

Marion, VA:
Abijah Thomas House Conceptual Site Master Plan



Prepared for the Octagon House Foundation
July 2018

Marion, VA:
Abijah Thomas House Conceptual Site Master Plan

Project funding provided in part by the US Forest Service in cooperation with the Virginia Department of Forestry Urban & Community Forestry Program



16UCF15



Marion, VA:
Abijah Thomas House Conceptual Site Master Plan

Project Team

Elizabeth Gilboy
Director

Anastasia Tolstikhin
Landscape Architecture Student

Nick Proctor
Project Manager

Kristen Allen
Landscape Architecture Student



CDAC team members (left to right): Nick Proctor, Anastasia Tolstikhin, Elizabeth Gilboy, Kristen Allen

The Community Design Assistance Center (CDAC) is an outreach center in the College of Architecture and Urban Studies at Virginia Tech that assists communities, neighborhood groups and non-profit organizations in improving the natural and built environments. Assistance is provided in the areas of landscape architecture, architecture, planning, and interior design. Working with communities, the conceptual planning and design provides communities with a graphic vision of their project that can then be used for grant applications and fundraising for the next steps toward implementation.

Community Design Assistance Center
101 South Main Street, Blacksburg, Virginia 24060
p: 540.231.5644 f: 540.231.6089
<http://www.cdac.arch.vt.edu>

Marion, VA:
Abijah Thomas House Conceptual Site Master Plan

ACKNOWLEDGMENTS

The CDAC team would like to acknowledge the following individuals for their contributions throughout the project:

Derek Orr
President, Octagon House Foundation

Ken Hall
Octagon House Foundation

Nancy Smith
Octagon House Foundation

and

Those who volunteered time for the betterment of their community

Marion, VA:
Abijah Thomas House Conceptual Site Master Plan

TABLE OF CONTENTS

Project Description

Project Overview	7
Project Location	8
Background of the Abijah Thomas House	10
Design Process	11

Part 1: Final Design Concept

Design Description	14
Master Plan	16
Site Plan	17
Perspective 1: Front of Octagon House with Pergolas and Brick Paths	18
Perspective 2: Breezeway and Slave Cabins	19
Perspective 3: Demonstration Barn	20
Perspective 4: Entry Signage Concepts	21
Precedent Images	22
Planting Palette: Native Fruit and Shade Trees	23
Planting Palette: Kitchen and Herb Gardens	24
Proposed Regional Trail Connections: Map A	25
Proposed Regional Trail Connections: Map B	26

Part 2: Site Inventory and Analysis

Site Inventory Description	28
Opportunities and Constraints	29
Existing Conditions	30
Site Inventory	31
Site Analysis	32

Part 3: Preliminary Design Concept

Design Description	34
Master Plan	35
Site Plan and Precedent Images	36
Perspective: Front of Octagon House and Cherry-Lined Event Space	37

Part 4: Appendix

Meeting Notes	
Stakeholder Meeting Notes: 5/16/18	39
Preliminary Presentation Meeting Notes: 6/4/18	42
Case Studies	
Monticello; Charlottesville, VA	44
Smithfield Plantation; Blacksburg, VA	45

Marion, VA:
Abijah Thomas House Conceptual Site Master Plan

TABLE OF CONTENTS

Soil Tests	
Soil Sample Locations	46
Results: Sample 1	47
Results: Sample 2	48
Results: Sample 3	49
Results: Sample 4	50

PROJECT DESCRIPTION

Project Overview

The goal of this project was to develop a conceptual site master plan for the Abijah Thomas house (herein referred to as the Octagon House), including its current grounds, and surrounding properties (to be purchased in the future) and to depict the Octagon House Foundation's vision for a historical, educational, and cultural attraction. Further, CDAC explored opportunities to link the Octagon House to regional trail networks such as the Appalachian Trail and the Gorge Trail.

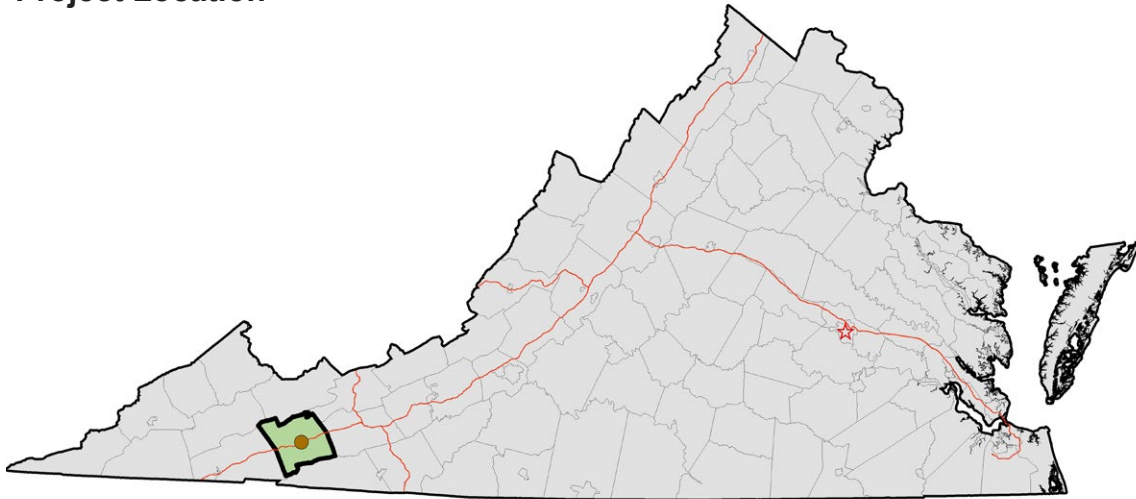
The current property is about 1 acre in size and is located at the corner of Thomas Bridge Rd and VA 657 Octagon House Rd. Several adjacent and nearby properties were included in the planning for their vision of the Octagon House. At the request of the Octagon House Foundation, one adjacent property located at the rear of the property (Richardson Property), two properties just behind the adjacent property (another Richardson property and then an Evans property), and the two properties across the street were included when creating the conceptual site master plan. The Thomas Cemetery was also included. This public cemetery, is located within walking distance down the street from the Abijah Thomas house and contains the Thomas family graves.

The Community Design Assistance Center worked with a stakeholders group from the Octagon House Foundation to develop ideas for the conceptual site master plan. The site master plan was developed with the aim of potentially obtaining nearby site(s), but phased so that additional site(s) would not be needed to function in the near-term. The conceptual master plan can be helpful to the Octagon House Foundation, Inc. with fundraising as it will portray a visual depiction of their vision for the future.

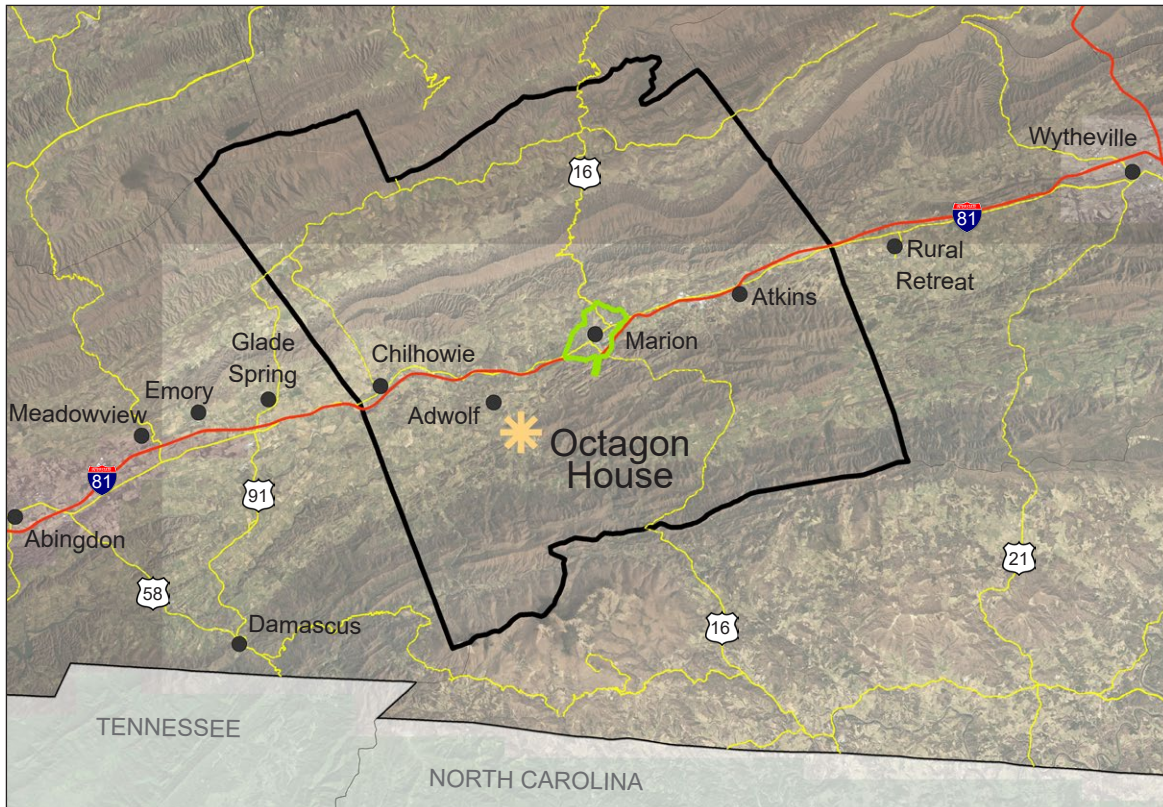
Marion, VA:
Abijah Thomas House Conceptual Site Master Plan

PROJECT DESCRIPTION

Project Location



The Octagon House is located in Smyth County in southwest Virginia (above), and is easily accessible from Interstate 81.

