



POWHATAN COUNTY PLANNING COMMISSION

Agenda: Regular Meeting and Workshop

Tuesday, September 3, 2019

7:00 PM

Powhatan Village Building Auditorium
3910 Old Buckingham Road

1. Call to Order

Karin Carmack (Chair)

2. Invocation

David Van Gelder (Vice Chair)

3. Administrative Items

- a. Request to Postpone Action/Amend the Agenda
- b. Approval of Minutes: August 6, 2019 (Regular Meeting) ([p. 3](#))
- c. Approval of Minutes: August 6, 2019 (Workshop) ([p. 8](#))

4. Public Comment Period

At this time, the Planning Commission will hear citizen comments on unscheduled matters involving the services, policies, and affairs of Powhatan County government regarding planning or land use issues.

5. Old Business

- a. **Case #19-03-REZC: East West Communities (District #1: Subletts/Manakin/Flat Rock)** requests the rezoning of Tax Map Parcels #43-61, 43-64, and 43-64E and a portion of Tax Map Parcel #43-63 from Agricultural-10 (A-10) to Commerce Center Planned Development (CC-PD) and Village Residential Planned Development (VR-PD) and amendment of the zoning district map of approximately 120.68 acres of land located on the north side of State Route 675 (Page Road) near its intersection with U.S. Route 60 (Anderson Highway) adjacent to the Chesterfield County line. Approximately 6.98 acres would be rezoned to CC-PD and approximately 113.7 acres would be rezoned to VR-PD, which permits residential densities of up to four dwelling units per acre developed in accordance with a master plan. Proffered conditions address a master plan of development, cash proffers, maximum density (up to 249 dwelling units), access and circulation, and building materials. The 2019 Long-Range Comprehensive Plan designates the subject properties as Commerce Center, Village Residential, and Natural Conservation (Route 60 Corridor East Special Area Plan) on the Countywide Future Land Use Plan, with maximum recommended residential densities in the Village Residential land use designation being four dwelling units per acre. ([p. 10](#))

6. Public Hearings

- a. **Case #19-04-CUP: Powhatan Solar I, LLC (District #3: Bethesda/Lees Landing)** requests a conditional use permit (CUP) to permit a solar energy farm and related accessory uses within the Agricultural-10 (A-10) zoning district, per Sec. 83-162 of the Zoning Ordinance of the County of Powhatan. The proposed use will be located on a portion of Tax Map Parcels #27-14, 27-14A, and 26-104, which have frontage on the south side of State Route 615 (Three Bridge Road) at its intersection with State Route 1330 (Mill Mount Parkway) and at the

northern terminus of State Route 626 (Brauer Road). The subject properties total approximately 927.38 acres, with the proposed use located within a project area that is approximately 350.9 acres. The 2019 Long-Range Comprehensive Plan designates the subject properties as Rural Preservation and Natural Conservation on the Countywide Future Land Use Plan. ([p. 140](#))

- b. **Case #19-05-CUP: HCE Powhatan Solar I (District #4: Powhatan Courthouse/Mt. Zion)** requests a conditional use permit (CUP) to permit a solar energy farm and related accessory uses within the Agricultural-10 (A-10) zoning district, per Sec. 83-162 of the Zoning Ordinance of the County of Powhatan. The proposed use will be located on a portion of Tax Map Parcel #37-23B, which has frontage on the west side of State Route 13 (Old Buckingham Road) at its intersection with Spoonbill Drive (private road). The subject property totals approximately 89.52 acres, with the proposed use located within a project area of approximately 45 acres. The 2019 Long-Range Comprehensive Plan designates the subject properties as Rural Preservation and Natural Conservation on the Countywide Future Land Use Plan. ([p. 181](#))

7. New Business

None

8. Workshop

- a. Discussion: Case #19-06-REZC ([p. 210](#))
(Proposed Rezoning: Tax Map Parcels #42-55, 42-55A, 42-55B, 42-57G, and 42-72)

9. Adjourn

Next Meeting: October 1, 2019

August 6, 2019

VIRGINIA: AT A REGULAR MEETING OF THE PLANNING COMMISSION HELD IN THE POWHATAN VILLAGE BUILDING AUDITORIUM, 3910 OLD BUCKINGHAM ROAD IN POWHATAN COUNTY, VIRGINIA, AUGUST 6, 2019 AT 7:00 PM

Planning Commissioners Present	Karin Carmack, District 1, Chairman David Van Gelder, District 5, Vice-Chairman Donna Moore, District 3 Bill Cox, District 4
Planning Commissioners Absent	Owen Walker, District 2
Staff Members Present	Bret Schardein, Assistant County Administrator Andrew Pompei, Planning Director Kelley Kemp, Assistant County Attorney Ed Howland, Principal Planner Alyson Oliver, Planner II

1. Call to Order

Ms. Carmack called the meeting to order at 7:00 PM.

2. Invocation

Mr. Van Gelder gave the invocation.

3. Administrative Items

a. Request to Postpone Action/Amend the Agenda

None

b. Approval of Minutes

Ms. Carmack motioned to approve the minutes from the regular meeting and workshop on July 2, 2019.

Ms. Carmack, Mr. Van Gelder, Ms. Moore, and Mr. Cox voted AYE.

**VOTE 4-0
MOTION Passed**

4. Public Comment Period

Ms. Carmack opened the public comment period.

Carl Schangerment (1727 Teresa Lane) spoke, advocating for sidewalks to be built along U.S. Route 60 (Anderson Highway) in connection to the proposed mixed-use rezonings.

Seeing as there were no other speakers, the public comment period was closed by Ms. Carmack.

5. Old Business

None.

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6. Public Hearings

- a. **Case #19-06-CUP: Christopher and Joy Basic (District #4: Powhatan Courthouse/Mt. Zion)** request a conditional use permit (CUP) to permit a detached accessory dwelling unit within the Single-Family Residential-2 (R-2) zoning district per Sec. 83-213 of the zoning ordinance of the County of Powhatan. The use is proposed to be located on Tax Map Parcel #38D-2-16, located at 1645 Hollow Log Drive. The subject property consists of 4.1 acres. The 2019 Long-Range Comprehensive Plan designates the subject property as Rural Preservation on the Countywide Future Land Use Plan.

Ms. Oliver gave an overview of this request.

Ms. Carmack opened the public hearing.

Seeing as there were no speakers, the public comment period was closed by Ms. Carmack.

Mr. Cox asked the applicant to address the feasibility of the proposed conditions. Mr. Basic (1645 Hollow Log Drive) acknowledged the proposed conditions and stated that he will be able to comply with them as presented.

After brief discussion, Mr. Cox motioned to **recommend approval** of the CUP request.

Ms. Carmack, Mr. Van Gelder, Ms. Moore, and Mr. Cox voted AYE.

**VOTE 4-0
MOTION Passed**

- b. **Case #19-03-REZC: East West Communities (District #1: Subletts/Manakin/Flat Rock)** requests the rezoning of Tax Map Parcels #43-61, 43-64, and 43-64E and a portion of Tax Map Parcel #43-63 from Agricultural-10 (A-10) to Commerce Center Planned Development (CC-PD) and Village Residential Planned Development (VR-PD) and amendment of the zoning district map of approximately 120.68 acres of land located on the north side of State Route 675 (Page Road) near its intersection with U.S. Route 60 (Anderson Highway) adjacent to the Chesterfield County line. Approximately 6.98 acres would be rezoned to CC-PD and approximately 113.7 acres would be rezoned to VR-PD, which permits residential densities of up to four dwelling units per acre developed in accordance with a master plan. Proffered conditions address a master plan of development, cash proffers, maximum density (up to 249 dwelling units), access and circulation, and building materials. The 2019 Long-Range Comprehensive Plan designates the subject properties as Commerce Center, Village Residential, and Natural Conservation (Route 60 Corridor East Special Area Plan) on the Countywide Future Land Use Plan, with maximum recommended residential densities in the Village Residential land use designation being four dwelling units per acre.

Mr. Pompei gave an overview of this request. Chris Shust (Balzer and Associates) spoke on behalf of the applicant, providing additional information on the proposed rezoning as it relates to existing traffic patterns, the comprehensive plan, and projected tax revenues.

Ms. Carmack opened the public hearing.

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Carl Schangerment (1727 Teresa Lane) asked if the developer could consider extending Oakbridge Road to County Line Road and extend West County Line Road to Holly Hills to allow access to new signalized intersection, as well as to explore the possibility of adding bicycle trails along U.S. Route 60.

Debbie Weir (1501 Page Road) expressed concerns with the proposed rezoning, specifically citing concerns about the proposed density, increased traffic, and impact on schools and infrastructure.

Mike Hall (1746 Old Powhatan Estates) expressed concerns with the impact of the proposed rezoning, increased density and traffic, and realignment of the State Route 675 (Page Road) on the historic character of the road. Mr. Hall also spoke in opposition to the proposed RCUT intersection treatment, citing safety concerns, as well as the fiscal impact of the proposed residential development on the county's resources and infrastructure.

Robin McQuiddy (4426 Manakintown Ferry Road) stated that she agreed with the previous speakers, expressing concerns with traffic on Manakintown Ferry Road and its use as its cut-through to State Route 711 (Huguenot Trail).

Mark Kimbell (1756 Old Powhatan Estates) expressed concerns that decisionmakers would not live in the area of the proposed development, suggesting that State Route 675 (Page Road) be improved. Mr. Kimbell also expressed concern with the safety of motorists entering/existing U.S. Route 60 (Anderson Highway) from State Route 675 (Page Road).

Dwayna Wineguard (1338 Page Road) expressed concerns with potential impacts the development may have on emergency services (fire/rescue) and the ability of emergency responders to respond in an adequate amount of time.

Michael Thompson (1681 King William Woods Road) expressed concerns regarding the potential impacts this development could have on public infrastructure and services, as well as the county's rural character. Mr. Thompson also requested more information about potential transportation improvements, water/sewer infrastructure, project financing, and fiscal impacts.

Curtis Newton (2000 Judes Ferry Road) stated that he agreed with the previous comments and is concerned about potential transportation impacts and negative impacts to public services and infrastructure.

Elaine Hall (1746 Old Powhatan Estates) stated that she agreed with the previous comments, expressing concerns about potential negative impacts on public safety, public utilities (water/sewer), schools, transportation infrastructure, and the area's rural character.

Seeing as there were no other speakers, Ms. Carmack closed the public hearing.

Members of the Planning Commission then discussed the following:

- Members of the Planning Commission asked for Kyle Bates (VDOT) to provide input on the traffic concerns related to the proposed rezoning. Mr. Bates stated that he would be able to provide additional feedback on the proposal once the signal justification report has been received and reviewed by VDOT.

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- Members of the Planning Commission discussed concerns relating to school capacity with Dr. Eric Jones (Superintendent for Powhatan County Public Schools). Dr. Jones provided information on the current capacity of the schools, stating that the elementary and middle schools are at approximately 80% to 86% capacity, while the high school is at 92% capacity. Dr. Jones noted that future school expansion to accommodate additional students has been factored into the current Capital Improvement Plan, and that this development is anticipated to add 126 additional students to the school system.
- Members of the Planning Commission asked for additional information from the staff and applicant, including:
 - Additional information from the Fire Department regarding anticipated impacts on operating costs and response times; and
 - Additional information regarding the provision of public utilities (specifically a proposed pump station), proposed project phasing, and estimated timeline for intersection improvements.

After discussion, Ms. Carmack motioned to **defer** the request for at least 30 days.

Ms. Carmack, Mr. Van Gelder, Ms. Moore, and Mr. Cox voted AYE.

VOTE 4-0
MOTION Passed

- c. **Case #19-05-REZ: Scott O’Connell (District #2: Powhatan Station/Graceland)** requests the rezoning of Tax Map Parcel #41C-1-18 from General Commercial (C) with proffered conditions to Commerce Center (CC) and amendment of the zoning district map of approximately 1.2 acres of land located on the western end of State Route 1044 (New Dorset Circle), approximately 1,000 feet southeast of the intersection of U.S. Route 60 (Anderson Highway) and State Route 1043 (New Dorset Road). The 2019 Long-Range Comprehensive Plan designates the subject property as Commerce Center (Route 60 Corridor East Special Area Plan) on the Countywide Future Land Use Plan.

Ms. Oliver provided an overview for this request.

Ms. Carmack opened the public hearing.

Seeing as there were no speakers, the public comment period was closed by Ms. Carmack.

Members of the Planning Commission briefly discussed access to public utilities, the proffered conditions applicable to the property from the previous rezoning, and the architectural review process.

Following discussion, Ms. Carmack motioned to **recommend approval** of the rezoning request.

Ms. Carmack, Mr. Van Gelder, Ms. Moore, and Mr. Cox voted AYE.

VOTE 4-0
MOTION Passed

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- d. **Case #19-08-AZ:** The **County of Powhatan** requests the amendment and reenactment of provisions set forth in Chapter 83 (Zoning Ordinance), Article XII (Interpretations) to clarify language regarding accessory dwelling units and density; the measurement of corner yards; and the relationship between minimum front yard requirements and road classifications.

Mr. Pompei provided an overview for this request.

Ms. Carmack opened the public hearing.

Seeing as there were no speakers, the public comment period was closed by Ms. Carmack.

After brief discussion, Ms. Carmack motioned to **recommend approval** of the zoning ordinance amendment.

Ms. Carmack, Mr. Van Gelder, Ms. Moore, and Mr. Cox voted AYE.

VOTE 4-0
MOTION Passed

7. New Business

None.

8. Adjourn

There being no further business, Ms. Carmack adjourned the meeting at 8:07 PM.

Karin Carmack
Chairman

Andrew Pompei
Planning Director

August 6, 2019

VIRGINIA: AT A WORKSHOP OF THE PLANNING COMMISSION HELD IN THE POWHATAN VILLAGE BUILDING AUDITORIUM, 3910 OLD BUCKINGHAM ROAD IN POWHATAN COUNTY, VIRGINIA, AUGUST 6, 2019 AT 8:15 PM

Planning Commissioners Present	Karin Carmack, District 1, Chairman David Van Gelder, District 5, Vice-Chairman Donna Moore, District 3 Bill Cox, District 4
Planning Commissioners Absent	Owen Walker, District 2
Staff Members Present	Bret Schardein, Assistant County Administrator Andrew Pompei, Planning Director Kelley Kemp, Assistant County Attorney Ed Howland, Principal Planner Alyson Oliver, Planner II

1. Call to Order

Ms. Carmack called the meeting to order at 8:15 PM, following adjournment of the regular Planning Commission meeting held on August 6, 2019.

2. Discussion: Case #19-05-CUP (Proposed Solar Energy Farm: Tax Map Parcel #37-23B)

Davis Plunkett (Holocene Clean Energy), a representative for the applicant, provided an overview of the conditional use permit request to members of the Planning Commission, including updates since the July Planning Commission Workshop. Members of the Planning Commission discussed the following:

- Findings from the initial environmental investigations;
- Condition of the existing on-site vegetation;
- Plans for battery storage and maintenance;
- Estimated cost of decommissioning without accounting for salvage value; and
- Proposed conditions for approval.

3. Discussion: Case #19-04-CUP (Proposed Solar Energy Farm: Tax Map Parcels #27-14, 27-14A, and 26-104)

Parker Sloan (Cypress Creek Renewables), a representative for the applicant, provided an overview of the conditional use permit request and changes since the July Planning Commission Workshop. The Planning Commission discussed the following:

- Estimated cost of decommissioning without accounting for salvage value; and
- Proposed conditions for approval.

4. Discussion: Case #19-06-REZC (Proposed Rezoning: Tax Map Parcels #42-55, 42-55A, 42-55B, 42-57G, and 42-72)

Representatives for the applicant provided an overview of the requested rezoning. Members of the Planning Commission discussed the following:

- Provision of public utilities, including a pump station;

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- Estimated timeline for completing a traffic study; and
- The proposal's relation to recommendations within the 2019 Long-Range Comprehensive Plan.

5. Adjourn

Ms. Carmack adjourned the workshop at approximately 9:15 PM.

Karin Carmack
Chairman

Andrew Pompei
Planning Director



Powhatan County Planning Commission Agenda Item

Meeting Date: September 3, 2019

Agenda Item Title: **Case #19-03-REZC: East West Communities (District #1: Subletts/Manakin/Flat Rock)** requests the rezoning of Tax Map Parcels #43-61, 43-64, and 43-64E and a portion of Tax Map Parcel #43-63 from Agricultural-10 (A-10) to Commerce Center Planned Development (CC-PD) and Village Residential Planned Development (VR-PD) and amendment of the zoning district map of approximately 120.68 acres of land located on the north side of State Route 675 (Page Road) near its intersection with U.S. Route 60 (Anderson Highway) adjacent to the Chesterfield County line. Approximately 6.98 acres would be rezoned to CC-PD and approximately 113.7 acres would be rezoned to VR-PD, which permits residential densities of up to four dwelling units per acre developed in accordance with a master plan. Proffered conditions address a master plan of development, cash proffers, maximum density (up to 249 dwelling units), access and circulation, and building materials. The 2019 Long-Range Comprehensive Plan designates the subject properties as Commerce Center, Village Residential, and Natural Conservation (Route 60 Corridor East Special Area Plan) on the Countywide Future Land Use Plan, with maximum recommended residential densities in the Village Residential land use designation being four dwelling units per acre.

The applicant is also requesting a waiver from local intersection spacing requirements set forth in Table 68-175(e)(5)d of the Powhatan County Subdivision Ordinance.

Motion: *Rezoning Request*

In accordance with Article II of the Powhatan County Zoning Ordinance and public necessity, convenience, general welfare, and good zoning practice, the Powhatan County Planning Commission recommends (*approval / denial / deferral*) of the request submitted by East West Communities to rezone approximately 120.68 acres of land from Agricultural-10 (A-10) to Commerce Center Planned Development (CC-PD) and Village Residential Planned Development (VR-PD) with proffered conditions.

Waiver Request (Intersection Spacing Standards)

In accordance with Sec. 68-175(e)(5)(d) of the Powhatan County Subdivision Ordinance, the Powhatan County Planning Commission recommends (*approval / denial / deferral*) the request submitted by East West Communities for a waiver from local intersection spacing requirements set forth in Table 68-175(e)(5)d, as described in the letter dated July 26, 2019.

Dates Previously Considered by PC: July 2, 2019 (Workshop: Discussion Item)

August 6, 2019 (Public Hearing)

Summary of Item: The applicant is requesting approval to rezone approximately 120.68 acres north of the intersection of U.S. Route 60 (Anderson Highway) and State Route 675 (Page Road) along the Chesterfield County line to CC-PD and VR-PD with proffered conditions. A portion (6.98 acres) of the property along State Route 675 (Page Road) would accommodate commercial development, with the remainder of the site (113.7 acres)

If Planning Commission members have questions, please call the staff / contact prior to the meeting.

developed as a residential neighborhood with up to 249 single-family dwellings and townhouses.

Staff: Approve Disapprove See Comments

The Department of Community Development recommends **deferral** of this request (see Part VII for more information).

Attachments: Staff Report
Application Materials

Staff/Contact: Andrew Pompei: Planning Director
(804) 598-5621 x2006
apompei@powhatanva.gov

If Planning Commission members have questions, please call the staff / contact prior to the meeting.



19-03-REZC

East West Communities

Request to Rezone Tax Map Parcels #43-61, 43-64, and 43-64E
and a Portion of Tax Map Parcel #43-63
from Agricultural-10 (A-10) to Commerce Center Planned Development (CC-PD)
and Village Residential Planned Development (VR-PD) with Proffered Conditions

Staff Report Prepared for the Planning Commission
September 3, 2019

I. PUBLIC MEETINGS

Neighborhood Meeting	November 8, 2018 June 12, 2019	
Planning Commission	July 2, 2019 August 6, 2019 September 3, 2019	Workshop Public Hearing (Deferred for 30 Days: 4 – 0) Old Business

II. GENERAL INFORMATION

Request	Rezone to Commerce Center Planned Development (CC-PD) (6.98 acres) and Village Residential Planned Development (VR-PD) (113.7 acres)
Existing Zoning	Agricultural-10 (A-10)
Parcel ID#	43-61, 43-64, 43-64E and 43-63 (Part)
Parcel Size	120.68 acres
Proposed Density	249 Residential Units Maximum (VR-PD Portion: 113.7 acres) (2.19 units per acre in VR-PD)
Applicant	East West Communities
Applicant Rep.	Balzer and Associates (Chris Shust)
Owner	New County Line Farm LLC
Location of Property	1318 Page Road North of the Intersection of U.S. Route 60 (Anderson Highway) and State Route 675 (Page Road) at the Chesterfield County Line
Electoral District	(1) Subletts/Manakin/Flat Rock
2019 Land Use Plan Recommendation	Commerce Center Village Residential Natural Conservation (Route 60 Corridor East Special Area Plan)

III. EXECUTIVE SUMMARY

The applicant is requesting approval to rezone approximately 120.68 acres north of the intersection of U.S. Route 60 (Anderson Highway) and State Route 675 (Page Road) along the Chesterfield County line to CC-PD and VR-PD with proffered conditions. A portion (6.98 acres) of the property along State Route 675 (Page Road) would accommodate commercial development, with the remainder of the site (113.7 acres) developed as a residential neighborhood with up to 249 single-family dwellings and townhouses.

Application Revisions

Since the public hearing on August 6, 2019, the applicant has submitted the following amendments to the application:

- Revised Proffered Condition #3, making minor revisions to address technical concerns listed in the previous staff report (with updated language stating that certain improvements should be complete prior to issuance of a building permit, as opposed to recordation of a building permit);
- Revised Proffered Condition #5, adding language requiring the provision of a central park within Land Bay R-2;
- Revised the conceptual mater plan by:
 - Removing a future connection providing access to a large adjoining parcel(s) to the north; and
 - Adding a note regarding the provision of a central park within Land Bay R-2.
- Revised the Development Plan (Guidelines for Residential Dwelling Units) by:
 - Reducing the maximum number of townhouse units permitted within a single building from six (6) to four (4); and
 - Allowing attached front-loading garages to extend beyond the front façade (permitting front-loading garages to be flush with a covered porch or extend up to two feet beyond the front façade, depending upon the design of the dwelling).

IV. PROPERTY DESCRIPTION

Location

The subject properties, which total 120.68 acres, are located north of the intersection of U.S. Route 60 (Anderson Highway) and State Route 675 (Page Road) adjacent to the Chesterfield County line.

Existing Conditions

Parcel (Tax Map #)	Acreage	Existing Conditions
43-61	88.9	This parcel remains mostly undeveloped, with a mix of wooded areas (primarily along streams) and open pastures. Several intermittent and perennial streams (tributaries to Bernards Creek) cross the property, generally running west to east. A transmission line bisects the property within an easement 100 feet in width. A single-family dwelling (constructed in 2016) and accessory structures are located near the northern boundary of the property. This parcel has no road frontage.
43-64	24.8	This parcel remains undeveloped and is mostly wooded. Several intermittent and perennial streams (tributaries to Bernards Creek) cross the property, generally running west to east. A portion of a pond is located in the far southwestern corner of the property. A transmission line bisects the property within an easement 100 feet in width. This property has approximately 100 feet of frontage on State Route 675 (Page Road).
43-64E	6.18	This parcel remains undeveloped and is wooded. There is a perennial stream near the northern boundary of the parcel, with associated wetlands extending across the parcel towards State Route 675 (Page Road). This property has approximately 475 feet of frontage on State Route 675 (Page Road). A driveway to 1318 Page Road bisects the property.
43-63 (Part)	0.8	The portion of the property included with this request is wooded.

Surrounding Properties

Direction	Zoning	Uses
North	Agricultural-10 (A-10)	<ul style="list-style-type: none"> • Vacant Properties • Single-Family Dwellings on Large Lots (≥10 Acres) (Part of Stonehenge Farm)
South	Agricultural-10 (A-10) Commerce Center (CC)	<ul style="list-style-type: none"> • Single-Family Dwellings along State Route 675 (Page Road) • Commercial Uses South of State Route 675 (Page Road) (Gas Station, Office/Service-Oriented Businesses)
East	Agricultural-10 (A-10) Agricultural (A) (Chesterfield Co.)	<ul style="list-style-type: none"> • Vacant Properties (in Powhatan Co. and Chesterfield Co.) • Single-Family Residential along U.S. Route 60 (in Chesterfield Co.)
West	Agricultural-10 (A-10) Single-Family Residential-2 (R-2)	<ul style="list-style-type: none"> • Single-Family Dwellings on Large Lots (3 – 10 Acres) (Part of Stonehenge Farm and The Grange)

V. PROJECT ANALYSIS

Current Zoning

The subject properties are currently zoned Agricultural-10 (A-10).¹

Proposed Project

The applicant is proposing to rezone the properties to VR-PD and CC-PD (with proffered conditions) to accommodate residential and commercial development:

- 113.7 acres would be rezoned to VR-PD with proffered conditions to accommodate up to 249 residential dwellings, with an overall density of 2.17 units per acre. Up to 50 units could be attached, such as townhouses and/or duplexes. Densities would generally decrease from south to north, with open space distributed throughout the project (primarily along stream corridors).
- 6.98 acres would be rezoned to CC-PD with proffered conditions, accommodating commercial development.

Community Character

This property is in a transitional area, with commercial properties to the south (on or near U.S. Route 60) and residential properties to the west, and large vacant properties to the north and east. The surrounding parcels are located within the Route 60 Corridor East Special Area Plan in the *2019 Long Range Comprehensive Plan*. Nearby residential properties are generally on lots ranging from three (3) to ten (10) acres.



View of State Route 675 (Page Road) Adjacent to the Subject Properties

¹ Portions of Tax Map Parcels #43-61 and 43-64E extend into Chesterfield County and are zoned Agricultural (A). The zoning of the area located within Chesterfield County will not be changed, as Powhatan County does not have jurisdiction in those areas.

Environment/Natural Resources

Agency Comments: Environmental Review (Powhatan County)

All riparian buffers and setbacks shall be enforced per Sec. 83-471 of the Powhatan County Zoning Ordinance. The development will also be required to adhere to all stormwater management design criteria.

On-Site Natural Resources

Several intermittent and perennial streams cross the subject properties, with most running west to east and serving as tributaries to Bernards Creek. Per the environmental exhibit submitted with the application, wetlands are adjacent to some of these streams. There is a portion of a pond in the southwestern corner of the proposed project. In accordance with Sec. 83-471(a), protected riparian buffers are required adjacent to wetlands, intermittent streams, and perennial streams.² The conceptual plan shows that these riparian corridors will be preserved as open space, with a network of trails located along some streams.³

Throughout the subject properties, there is a mixture of forested areas and open pastures.

There is varied topography on the subject properties. Per GIS, elevations range from approximately 316 feet near the intersection of U.S. Route 60 (Anderson Highway)/State Route 675 (Page Road) to approximately 248 feet in the eastern corner of the property. Based on analysis of public GIS data, there do not appear to be significant steep slopes (over fifteen percent slope) on the property, with 98.4 percent of the total site having slopes of ten percent or less.⁴

Stormwater Management

The conceptual plan shows the general location of proposed stormwater management ponds throughout the development, which are generally located outside of riparian buffers. Prior to subdivision approval, a stormwater management plan will need to be submitted and approved by the Virginia Department of Environment Quality (DEQ) to ensure that the necessary infrastructure is in place to control the quantity and quality of runoff.

² Sec. 83-471(a) requires that riparian buffers at least 50 feet wide be provided adjacent to wetlands and intermittent streams and at least 100 feet wide along perennial streams.

³ Table 83-470(c)(2) states that the preservation of existing natural features, including natural water features and riparian buffers “shall have the highest priority for locating open space set-asides.” Sec. 83-471(a)(5) states that bikeways, walkways, and similar recreational facilities are permitted within riparian buffers, provided that such facilities involve minimal removal vegetation and are not impervious.

⁴ In the 2019 Long-Range Comprehensive Plan, steep slopes are described as slopes with 15% or greater slopes (p. 64, 65, 69, 75, 81, 85).

Transportation

Agency Comments: Virginia Department of Transportation (VDOT)

A full response from VDOT (letter dated July 15, 2019) is included as Attachment #4. Excerpts are below:

- “The Virginia Department of Transportation has reviewed the resubmitted traffic study, dated June 6, 2019 for the proposed Ellis Farm site along the north side of Page Road (Route 675) near its intersection with Anderson Highway (US 60), and the responses to the original review comments. Based on the comment responses, the Department finds that the revised report conforms to the requirements of a traffic impact analysis in regard to the accuracy of the methodologies, assumptions, and conclusions presented in the analysis” (p. 1).
- “In order to determine if a signalized intersection is warranted at the intersection of US 60 with Page Road and County Line Road, a signal warrant analysis was included in the traffic assessment. The analysis concludes that the buildout year meets multiple signal warrants. VDOT Richmond District Traffic Engineering has reviewed the warrants and concurs with the warrant analysis presented in the traffic assessment report” (p. 3).
- “The traffic assessment report clearly demonstrates that there is an existing operational issue on the Page Road and County Line Road approaches to US 60, which would be exacerbated by the addition of the Ellis Farm site traffic” (p. 3).
- “At this time, the Department cannot support the four-way signalization of the realigned Page Road and proposed access road to the Classic Granite site, due to the analyzed LOS values provided in this report. The traffic analysis presented in the report concludes that a signalized intersection treatment will be required to accommodate the site traffic added to the US 60 intersection with Page Road and County Line Road” (p. 3).
- “The Department recommends that the applicant proceed with a Signal Justification Report (SJR) that analyzes the traditional four-way signal and the alternative intersections identified in the traffic assessment report. The goal of the SJR would be to determine the most appropriate signalized intersection treatment that provides the best safety and operational conditions for the intersection. The Department will continue to support the county’s evaluation of this rezoning proposal and is committed to working with the developer to determine the most appropriate solution to the operational issues at the US 60 intersection with Page Road and County Line Road” (p. 4).

Local Road Network

The subject properties have frontage on State Route 675 (Page Road) near its intersection with U.S. Route 60 (Anderson Highway).

Roadway Characteristic	State Route 675 (Page Road)	U.S. Route 60 (Anderson Highway)
Functional Classification: VDOT	Major Collector	Other Principal Arterial ⁵
Functional Classification: Powhatan Co. Major Thoroughfare Plan	Rural Collector (Existing)	Major Arterial (Existing)
Traffic Volume Estimates (VDOT: 2017)	1,200	34,000

Traffic Analysis

Green Light Solutions, Inc. prepared a traffic assessment (dated January 29, 2019/revised June 6, 2019: Attachment #3) to analyze potential impacts the proposed project may have on the local transportation network. The study analyzed the several intersections, including the site entrances and nearby intersections along U.S. Route 60 (Anderson Highway).⁶ This analysis studied existing peak hour traffic conditions and anticipated peak hour conditions in 2024 (with already-approved developments and with the proposed development).

Per the traffic assessment, the following issues are occurring under existing traffic conditions (Traffic Assessment: p. 2):

- The signalized intersection at U.S. Route 60 (Anderson Highway)/State Route 634 (Stavemill Road) is operating at unacceptable levels of service under the AM peak hour, due to demand exceeding capacity on the eastbound and northbound approaches.
- Minor street left turn movements at all unsignalized intersections on U.S. Route 60 (Anderson Highway) are operating at unacceptable levels of service and over capacity for both the AM and PM peak hours.
- Existing traffic volume on U.S. Route 60 (Anderson Highway) is 34,000 vehicles per day east of State Route 675 (Page Road) and 32,000 vehicles per day east of State Route 634 (Stavemill Road).

⁵ U.S. Route 60 (Anderson Highway) between U.S. Route 522 (Maidens Road) and the Chesterfield County line is part of VDOT's Arterial Preservation Network. For roadways that are part of this network, VDOT aims to implement innovative strategies aimed at adding capacity, improving safety, and minimizing delays for through traffic.

⁶ The study analyze impacts the development may have on the following intersections: U.S. Route 60 (Anderson Highway) at State Route 634 (Stavemill Road), Oakbridge Drive, Standing Ridge Drive, State Route 675 (Page Road)/County Line Road, and State Route 652 (Old Hundred Road) (which is in Chesterfield County).

Background traffic levels, plus traffic generated from approved developments, will result in the following conditions in 2024 (Traffic Assessment: p. 2):

- A significant increase in delay is anticipated at the signalized intersection of U.S. Route 60 (Anderson Highway)/State Route 634 (Stavemill Road). Increases in traffic demand further deteriorate existing operational measures to unacceptable levels under both the AM and PM peak hours.
- Traffic demand is anticipated to exceed capacity on the eastbound and northbound approaches at the signalized intersection of U.S. Route 60 (Anderson Highway)/State Route 634 (Stavemill Road).
- Anticipated traffic volume on U.S. Route 60 (Anderson Highway) will be 38,320 vehicles per day east of State Route 675 (Page Road) and 40,580 vehicles per day east of State Route 634 (Stavemill Road).

Per the traffic assessment, “analysis of the study area under buildout traffic conditions has determined that the site will have a marginal impact to the overall study area with the exception of U.S. Route 60 and Page Road/County Line Road. Where the impacts beyond the US 60 and Page Road/County Line Road intersection are expected to be marginal there will be impacts to intersections/movements that are already experiencing deficient operations due to existing and/or background plus approved development peak hour traffic conditions. Mitigation measures needed for these intersections/movements are beyond the ability of this development to provide” (Traffic Assessment: p. 2).

VDOT has confirmed that the traffic assessment “conforms to the requirements of a traffic impact analysis in regard to the accuracy of the methodologies, assumptions, and conclusions presented in the analysis” (Attachment #4).

Signal Justification Report

At the request of VDOT, the applicant has prepared a signal justification report (dated August 16, 2019) (Attachment #5). This report analyzed four different designs/treatments that could be used to manage traffic at the intersection of U.S. Route 60 (Anderson Highway)/State Route 675 (Page Road)/State Route 671 (County Line Road):

- Full-Movement Signalized Intersection
- Median U-Turn (M-CUT)
- Restricted Crossing U-Turn (RCUT)
- Modified RCUT

As part of the originally-submitted application, the applicant proposed realigning the intersection of U.S. Route 60 (Anderson Highway)/State Route 675 (Page Road)/State Route 671 (County Line Road) and constructing a full-movement signalized intersection (Development Plan Exhibit D: Interchange Plan). Based upon analysis of the aforementioned alternatives, the signal justification report concludes that a RCUT is the recommended treatment for the intersection, as that design “provides the best measure for overall intersection levels of service; volume to capacity ratios; and cumulative stopped delay on the primary movements” (Signal Justification Report: p. 9). This analysis

indicates that all alternatives “require signalization of each point of conflict in order to provide sufficient capacity for each intersection” (Signal Justification Report: p. 2).

As of August 28, 2019, VDOT continues to review the signal justification report.

Major Thoroughfare Plan

The Major Thoroughfare Plan (2019 Long-Range Comprehensive Plan: Chapter 9), establishes guidance regarding long-term development of the local transportation network. No specific improvements are listed along State Route 675 (Page Road), but the document recommends that roads designated as Rural Collectors have an ultimate right-of-way of at least 70 feet.

There are no specific improvements recommended for the intersection of U.S. Route 60 (Anderson Highway)/State Route 675 (Page Road), but there is general language stating that Powhatan County should improve U.S. Route 60 countywide by realigning intersections, modifying signals, and adding turn lanes as needed (Map ID 22: p. 138).

The applicant has proffered to improve the intersection of U.S. Route 60 (Anderson Highway)/State Route 675 (Page Road) (Proffered Condition #4).



View of State Route 675 (Page Road) Adjacent to the Subject Properties

Site Entrances: Spacing and Improvements

Due to existing commercial development (and associated existing entrances), modifications to local intersection spacing requirements [Table 68-175(e)(5)(d)] will need to be approved, in accordance with Sec. 68-175(e)(5)(d) (revised January 28, 2019). A written request for these modifications, along with a map/diagram, is included as Attachment #6.

Proposed Entrance	Conditions Necessitating Modification
<p>Proposed Westernmost Entrance: State Route 675 (Page Road) to Proposed Ellis Farm Development</p>	<p>While the proposed entrance adheres to spacing requirements on the north side of State Route 675 (Page Road), there are several existing entrances to established commercial uses located on the south side of State Route 675 (Page Road).</p> <p>(See Attachment #6: Measurements A, B, and C)</p>
<p>Proposed Entrance: State Route 675 (Page Road) to Tax Map Parcel #43-36</p>	<p>This parcel is currently undeveloped. If State Route 675 (Page Road) is realigned, no entrance from an adjacent roadway to this parcel would meet local intersection spacing requirements. The proposed location places the entrance on a roadway with the lowest classification and maximizes its spacing from major roadway intersections.</p> <p>(See Attachment #6: Measurements D, E, and F)</p>
<p>Proposed New Entrance: Page Road Realigned to Existing Gas Station (Tax Map Parcel #43-36B: 1300 Anderson Highway)</p>	<p>The applicant is proposing to close an existing entrance from U.S. Route 60 (Anderson Highway) and relocate it to proposed Page Road Realigned.</p> <p>(See Attachment #6: Measurements G and K)</p>
<p>Easternmost Existing Entrance: U.S. Route 60 (Anderson Highway) to Existing Gas Station (Tax Map Parcel #43-36B: 1300 Anderson Highway)</p>	<p>If Page Road Realigned is constructed at the proposed location, the easternmost existing entrance to 1300 Anderson Highway will not meet local intersection spacing requirements. The applicant is proposing to close the other existing entrance to 1300 Anderson Highway, so that the existing gas station will only have one direct access to U.S. Route 60 (Anderson Highway).</p> <p>(See Attachment #6: Measurement J)</p>
<p>Existing Entrance: State Route 675 (Page Road) to Existing Gas Station</p>	<p>If Page Road Realigned is constructed at the proposed location, the existing entrance to 1300 Anderson Highway from State Route 675 (Page Road) will not meet local intersection spacing requirements.</p> <p>(See Attachment #6: Measurement H)</p>
<p>Proposed Intersection Page Road Realigned at U.S. Route 60 (Anderson Highway)</p>	<p>A new crossover on U.S. Route 60 (Anderson Highway) and Page Road Realigned does not meet local intersection spacing requirements. Eventually, it is intended that State Route 671 (County Line Road) will be realigned to intersect at Page Road Realigned, allowing the existing crossover to be closed.</p> <p>The proposed intersection will not meet local intersection spacing requirements from an existing commercial entrance that serves 1346, 1348, 1350, and 1356 Anderson Highway).</p> <p>(See Attachment #6: Measurements I and L)</p>

Two entrances are proposed into the development from State Route 675 (Page Road). One entrance will be adjacent to proposed commercial uses, with a second entrance proposed farther west. The second entrance will be located within a strip that varies from 60 to 100 feet in width, crossing an existing pond.