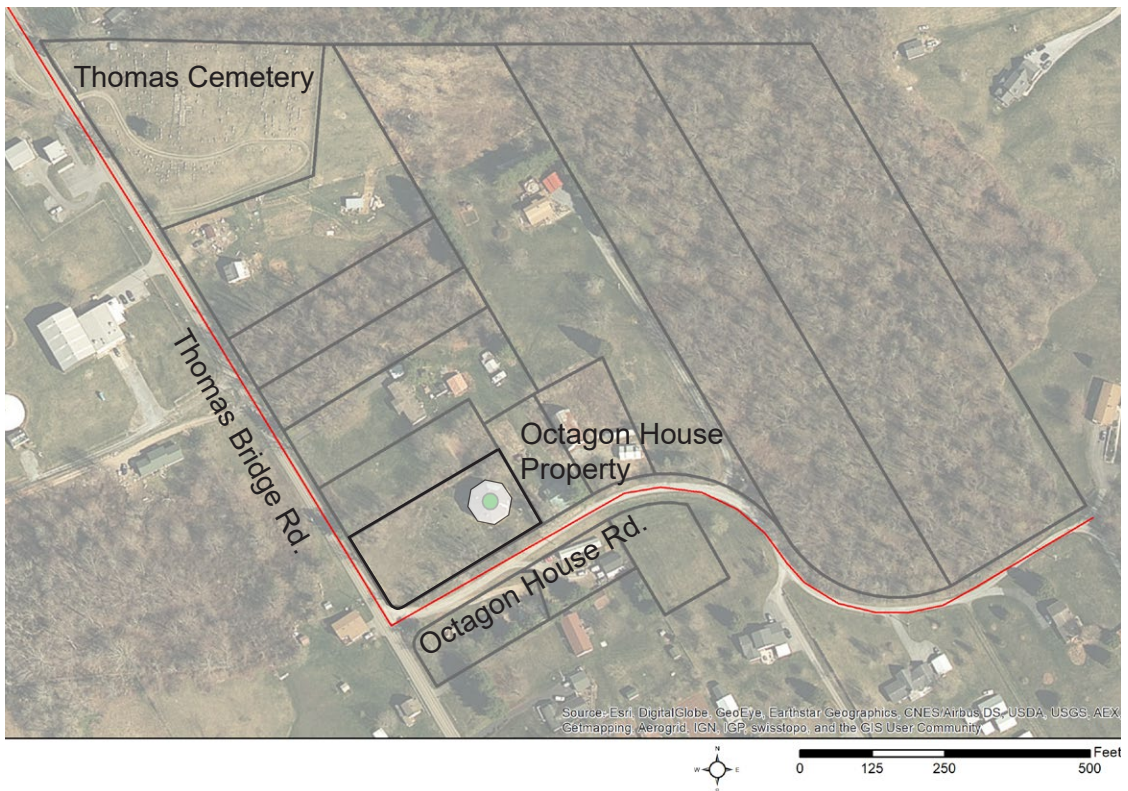


Marion, VA:
Abijah Thomas House Conceptual Site Master Plan

PROJECT DESCRIPTION



The property is a 15 minute drive southwest of Marion, VA. The Octagon House is located on a 1 acre parcel owned by the Octagon House Foundation. Potential adjacent properties to be acquired by the Foundation are outlined below. The house is located on the property at the corner of Thomas Bridge Road and Octagon House Road shown below.



PROJECT DESCRIPTION

Background of the Abijah Thomas House

The Abijah Thomas House is an octagon house, which was a part of the trend of octagon architecture of 1850s America. The house was completed in 1858 for Abijah Thomas of Smyth County, who was a property, slave owner, and the owner of Holston Woolen Mills and a pig iron furnace also in the Smyth County area. The house and property around it consisted of 400 acres and was assessed at being worth \$5,000 in 1857.

Encompassing nearly 6,000 square feet, the house is the largest remaining octagon house in Virginia. The building consists of seventeen rooms, ten closets, and a storage room. The exterior walls are made of brick, which were made by slaves on the property. The structure consists of a handmade brick exterior with interior post and beam construction, with the addition of iron plates to strengthen connections. Interior design-wise, the house features beautiful faux marbleizing, stenciling, and graining throughout the interior, with classic federal architecture combined with early Victorian architecture and design. The home, which is listed on the national historic landmark register, is rare, not only in Virginia, but in antebellum architecture altogether.

10

Originally inhabited by Abijah and his family, the house passed out of the hand of the Thomas Family after Abijah and his wife Priscilla died. The home was eventually purchased and used as a barn by the Bonham Brothers apple orchard company. Long-term vacancy has taken a substantial toll on the building though recent engineering reports have determined that the building remains structurally sound to this day.

The house sat abandoned for many years and now it is hoped that the process of rehabilitating the house can begin. The Octagon House Foundation and CDAC want the site to reflect some of the history of Smyth County, drawing people from all over the world to see the unique home.

In the spring of 2014, Virginia Tech Professor Lisa Tucker's Interior Design Studio developed ideas for reuse of the structure and corresponding interior design furnishings and finishes.

PROJECT DESCRIPTION

Design Process

The CDAC team visited Marion three times over the course of the project, beginning with an initial stakeholder input session and site visit on May 16, 2018 in which CDAC had the opportunity to tour the inside of the Octagon House as well as the grounds of the house. During the second visit, soil samples were collected to test for plant material suitability. The CDAC team also visited to Buller Fish Hatchery that is nearby. Later that evening, the preliminary designs were presented.



Student designer Kristen Allen takes photographs on the second floor of the Octagon House.



Derek Orr (left), President of the Octagon House Foundation, shows student designer Kristen Allen (right) the back of the house and the location of the former cistern.

Marion, VA:
Abijah Thomas House Conceptual Site Master Plan

PROJECT DESCRIPTION

The design process began with a stakeholder input session on May 16, 2018 at the Smyth County Chamber of Commerce in Marion, VA. During that visit the CDAC team facilitated a discussion with several board members of the Octagon House Foundation to discuss the broad vision of the organization, Abijah Thomas, the history of the Octagon House, and what specific uses the Octagon House Foundation would like to see for the grounds of the house. A site visit, photographs, early sketches, and input from the board members, combined with historical research, created a comprehensive foundation that the CDAC team used to develop an initial conceptual master plan.

The team returned to Marion on June 4, 2018 to present a preliminary design concept for the grounds of the Octagon House, which included several surrounding properties currently held privately. Following the presentation, stakeholders were encouraged to provide feedback about what they (dis)liked and what they thought might have been missing.

The team revised the preliminary design concept into a final conceptual master plan with supporting drawings, which were presented to the Octagon House Foundation on June 20, 2018.

12

Meeting notes from the input sessions and presentations can be found in the Appendix.



CDAC student designers Anastasia Tolstikhin (left) and Kristen Allen (right) present site inventory and analysis drawings during the preliminary design presentation on June 4, 2018 to Octagon House Foundation members.

Marion, VA:
Abijah Thomas House Conceptual Site Master Plan

**PART 1:
FINAL DESIGN CONCEPT**

13

FINAL DESIGN CONCEPT

Design Description

The Abijah Thomas House will serve as a historic site that attracts visitors from around the globe and provides spaces for larger events. It will showcase the home's unique architecture, the lives of a plantation owners family, and the lives of plantation slaves. It will also serve as a depository for historical archives, a community gathering space, and a community greenspace. The house and grounds are restored to be as historically accurate to the original house and grounds built by Abijah Thomas as possible, including the historic outbuildings such as the laundry, woodshed, servants quarters, corn crib, slave cabins, and other supporting activities such as the brick-making area. These structures are recreated and placed as close as possible to their original locations as illustrated in the plan of the grounds found in the Abijah Thomas and his Octagonal House book.

The historic structures and gardens around the grounds will provide opportunities for education and hands-on learning for visitors. A few of the structures such as the breezeway barn and the two barns on the eastern end of the site are re-purposed for more modern uses that fit the needs of visitors. The breezeway barn will not only serve as an entry to the Octagon House grounds from the Thomas Cemetery trail but will also contain demonstration stages for reenactments or educational programs. The two eastern barns have an overhang between them that acts as a threshold onto the house grounds from the parking area in the back. One of the barns will be an open air pavilion used for group events while the other will be used for overnight stays. The other out-buildings, including the chicken coop, corn crib, laundry, woodshed, servants house and kitchen, and smokehouse will be rebuilt in their approximate locations and display the kinds of services needed to run the house as it was in the 1860s.

The original orchard of Abijah Thomas will be recreated closer to the house, centrally placed on the grounds. The orchard will contain various species of native fruit trees such as pawpaw and mulberry trees and will provide interactive opportunities for visitors. The herb, kitchen, and slave gardens are also recreated on site and are placed as close to their original locations as possible. The smaller garden will house herbs and medicinal plants found in the area during the time period. The kitchen garden is a larger garden on the northern side of the house. It will contain basic foods grown and eaten by the family. The slave gardens are smaller gardens in front of each slave cabin. These gardens contain a mixture of African and native crops that were grown by slaves at the time.

The main path leading directly from the back of the house as well as the paths in the front of the house will be laid using the original brick re-purposed from another location. The remaining paths will be made from decomposed granite. The original brickyard will be recreated in its original location across Octagon House Road. This will be used to teach guests about the brick-making process as it was done in the 1800's.

FINAL DESIGN CONCEPT

The front yard of the Octagon House will have added wood pergolas and brick paths leading to a stage area. These cherry tree lined walkways at the front of the house give a nod to the former brick driveway that arched to the front of the house and welcomed guests. Now, this walkway will serve as a boundary that encloses the event space with beautiful ornamental trees and helps frame the view of the mountains to the southwest that gave the house its traditional name. The small stage area framed by the pergolas can be used for wedding ceremonies and photographing mountain views.

The Thomas Cemetery is found on the northern side of the site. A visitor center with bus parking will be added next to the cemetery. Three pedestrian trails lead visitors around the site from the visitor center area. The western trail heads towards the kitchen garden and the front of the house. The beginning of the trail is forested but it then emerges into the open framing a view of the Octagon House from the front. The central trail makes a direct connection between the Cemetery and the demonstration barn in the backyard of the property. Finally, the eastern forest trail loops through the forested portion of the site to the east, passing the amphitheater and Appalachian Trail connector trail, and emerging at the back of the grounds.

The following pages include a master plan, site plan, supporting perspectives, precedent images, plant materials, and maps of possible trail linkages. The master plan depicts the overall vision for the Octagon House and its relationship with the nearby properties. The site plan focuses more closely on the Octagon House property and the elements found on site.



community design
assistance center

College of Architecture and Urban Studies
Virginia Polytechnic Institute and State University

Disclaimer : This drawing is conceptual and was prepared to show approximate location and arrangement of site features. It is subject to change and is not intended to replace the use of construction documents. The client should consult appropriate professionals before any construction or site work is undertaken. The Community Design Assistance Center is not responsible for the inappropriate use of this drawing.



- Legend
- A- Thomas Cemetery
 - B- Visitor Center and Parking (Bus Compatible)
 - C- Cemetery Trail
 - D- Visitors Center Trail
 - E- Forest Trail
 - F- Forest Amphitheater
 - G- Octagon House
 - H- Event Parking (No Buses)
 - I- Connection to Appalachian Trail*
(*Requires partnership with private landowners)
 - J- Property to be acquired (long term)

Marion, VA:
Abijah Thomas House Conceptual Site Master Plan

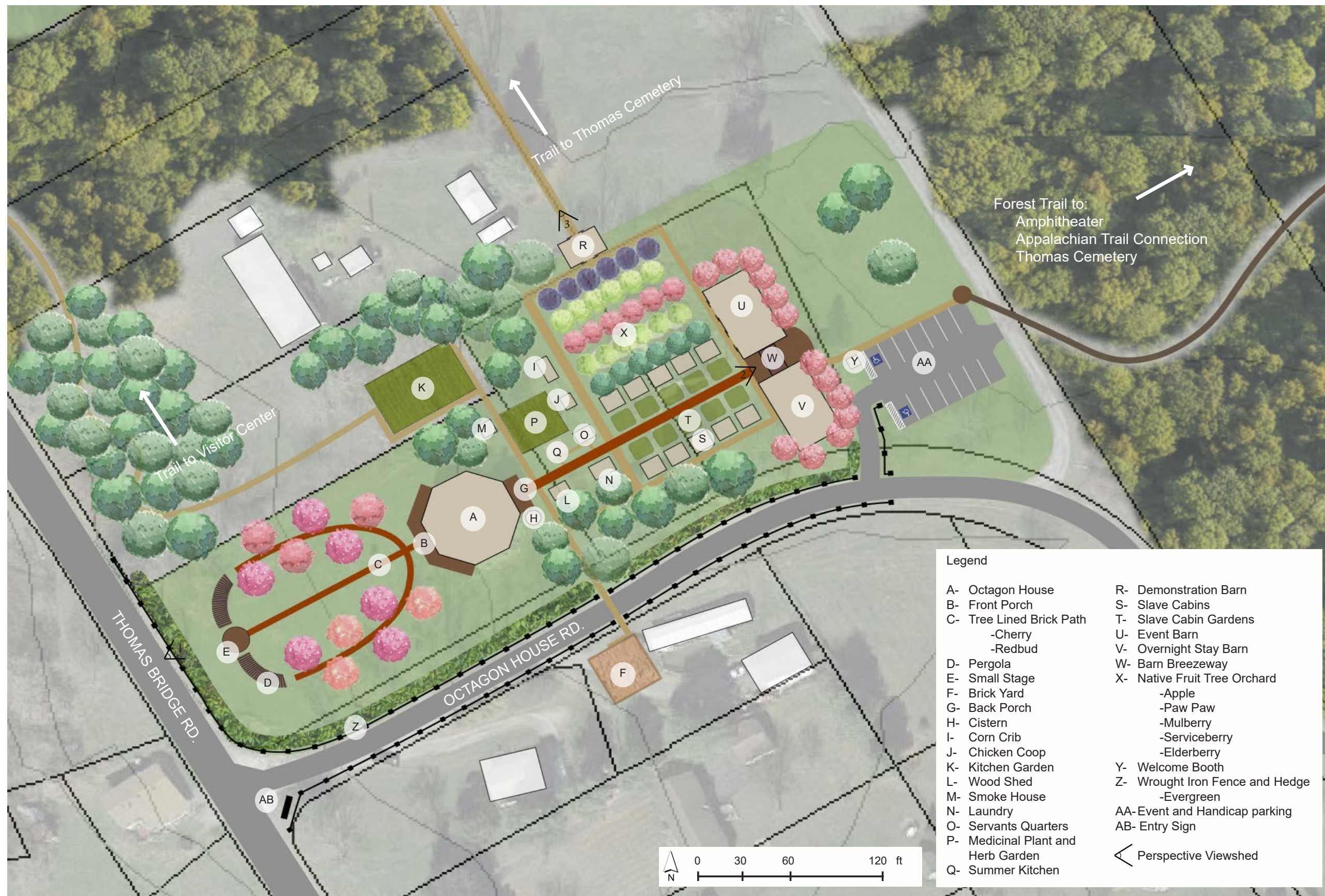
Final Design Concept
Master Plan



community design assistance center

College of Architecture and Urban Studies
Virginia Polytechnic Institute and State University

Disclaimer : This drawing is conceptual and was prepared to show approximate location and arrangement of site features. It is subject to change and is not intended to replace the use of construction documents. The client should consult appropriate professionals before any construction or site work is undertaken. The Community Design Assistance Center is not responsible for the inappropriate use of this drawing.



Legend

A- Octagon House	R- Demonstration Barn
B- Front Porch	S- Slave Cabins
C- Tree Lined Brick Path -Cherry -Redbud	T- Slave Cabin Gardens
D- Pergola	U- Event Barn
E- Small Stage	V- Overnight Stay Barn
F- Brick Yard	W- Barn Breezeway
G- Back Porch	X- Native Fruit Tree Orchard -Apple -Paw Paw -Mulberry -Serviceberry -Elderberry
H- Cistern	Y- Welcome Booth
I- Corn Crib	Z- Wrought Iron Fence and Hedge -Evergreen
J- Chicken Coop	AA-Event and Handicap parking
K- Kitchen Garden	AB- Entry Sign
L- Wood Shed	◁ Perspective Viewshed
M- Smoke House	
N- Laundry	
O- Servants Quarters	
P- Medicinal Plant and Herb Garden	
Q- Summer Kitchen	

Marion, VA:
Abijah Thomas House Conceptual Site Master Plan

Final Design Concept
Site Plan



View of the front of the Octagon House with the proposed outdoor event space. The event space includes a brick path lined with cherry and redbud trees, pergolas to frame the view of the mountains to the southwest, and a small stage.



community design
assistance center

College of Architecture and Urban Studies
Virginia Polytechnic Institute and State University

Disclaimer : This drawing is conceptual and was prepared to show approximate location and arrangement of site features. It is subject to change and is not intended to replace the use of construction documents. The client should consult appropriate professionals before any construction or site work is undertaken. The Community Design Assistance Center is not responsible for the inappropriate use of this drawing.

Marion, VA:
Abijah Thomas House Conceptual Site Master Plan

Final Design Concept
Perspective 1: Front of the Octagon House with Pergolas and Brick Paths



View of the backyard of the Octagon House looking towards the back of the house from within the event barn breezeway. Two rows of slave cabins line the central brick path leading towards the house. The laundry and servants quarters are located closer to the house, and can be seen between the slave cabins and house.



community design
assistance center

College of Architecture and Urban Studies
Virginia Polytechnic Institute and State University

Disclaimer : This drawing is conceptual and was prepared to show approximate location and arrangement of site features. It is subject to change and is not intended to replace the use of construction documents. The client should consult appropriate professionals before any construction or site work is undertaken. The Community Design Assistance Center is not responsible for the inappropriate use of this drawing.

Marion, VA:
Abijah Thomas House Conceptual Site Master Plan

Final Design Concept
Perspective 2: Breezeway and Slave Cabins



View of demonstration barn. The path from the Thomas Cemetery and Visitor Center passes through the barn and to the grounds of the Octagon House.



community design
assistance center

College of Architecture and Urban Studies
Virginia Polytechnic Institute and State University

Disclaimer : This drawing is conceptual and was prepared to show approximate location and arrangement of site features. It is subject to change and is not intended to replace the use of construction documents. The client should consult appropriate professionals before any construction or site work is undertaken. The Community Design Assistance Center is not responsible for the inappropriate use of this drawing.

Marion, VA:
Abijah Thomas House Conceptual Site Master Plan

Final Design Concept
Perspective 3: Demonstration Barn



Entry sign alternative 1. Not to scale.



Entry sign alternative 2. Not to scale.



community design
assistance center

College of Architecture and Urban Studies
Virginia Polytechnic Institute and State University

Disclaimer : This drawing is conceptual and was prepared to show approximate location and arrangement of site features. It is subject to change and is not intended to replace the use of construction documents. The client should consult appropriate professionals before any construction or site work is undertaken. The Community Design Assistance Center is not responsible for the inappropriate use of this drawing.

Marion, VA:
Abijah Thomas House Conceptual Site Master Plan

Final Design Concept
Perspective 4: Entry Signage Concepts



Open air event barn



Breezeway between barns



Lofted barn



Kitchen garden (Monticello)



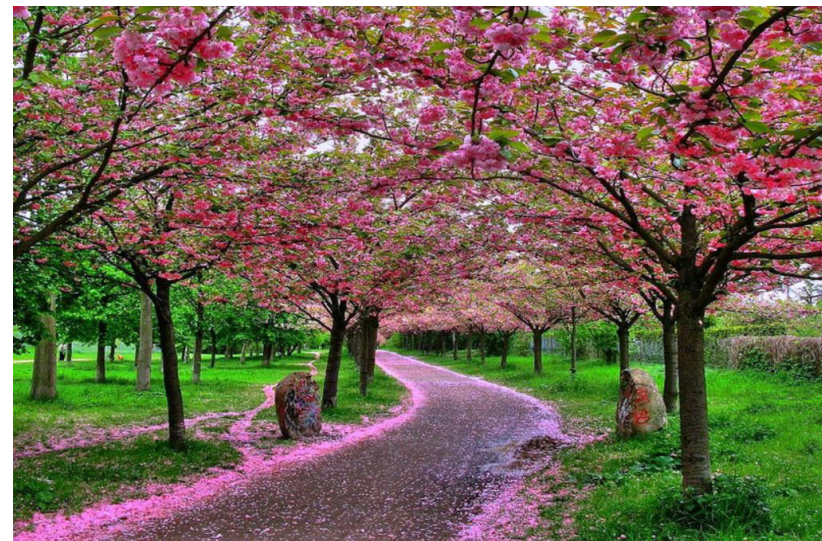
Herb garden



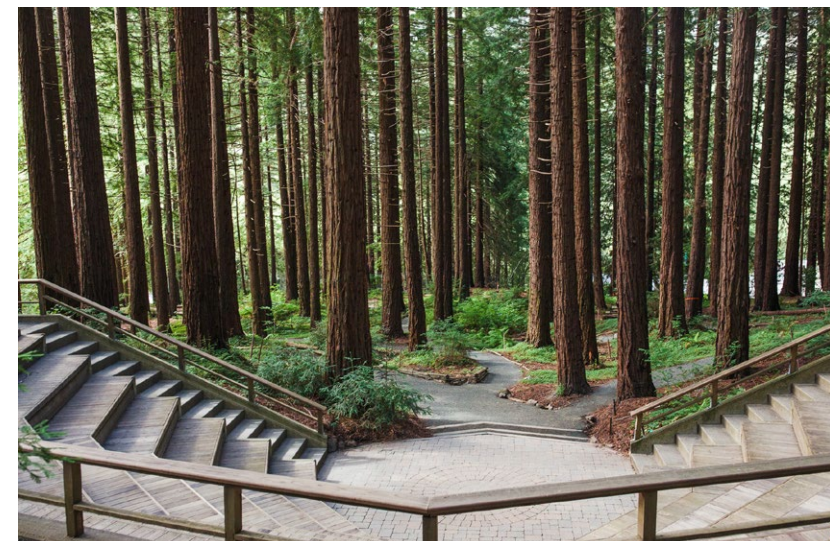
Slave cabin and slave garden (Smithfield Plantation)



Brick yard (Colonial Williamsburg)



Cherry tree lined path



Forested amphitheater



community design assistance center

College of Architecture and Urban Studies
Virginia Polytechnic Institute and State University

Disclaimer : This drawing is conceptual and was prepared to show approximate location and arrangement of site features. It is subject to change and is not intended to replace the use of construction documents. The client should consult appropriate professionals before any construction or site work is undertaken. The Community Design Assistance Center is not responsible for the inappropriate use of this drawing.

Marion, VA:
Abijah Thomas House Conceptual Site Master Plan

Final Design Concept
Precedent Images

Fruit Trees



Pawpaw tree, *Asimina triloba*
Edible yellowish green fruits mature in early autumn. Flavor and fleshy consistency of the sweet-flavored fruits resembles bananas.