As only two entrances are proposed, the development is not permitted to have more than 249 units. Sec. 68-170(b)(7) states that “subdivisions with 50 or more lots shall have at least two vehicular access points into the subdivision. Subdivisions with 250 or more lots shall have at least three vehicular access points into the subdivision.”

Two stub roads are shown on the Conceptual Master Plan, accommodating future connections to adjacent vacant parcels located to the east (should they develop). Since the public hearing on August 6, 2019, the applicant has removed a proposed stub road that would have provided access to vacant parcels located to the north of the subject properties.⁷

Pedestrian Mobility

In accordance with the master plan and proffered conditions, the pedestrian network will consist of on- and off-road accommodations:

- A sidewalk will be provided along one side of the primary road serving the development.
- Sidewalks will be provided on at least one side of all public streets.
- A network of pedestrian pathways and trails will provided throughout preserved open space (generally following streams).

This infrastructure will help provide safe and comfortable accommodations for those walking to destinations within the development, aligning with recommendations made in the 2019 Long-Range Comprehensive Plan. Strategy TR.5.a states that Powhatan County should “encourage pedestrian and bicycle improvements, especially in new developments, to enhance walkability and provide valuable recreation and health benefits” (p. 132). These improvements also seem to align with requirements set forth in Sec. 68-175(g) (Pedestrian Access and Circulation).

⁷ The Department of Community Development recommends that at least one stub road be provided to accommodate future access to vacant parcels located north of the subject properties. This will help create an interconnected street network (should those properties be developed in the future). Tax Map Parcel #43-57, which adjoins the northeastern corner of the subject properties, is a sizable parcel that is currently vacant.

Utilities and Public Infrastructure

Agency Comments: Department of Public Works (Powhatan County)

The properties, Tax Maps 43-61, 43-64 and 43-64E, are located within the Water and Wastewater Service District. By ordinance, they are not required to connect to public water or wastewater, since existing public utilities do not front any of the associated properties. The applicant has proposed connecting to public water and sewer, which will require the extension and dedication of the utilities (including the construction of a public pump station, built to DPW's specifications, and the dedication of the associated easements and land for the public utilities by the developer). The 249 residential units would be assessed water and sewer connection fees in the amount of \$3,037,800 using Powhatan County's current fee schedule. The department has no further review comments.

Agency Comments: Virginia Department of Health

No objections to this request.

Water Capacity

- Per an agreement with Chesterfield County, Powhatan County may purchase up to 572,000 gallons of water per day to serve its customers.
- As of May 2019, there are 105 accounts purchasing public water. Five (5) of those accounts are residential customers, with the remaining being schools, commercial, and irrigation accounts.
- Combined, those 105 accounts use an average of 30,000 gallons per day, with Powhatan County Public Schools using an average of 7,000 gallons per day.
- Powhatan County currently purchases 203,000 gallons per day, flushing approximately 165,000 gallons per day to maintain water quality.
- Existing residential customers use an average of 158 gallons per day. If the proposed dwellings use the same amount, the residential portion of the project will use an estimated 39,342 gallons per day.

Sewer Capacity

- The eastern portion of Powhatan County's Water and Sewer Service Area is served by the Dutoy Waste Water Treatment Plant, which is owned and operated by Powhatan County.
- Dutoy Creek's WWTP currently operating with an average flow of 0.039-0.043 MGD and has a maximum design flow of 0.125 MGD.
- Dutoy Creek's DEQ Permit will require additional testing requirements when the average design flow exceeds 0.050 MGD.
- The Department of Public Works will require that any proposed pump station be sized/designed to local specifications, so that it can adequately serve not only the proposed development, but the entire sewer service drainage basin within the existing Water and Wastewater Service District (as existing grades dictate). The pump station

(and the site of the pump station) must be dedicated to Powhatan County by the developer.

Public Safety

Agency Comments: Sheriff's Office (Powhatan County)

No comments at this time.

Agency Comments: Fire Department (Powhatan County)

Reviewed and there are no concerns with this proposal.

Fire/Rescue

The nearest fire station/rescue squad is Huguenot Volunteer Fire Department, which is located approximately 2.9 miles away.⁸ Currently, that facility has one career employee, who is supplemented by volunteers. In ideal conditions, response time would be approximately nine (9) minutes.

Powhatan County has a mutual aid agreement with Chesterfield County. The nearest fire station within Chesterfield County (Station #5) is located 5.2 miles away, and the nearest rescue squad (Medic #721) is located 2.9 miles away. During a structure fire in this area, a unit from Chesterfield County will be dispatched on automatic aid.

Based on an average of 0.28 calls per dwelling per year, it is estimated that this development will generate 70 calls for Fire/EMS services:

- Approximately 80% of calls are for EMS services, with Powhatan County recouping most of these costs from insurance providers.
- Due to the time and resources necessary to adequately respond, structure fires are generally more costly to respond to than other types of emergencies. Each year, 10 to 20 structure fires occur countywide (0.001 structure fire per dwelling per year). Based on the anticipated number of dwellings, it is estimated that Powhatan County will respond to one structure fire once every three years within the development.⁹

If this request is approved, the Fire Marshal will review the subdivision plat to ensure that the final design includes an appropriate number of hydrants and is designed to provide adequate emergency access to structures.

⁸ Properties within five driving miles of the nearest fire station may be eligible for lower homeowners insurance rates, as it may have a lower ISO (Insurance Services Office) fire score.

⁹ Estimates are based upon countywide population data and data collected by Public Safety Communications.

Public Schools

Upon full buildout (249 dwelling units), the proposed project is expected to generate approximately 126 students as follows:

School Level	Anticipated Generation Rate	Estimated Number of Students
Elementary	0.2 students per dwelling unit	50
Middle	0.15 students per dwelling unit	38
High	0.15 students per dwelling unit	38

*When the calculations result in a fraction, the estimate is rounded to the next whole number.

The enrollment and capacity for each school in Powhatan County (as of June 1, 2019) is as follows:

School	Current Enrollment	Total Capacity	% of Capacity	No. of Students Below Capacity
Powhatan Elementary	484	575	84	91
Pocahontas Elementary	723	850	85	127
Flat Rock Elementary	612	760	81	148
Powhatan Middle	1,027	1,200	86	173
Powhatan High	1,385	1,500	92	115

Any students living within the proposed development would attend Flat Rock Elementary School, Powhatan Middle School, or Powhatan High School.

If this request is approved, anticipated enrollment would be as follows:

School	Anticipated Enrollment	Total Capacity	% of Capacity
Powhatan Elementary	484	575	84
Pocahontas Elementary	723	850	85
Flat Rock Elementary	662	760	87
Powhatan Middle	1,065	1,200	89
Powhatan High	1,423	1,500	95

Functional capacity is defined as the number of students that can be effectively educated within a school facility. Classrooms are a primary consideration, but support areas (such as cafeterias, libraries, gyms, and/or auditoriums) must also be considered. The benchmark for a school reaching the limit of its functional capacity is when it approaches or exceeds 90% of its total capacity. Schools approaching or exceeding 90% of total capacity should plan for additions or renovations to create additional capacity or consider building a new school to provide capacity relief.

Based on these estimates, Flat Rock Elementary School and Powhatan Middle School will be approaching functional capacity if this request is approved. Powhatan High School will exceed 90% of its total capacity. Powhatan County Public Schools will continue planning for additions at Powhatan Middle School and Powhatan High School

as its most immediate capital needs, in light of anticipated increased enrollments at both of these schools.

Development Requirements and Standards

Agency Comments: Building Inspections Department (Powhatan County)

1. All construction will need to meet current USBC code requirements at the time of application.
2. This area is in a moderate shrink/swell area per the Powhatan County GIS system. All new homes within this area will need a soil analysis with an engineered footing design.
3. Road signs will need to be in place prior to any inspection being requested.
4. Other requirements will be established once building plans are submitted to the county.

The Building Department has no comment that would affect this rezoning case. All comments made are towards the application process for the proposed new construction.

Development Review: Next Steps

If this rezoning request is approved, the development will be required to undergo additional administrative review:

- *Preliminary Plat*

A preliminary plat must be submitted to Powhatan County for review for any subdivision involving greater than 50 lots [Sec. 68-110(a)]. Preliminary plat approval authorizes the subdivider to submit an application for construction plans and final plat approval [Sec. 68-109].

Preliminary plats are reviewed by the Department of Community Development to ensure compliance with provisions set forth in the zoning and subdivision ordinances.

- *Final Plat*

A final subdivision plat must be submitted to Powhatan County for review and approval prior to recordation at the Office of the Clerk of the Circuit Court [Sec. 68-110(c)].

Final plats are reviewed by the Department of Community Development to ensure compliance with provisions set forth in the zoning and subdivision ordinances.

- *Site Plan Approval*

Prior to issuance of a building permit for commercial development (within the portion of the property proposed to be zoned CC-PD), the applicant will be required to submit a site plan(s) for review and approval [Sec. 83-123(g)].

All site plans are evaluated to ensure that proposed development adheres to standards set forth in Article VIII (Development Standards) of the zoning ordinance. These standards address several components of the development, including:

- Vehicular Access and Circulation [Sec. 68-175(e)];
- Off-Street Parking and Loading [Sec. 83-455];

- Landscaping and Buffers [Sec. 83-461];
- Exterior Lighting [Sec. 83-469];
- Open Space [Sec. 83-470]; and
- Signage [Sec. 83-488].

Site plan applications are reviewed by the Department of Community Development.

VI. COMPREHENSIVE PLAN ANALYSIS

Countywide Future Land Use Plan

The 2019 Long-Range Comprehensive Plan designates the subject properties as *Village Residential*, *Commerce Center*, and *Natural Conservation*. The subject properties are within the Route 60 Corridor East Special Area Plan (p. 119) (Attachment #8).

Land Use: Village Residential

Most of Tax Map Parcels #43-61 and #43-64 are designated *Village Residential* in the 2019 Long-Range Comprehensive Plan. This land use designation is described as follows (p. 84):

Village Residential generally applies to large areas of land that could be developed under a unified planned development. Village Residential recommends thoughtful design to provide a variety of housing options in a layout that respects the low-intensity, single-family character of adjacent rural areas, while providing slightly more intense development. The gross density in these areas may vary within each growth area (special area plan) between one-half and four units per acre and could include single-family detached, single-family attached, and three- to four-unit multi-family buildings. The average lot size would range between one-fourth acre and two acres.

The primary location for Village Residential is near the courthouse in the Courthouse Village, Route 711 Village, and along eastern portions of the Route 60 Corridor. Village Residential represents the residential-only neighborhood component of a complete village and is often developed near a Village Center (p. 84).

The following uses are recommended within areas designated *Village Residential* (p. 84):

- Single-Family Detached Residential with Accessory Residential Structures
- Two- to Four-Family Residential Structures
(Examples: Apartments, Condominiums, Townhouses)
- Bed and Breakfasts
- Public and Institutional Uses
(Examples: Schools, Churches, and Community Centers)
- Parks and Recreation
- Village Center uses may be appropriate as part of a master plan.

Within areas designated *Village Residential*, the applicant is proposing single-family detached units and single-family attached units (such as townhouses and/or duplexes). This generally aligns with specific recommendations for areas designated *Village*

Residential within the Route 60 Corridor East Special Area Plan. Within that growth areas, projects designated *Village Residential* “should include detached single-family dwellings and two- to four-family residential structures (apartments, condominiums, townhouses, etc.) within developments designed as traditional neighborhoods” (p. 118).

VR-PD is listed as an appropriate zoning district within areas designated *Village Residential*.

Below is an analysis of how the conceptual master plan and development standards relate to recommended design elements for areas designated *Village Residential*:

Design Element	Adherence to Design Recommendations (Yes/No)	Analysis
Min. Project Size	Yes	The comprehensive plan recommends that projects within areas designated <i>Village Residential</i> be at least 20 acres in area. The residential portion of the proposed project is 113.7 acres.
Residential Densities	Yes	Recommended residential densities for projects within areas designated <i>Village Residential</i> be 0.5 units/acre to 4 units/acre. The proposed project will have 2.19 units/acre.
Mix of Uses	Yes	The portion of the project designated <i>Village Residential</i> will be used only for residential purposes, as recommended within the comprehensive plan. No more than 50 units (approximately 20% of total units) will be attached, with the comprehensive plan recommending that no more than 30% of units within a project be attached.
Minimum Open Space	Yes	Per the application, at least 20% of the site will be dedicated to open space.

Design Element	Adherence to Design Recommendations (Yes/No)	Analysis
Open Space Features	Yes	<p>Riparian buffers along intermittent and perennial streams are shown as preserved open space on the Conceptual Master Plan and Conceptual Open Space Plan. A network of trails will be located in this areas.</p> <p>The applicant has proffered that a pocket park be located within each land bay.</p> <p>The applicant has proffered that a central park will be provided within Land Bay R-2, connecting riparian corridors and providing additional areas for active recreation. Specific information regarding the size and location of this feature has not been provided.</p> <p>The applicant has proffered that sidewalks will be located on at least one side of the primary spine road and along other public streets (except for around the bulb of a cul-de-sac).</p>
Landscaping and Buffers	Yes	<p>A perimeter buffer at least 50 ft. wide will be provided where the project abuts adjacent properties.</p>
Environmental Design	Some Recommendations (Not All)	<p>The master plan shows the general location of stormwater management facilities.</p> <p>There is no indication that exceptional environmentally-friendly features will be incorporated into the development.</p>
Transportation Network	Yes	<p>There is generally an interconnected street network, where topography allows. Generally due to the presence of streams, there are several cul-de-sacs planned.</p> <p>The applicant has proffered that sidewalks will be located on at least one side of the primary spine road and along other public streets (except for around the bulb of a cul-de-sac).</p> <p>A network of trails will be located within riparian buffers, improving pedestrian connectivity.</p>

Design Element	Adherence to Design Recommendations (Yes/No)	Analysis
Utilities and Infrastructure	Some Recommendations (Not All)	<p>The project will be served by public water and sewer.</p> <p>Proffered conditions do not address potential impacts the project may have on public schools, parks, and/or public safety.</p> <p>Proffered conditions that address transportation-related impacts do not provide certainty regarding the phasing of proposed roadway improvements.</p>
Community Character	Some Recommendations (Not All)	<p>Per the revised application, front-facing garages may extend beyond the front façade (permitting front-loading garages to be flush with a covered porch or extend up to two feet beyond the front façade). Allowing garages to extend beyond the front façade hinders the creation of a pedestrian-friendly, village-like environment and does not align with design recommendations on p. 87 of the <i>2019 Long-Range Comprehensive Plan</i>. Sec. 83-476 (Multi-Family and Townhouse Development Standards in Village Growth Area Districts) requires that attached front-loading garages for townhouses “be set back at least two feet behind the street-facing façade.” Conflicting language is included within the revised Development Plan.</p> <p>There is no language regarding the style of homes, but proffered conditions limit the types of materials that may be used on residential structures.</p> <p>Buildings with townhouses will contain no more than four attached units, aligning with recommendations in the <i>2019 Long-Range Comprehensive Plan</i> that multi-family buildings have no more than four units (and designed to be similar in appearance to large single-family structures) (p. 84).</p>
Other Components	Yes	<p>The site will be developed in accordance with a master plan.</p> <p>Residential units will be in close proximity to planned parks/open space and commercial areas.</p>

Land Use: Commerce Center

Tax Map Parcel #43-64E is designated *Commerce Center* in the 2019 Long-Range Comprehensive Plan. This land use designation is described as follows (p. 96):

Commerce Centers should be established at targeted locations along the Route 60 Corridor to accommodate business and industrial development in a location conducive to both the local and regional markets. Commerce Centers should be well designed to accommodate these uses in a manner that has limited impact on the surrounding development, including but not limited to sustainable stormwater management practices, local roads, and open spaces.

The following uses are recommended within areas designated *Commerce Center* (p. 96):

- Offices
- Large-Scale Commercial/Retail
- Services
- Clean Manufacturing
- Distribution
- Warehousing
- Institutional Uses
- Parks, Open Space, Recreation

Within areas designated *Commerce Center*, the applicant (per the permitted textual plan) is proposing that a variety of commercial uses be permitted.

CC-PD is listed as an appropriate zoning district within areas designated *Commerce Center*.

Below is an analysis of how the conceptual master plan and development standards relate to recommended design elements for areas designated *Commerce Center*:

Design Element	Adherence to Design Recommendations (Yes/No)	Analysis
Min. Project Size	No	The comprehensive plan recommends that projects within areas designated <i>Commerce Center</i> be at least 30 acres in area. The commercial portion of the proposed project is 6.98 acres.
Residential Densities	Yes	No residential units are proposed in areas designated <i>Commerce Center</i> , in accordance with recommendations made in the 2019 Long-Range Comprehensive Plan.
Mix of Uses	Yes	If this request is approved, only commercial uses would be permitted in areas designated <i>Commerce Center</i> .
Minimum Open Space	Yes	Per the application, at least one acre of the area zoned CC-PD will be dedicated as open space.

Design Element	Adherence to Design Recommendations (Yes/No)	Analysis
Open Space Features	Some Recommendations (Not All)	<p>Portions of perimeter buffers and riparian buffers are located within areas designated <i>Commerce Center</i>.</p> <p>The applicant has proffered that sidewalks will be located on at least one side of the primary spine road.</p> <p>There is no indication that there will be active public spaces, such as plazas, parks, and greens.</p>
Landscaping and Buffers	Some Recommendations (Not All)	<p>On the Conceptual Master Plan, a buffer area is shown along State Route 675 (Page Road), but the minimum width is unclear.</p> <p>A buffer area is shown between areas intended for commercial and residential uses.</p>
Environmental Design	Some Recommendations (Not All)	<p>The master plan shows the general location of stormwater management facilities.</p> <p>There is no information regarding any environmentally-friendly features that may be incorporated into the development.</p>
Transportation Network	Yes	<p>Based on the conceptual plan and access management requirements, areas designated <i>Commerce Center</i> will be served by an internal street network (no direct access to existing major thoroughfares).</p> <p>The applicant has proffered that sidewalks will be located on at least one side of the primary spine road, connecting commercial uses to residential uses.</p>
Utilities and Infrastructure	Yes	<p>The proposed project will be served by public water and sewer.</p> <p>Proffered conditions that address transportation-related impacts do not provide certainty regarding the phasing of proposed roadway improvements.</p>
Community Character	Uncertain	<p>Few details are provided regarding the design of proposed commercial buildings, parking areas, or landscaped areas. Proffered Condition #6 limits exterior materials to brick, stone, stucco, cementitious siding, and similar materials.</p>

Land Use: Natural Conservation

Areas adjacent to some streams are designated *Natural Conservation* in the 2019 *Long-Range Comprehensive Plan*. This land use designation is described as follows:

Natural conservation indicates land with intrinsic natural features, such as perennial stream corridors, floodplains, floodways, wetlands, or steep slopes (over fifteen percent). As a secondary benefit, these same areas provide greenways for wildlife corridors. These areas are designated as “unbuildable” and should be maintained in a naturalized, undisturbed state. Local, state, and federal regulations apply to the conservation of these areas.

Areas designated *Natural Conservation* generally align with riparian buffers shown on the proffered master plan.

It is recommended that areas designated *Natural Conservation* include natural habitats, nature trails, and camps/retreats (p. 64).

VII. PROFFERED CONDITIONS

The applicant has voluntarily proffered the following six conditions (latest version signed August 23, 2019) (Attachment #2). Changes since the public hearing held on August 6, 2019 are noted with underlines/strikethroughs:

- *Proffered Condition #1*

Master Plan. *The Master Plan for the Property shall generally conform to the Terms and Conditions (II) and Conceptual Master Plan (III) outlined in the “Ellis Farm Development Plan” document, last revised ~~June 20, 2019~~ August 23, 2019, provided that the alignment and proposed street connections to Page Road and Anderson Highway (Route 60) are subject to change based on final approval by the Virginia Department of Transportation. Adjustments to the Terms and Conditions and/or Conceptual Master Plan may be approved at the time of preliminary plat and/or site plan review, provided such adjustments substantially retain the intent and overall design of the development at the sole discretion of the Planning Director.*

Analysis: This language could be improved to provide greater clarity for the Zoning Administrator. It should specify what degree of change to the alignment and proposed street connections may be permitted.

Proffered components of the development plan generally align with requirements for a PD plan specified in Sec. 83-282.

Sec. 83-123(e)(7) specifies what types of minor deviations from the PD plan may be approved by the Planning Director during the review of subsequent plans (such as preliminary plats and site plans).

- *Proffered Condition #2*

Density. *The maximum density shall not exceed 249 residential dwelling units.*

Analysis: This language is generally acceptable and aligns with language throughout the application and supporting documents.

- *Proffered Condition #3*

Vehicular Access. *There shall be no more than two (2) access points from Page Road as shown on the Conceptual Master Plan. The westernmost access shall be located on Parcel 043-64 and the easternmost access shall be located within, or adjacent to, parcels 043-64E and 043-63. One access shall be completed prior to ~~recording~~ the issuance of the 1st building permit and the other access shall be completed prior to the ~~recording~~ issuance of the 50th building permit. The Virginia Department of Transportation and Powhatan County shall approve the exact location of these accesses.*

Analysis: This language is generally acceptable. The intent of this proffered condition seems to align with provisions set forth in Sec. 68-170(b)(7) of the Powhatan County Subdivision Ordinance, which states that subdivisions with 50 or more lots shall have at least two vehicular access points.

Limiting access to State Route 675 (Page Road) will help maintain the capacity and functionality of that roadway.

- *Proffered Condition #4*

Transportation Improvements. *The applicant proffers to provide right-of-way, construct roadway, and signal improvements within and between the Page Road and Anderson Highway (Route 60). These improvements shall be phased and built when warrants are met, and in accordance with construction plans approved by the Virginia Department of Transportation, Powhatan County, and the Applicant.*

Analysis: This language is not acceptable as presented, as it does not provide certainty regarding the timing and phasing of proposed transportation improvements. It states that improvements will be phased, but does not specify which components of the proposed improvements will be constructed when.¹⁰ This language does not provide details regarding the design of the proposed roadway or its specific location (or reference a particular exhibit/diagram).

- *Proffered Condition #5*

Community Design Elements.

- Sidewalks.** At a minimum, sidewalks shall generally be located on one side of all public streets, excluding the bulb of cul-de-sacs. Sidewalks within land bays shall connect to the main sidewalk shown on Exhibit A, the Conceptual Master Plan.*
- Trails.** Pedestrian pathways and trails shall be provided as generally depicted on Exhibit A, the Conceptual Master Plan.*
- Pocket Parks.** A minimum 2,500 square foot pocket park shall be included in each land bay area. These shall act as an amenity for the development with either landscaping, benches, hardscaped areas, or a combination of thereof.*

¹⁰ Per the Revised Traffic Assessment (dated June 6, 2019), “traffic signal warrants indicate that buildout of 45% of site residential units; 10,000sf of retail; 15,000sf of office uses will meet warrants for justification of a traffic signal at the proposed US 60 and Realigned Page Road / Classic Granite Site Drive” (p. 21).

- d. ***Central Park.*** *A central park area shall be included in Land Bay R-2 to connect riparian corridors and provide additional space for active recreation.*

Analysis: Language associated with Subsections A, B, and C is generally acceptable.

Language associated with Subsection D is not acceptable as presented. Recently-submitted revisions requiring the provision of a central park within Land Bay R-2 do not provide sufficient detail regarding the size and features of this proposed open space. As it is a significant feature, its general location should be shown on the conceptual master plan. The provision of a central park could create a usable open space that contributes to a village-like environment.

- *Proffered Condition #6*

Materials. *Acceptable siding materials for residential and commercial buildings include brick, stone, stucco (E.I.F.S), cementitious siding, or other materials of comparable quality. Synthetic stucco (E.I.F.S) siding shall be finished in smooth, sand, or level texture. Rough textures are not permitted.*

Analysis: This language is generally acceptable. It is slightly more stringent than requirements set forth in Sec. 83-477(h)(1) of the Powhatan County Zoning Ordinance, which specifies materials that may be used on the facades of institutional, commercial, and mixed-use buildings. There are no zoning requirements or other development standards that specify what materials may be used on residential structures.

VIII. PUBLIC COMMENTS

Comments provided at the most recent neighborhood meeting (June 12, 2019) are included as Attachment #9. In general, attendees commented on potential transportation-related impacts (and associated improvements), impacts on other public services, and proposed densities.¹¹

Comments submitted to the Department of Community Development are included as Attachment #10.

VI. PLANNING COMMISSION REVIEW

On August 6, 2019, the Planning Commission held a public hearing on this request. Nine (9) members of the public spoke during the public hearing. Speakers expressed concerns regarding the following issues:

- Negative impacts the proposed project may have on the local transportation network;
- Negative impacts the proposed project may have on public services; and
- Negative impacts the proposed project may have on the community's character.

After the public hearing, the Planning Commission discussed the following issues:

- Proposed transportation improvements;
- Potential impacts to Powhatan County Public Schools;

¹¹ A neighborhood meeting was also held on November 12, 2018 by a different applicant proposing a similar development with a similar layout.

- Potential impacts to public services.

After discussion, the Planning Commission deferred this request for 30 days (Vote: 4 – 0).

VII. STAFF RECOMMENDATION

Rezoning Request

Favorable Attributes of Request

- The proposed project addresses several recommendations made in the 2019 Long-Range Comprehensive Plan: Countywide Land Use Plan (Map 6: p. 59). Areas designated *Village Residential* in that document would generally be rezoned to Village Residential Planned Development (VR-PD), while areas designated *Commerce Center* would generally be rezoned to Commerce Center Planned Development (CC-PD). Areas designated as *Natural Conservation* would be included within preserved riparian buffers.
- The proposed project is located within a designated growth area (Route 60 Corridor East Special Area Plan).
- The project would include a mix of housing types (single-family detached dwellings and townhouse).¹²
- Proffered conditions address some of the transportation-related impacts the proposed development may have on public infrastructure.

Unfavorable Attributes of Request

- Some language within the proposed development plan regarding the setbacks and design of residential structures (such as setbacks for attached front-facing garages) does not align with recommendations made in the *2019 Long-Range Comprehensive Plan*, which encourages the creation of a pedestrian-friendly, village-like environment within areas designated *Village Residential*.
- While proffered conditions help mitigate some of the transportation-related impacts the proposed project may have on the surrounding community, the project will negatively impact the level of service of adjacent roadways.
- Proffered conditions do not address potential impacts the project may have on public schools, parks, and/or public safety.¹³
- VDOT does not support the intersection treatment (conventional signalized intersection) proposed by the applicant for the intersection of U.S. Route 60 (Anderson Highway) and Page Road/County Line Road realigned.

To allow additional time for the applicant to address the aforementioned unfavorable attributes of this request, the Department of Community Development recommends **deferral** of this rezoning request.

¹²The 2019 Long-Range Comprehensive Plan: Strategy HS.2.b recommends that Powhatan County “as part of major rezoning requests, encourage developers to provide a mixture of housing types” (p. 25).

¹³The 2019 Long-Range Comprehensive Plan: Objective LU.9 recommends that Powhatan County “coordinate land use planning with the provision of transportation facilities, infrastructure and community facilities, and economic development goals” (p. 57).

Waiver Request (Intersection Spacing Standards)

The Department of Community Development recommends **deferral** of this request, to allow additional time to analyze how the proposed intersection spacing relates to VDOT requirements and other possible intersection treatments at the intersection of U.S. Route 60 (Anderson Highway) and Page Road Realigned.

If this request is approved is approved, the following condition is recommended:

- The proposed new entrance from Page Road Realigned to the existing gas station at 1300 Anderson Highway (Tax Map Parcel #43-36B) shall be designed to restrict access to right-in/right-out only. Prior to approval of any road plans for Page Road Realigned, an auxiliary lane warrants analysis shall be submitted to determine if an auxiliary (turn) lane or taper is required per local standards or VDOT requirements.

VIII. PROPOSED RESOLUTION

Rezoning Request

In accordance with Article II of the Powhatan County Zoning Ordinance and public necessity, convenience, general welfare, and good zoning practice, the Powhatan County Planning Commission recommends (*approval / denial / deferral*) of the request submitted by East West Communities to rezone approximately 120.68 acres of land from Agircultural-10 (A-10) to Commerce Center Planned Development (CC-PD) and Village Residential Planned Development (VR-PD) with proffered conditions.

Waiver Request (Intersection Spacing Standards)

In accordance with Sec. 68-175(e)(5)(d) of the Powhatan County Subdivision Ordinance, the Powhatan County Planning Commission recommends (*approval / denial / deferral*) the request submitted by East West Communities for a waiver from local intersection spacing requirements set forth in Table 68-175(e)(5)d, as described in the letter dated July 26, 2019.

Attachment(s)

1. Ellis Farm Development Plan (Revision Date: August 23, 2019)
2. Proffer Statement (Dated August 23, 2019)
3. Revised Traffic Assessment: Ellis Farm Property (Dated June 6, 2019)
4. Comments from VDOT re Traffic Assessment (Ellis Farm Traffic Assessment Report Comments: Dated July 15, 2019)
5. Access Management Waiver Request (Dated July 26, 2019)
6. Supplemental Signal Justification Report: Ellis Farm Property (Dated August 16, 2019)
7. Vicinity Map
8. Zoning Map
9. Countywide Future Land Use Map
10. Neighborhood Meeting Comments
11. Public Comments Received via Email or Hand Delivered

EAST WEST COMMUNITIES

Ellis Farm Development Plan (Page Road at Route 60)



Submittal Date: 05-21-2019
Revision Date: 06-07-2019
Revision Date: 06-20-2019
Revision Date: 08-23-2019

Richmond, Va

AMERICA'S BEST

EAST WEST COMMUNITIES

3 Time Winner Of America's Best Community

★ Richmond, Virginia

The Best Communities In America Are In Richmond, VA

Over the past 45 years, East West Communities has received national acclaim for developing the Best Community in America for three (3) different communities. Every year the National Association of Home Builders and the Urban Land Institute assemble panels of expert judges and select new planned housing developments somewhere in the United States that they judge to be the best. The criteria includes

No other developer in the country has EVER won three "Best Communities in America" awards! And certainly no other 6.8 square mile area contains three winning communities.

diversity of housing, sales success, environmental sensitivity, infrastructure, and quality of life, and more. The award winning communities include Hallsley, Woodlake, and Brandermill. These three East West communities are all located in Richmond, Virginia.





East West Communities *Wins* National Acclaim

Since 1973, East West Communities has developed 25 award-winning communities that are home to more than 20,000 families. The company purchased land in Richmond, Virginia, with unprecedented plans of building a community that would offer a vacation lifestyle for everyday living. The first community, Brandermill, became home to 4,400 families and was named the “Best Planned Community in America” in 1977 by Better Homes and Gardens Magazine and the National

Association of Homebuilders. The second community, Woodlake, also near Richmond, was chosen “Best Community in America” by the 14,000 members of Urban Land Institute in 1990. And now, Hallsley, one of the most recent additions to East West Communities, was chosen the national platinum award winner for the 2017 Best Master Planned Community by the National Association of Home Builders Best In American Living (BALA). Hallsley will be home to 800 families at completion.



Table of *Contents*

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- II. Terms and Conditions
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 - Exhibit B - Methodologies
 - Exhibit C - Conceptual Open Space Plan
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- IV. Exhibits (Illustrative Purposes Only)
 - Exhibit E - Submitted Application
 - Exhibit F - Environmental Features
 - Exhibit G - Commercial / Retail Corners Created
 - Exhibit H - Traffic Study

*All photos are for informational purposes to illustrate the history and quality of East West Communities

INTRODUCTION

I. REZONING REQUEST

East West Communities, or it assigns (the "Applicant"), requests conditional rezoning of 119.91+/- acres ("the Property"), including parcel #043- 61 (88.9 acres); #043-64 (24.8 acres); #043-64E (6.18 acres); and a portion of parcel #043-63 (+/- 0.8 acre) from Agricultural (A-10) to Commerce Center Planned Development (CC-PD) and Village Residential Planned Development (VR-PD).



II. PROJECT OVERVIEW

A. GENERAL INFORMATION

The Property, owned by New County Line Farm LLC, is located at 1318 Page Road, Midlothian, VA 23113, directly across from the Shell Station at the intersection of Page Road and Route 60 (Anderson Highway). The front portion of the Property will be zoned Commerce Center Planned Development (CC-PD) with the remainder of the property zoned Village Residential Planned Development (VR-PD). The overview below is intended to be compatible and congruent with Powhatan County, Virginia's 2019 Long-Range Comprehensive Plan and Route 60 Corridor East Special Area Plan.



B. RESIDENTIAL DENSITIES

VR-PD	0.5 du/ac to 4 du/ac
CC-PD	Not Applicable



C. MIX OF USES

i. CC-PD Component.

The purpose of the CC-PD District is to accommodate a wide range of retail, service, office and institutional uses that provide goods and services serving the residents and businesses in the community at large. Architectural Proffered Standards will apply to both the CC-PD and VR-PD Components.



ii. VR-PD Component

The purpose of the VR-PD District is to accommodate moderate density residential development of walkable neighborhoods that include single family detached, duplex, and townhouse dwellings. The Property will incorporate thoughtful design to provide a variety of housing options in a layout that respects the low-intensity, single family character of adjacent rural areas. The property will include single-family detached and single family attached (duplex and townhome style) housing options. The Property will have a maximum of 249 mixed dwelling units. No more than 50 will be attached units.

D. OPEN SPACE FEATURES (See Exhibit D)

VR-PD: A minimum of 23 acres of the Project Area will be open space or have an easement over them precluding alteration, clearing, building and disturbance. At least 9 acres of the open space set aside will be dedicated to active recreational areas.

CC-PD: A minimum of 1 acre of the Project Area will be open space or have an easement over them precluding alteration, clearing, building and disturbance.

EAST WEST COMMUNITIES HISTORY



1973. Sea Pines purchased 2600 acres of land surrounding a 1700-acre lake/reservoir in Midlothian, VA and began development on Brandermill.



1977. Brandermill was named **Best Planned Community In America** by Better Homes and Gardens magazine and the National Association of Home Builders.

OPEN SPACE FEATURES, *continued*

Natural water features (including lakes, ponds, rivers, streams, wetlands, and other riparian areas) riparian buffers, flood hazard areas, steep slopes (15% or greater) and wildlife habitat will be preserved as open space or have an easement over them precluding alteration, clearing, building and disturbance.

Parks, trails and sidewalks will be provided within the development to create a pedestrian network that connects neighborhoods with commercial areas and public facilities.

The Property will have street trees, pocket parks, pocket gardens, gazebos, walking/hiking trails, bridges, playgrounds and gathering areas for the enjoyment of the community residents.

Site furniture such as benches, lighting, trash receptacles and decorative street signs will be used to complement the site architecture.

The Conceptual Open Space Plan (Exhibit C) identifies an open space and trail network to provide residents walkable opportunities for recreation, community activities and access to retail and commercial businesses.

EAST WEST COMMUNITIES HISTORY



1978. Gary Fenchuck and two partners purchased the land from Sea Pines Company and formed what is known today as East West Communities.



1984. Development began on the 2,700 home Woodlake community, later chosen **Best Community in America** by the Urban Land Institute.

E. LANDSCAPING AND BUFFERS

Buffers will be provided in the areas generally shown on the attached Conceptual Plan. Transition of development density within the VR-PD area will be accomplished through natural and planted buffers as generally shown on the attached Conceptual Plan.

Every attempt will be made to preserve existing mature trees to maintain the character the land. Street trees will be provided per the Subdivision Ordinance.

F. ENVIRONMENTAL DESIGN

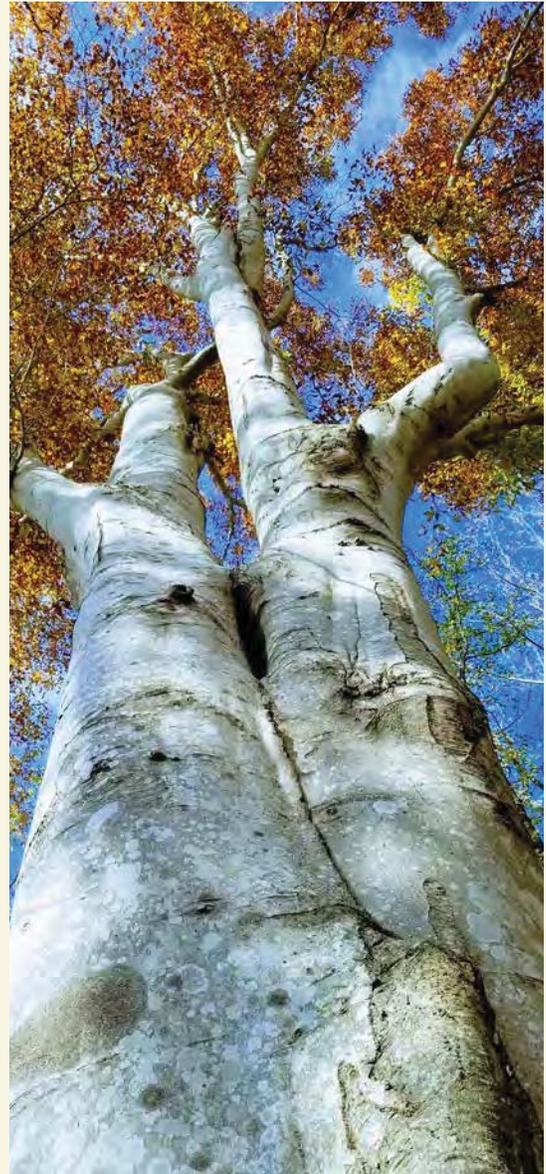
The development will have coordinated storm water management plans. This includes ensuring storm water impacts are properly mitigated in accordance with local and state officials.

G. TRANSPORTATION NETWORK & ACCESS

The Property will be served by a network of publicly maintained roads (unless alleys are provided, which will be private and maintained by the HOA). Two entrances will be provided onto Page Road with 3 stub roads to adjacent parcels generally as shown on the attached exhibit. The Applicant will realign County Line Road through off-site parcel 043-36, as shown on Exhibit D, and corresponding Page Road Improvements to align with primary entrance of neighborhood development through a portion of parcel 043-63.

H. UTILITIES & INFRASTRUCTURE

The Property will provide public water, wastewater, and a pump-station that will allow for a density that is commensurate for the proposed commercial, office and residential uses.