Height: 15-30 feet
Spread: 15-30 feet
Bloom Time: April to May
Sun: Full sun to part shade
Water: Medium to wet
Maintenance: Low



Serviceberry, *Amelanchier arborea*
Edible berries resemble blueberries in size and color and are often used in jams, jellies, and pies. Amelanchiers are commonly called Juneberries.

Height: 12-15 feet
Spread: 12-15 feet
Bloom Time: April to May
Sun: Full sun
Water: Medium
Maintenance: High



Red Mulberry, *Morus rubra*
Sweet blackberry-like edible fruits are reddish to dark purple in color. Fruits are sweet and juicy and may be eaten off the tree.

Height: 50-60 feet
Spread: 50-60 feet
Bloom Time: April
Sun: Full sun
Water: Medium to wet
Maintenance: Low



American Persimmon, *Diospyros virginiana*
Edible persimmon fruits mature in fall to an orange to reddish-purple color, and may persist on the tree into winter.

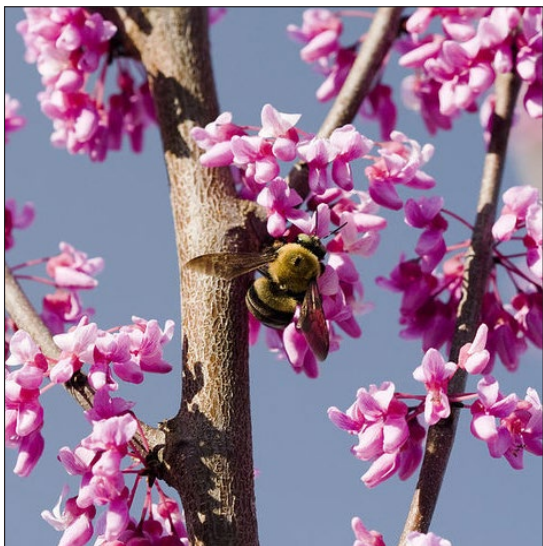
Height: 35-60 feet
Spread: 25-35 feet
Bloom Time: May to June
Sun: Full sun to part shade
Water: Dry to medium
Maintenance: Low

Decorative Trees



Japanese flowering cherry, *Prunus 'Kanzan'*
Deep pink double flowers (to 2.5" diameter), each with 20-30 petals bloom best in full sun.

Height: 25-30 feet
Spread: 25-30 feet
Bloom Time: April
Sun: Full sun to part shade
Water: Medium
Maintenance: Medium



Redbud, *Cercis canadensis*
Stunning pea-like rose-purple flowers bloom profusely on bare branches in early spring before the foliage emerges.

Height: 20-30 feet
Spread: 25-35 feet
Bloom Time: March to April
Sun: Full sun to part shade
Water: Medium
Maintenance: Low

Shade Trees



Sugar maple, *Acer saccharum*
This tree is a main component of the Eastern U.S. hardwood forest. It has a dense, rounded crown and spectacular fall color.

Height: 40-80 feet
Spread: 30-60 feet
Bloom Time: April
Sun: Full sun or part shade
Water: Medium
Maintenance: Medium



Pin oak, *Quercus palustris*
Medium sized deciduous tree. Easily grown in average, medium to wet, acidic soils in full sun.

Height: 50-70 feet
Spread: 40-60 feet
Bloom Time: April
Sun: Full sun
Water: Medium to wet
Maintenance: Medium



community design
assistance center

College of Architecture and Urban Studies
Virginia Polytechnic Institute and State University

Disclaimer : This drawing is conceptual and was prepared to show approximate location and arrangement of site features. It is subject to change and is not intended to replace the use of construction documents. The client should consult appropriate professionals before any construction or site work is undertaken. The Community Design Assistance Center is not responsible for the inappropriate use of this drawing.

Marion, VA:
Abijah Thomas House Conceptual Site Master Plan

Final Design Concept
Planting Palette: Native Fruit and Shade Trees

Kitchen Garden Plants



Leaf mustard, *Brassica juncea*

Although extensively grown as a vegetable for its leaves, this plant is also often grown for its seeds

Height: 1-1.5 feet
 Spread: 1-1.5 feet
 Bloom Time: flowers not showy
 Sun: Full sun
 Water: Medium
 Maintenance: Low



Cabbage, *Brassica oleracea*

Produces edible leaves. Typically grown in the cool temperatures of spring or fall.

Height: 1-2 feet
 Spread: 1-2 feet
 Bloom Time: Rarely flowers
 Sun: Full sun
 Water: Medium
 Maintenance: Low



Onion, *Allium altaicum*

Edible parts of this allium are the onion-flavored young spring leaves, summer flowers, and underground bulbs.

Height: 1-2 feet
 Spread: 1-1.5 feet
 Bloom Time: June to August
 Sun: Full sun
 Water: Medium
 Maintenance: Medium



Corn, *Zea mays*

Tall stalk plant. Corn is a warm weather crop and should not be planted until the soil warms up to 60° F.

Height: 4-5 feet
 Spread: 1-2 feet
 Bloom Time: Flowers not showy
 Sun: Full sun
 Water: Medium
 Maintenance: Medium

Herbs and Medicinal plants



Caraway, *Carum carvi*

Caraway has various medicinal properties such as anti-histaminic, antiseptic, antispasmodic, carminative, and vermifuge. Also used as a spice in cooking.

Height: 1-2 feet
 Spread: 1 foot
 Bloom Time: June to August
 Sun: Full sun to part shade
 Water: Medium to wet
 Maintenance: Low



English lavender, *Lavandula angustifolia*

Lavender oil is used for soothing anxiety and improving sleep. Can also be used to treat fungal infections and hair loss.

Height: 2-3 feet
 Spread: 2-4 feet
 Bloom Time: June to August
 Sun: Full sun
 Water: Dry to medium
 Maintenance: Medium



Horehound, *Marrubium vulgare*

Commonly made into lozange candies used as a remedy for respiratory ailments, sore throats, aiding digestion, and relieving inflammation

Height: 1-2 feet
 Spread: 1-1.5 feet
 Bloom Time: Throughout the year
 Sun: Full sun
 Water: Dry to medium
 Maintenance: Low

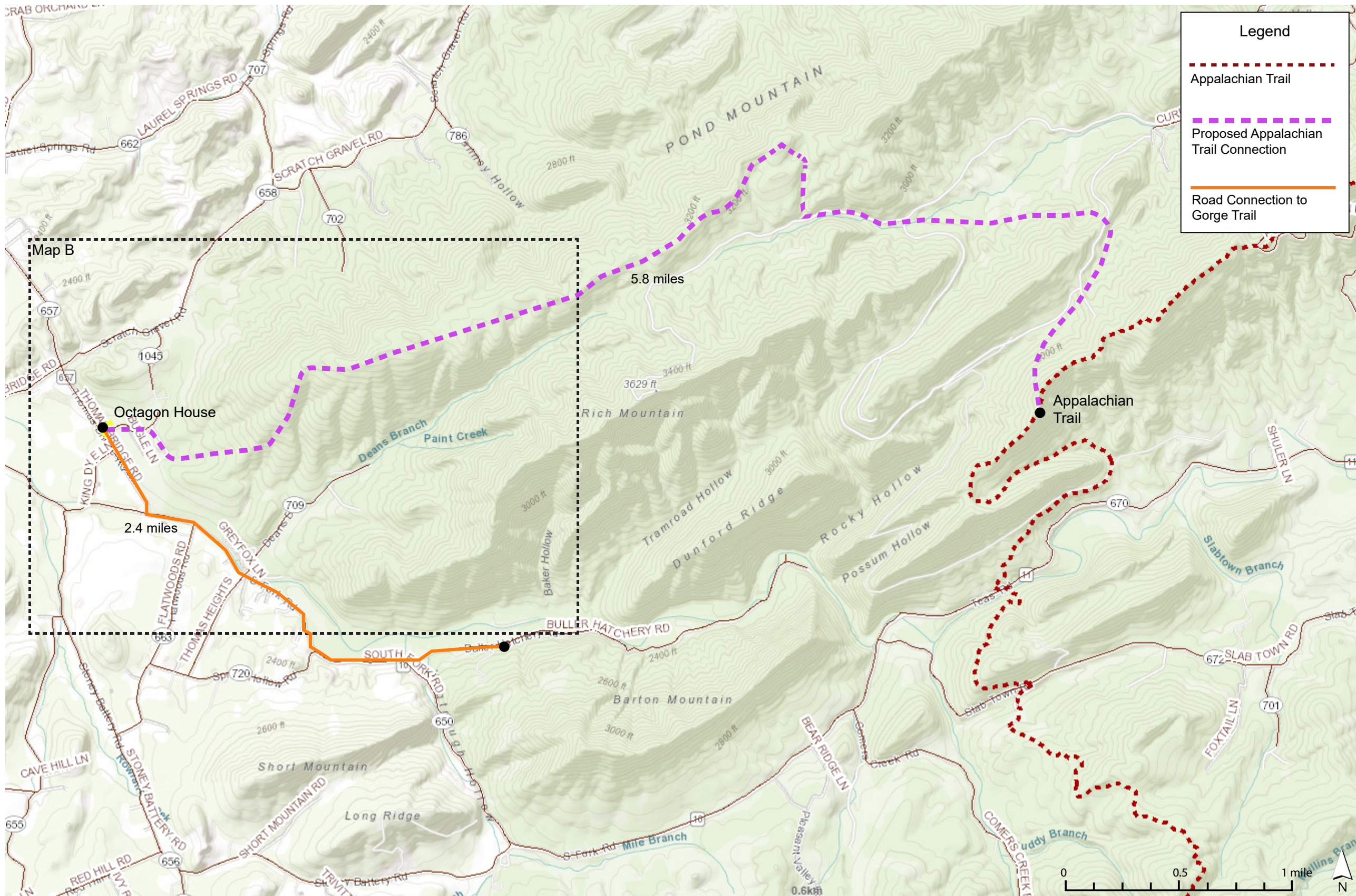


Pennyroyal, *Mentha pulegium*

Frequently used as an insecticide and pest repellent. Pennyroyal tea is used for cold relief, fevers, coughs, indigestion, liver and kidney problems, and headaches.

Height: 1-1.5 feet
 Spread: 1-1.5 feet
 Bloom Time: August to October
 Sun: Full sun or part shade
 Water: Dry to medium
 Maintenance: Low

Disclaimer : This drawing is conceptual and was prepared to show approximate location and arrangement of site features. It is subject to change and is not intended to replace the use of construction documents. The client should consult appropriate professionals before any construction or site work is undertaken. The Community Design Assistance Center is not responsible for the inappropriate use of this drawing.