I. COMMUNITY CHARACTER

VR-PD

- Houses will be designed to relate to the street. The front of building will be oriented to the street, and the transition from public to private space will include a general pattern of street – sidewalk – front yard – porch.
- Homes will have front-loading, side-loading, or rear-loading garages, either attached or detached. If the garage is detached it will be located in the side yard or rear yard only. Any front-loading garage shall be set back at least 5 ft. from the rear of the dwelling's front facade.
- A homeowner's association (the "Association") will be formed to manage and maintain common areas of the residential portion of the Property such as gardens, private alleys, trails, playground, etc. The Association will perform its functions in accordance with customary restrictive covenants (the "Covenants"), bylaws (the "Bylaws"), articles of incorporation (the "Articles") and Virginia law.

CC-PD

- Project will have a coordinated architectural form and spatial feel, which will relate to surrounding developments. There will be a cohesive signage, lighting, and landscaping.
- Design techniques such as high-quality landscaping, building colors and siting, low visibility parking locations, etc. will be employed to help reduce their visual presence and scale.

Terms and Conditions

VR-PD Textual Plan

CC-PD Textual Plan



VR-PD Textual Plan

A. Purpose.

East West Communities believes that great places add to the sum of human happiness. Per our motto, We Truly Care How You Live. We accomplish this through thoughtful creative Design and passively and actively Delighting our customers. We convene residential architects, landscape design architects, designers, artists, transportation experts, and even citizen activists to build places that are lovable, safe, welcoming, and stand the test of time.

Basic Tenets of Ellis Farm

Generate the physical and social framework for accomplishing the above and below. Create sustainable, human-scaled places where people can live healthy and happy lives. Walkable, vibrant, beautiful places work better for businesses, local governments, and their residents. Safe, pedestrian-friendly streets encourage people to walk in and interact with their built and natural surroundings. Sidewalks shall be provided where appropriate throughout the community to accommodate connectivity between uses. Well-designed public realms, including “third places”, where people hang out beyond home and work, facilitates the creation of social networks and affiliations.

Build sustainable places that are compact, mixed residential use, where people love to walk. Make streets safer for the young and the old and let people spend more quality time with their families and less with their steering wheels.



VR-PD Textual Plan, *continued*

Provide gathering areas, dog parks, pocket parks, sidewalks, and large porches to host daily interaction and public life. Open space shall be provided throughout the community to harness both active and passive recreation. A minimum of nine (9) acres shall be reserved for active recreation, including a trail system. Accommodate multimodal transportation including greenways, walking, bicycling, jogging, horseback riding, and driving.

The size, shape and location of the pocket parks will help determine whether it is consistently alive with people or windswept and vacant. The organization of buildings in a neighborhood and their relationship to the street will help establish its character. Combining appropriate yet traditional design elements makes places that are greater than the sum of their parts.

B. Use Standards.

Uses shall be consistent with the comprehensive plan, other county-adopted plans, and the purpose of the VR-PD district, and shall comply with the use and use-specific standards in Article VII: Use Standards.

EAST WEST COMMUNITIES HISTORY



1999. The Riverfront opens in 1999 and hosts the area's Homeareama in 2001, welcoming more than 116,000 visitors.



1999. Windsong, a small community bordering three lakes in old Winter Park outside Orlando, Florida opens.

C. Intensity and Dimensional Standards

Density, minimum	0.5 du/ac	
Density, maximum	4 du/ac	
Floor area ratio (FAR), maximum	n/a	
Lot area, minimum (s.f.)	Townhouses & Duplexes	1,600 s.f.
	Single Family	4,000 s.f.
Lot width, minimum (s.f.)	Townhouses & Duplexes	20 feet
	Single Family	40 feet
Impervious surfaces, maximum (% of district area)	80%	
Individual building size, maximum (s.f.)	Individual Townhouse Unit	4,800
	Individual Duplex Unit	4,800
	Individual Single-Family Unit	5,000 (1)
Building height, maximum (ft.)	40 feet	
Yard depths or setbacks, minimum (ft.)	Front	10 feet (2)
	Side - 0 ft. with 10 foot minimum between primary homes (excludes common wall on TH)	
	Rear	10 feet
Setback from abutting RSF zoning district, A-10 zoning, or existing single-family dwelling use, minimum (ft.)	50 feet	

FOOTNOTES:

(1) Excluding garages, basements, terraces, decks, attics, open porches, screened porches, attached utility or storage areas, unfinished “bonus” rooms and similar areas.

(2) Porches and steps may encroach up to five (5) feet within the front yard setback. Bay windows may extend up to two (2) feet within the front yard setback.

Guidelines for Residential Dwelling Units

1. Unit Type A

- a. General. There shall be no more than fifty (50) Type A dwelling units in the Development. If townhouses are provided, a maximum of four (4) residences per townhouse building shall be permitted and the length of each building will not exceed 128 feet, therefore a townhouse building shall not exceed 19,200 square feet (4,800 sq. ft. x 4 units = 19,200 total square feet).
- b. Lot Dimensions and Setbacks. Type A dwelling units shall follow the below dimensions.
 - i. Minimum lot size - 1,600 square feet
 - ii. Minimum front yard setback - 10 feet
 - iii. Minimum rear yard setback - 10 feet
 - iv. Minimum side yard setback - 5 feet*, excluding the common wall between townhouse units
 - v. Lot width range - 20 feet to 40 feet
 - vi. Lot depth minimum - 80 feet
- c. Accessory Structure (Including Detached Garage) Setbacks. Accessory structures associated with Type A units shall follow the below dimensions.
 - i. No accessory structure shall be located in the front yard setback
 - ii. Minimum rear yard setback - 5 feet
 - iii. Minimum side yard setback - 2.5 feet

2. Unit Type B

- a. Lot Dimensions and Setbacks. Type B dwelling units shall follow the below dimensions.
 - i. Minimum lot size - 4,000 square feet
 - ii. Minimum front yard setback - 10 feet
 - iii. Minimum rear yard setback - 10 feet
 - iv. Minimum side yard setback - 5 feet*
 - v. Lot width range - 40 feet to 70 feet
 - vi. Lot depth minimum - 100 feet
- b. Accessory Structure (Including Detached Garage) Setbacks. Accessory structures associated with Type B units shall follow the below dimensions.
 - i. No accessory structure shall be located in the front yard setback
 - ii. Minimum rear yard setback - 5 feet
 - iii. Minimum side yard setback - 2.5 feet

Guidelines for Residential Dwelling Units

3. Unit Type C

- a. Lot Dimensions and Setbacks. Type C dwelling units shall follow the below dimensions.
 - i. Minimum lot size - 5,000 square feet
 - ii. Minimum front yard setback - 10 feet
 - iii. Minimum rear yard setback - 10 feet
 - iv. Minimum side yard setback - 5 feet*
 - v. Lot width range - 50 feet to 80 feet
 - vi. Lot depth minimum - 100 feet
- b. Accessory Structure (Including Detached Garage) Setbacks. Accessory structures associated with Type C units shall follow the below dimensions.
 - i. No accessory structure shall be located in the front yard setback
 - ii. Minimum rear yard setback - 5 feet
 - iii. Minimum side yard setback - 2.5 feet

4. Unit Type D

- a. Lot Dimensions and Setbacks. Type D dwelling units shall follow the below dimensions.
 - i. Minimum lot size - 7,000 square feet
 - ii. Minimum front yard setback - 10 feet
 - iii. Minimum rear yard setback - 10 feet
 - iv. Minimum side yard setback - 10 feet
 - v. Lot width range - 70 feet to 100 feet
 - vi. Lot depth minimum - 100 feet
- b. Accessory Structure (Including Detached Garage) Setbacks. Accessory structures associated with Type D units shall follow the below dimensions.
 - i. No accessory structure shall be located in the front yard setback
 - ii. Minimum rear yard setback - 5 feet
 - iii. Minimum side yard setback - 2.5 feet

Guidelines for Residential Dwelling Units

5. Entry and Access (All Unit Types)

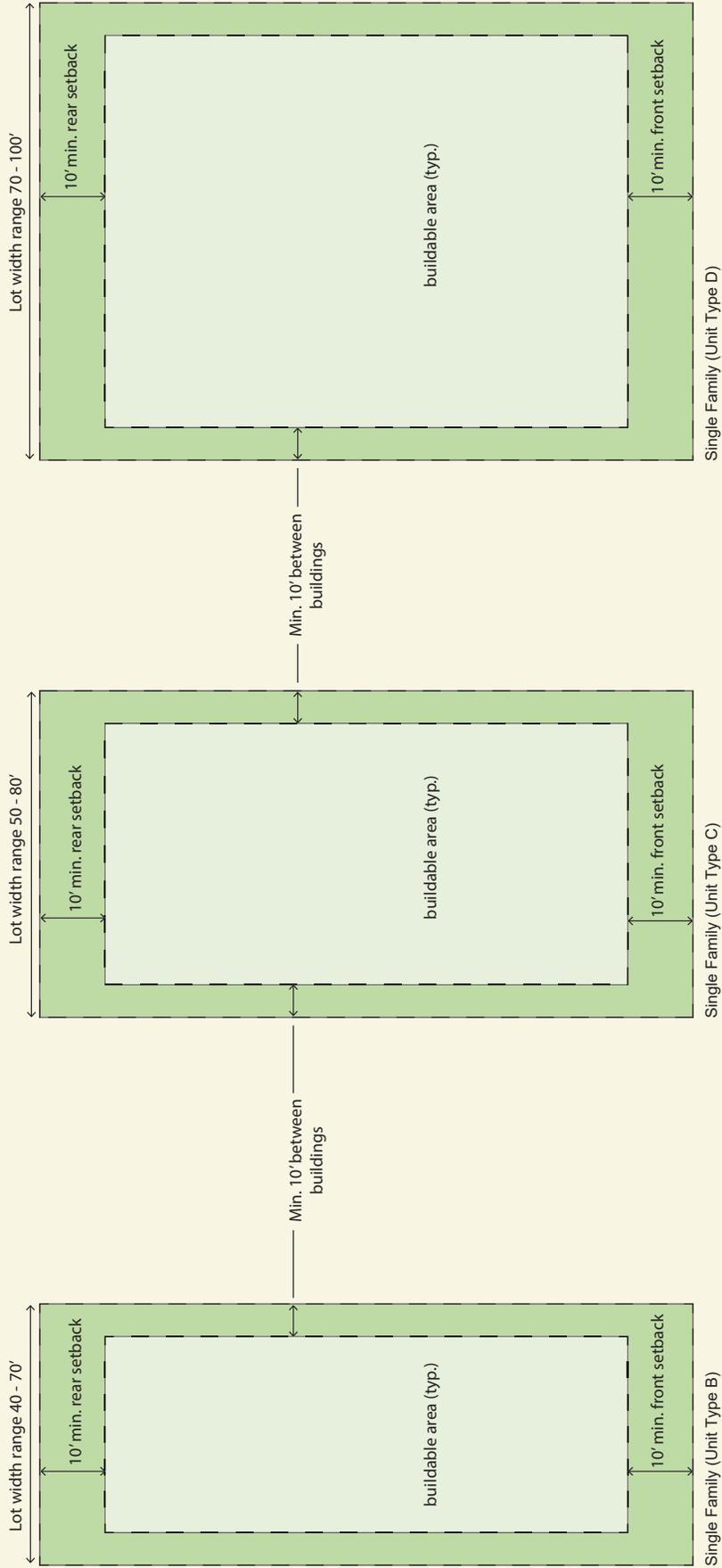
- a. Front-facing attached garages shall be permitted to extend as far forward from the front line of the main dwelling as the front line of the front porch provided that the rooflines of the porch and garage are contiguous. Where the rooflines are not contiguous, garages shall be permitted to project a maximum of two (2) feet forward of the front line of the main dwelling.
- b. Front-facing detached garages shall be permitted if setback a minimum of twelve (12) feet from the edge of the front porch or stoop closest to the road, or twelve (12) feet from the front facade and accessed through the front.
- c. Rear-facing/entry garages shall be permitted and accessed either through the front of the parcel, by means of on parcel driveway, or by direct access from a rear alleyway. Alleyways shall be maintained by the Homeowners Association.
- d. Side-facing garages, attached or detached, shall be permitted.
- e. On lots where driveways access the front, the use of shared driveways shall be permitted.

6. Phasing. The phasing of the residential development shall generally be done south to north. Development of each product type may be done concurrently if warranted.

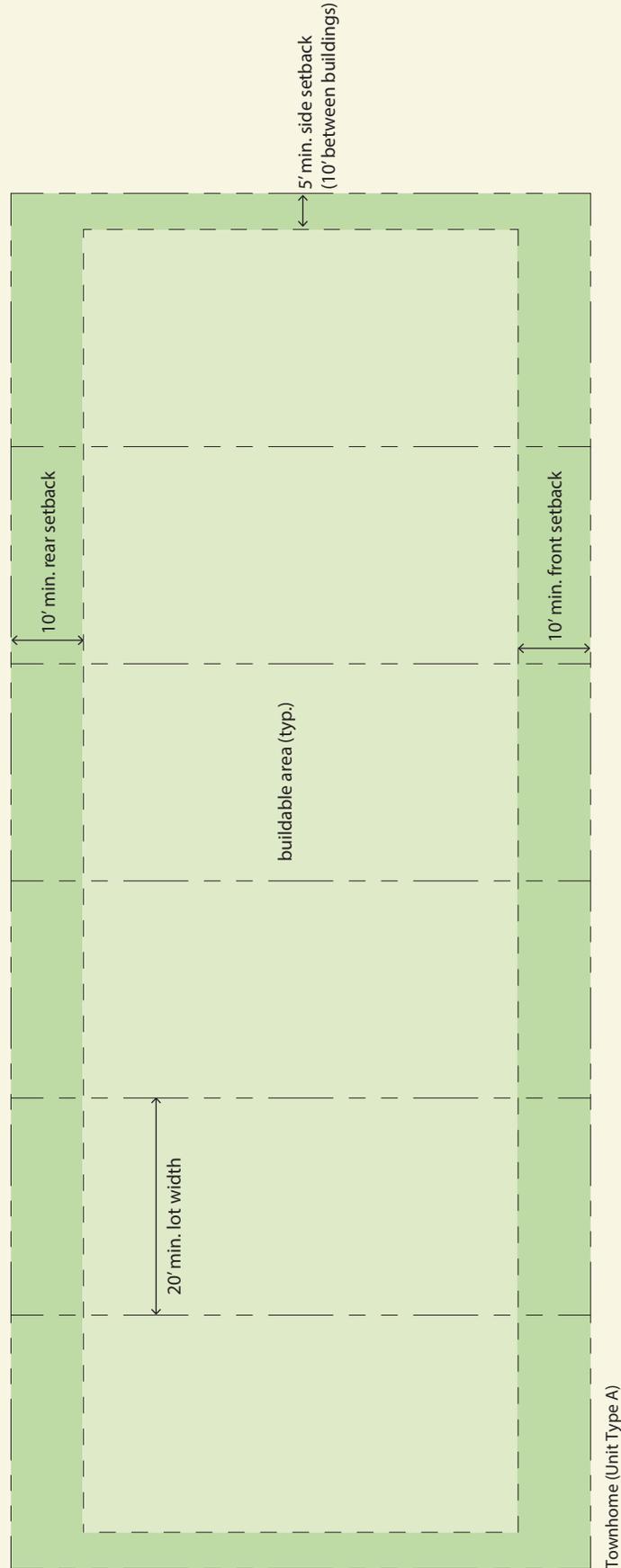
Footnote:

*The minimum distance between detached residential dwelling units and townhouse buildings will be 10 feet. The side yard setbacks may be reduced to a minimum of zero (0) feet as long as the adjacent lot(s) shows an increased setback to maintain a total of ten (10) feet between detached dwelling units or townhouse buildings.

Typical Lot Sections – Detached Units



Typical Lot Sections – Attached Units



VR-PD Textual Plan, *continued*

D. Development Standards

All development standards set forth in Article VIII: Development Standards of the Powhatan County Zoning Ordinance shall apply, except that:

- **Parking:** A single car garage shall count as one (1) parking space and a two (2) car garage shall count as two (2) parking spaces for all residential type dwelling units. On-street parking for townhouses and/or duplexes shall count as 50% of the parking requirements.

Sec. 83-291. - Permitted Uses

The following uses are allowable as principal uses in the VR-PD District:

1. Forestry and logging;
2. Dwelling, duplex;
3. Dwelling, live/work;
4. Dwelling, single-family detached;
5. Dwelling, three- or four-family;
6. Dwelling, townhouse;
7. Assisted living facility;
8. Continuing care retirement community;
9. Hospice facility;
10. Rooming or boarding house;
11. Telecommunications facility, collocated;
12. Fire or EMS station;
13. Law enforcement facility;
14. Community garden;
15. Park or greenway;
16. Place of worship;
17. Utility use, major;
18. Utility use, minor;
19. Recreation facility, nonprofit;
20. Recreation facility; public;
21. Recycling drop-off center;
22. Micro-distillery.

EAST WEST COMMUNITIES HISTORY



2005. Patriots Landing community in New Kent, outside Richmond, Virginia opens.



2008. Liberty Ridge, East West Communities' 35th community, opens in Williamsburg and is the first 3 to 9-acre homesite community for East West.

VR-PD Textual Plan, *continued*

Sec. 83-292. - Accessory Uses.

The following uses are allowable as accessory uses that are incidental and customarily sub-ordinate to principal uses in the VR-PD District, subject to compliance with any referenced use-specific standards and all other applicable regulations of this chapter:

1. Accessory apartment;
2. Amateur radio antenna;
3. Bed and breakfast inn;
4. Clubhouse;
5. Electric vehicle (EV) level 1 or 2 charging station;
6. Electric vehicle (EV) level 3 charging station;
7. Family day care home;
8. Home garden;
9. Home occupation;
10. Office (as accessory to P multifamily dwelling or commercial use);
11. Open space, park, playground, or recreational facility;
12. Outdoor display and sale of merchandise;
13. Outdoor storage (as an accessory use);
14. Rainwater cistern;
15. Residential care facility;
16. Private recycling bins;
17. Satellite dish;
18. Small wind energy system;
19. Solar energy collection system;
20. Swimming pool, spa, or hot tub;
21. Television or radio antenna.

(Ord. No. O-2013-06, 9-16-13)



VR-PD Textual Plan, *continued*

Sec. 83-293. Temporary Uses.

a) *Permitted temporary uses.* The following uses are allowable as temporary uses of limited duration, in the VR-PD District, subject to compliance with any referenced use-specific standards and all other applicable regulations of this chapter:

1. Garage or yard sale;
2. Model sales home/unit;
3. Post-disaster temporary dwelling;
4. Temporary construction-related structure or facility;
5. Temporary family health care structure.

b) *Permitted with temporary business permit.* The following uses are allowable as temporary-buses of limited duration in the VR-PD District, only on approval of a temporary business permit, and subject to compliance with any referenced use-specific standards and all other applicable regulations of this chapter:

1. Estate sale/auction.



2010. East West Communities purchases the Pinckney Retreat community in Beaufort, SC and soon after develops City Walk at Beaufort.

CC-PD Textual Plan

A. Purpose

East West Communities believes that great places add to the sum of human happiness. Per our motto, We Truly Care How You Live. We accomplish this through thoughtful creative Design and passively and actively Delighting our customers. We convene commercial architects, landscape design architects, designers, artists, transportation experts, and even citizen activists to build places that are lovable, safe, welcoming, and stand the test of time.

Basic Tenets of Ellis Farm

Generate the physical and social framework for accomplishing the above and below.

Create sustainable, human-scaled places where people can live healthy and happy lives. Walkable, vibrant, beautiful places work better for businesses, local governments, and their residents.

Safe, pedestrian-friendly streets encourage people to walk in and interact with their built and natural surroundings.

Encourage the use of innovative and creative design that will achieve the “campus-like” development of a wide range of office, business, services, and research and development uses, as well as ancillary uses that serve center businesses (e.g., communication technology services) and employees (e.g., restaurants).

Development will include vehicular access designed to maximize efficiency, minimize negative impacts on the levels of service of adjacent roads, handle heavy truck traffic, and separate customer traffic from delivery and distribution truck traffic where applicable.

Focus on Design. Will be designed to mitigate adverse impacts on adjacent areas and blend in with the design of the traditional residential neighborhoods. Will include pedestrian friendly access and include open space to protect natural features and/or provide plazas, squares, or greens.



CC-PD Textual Plan, *continued*

B. Use Standards

Principal uses allowed in a CC-PD District shall be established in the PD plan. Uses shall be consistent with the comprehensive plan, other county-adopted plans, and the purpose of the CC-PD District, and shall comply with the use and the use-specific standards in Article VII: Use Standards.

C. Intensity and Dimensional Standards

Lot area, minimum	10,000 sq. ft.	
Lot width, minimum	60 ft.	
Density, maximum	n/a (no residential units permitted)	
Lot coverage, maximum	60%	
Gross floor area, maximum	n/a	
Structure height, maximum	40 ft.	
Front yard depth, minimum	Along major arterials, excluding limited access roads	75 ft. (1)
	Along minor arterial	50 ft. (2)
	Along rural collector roads	35 ft. (3)
	Lots abutting internal/local roads	10 ft. (4)
Side yard depth, minimum	n/a	
Rear yard depth, minimum	10 ft. (5)	
Corner lot yard depth, minimum	10 ft.	
Setback Monument Signs	(may encroach into public right of way with approval from Powhatan County and VDOT)	0 ft.

Footnotes:

1. Fifty (50) feet for accessory uses and parking lots.
2. Thirty-five (35) feet for accessory uses and parking lots.
3. Twenty (20) feet for accessory uses and parking lots.
4. Ten (10) feet for accessory uses and parking lots.
5. Three (3) feet for accessory uses and parking lots.

Notes: ac = acre(s) ft. = feet

CC-PD Textual Plan

D. Development Standards

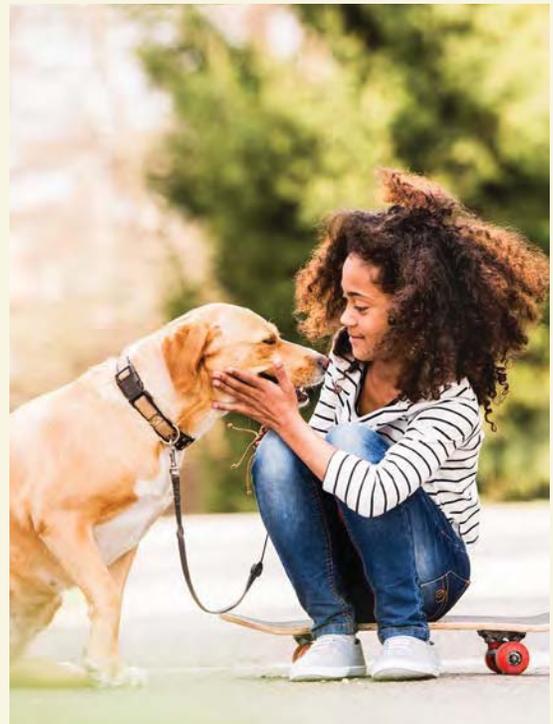
All development standards set forth in Article VIII: De-velopment Standards of the Powhatan County Zoning Ordinance shall apply, except that:

- Landscaping, Buffers, Screening, and Tree Protection: Internal uses shall not be required to provide perimeter buffers specified in Sec. 83-461(e). There shall be a minimum 50 foot buffer between CC-PD and VR-PD Districts.
- Off-Street Parking and Loading
All uses shall provide the minimum number of off-street parking spaces required per Sec. 83-455, except for the following uses:
Restaurant with Drive-Through Service: 1 parking space per 100 square feet

Sec. 83-311. - Permitted Uses

The following uses are allowable as principal uses in the CC-PD District:

1. Forestry and logging;
2. Telecommunications facility, collocated;
3. Telecommunications tower;
4. Community center;
5. Library;
6. Museum;
7. Adult day care center;
8. Child day care center;
9. College or university;
10. Private school;
11. Public school;
12. Vocational or trade school;
13. Courthouse facility;
14. Fire or EMS station;
15. Government administrative offices;
16. Law enforcement facility;
17. Post office;
18. Hospital;
19. Massage clinic;
20. Medical or dental clinic;



CC-PD Textual Plan, *continued*

21. Medical or dental lab;
22. Medical treatment facility;
23. Community garden;
24. Park or greenway;
25. Public square or plaza;
26. Civic center;
27. Club or lodge;
28. Place of worship;
29. Surface transportation passenger station/terminal;
30. Utility use, minor;
31. Animal grooming;
32. Veterinary clinic;
33. Business service establishment;
34. Conference or training center;
35. Brewpub;
36. Micro-distillery;
37. Restaurant with drive-through service;
38. Restaurant without drive-through service;
39. Specialty eating or drinking establishment;
40. Professional offices;
41. Other office facility;
42. Arena, stadium, or amphitheater;
43. Auditorium or stage theater;
44. Country club;
45. Golf course;
46. Motion picture theater;
47. Recreation facility, commercial indoor;
48. Recreation facility, commercial outdoor;
49. Recreation facility, nonprofit;
50. Recreation facility, public;
51. Antique store;
52. Art gallery;
53. Art, crafts, music, dance, photography, or martial arts studio/school;
54. Auction facility;
55. Bank or financial institution with drive-through service;
56. Bank or financial institution without drive-through service;
57. Convenience store;
58. Drugstore or pharmacy with drive-through service;
59. Drugstore or pharmacy without drive-through service;
60. Farmers' market;
61. Grocery store;

CC-PD Textual Plan, *e ntinued*

49. Grocery store;
50. Large retail sales establishment;
51. Lawn care, pool, or pest control service;
52. Liquor store;
53. Personal services establishment;
54. Shopping center;
55. Taxidermy shop;
56. Other retail sales establishment;
57. Automotive painting or body shop;
58. Automotive repair and servicing;
59. Car wash or auto detailing;
60. Gas station;
61. Parking lot or parking structure (as a principal use);
62. Tire sales and mounting;
63. Vehicle/equipment sales or rental;
64. Hotel or motel;
65. Recycling drop-off center;

Sec. 83-312. - Accessory Uses

The following uses are allowable as accessory uses that are incidental and customarily sub-ordinate to principal uses in the CC-PD District, subject to compliance with any referenced use-specific standards and all other applicable regulations of this chapter:

1. Accessory apartment;
2. Amateur radio antenna;
3. Automatic teller machine (ATM);
4. Bed and breakfast inn;
5. Canopy, nonresidential drive-through;
6. Clubhouse;
7. Electric vehicle (EV) level 1 or 2 charging station;
8. Electric vehicle (EV) level 3 charging station;
9. Family day care home;
10. Fuel oil or bottled gas distribution or storage, limited;
11. Home garden;
12. Home occupation;
13. Office (as accessory to P multifamily dwelling or commercial use);
14. Open space, park, playground, or recreational facility;
15. Outdoor display and sale of merchandise;
16. Outdoor storage (as an accessory use);
17. Parking or storage of large vehicles;

CC-PD Textual Plan, *continued*

18. Rainwater cistern;
19. Private recycling bins;
20. Satellite dish;
21. Small wind energy system;
22. Solar energy collection system;
23. Swimming pool, spa, or hot tub;
24. Television or radio antenna.

Sec. 83-313. Temporary uses

- a) Permitted temporary uses. The following uses are allowable as temporary uses of limited duration, in the CC-PD District, subject to compliance with any referenced use-specific standards and all other applicable regulations of this chapter:
 1. Garage or yard sale;
 2. Post-disaster temporary dwelling;
 3. Temporary construction-related structure or facility.

- b) Permitted with temporary business permit. The following uses are allowable as temporary uses of limited duration in the CC-PD District, only on approval of a temporary business permit, and subject to compliance with any referenced use-specific standards and all other applicable regulations of this chapter:
 1. Estate sale/auction;
 2. Farmer's market (as a temporary use);
 3. Outdoor seasonal sales.

Conceptual Master Plan

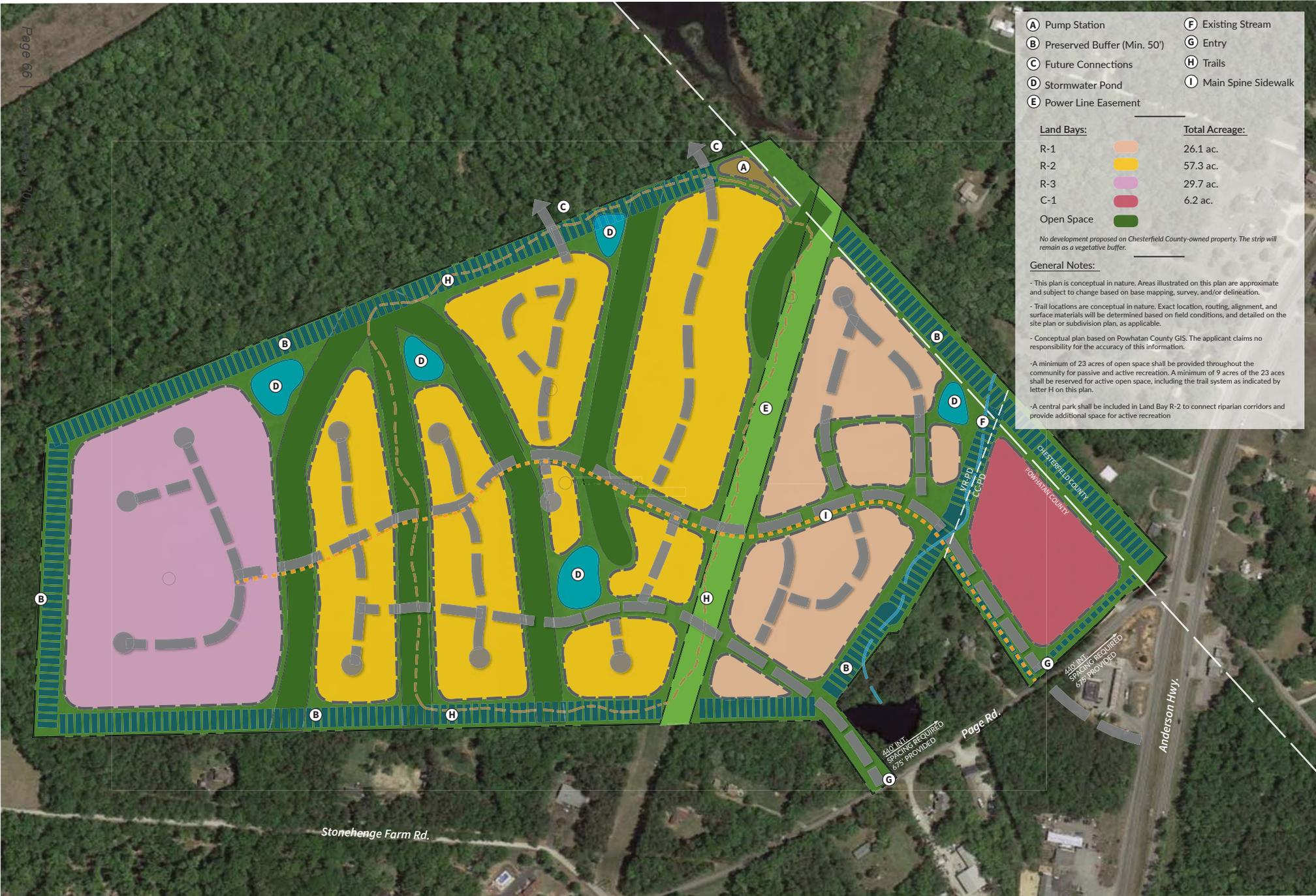
Exhibit A- Conceptual Master Plan Diagram

Exhibit B - Conceptual Master Plan Methodologies

Exhibit C - Conceptual Open Space Plan

Exhibit D - Interchange Plan





(A) Pump Station	(F) Existing Stream
(B) Preserved Buffer (Min. 50')	(G) Entry
(C) Future Connections	(H) Trails
(D) Stormwater Pond	(I) Main Spine Sidewalk
(E) Power Line Easement	

Land Bays:	Total Acreage:
R-1	26.1 ac.
R-2	57.3 ac.
R-3	29.7 ac.
C-1	6.2 ac.
Open Space	

No development proposed on Chesterfield County-owned property. The strip will remain as a vegetative buffer.

General Notes:

- This plan is conceptual in nature. Areas illustrated on this plan are approximate and subject to change based on base mapping, survey, and/or delineation.
- Trail locations are conceptual in nature. Exact location, routing, alignment, and surface materials will be determined based on field conditions, and detailed on the site plan or subdivision plan, as applicable.
- Conceptual plan based on Powhatan County GIS. The applicant claims no responsibility for the accuracy of this information.
- A minimum of 23 acres of open space shall be provided throughout the community for passive and active recreation. A minimum of 9 acres of the 23 acres shall be reserved for active open space, including the trail system as indicated by letter H on this plan.
- A central park shall be included in Land Bay R-2 to connect riparian corridors and provide additional space for active recreation

Stonehenge Farm Rd.

Page Rd.

Anderson Hwy.

440 INT. SPACING REQUIRED 675 PROVIDED

440 INT. SPACING REQUIRED 675 PROVIDED

ELLIS FARM

Conceptual Master Plan
Powhatan County, Virginia



Conceptual Master Plan Methodologies

Land Bay	Acreage	Permitted Mix of Unit Types		Maximum Number of Total Units in Land	Residential Density (Unit/Acre)
R-1	26.1	A	0 to 67% of Units	75	2.9
		B	0 to 100% of Units		
		C	0 to 100% of Units		
		D	None		
R-2	57.3	A	None	125	2.2
		B	0 to 100% of Units		
		C	0 to 100% of Units		
		D	0 to 50% of Units		
R-3	29.7	A	None	49	1.65
		B	None		
		C	0 to 25% of Units		
		D	75 to 100% of Units		
C-1	6.2	No Residential Units (Commercial Uses Only as Specified in CC-PD District)			

Notes:

There shall be no more than 50 Type A units within the entire development.

There shall be no more than 249 total dwelling units within the entire development.

The maximum number of units within an individual land bay may increase by up to 25% by transferring units from one land bay to another, provided that the total number of units within the entire development remains unchanged.





- A** Pump Station
 - B** Preserved Buffer (Min. 50')
 - D** Stormwater Pond
 - E** Power Line Easement
 - F** Existing Stream
 - H** Trails
 - I** Main spine sidewalk
- Open Space**
- No development proposed on Chesterfield County-owned property. The strip will remain as a vegetative buffer.*

General Notes:

- This plan is conceptual in nature. Areas illustrated on this plan are approximate and subject to change based on base mapping, survey, and/or delineation.
- Trail locations are conceptual in nature. Exact location, routing, alignment, and surface materials will be determined based on field conditions, and detailed on the site plan or subdivision plan, as applicable.
- Conceptual plan based on Powhatan County GIS. The applicant claims no responsibility for the accuracy of this information.
- A minimum of 23 acres of open space shall be provided throughout the community for passive and active recreation. A minimum of 9 acres of the 23 acres shall be reserved for active open space, including the trail system as indicated by letter H on this plan.

EXHIBIT C

ELLIS FARM

Conceptual Open Space Plan
Powhatan County, Virginia



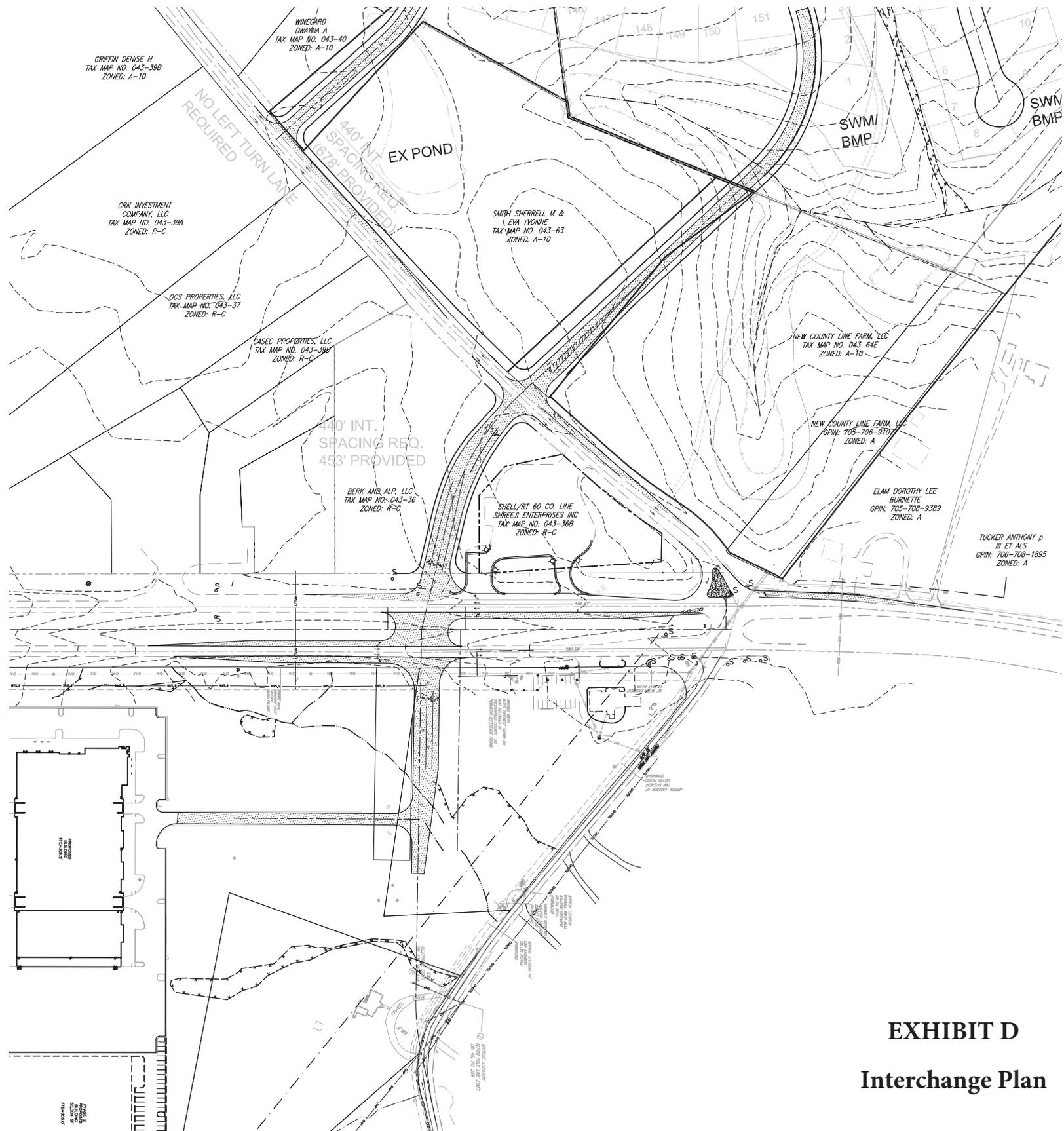


EXHIBIT D
Interchange Plan

Exhibits

(Illustrative Purposes Only)

Exhibit E - Submitted Application

Exhibit F - Environmental Features

Exhibit G - Conceptual Retail/Village Center Parcels

Exhibit H - Traffic Study



May 13, 2019



**County of Powhatan,
Virginia**
Rezoning Application

For Office Use Only	
Case Number	

Powhatan County, Virginia
Department of Community Development
3834 Old Buckingham Road: Suite F
Powhatan, VA 23139

Applicant Information	
Name of Applicant	East West Communities, Daniel Jones & Clem Carlisle
Mailing Address	14700 Village Square Place Midlothian, Va 23112
Phone Number	804-523-4170
Email Address	djones@eastwestp.com & clemc@eastwestp.com

Owner Information (Complete this section if the applicant is not the current property owner)	
Name of Owner	New County Line Farm LLC
Mailing Address	1318 Page Road Midlothian, VA 23113
Phone Number	804-539-5536
Email Address	hellis@ppinfrastructure.com

If the applicant is not the owner, the applicant must provide written documentation that the current property owner consents to the application (see form entitled *Consent of Owner(s) to Request Rezoning*).

If there are multiple owners, all owners must sign the application or provide other documentation consenting to the application (see form entitled *Ownership Disclosure*).

Applicant Representative (Complete this section if correspondence should be directed to someone other than the applicant)	
Name of Representative	Balzer and Associates, Chris Shust
Mailing Address	15871 City View Drive, Suite 200 Midlothian, VA 23113
Phone Number	804-794-0571
Email Address	cshust@balzer.cc

EAST WEST COMMUNITIES

Parcel Information	
Tax Map Number	043-61, 043-64, 043-64E & 043-63 (part of)
Physical Address	1318 PAGE RD MIDLOTHIAN , VA 23113
General Description of Property Location	Page Road at County Line
Election District	1 Subletts/Manakin/Flat Rock
Total Acreage	120+/- acres*
Current Zoning	Agriculture A-10
Requested Zoning	CC-PD & VR-PD
Acreage to Be Rezoned	120+/- acres*
Countywide Future Land Use: Land Use Designation	Commerce Center and Village Center

Proposed Use	
Describe Proposed Use	Parcel 043-64E 6.18 acres - CC-PD Parcel 043-61 88.9 acres - VR-PD Parcel 043-64 24.8 acres - VR-PD Parcel 043-63 0.8+/- acre - CC-PD (for entrance road right of way)
Amount of Dedicated Open Space (Acreage + % of Site)	Minimum 23 acres of open space in the VR-PD zoning with 9 of those acres shall be reserved for active recreation. Minimum 1 acre of open space in the CC-PD zoning.
If this request is approved, will new lots be created?	YES
If this request is approved, will new structures be constructed?	YES
Are there existing structures on the subject property?	YES
Will the proposed use connect to public water and/or sewer?	YES

A conceptual plan that shows the general configuration of the proposed development, including land uses, general building types, density/intensity, resource protection areas, pedestrian and vehicular circulation, open space, public facilities, and phasing, should be submitted with the application.

List of Adjacent Property Owners

Tax Map No.	Owner Name	Mailing Address
043-63	SMITH SHERRELL M & EVA YVONNE	1320 PAGE ROAD MIDLOTHIAN , VA 23113
043-40	WINEGARD DWAYNA A ET AL	1338 PAGE ROAD MIDLOTHIAN , VA 23113
043-41	HOWIE CHERYL L ET AL	1338 PAGE ROAD MIDLOTHIAN , VA 23113
043-42A	LAMOND TYLER JOHN	1810 STONEHENGE FARM RD MIDLOTHIAN , VA 23113
043-2-1	HIGHAM WALTER E ET AL	1820 STONEHENGE FARM ROAD MIDLOTHIAN , VA 23113
043-57	CARNES W S INC	9801 IRONBRIDGE ROAD CHESTERFIELD , VA 23832
043-62	JMS INVESTMENTS LLC	1475 OAKBRIDGE CT POWHATAN , VA 23139
043-36B	SHREEJI ENTERPRISES INC	14107 COTESWORTH WAY MIDLOTHIAN , VA 23113
043-36	BERK AND ALP LLC	14301 JUSTICE RD MIDLOTHIAN , VA 23113
043-39A	CRK INVESTMENT COMPANY LLC	1706 CALAIS TRAIL POWHATAN , VA 23139

Note: Adjacent properties include those across roadways, waterways, railroads, and municipal boundaries.

EAST WEST COMMUNITIES

Proffer Statement

In accordance with § 15.2-2303 and Article II of the Powhatan County Zoning Ordinance, I do hereby voluntarily proffer, as the owner of record of the property or the applicant of this rezoning request, the conditions listed below. I hereby acknowledge that the rezoning of the subject property gives rise to the need for these conditions.

(Note: If text for all proffered conditions does not fit on this page, additional proffered conditions may be attached to the application as separate pages.)

Proffer #1	<i>See Attached</i>
Proffer #2	
Proffer #3	
Proffer #4	
Signature of Applicant	
Name of Applicant (Printed)	<i>Daniel Jones, East West Communities</i>

Commonwealth of Virginia
County of Chesterfield, to wit:

Sworn and subscribed to before me a Notary Public in and for the jurisdiction aforesaid by Daniel Jones, whose name is signed to the above, on this 19th day of February 20 19.

Notary Public	<i>Anne Garst Miller</i>	
Commission Expires	<i>6/30/2019</i>	
Notary Number	<i>7646240</i>	

Powhatan County, Virginia

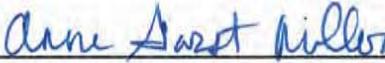
EAST WEST COMMUNITIES

Statement of Validity of Information

Every applicant shall sign the following document to substantiate the validity of submitted information.

I, being duly sworn, depose and say that I am the Lessee/Owner of the property involved in the application. If I am not the Lessee/Owner, I will provide written certification from the owner granting me the right to submit this application.

I declare that I have familiarized myself with the rules and regulations pertaining to preparing and filing this application. I further declare that the foregoing statements and answers provided throughout the various sections of this application are in all respects true and correct to the best of my knowledge and belief.

Signature of Applicant		
Name of Applicant (Printed)	Daniel Jones, East West Communities	
Commonwealth of Virginia County of <u>Chesterfield</u> , to wit:		
Sworn and subscribed to before me a Notary Public in and for the jurisdiction aforesaid by <u>Daniel Jones</u> , whose name is signed to the above, on this <u>19th</u> day of <u>February</u> 20 <u>19</u> .		
Notary Public		
Commission Expires	6/30/2019	
Notary Number	7646240	

EAST WEST COMMUNITIES

Ownership Disclosure

List below the names and addresses of all owners or parties in interest of the land subject to this request.

If this request is in the name of a corporation, artificial person, joint venture, trust, or other form of ownership, all officers, directors, and any stock holders owning ten percent or more of such stock must be listed.

Name	Address
New County Line Farm LLC	1318 Page Road Midlothian , VA 23113
Harold Ellis	1318 Page Road Midlothian , VA 23113
Christina Ellis	1318 Page Road Midlothian , VA 23113

I, Daniel Jones, East West Communities, do hereby swear and affirm to the best of my knowledge and belief, the above information is true and that I am the applicant requesting rezoning for Tax Map 043-61, 043-64, 043-64E.
If the information listed above changes at any time while this request is being considered, I will provide Powhatan County with an updated list of owners.

Signature of Applicant	
Name of Applicant (Printed)	<u>Daniel Jones, East West Communities</u>

Commonwealth of Virginia
County of Chesterfield, to wit:

Sworn and subscribed to before me a Notary Public in and for the jurisdiction aforesaid by Daniel Jones, whose name is signed to the above, on this 19th day of February 20 19.

Notary Public	<u>Anne Garst Miller</u>	
Commission Expires	<u>6/30/2019</u>	
Notary Number	<u>7646240</u>	

EAST WEST COMMUNITIES

Consent of Owner(s) to Rezoning Request

If the applicant is not the owner, the applicant must provide written documentation that the current property owner consents to the rezoning application and that the applicant may submit proffered conditions on the property owner's

I, Harold Ellis (New County Line Farm, LLC), am the owner of the property subject to this rezoning request and consent to the request submitted by East West Communities (Applicant) to rezone Tax Map 043-61, 043-64, 043-64E from A-10 (Current Zoning District) to CC-PD and VR-PD (Requested Zoning District).

Signature of Owner

Harold Ellis Member

Name of Owner (Printed)

Harold Ellis, Member of New County Line Farm, LLC

Commonwealth of Virginia
County of Chesterfield, to wit:

Sworn and subscribed to before me a Notary Public in and for the jurisdiction aforesaid by Harold Ellis, whose name is signed to the above, on this 19th day of February 20 19.

Notary Public

Anne Garst Miller

Commission Expires

6/30/2019

Notary Number

7646240



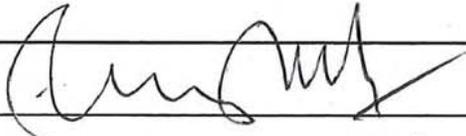
EAST WEST COMMUNITIES

Consent of Owner(s) to Rezoning Request

If the applicant is not the owner, the applicant must provide written documentation that the current property owner consents to the rezoning application and that the applicant may submit proffered conditions on the property owner's

I, Tony Kilic TONY HASAN KILIC (for Bank of America) am the owner of the property subject to this rezoning request and consent to the request submitted by East West Communities (Applicant) to rezone Tax Map 043-63 (part of) from A-10 (Current Zoning District) to CC-PD (Requested Zoning District).

Signature of Owner



Name of Owner (Printed)

TONY HASAN KILIC

Commonwealth of Virginia

County of Chesterfield, to wit:

Sworn and subscribed to before me a Notary Public in and for the jurisdiction aforesaid by Tony Hasan Kilic whose name is signed to the above, on this 17th day of May 2019.

Notary Public

Katherine E. Lynch

Seal

Commission Expires

7/31/19

Notary Number

7510358



EAST WEST COMMUNITIES

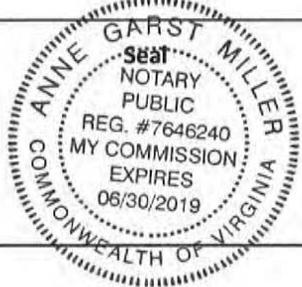
Applicant's Permission for Inspection of Property

I, Daniel Jones of East West Communities, hereby grant access to the Director of Community Development, Zoning Administrator, or assigns thereof, to enter my property during reasonable hours without prior notice to make inspections as deemed necessary for the evaluation of my application.

Signature of Applicant	
Name of Applicant (Printed)	<u>Daniel Jones, East West Communities</u>

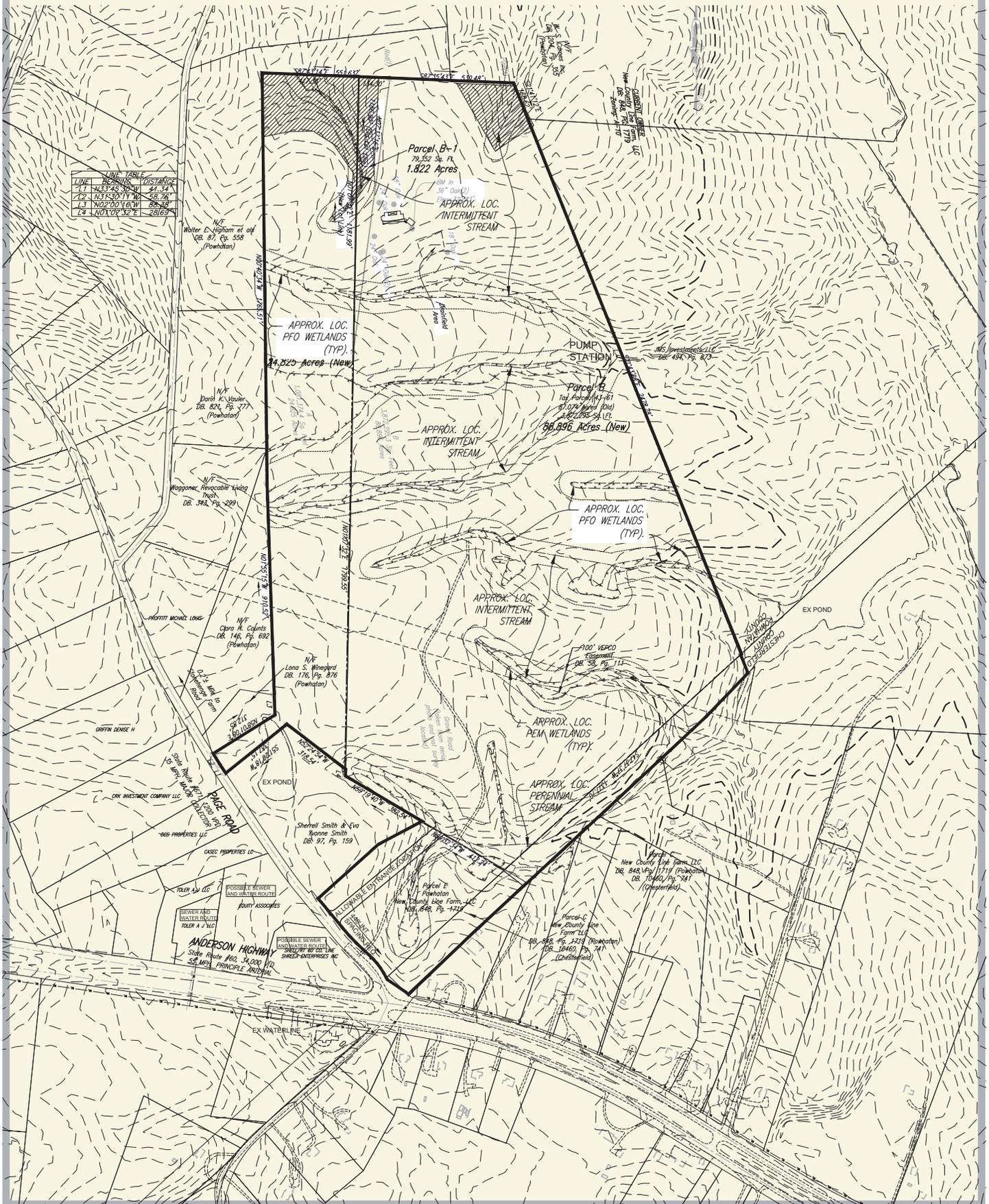
Commonwealth of Virginia
County of Chesterfield, to wit:

Sworn and subscribed to before me a Notary Public in and for the jurisdiction aforesaid by Daniel Jones, whose name is signed to the above, on this 19th day of February 20 19.

Notary Public	<u>Anne Garst Miller</u>	
Commission Expires	<u>6/30/2019</u>	
Notary Number	<u>7646240</u>	

EAST WEST COMMUNITIES

Environmental Features



Conceptual Retail/Village Center Parcels



ANDERSON HWY./PAGE RD. STUDY
Conceptual Retail/Commercial Parcels
Powhatan County, Virginia

**PART OF ELLIS FARM APPLICATION*

Attachment #2
Proffer Statement
(Dated August 23, 2019)



August 23, 2019
 Proffer Statement
 19-03-REZC

In accordance with 15.2-2303 and Article II of the Powhatan County Zoning Ordinance, I do hereby voluntarily proffer, as the owner of record of the property or the applicant of this rezoning request, the conditions listed below. I hereby acknowledge that the rezoning of the subject property gives rise to the need for these conditions.

An exhibit titled “Ellis Farm”, prepared by East West Communities, last revised August 23, 2019, has been added to the application for illustrative and informational purposes. The document includes proffered information, but only as outlined in the following conditions.

The applicant hereby offers the following proffered conditions:

1. Master Plan. The Master Plan for the Property shall generally conform to the Terms and Conditions (II) and Conceptual Master Plan (III) outlined in the “Ellis Farm Development Plan” document, last revised August 23, 2019, provided that the alignment and proposed street connections to Page Road and Anderson Highway (Route 60) are subject to change based on final approval by the Virginia Department of Transportation. Adjustments to the Terms and Conditions and/or Conceptual Master Plan may be approved at time of preliminary plat and/or site plan review, provided such adjustments substantially retain the intent and overall design of the development at the sole discretion of the Planning Director.
2. Density. The maximum density shall not exceed 249 residential dwelling units.
3. Vehicular Access. There shall be no more than two (2) access points from Page Road as shown on the Conceptual Master Plan. The westernmost access shall be located on Parcel 043-64 and the easternmost access shall be located within, or adjacent to, parcels 043-64E and 043-63. One access shall be completed prior to the issuance of the 1st building permit and the other access shall be completed prior to the issuance of the 50th building permit. The Virginia Department of Transportation and Powhatan County shall approve the exact location of these accesses.
4. Transportation Improvements. The Applicant proffers to provide right of way, construct roadway, and signal improvements within and between the Page Road and Anderson Highway (Route 60). These improvements shall be phased and built when warrants are met, and in accordance with construction plans approved by the Virginia Department of Transportation, Powhatan County and the Applicant.
5. Community Design Elements.
 - a. **Sidewalks.** At a minimum, sidewalks shall generally be located on one side of all public streets, excluding the bulb of cul-de-sacs. Sidewalks within land bays shall connect to the main sidewalk shown on Exhibit A, the Conceptual Master Plan.



BALZER
& ASSOCIATES
PLANNERS / ARCHITECTS
ENGINEERS / SURVEYORS

August 23, 2019
Proffer Statement
19-03-REZC

- b. **Trails.** Pedestrian pathways and trails shall be provided as generally depicted on Exhibit A, the Conceptual Master Plan.
 - c. **Pocket Parks.** A minimum 2,500 square foot pocket park shall be included in each land bay area. These areas shall act as an amenity for the development with either landscaping, benches, hardscaped areas, or a combination of thereof.
 - d. **Central Park.** A central park area shall be included in Land Bay R-2 to connect riparian corridors and provide additional space for active recreation.
6. **Materials.** Acceptable siding materials for residential and commercial buildings include brick, stone, stucco (E.I.F.S.), cementitious siding, or other materials of comparable quality. Synthetic stucco (E.I.F.S.) siding shall be finished in smooth, sand or level texture. Rough textures are not permitted.

Sincerely,

Anne Miller
Planner
Balzer and Associates, Inc.

Attachment #3

Revised Traffic Assessment:

Ellis Farm Property

(Dated June 6, 2019)



June 6, 2019

Mr. Andrew Pompei, AICP, CZA
 Powhatan County
 Planning Director
 3834 Old Buckingham Road
 Suite F
 Powhatan, Virginia 23139

Re: Revised Traffic Assessment – Ellis Farm Property
 Powhatan County, Virginia

Mr. Pompei,

This revised traffic assessment is in regards to the proposed Ellis Farm Property to be located in Powhatan County, Virginia. Based on review comments (dated 3/8/19) by the Virginia Department of Transportation (VDOT) of the traffic assessment for the proposed Ellis Farm Property dated 1/29/19, a revised traffic assessment has been conducted to address all review comments and a revised plan of development as part of the ongoing approval process for the proposed Ellis Farm site. Refer to Appendix A for the VDOT comments and development team responses.

Executive Summary

Based on the current proposal, the plan of development looks to construct a mixed use development to include residential, assisted living, retail, and office land uses. The proposed plan of access will provide two points of full movement site access on existing Page Road north of existing US 60 and Page Road/County Line Road intersection.

Buildout of the proposed site is to include 249 single family residential units; 80,000sf of assisted living space; 15,000sf of office land uses; 10,000sf of retail land uses. The proposed site will have two full movement site drives on Page Road. Each site drive will be located to provide sufficient spacing as required by VDOT and County access management standards.

As requested by County staff, a traffic impact analysis has been conducted to assess proposed site access and off-site impacts expected as a result of site development. Discussions with both VDOT and County staff has been conducted to develop a scope of services for this traffic assessment.

The study includes analysis of the following intersections:

- US 60 and Stavemill Road
- US 60 and Oakbridge Drive
- US 60 and Standing Ridge Drive
- US 60 and Page Road/County Line Road
- US 60 and Old Hundred Road
- Page Road and Site Drive #1
- Page Road and Site Drive #2

The study has analyzed each study area intersection under traffic conditions for each of the following scenarios:

- Existing (2018) Peak Hour Traffic Conditions
- Background Plus Approved Development (2024) Peak Hour Traffic Conditions
- Buildout (2024) Peak Hour Traffic Conditions

Analysis of the study area has determined the following issues are occurring under existing traffic conditions:

- Signalized intersection of US 60 and Stavemill Road is operating at unacceptable levels of service during the AM peak hour due to demand exceeding capacity on the eastbound and northbound approaches.
- Minor street left turn movements at all unsignalized intersections on US 60 are operating at unacceptable levels of service and over capacity conditions for both the AM and PM peak hours.
- Existing traffic demand on US 60 is 34,000 vehicles per day (vpd) east of Page Road and 32,000vpd east of Stavemill Road.

Analysis of the study area has determined the following additional issues from those determined under existing traffic conditions are expected to occur under background plus approved traffic conditions:

- Significant increase in delays and demand at the signalized intersection of US 60 and Stavemill Road. Increases in traffic demand further deteriorate existing operational measures to unacceptable levels under both the AM and PM peak hours.
- Traffic demand in excess of capacity on the eastbound and northbound approaches at the signalized intersection of US 60 and Old Hundred Road.
- Background Plus Approved Development traffic demand on US 60 is 38,320vpd east of Page Road and 40,580vpd east of Stavemill Road.

Analysis of the study area under buildout traffic conditions has determined that the site will have a marginal impact to the overall study area with the exception of US 60 and Page Road / County Line Road. Where the impacts beyond the US 60 and Page Road / County Line Road intersection are expected to be marginal there will be impacts to intersections/movements that are already experiencing deficient operations due to existing and/or background plus approved development peak hour traffic conditions. Mitigation measures needed for these intersections/movements are beyond the ability of this development to provide.

Analysis of buildout peak hour traffic conditions for the intersection of US 60 and Page Road / County Line Road indicate the following:

- Operation at the existing unsignalized intersection under buildout peak hour traffic conditions is expected to create traffic conditions that cannot be supported under any circumstance (with or without improvements) as an unsignalized intersection.
- Traffic signal warrants are expected to be met for the proposed site at 45% buildout of the residential units and buildout of the retail/office lane uses. A traffic signal cannot be supported by VDOT at the existing location of US 60 and Page Road

due to geometry configuration; progression band impact of existing traffic signal timing plans; Powhatan County plans to realign Page Road and create a new location for the intersection of US 60 and Page Road.

- Buildout traffic demand on US 60 is 39,030vpd east of Page Road and 43,190vpd east of Stavemill Road.
- It is recommended to construct a new link between existing Page Road and US 60 such that the new alignment will intersect US 60 at the approved left-over location for the US 60 and Classic Granite Site Drive. This new alignment is denoted as Realigned Page Road.

As part of the overall traffic impact analysis an intersection alternatives analysis has been prepared to quantify measures of effectiveness (MOE's) for the proposed intersection of US 60 and Realigned Page Road / Classic Granite Site Drive. Options include the following:

- Full movement (left; through; right) signalized intersection
- Median U-Turn (MUT) – Major street left movements and side street left movements are restricted / restricted movements are rerouted to upstream median breaks to make a U-Turn maneuver allowing the users to route back to the primary intersection and continue on their individual routes
- Restricted Crossing U-Turn (RCUT) – All major street movements (left; through; right) are maintained / side street right movements are maintained / side street through and left movements are restricted and rerouted to upstream median breaks to make a U-Turn maneuver allowing the users to route back to the primary intersection and continue on their individual routes

The intersection alternatives analysis provided in this report include the following traffic control options for the proposed intersection of US 60 and Realigned Page Road / Classic Granite Site Access:

- Alternative #1 – Existing US 60 / Page Road / County Line Road - base condition
- Alternative #2 – Realigned Page Road / US 60 - full movement signalized
- Alternative #3 – Realigned Page Road / US 60 - Median U-Turn (MUT)
- Alternative #4 – Realigned Page Road / US 60 - Restricted Crossing U-Turn (RCUT)

Results of the alternative analysis indicate that Alternative #2 will provide the best option for the intersection design of the proposed US 60 and Realigned Page Road / Classic Granite Site Drive intersection. All recommendations made in this report are based on Alternative #2 being selected as the intersection design.

The following is recommended as part of the proposed site buildout in order to mitigate site impacts at the intersection of US 60 and Page Road / County Line Road:

- Construct a basic three lane cross section between existing Page Road and US 60 immediately west of the existing Shell Station property line such that realigned Page Road will intersect US 60 at the proposed US 60 / Classic Granite Site Drive left over.
- Construct one eastbound left turn lane (325ft of storage); one westbound right turn lane (200ft of storage); dual southbound left turn lanes (225ft of storage); one

southbound through-right lane at the intersection of US 60 and Realigned Page Road / Classic Granite Site Drive.

- Install a traffic signal at the intersection of US 60 and Realigned Page Road / Classic Granite Site Drive upon completion of the realigned Page Road corridor and once a combination of VDOT warrants are met.

The following is recommended as part of the proposed site buildout in order to mitigate site impacts at Site Drive #1 and Site Drive #2 on existing Page Road:

- Construct realigned Page Road to intersect existing Page Road at the proposed Site Drive #1 location. This will create a four approach intersection such that realigned Page Road will form the northbound approach and Site Drive #1 will create the southbound approach.
- Construct a northbound left turn lane (150 feet of storage) at the intersection of Page Road / Realigned Page Road / Site Drive #1.
- Install a two-way stopped control on the east and westbound approaches of Page Road. This will create uninterrupted traffic flow for the northbound (Realigned Page Road) and southbound approaches (Site Drive #1) at the intersection of Page Road / Realigned Page Road / Site Drive #1.
- Site Drive #2 to provide appropriate spacing with Site Drive #1. Turn lanes are not warranted at the intersection of Page Road / Site Drive #2 based on VDOT turn lane warrants thresholds. A westbound right turn taper is warranted at the intersection of Page Road / Site Drive #2.

Proposed mitigation measures as part of the Ellis Farm property are expected to fully mitigate site traffic impacts at the intersection of US 60 and Page Road / County Line Road. At significant capital expenditure, the site mitigation plan will implement a responsible roadway improvement plan that provides a basis for growth going forward for this part of Powhatan County. By constructing the realignment of Page Road an important link on the County Transportation Plan will begin the process to development the future plan of access on US 60 for this area of Powhatan County. The proposed mitigation plan will not provide a completed plan of access; however, it will provide acceptable function for the proposed site and the approved Classic Granite site and form a basis for existing and future development to access US 60 under signalized traffic control.

Existing/Background Traffic Conditions

In order to evaluate site impacts data was collected at all existing study area intersections for the AM (7am to 9am), and PM (4pm to 6pm) peak hours of a typical weekday. Data was obtained from approved development traffic studies where available and all remaining intersections not provided for by area studies was obtained by field observations. Refer to the technical appendix for all traffic count data. Refer to Figure C-1 in Appendix C for the existing (2018) peak hour traffic conditions. Refer to Appendix B for all raw data sets.

Data collection is based on field observations at each existing study area intersection. Data includes heavy vehicle counts and U-turns, where applicable. Data is collected in 15-minute increments and is analyzed to determine the peak hour for each two hour count. Typically, traffic volumes do fluctuate on a daily basis and is subject to changes due to economic conditions and seasonal/weekly fluctuations.

As determined from data collection efforts, U-turns are significant within the study area for this project. Most significantly on the eastbound left turn movement at the intersection of US 60 and Page Road/County Line Road (49vph – AM; 28vph – PM) and the westbound left turn movement at the intersection of US 60 and Oakbridge Drive (54vph – AM; 34vph – PM). All existing and future U-Turn maneuvers have been delineated on all traffic figures where applicable.

Existing (2018) peak hour traffic conditions have been adjusted to reflect a 2% annual growth rate to determine background (2024) peak hour traffic conditions. Refer to Figure C-2 in the Appendix C for the background (2024) peak hour traffic conditions.

Approved Developments

As part of the background analysis for this study all approved developments are to be included as part of the comparative analysis. For this study two approved developments have been included as part of the analysis. Stoneridge Commercial Development is to be developed to the north of US 60 on Luck Stone Road and is expected to include 52,700sf of retail; 6,511sf fast food restaurant; 3,000sf convenience mart; 3,465sf bank. Peak hour site trips for this site was determined as part of a TIA Report submitted by Bowman Consulting dated 9/11/18 and can be found in Appendix D.

Classic Granite is a planned commercial development to be constructed in three phases. It is located on the southwest quadrant of the US 60 and Page Road/County Line Road intersection. The site is approved to develop Phase 1 of the development plan and is expected to include 72,211sf of manufacturing uses; 10,438sf of office uses; 7,881sf of retail uses. Peak hour site trips were developed as part of a TIA Report submitted by Green Light Solutions dated 8/30/18 and can be found in Appendix D.

Refer to Figure C-3 for approved peak hour site trips in Appendix C. Background plus approved development peak hour traffic conditions have been determined by combining approved peak hour site trips (Figure C-3) and background (2024) peak hour traffic conditions (Figure C-2). Refer to Figure C-4 in Appendix C for background plus approved (2024) peak hour traffic conditions.

Buildout Traffic Conditions

Buildout site development traffic conditions were determined by analyzing site trip generation numbers for land uses and densities (249 single family residential units; 80,000sf of assisted living space; 15,000sf of office land uses; 10,000sf of retail land uses) utilizing the ITE Trip Generation Manual, 10th Edition. Refer to Table 1 for the trip generation results.

Total buildout site trips have been adjusted to reflect internal, pass-by and primary peak hour site trips. Internal site trips have been determined assuming a 5% capture rate for all uses. Pass-by site trips have been determined based on a 34% pass-by rate determined from ITE data sets for the 820 (34%) land use. Refer to Figure C-5 in the Appendix C for the primary site distribution percentages and Figure C-7 for the primary peak hour site trip assignments. Refer to Figure C-6 in Appendix C for the pass-by distribution percentages and Figure C-8 for the pass-by peak hour site trip assignments.

**TABLE 1
Buildout Site Trip Generation Results**

Land Use	Density	ITE Code	AM Peak Hour (vph)		PM Peak Hour (vph)		Daily (vpd)
			Enter	Exit	Enter	Exit	Total
Single Family	249 units	210	45	136	154	90	2,406
Elderly Housing	80,000sf	254	24	7	12	27	336
Office	15,000sf	710	35	6	3	16	168
Retail	10,000sf	820	97	60	47	51	1,256
Total Buildout Site Trips			201	209	216	184	4,166
Internal Site Trips (5%)			10	10	10	10	208
Pass-By Site Trips (34%)			25	25	16	16	406
Primary Site Trips			166	174	190	158	3,552

Buildout traffic conditions were determined by combining background plus approved (2024) peak hour traffic conditions (Figure C-4) with site traffic conditions determined in Figures C-7 and C-8. Refer to Figure C-9 in Appendix C for the buildout (2024) peak hour traffic conditions.

Scenario Analysis

Existing traffic control and lane geometries have been obtained and utilized for all analysis scenarios for each off-site study intersection. Based on discussions with VDOT and County staff, there is one roadway improvement to be constructed during the buildout of the proposed site. As part of the Classic Granite development plan, initial phases of the development will utilize a proposed unsignalized left-over at the future US 60 location for the realigned Page Road corridor.

Capacity as defined by the HCM, is a measure of the maximum number of vehicles in an hour that can travel through an intersection or section of roadway under typical conditions. Level of Service (LOS) is a marker of the driving conditions and perception of drivers while traveling during the given time period. LOS ranges from LOS “A” which represents free flow conditions, to LOS “F” which represents breakdown conditions. Table 2 shows the LOS for intersections as defined by the HCM.

**TABLE 2
HCM Level of Service Criteria**

Unsignalized Intersections		Signalized Intersections	
Level of Service	Average Control Delay (sec/veh)	Level of Service	Average Control Delay (sec/veh)
A	≤ 10	A	≤ 10
B	> 10-15	B	> 10-20
C	> 15-25	C	> 20-35
D	> 25-35	D	> 35-55
E	> 35-50	E	> 55-80
F	≥ 50	F	≥ 80

Control delay is a measure of the total amount of delay experienced by an individual vehicle and includes delay related to deceleration, queue delay, stopped delay, and acceleration. Table 2 shows the amount of control delay (in seconds per vehicle) that corresponds to the LOS for signalized and unsignalized intersections.

The reported queues, or linear distance of delayed vehicles, in this study are 95th percentile queues as reported by SimTraffic after 10 runs of 60 minutes each with a 15 minute seeding time. A 15 minute seeding time was used to ensure vehicles could travel entirely through the network. The queues are reported to ensure that the storage lengths of lanes at intersection are of adequate length and that queued vehicles will not interfere with free flow vehicles or adjacent intersections.

Analysis has been conducted using Synchro macro-scopic modeling for each traffic scenario. All analysis measures (delay, queues, volume-to-capacity) have been determined utilizing the Synchro modeling exclusively. Existing peak hour factors and heavy vehicle percentages have been utilized for the existing conditions analysis. Peak hour factors have been adjusted to utilize a 0.92 on all existing peak hours below 0.92, and heavy vehicle percentages have been adjusted to reflect a 2% rate on all existing percentages less than 2% for all future traffic analysis scenarios.

Existing (2018) Traffic Analysis

Existing (2018) peak hour traffic conditions detailed in Figure C-1 have been analyzed to determine a base line for determining site traffic impacts. Refer to Table 3 for the existing (2018) peak hour analysis results. Refer to Appendix E for the computer printouts of the existing analysis.

Analysis indicates all minor street left and through movements are not operating at acceptable levels. This is typical of unsignalized side street movements. Traffic signal improvements are not expected to be warranted on any of these movements under existing traffic conditions.

Analysis of each signalized study area intersection indicates that overall intersection levels of service are at acceptable levels except for the AM peak hour at the intersection of US 60 and Stavemill Road/Luck Stone Road.

**TABLE 3
Analysis Summary
Existing (2018) Peak Hour Traffic Conditions**

Intersection	Control	Lane Group	Available Storage ¹	AM Peak Hour			PM Peak Hour		
				Lane LOS	Lane Delay (sec/veh)	Lane Queue (ft) ²	Lane LOS	Lane Delay (sec/veh)	Lane Queue (ft) ²
1. US 60 (E/W) and Stavemill Road / Luck Stone Road (N/S)	Signal	EBLL	400	E	58.2	190	E	55.7	98
		EBTT	-	F	84.6	611	D	35.9	170
		EBR	300	B	15.7	141	C	23.9	22
		WBL	675	D	43.1	134	E	63.4	704
		WBTT	-	B	15.9	123	C	26.0	9150
		WBR	275	A	9.8	32	A	9.4	86
		NBLT	-	E	70.7	294	E	72.8	144
		NBR	325	F	97.2	355	C	24.9	59
		SBL	325	E	66.6	51	E	66.4	74
		SBLT	-	E	67.2	102	E	66.6	142
		SBR	325	D	50.6	24	D	45.2	57
Overall LOS				E	68.6		C	33.5	
2. US 60 (E/W) and Oakbridge Drive (N/S)	Stop	WBL	125	F	76.7	170	B	13.0	79
		NBL	-	F	387.9	67	F	799.7	294
		NBR	50-	C	23.9	44	B	13.1	49
3. US 60 (E/W) and Standing Ridge Drive (N/S)	Stop	NBR	-	D	33.8	59	B	14.6	45
6. US 60 (E/W) and County Line Road / Page Road (N/S)	Stop	EBL	125	B	12.2	49	F	52.3	90
		WBL	125	C	21.1	21	B	11.5	30
		NBLT	-	F	686.3	11	F	\$\$	274
		NBR	50	C	22.4	35	B	13.1	58
		SBLT	-	F	\$\$	552	F	\$\$	1159
		SBR	125	B	12.2	61	D	27.4	88
7. US 60 (E/W) and Old Hundred Road (N/S)	Signal	EBTT	-	C	22.2	313	C	20.1	302
		EBR	200	A	5.0	166	C	20.4	181
		WBL	200	F	110.2	117	E	56.3	239
		WBTT	-	A	3.6	94	B	12.9	338
		NBL	200	E	65.0	185	E	61.1	192
		NBR	200	E	77.2	202	D	43.9	104
Overall LOS				C	23.7		C	20.6	

NOTES

- (1) – Indicates continuous lane.
- (2) Queues are average 95th percentile queues as reported by SimTraffic.
- (3) \$ Indicates Delay/Queue incalculable.

Analysis of study area intersections indicates that the following intersection movements are not expected to operate at acceptable levels of service under background plus approved peak hour traffic conditions:

US 60 and Stavemill Road/Luck Stone Road

- Eastbound left turn movement
- Eastbound through movement
- Westbound left turn movement
- Northbound left-through movement
- Northbound right movement
- Southbound left movement
- Southbound left-through movement

US 60 and Oakbridge Drive

- Westbound left movement
- Northbound left movement

US 60 and Page Road/County Line Road

- Eastbound left movement
- Northbound left-through movement
- Southbound left-through movement

US 60 and Old Hundred Road

- Westbound left movement
- Northbound left movement
- Northbound right movement

Analysis of study area intersections indicates that the following intersection movements are not expected to operate within available turn lane storage capacity under background plus approved peak hour traffic conditions:

US 60 and Stavemill Road/Luck Stone Road

- Westbound left turn movement
- Northbound right turn movement

US 60 and Oakbridge Drive

- Westbound left turn movement

US 60 and Page Road/County Line Road

- Northbound right turn movement

US 60 and Old Hundred Road

- Westbound left turn movement
- Northbound right turn movement

Field observations during data collection efforts affirm failing traffic conditions; however, analytical delay measures are not consistent with field observations. Field observations indicate that delays are not as significant as those calculated by the traffic model. This is explained by observations of user's queueing up in the median to complete a two-stage left turn maneuver. The traffic model does not account for multiple vehicles completing a two stage maneuver together. All analyses assume a standard single vehicle two stage left turn maneuver with corresponding analysis results.

Background Plus Approved (2024) Traffic Analysis

Background Plus Approved (2024) peak hour traffic conditions detailed in Figure C-4 have been analyzed as part of a comparative analysis to assess site traffic impacts. Refer to Table 4 for the background plus approved (2024) peak hour analysis results. Refer to Appendix F for the computer printouts of the background plus approved analysis.