Legend

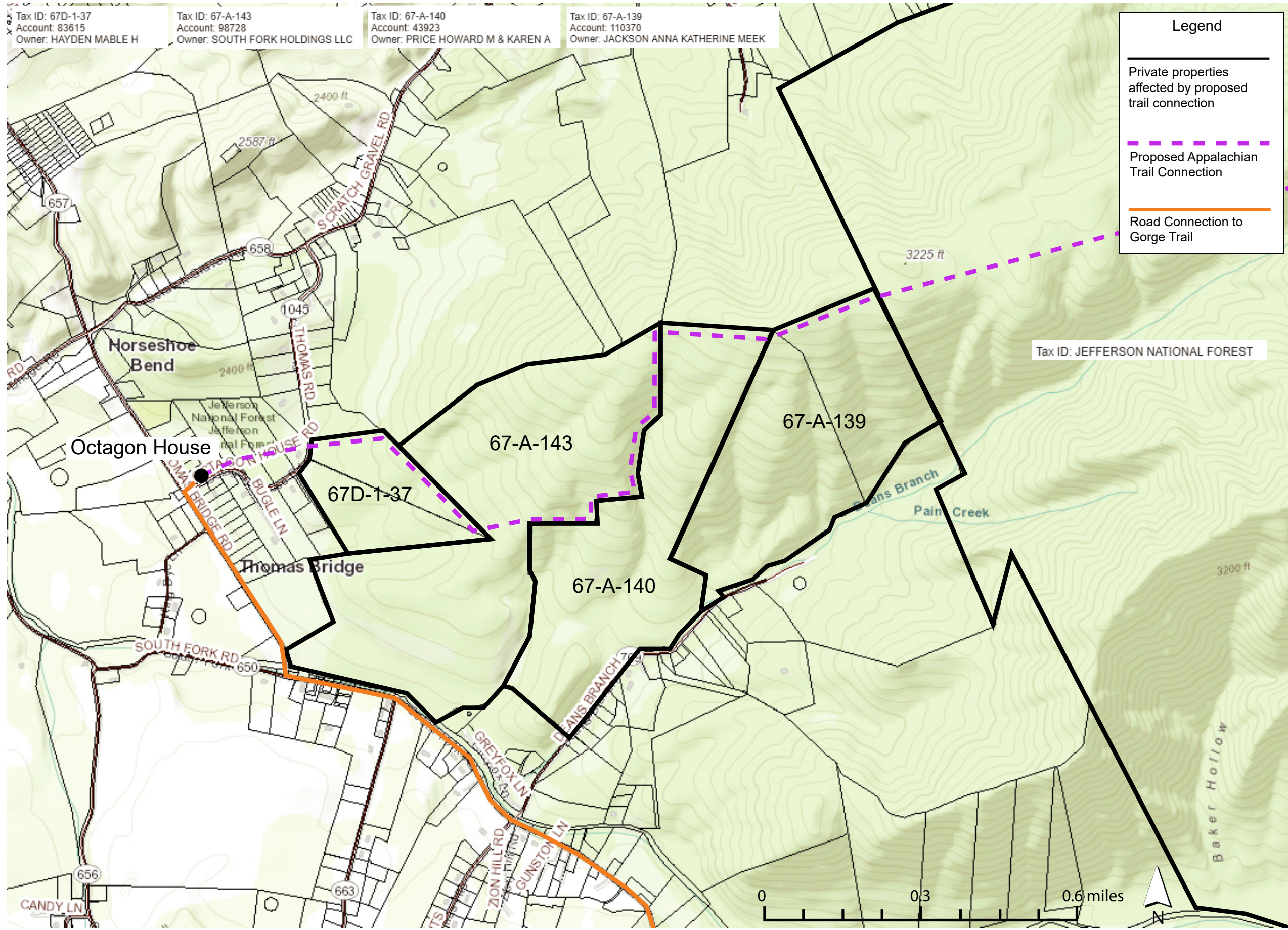
- Appalachian Trail
- Proposed Appalachian Trail Connection
- Road Connection to Gorge Trail

The Appalachian Trail (AT) is located east of the Octagon House property. The proposed trail connection runs about 5.8 miles, following the ridge of Pond Mountain, heading east down into the valley before ascending to the AT on the ridge of Brushy Mountain. The Gorge trail is located about 2.4 miles south by road from the Octagon House at the Buller Fish Hatchery.

Disclaimer : This drawing is conceptual and was prepared to show approximate location and arrangement of site features. It is subject to change and is not intended to replace the use of construction documents. The client should consult appropriate professionals before any construction or site work is undertaken. The Community Design Assistance Center is not responsible for the inappropriate use of this drawing.

Marion, VA:
Abijah Thomas House Conceptual Site Master Plan

Preliminary Design Concept
 Proposed Regional Trail Connections: Map A



The proposed trail connection between the AT and the Octagon House property crosses 4 different private properties before entering the boundary of the Jefferson National Forest

Disclaimer: This drawing is conceptual and was prepared to show approximate location and arrangement of site features. It is subject to change and is not intended to replace the use of construction documents. The client should consult appropriate professionals before any construction or site work is undertaken. The Community Design Assistance Center is not responsible for the inappropriate use of this drawing.

**PART 2:
SITE INVENTORY AND ANALYSIS**

SITE INVENTORY AND ANALYSIS

Site Inventory Description

The CDAC team inventoried the Octagon House property and the adjacent properties, creating inventory and analysis maps to understand the opportunities and constraints on the site. This information, combined with ideas and input from the stakeholders committee, guided design development.

Nearby Attractions

The Appalachian Trail (AT) is located nearby in the Jefferson National Forest. The newer Gorge trail is located at the Buller Fish Hatchery and is about 2.4 miles south by road from the Octagon House Property.

Circulation

The existing circulation at the site exists mainly around the property boundary. There are no pedestrian trails or roads connecting the inner portions of the site. Three levels of circulation are found around the site. Thomas Bridge Road is the primary paved road bounding the southwest portion of the property. Octagon House Road is a secondary gravel road stemming off Thomas Bridge Road. The Octagon House site has a few vehicle driveways off of the primary and secondary roads but these do not extend out into the site or connect to any other roads. The Thomas Cemetery has an unpaved vehicle loop weaving through it, connecting back to Thomas Bridge Road on both ends. There is no formal parking at the Octagon House apart from the gravel driveway leading towards the barn. The Thomas Cemetery also does not have a parking area.

Vegetation

The Octagon House property and adjacent properties contain large open areas as well as dense hardwood forest. The trees found in the area consist mainly of native deciduous trees.

Buildings and Utilities

The adjacent properties include one vacant building, a barn, temporary trailers as well as multiple private residences to be acquired by the Octagon House Foundation in the future. Unsightly power lines block views of the Octagon House and views away from the house. There are currently no restrooms on the Octagon House property but there is access to water lines and sewer lines.

Existing conditions of the Octagon House property and adjacent properties can be found in the images on page 30 and in the map on page 31.

SITE INVENTORY AND ANALYSIS

Opportunities and Constraints

Opportunities:

Circulation: The site has road access along two sides, allowing for different access points into the site.

Parking: There is plenty of flat open space on the Octagon House property as well as on other adjacent properties that would allow for parking.

Points of Interest: Octagon House, smoke house, vintage gas pump, barns, possible visitor center, and Thomas Cemetery. Some of these points of interest are on adjacent or nearby properties.

Vegetation: Beautiful old apple tree next to the house and larger shade trees around the property.

Slope: Flatter open spaces allow for a variety of programming, trail connections, and parking areas.

Trails: Appalachian Trail (AT) passes east of the project site providing the opportunity to create a direct trail connection between the AT and the Octagon House.

Views: Southwest views from the house of the mountains and valley.

Constraints:

Entry: No clear signage. Unsightly mailboxes in front of property. Not handicap accessible, steep grade to get onto the site from the front of the house. Poor sight lines when entering Thomas Bridge Road from Octagon House Road.

Circulation: No existing inner site vehicle circulation. Unpaved road access to the Octagon House property. No existing pedestrian trail circulation.

Slope: Steep areas restricting pedestrian trail access to Thomas Cemetery.

Trails: Connection trail has to pass through four privately owned properties and owner approval must be obtained.

Views: Overgrown vegetation blocking many of the views to surrounding mountains. Trees should be selectively cleared to expose and frame views around the property.

Utilities: Existing light posts and power lines are located too close to the Octagon House, taking away from views of and around the house. Power lines should be relocated if possible.

The major opportunities and constraints are consolidated in the analysis map found on page 32.



Octagon House; southwest facade



View from the 2nd story of the Octagon House facing Thomas Bridge Road



Octagon House road entry from Thomas Bridge Road; unsightly mailboxes



Smoke house (one of two remaining original structures)



Northeast lawn and buildings; electrical lines, barn, and private residence (far right) on adjacent properties



Old gas pump and barn on adjacent property



Landscape behind barn, electrical lines, and storage structure (left) on adjacent properties



Northeast facade of the Octagon House, smoke house, and apple tree (between buildings)



The approximate location of the underground historic cistern on the right.



community design assistance center

College of Architecture and Urban Studies
Virginia Polytechnic Institute and State University

Disclaimer : This drawing is conceptual and was prepared to show approximate location and arrangement of site features. It is subject to change and is not intended to replace the use of construction documents. The client should consult appropriate professionals before any construction or site work is undertaken. The Community Design Assistance Center is not responsible for the inappropriate use of this drawing.

Marion, VA:
Abijah Thomas House Conceptual Site Master Plan

Existing Conditions



community design assistance center

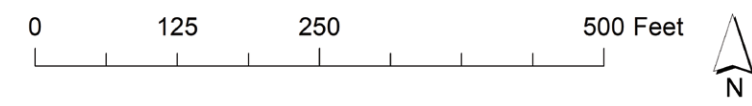
College of Architecture and Urban Studies
Virginia Polytechnic Institute and State University

Disclaimer : This drawing is conceptual and was prepared to show approximate location and arrangement of site features. It is subject to change and is not intended to replace the use of construction documents. The client should consult appropriate professionals before any construction or site work is undertaken. The Community Design Assistance Center is not responsible for the inappropriate use of this drawing.