**TABLE 4
 Analysis Summary
 Background Plus Approved (2024) Peak Hour Traffic Conditions**

Intersection	Control	Lane Group	Available Storage ¹	AM Peak Hour			PM Peak Hour		
				Lane LOS	Lane Delay (sec/veh)	Lane Queue (ft) ²	Lane LOS	Lane Delay (sec/veh)	Lane Queue (ft) ²
1. US 60 (E/W) and Stavemill Road / Luck Stone Road (N/S)	Signal	EBLL	400	E	63.5	567	F	104.9	158
		EBTT	-	E	79.3	1783	D	45.4	217
		EBR	300	B	12.8	178	C	26.0	23
		WBL	675	D	51.0	132	E	65.8	712
		WBTT	-	C	23.1	157	E	73.0	10482
		WBR	275	D	53.5	63	A	6.4	145
		NBLT	-	F	203.9	1714	F	134.0	208
		NBR	325	F	275.0	373	C	24.8	84
		SBL	325	F	144.1	209	F	127.5	211
		SBLT	-	F	148.8	228	F	123.7	234
		SBR	325	D	44.1	57	D	44.0	168
Overall LOS				F	95.0		E	64.3	
2. US 60 (E/W) and Oakbridge Drive (N/S)	Stop	WBL	125	F	247.3	162	C	15.9	145
		NBL	-	F	\$\$	130	F	\$\$	596
		NBR	50-	D	30.1	66	B	14.6	435
3. US 60 (E/W) and Standing Ridge Drive (N/S)	Stop	NBR	-	E	43.8	83	C	16.0	149
6. US 60 (E/W) and County Line Road / Page Road (N/S)	Stop	EBL	125	C	17.8	64	F	536.5	156
		WBL	125	D	27.6	19	B	13.9	57
		NBLT	-	F	\$\$	294	F	\$\$	849
		NBR	50	D	28.7	57	C	15.6	7
		SBLT	-	F	\$\$	1368	F	\$\$	1346
		SBR	125	B	14.4	95	E	39.1	52
7. US 60 (E/W) and Old Hundred Road (N/S)	Signal	EBTT	-	D	41.8	385	B	10.7	294
		EBR	200	A	2.2	231	A	1.8	174
		WBL	200	F	112.7	156	E	56.7	271
		WBTT	-	A	4.5	122	C	27.2	1492
		NBL	-	E	65.7	276	F	93.9	246
		NBR	200	F	129.1	236	D	45.2	158
		Overall LOS				D	37.4		C

NOTES

- (1) – Indicates continuous lane.
- (2) Queues are average 95th percentile queues as reported by SimTraffic.
- (3) \$ Indicates Delay/Queue incalculable.

As traffic volumes increase from existing traffic conditions, side street minor movements will deteriorate further from levels determined under existing traffic conditions. Traffic signal improvements are not expected to be warranted on any of these movements under background plus approved traffic conditions.

Analysis of each signalized study area intersection indicates that overall intersection levels of service are at acceptable levels at the intersection of US 60 and Old Hundred Road. However, analysis indicates that overall unacceptable levels of service are expected at the intersection of US 60 and Stavemill Road/Luck Stone Road.

Analysis of study area intersections indicates that the following intersection movements are not expected to operate at acceptable levels of service under background plus approved peak hour traffic conditions (*italics denotes problem traffic movements determined in prior analysis*):

US 60 and Stavemill Road/Luck Stone Road

- *Eastbound left turn movement*
- *Eastbound through movement*
- *Westbound left turn movement*
- Westbound through movement
- *Northbound left-through movement*
- *Northbound right movement*
- *Southbound left movement*
- *Southbound left-through movement*

US 60 and Oakbridge Drive

- *Westbound left movement*
- *Northbound left movement*

US 60 and Standing Ridge Drive

- Northbound right movement

US 60 and Page Road/County Line Road

- *Eastbound left movement*
- *Northbound left-through movement*
- *Southbound left-through movement*
- Southbound right movement

US 60 and Old Hundred Road

- *Westbound left movement*
- *Northbound left movement*
- *Northbound right movement*

Analysis of study area intersections indicates that the following intersection movements are not expected to operate within available turn lane storage capacity under background plus approved peak hour traffic conditions (*italics denotes problem traffic movements determined in prior analysis*):

US 60 and Stavemill Road/Luck Stone Road

- Eastbound left turn movement
- *Westbound left turn movement*
- *Northbound right turn movement*

US 60 and Oakbridge Drive

- *Westbound left turn movement*
- Northbound right turn movement

US 60 and Page Road/County Line Road

- Eastbound left turn movement
- *Northbound right turn movement*

US 60 and Old Hundred Road

- Eastbound right turn movement
- Westbound left turn movement
- Northbound right turn movement

Buildout (2024) Traffic Analysis

Buildout (2024) peak hour traffic conditions detailed in Figure C-9 have been analyzed as part of a comparative analysis to assess site traffic impacts. Refer to Table 6 for the buildout (2024) peak hour analysis results. Refer to Appendix G for the computer printouts of the buildout (2024) peak hour traffic conditions.

**TABLE 6
Analysis Summary
Buildout (2024) Peak Hour Traffic Conditions**

Intersection	Control	Lane Group	Available Storage ¹	AM Peak Hour			PM Peak Hour		
				Lane LOS	Lane Delay (sec/veh)	Lane Queue (ft) ²	Lane LOS	Lane Delay (sec/veh)	Lane Queue (ft) ²
1. US 60 (E/W) and Stavemill Road / Luck Stone Road (N/S)	Signal	EBLL	400	E	63.5	582	F	104.9	163
		EBTT	-	F	90.8	2600	D	48.4	225
		EBR	300	B	13.3	164	C	26.2	29
		WBL	675	D	50.6	140	E	65.4	715
		WBTT	-	C	21.7	154	E	76.5	10026
		WBR	275	D	40.5	60	A	6.5	145
		NBLT	-	F	203.9	1748	F	134.0	210
		NBR	325	F	258.3	377+	C	24.7	111
		SBL	325	F	157.5	208	F	139.7	219
		SBLT	-	F	159.7	226	F	136.1	248
		SBR	325	D	44.1	59	D	44.0	175
Overall LOS				F	98.5		E	66.8	
2. US 60 (E/W) and Oakbridge Drive (N/S)	Stop Stop	WBL	125	F	267.1	161	C	16.6	146
		NBL	-	F	\$	131	F	\$	629+
		NBR	50	D	30.8	58	B	14.9	399+
3. US 60 (E/W) and Standing Ridge Drive (N/S)	Stop	NBR	-	E	45.5	85	C	16.4	386+
6. US 60 (E/W) and County Line Road / Page Road (N/S)	Stop Stop Stop Stop	EBL	125	D	25.7	114	F	\$	148
		WBL	125	D	27.2	21	B	13.9	55
		NBLT	-	F	\$	461	F	\$	880
		NBR	50	D	28.3	57	C	15.5	18
		SBLT	-	F	\$	237	F	\$	1122+
		SBR	125	C	17.2	74	F	76.8	31
7. US 60 (E/W) and Old Hundred Road (N/S)	Signal	EBTT	-	E	60.0	365	B	14.2	303
		EBR	200	A	2.1	223	A	2.8	175
		WBL	200	F	130.5	176	E	56.7	268
		WBTT	-	A	4.7	142	D	42.2	2934
		NBL	-	E	76.5	279	F	107.4	311
		NBR	200	F	154.1	236	D	45.2	203
Overall LOS				D	49.0		D	36.0	

NOTES

- (1) – Indicates continuous lane.
- (2) Queues are average 95th percentile queues as reported by SimTraffic.
- (3) \$ Indicates Delay/Queue incalculable.
- (4) **Bold** denotes improvement.
- (5) + Denotes queues are in excess of available link distance.

Analysis indicates that site traffic impacts are expected to have marginal impacts to the overall study area for this intersection. Primary impacts are expected to occur at the intersection of US 60 and Page Road/County Line Road. Based on buildout analysis results, the existing intersection of US 60 and Page Road/County Line Road is not viable for any future development plans. Major street left turn movements, minor street movements are expected to operate at over capacity measures and cannot be mitigated with additional lane improvements.

Analysis of study area intersections indicates that the following intersection movements are not expected to operate at acceptable levels of service under background plus approved peak hour traffic conditions (*italics denotes problem traffic movements determined in prior analysis*):

US 60 and Stavemill Road/Luck Stone Road

- *Eastbound left turn movement*
- *Eastbound through movement*
- *Westbound left turn movement*
- *Westbound through movement*
- *Northbound left-through movement*
- *Northbound right movement*
- *Southbound left movement*
- *Southbound left-through movement*

US 60 and Oakbridge Drive

- *Westbound left movement*
- *Northbound left movement*

US 60 and Standing Ridge Drive

- *Northbound right movement*

US 60 and Page Road/County Line Road

- *Eastbound left movement*
- *Northbound left-through movement*
- *Southbound left-through movement*
- *Southbound right movement*

US 60 and Old Hundred Road

- *Eastbound through movement*
- *Westbound left movement*
- *Northbound left movement*
- *Northbound right movement*

Analysis of study area intersections indicates that the following intersection movements are not expected to operate within available turn lane storage capacity under background plus approved peak hour traffic conditions (*italics denotes problem traffic movements determined in prior analysis*):

US 60 and Stavemill Road/Luck Stone Road

- *Eastbound left turn movement*
- *Westbound left turn movement*

- *Northbound right turn movement*

US 60 and Oakbridge Drive

- *Westbound left turn movement*
- *Northbound right turn movement*

US 60 and Page Road/County Line Road

- *Eastbound left turn movement*
- *Northbound right turn movement*

US 60 and Old Hundred Road

- *Eastbound right turn movement*
- *Westbound left turn movement*
- *Northbound right turn movement*

Traffic Signal Warrant Analysis

Analysis of traffic signal warrants for the intersection of US 60 and Page Road/County Line Road indicates that warrant 1A will not be met under buildout traffic conditions. However, analysis of signal warrants assuming 45% buildout of the residential development (110 units) indicates that warrant 1B (70% threshold) will meet the hourly threshold for 9 hours analyzed (8 hours needed to meet warrant) assuming southbound left turn hourly volumes, exclusively. Additionally, warrant #2 (6 hours met/4 hour required) and warrant #3 (3 hours met/1 hour required) will be met at the 45% buildout of the residential development.

Upon full buildout of the site warrant 1B (100% threshold) will meet the hourly threshold for 10 hours analyzed (8 hours needed to meet warrant) assuming southbound left turn hourly volumes, exclusively.

Refer to Appendix H for all technical information related to the signal warrants analysis.

Signal System Timing Plan Evaluation

Under existing conditions there are peak hour signal system timing plans for the signalized intersections on US 60 between Stavemill Road/Luck Stone Road and Academy Drive. Existing timing plans for the AM Peak Hour (120 second cycle/14 second eastbound band width) and PM peak hour (114 second cycle/47 second eastbound band width/31 second westbound band width) have been modeled to assess if a traffic signal at the existing/future intersection of US 60 and Page Road/County Line Road will impact existing progression bands. Based on modeling of the existing plans, it has been determined that both peak hour plans will not be impacted by the potential traffic signal to be located at either the existing US 60 and Page Road/County Line Road intersection or the future realigned intersection location to be located at the proposed Classic Granite site drive to the west of the existing Page Road intersection.

Refer to Appendix I for all technical information related to the signal system timing plans.

Alternatives Analysis

In order to assess potential traffic control/intersection geometries of the US 60 and Page Road/County Line Road intersection an alternative analysis was conducted to determine what intersection design would provide the best operational measures for buildout (2024) peak hour traffic conditions.

Currently VDOT recognizes eight alternative designs to standard signalized traffic control. Each option has basic geometry/volume requirements that provide a basis for consideration at a viable option to a standard traffic signal traffic control. Refer to the following alternative designs and requirements that include/preclude as a potential alternative:

- Continuous Green-T: requires 3 leg approach/subject intersection is 4 leg intersection/not applicable
- Diverging Diamond Interchange: option for interchange design/subject intersection is an at grade intersection/not applicable
- Displaced Left Turn: moderate to heavy volumes in all directions/subject intersection volumes vary greatly from major to minor approaches/not applicable
- Median U-Turn: heavy through and low left turn volumes/ subject intersection major and minor street left turn volumes in excess of 200vph/VDOT requirement for analysis
- Quadrant Roadway: existing roadway to be used as connector/subject intersection does not have an adjacent roadway connector/not applicable
- Restricted Crossing U-Turn: low volumes on minor street movements/subject intersection has left turn volumes on both minor street approaches at approximately 200vph/VDOT required analysis
- Round-a-bout: similar traffic volumes on all approach/subject intersection has volumes in excess of 2,500vph on major street approaches and side street volumes of approximately 300 to 400vph/not applicable
- Single Point Urban Interchange: option for interchange design/subject intersection is an at grade intersection/not applicable

The following alternatives have been selected for analysis:

- Alternative #1 - Existing US 60 and Page Road/County Line Road – no signalization (base condition)
- Alternative #2 – US 60 and Realigned Page Road/Classic Granite Site Drive – Standard Traffic Signal (Appendix K)
- Alternative #3 - US 60 and Realigned Page Road/Classic Granite Site Drive – Median U-Turn (MUT) (Appendix L)
- Alternative #4 - US 60 and Realigned Page Road/Classic Granite Site Drive – Restricted Crossing U-Turn (RCUT) (Appendix M)

Alternatives #2, #3, and #4 have been analyzed based on the realignment of Page Road to the west of the existing US 60 intersection with Page Road and County Line Road. For the alternatives analysis realigned Page Road is located between existing Page Road and US 60 along the western property line of the Shell Station located on the northwest quadrant of the existing US 60 and Page Road / County Line Road intersection. Where the base alignment of the relocated Page Road is consistent for each alternative (#2,#3, and #4), the geometry of the alignment varies depending on the alternative being analyzed. The proposed US 60 intersection location is to be located at the proposed Classic Granite left over intersection with US 60. Plans indicate that the approved Classic Granite site drive will provide a new alignment for County Line

Road at buildout of the approved Classic Granite site. The approved Classic Granite site drive will form the northbound approach of the future US 60 and Realigned Page Road intersection. Refer to Appendix J for a conceptual layout of the proposed realigned Page Road improvement assuming Alternative #2.

Traffic conditions developed for each alternative assumes Classic Granite site traffic under Phase 2 buildout of the approved site. Full buildout traffic conditions would assume completion of the County Line Road alignment. Based on discussions with the Classic Granite development team, that improvement is not expected by buildout of the proposed Ellis Farm project. Therefore, Classic Granite traffic conditions assume phase 2 conditions per their development plan for all alternatives.

Existing Page Road / County Line Road is assumed to operate with restrictions on existing Page Road. Alternatives #2, #3, and #4 assume no eastbound left movement; southbound left-through movements. County Line Road will maintain all existing traffic movements except for a northbound through movement.

Analysis of each alternative has been conducted using Synchro macro-scopic modeling for each traffic scenario. Models have been created to insure the comparative analysis differentiates only in measures related to the general configurations of each alternative. Where possible all remaining parameters have been kept equal. Quantifiable analysis measures (delay, queues, travel time) have been determined utilizing the Synchro/SimTraffic modeling, exclusively. Peak hour factors have been adjusted to utilize a 0.92 on all traffic movements, and heavy vehicle percentages have been adjusted to reflect a 2% rate on all traffic movements.

Alternative #1 has been analyzed as part of the scenario analysis detailed in a previous section of the report. This alternative assumes maintaining the existing intersection location on US 60 under buildout (2024) peak hour traffic conditions. Analysis results indicate that as an unsignalized intersection Alternative #1 will operate beyond capacity for all minor street movements to such a level that this option is eliminated on the basis of operational functionality. Further, this option has not been analyzed under signalized control based on review comments. Based on Powhatan County transportation plans, it is proposed to realign Page Road to intersection US 60 west of its current location. Therefore, VDOT has determined that signalization of the existing location will not meet future plans for the realignment of Page Road. Refer to Appendix G for all Alternative #1 analysis reports.

Alternative #2 assumes the realignment of Page Road to form a full movement (left; through; right turn movements on all approaches) four approach intersection on US 60. Buildout (2024) peak hour traffic conditions have been developed based on this alternative and are provided in Appendix K. Analysis of buildout (2024) peak hour traffic conditions are detailed in Table 7. Refer to Appendix K for the computer printouts of the buildout (2024) peak hour traffic conditions.

TABLE 7
Analysis Summary
Alternative #2 (Standard Signal) – Buildout (2024) Traffic Conditions

Intersection	Control	Lane Group	Available Storage ¹	AM Peak Hour			PM Peak Hour		
				Lane LOS	Lane Delay (sec/veh)	Lane Queue (ft) ²	Lane LOS	Lane Delay (sec/veh)	Lane Queue (ft) ²
5. US 60 (E/W) and Realigned Page Road / Classic Granite (N/S)	Signal	EBL	325	E	59.4	421	F	112.8	202
		EBTT	-	F	88.4	1926	B	14.5	242
		EBR	200	A	9.7	226	A	7.6	64
		WBL	300	E	69.9	211	E	62.2	337
		WBTT	-	B	15.5	217	F	105.0	513
		WBR	200	B	10.4	54	A	7.3	159
		NBL	150	E	62.2	7	E	68.4	20
		NBLT	-	E	62.7	49	E	67.1	96
		NBR	150	D	44.8	16	D	45.4	15
		SBLL	225	F	186.3	232	F	204.0	175
		SBTR	-	D	54.4	145	E	55.1	114
		Overall LOS				E	71.2		E
6. US 60 (E/W) and County Line Road / Page Road (N/S)	Stop	WBL	100	D	29.9	27	C	15.5	88
		NBL	-	F	\$	38	F	\$	654
		NBR	50	D	33.9	41	C	17.4	38
		SBR	-	B	13.4	23	E	36.7	377
8. Page Road (E/W) and Realigned Page Road / Site Drive #1 (N/S)	Stop	EBLTR	-	B	10.0	57	B	10.1	47
		WBLTR	-	B	10.6	47	B	11.4	58
		NBL	150	A	7.7	45	A	7.6	35
9. Page Road (E/W) and Site Drive #2 (N/S)	Stop	EBL	-	A	7.5	11	A	7.6	10
		SBLR	-	B	10.0	53	B	10.1	53

NOTES

- (1) – Indicates continuous lane.
- (2) Queues are average 95th percentile queues as reported by SimTraffic.
- (3) \$ Indicates Delay/Queue incalculable.
- (4) **Bold** denotes improvement.
- (5) + Denotes queues are in excess of available link distance.

Capacity analysis indicates the following:

- Major street through volumes push the limit to provide capacity for this intersection under signalized control.
- Westbound traffic queues under PM peak hour traffic conditions are expected to create spillback conditions that will impact the existing intersection of US 60 and Page Road / County Line Road.
- Primary traffic conflict is expected to occur between the major street through movements (eastbound – AM / westbound – PM) and the southbound dual left turn movement.
- Travel time analyses indicate alternative #2 will operate at 270.2 hours under AM peak hour traffic conditions and 356.2 hours under PM peak hour traffic conditions.
- Analysis of site drives #1 and #2 indicate levels of service will be acceptable upon buildout of the proposed site with the Page Road realignment.

Alternative #3 assumes a median U-turn (MUT) configuration. This configuration prevents major street and minor street left turns at the US 60 and Realigned Page Road / Classic Granite Site Drive intersection (Node 5). Left maneuvers are rerouted to through (major street) movement and right turn (minor street) maneuvers at the intersection of US 60 and Realigned Page Road / Classic Granite Site Drive (Node 5). These movements then continue upstream to a proposed median break (Node 4) and existing Page Road / County Line Road (Node 6) to conduct a U-turn

maneuver in order to travel back to the US 60 and Realigned Page Road / Classic Granite Site Drive intersection (Node 5). Thereby allowing the motorists to continue on their desired travel route. Buildout (2024) peak hour traffic conditions have been developed based on this alternative and are provided in Appendix L. Analysis of buildout (2024) peak hour traffic conditions are detailed in Table 8.

TABLE 8
Analysis Summary
Alternative #3 (MUT) – Buildout (2024) Traffic Conditions

Intersection	Control	Lane Group	Available Storage ¹	AM Peak Hour			PM Peak Hour			
				Lane LOS	Lane Delay (sec/veh)	Lane Queue (ft) ²	Lane LOS	Lane Delay (sec/veh)	Lane Queue (ft) ²	
4. US 60 (E/W) and US 60 WB U-Turn (E/W)	Signal	EBTT	-	C	20.7	914	A	5.6	186	
		WBUU	325	F	107.2	330	D	51.9	111	
		Overall LOS			C	23.0		A	4.9	
5. US 60 (E/W) and Realigned Page Road / Classic Granite (N/S)	Signal	EBTT	-	B	13.5	808	A	6.7	194	
		EBR	200	A	3.0	284	A	2.3	58	
		WBTT	-	A	0.8	50	C	31.9	191	
		WBR	200	A	0.6	16	A	0.1	40	
		NBT	-	D	51.1	11	D	44.4	22	
		NBR	150	D	51.8	49	D	45.3	46	
		SBTR	-	D	54.5	131	E	56.1	132	
		SBR	150	D	54.8	106	D	50.2	117	
		Overall LOS			B	12.1		C	23.2	
6. US 60 (E/W) and County Line Road / Page Road (N/S)	Signal	EBUU	300	E	57.1	230	E	78.7	100	
		EBTTR	-	E	74.0	468	A	7.9	177	
		WBL	100	F	130.5	38	E	69.2	85	
		WBTT	-	B	16.3	214	F	140.5	6008	
		WBR	200	B	10.6	84	A	9.1	295	
		NBL	-	F	224.1	31	F	109.9	49	
		NBR	50	D	41.2	39	D	39.2	31	
		SBR	-	D	47.0	20	D	46.1	38	
Overall LOS			D	54.9		F	86.4			

NOTES

- (1) – Indicates continuous lane.
- (2) Queues are average 95th percentile queues as reported by SimTraffic.
- (3) \$ Indicates Delay/Queue incalculable.
- (4) **Bold** denotes improvement.
- (5) + Denotes queues are in excess of available link distance.

Capacity analysis indicates the following:

- In order to provide a functional alternative all nodes require signalization. Capacity for any of the three nodes under unsignalized conditions gridlocks the corridor.
- Existing County Line Road prevents node 6 from operating under ideal conditions such that only the westbound U-turn movement will be accommodated.
- Operation of County Line Road under restricted signalized conditions creates the primary conflict for this alternative. Westbound through movement operation under PM peak hour conditions are expected to operate at unacceptable measures.
- Travel time analyses indicate alternative #2 will operate at 279.6 hours under AM peak hour traffic conditions and 519.0 hours under PM peak hour traffic conditions.

Alternative #4 assumes a restricted crossing U-turn (RCUT) configuration. This configuration prevents minor street left and through movements at the US 60 and Realigned Page Road / Classic Granite Site Drive intersection (Node 5). Side street maneuvers (left and through movements) are rerouted to right turn (minor street) maneuvers at the intersection of US 60 and Realigned Page Road / Classic Granite Site Drive (Node 5). These movements then continue upstream to a proposed median break (Node 4) and existing Page Road / County Line Road (Node 6) to conduct a U-turn maneuver in order to travel back to the US 60 and Realigned Page Road / Classic Granite Site Drive intersection (Node 5). Thereby allowing the motorists to continue on their desired travel route. Buildout (2024) peak hour traffic conditions have been developed based on this alternative and are provided in Appendix M. Analysis of buildout (2024) peak hour traffic conditions are detailed in Table 9.

TABLE 9
Analysis Summary
Alternative #4 (RCUT) – Buildout (2024) Traffic Conditions

Intersection	Control	Lane Group	Available Storage ¹	AM Peak Hour			PM Peak Hour			
				Lane LOS	Lane Delay (sec/veh)	Lane Queue (ft) ²	Lane LOS	Lane Delay (sec/veh)	Lane Queue (ft) ²	
4. US 60 (E/W) and US 60 WB U-Turn (E/W)	Signal	EBTT	-	C	26.2	584	A	7.0	235	
		WBL	275	F	114.4	323	D	50.5	179	
		Overall LOS			C	23.4		A	4.8	
5. US 60 (E/W) and Realigned Page Road / Classic Granite (N/S)	Signal	EBL	250	D	46.5	239	E	55.1	210	
		EBTT	-	B	10.1	567	A	4.3	553	
		EBR	200	A	4.3	204	A	1.7	145	
		WBL	225	F	116.2	228	E	58.6	112	
		WBTT	-	A	1.2	142	A	6.7	156	
		WBR	200	A	0.5	10	A	0.0	39	
		NBR	-	D	49.4	59	D	48.3	74	
		SBRR	-	D	50.0	88	F	149.0	131	
		Overall LOS			B	15.4		B	14.8	
6. US 60 (E/W) and County Line Road / Page Road (N/S)	Signal	EBU	225	D	49.6	234	F	260.8	301	
		EBTTR	-	E	69.8	516	B	10.8	582	
		WBL	100	F	130.5	39	E	69.2	81	
		WBTT	-	B	15.9	211	F	140.5	6020	
		WBR	200	B	10.3	90	A	9.1	287	
		NBL	-	E	67.7	35	F	109.9	49	
		NBR	50	D	42.2	34	D	39.2	31	
		SBR	-	D	49.0	31	D	46.1	47	
		Overall LOS			D	51.5		F	91.1	

NOTES

- (1) – Indicates continuous lane.
- (2) Queues are average 95th percentile queues as reported by SimTraffic.
- (3) \$ Indicates Delay/Queue incalculable.
- (4) **Bold** denotes improvement.
- (5) + Denotes queues are in excess of available link distance.

Capacity analysis indicates the following:

- In order to provide a functional alternative all nodes require signalization. Capacity for any of the three nodes under unsignalized conditions gridlocks the corridor.
- Existing County Line Road prevents node 6 from operating under ideal conditions such that only the westbound U-turn movement will be accommodated.
- Operation of County Line Road under restricted signalized conditions creates the primary conflict for this alternative. Westbound through movement operation under PM peak hour conditions are expected to operate at unacceptable measures.
- Travel time analyses indicate alternative #2 will operate at 256.1 hours under AM peak hour traffic conditions and 552.1 hours under PM peak hour traffic conditions.

Alternatives Evaluation

Based on the analysis results and general considerations, refer to the following:

- Level of service results indicate a mixed result heavily dependent upon the degree to which capital expenditures can be made to provide appropriate infrastructure for the selected configuration. LOS results indicate that alternatives #3 and #4 show promise with two fully dedicated median breaks. This analysis has one dedicated median break and one existing median break that has additional conflict points increasing the number of signal phases needed for the intersection creating more system delay.
- US 60 is operating at capacity under existing traffic conditions and is expected to reach critical levels under future conditions with or without the proposed site. Acceptable levels of service can only be achieved if/when US 60 is widened from its existing 4 lane divided cross section to a 6 lane divided cross section from its existing terminus in Chesterfield County to just west of Stavemill Road.
- None of the alternatives analyzed provide an ideal level of service option.
- System travel time measures indicate that Alternative #2 provides the best option for intersection design.
- Expected infrastructure costs are expected to be less with Alternative #2. Traffic signal costs for Alternative #2 are expected to be approximately \$500K. Both Alternatives #3 and #4 are expected to be approximately \$900K. Geometric improvements are expected to be approximately equal assuming right of way costs are not an issue.
- Alternatives #3 and #4 are expected to exceed the ability for the development team to provide sufficient capital.
- Alternative #2, as analyzed, can be committed to by the developer as part of this overall site traffic mitigation plan.
- Alternative #2 provides a standard intersection design. Alternatives #3 and #4 provide atypical intersection designs. Driver expectancy for Alternative #2 is expected to provide the best option.
- Each alternative is expected to impact the existing intersection of US 60 and Page Road / County Line Road. Each alternative does provide existing Page Road traffic with an option to gain access to the proposed US 60 and Realigned Page Road / Classic Granite Site Drive intersection. No alternative provides relief to County Line Road.
- Access to the existing Shell Station will need to be adjusted to reflect the proposed Page Road realignment. It is recommended that the existing western most US 60 access location be eliminated. This entrance was intended to operate as a shared entrance between adjoining parcels. As part of this recommended action, a new point of access needs to be provide for the Shell Station to maximize this parcels access to realigned Page Road.
- Alternative #2 provides the best option for US 60 and Page Road / County Line Road since it does not require a signalized operation at this intersection.

It is recommended to implement the Alternative #2 (Realigned Page Road; full movement intersection; single traffic signal) intersection design. All recommended lane improvements detailed in this report are based on this alternative being selected.

Conclusions and Recommendations

Analysis indicates that the proposed site is expected to have a minimal impact to all off-site study area intersections except for the intersection of US 60 and Page Road / County Line Road at buildout of the proposed site. Site traffic is expected to impact study area traffic movements operating at unacceptable levels of service under existing/future traffic conditions; however, the proposed development is not the cause of these deficiencies nor is it in position to provide the appropriate mitigation measures needed to mitigate the operational conditions.

Analysis of the US 60 and Page Road / County Line Road intersection indicates that buildout traffic conditions cannot be accommodated under unsignalized traffic control. Based on VDOT comments the existing location will not be permitted for a traffic signal installation. In order to mitigate these concerns the development team is committing to constructing a new link to that will provide for the future alignment of Page Road between existing Page Road and US 60.

With the realignment of the Page Road facility the intersection of US 60 and Realigned Page Road is proposed to align with the approved Classic Granite left over site drive on US 60 forming a four way full movement intersection. Additionally, traffic signal warrants indicate that buildout of 45% of site residential units; 10,000sf of retail; 15,000sf of office uses will meet warrants for justification of a traffic signal at the proposed US 60 and Realigned Page Road / Classic Granite Site Drive.

The following is recommended as part of the proposed site buildout in order to mitigate site impacts at the intersection of US 60 and Page Road / County Line Road:

- Construct a basic three lane cross section between existing Page Road and US 60 immediately west of the existing Shell Station property line such that realigned Page Road will intersect US 60 at the proposed US 60 / Classic Granite Site Drive left over.
- Construct one eastbound left turn lane (325ft of storage); one westbound right turn lane (200ft of storage); dual southbound left turn lanes (225ft of storage); one southbound through-right lane at the intersection of US 60 and Realigned Page Road / Classic Granite Site Drive.
- Install a traffic signal at the intersection of US 60 and Realigned Page Road / Classic Granite Site Drive upon completion of the realigned Page Road corridor and once a combination of VDOT warrants are met.

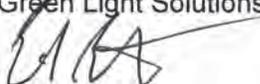
The following is recommended as part of the proposed site buildout in order to mitigate site impacts at Site Drive #1 and Site Drive #2 on existing Page Road:

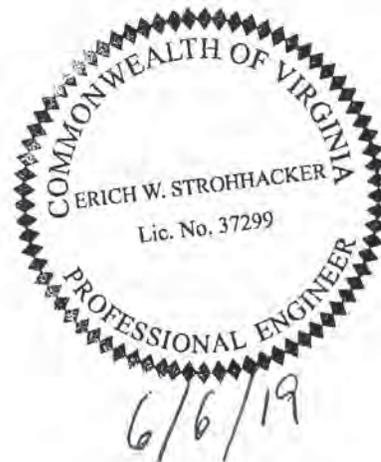
- Construct realigned Page Road to intersect existing Page Road at the proposed Site Drive #1 location. This will create a four approach intersection such that realigned Page Road will form the northbound approach and Site Drive #1 will create the southbound approach.
- Construct a northbound left turn lane (150 feet of storage) at the intersection of Page Road / Realigned Page Road / Site Drive #1.
- Install a two-way stopped control on the east and westbound approaches of Page Road. This will create uninterrupted traffic flow for the northbound (Realigned Page Road) and southbound approaches (Site Drive #1) at the intersection of Page Road / Realigned Page Road / Site Drive #1.

- Site Drive #2 to provide appropriate spacing with Site Drive #1. Turn lanes are not warranted at the intersection of Page Road / Site Drive #2 based on VDOT turn lane warrants thresholds. A westbound right turn taper is warranted at the intersection of Page Road / Site Drive #2.

If you need any additional information or have any questions regarding this submittal, please feel free to call or email.

Sincerely,
Green Light Solutions, Inc.


Erich Strohhacker, PE
President



Attachment #4
Comments from VDOT re Traffic Assessment
(Ellis Farm Traffic Assessment Report Comments: Dated July 15, 2019)



COMMONWEALTH of VIRGINIA

DEPARTMENT OF TRANSPORTATION
RICHMOND DISTRICT
2430 Pine Forest Drive
COLONIAL HEIGHTS, VA 23834
www.VDOT.Virginia.gov

Stephen C. Brich, P.E.
COMMISSIONER

July 15, 2019

Andrew Pompei
Planning Director
Powhatan County
3834 Old Buckingham Road
Powhatan, Virginia 23139

(Sent via E-mail)

Subject: Ellis Farm
Traffic Assessment Report Comments

Dear Mr. Pompei:

The Virginia Department of Transportation (Department) has reviewed the resubmitted traffic study, dated June 6, 2019 for the proposed Ellis Farm site along the north side of Page Road (Route 675) near the intersection with Anderson Highway (US 60), and the responses to the original review comments. Based on the comment responses, the Department finds that the revised report conforms to the requirements of a traffic impact analysis in regard to the accuracy of the methodologies, assumptions, and conclusions presented in the analysis.

The analysis was required by Powhatan County as part of the rezoning case for the Ellis Farm development to define the impacts of site traffic on the surrounding road network. Summarized below are the key findings and recommendations included in the study:

Proposed Development

The applicant is proposing to construct a mixed-use development to include the following uses:

- 249 single family residential units
- 80,000 square feet (s.f.) of assisted living space
- 15,000 s.f. of office space
- 10,000 s.f. of retail space

The development is expected to be completely built-out in the year 2024, with no proposed phasing plan for the site. The anticipated trip generated for the proposed development is as follows (does not include deduction for internal capture and pass-by trips):

- AM Peak Traffic – 410 total trips
- PM Peak Traffic – 410 total trips
- Average Daily Traffic – 4,166 vehicles trips per day

Existing (2018) Traffic Analysis

In order to determine the impact of the proposed site traffic, the existing operation of the Anderson Highway intersection with Page Road and County Line Road (Route 606) was analyzed as the base condition for future evaluations. Since through traffic on US 60 is an uncontrolled free-flow condition, there is no level of service (LOS) or delay associated with these movements. The report summarizes the movements from Page Road and Country Line Road as follows:

Analysis indicates all minor street left and through movements are not operating at acceptable levels. This is typical of unsignalized side street movements. Traffic signal improvements are not expected to be warranted on any of these movements under existing traffic conditions (p. 7).

Both the northbound (NB) combined through-left movement from County Line Road and the southbound (SB) combined through-left movement from Page Road were both calculated with a LOS of "F", which is the worst LOS rating possible.

Buildout (2024) Traffic Analysis

The existing intersection of US 60 at Page Road and County Line Road was evaluated with the proposed site traffic added into the projected traffic along US 60, which includes traffic generated by the Stonebridge development at the north-east quadrant of the US 60 at Luck Stone Road intersection, and the first phase of development for the Classic Granite site on the south side of US 60 west of County Line Road. As in the previous condition, no level of service or delay value was assigned to the uncontrolled free-flow through movements on eastbound (EB) and westbound (WB) US 60. The report summarizes the impact of the site traffic at this intersection as follows:

Primary impacts are expected to occur at the intersection of US 60 and Page Road/County Line Road. Based on buildout analysis results, the existing intersection of US 60 and Page Road/County Line Road is not viable for any future development plans. Major street left turn movements, minor street movements are expected to operate at over capacity measures and cannot be mitigated with additional lane improvements (p. 13).

In order to support the proposed development, multiple intersection improvements have been analyzed in the report to determine if the intersection can be improved to address the existing and proposed traffic at this location.

Traffic Signal Warrant Analysis

In order to determine if a signalized intersection is warranted at the intersection of US 60 with Page Road and County Line Road, a signal warrant analysis was included in the traffic assessment. The analysis concludes that the buildout year meets multiple signal warrants. VDOT Richmond District Traffic Engineering has reviewed the warrants and concurs with the warrant analysis presented in the traffic assessment report.

Signalization and Alternative Intersection Analysis

In order to approve a future signal on US 60, the Department will require a Signal Justification Report (SJR) be provided to the Department in accordance with the current version of VDOT IIM-TE-387. The traffic assessment for the Ellis Farm development identified three (3) potential intersection treatments to address the traffic conditions at the US 60 intersection with Page Road and County Line Road, including a traditional four-way signalized intersection, a restricted crossing u-turn (RCUT) intersection, and a median u-turn (MUT) intersection. The analysis for the RCUT and MUT intersections recommends signalization to function adequately.

The analysis for the four-way signalized intersection at the proposed relocated US 60 intersection at Page Road and County Line Road includes the following levels of service (LOS) for the eastbound (EB) and westbound (WB) through movements along US 60:

- EB 60 Through – AM Peak Hour = LOS F
- EB 60 Through – PM Peak Hour = LOS B
- WB 60 Through – AM Peak Hour = LOS B
- WB 60 Through – PM Peak Hour = LOS F

In addition, the signalized intersection analysis concluded with an overall LOS of E for both the AM and PM Peak Hours. Since US 60 is classified as a Rural Principal Arterial and included on the statewide Arterial Preservation Network (APN) as a Mobility Preservation Segment (MPS), the Department would not support the overall intersection LOS E or the LOS F shown for the EB 60 – AM Peak Hour and WB 60 – PM Peak Hour through movements.

Conclusion and Recommendations

The traffic assessment report clearly demonstrates that there is an existing operational issue on the Page Road and County Line Road approaches to US 60, which would be exacerbated by the addition of the Ellis Farm site traffic. The conclusion of the traffic assessment identifies the following improvements to the intersection to mitigate site traffic impacts to the intersection:

- Construct a new three (3) lane road from existing Page Road to US 60 immediately west of the existing Shell station, to align with the proposed site access to the Classic Granite site. This road will serve as “Realigned Page Road”, and would replace existing Page Road as the primary access to US 60.

Ellis Farm – Traffic Assessment Report

July 15, 2019

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- Construct an EB 60 left turn lane and a WB 60 right turn lane at the location of relocated Page Road. Realigned Page Road would be designed with a dual left turn lane and a combined through-right lane
- Install a traffic signal at the intersection of US 60 and Realigned Page Road and the proposed access road to Classic Granite site, once a combination of VDOT signal warrants are met by the site traffic.

At this time, the Department cannot support the four-way signalization of the realigned Page Road and proposed access road to the Classic Granite site, due the analyzed LOS values provided in this report. The traffic analysis presented in the report conclude that a signalized intersection treatment will be required to accommodate the site traffic added to the US 60 intersection with Page Road and County Line Road.

The Department recommends that the applicant proceed with a Signal Justification Report (SJR) that analyzes the traditional four-way signal and the alternative intersections identified in the traffic assessment report. The goal of the SJR would be to determine the most appropriate signalized intersection treatment that provides the best safety and operational conditions for the intersection. The Department will continue to support the County's evaluation of this rezoning proposal and is committed to working with the developer to determine the most appropriate solution to the operational issues at the US 60 intersection with Page Road and County Line Road.

It must be noted that the boundary line between Powhatan County and Chesterfield County bisects the existing US 60 intersection with Page Road and County Line Road. The Department recommends that any significant changes to the existing intersection be coordinated with Chesterfield County to receive their support for the ultimate intersection configuration.

If you have any questions or require any additional information, I can be reached at 804-674-2384.

Sincerely,



Adam Wilkerson, PE
Area Land Use Engineer, Central

CC (Via E-mail):

K. Bates (VDOT – Chesterfield Residency)
R. Vilak (VDOT – Richmond District)
D. Dreis (VDOT – Richmond District)
B. Lokker (VDOT – Richmond District)
R. Svejkovsky (VDOT – Richmond District)

Attachment #5
Access Management Waiver Request
(Dated July 26, 2019)

July 26, 2019



**BALZER
& ASSOCIATES**
PLANNERS / ARCHITECTS
ENGINEERS / SURVEYORS

15871 City View Drive
Suite 200
Midlothian, VA 23113
804.794.0571
www.balzer.cc

Roanoke
Richmond
New River Valley
Staunton
Harrisonburg
Lynchburg

Andrew Pompei, CZA, AICP
Planning Director
(804) 598-5698
apompei@powhatanva.gov

RE: Access Management Waiver
Tax Map Numbers 043-36B and 043-36
19-03-REZC Ellis Farm Rezoning

Dear Andrew,

On behalf of our clients and the property owners of the above referenced properties, Balzer and Associates is requesting exceptions to the Access Management Regulations as it relates to the proposed realignment of Page Road as described in Zoning Case 19-03-REZC and as shown on the attached plan. We are requesting an exception to Table 68-175(e)(5)d "Intersection Spacing Standards".

The Traffic Impact Analysis (TIA) associated with 19-03-REZC states that a signalized intersection will be triggered with the construction of the proposed 249 homes. In order to provide the warranted signalized intersection that aligns with the proposed County Line Road to the south of Route 60, which was approved with the "Classic Granite" zoning case last year, we are proposing to realign existing Page Road through Parcel #043-36, which is located west of the existing Shell Station. The attached plan and spreadsheet identify the exceptions we are requesting for each intersection surrounding the proposed development.

We ask Powhatan County to please evaluate the spacing standards and grant access management exceptions for the proposed realignment of Page Road. Enclosed you will find signed affidavits from the property owners of 043-63 and 043-63B consenting to these requests. Please review this request and do not hesitate to contact me at (804) 794-0571 with any questions. Thank you for your consideration of this request.

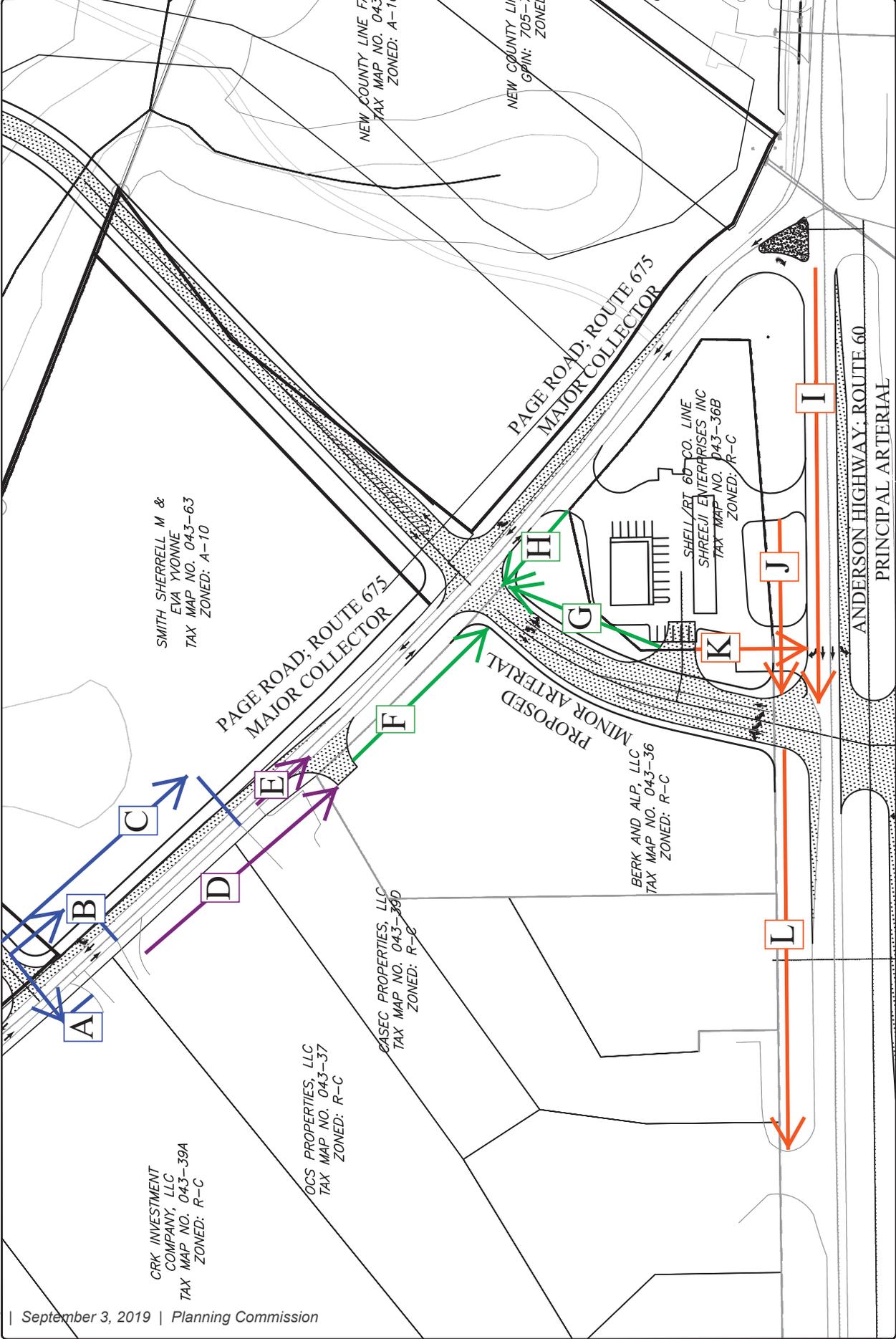
Sincerely,
Balzer and Associates, Inc.

Anne Miller
Planner

Envisioning Tomorrow, Designing Today

Section		From	To	Requirement	Provided	Exception
Northside of existing Page Road	A	Proposed westernmost access to Ellis Farm development	Commercial entrance to Parcel 043-39A	440 ft	27 ft	413 ft
	B	Proposed westernmost access to Ellis Farm development	Commercial entrance to Parcel 043-37	440 ft	99 ft	341 ft
	C	Proposed westernmost access to Ellis Farm development	Commercial entrance to Parcel 043-39D	440 ft	289 ft	151 ft
Southside of existing Page Road	D*	Commercial entrance to Parcel 043-37	Proposed access to Parcel 043-36 from existing Page Rd	440 ft	302 ft	138 ft
	E*	Commercial entrance to Parcel 043-39D	Proposed access to Parcel 043-36 from existing Page Rd	440 ft	81 ft	359 ft
Intersection of Ellis Farm Entrance & Realign Page Road	F*	Proposed access to Parcel 043-36 from existing Page Rd	Proposed Page Rd Realignment Intersection at Ellis Farm Entrance	440 ft	225 ft	215 ft
	G*	Proposed access to serve Shell Station off proposed realigned Page Rd	Proposed Page Rd Realignment Intersection at Ellis Farm Entrance	440 ft	231 ft	209 ft
	H	Shell Station Page Rd Access (NE)	Proposed Page Rd Realignment Intersection at Ellis Farm Entrance	440 ft	125 ft	315 ft
Route 60	I	Existing Page Rd Intersection (east)	Proposed Page Rd Realignment Intersection (west)	2640 ft	465 ft	2175 ft
	J	Easternmost Access of Shell Station	Proposed Page Rd Realignment Intersection (west)	625 ft	364 ft	261 ft
	K*	Proposed access to serve Shell Station off proposed realigned Page Rd	Proposed Page Rd Realignment Intersection at Rte 60	440 ft	130 ft	310 ft
	L	Proposed Page Rd Realignment Intersection (west)	Commercial entrance off Rte 60 (further west)	625 ft	457 ft	168 ft

* With the understanding that affidavits from property owners would be required



Attachment #6
Supplemental Signal Justification Report:
Ellis Farm Property
(Dated August 16, 2019)



August 16, 2019

Mr. Adam Wilkerson, PE
Area Land Use Engineer
Virginia Department of Transportation
Chesterfield Residency
3301 Speeks Drive
Midlothian, Virginia 22112

Re: Supplemental Signal Justification Report – Ellis Farm Property
Powhatan County, Virginia

Mr. Wilkerson,

As part of the ongoing approval process for the proposed Ellis Farm Property, the Virginia Department of Transportation has requested that a Supplemental Signal Justification Report (SJR) be prepared to address comments regarding review of traffic analyses submitted to date.

Analysis presented in the Revised Traffic Assessment (dated 6/6/19) provided detailed information regarding impacts expected as a result of the proposed Ellis Farm Property and an alternatives analysis to address SJR requirements. The traffic impact analysis presented in that report has been reviewed and found acceptable by the review jurisdictions. However, additional analysis has been requested to accommodate the ongoing SJR process for the intersection of US 60 and Page Road/County Line Road. The purpose of this supplemental analysis is to address the following:

- Analyze alternative intersection designs under ideal lane configurations
- Analyze buildout site traffic for the approved Classic Granite Site
- Analyze a Modified RCUT alternative (Alternative #5)

Executive Summary

Based on current plans, the Ellis Farm Property plan of development looks to construct a mixed use development to include residential, assisted living, retail, and office land uses. As part of the approval process for the proposed site, a traffic analysis was conducted to assess traffic impacts. Based on the results of this analysis, it was determined that a traffic signal is warranted at the intersection of US 60 and Page Road/County Line Road.

Agreement to the warrant analysis has been provided by the review jurisdictions. Per VDOT requirements, an SJR is required as part of the traffic signal evaluation process. The SJR process requires the evaluation of up to eight alternative designs in lieu of a conventional traffic signal configuration. Based on analysis conducted to date, four alternatives have merit for consideration at the intersection of US 60 and Page Road/County Line Road. The intersection alternatives analyzed in this report include the following traffic control options:

- Alternative #2 – US 60/Page Road/County Line Road - full movement signalized
- Alternative #3 – US 60/Page Road/County Line Road - Median U-Turn (MUT)

- Alternative #4 – US 60/Page Road/County Line Road - Restricted Crossing U-Turn (RCUT)
- Alternative #5 – Existing US 60/Page Road/County Line Road – Modified RCUT

Of the four alternatives analyzed in this report only one has a specific design requirement in order to accommodate existing/future plans of access along US 60. Alternative #5 assumes a configuration that accommodates the future plan of access for Classic Granite and the existing intersection location of US 60 and Page Road/County Line Road. Alternatives #2, #3, and #4 assume ideal configurations for each alternative and in concept can be placed at either the existing Page Road/County Line Road intersection with US 60 or at the proposed realigned Page Road/County Line Road intersection with US 60.

Analysis indicates all scenarios require signalization of each point of conflict in order to provide sufficient capacity for each intersection. All alternative designs require dual U-Turn lane configurations for each U-Turn point of conflict.

Analysis results indicate that Alternative #4 (RCUT) provides the optimum set of measures of effectiveness (MOE's) as part of the comparative analysis. Levels of service, volume to capacity ratios, and cumulative stopped delay on the US 60 through movements have been found to exceed all other alternatives.

Alternatives #3 and #5 provide acceptable MOE's for through traffic on US 60 and acceptable overall intersection levels of service; however, delays and volume to capacity ratios are more significant than those determined for Alternative #4.

Analysis of Alternative #2 indicates this option is expected to have the most significant impact to US 60 through movements. PM Peak hour traffic conditions are expected to operate at an unacceptable overall level of service at the intersection of US 60 and Page Road/County Line Road.

Existing/Background Traffic Conditions

Existing and background peak hour traffic conditions were determined as part of the previous traffic analysis submitted for review and approved. Existing and Background peak hour traffic conditions have been adjusted to reflect intersection configurations as required for each alternative intersection design.

Approved Developments

As part of the background analysis for this study all approved developments are to be included as part of the comparative analysis. For this study two approved developments have been included as part of the analysis. Stoneridge Commercial Development is to be developed to the north of US 60 on Luck Stone Road and is expected to include 52,700sf of retail; 6,511sf fast food restaurant; 3,000sf convenience mart; 3,465sf bank.

Classic Granite is a planned commercial development to be constructed in three phases. It is located on the southwest quadrant of the US 60 and Page Road/County Line Road intersection. Buildout of the development is expected to include 90,129sf of manufacturing uses; 110,828sf of office lane uses; 7,881sf of retail uses; a 16 fueling station convenience mart; a 4,500sf drive in bank; a 3,500sf fast food restaurant.

Approved development peak hour site trips have been adjusted to reflect intersection configurations as required for each alternative intersection design. All conditions assume full buildout condition for each approved development.

Buildout Traffic Conditions

Buildout site development traffic conditions were determined by analyzing site trip generation numbers for land uses and densities (249 single family residential units; 80,000sf of assisted living space; 15,000sf of office land uses; 10,000sf of retail land uses) utilizing the ITE Trip Generation Manual, 10th Edition. Site buildout peak hour site trips have been adjusted to reflect intersection configurations as required for each alternative intersection design.

Refer to the technical appendix for figures detailing each traffic component (existing, background, approved development, total site, and buildout) of peak hour traffic conditions used as the basis for this analysis.

Alternatives Analysis

In order to assess potential traffic control/intersection geometries of the US 60 and Page Road/County Line Road intersection an alternative analysis was conducted to determine what intersection design would provide the best operational measures for buildout (2024) peak hour traffic conditions.

Currently VDOT recognizes eight alternative designs to standard signalized traffic control. Each option has basic geometry/volume requirements that provide a basis for consideration as a viable option to a standard traffic signal traffic control. Refer to the following alternative designs and requirements that include/preclude as a potential alternative:

- Continuous Green-T: requires 3 leg approach/subject intersection is 4 leg intersection/not applicable
- Diverging Diamond Interchange: option for interchange design/subject intersection is an at grade intersection/not applicable
- Displaced Left Turn: moderate to heavy volumes in all directions/subject intersection volumes vary greatly from major to minor approaches/not applicable
- Median U-Turn: heavy through and low left turn volumes/ subject intersection major and minor street left turn volumes in excess of 200vph/VDOT requirement for analysis
- Quadrant Roadway: existing roadway to be used as connector/subject intersection does not have an adjacent roadway connector/not applicable
- Restricted Crossing U-Turn: low volumes on minor street movements/subject intersection has left turn volumes on both minor street approaches at approximately 200vph/VDOT required analysis
- Round-a-bout: similar traffic volumes on all approach/subject intersection has volumes in excess of 2,500vph on major street approaches and side street volumes of approximately 300 to 400vph/not applicable
- Single Point Urban Interchange: option for interchange design/subject intersection is an at grade intersection/not applicable

The following alternatives have been analyzed previously and/or as part of this report:

- Alternative #1 - Existing US 60 and Page Road/County Line Road – no signalization (base condition) / Not analyzed in this report
- Alternative #2 – US 60 and Realigned Page Road/Classic Granite Site Drive – Standard Traffic Signal (Appendix A)
- Alternative #3 - US 60 and Realigned Page Road/Classic Granite Site Drive – Median U-Turn (MUT) (Appendix B)
- Alternative #4 - US 60 and Realigned Page Road/Classic Granite Site Drive – Restricted Crossing U-Turn (RCUT) (Appendix C)
- Alternative #5 – US 60 and existing Page Road/County Line Road; US 60 and Classic Granite Site Drive – Modified RCUT (Appendix D)

Of the four alternatives analyzed in this report only one has a specific design requirement in order to accommodate existing/future plans of access along US 60. Alternative #5 assumes a configuration that accommodates the future plan of access for Classic Granite and the existing intersection location of US 60 and Page Road/County Line Road. This alternative assumes a modified configuration at the intersection of US 60 and US 60 WB U-Turn movement. In addition to the westbound U-Turn movement the intersection provides westbound left turn and eastbound right turn Classic Granite ingress movements and northbound right turn Classic Granite egress movements.

Alternatives #2, #3, and #4 assume ideal configurations for each alternative and in concept can be placed at either the existing Page Road/County Line Road intersection with US 60 or at the proposed realigned Page Road/County Line Road intersection with US 60. There are no movement modifications to these alternatives. Therefore, each of these alternatives provides an ideal lane configuration for evaluation purposes.

Analysis of each alternative has been conducted using Synchro macro-scopic modeling for each traffic scenario. Models have been created to insure the comparative analysis differentiates only in measures related to the general configurations of each alternative. Where possible all remaining parameters have been kept equal. Quantifiable analysis measures (delay, queues) have been determined utilizing the Synchro/SimTraffic modeling, exclusively. Peak hour factors have been adjusted to utilize a 0.92 on all traffic movements, and heavy vehicle percentages have been adjusted to reflect a 2% rate on all traffic movements.

Alternative #2 assumes the existing intersection configuration, which forms a full movement (left; through; right turn movements on all approaches) four approach intersection on US 60. Buildout (2024) peak hour traffic conditions have been developed based on this alternative and are provided in Appendix A. Analysis of buildout (2024) peak hour traffic conditions are detailed in Table 1. Refer to Appendix A for the computer printouts of the buildout (2024) peak hour traffic conditions.

**TABLE 1
Analysis Summary
Alternative #2 (Standard Signal) – Buildout (2024) Traffic Conditions**

Intersection	Control	Lane Group	Available Storage ¹	AM Peak Hour			PM Peak Hour		
				Lane LOS	Lane Delay (sec/veh)	Lane Queue (ft) ²	Lane LOS	Lane Delay (sec/veh)	Lane Queue (ft) ²
1. US 60 (E/W) and Page Road / County Line Road (N/S)	Signal	EBLL	300	D	53.4	385	D	48.9	113
		EBTT	-	F	106.8	1747	B	17.9	287
		EBR	200	B	10.1	301	A	8.1	121
		WBLL	300	D	48.4	192	D	50.2	424
		WBTT	-	B	11.6	173	F	97.5	1658
		WBR	200	A	6.1	57	A	7.0	293
		NBLL	250	E	58.9	134	F	283.3	234
		NBLT	-	E	66.5	90	E	58.9	79
		NBR	150	D	44.7	154	D	42.7	108
		SBLL	250	F	104.5	260	F	204.0	202
		SBT	-	E	58.1	170	E	58.5	36
		SBR	150	D	45.8	37	D	44.3	73
		Overall LOS				E	71.1		E

NOTES

- (1) – Indicates continuous lane.
- (2) Queues are average 95th percentile queues as reported by SimTraffic.
- (3) \$ Indicates Delay/Queue incalculable.
- (4) **Bold** denotes improvement.
- (5) + Denotes queues are in excess of available link distance.

Capacity analysis indicates the following:

- Major street through volumes push the limit to provide capacity for this intersection under signalized control. Volume to capacity ratios are expected to exceed 1.0.
- Primary traffic conflict is expected to occur between the major street through movements (eastbound – AM / westbound – PM) and the southbound dual left turn movement.
- Overall intersection LOS E under both AM and PM peak hours of the day.
- Worst case cumulative stopped delay measures: SB LT – 204.0sec; EB Through – 106.8sec; WB Through – 97.5sec.

Alternative #3 assumes a median U-turn (MUT) configuration. This configuration prevents major street and minor street left turns at the US 60 and Page Road/County Line Road intersection (Node 2). Left maneuvers are rerouted to through (major street) movement and right turn (minor street) maneuvers at the intersection of US 60 and Page Road/County Line Road (Node 2). These movements then continue upstream to a proposed median break (Nodes 1 and 3) to conduct a U-turn maneuver in order to travel back to the US 60 and Page Road/County Line Road intersection (Node 2). Thereby allowing the motorists to continue on their desired travel route. Buildout (2024) peak hour traffic conditions have been developed based on this alternative and are provided in Appendix B. Analysis of buildout (2024) peak hour traffic conditions are detailed in Table 2.

TABLE 2
Analysis Summary
Alternative #3 (MUT) – Buildout (2024) Traffic Conditions

Intersection	Control	Lane Group	Available Storage ¹	AM Peak Hour			PM Peak Hour		
				Lane LOS	Lane Delay (sec/veh)	Lane Queue (ft) ²	Lane LOS	Lane Delay (sec/veh)	Lane Queue (ft) ²
1. US 60 (E/W) and US 60 WB U-Turn (E/W)	Signal	EBTT	-	D	38.7	952	A	9.6	208
		WBTT	275	E	78.6	346	D	44.5	195
		Overall LOS		C	32.8		A	7.4	
2. US 60 (E/W) and Realigned Page Road / Classic Granite (N/S)	Signal	EBTT	-	B	18.2	866	A	4.7	110
		EBR	200	A	6.5	301	A	5.4	46
		WBTT	-	A	4.5	452	E	61.6	796
		WBR	200	A	1.9	102	A	1.2	303
		NBTR	-	E	62.8	238	E	73.5	297
		NBR	325	E	55.7	210	E	76.5	254
		SBTR	-	D	50.2	398	E	63.1	317
		SBR	400	D	50.0	310	D	54.2	183
Overall LOS		B	16.6		D	39.7			
3. US 60 (E/W) and US 60 EB U-Turn (E/W)	Signal	EBUU	250	D	52.5	144	F	116.2	252
		WBTT	-	A	4.8	138	D	52.1	870
		Overall LOS		A	4.7		D	38.4	

NOTES

- (1) – Indicates continuous lane.
- (2) Queues are average 95th percentile queues as reported by SimTraffic.
- (3) \$ Indicates Delay/Queue incalculable.
- (4) **Bold** denotes improvement.
- (5) + Denotes queues are in excess of available link distance.

Capacity analysis indicates the following:

- In order to provide a functional alternative all nodes require signalization. Capacity for any of the three nodes under unsignalized conditions gridlocks the corridor.
- The primary capacity constraint is due to the eastbound U-Turn movement in conflict with the westbound through movement under PM peak hour traffic conditions. The U-Turn movement requires a dual lane configuration in order to provide sufficient capacity.
- The westbound U-Turn movement requires a dual lane configuration in order to provide sufficient capacity under AM peak hour traffic conditions.
- Volume to capacity ratios are expected to exceed 1.0.
- Overall intersection levels of service D or better for all intersection under both AM and PM peak hours of the day.
- Worst case cumulative stopped delay measures: SB LT – 146.8sec; EB Through – 56.9sec; WB Through – 113.7sec.

Alternative #4 assumes a restricted crossing U-turn (RCUT) configuration. This configuration prevents minor street left and through movements at the US 60 and Page Road/County Line Road intersection (Node 2). Side street maneuvers (left and through movements) are rerouted to right turn (minor street) maneuvers at the intersection of US 60 and Page Road/County Line Road (Node 2). These movements then continue upstream to a proposed median breaks (Nodes 1 and 3) to conduct a U-turn maneuver in order to travel back to the US 60 and Realigned Page Road / Page Road/County Line Road intersection (Node 2). Thereby allowing the motorists to continue on their desired travel route. Buildout (2024) peak hour traffic conditions have been developed

based on this alternative and are provided in Appendix C. Analysis of buildout (2024) peak hour traffic conditions are detailed in Table 3.

TABLE 3
Analysis Summary
Alternative #4 (RCUT) – Buildout (2024) Traffic Conditions

Intersection	Control	Lane Group	Available Storage ¹	Lane LOS	AM Peak Hour Lane Delay (sec/veh)	Lane Queue (ft) ²	Lane LOS	PM Peak Hour Lane Delay (sec/veh)	Lane Queue (ft) ²
1. US 60 (E/W) and US 60 WB U-Turn (E/W)	Signal	EBTT	-	B	16.3	682	A	5.0	132
		WBUU	200	F	84.9	162	D	46.1	131
		Overall LOS		B	15.5		A	4.1	
2. US 60 (E/W) and Realigned Page Road / Classic Granite (N/S)	Signal	EBL	300	D	47.1	239	E	66.0	102
		EBTT	-	B	18.5	670	B	11.5	229
		EBR	200	A	2.1	271	A	4.8	100
		WBL	350	F	89.0	338	C	33.5	233
		WBTT	-	A	3.1	237	A	3.8	279
		WBR	200	A	2.6	37	A	0.7	145
		NBRR	250	D	46.8	227	D	37.2	266
		SBRR	250	D	49.1	209	F	146.4	272
		Overall LOS		C	21.3		B	16.6	
3. US 60 (E/W) and US 60 EB U-Turn (E/W)	Signal	EBUU	225	D	47.5	110	F	107.4	205
		WBTT	-	A	3.9	124	D	47.2	993
		Overall LOS		A	3.4		C	34.2	

NOTES

- (1) – Indicates continuous lane.
- (2) Queues are average 95th percentile queues as reported by SimTraffic.
- (3) \$ Indicates Delay/Queue incalculable.
- (4) **Bold** denotes improvement.
- (5) + Denotes queues are in excess of available link distance.

Capacity analysis indicates the following:

- In order to provide a functional alternative all nodes require signalization. Capacity for any of the three nodes under unsignalized conditions gridlocks the corridor.
- The primary capacity constraint is due to the eastbound U-Turn movement in conflict with the westbound through movement under PM peak hour traffic conditions. The U-Turn movement requires a dual lane configuration in order to provide sufficient capacity.
- The westbound U-Turn movement requires a dual lane configuration in order to provide sufficient capacity under AM peak hour traffic conditions.
- Volume to capacity ratios are expected to approach 1.0; however, only one movement exceeds 1.0.
- Overall intersection levels of service C or better for all intersection under both AM and PM peak hours of the day.
- Worst case cumulative stopped delay measures: SB LT – 204.0sec; EB Through – 34.8sec; WB Through – 51.0sec.

Alternative #5 assumes a modified restricted crossing U-turn (RCUT) configuration. This configuration assumes the same design as an RCUT except for the US 60 and US 60 WB U-Turn. In addition to the westbound U-Turn maneuver the intersection also provides for the future Classic Granite Site Drive allowing eastbound right turn; westbound left turn; northbound right turn movements. Traffic conditions assumes interconnection to County Line Road for the approved Classic Granite Site. Buildout (2024) peak hour traffic conditions have been developed based on this alternative and are provided in Appendix D. Analysis of buildout (2024) peak hour traffic conditions are detailed in Table 4.

**TABLE 4
Analysis Summary
Alternative #5 (Modified RCUT) – Buildout (2024) Traffic Conditions**

Intersection	Control	Lane Group	Available Storage ¹	AM Peak Hour			PM Peak Hour		
				Lane LOS	Lane Delay (sec/veh)	Lane Queue (ft) ²	Lane LOS	Lane Delay (sec/veh)	Lane Queue (ft) ²
1. US 60 (E/W) and Classic Granite Site Drive (N/S)	Signal	EBTT	-	D	43.1	940	B	18.2	343
		EBR	200	A	5.5	232	A	9.1	75
		WBLL	250	F	92.2	222	D	54.8	160
		NBR	-	F	221.0	392	D	47.9	186
		Overall LOS		D	38.6		B	10.8	
2. US 60 (E/W) and Realigned Page Road / Classic Granite (N/S)	Signal	EBL	250	D	48.5	239	E	65.0	121
		EBTT	-	B	14.3	507	A	2.3	103
		EBR	200	A	6.3	255	A	0.1	22
		WBL	300	F	83.0	202	D	44.5	227
		WBTT	-	A	4.5	155	A	10.0	424
		WBR	200	A	2.7	35	A	2.6	238
		NBRR	250	D	50.8	193	D	45.8	213
		SBRR	250	D	48.5	223	F	146.4	282
		Overall LOS		B	17.9		B	17.0	
3. US 60 (E/W) and US 60 EB U-Turn (E/W)	Signal	EBUU	225	D	50.6	109	F	128.3	213
		WBTT	-	A	3.9	122	D	42.4	986
		Overall LOS		A	3.5		C	32.2	

NOTES

- (6) – Indicates continuous lane.
- (7) Queues are average 95th percentile queues as reported by SimTraffic.
- (8) \$ Indicates Delay/Queue incalculable.
- (9) **Bold** denotes improvement.
- (10) + Denotes queues are in excess of available link distance.

Capacity analysis indicates the following:

- In order to provide a functional alternative all nodes require signalization. Capacity for any of the three nodes under unsignalized conditions gridlocks the corridor.
- Due to the additional intersection movements at Node 1, this intersection is the primary constraint to overall operation. Volume to capacity ratios are expected to exceed 1.0.
- Westbound left and U-turn maneuvers require a dual lane configuration in order to provide sufficient capacity under AM peak hour traffic conditions.
- Eastbound U-turn maneuvers require a dual lane configuration in order to provide sufficient capacity under PM peak hour traffic conditions.
- Overall intersection levels of service D or better for all intersection under both AM and PM peak hours of the day.
- Worst case cumulative stopped delay measures: SB LT – 203.5sec; EB Through – 57.4sec; WB Through – 52.4sec.

Alternatives Evaluation

Based on the analysis results and general considerations, refer to the following:

- All alternatives require the signalization of each point of conflict.
- All U-Turn points of conflict will require dual lane configurations.
- Alternative #4 provides the best measure for overall intersection levels of service; volume to capacity ratios; cumulative stopped delay on the primary movements.
- Alternatives #3 and #5 provide acceptable overall intersection levels of service and good US 60 cumulative stopped delay measures.
- Alternative #2 provides a standard intersection design. Alternatives #3, #4, and #5 provide atypical intersection designs. Driver expectancy for Alternative #2 is expected to be best served by this option.
- Alternative #5 provides a possible transitional alternative towards completing Alternative #4.

Based on analysis results, it is recommended to implement the RCUT intersection design for the intersection of US 60 and Page Road/County Line Road.

If you need any additional information or have any questions regarding this submittal, please feel free to call or email.

Sincerely,
Green Light Solutions, Inc.

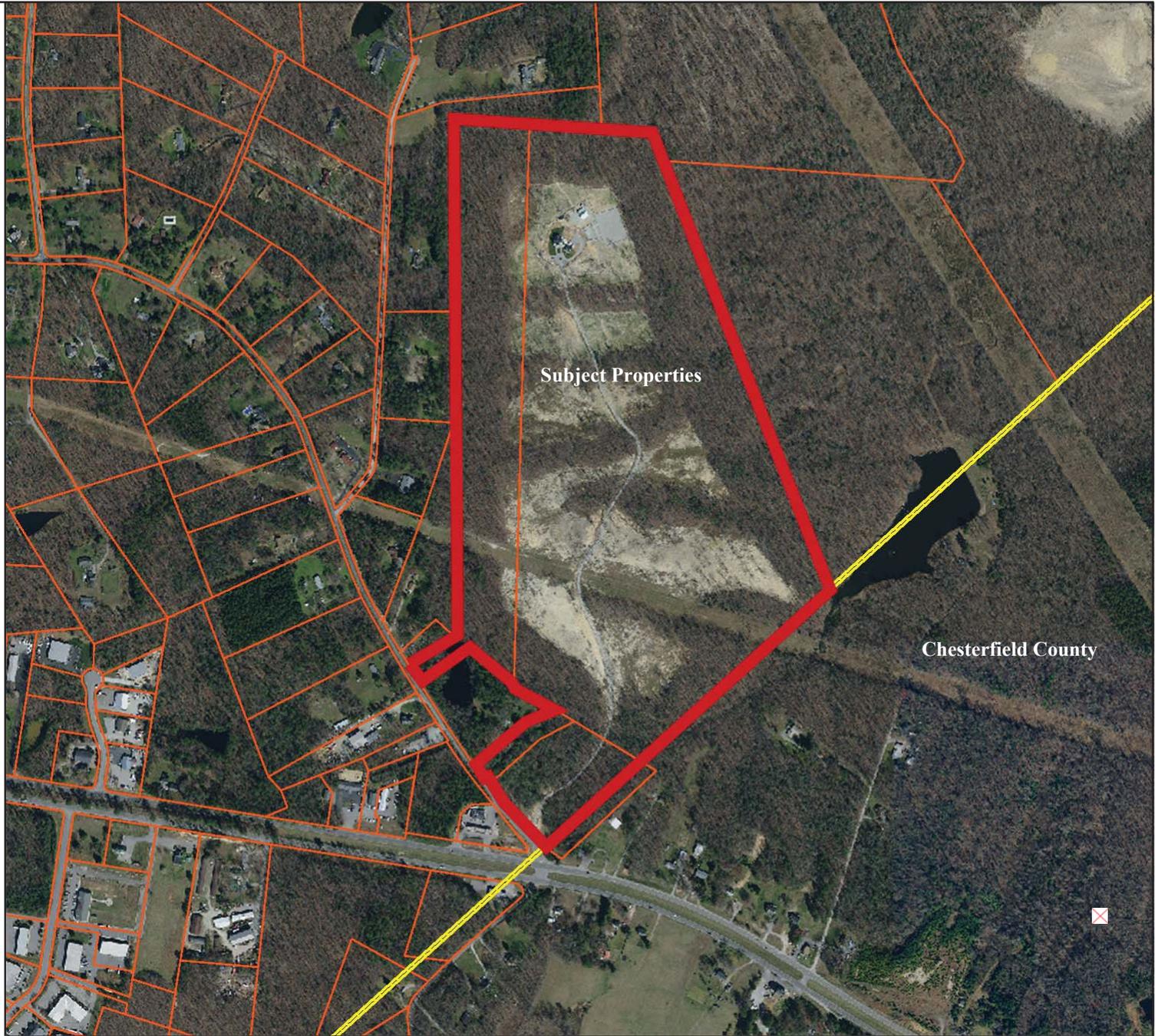


Erich Strohacker, PE
President

Powhatan County

Legend

-  County Boundary
-  Places
-  Parcels



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Feet



1:12,000 / 1"=1,000 Feet

Case #19-03-REZC: Vicinity Map

DISCLAIMER: ALL INFORMATION DEPICTED ON THIS MAP SHALL BE TREATED AS CONFIDENTIAL INFORMATION AND SHALL ONLY BE USED FOR THE SOLE PURPOSE FOR WHICH IT WAS PROVIDED. ANY OTHER USE OF THIS MAP, OR THE INFORMATION INCLUDED THEREON, IS STRICTLY PROHIBITED. THE DATA SHOWN ON THIS MAP IS FOR INFORMATION PURPOSES ONLY. THIS MAP MAY NOT BE COPIED OR OTHERWISE MADE AVAILABLE TO ANY OTHER PARTY IN PAPER OR ELECTRONIC FORMAT.