Legend

- Property lines ———
- Primary Road ———
- Secondary Road ———
- Driveway ———
- Above ground electric lines ———
- Green/open space ●
- Dense vegetation ●
- Site Entry ●
- Parking areas ●
- Key features
- Thomas Cemetery ● A
- Private residence ● B
- Vacant residence ● C
- Old apple tree ● D
- Smoke house ● E
- Octagon House ● F
- Old gas pump ● G
- Old barn ● H

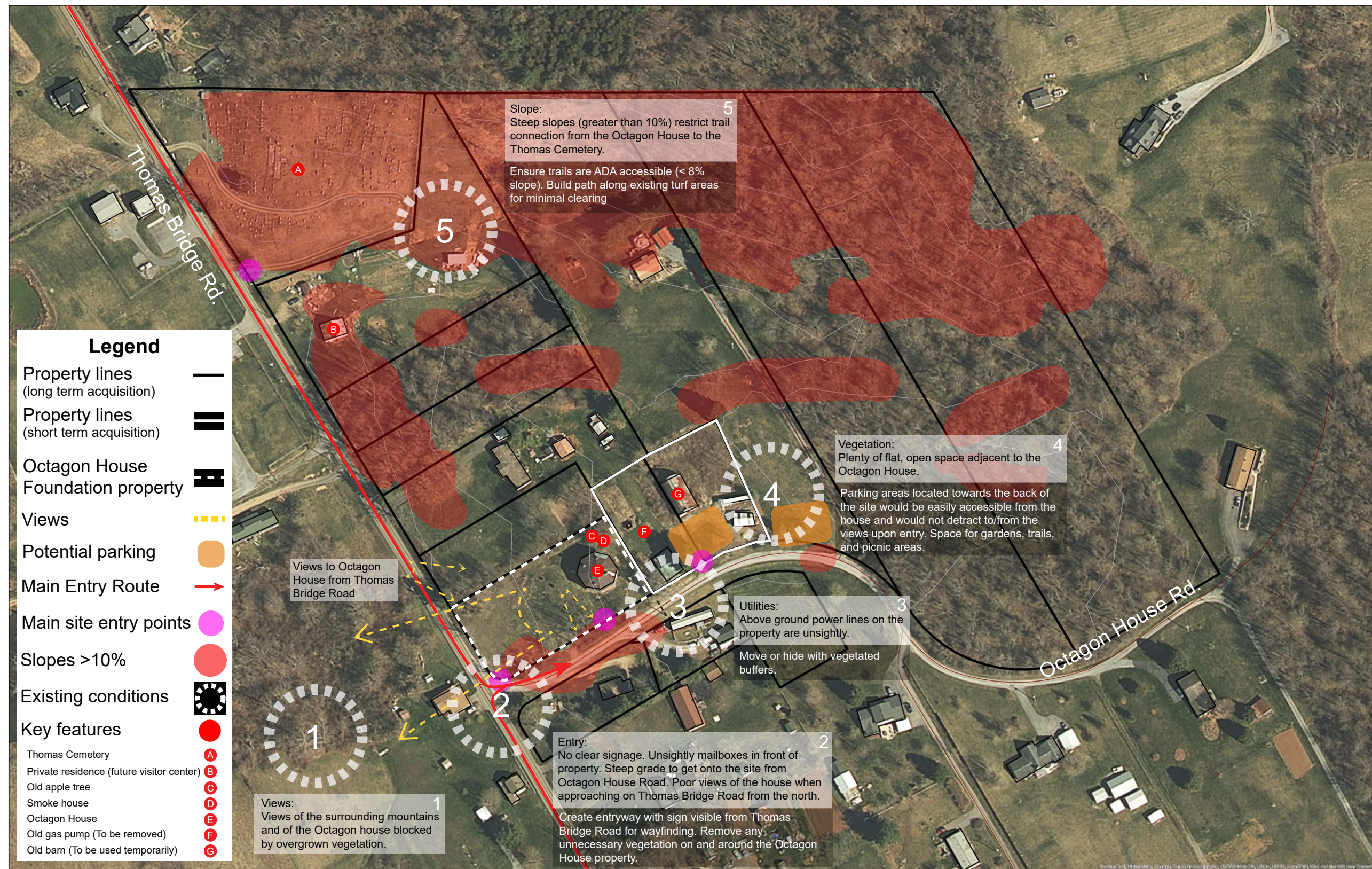


Marion, VA:
Abijah Thomas House Conceptual Site Master Plan

Site Inventory



Disclaimer : This drawing is conceptual and was prepared to show approximate location and arrangement of site features. It is subject to change and is not intended to replace the use of construction documents. The client should consult appropriate professionals before any construction or site work is undertaken. The Community Design Assistance Center is not responsible for the inappropriate use of this drawing.



Marion, VA:
Abijah Thomas House Conceptual Site Master Plan

Site Analysis

**PART 3:
PRELIMINARY
DESIGN CONCEPT**

PRELIMINARY DESIGN CONCEPT

Design Description

The goal of this concept was to recreate the Abijah Thomas House and its supporting structures with historical accuracy and sequence of learning in mind. The supporting structures are in the same general locations as they were in the past but amenities such as learning gardens are interspersed between structures to facilitate greater learning about life in the 1800s and the knowledge of local resources that is still applicable today.

The new design additions give homage to certain features of the site while reinventing them in a modern context. For instance, the two barns that were on site have been recreated to support events and guest lodging, and the open air event barn can double as a place to display antique farm equipment that the Thomas farm might have used and provide shelter.

Additionally, a new network of trails has been put in place to better utilize the upper portion of potential property and connecting the Abijah Thomas House to the Thomas Cemetery and proposed visitor center. The Forest Trail extends .4 miles in a scenic route through the surrounding densely vegetated area and can support such activities as nature education (native tree identification, how this forest could have been used when Abijah Thomas lived here) or as a haunted trail during Halloween. For more direct access to/from the visitor center and Thomas Cemetery and the Abijah Thomas House, a path that's 1/8th of a mile extends from the back of the house near the event pavilion to the eastern edge of the cemetery road.



community design
assistance center

College of Architecture and Urban Studies
Virginia Polytechnic Institute and State University

Disclaimer : This drawing is conceptual and was prepared to show approximate location and arrangement of site features. It is subject to change and is not intended to replace the use of construction documents. The client should consult appropriate professionals before any construction or site work is undertaken. The Community Design Assistance Center is not responsible for the inappropriate use of this drawing.



- Legend
- A- Thomas Cemetery
 - B- Visitor Center Parking (Bus Compatible)
 - C- Cemetery Trail
 - D- Visitors Center Trail
 - E- Forest Trail
 - F- Octagon House
 - G- Event Parking (No Buses)
 - H- Connection to Appalachian Trail*
(*Requires partnership with private landowners)
 - P- Structures to Remain as Private Residences

Marion, VA:
Abijah Thomas House Conceptual Site Master Plan

Preliminary Design Concept
Master Plan



Legend

A- Octagon House	O- Medicinal Plant Garden
B- Front Porch	P- Maintenance Shed
C- Cherry Tree Lined Path with Brick Pavers	Q- Native Fruit Tree Orchard
D- Pergola	R- Slave Cabins
E- Small Stage	S- Slave Cabin Gardens
F- Brick Yard	T- Event Barn
G- Back Porch	U- Overnight Stay Barn
H- Corn Crib	V- Breezeway
I- Chicken Coop	W- Patio
J- Kitchen Garden	X- Welcome Booth
K- Wood Shed	Y- Brick and Wrought Iron Fence
L- Smoke House	
M- Laundry	
N- Demonstration Stage	



Kitchen Garden



Raised Garden Plot



Cherry Tree Lined Path



Breezeway between Barns



Overnight Stay Barn with Loft



Event Barn (Open Air Option)



community design assistance center

College of Architecture and Urban Studies
Virginia Polytechnic Institute and State University

Disclaimer : This drawing is conceptual and was prepared to show approximate location and arrangement of site features. It is subject to change and is not intended to replace the use of construction documents. The client should consult appropriate professionals before any construction or site work is undertaken. The Community Design Assistance Center is not responsible for the inappropriate use of this drawing.

Marion, VA:
Abijah Thomas House Conceptual Site Master Plan

Preliminary Design Concept
Site Plan and Precedent Images



View of the front of the Octagon House with the proposed outdoor event space. The event space includes a cherry tree lined path, pergolas to frame the view of the mountains to the southwest, and a small stage.



community design
assistance center

College of Architecture and Urban Studies
Virginia Polytechnic Institute and State University

Disclaimer : This drawing is conceptual and was prepared to show approximate location and arrangement of site features. It is subject to change and is not intended to replace the use of construction documents. The client should consult appropriate professionals before any construction or site work is undertaken. The Community Design Assistance Center is not responsible for the inappropriate use of this drawing.

Marion, VA:
Abijah Thomas House Conceptual Site Master Plan

Preliminary Design Concept
Perspective: Front of the Octagon House and Cherry-Lined Event Space

Marion, VA:
Abijah Thomas House Conceptual Site Master Plan

PART 4:
APPENDIX

Marion, VA:
Abijah Thomas House Conceptual Site Master Plan

MEETING NOTES

Stakeholder Meeting Notes: 5/16/18

May 16, 2018; 10:45-12:45pm
Conference Room, Smyth County Chamber of Commerce
214 West Main Street, Marion, VA 24354

Background

- Original house name: Mountain View; but the trees have grown up in certain viewsheds and there are power lines running against the road
- Train came through the area in 1856
- Octagon House built in 1858
- Historical preservation is a core focus of the Octagon House Foundation (OHF) but needs revenue diversity in order to secure long-term financial stability.
- OHF initially reached out to the Virginia Highlands Community College (VHCC; Ben Casteel, Cindy Fields) for planting ideas for the front of the house and border areas. That effort has since lost momentum.

Overall

- Historical accuracy during reconstruction is vastly important
- Extent of design work is denoted by the bold black line in the plat drawing supplied by the Octagon House Foundation (OHF)
- Original structures remaining
 - o Octagon House itself
 - o Smoke house
 - o Much of the existing topography has been altered from original condition
- Visitation goals
 - o 20,000 people/ year within 10 years (current Museum on Main St.; 1,700/ year)

Overarching Themes and Initial Design Ideas (*=potentially in Octagon House as well)

- Regional connections
 - o Trails
 - To slave cemetery
 - To Thomas Cemetery
 - o Linkages
 - o Outdoor recreation
 - Pedestrian connection to Thomas Cemetery
 - Connection to Applalachia Trail (~6 miles as the crow flies; expected to be several private landowners in between)
 - o Destination among a network of regional attractions
 - Bus tours; need to account for parking/ space requirements in design work
 - Settlers Museum of Southwest Virginia (Atkins, VA)
 - Museum of the Middle Appalachias (Saltville, VA)
 - African American Museum (Marion, VA)

Marion, VA:
Abijah Thomas House Conceptual Site Master Plan

MEETING NOTES

- Historical preservation
 - Tools, techniques, farm equipment display/ operation
 - Architecture styles
 - Plantation operations; orchard, farming, blacksmithing
 - Art and paintings; highlight original work that existing in the house, stenciling in door frames/ baseboards
 - Lifestyle stories; slaves, every day life
 - Trail to slave cemetery
 - Slave quarters (may not be appropriate for modern lodging)
 - Civil War
 - Battle of Marion
- Cultural education and historical interpretation
 - Hands-on and interactive
 - Smyth County schools and connection to SOLs
 - Period reenactments
 - On-site education and demonstrations
 - Barrel making
 - Blacksmithing
 - Brick making
 - Iron foundry
 - Fabric and textiles
 - Abijah Thomas' wool mill was 2 miles down the road
- Special events and outreach
 - Cultural heritage tourism
 - Music, movies on the lawn
 - Lodging
 - Reunions
 - Festivals- wine and cheese
 - Weddings, rehearsal dinners
 - Receptions
 - Business retreats
 - Visitor center potentially located in the house adjacent to the Thomas Museum
 - Kitchen (smaller kitchen in house; catering outside with historical facade)
 - Public restrooms
- Economic development and job creation
- Ecological sensitivity and environmental education
 - Outdoor amphitheater; plays, outdoor drama, music
 - Landscapes that produce food
 - Period-specific plants
 - Medicinal plants
 - Native plants
 - Potential tree species
 - Dogwood
 - Redbud
 - Crape Myrtle
 - Cherry