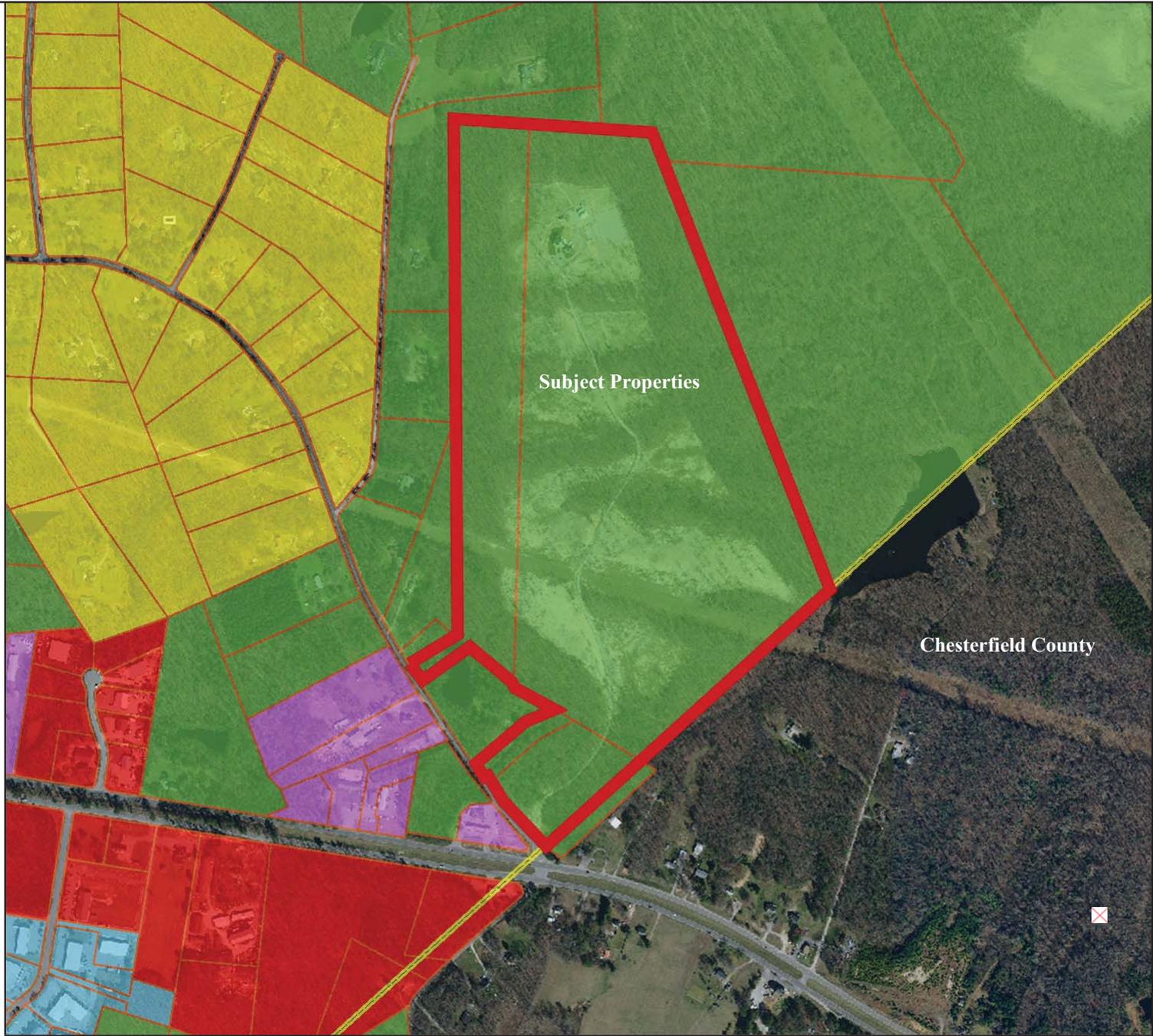
Powhatan County

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September 3, 2019 Planning Commission

Legend

-  County Boundary
-  Places
-  Parcels
- Zoning**
-  Agriculture A-10
-  Agricultural/Animal Confinement
-  Commerce Center Planned Development
-  Commerce Center
-  Commercial
-  Courthouse Square Center
-  Industrial - 1
-  Industrial - 2
-  Mining
-  Office
-  Residential - 2
-  Rural Residential 5
-  Residential Commercial
-  Residential Utility
-  Rural Residential
-  Village Center Planned Development
-  Village Center



Case #19-03-REZC: Zoning Map

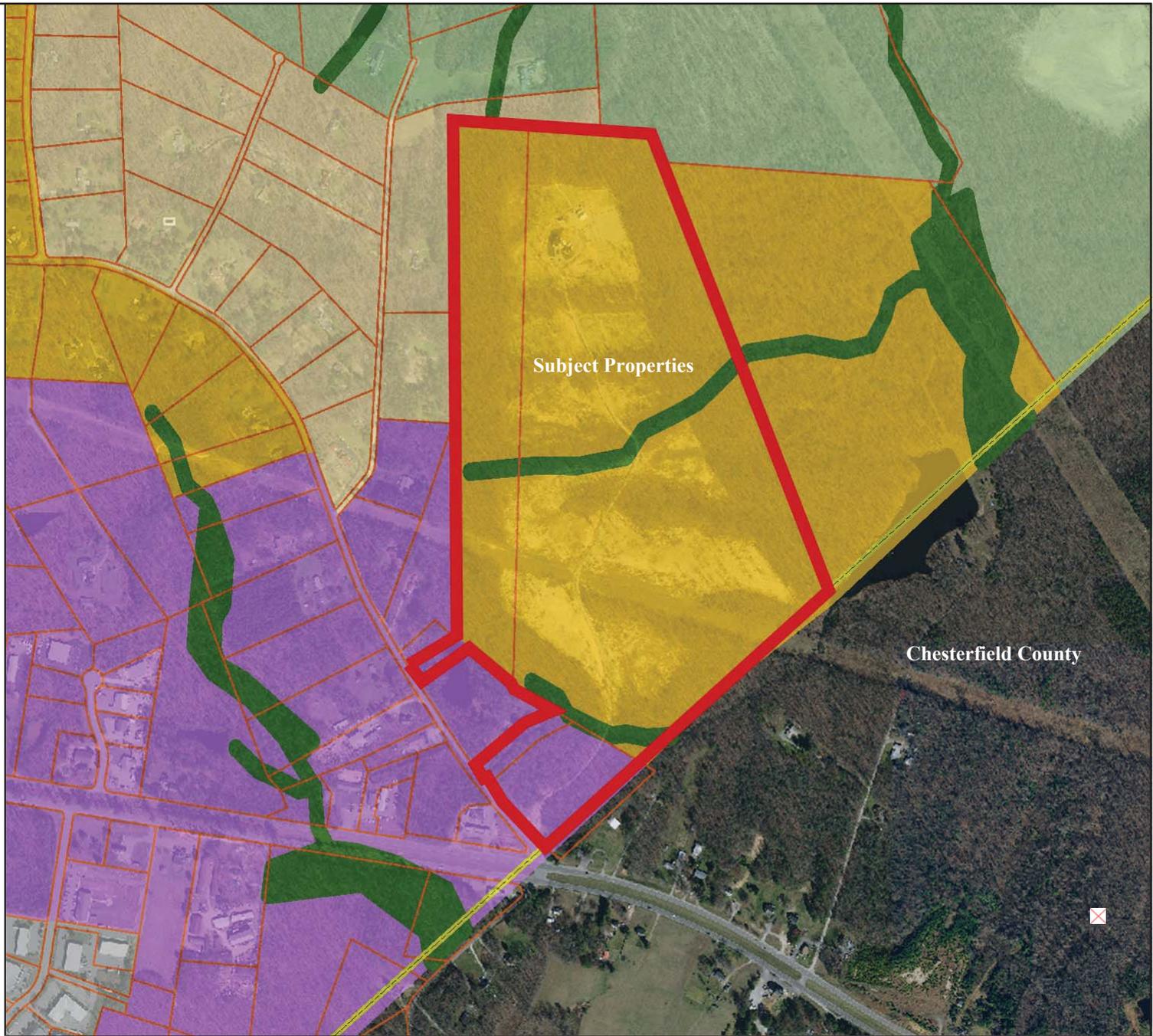
Feet
 0 200 400 600 800
 1:12,000 / 1"=1,000 Feet

DISCLAIMER: ALL INFORMATION DEPICTED ON THIS MAP SHALL BE TREATED AS CONFIDENTIAL INFORMATION AND SHALL ONLY BE USED FOR THE SOLE PURPOSE FOR WHICH IT WAS PROVIDED. ANY OTHER USE OF THIS MAP, OR THE INFORMATION INCLUDED THEREON, IS STRICTLY PROHIBITED. THE DATA SHOWN ON THIS MAP IS FOR INFORMATION PURPOSES ONLY. THIS MAP MAY NOT BE COPIED OR OTHERWISE MADE AVAILABLE TO ANY OTHER PARTY IN PAPER OR ELECTRONIC FORMAT.

Powhatan County

Legend

-  County Boundary
-  Places
-  Parcels
-  Crossroads
-  Rural Enterprise Zone Boundary
- Future Land Use**
-  Public Lands
-  Natural Conservation
-  Rural Preservation
-  Rural Residential
-  Low Density Residential
-  Village Residential
-  Village Center
-  Commerce Center
-  Economic Opportunity
-  Industrial



Feet



1:12,000 / 1"=1,000 Feet

Case #19-03-REZC: Countywide Future Land Use Plan (2019)

DISCLAIMER: ALL INFORMATION DEPICTED ON THIS MAP SHALL BE TREATED AS CONFIDENTIAL INFORMATION AND SHALL ONLY BE USED FOR THE SOLE PURPOSE FOR WHICH IT WAS PROVIDED. ANY OTHER USE OF THIS MAP, OR THE INFORMATION INCLUDED THEREON, IS STRICTLY PROHIBITED. THE DATA SHOWN ON THIS MAP IS FOR INFORMATION PURPOSES ONLY. THIS MAP MAY NOT BE COPIED OR OTHERWISE MADE AVAILABLE TO ANY OTHER PARTY IN PAPER OR ELECTRONIC FORMAT.

Attachment #10
Neighborhood Meeting Comments

Name	Address	Phone Number	Email	Notes from Comment Cards
Lynnette Riner	1820 Stonehenge Farm Rd, Midlothian VA 23113	(804) 794-5363	lynnettriner@yahoo.com	24. I would like to see a fence between the easement and the open space or the open space and the homes to keep people from wandering over into our property. The less houses built on the property the better.
Marc Gregory	1442 Loch Gate Path, Powhatan VA 23139	(804) 755-7433	marc.gregory@gmail.com	16. We can all see for ourselves the tide of progress creeping westward down Rt. 60. These changes cannot be avoided, and we should confront these changes realistically, and plan to embrace the progress in a way that best benefits the community, & sets a responsible pattern for changes to core. This plan seems like a great opportunity to build for the future & reap the benefits to update the infrastructure of the county.
Bill Howie	1344 Page Road, Powhatan VA 23139	(804) 350-8210	billhowie1958@gmail.com	
Mark Smith	924 Roll Drive, Midlothian VA 23114	(804) 379-7556		
Harold & Christina Ellis	1318 Page Road, Powhatan VA 23139	(804) 539-5536	cellis@ppiservices.com	
Jamey Epps	1920 Anderson Highway, Powhatan VA 23139	(804) 972-0554	jepps@luckstone.com	
Pam Dubose	1815 Boyer Road, Powhatan VA 23139	(804) 683-3480	dubose3@verizon.net	7. Page Rd intersection to Rt. 60 should not be moved to behind the Shell Station. It will cause more accidents than currently occur. That is a terrible spot to open a road on Rt. 60 even with a light. You could just add a light to the current location of Page Road & Route 60 (would be much safer!) "No to Rezoning to Village" too many houses for lot size - we are rural area - stay rural we need to stay min. of 2 acre lot size per home. Schools, police, fire, ems already overloaded. Wells of water overloaded.
Chuck Dubose	"	(804) 683-3479	pncdubose81@comcast.net	8. I am against the proposed Page Road re-alignment. The new entrance is below the line of site of west bound traffic. It prioritizes traffic from the Ellis Farm development. Separate VDOT issue. West Page stop sign on new road has a blind spot for traffic coming from 60. The guard rail obstructs view of on coming traffic.
Amanda Hardesty	3598 Timberview Road, Powhatan VA 23139	(804) 651-2157	amanda@hardestyhomesllc.com	
Bobby Hall	1770 Old Powhatan Estates, Powhatan VA 23139	(804) 378-2929	bhall1210@msn.com	26. Proposed intersections @ Page Rd & 60 - major issue; Stoplight should be required; Page Rd should be major thoroughfare.
Karen Hall	"	"	khall1770@live.com	
Betty Richardson	1769 Old Powhatan Estates, Powhatan VA 23139	(804) 794-2333		
Bruce Lewis	1845 Farringdon Road, Midlothian VA 23113	(804) 794-6585	lewisb5@verizon.net	
Sam Watson	1385 Page Road, Powhatan VA 23139	(804) 929-3008	sam.watson316@yahoo.com	
Burnette Elam	17600 Midlothian Tpke, Midlothian VA 23113	(804) 814-4544	james.b.elam@pmusa.com	28. Would like to see proposed uses for commercial development area since we have adjoining property.
Alan Willis	1415 Page Road, Powhatan VA 23139	(804) 794-7417		
Janet Willis	"	"		
Wilma Burke	1840 Stonehenge Farm Road, Midlothian VA 23113	(804) 897-7199		1. "NO WAY" - with 249 lots=min. of 498 people with teens - 2 min of 996; 3 cars each = 2978 cars! We live on 17.568 acres at the end of Stonehenge Farm Rd. We target shoot + hunt deer + turkey in season. Are you going to take that "right" away?
Andrew Suto	"	"		2. Smooth Talkers! This should be put to a vote by the residents of Page Rd + Co. Line Rd, not Supervisors whose interested are not to us!
Cut Sawan	1660 King William Woods Road, Midlothian VA 23113			

Don Silberbauer	1426 Donavon Mill Lane, Powhatan VA 23139	(804) 598-4716	silberdm@comcast.net	18. I was told East West Comm will be paying for any/all road realignments including signal, turn lanes, etc.; \$3.04 M doesn't pay for more water. 572 kg/d is all we get. Asked one of ...; \$1 M/yr in RE taxes is about \$500k short of the cost to educate a student. Powhatan K-12 cost is \$11,280/student x 125 new students = \$1 M RE tax recovery. \$468k is only a one-time payment. The cost of community services in a few years will far exceed this amount. Traffic study indicates 10 trips/day x 500 cares +/- this will be a nightmare if only right out. Definitely needs a signal at Page Rd & County Line Rd.
Haley Cash	2041 Early Settlers Road, N Chesterfield VA 23235	(804) 239-8800	haley@cashselisva.com	
Susanne Earnhardt	2495 Judes Ferry Road, Powhatan VA 23139	(804) 305-9696	ssearnhardt@hotmail.com	
Debbie Weir	1501 Page Road, Powhatan VA 23139	(804) 794-5715	dweir1976@gmail.com	
Stover Hughes	1731 Powhatan Estates, Powhatan VA 23139	(804) 874-4101		
Elaine Hall	1746 Old Powhatan Estates, Powhatan VA 23139	(804) 794-6473	hmsshall89@gmail.com	17. This is way too many homes for this location! We want to keep our 5 acre minimums. The demand on the county water & sewer is a concern. The increase of students, police/fire. There is so much vacant retail up & down 60, so why build more? Access to the development via 60 instead of Page Rd would be better.
Janice Burgess	1531 Greenberry Road, Powhatan VA 23139	(804) 536-9068	jburgess0828@gmail.com	13. Concerned about traffic. Don't believe either proposed will be adequate - stop light will create more congestion / turn lane will be dangerous maneuvering to left in heavy traffic. We simply have a challenge with only one main rd (60) to Powhatan.
Mike Byerly	2606 Maple Grove Lane, Powhatan VA 23139		cbvinva@ad.com	
Margaret Gipson	1442 Loch Gate Path, Powhatan VA 23139	(804) 372-6402	megjipson@gmail.com	22. As a powhatan resident of 5 years, I believe growth is inevitable - I think the plans for Ellis Farm seem to be a positive way of bringing new housing & growth opportunities to the county while still maintaining a respect for the look & feel of the county.
Jamie Chafin	600 County Line Road, Midlothian VA 23112	(804) 347-2002	jamielchafin@gmail.com	23. No issues with rezoning; however 1) need all offsite road improvements (Page, County Line, Rt. 60) done in conjunction with initial development of property; 2) need easement across Chesterfield parcel to service my property & others in Chesterfield (call me)
Chet Holtyn	2541 Liberty Hill, Powhatan VA 23139	(804) 598-3812	chholtyn@gmail.com	12. What happened to 5-acre averaging?? 1 house per 10-acres now to 2.2 units per 1 acre! This might be is the beginning of Chesterfieldizing Powhatan. Meeting arrangements were poor, could not get to placards.
Scott Tibbs	1385 Page Road, Powhatan VA 23139	(804) 399-3360	stibbs57@comcast.net	
David Pinkston	1831 Manakintown Ferry Road, Midlothian VA 23113	(804) 423-6501	deb1831@gmail.com	
Curtis Newton	2000 Judes Ferry Road, Powhatan VA 23139	(804) 598-1009		
W. Z. Howie	1827 Dorset Road, Powhatan VA 23139	(804) 625-6910	zhowie23@gmail.com	
Judy Waggoner	1800 Stonehenge Farm Road, Midlothian VA 23113	(804) 847-0238		
Mark Waggoner				
Will Kennedy	2250 Old Brick Road, Glen Allen VA 23060	(804) 461-9003	wkennedy@eagleofva.com	5. I have many concerns - I feel the developers have a history of beautiful work, however 1) I don't want increased strain & stretch of our fire-volunteers, police, teachers & school 2) I am confident the new residents will not bring money for shopping & eating and head to Westchester. Tis would place the burden of education & services on Powhatan while Chesterfield takes the revenue. 3) VDH/DEQ states 2030 Powhatan will be running out of water. The James River will not meet the demand. We want growth, it is good for the future of Powhatan. But this is two large of a chunk. We are not ready for this growth. We do not have the infrastructure yet. The traffic proposals are being forced and are not the vision of easy flow - 240+ residents, current residents and their families funneled out in this manner?
Victoria Ronnau	6430 Blenheim Road, Powhatan VA 23139		jwmab2@gmail.com	
Dakota Howie	4701 Powhatan Lakes Road, Powhatan VA 23139		dakotahowie01@gmail.com	
John Costello	Main Street Homes		johncostello9@gmail.com	

Pat Bohdan	1909 Boyer Road, Powhatan VA 23139	(804) 897-9580	pbohdani@gmail.com	20. Traffic control at Page Road & 60! Already a nightmare turning left! Can't handle any more traffic. A proposed right hand turn is "unacceptable" having to make a U-turn to go east on 60. The traffic back-up would be hazardous to say the least. Cost to county residents with tax increase is a major concern. Water & sewer??
Stephen Mulherin	2677 Liberty Hill Road, Powhatan VA 23139	(804) 514-1393	smirish51@gmail.com	4. My main concern is the tremendous traffic impact this development will have on the Page Rd/Rt. 60 intersection. This is already a very dangerous intersection with a high volume of commercial traffic. My second concern is the impact of 240 new homes on Powhatan Schools. These homes will not offset the increased education costs.
Larry Durbin	1518 Page Road, Powhatan VA 23139	(804) 379-5208	led118@comcast.net	21. Traffic is my main problem. VDOT would have to put a light at Page Road. I live on Page Road & own a business on Page Road. My other problem is how much will our taxes go up to support the new kids coming into our schools. My math show that Powhatan would have to come up with 1 million to support new kids in school. Both of my kids attend PCPS and I don't want school to be over filled.
Tim Fox	1512 Page Road, Powhatan VA 23139	(804) 248-0009	tfox320@yahoo.com	15. Not happy about this development. You will be taking away my hunting & gun rights. The second entrance will be right beside my house. I worry about traffic. The traffic will be going by my house to avoid Rt. 60. The amount of traffic jams in front of our house. There will be houses & people everywhere in my backyard. The reason we moved out here was to avoid subdivision. Hate, hate, hate this idea.
Angela Proffitt	1356 Page Road	(804) 675-8060	proffitt1356@gmail.com	
Mike Proffitt	"	(804) 921-4002		
Jason Fenchuk	8107 Longwood Road, Richmond VA 23229	(404) 644-2161	jfenchuk@gmail.com	14. Page Rd cannot and without risk support a large subdivision. 200+ homes will be a drain on the county's resources. A road alignment behind the Shell is unacceptable. If you simply swing wide left at the present crossover, you will meet the safety standards.
V. Spaur				
Mike Hall		(804) 516-9190		
Andrew Pompei	Powhatan County	(804) 598-5021	apompei@powhatanva.gov	
Dennis Weir	Powhatan County	(804) 794-5717		
Bret Schardein	Powhatan County	(804) 598-3639	bschardein@powhatanva.gov	

Comment Cards Received with No Name

- 3. NO
- 6. The proposal has no real provisions for extra Fire, EMS, Police that will be needed. #'s too low; projections will not cover the cost of schools, parks & recreation etc. Page Road improvements are inadequate unless they include a traffic light where Page Rd intersects Route 60
- 9. (cant read name) Do not move Page Rd. We don't need more traffic on this piss poor road.
- 10. Development is coming - does it fit the master plan? - house ok - what about traffic?? -offsite road improvements need to be completed first - barrier to keep new residence out of existing properties; a competent intersection needs to be designed that will not impede current traffic flow; neither of current designs fits that. How do you keep traffic off of Page Rd west and keep them on 60? Sewer, water taps only pay for this project so pull it off data sheet - not additional funds; Rt. 60 needs to be widened to 3 lanes - are you collecting revenues for this from development? Retail traffic would add how many cars? Again road improvements need to be addressed first to anticipation of trash hauls to Cumberland. Rt 60 already backs up a mile at lights. You need to deal with traffic issue first - not create more.
- 11. My wife and I are admittly opposed to this rezoning - we oppose any deviation from the minimum 5-acre average zoning. Powhatan does not want high density housing.
- 19. Too much traffic - transportation issues; water consumption - where does the water come from?; cost county with student enrollment & law enforcement; lower the density
- 25. To rezone Page Rd would impact Powhatan in such away as more traffic, as if it needs more, & an inconvenience for all the residents & on a historical note Don't think it's a good idea.
- 27. Don't approve. Must put up a fence if this goes through.

Attachment #11
Public Comments Received via
Email or Hand Delivered

Andrew Pompei, CZA, AICP

From: Patrick O'Neil <patricko@oneil-engineering.com>
Sent: Thursday, July 18, 2019 2:15 PM
To: Andrew Pompei, CZA, AICP
Subject: Page Road development

[External Email]

Andrew,

Good afternoon. I am concerned with the traffic implications of the housing development on Page Road and how that will impact my employees here at O'Neil Engineering Services. I don't know all of what VDOT is proposing but knowing that all the traffic from Page Road will have to make the U-turn here at Oakbridge Commercial Park to go east bound is terrible idea. As it is now the traffic turning into the park has to wait for breaks in the east bound traffic to be able to turn onto Oakbridge Drive. There are times now where the turn lane is backed up far enough that vehicles are on Rt 60 and not in the turning lane. At these times my employees continue west to make U-turns further down. Its an intersection where a light is already needed and that's before all the traffic from Page Road is diverted. I can't imagine what it will be like when it is diverted and we have a vastly higher number of vehicles trying to make U-turn's here. We are going to have accidents and it will adversely impact employees and employers working in this commercial park. A plan that addresses these issues must be implemented and shared with the community.

Thanks,



Andrew Pompei, CZA, AICP

From: Info Account <info@aslawncare.com>
Sent: Thursday, July 18, 2019 12:45 PM
To: Andrew Pompei, CZA, AICP
Subject: Fwd: Proposed changes to Page Rd

[External Email]

I misspelled your name in the first email, so sorry. Please see forwarded email!

----- Forwarded message -----

From: Info Account <info@aslawncare.com>
Date: Thu, Jul 18, 2019 at 11:52 AM
Subject: Proposed changes to Page Rd
To: <apompie@powhatanva.gov>, Scott Matherly <scott@aslawncare.com>

Good morning folks,

My name is Scott Matherly, managing owner of A&S Lawn and Land Care, Inc here in Oakbridge Business Park. I just got off of the phone with hopefully our next new member of the Powhatan Board of Supervisors for District 4, Bill Cox. Bill and his wife, India, are the proud and hard working owners of Casselmont Farm here in Powhatan, which produces locally grown organic produce for many local restaurants and farmer's markets.

I have included Bill in this email so he can correct any information that I didn't get quite right. Andrew Pompei, Planning Director for Powhatan, has also been included in this email.

East West Partners has proposed a 249 home subdivision off of Page Rd which will greatly impact traffic flow on Rt 60 for quite some time during construction. VDOT has proposed changes that will be a total nightmare for all of the businesses in this business park and locally on Rt. 60. They are proposing to divert Page Rd to join Rt 60 just West of the existing Shell Station. All traffic coming from Page Rd. will have to travel Westbound at Rt. 60. **All** east bound traffic leaving Page Rd. going toward the Westchester/Mildothian area will have to go west on 60 and do a u-turn at the west entrance to our business park. As we all know it's very hard getting across this intersection during peak hours. There is typically a long line of vehicles waiting to get in and out of this intersection with the traffic that we have now. I don't know how many of you remember Hull Street going out to the Woodlake area in the 90's and early 2000's, but if you do this is going to be basically the same thing.

In order to help stop this from happening and insist on a better plan, we must act with letters to Andrew Pompei, Planning Director of Powhatan. To contact him by phone please note his office number is 804.598.5621.

This email was sent to:
Oakbridge Corporation
O'Neil Engineering Services
SanAir Technologies Laboratory
Oriole Landscaping
A&S Lawn and Land Care
PIE Tech
Arborscapes
MP Barden and Sons

If any of you know other tenants within the business park or along the Rt 60 corridor who will be impacted by this traffic change, could you please pass along this notice or sent them my email address:
scott@aslawncare.com

I am always available to talk with anyone as well!

Regards,
Scott Matherly
A&S Lawn and Land Care, Inc

--
Regards,
A&S Lawn and Land Care, Inc

BY: _____

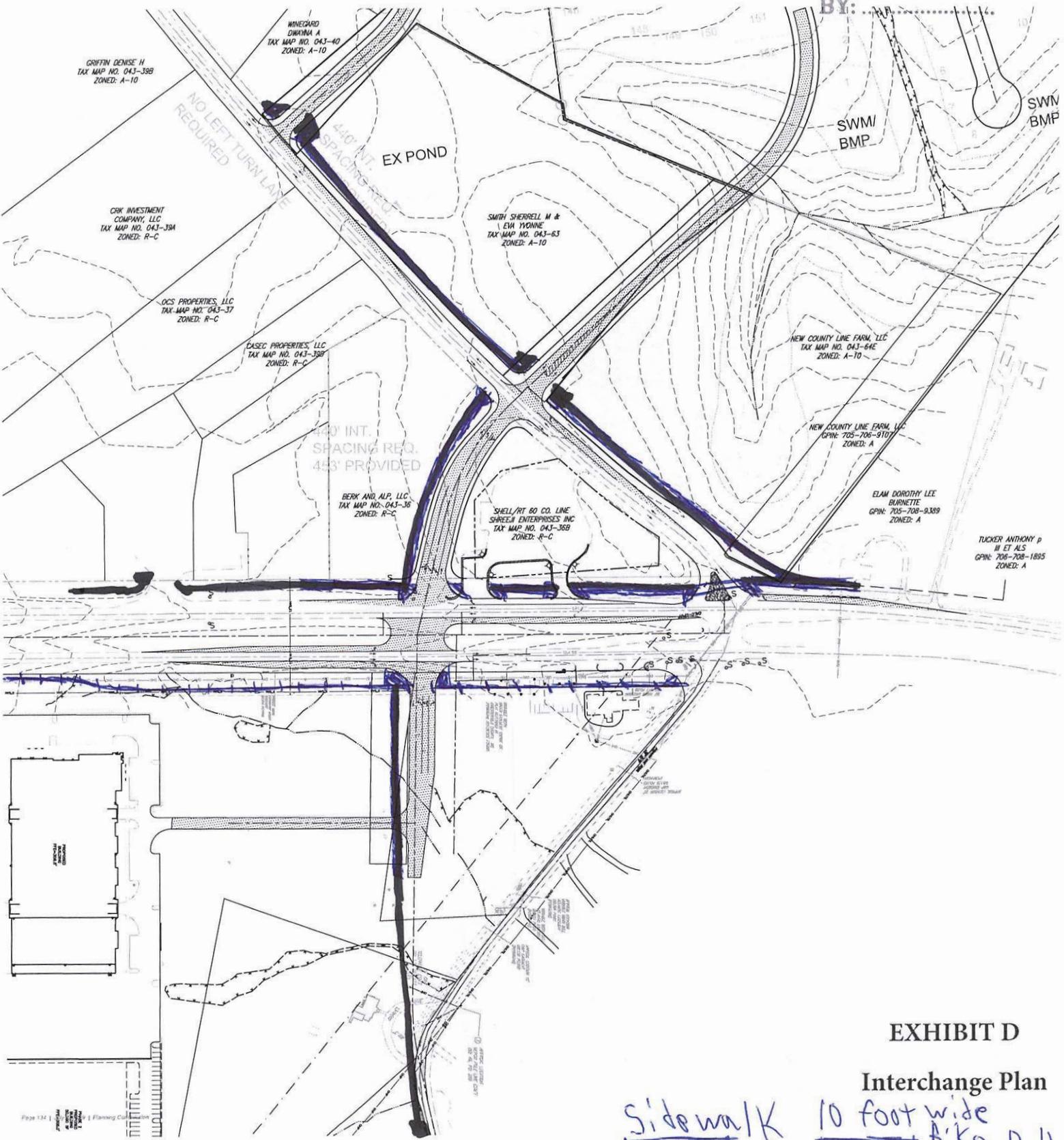
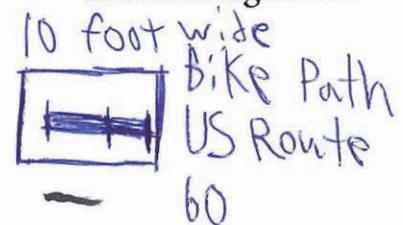
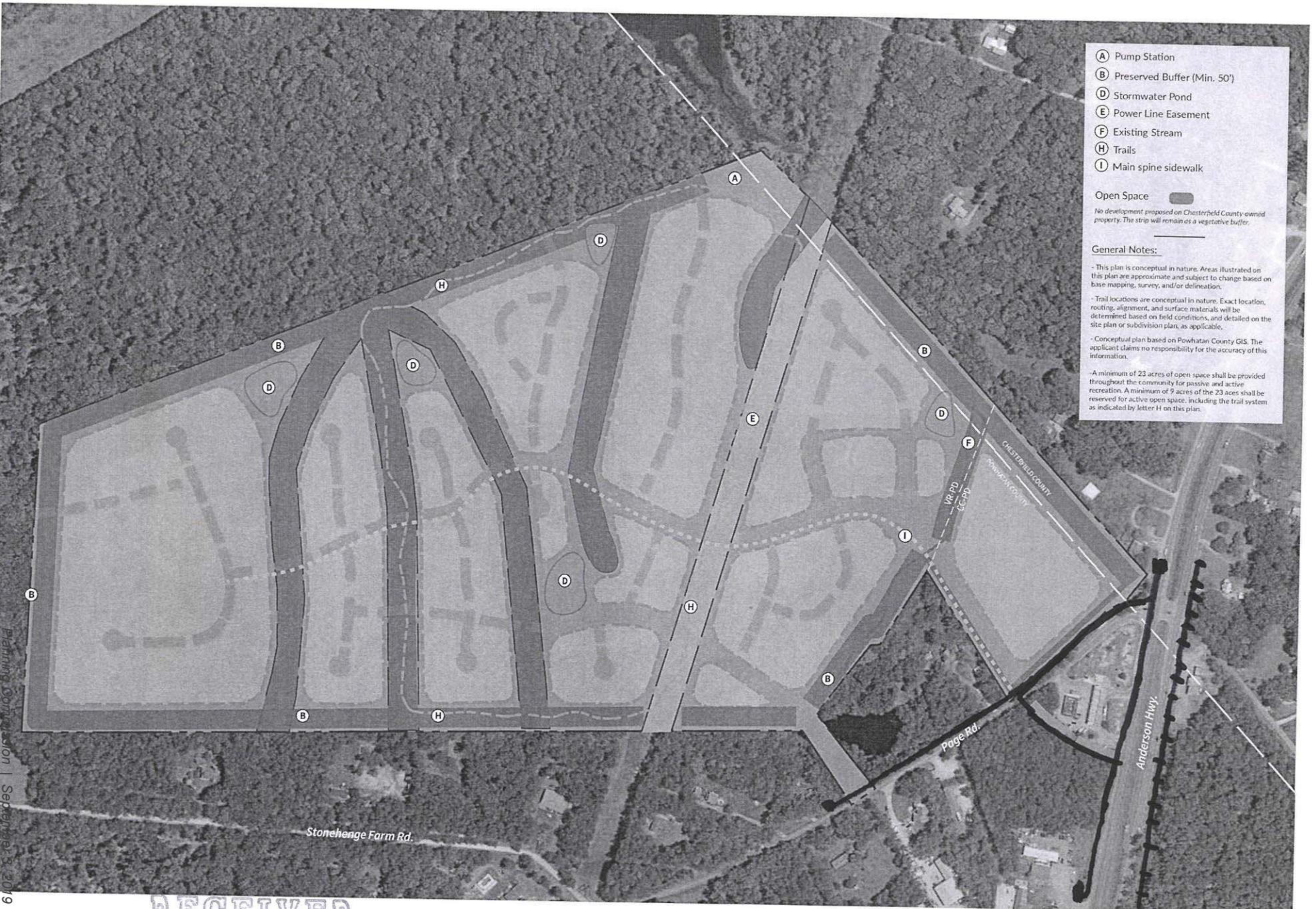


EXHIBIT D

Interchange Plan





RECEIVED
 JUL 09 2019

BY:

ELLIS FARM
 Conceptual Open Space Plan
 Powhatan County, Virginia

Sidewalk

10 foot wide
 Bike Path



Powhatan County Planning Commission Agenda Item

Meeting Date: September 3, 2019

Agenda Item Title: **Case #19-04-CUP: Powhatan Solar I, LLC (District #3: Bethesda/Lees Landing)** requests a conditional use permit (CUP) to permit a solar energy farm and related accessory uses within the Agricultural-10 (A-10) zoning district, per Sec. 83-162 of the Zoning Ordinance of the County of Powhatan. The proposed use will be located on a portion of Tax Map Parcels #27-14, 27-14A, and 26-104, which have frontage on the south side of State Route 615 (Three Bridge Road) at its intersection with State Route 1330 (Mill Mount Parkway) and at the northern terminus of State Route 626 (Brauer Road). The subject properties total approximately 927.38 acres, with the proposed use located within a project area that is approximately 350.9 acres. The 2019 Long Range Comprehensive Plan designates the subject properties as Rural Preservation and Natural Conservation on the Countywide Future Land Use Plan.

Motion: In accordance with Section 83-123(f)(4) of the Powhatan County Zoning Ordinance and public necessity, convenience, general welfare, and good zoning practice, the Powhatan County Planning Commission recommends (*approval / denial / deferral*) of the request submitted by Powhatan Solar I, LLC to permit a solar energy farm on Tax Map Parcels #27-14, 27-14A, and 26-104, subject to the conditions presented in this report.

Dates Previously Considered by PC: July 2, 2019 (Planning Commission Workshop)
August 6, 2019 (Planning Commission Workshop)

Summary of Item: The applicant is requesting a conditional use permit (CUP) to permit a solar energy farm within the Agricultural-10 (A-10) zoning district (Zoning Ordinance: Sec. 83-162). The proposed use would be located on portions of Tax Map Parcels #27-14, 27-14A, and 26-104, which are located along State Route 615 (Three Bridge Road) approximately one half-mile east of its intersection with U.S. Route 522 (Maidens Road) in central Powhatan County. In total, the properties consist of 927.38 +/- acres, of which approximately 225 acres will be occupied by the solar arrays.

Staff: Approve Disapprove See Comments

Attachments: Staff Report
Application Materials

Additional Materials Available at:
<http://powhatanva.gov/DocumentCenter/View/4622/19-04-CUP-PC-Supplemental-Packet-09-03-2019>

Staff/Contact: Andrew Pompei: Planning Director
(804) 598-5621 x2006
apompei@powhatanva.gov

If Planning Commission members have questions, please call the staff / contact prior to the meeting.



19-04-CUP

Powhatan Solar I

Request for a Conditional Use Permit
to Permit a *Solar Energy Farm*
within the Agricultural-10 (A-10) Zoning District
on Tax Map Parcels #26-104, 27-14, and 27-14A
along State Route 615 (Three Bridge Road)

Staff Report Prepared for the Planning Commission
September 3, 2019

I. PUBLIC MEETINGS

Neighborhood Meeting	July 24, 2019	
Planning Commission	July 2, 2019	Workshop
	August 6, 2019	Workshop
	September 3, 2019	Public Hearing

II. GENERAL INFORMATION

Request	Conditional Use Permit
Proposed Use	Solar Energy Farm
Proposed Density	N/A (No Residential Units Proposed)
Existing Zoning	Agricultural-10 (A-10)
Parcel Size	Total Parcel Area: 927.38 acres Project Area: 350.90 acres Maximum Solar Array Area: 225.00 acres
Parcel ID#	26-104, 27-14, 27-14A
Applicant	Powhatan Solar I, LLC
Owner	David and Tamara Anderson
Location of Property	Southern side of State Route 615 (Three Bridge Road) at its intersection with State Route 1330 (Mill Mount Parkway) Northern terminus of State Route 626 (Brauer Road)
Electoral District	(3) Bethesda/Lees Landing
2019 Land Use Plan Recommendation	Rural Preservation Natural Conservation

III. EXECUTIVE SUMMARY

The applicant is requesting a conditional use permit (CUP) to permit a *solar energy farm* within the *Agricultural-10 (A-10)* zoning district (Zoning Ordinance: Sec. 83-162). The

proposed use would be located on portions of Tax Map Parcels #27-14, 27-14A, and 26-104, which are located along State Route 615 (Three Bridge Road) approximately one half-mile east of its intersection with U.S. Route 522 (Maidens Road) in central Powhatan County.¹ In total, the properties consist of 927.38 +/- acres, of which approximately 225 acres will be occupied by the solar arrays.

IV. REVIEW STANDARDS

Conditional Use (A-10): Solar Energy Farm
<i>Solar energy farm</i> is listed as a conditional use within the A-10 zoning district [Sec. 83-162(26)].
Sec. 83-123(f)(4): Conditional Use Permit Review Standards
A Conditional Use Permit shall be approved if the applicant demonstrates the proposed conditional use: <ul style="list-style-type: none">a) Is consistent with the purposes, goals, objectives, and policies of the comprehensive plan and other applicable county-adopted plans;b) Complies with all applicable zoning district-specific standards in Articles III through VI;c) Complies with all applicable use-specific standards Article VII: Use Standards;d) Complies with all applicable development and design standards in Article VIII: Development Standards;e) Complies with all relevant subdivision and infrastructure standards in Chapter 68: Subdivisions of the Powhatan County Code;f) Is appropriate for its location and is compatible with the general character of surrounding lands and the uses allowed in the zoning district where proposed;g) Adequately screens, buffers, or otherwise minimizes adverse visual impacts on adjacent lands;h) Avoids significant adverse odor, noise, glare, and vibration impacts on surrounding lands regarding refuse collection, service delivery, parking and loading, signs, lighting, and other site elements;i) Avoids significant deterioration of water and air resources, scenic resources, and other natural resources;j) Maintains safe and convenient ingress and egress and traffic flow onto and through the site by vehicles and pedestrians, and safe road conditions around the site;k) Complies with all other relevant county, state and federal laws and standards; andl) Is required by the public necessity, convenience, general welfare, or good zoning practice.

¹ No structures or solar panels will be located on Tax Map Parcel #26-104, but the proposed solar energy farm will be accessed from an existing road that bisects Tax Map Parcel #26-104.

Sec. 83-123(f)(5): Expiration of a Conditional Use Permit
A Conditional Use Permit shall expire in accordance with any expiration date or provisions in a condition of its approval. A Conditional Use Permit shall automatically expire if a Building Permit, Site Plan, or other county approval, whichever occurs first, for the development granted by the Conditional Use Permit, is not obtained within two (2) years after the date of approval of the Conditional Use Permit, or if no subsequent county approval is required, the development is not completed and operational within two (2) years.

V. PROPERTY DESCRIPTION

Location

Tax Map Parcels #26-104, 27-14, and 27-14A are located east of the intersection of State Route 615 (Three Bridge Road) and U.S. Route 522 (Maidens Road). In total, the parcels consist of approximately 927.38 acres, with approximately 12,000 feet (2.25 miles) of frontage along State Route 615 (Three Bridge Road). The project area will be a maximum of 350.9 acres, with solar arrays occupying no more than 225 acres.

Existing Conditions

Parcel (Tax Map #)	Acreage	Existing Conditions
26-104	248.687	This parcel is currently used for agricultural purposes and is part of the Branch Creek Agricultural Forestal District (AFD). A private drive, which extends from State Route 626 (Brauer Road), runs through the central portion of the property and terminates at an existing single-family residential dwelling. Fine Creek runs from north to south along the western portion of the property. The land located west of Fine Creek is heavily wooded.
27-14	581.253	This parcel remains undeveloped. The property has recently been cleared for logging and timbering activity, with some trees remaining along streams and other water features. A transmission line bisects the property from northwest to southeast.
27-14A	97.44	This undeveloped parcel is long and narrow, with approximately 12,000 linear feet of frontage along State Route 615 (Three Bridge Road) and a depth of approximately 350 feet. The property has recently been cleared for logging and timbering activity, with a tree line of varying width remaining along the road frontage and stream lines.