Marion, VA:
Abijah Thomas House Conceptual Site Master Plan

MEETING NOTES

Precedents

- Poplar Forest; Charlottesville, VA
- Smithfield Plantation; Blacksburg, VA
- Historic Williamsburg; Williamsburg, VA
- Historic Latta Plantation; Huntersville, NC
- Boone Hall Plantation; Mount Pleasant, SC
- Monticello and Mulberry Row; Charlottesville, VA

Marion, VA:
Abijah Thomas House Conceptual Site Master Plan

MEETING NOTES

Preliminary Presentation Meeting Notes: 6/4/18

May 31, 2018; 6:30pm- 7:30pm
Conference Room, Smyth County Library
118 Sheffey Street, Marion, VA 24354

Likes

- Brick walk in front of the Octagon House
 - Symbolic of the brick drive that used to be in front of the house but not as intensive as an actual road
- Cherry trees
- Native plantings throughout (Paws Paws)
- Appalachian Trail connector

Changes

- Flush out plant palette
 - Perimeter of front lawn
 - Screening; block low views to surrounding houses but keep long views to the mountains
 - Medicinal
 - Kitchen garden
 - Year-round attractiveness; stems, foliage, coniferous, flowering, smells, etc.
 - Layered
 - Plantings around house foundation
 - Low, boxwood, classical selections, low hedge
- Front of Octagon House
 - Brick drive was at ground level
 - Only one step between historical brick drive and first floor of the Octagon House (see historical picture of children sitting on the floor in the front door with feet dangling)
 - Steps to front door should be brick, not white
 - Balchony of Octagon House was continuous with flat iron railing (not individual awning-like coverings as rendered)
 - See picture of Octagon House Foundation t-shirt (back)
- Brick yard; move across Otagon House Rd. to where it historically was, okay to plan where private residences are presently
- Additional perspectives needed:
 - From the front of the Octagon House towards to mountains in the distance
 - Rear gardens: Octagon House toward barns
 - Rear gardens: gardens towards rear of Octagon House
- Slave Cabins; were originally 10, we had 8 in preliminary drawings, adjust

Marion, VA:
Abijah Thomas House Conceptual Site Master Plan

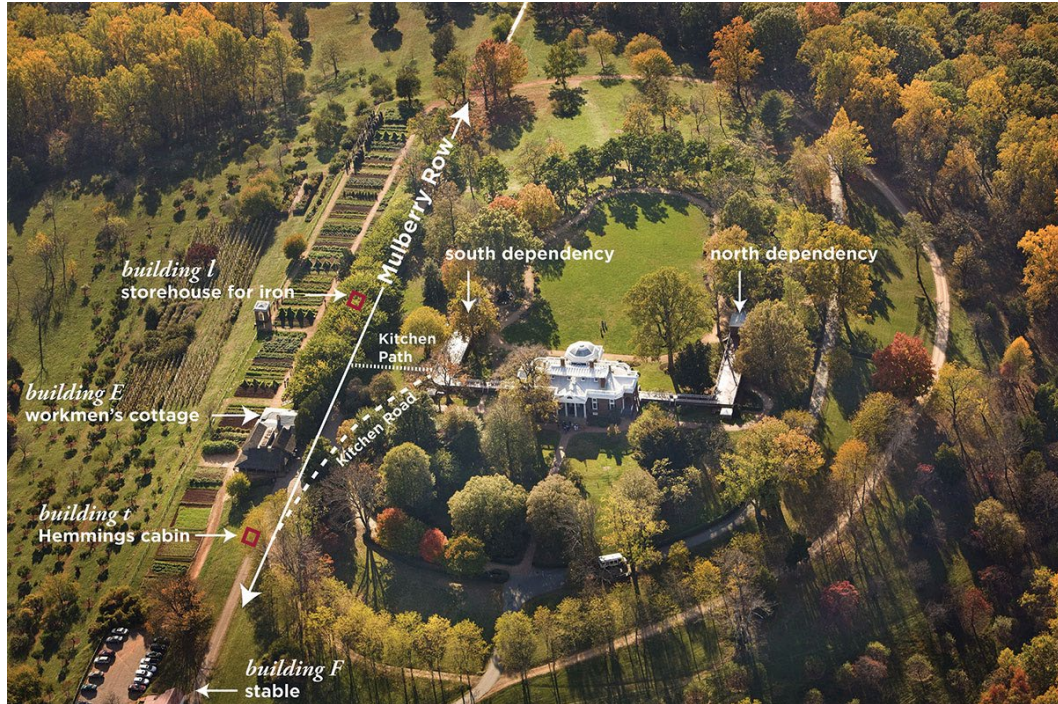
MEETING NOTES

What's Missing

- Outdoor amphitheater
- Formal festival space; away from the immediate proximity to historical elements (ie. Thomas Cemetery, Octagon House)
- Trail, along Thomas Bridge Rd. that connects the proposed Visitor Center to the front of the Octagon House property; okay to cross existing private property

CASE STUDIES

Monticello; Charlottesville, VA



Monticello is a preserved historic estate from the same era that is attractive to public visitors and open for larger events such as weddings. This is similar to the Octagon Foundation's vision for the Octagon House and grounds.

The grounds have a variety of different land uses and not only represent the history of what was there but also accommodate people in modern times. Some of the key features are the large lawn space next to the house, flower walk, vegetable garden, pavilion, picnic area, and visitor center. The grounds also have a shuttle transportation system between the landmarks that are further apart.

Monticello is located in a much more populous area and has more lodging opportunities around it. There is a need for more on-site lodging at the Octagon House if that is to be added to the program of the Octagon House. Also because the Octagon site is smaller than the Monticello grounds, there is little to no need for shuttling around the site.

There are a few important amenities and outdoor landscape features from Monticello that can also be incorporated in the Octagon House site. Lawn space should be left next to the Octagon House to allow for the mountain views to be exposed. Clusters of planting and smaller trees will allow for these views to be framed. The lawn space and pavilion can support large events such as weddings. The gardens, trails, picnic area, and visitor center are all important elements for everyday visitors.

CASE STUDIES

Smithfield Plantation; Blacksburg, VA



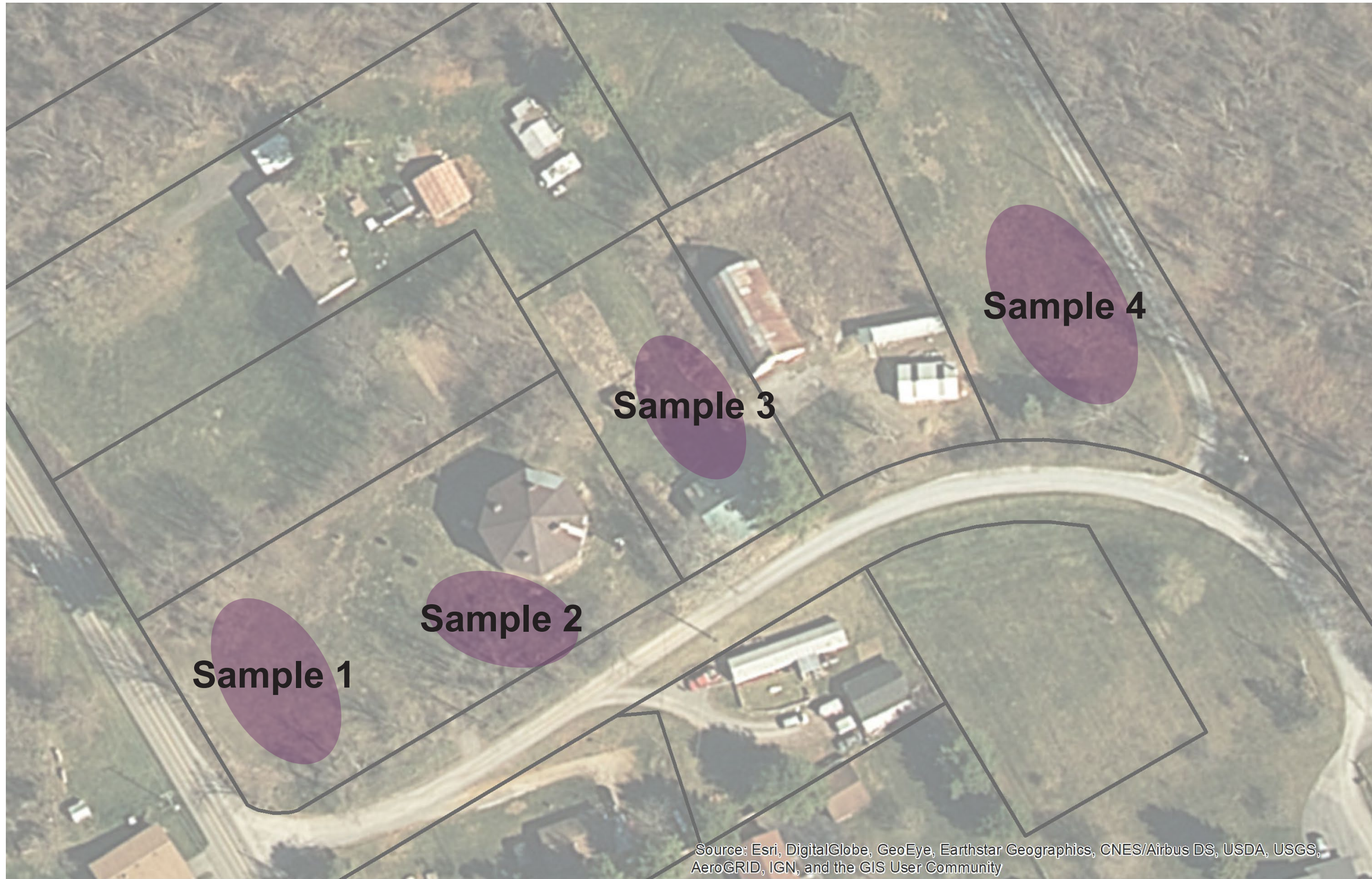
45

Smithfield is a period restored plantation house that supports the types of events envisioned by the Octagon House such as historical education and weddings. It is also at a smaller scale than Monticello and therefore more feasible to draw from.

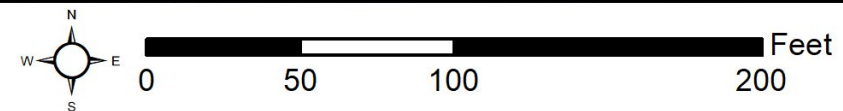
The site has a simple design that follows the history of how the land and house existed originally. The grounds have many of the original historic elements such as the slave garden and the blacksmith hut but it also includes some more modern amenities such as an outdoor event pavilion, parking, and gift shop. The gates have the sign for the plantation and designate the entry to the grounds. Historic plaques around the grounds along with the guided tours educate people about the history of the site.

The project is similar to the Octagon House in scale but differs because of the Octagon House's isolated location compared to Smithfield which is located near downtown Blacksburg. The Octagon House may require on-site lodging for larger events. There is also a need for more extensive trails to connect the cemeteries that are further away from the house. The zoning around the Octagon house property is also more of an issue because each of the properties is privately owned and may conflict with the project visions.

The entry gates and fence are important at the Octagon House because of the proximity to privately owned land. The gates and fence will not only help people with finding the site entry but will also provide privacy. Smithfield includes informational signs and areas for craft reenactment (such as a blacksmith workshop) that serve as an educational tool outside of the house tours themselves. Gardens and plantings can also include information on native, medicinal, and edible plants of the era.



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



community design
assistance center

College of Architecture and Urban Studies
Virginia Polytechnic Institute and State University

Disclaimer : This drawing is conceptual and was prepared to show approximate location and arrangement of site features. It is subject to change and is not intended to replace the use of construction documents. The client should consult appropriate professionals before any construction or site work is undertaken. The Community Design Assistance Center is not responsible for the inappropriate use of this drawing.

Marion, VA:
Abijah Thomas House Conceptual Site Master Plan

Soil Tests
Soil Sample Locations

Marion, VA:
Abijah Thomas House Conceptual Site Master Plan

SOIL TESTS

Results: Sample 1

Lab ID: 18-28523

2018-06-11

VPI & SU CAMPUS / 911

Virginia Cooperative Extension Soil Test Report

Questions? Contact:

Virginia Tech Soil Testing Laboratory
145 Smyth Hall (0465)
185 Ag Quad Ln
Blacksburg, VA 24061
www.soiltest.vt.edu

SEE NOTES:
1 19
at www.soiltest.vt.edu under Report Notes

O
W
N
E
R

PROCTOR NICK

C
O
P
Y

SAMPLE HISTORY

Sample ID	Field ID	LAST CROP		LAST LIME APPLICATION		SOIL INFORMATION				
		Name	Yield	Months Prev.	Tons/Acre	SMU-1 %	SMU-2 %	SMU-3 %	Yield Estimate	Productivity Group
OCT1										

LAB TEST RESULTS (see Note 1)

Analysis	P (lb/A)	K (lb/A)	Ca (lb/A)	Mg (lb/A)	Zn (ppm)	Mn (ppm)	Cu (ppm)	Fe (ppm)	B (ppm)	S.Salts (ppm)
Result	7	163	2676	453	24.0	25.5	0.8	4.7	0.7	
Rating	L	M+	VH	VH	SUFF	SUFF	SUFF	SUFF	SUFF	

Analysis	Soil pH	Buffer Index	Est.-CEC (meq/100g)	Acidity (%)	Base Sat. (%)	Ca Sat. (%)	Mg Sat. (%)	K Sat. (%)	Organic Matter (%)
Result	6.6	6.32	9.2	5.2	94.9	72.4	20.2	2.3	

FERTILIZER AND LIMESTONE RECOMMENDATIONS

Crop: FLOWER GARDEN (211)

619. Lime recommendations: NONE NEEDED.

991. "Explanation of Soil Tests, Note 1" and other referenced notes are viewable at www.soiltest.vt.edu under Report Notes.

221. FERTILIZER RECOMMENDATIONS: Apply 4 lbs (10 cups) of 5-10-10 or 2 lbs of 10-20-20 per 100 square feet. For additional information on fertilization, see Note 19.

Marion, VA:
Abijah Thomas House Conceptual Site Master Plan

SOIL TESTS

Results: Sample 2

Lab ID: 18-28524

2018-06-11

VPI & SU CAMPUS / 911

Virginia Cooperative Extension Soil Test Report

Questions? Contact:

Virginia Tech Soil Testing Laboratory
145 Smyth Hall (0465)
185 Ag Quad Ln
Blacksburg, VA 24061
www.soiltest.vt.edu

SEE NOTES:

1 19
at www.soiltest.vt.edu under Report Notes

O
W
N
E
R

PROCTOR NICK

C
F
O
P
R
Y

SAMPLE HISTORY

Sample ID	Field ID	LAST CROP		LAST LIME APPLICATION		SOIL INFORMATION				
		Name	Yield	Months Prev.	Tons/Acre	SMU-1 %	SMU-2 %	SMU-3 %	Yield Estimate	Productivity Group
OCT2										

LAB TEST RESULTS (see Note 1)

Analysis	P (lb/A)	K (lb/A)	Ca (lb/A)	Mg (lb/A)	Zn (ppm)	Mn (ppm)	Cu (ppm)	Fe (ppm)	B (ppm)	S.Salts (ppm)
Result	2	251	1788	319	2.4	26.1	0.4	4.7	0.5	
Rating	L-	H	H	VH	SUFF	SUFF	SUFF	SUFF	SUFF	

Analysis	Soil pH	Buffer Index	Est.-CEC (meq/100g)	Acidity (%)	Base Sat. (%)	Ca Sat. (%)	Mg Sat. (%)	K Sat. (%)	Organic Matter (%)
Result	6.4	6.24	7.0	13.5	86.5	63.3	18.6	4.6	

FERTILIZER AND LIMESTONE RECOMMENDATIONS

Crop: FLOWER GARDEN (211)

619. Lime recommendations: NONE NEEDED.

991. "Explanation of Soil Tests, Note 1" and other referenced notes are viewable at www.soiltest.vt.edu under Report Notes.

222. FERTILIZER RECOMMENDATIONS: Apply 4 lbs (9 cups) of 5-10-5 per 100 square feet. For additional information on fertilization, see Note 19.

Marion, VA:
Abijah Thomas House Conceptual Site Master Plan

SOIL TESTS

Results: Sample 3

Lab ID: 18-28525

2018-06-11

VPI & SU CAMPUS / 911

Virginia Cooperative Extension Soil Test Report

Questions? Contact:

Virginia Tech Soil Testing Laboratory
145 Smyth Hall (0465)
185 Ag Quad Ln
Blacksburg, VA 24061
www.soiltest.vt.edu

SEE NOTES:

1 19
at www.soiltest.vt.edu under Report Notes

O
W
N
E
R

PROCTOR NICK

C
O
P
Y

SAMPLE HISTORY

Sample ID	Field ID	LAST CROP		LAST LIME APPLICATION		SOIL INFORMATION				
		Name	Yield	Months Prev.	Tons/Acre	SMU-1 %	SMU-2 %	SMU-3 %	Yield Estimate	Productivity Group
OCT3										

LAB TEST RESULTS (see Note 1)

Analysis	P (lb/A)	K (lb/A)	Ca (lb/A)	Mg (lb/A)	Zn (ppm)	Mn (ppm)	Cu (ppm)	Fe (ppm)	B (ppm)	S.Salts (ppm)
Result	5	102	1720	313	3.4	22.5	0.4	4.4	0.4	
Rating	L	M	H	VH	SUFF	SUFF	SUFF	SUFF	SUFF	

Analysis	Soil pH	Buffer Index	Est.-CEC (meq/100g)	Acidity (%)	Base Sat. (%)	Ca Sat. (%)	Mg Sat. (%)	K Sat. (%)	Organic Matter (%)
Result	6.3	6.16	7.1	20.0	80.0	60.2	18.1	1.8	

FERTILIZER AND LIMESTONE RECOMMENDATIONS

Crop: FLOWER GARDEN (211)

619. Lime recommendations: NONE NEEDED.

991. "Explanation of Soil Tests, Note 1" and other referenced notes are viewable at www.soiltest.vt.edu under Report Notes.

221. FERTILIZER RECOMMENDATIONS: Apply 4 lbs (10 cups) of 5-10-10 or 2 lbs of 10-20-20 per 100 square feet. For additional information on fertilization, see Note 19.

Marion, VA:
Abijah Thomas House Conceptual Site Master Plan

SOIL TESTS

Results: Sample 4

Lab ID: 18-28526

2018-06-11

VPI & SU CAMPUS / 911

Virginia Cooperative Extension Soil Test Report

Questions? Contact:

Virginia Tech Soil Testing Laboratory
145 Smyth Hall (0465)
185 Ag Quad Ln
Blacksburg, VA 24061
www.soiltest.vt.edu

SEE NOTES:

1 19
at www.soiltest.vt.edu under Report Notes

O
W
N
E
R

PROCTOR NICK

C
F
O
O
P
R
Y

SAMPLE HISTORY

Sample ID	Field ID	LAST CROP		LAST LIME APPLICATION		SOIL INFORMATION				
		Name	Yield	Months Prev.	Tons/Acre	SMU-1 %	SMU-2 %	SMU-3 %	Yield Estimate	Productivity Group
OCT4										

LAB TEST RESULTS (see Note 1)

Analysis	P (lb/A)	K (lb/A)	Ca (lb/A)	Mg (lb/A)	Zn (ppm)	Mn (ppm)	Cu (ppm)	Fe (ppm)	B (ppm)	S.Salts (ppm)
Result	143	326	8911	523	7.7	4.6	0.1	0.4	3.0	
Rating	VH	VH	VH	VH	SUFF	SUFF	SUFF	SUFF	SUFF	

Analysis	Soil pH	Buffer Index	Est.-CEC (meq/100g)	Acidity (%)	Base Sat. (%)	Ca Sat. (%)	Mg Sat. (%)	K Sat. (%)	Organic Matter (%)
Result	7.9	6.60	24.8	0.0	100.0	89.6	8.7	1.7	

FERTILIZER AND LIMESTONE RECOMMENDATIONS

Crop: FLOWER GARDEN (211)

619. Lime recommendations: NONE NEEDED.

630. Soil pH needs to be lower. So first, do NOT apply any liming material, including wood ashes. To help reduce the pH, do one of the following. OPTION #1 - Apply 10 pounds of aluminum sulfate per 100 square feet. OPTION #2 - Apply one and a half pounds of elemental ("free"/85-100% pure) sulfur (as a fine powder, called "flowers of sulfur") per 100 square feet. Preferably, mix either one into the soil, and retest the soil after 4 to 6 months to determine if further applications are needed. Option #2 works slower, but is longer lasting, and safer, especially for blueberries. Option #1 works faster and is better for obtaining blue hydrangeas. Take care not to over apply either one to existing plants, and it is safest to apply no more than 5 pounds of aluminum sulfate per 100 square feet per month until the full amount has been applied.

991. "Explanation of Soil Tests, Note 1" and other referenced notes are viewable at www.soiltest.vt.edu under Report Notes.

225. FERTILIZER RECOMMENDATIONS: Apply a nitrogen-only fertilizer, such as one of the following amounts per 100 sq. ft. --- 1.25 lbs (2 cups) of nitrate of soda (16-0-0) or 1.33 lbs (2 2/3 cups) of calcium nitrate (15-0-0) or 1.0 lb (2 1/2 cups) of ammonium sulfate (21-0-0) or 0.4 lbs (1 cup) of urea (46-0-0). Do not over fertilize! These products will burn plants at high rates! If you are unable to find one of these fertilizers, apply a turf-type (lawn maintenance) fertilizer that is high in nitrogen with little or no phosphorus and potassium at a rate close to 0.2 lb of nitrogen per 100 sq. ft., such as applying two-thirds of a pound of either 26-0-2 or 32-0-4. For additional information on fertilization, see Note 19.