Surrounding Properties

Direction	Zoning	Uses
North	Rural Residential-5 (RR-5) Residential Utility (RU) Single-Family Residential-2 (R-2) Agricultural-10 (A-10)	<ul style="list-style-type: none"> • Low-Density Single-Family Residential (Subdivisions: Westlake at Mill Mount and Three Bridge Estates) • Vacant

Direction	Zoning	Uses
South	Agricultural-10 (A-10)	<ul style="list-style-type: none"> • Vacant²
East	Agricultural-10 (A-10)	<ul style="list-style-type: none"> • Low-Density Single-Family Residential • Vacant
West	Agricultural-10 (A-10)	<ul style="list-style-type: none"> • Vacant

VI. PROJECT ANALYSIS

Current Zoning

The subject properties are currently zoned Agricultural-10 (A-10).

Proposed Use

The applicant is proposing a *solar energy farm*, which is defined as follows [Sec. 83-521]:

Solar energy farm means a system consisting of solar panels, modules, and related equipment (e.g., heat exchanger, pipes, inverter, wiring, storage) that collects solar radiation and transfers it as heat to a carrier fluid for use in hot water heating or space heating and cooling, and/or that collects solar energy and converts it into electricity. It is designed to meet demands for a larger area and is typically mounted on the ground.

Solar energy farm is a conditional use within the Agricultural-10 (A-10) zoning district [Sec. 83-162(26)]. No specific standards applicable to this use are identified in Sec. 83-432 (Standards for Specific Principal Uses).

Land Use and Community Character

The surrounding area is rural in character, with a mixture of large, vacant parcels and single-family residential development on larger lots (generally ranging from two to ten acres in size). Many of the nearby homes are located within residential subdivisions, such as Montpelier Place (zoned R-2), Three Bridge Estates (zoned A-10 and R-2) and Westlake at Mill Mount (zoned RR-5).

The proposed conditions included in this report are intended to help the proposed use blend with the surrounding rural areas. This is accomplished by:

- Requiring significant setbacks (at least 200 feet) from property lines (Conditions #8 and #9);
- Requiring vegetated buffers along State Route 615 (Three Bridge Road) (Conditions #11 and #12); and
- Requiring significant riparian buffers (at least 200 feet wide) along wetlands and streams (Condition #14).

While significant setbacks and buffer requirements may be imposed, the facility may still be visible from portions of State Route 615 (Three Bridge Road), depending upon the topography and the composition of existing vegetation that has been retained. At some

² Some nearby vacant parcels are enrolled in the Branch Creek Agricultural and Forestal District (AFD).

locations (primarily along eastern portions of the project area), only a narrow strip of existing vegetation was retained after recent logging operations.

Environment/Natural Resources

Agency Comments: Environmental Review (Powhatan County)

A wetland delineation should be provided for all parcels that are to be considered for this request. A *Land Disturbance Permit* shall be obtained from Powhatan County. The use of native vegetation that support local ecology should be used as groundcover prior to the completion of the project.

On-Site Environmental and Historic Features

- *Topography*

The subject properties have varied topography, with steep slopes generally located at or around aquatic features (wetlands, streams, ponds, etc.). Per GIS, elevations range from approximately 245 feet above sea level to 365 feet above sea level, with the highest elevations in north-central portions of the subject properties near the intersection of State Route 615 (Three Bridge Road) and State Route 1330 (Mill Mount Parkway). Based on analysis of public GIS data, significantly steep slopes (over fifteen percent slope) occur on approximately 5.26% of the total site area.³

- *Streams and Wetlands*

Several intermittent and perennial streams bisect the subject properties, with wetlands located adjacent to some streams. Branch Creek runs along the eastern boundary of the subject properties, with its tributaries flowing from the central and eastern portions of the project area. Fine Creek flows from south to north along the western boundary of the subject properties. Both streams are tributaries to the James River.

A wetland delineation report was submitted by the applicant (TNT Environmental: Dated December 20, 2018/Revised April 30, 2019).⁴ In addition to mapping the aforementioned streams, the study identified the location of wetland areas. Per the report, “many of the wetlands originate from groundwater seeps at the toe-of-slope, adjacent to areas which have historically been used for silvicultural and agricultural practices. The boundaries of most on-site wetlands are driven by slight changes in on-site topography. For the most part, on-site streams are contained within well-defined channels. Small, seep-fed wetlands were frequently encountered along portions of on-site streams, which is typical of this geology” (p. 3). Identified wetlands and streams (and associated riparian buffers) are shown on the conceptual plan submitted by the applicant.⁵

³ In the 2019 Long-Range Comprehensive Plan, steep slopes are described as those with 15% or greater slopes (p. 64, 65, 69, 75, 81, 85).

⁴ The applicant has submitted a preliminary jurisdictional determination from the U.S. Army Corps of Engineers (dated June 10, 2019).

⁵ Sec. 83-471(a) requires that riparian buffers at least 50 feet wide be provided adjacent to wetlands and intermittent streams and at least 100 feet wide along perennial streams. The conceptual plan (which aligns with language in Condition #14) shows riparian buffers at least 200 feet wide adjacent to wetlands, intermittent streams, and

- *Natural Habitats*

The subject properties contain a mix of woodlands and open areas (pasture and cropland). Timbering has occurred on the property on different occasions, with clearing recently occurring in the north/central portions of the subject properties.

The applicant submitted a Limited NEPA Report (TNT Environmental: Dated December 18, 2018/Revised April 22, 2019), which identifies potential environmental resources found within or near the project area. That study found that one *heritage resource of concern* (dwarf chinquapin oak) may be located in northeastern portions of the subject properties.⁶ It also indicated that one threatened species (Northern Long-Eared Bat) may be located in the general area (p. 4 – 5).

- *Historic Resources*

Per the Limited NEPA Report (TNT Environmental: Dated December 18, 2018/Revised April 22, 2019), no archaeological or architectural resources eligible for listing on the National Register of Historic Places are located within the project area.⁷

Erosion and Sediment Control

Prior to starting clearing and grading, a land disturbance permit (which identifies on-site erosion and sediment control measures) must be approved by Powhatan County. Regular inspections will occur throughout the construction process to ensure that adequate measures are taken to control erosion.⁸

Stormwater Management

Prior to site plan approval, a stormwater management plan will need to be submitted and approved by the Virginia Department of Environment Quality (DEQ) to ensure that the necessary infrastructure is in place to control the quantity and quality of runoff.

perennial streams, exceeding requirements set forth in Sec. 83-471(a) and aligning with recommendations made in the 2019 Long-Range Comprehensive Plan (p. 73).

⁶ Due to the potential presence of the dwarf chinquapin oak in northeastern portions of the property, the Department of Conservation and Recreation (DCR) recommends (1) avoiding the use of herbicides and pesticides in that area (to avoid impacts to the dwarf chinquapin oak); (2) developing an invasive species management plan; and (3) planting native pollinators throughout buffer areas (Limited NEPA Report: p. 4). Condition #13 requires the applicant to develop an invasive species management plan.

⁷ Per the 2019 Long-Range Comprehensive Plan (Map 4: Historic Resources), no known historic resources are located on the subject properties or within the immediate areas.

⁸ Due to the project's size, Condition #19 requires that the applicant hire a third-party consultant to conduct regular inspections of erosion and sediment control measures, helping ensure that the project does not negatively impact adjacent properties and waterways.

Transportation

Agency Comments: Virginia Department of Transportation (VDOT)

VDOT supports the request by Powhatan Solar I, LLC and offers the following comments:

- Site Plan shall be submitted for VDOT review and approval prior to Land Disturbance. This review shall include potential Drainage Impacts upon Three Bridge Road (Rt. 615).
- A VDOT Land Use Permit shall be required for the Temporary Construction Entrances and for the Commercial Entrances to the site along Three Bridge Road and Brauer Road.
- Proposed Access from Three Bridge Road (Rt. 615) and Brauer Road (Rt. 626) shall be subject to VDOT review and approval.
- VDOT Access Management does not apply for Low Volume Commercial entrances, but stopping sight Distance is required.
- While VDOT Access Management does not apply, the revised Sec. 68-175(e)(5) of the Powhatan County Subdivision Ordinance requires that any deviations from local spacing standards be approved by the Board of Supervisors, prior to VDOT site plan approval.
- Powhatan County may consider bonding the roadways to insure that the potential damage caused by Heavy Truck Traffic shall be repaired.

Local Road Network

The proposed solar energy farm has approximately 2.25 miles of frontage along State Route 615 (Three Bridge Road). The site is also accessible from State Route 626 (Brauer Road), which ends near the southern boundary of the subject properties.

Roadway Characteristic	State Route 615 (Three Bridge Road)	State Route 626 (Brauer Road)
Functional Classification: VDOT	Major Collector	Local Road
Functional Classification: Powhatan Co. Major Thoroughfare Plan	Minor Arterial (Existing)	Local Road (Existing)
Traffic Volume Estimates (VDOT: 2018)	800	230

Site Entrances

The site will have one access point from State Route 615 (Three Bridge Road) and another access point accessible from State Route 626 (Brauer Road) (Condition #15). All construction traffic will be required to access State Route 626 (Brauer Road) (Condition

#7d). Once construction is complete, these entrances are expected to generate little traffic.

Utilities and Public Infrastructure

Agency Comments: Department of Public Works (Powhatan County)

No comments received.

Agency Comments: Virginia Department of Health

No adverse comments.

The proposed use is anticipated to have minimal impact on public utilities and infrastructure. After construction, the site will generally not be occupied, except for occasional maintenance visits. Lack of on-site office or industrial facilities means there will rarely be a need for emergency services, and there will be no need for on-site wells or septic systems.

Public Safety

Agency Comments: Sheriff's Office (Powhatan County)

No comments at this time.

Agency Comments: Fire Department (Powhatan County)

The fire department has reviewed and offers the following comments: Understanding the property will be secured, there shall remain access for public safety equipment throughout the property. Details to be coordinated between Fire and property management.

Per information provided with the application, the solar energy farm will be entirely enclosed by a fence, and access codes will be provided to local emergency service providers.

Development Requirements and Standards

Agency Comments: Building Inspections Department (Powhatan County)

No comments at this time.

Development Review: Next Steps

Prior to issuance of a building permit, the applicant will be required to submit a site plan(s) for review and approval [Sec. 83-123(g)].

All site plans are evaluated to ensure that proposed development adheres to standards set forth in Article VIII (Development Standards) of the zoning ordinance, along with any conditions associated with this CUP (if approved).

Site plan applications are reviewed by the Department of Community Development.

Fiscal Impacts

Per information provided with the application, the proposed solar energy farm is expected to generate over \$14,676,000 in direct local investment. The proposed use is also expected to generate greater tax revenues than the current use of the property (but an estimate is not provided by the applicant).

VII. COMPREHENSIVE PLAN ANALYSIS

Countywide Future Land Use Plan

The *2019 Long-Range Comprehensive Plan* designates the subject properties as *Rural Preservation* and *Natural Conservation* on the Countywide Future Land Use Plan.

Land Use: Rural Preservation

Most of the subject properties are designated *Rural Preservation* in the *2019 Long-Range Comprehensive Plan*. This land use designation is described as follows (p. 68):

Rural Preservation areas will be rural in character, with preserved natural, cultural, and historic resources, including farms, agribusinesses and tourism, permanently-protected open spaces, permanent easement properties, hillsides, hilltops, floodplain, wooded and forested areas, historic landscapes, landmarks, and corridors. These areas will contribute to active agriculture, silviculture, agribusiness, equestrian operations, and tourism, with new residential development designed in such a way as to be balanced with the natural and existing manmade environment in order to minimize degradation of the rural, natural, cultural, and historic environment.

There are specific recommendations regarding the siting and design of *solar energy farms* located within areas designated *Rural Preservation* (p. 73).

Design Element	Adherence to Design Recommendations (Yes/No)	Analysis
Proximity to Major Thoroughfares	Yes	<p>Condition #7d states that construction traffic may only access the site from State Route 626 (Brauer Road). While that roadway is not classified as a major thoroughfare, trucks will only have to travel a relatively short distance (approximately one mile) to reach U.S. Route 60 (Anderson Highway).⁹</p> <p>Condition #15 limits site access.</p> <p>Condition #18 requires submittal of a construction traffic management plan.</p>
Screening and Buffering	Yes	<p>Condition #8 generally requires that solar panels and accessory structures be located at least 200 feet from property lines (including roadways).</p> <p>Natural buffers adjacent to roadways will be preserved and supplemented with native plantings (Conditions #11 and #12). At some locations, wide riparian buffers are located between solar panels and adjacent roadways.</p> <p>Due to topography and limited existing vegetation at some locations, the project may be visible from portions of State Route 615 (Three Bridge Road).</p>
Protection of Natural Resources	Yes	<p>The conceptual plan (which aligns with language in Condition #14) shows riparian buffers at least 200 feet wide adjacent to wetlands, intermittent streams, and perennial streams.</p> <p>The applicant has submitted a Limited NEPA Report, a wetlands delineation report, and supporting documentation.</p> <p>Natural buffers adjacent to roadways will be preserved and supplemented with native plantings (Conditions #11 and #12).</p>

⁹ There is limited existing development on State Route 626 (Brauer Road). Per GIS, there are eight (8) existing residences along State Route 626 (Brauer Road), with the Powhatan County Fairgrounds and an existing business located at the roadway’s intersection with U.S. Route 60 (Anderson Highway). There is a crossover at the U.S. Route 60 (Anderson Highway)/State Route 626 (Brauer Road) intersection. There is an existing left-turn lane from U.S. Route 60 (Anderson Highway) onto State Route 626 (Brauer Road), but there is not a right-turn lane. Adjacent to the subject properties, State Route 626 (Brauer Road) has a speed limit of 35 miles per hour, compared to 55 miles per hour along State Route 615 (Three Bridge Road).

Design Element	Adherence to Design Recommendations (Yes/No)	Analysis
Protection of Cultural Resources	Yes	Per the Limited NEPA Report and <i>2019 Long-Range Comprehensive Plan</i> (Map 4: Historic Resources), no significant historic sites are located within (or in close proximity to) the project area.
Prohibition of Toxic Materials	Yes	Condition #17 prohibits the use of solar panels containing cadmium and GenX chemicals.
Project Size	Yes	The proposed project area is 350.9 acres (with the maximum solar array area being 225 acres), below the recommended maximum area of 500 acres.

Land Use: Natural Conservation

Areas adjacent to Branch Creek, Fine Creek, and some smaller tributaries are designated *Natural Conservation* in the *2019 Long-Range Comprehensive Plan*. This land use designation is described as follows (p. 64):

Natural conservation indicates land with intrinsic natural features, such as perennial stream corridors, floodplains, floodways, wetlands, or steep slopes (over fifteen percent). As a secondary benefit, these same areas provide greenways for wildlife corridors. These areas are designated as “unbuildable” and should be maintained in a naturalized, undisturbed state. Local, state, and federal regulations apply to the conservation of these areas.

Areas designated *Natural Conservation* generally align with riparian buffers shown on the conceptual plan.

It is recommended that areas designated *Natural Conservation* include natural habitats, nature trails, and camps/retreats (p. 64).

The conceptual plan (which aligns with language in Condition #14) shows riparian buffers at least 200 feet wide adjacent to wetlands, intermittent streams, and perennial streams. This generally aligns with the location of areas designated *Natural Conservation*.

Priority Conservation Areas

In the *2019 Long-Range Comprehensive Plan*, Map 3: Natural Resources (Prime Conservation Areas) identifies Branch Creek and adjacent lands as *Priority Conservation Areas*. *Priority Conservation Areas* include critical wildlife habitat, old-growth woodlands, wetlands, sensitive soils, and other features which contribute to the ecological health and beauty of Powhatan County. It is recommended that development within these areas be designed to minimize impacts on significant environmental resources (p. 44-45).

The conceptual plan for the proposed solar energy identifies the location of *Priority Conservation Areas*, with solar panels located outside of these areas.

VIII. PUBLIC COMMENTS

The applicant held a neighborhood meeting on July 24, 2019 at the Powhatan County Public Library. Approximately 20 people attended the meeting, where the applicant shared the proposed plans with attendees and answered general questions.

The Department of Community Development has not received any formal comments on this request but has received phone calls with general questions about the application.

VI. STAFF RECOMMENDATION

Favorable Attributes of Request

- *Adherence to Comprehensive Plan Recommendations*

The design of the proposed solar energy farm incorporates many of the recommendations made in the *2019 Long-Range Comprehensive Plan* (Solar Energy Farms: p. 73).

- *Limited Demands on Public Services*

The use will not require significant public services. After construction, the site will generally not be occupied, except for occasional maintenance visits. Lack of on-site office or industrial facilities means there will rarely be a need for emergency services, and there will be no need for on-site wells or septic systems.

- *Limited Noise and Odors*

Once construction is complete, the use will generate little noise or odor.

- *Accommodates Future Agricultural and Forestal Uses (After Decommissioning)*

Once the solar energy farm reaches the end of its lifespan, the solar panels and most of the supporting infrastructure must be removed from the site (Condition #20), allowing agricultural and forestry uses to resume on the property.

- *Delays Subdivision of Subject Properties*

Use of the property as a solar energy farm will prevent further subdivision of the subject properties for several decades, limiting residential development with an area designated *Rural Preservation*.

- *Greater Environmental Standards than Permitted Agricultural Uses*

The design and construction of the solar energy farm will have to adhere to more stringent environmental standards than permitted agricultural and forestry uses.

Unfavorable Attributes of Request

- *Noise, Dust, and Traffic During Construction*

Construction of the project will generate additional traffic and may create noise and dust.

- *Visibility from Adjacent Roadways*

While additional setbacks and buffer requirements are intended to mitigate the use's visual impacts, the solar energy farm will likely be visible from portions of State Route 615 (Three Bridge Road). The subject properties have significant road frontage and have been logged, which makes completely screening the proposed use from public view difficult.

Recommendation

The Department of Community Development **recommends approval** of this request. With the recommended conditions, the use is generally compatible with other agricultural and rural uses in the area and generally reflects recommendations made in the *2019 Long-Range Comprehensive Plan*. The conditions address aesthetic and environmental concerns by:

- Increasing required setbacks and riparian buffers;
- Requiring the preservation of existing vegetation along adjacent roadways;
- Requiring additional plantings along adjacent roadways;
- Limiting construction activity and access to the site;
- Establishing procedures for future erosion and sediment control review and project decommissioning.
- Prohibiting the use of ad cadmium or GenX chemicals in solar panels.

VII. RECOMMENDED CONDITIONS

If approved, the Department of Community Development recommends that the conditions listed below be incorporated into this request. These conditions are proposed to minimize negative impacts on surrounding properties and reflect recommendations made in the *2019 Long-Range Comprehensive Plan*.

1. The applicant(s) shall consent to annual administrative inspections by the Department of Community Development for compliance with the requirements of this CUP.
2. The applicant(s) shall sign the list of adopted conditions for this CUP signifying acceptance and intent to comply with these conditions.
3. Failure to comply with the conditions of this CUP may result in the issuance of a Notice of Violation (NOV) by the Zoning Administrator. The Zoning Administrator may present this CUP to the Board of Supervisors for revocation if the NOV is not resolved as directed.
4. All activities associated with this CUP shall be in compliance with all local, state, and federal laws.
5. This conditional use permit shall permit a *solar energy farm* and related accessory uses, as defined in Section 83-521 of the Powhatan County Zoning Ordinance. The extent of the project shall be limited to the area identified as the “Project Area,” as generally shown on Sheet Z1.0 of the Zoning Site Plan dated July 15, 2019. The area with solar panels shall not exceed 225 acres.
6. A site plan shall be submitted to Powhatan County for review and approval, in accordance with Section 83-123(g) of the Powhatan County Zoning Ordinance.
7. All site activity required for the construction and operation of the solar energy farm shall be limited to the following:
 - a. All clearing and grading of the site, including the construction and/or upgrade of any access roads needed for the project, shall be limited to the hours of 8 a.m. to 6 p.m., Monday through Saturday.

- b. All pile driving activity shall be limited to the hours of 8 a.m. to 6 p.m., Monday through Saturday.
 - c. All other construction activity on site shall be permitted outside of those hours provided such activities are consistent with the provisions of Powhatan County's Noise Ordinance.
 - d. Construction vehicles shall only access the site from State Route 626 (Brauer Road). No construction vehicles shall access State Route 615 (Three Bridge Road).
8. Solar panels and accessory structures shall maintain a minimum setback of 200 feet from all property lines.
 9. Solar panels and accessory structures (excluding fencing) shall maintain a setback of 250 from any residential dwelling existing on the date of approval of this CUP.
 10. Any required security or perimeter fencing shall be installed in accordance with the following standards:
 - a. Fencing shall not cross streams, wetlands, or riparian buffers; and
 - b. The use of barbed wire shall be prohibited along State Route 615 (Three Bridge Road).
 11. A natural buffer shall be provided along State Route 615 (Three Bridge Road) (the "Natural Buffer Area"). The width of the Natural Buffer Area shall be a minimum of 75 feet from the edge of the property line.

Existing vegetation located within the Natural Buffer Area shall be maintained for the lifetime of the project. No clearing, grading, or excavation may occur within the Natural Buffer Area, except as necessary for utilities and driveways. Existing vegetation within the perimeter buffer shall be maintained to the greatest extent practicable, and the Zoning Administrator may require existing vegetation be supplemented with native trees and/or native shrubs to maintain the rural character of the site as seen from adjacent roadways, properties, and/or historic structures.

12. Along the project's frontage with public roadways, additional plantings shall be provided in a planting area, 50 feet wide, adjacent to the required Natural Buffer Area (between the Natural Buffer Area and the perimeter fence). Plantings shall be planted in a natural-appearing, staggered pattern and maintained for the lifetime of the project at the following rates:
 - a. 8 native evergreen trees per 100 feet of road frontage;
 - b. 4 native understory trees per 100 feet of road frontage; and
 - c. 10 native shrubs per 100 feet of road frontage.

At the time of installation, all new plantings shall adhere to the size requirements set forth in Sec. 83-461 of the Powhatan County Zoning Ordinance.

13. Prior to site plan approval, the applicant shall develop an invasive species management plan to address recommendations made by the Department of

Conservation and Recreation in the Limited NEPA report dated December 18, 2018 and revised April 22, 2019.

14. A riparian buffer at least 200 feet in width shall be maintained along all perennial streams, intermittent streams, and wetlands. Required riparian buffers shall be maintained as vegetated areas composed of an assemblage of trees, shrubs, and other vegetation that can effectively stabilize banks and slow down and filter stormwater runoff. If the buffer is not currently so vegetated, it shall be restored or allowed to develop into such a buffer. No mowing or disturbance shall occur within riparian buffers.
15. Access to the solar energy farm shall be limited as follows:
 - a. A maximum of one point of access shall be permitted along State Route 615 (Three Bridge Road); and
 - b. A maximum of one point of access shall be permitted along Brauer Road.
16. If needed, depending on weather and site conditions, dust control measures shall be implemented during construction.
17. Solar panels shall not contain ad cadmium or GenX chemicals.
18. A Construction Traffic Management Plan and mitigation measures shall be developed by the Applicant and submitted to the Virginia Department of Transportation (VDOT) and the County of Powhatan for review. The Plan shall address traffic control measures, a pre- and post-construction road evaluation, and any necessary repairs to the public road that are required as a result of damage from the Project. If a traffic issue arises during the construction of the Project, the Applicant shall develop appropriate measures to mitigate the issue with input from the County and VDOT.
19. At the request of Powhatan County, the applicant shall provide a qualified third party consultant to review the site's Erosion and Sediment Control (ESC) plan and to conduct ongoing inspections of the site to ensure compliance with the Virginia Erosion and Sediment Control Law. Powhatan County shall approve of the third party consultant provided to conduct said reviews and inspections.
20. If the solar energy farm is not in active use for a continuous period of 24 months, it shall be considered abandoned, and the owner of the facility, the land owner of the property on which the solar energy farm is located, or their successors or assigns shall remove the facilities within six months of receipt of notice from the county. Decommissioning includes the removal of the solar systems, buildings, cabling, electrical components, roads, foundations, pilings, and fencing to a depth of 36 inches, and shall comply with the following:
 - a. Any agricultural land upon which the facility was located shall be restored to tillable soil suitable for agricultural use, forestry, ponds and/or wetlands. The Zoning Administrator may permit the fence, roads and support buildings to remain with the property owner's approval so long as they continue to be screened as required.
 - b. The owner of the facility shall secure the costs of decommissioning by providing and keeping in force a decommissioning agreement and financial surety in a form

agreed to by the county attorney. The owner of the facilities shall every five years submit updated cost estimates for decommissioning the facilities, adjusted for changes in inflation. At its option, the county may require the surety amount be increased based on the net cost of decommissioning.

- c. If the facility is not removed within the specified time, the county may contract for removal. Thereafter, the county may cause removal of the facility with costs being borne by the owner of the facilities and/or the land owner. In the event that the financial surety does not cover the cost of removal, all additional costs shall be charged to the landowner and become a lien on the property on which the facility was located.

VIII. PROPOSED RESOLUTION

In accordance with Section 83-123(f)(4) of the Powhatan County Zoning Ordinance and public necessity, convenience, general welfare, and good zoning practice, the Powhatan County Planning Commission recommends (*approval / denial / deferral*) of the request submitted by Powhatan Solar I, LLC to permit a *solar energy farm* on Tax Map Parcels #27-14, 27-14A, 26-104, subject to the conditions presented in this report.

Attachment(s)

1. Application
2. Vicinity Map
3. Zoning Map
4. Countywide Future Land Use Map (2019)
5. Prime Conservation Areas Map
6. Application
7. Conceptual Plan

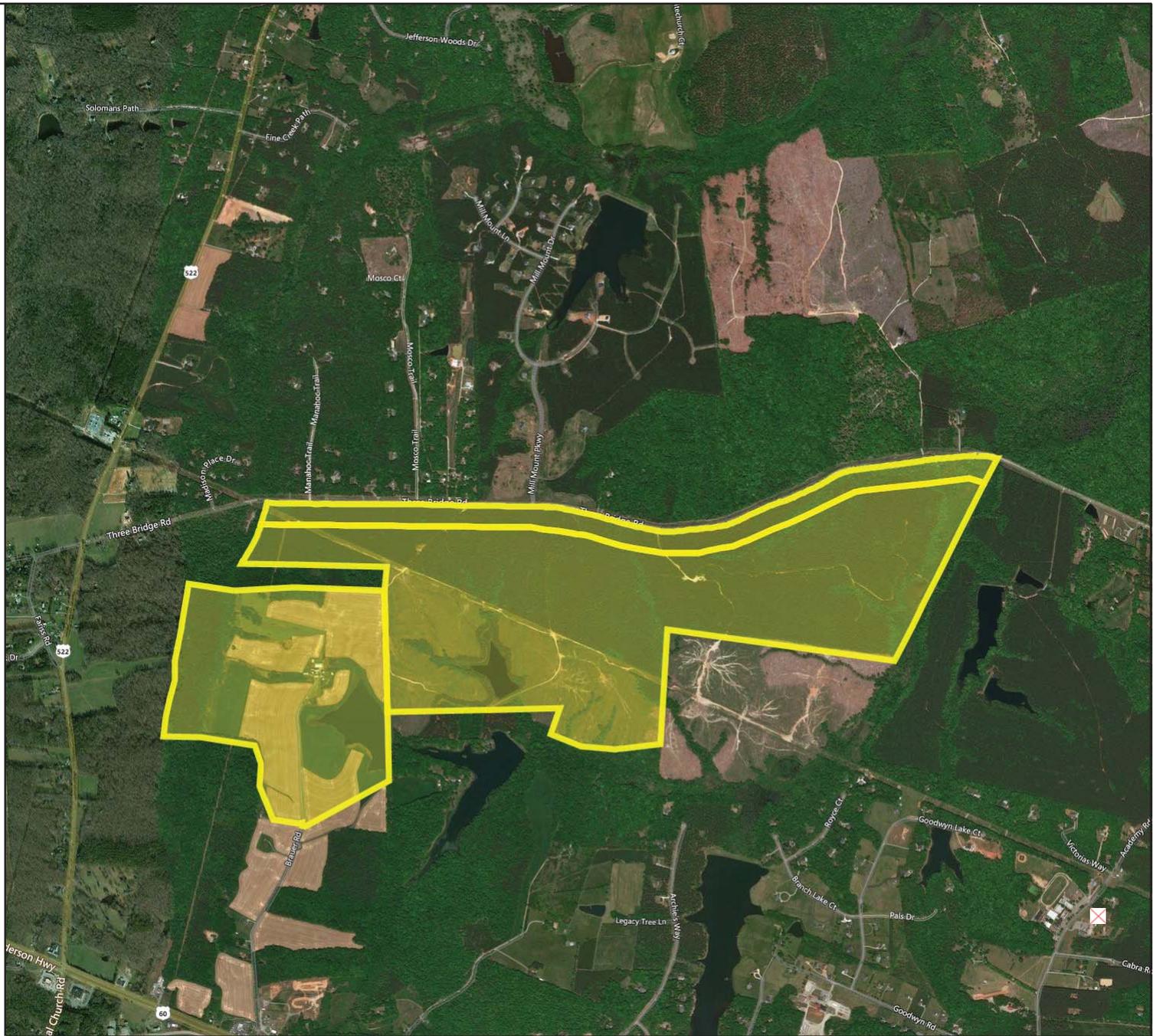
The following materials are included in a supplemental packet, which is available at:
<http://powhatanva.gov/DocumentCenter/View/4622/19-04-CUP-PC-Supplemental-Packet-09-03-2019>

1. Application Narrative and Supplemental Documents ([p. 2](#))
 - Exhibit A – Application Form ([p. 23](#))
 - Exhibit B – Zoning Site Plan ([p. 36](#))
 - Exhibit C – Vegetation Maintenance Memo ([p. 47](#))
 - Exhibit D – Decommissioning Plan ([p. 51](#))
 - Exhibit E – CCR Company Overview ([p. 53](#))
 - Exhibit F – Technical Memo ([p. 61](#))
 - Exhibit G – CCR Operations & Maintenance Template Scope of Services ([p. 66](#))
2. Decommissioning Estimate ([p. 79](#))
3. Army Core of Engineers: Preliminary Jurisdictional Determination ([p. 84](#))
4. Wetland Delineation Report ([p. 94](#))
5. Limited NEPA Report ([p. 232](#))

Powhatan County

Legend

-  County Boundary
-  Places



Feet



0 600 1200 1800 2400
1:36,112 / 1"=3,009 Feet

Title: 19-04-CUP Vicinity Map

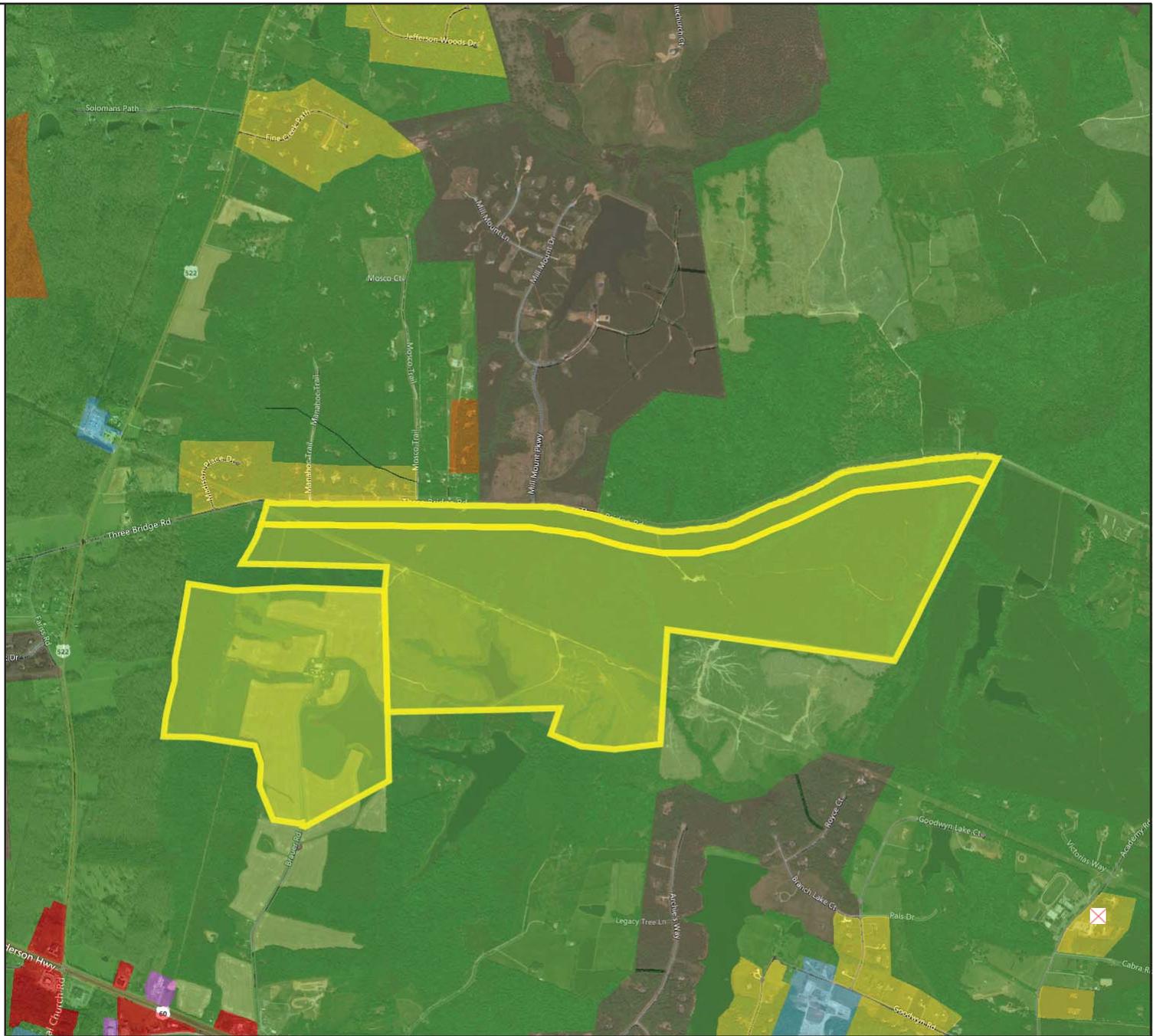
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Powhatan County

Legend

-  County Boundary
-  Places
- Zoning**
-  Agriculture A-10
-  Agricultural/Animal Confinement
-  Commerce Center Planned Development
-  Commerce Center
-  Commercial
-  Courthouse Square Center
-  Industrial - 1
-  Industrial - 2
-  Mining
-  Office
-  Residential - 2
-  Rural Residential 5
-  Residential Commercial
-  Residential Utility
-  Rural Residential
-  Village Center Planned Development
-  Village Center



Title: 19-04-CUP Zoning Map

Date: 8/27/2019

Feet



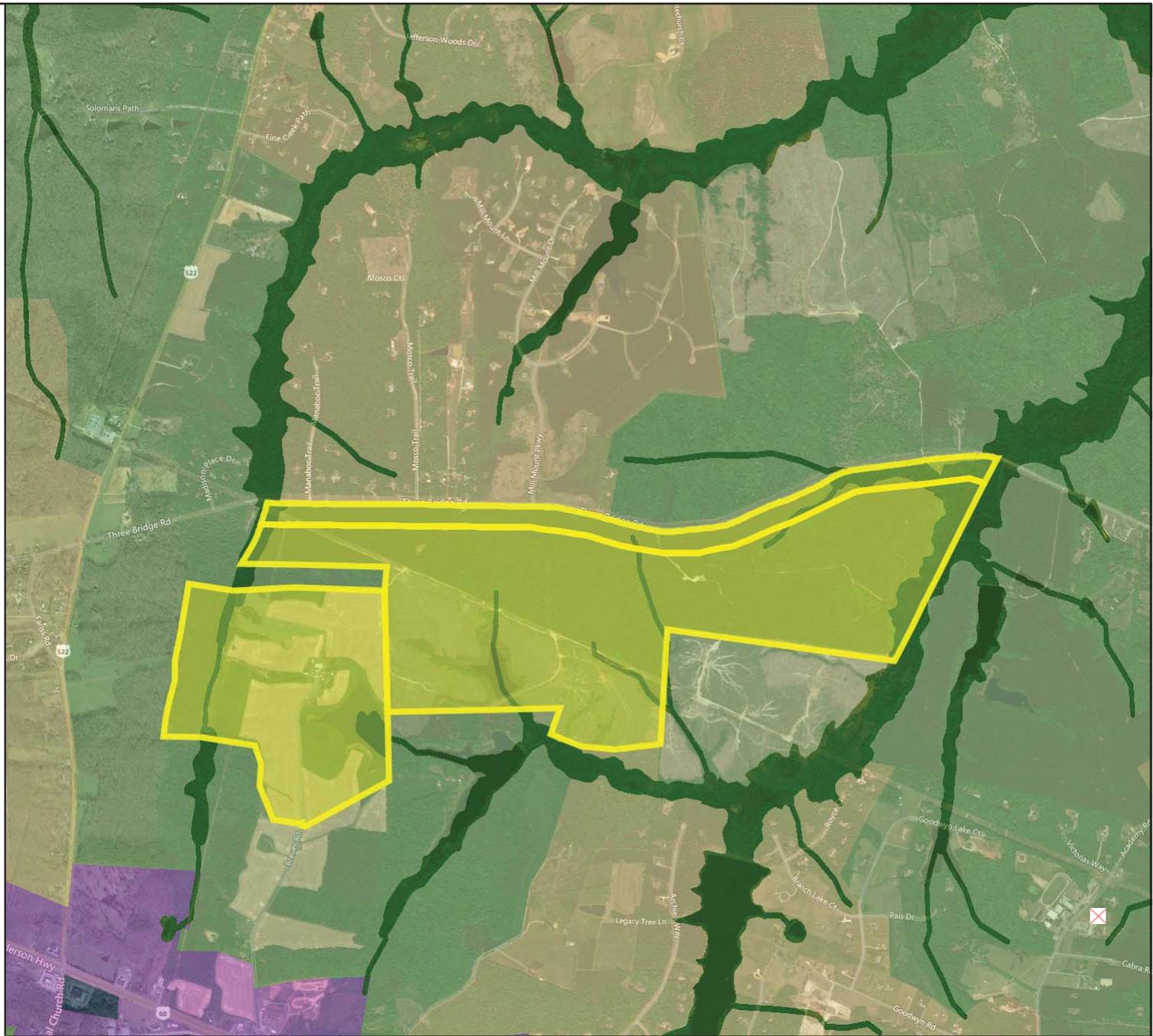
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Powhatan County

Legend

-  County Boundary
-  Places
- Future Land Use**
-  Public Lands
-  Natural Conservation
-  Rural Preservation
-  Rural Residential
-  Low Density Residential
-  Village Residential
-  Village Center
-  Commerce Center
-  Economic Opportunity
-  Industrial



Feet



0 600 1200 1800 2400
1:36,112 / 1"=3,009 Feet

Title: 19-04-CUP Future Land Use Map

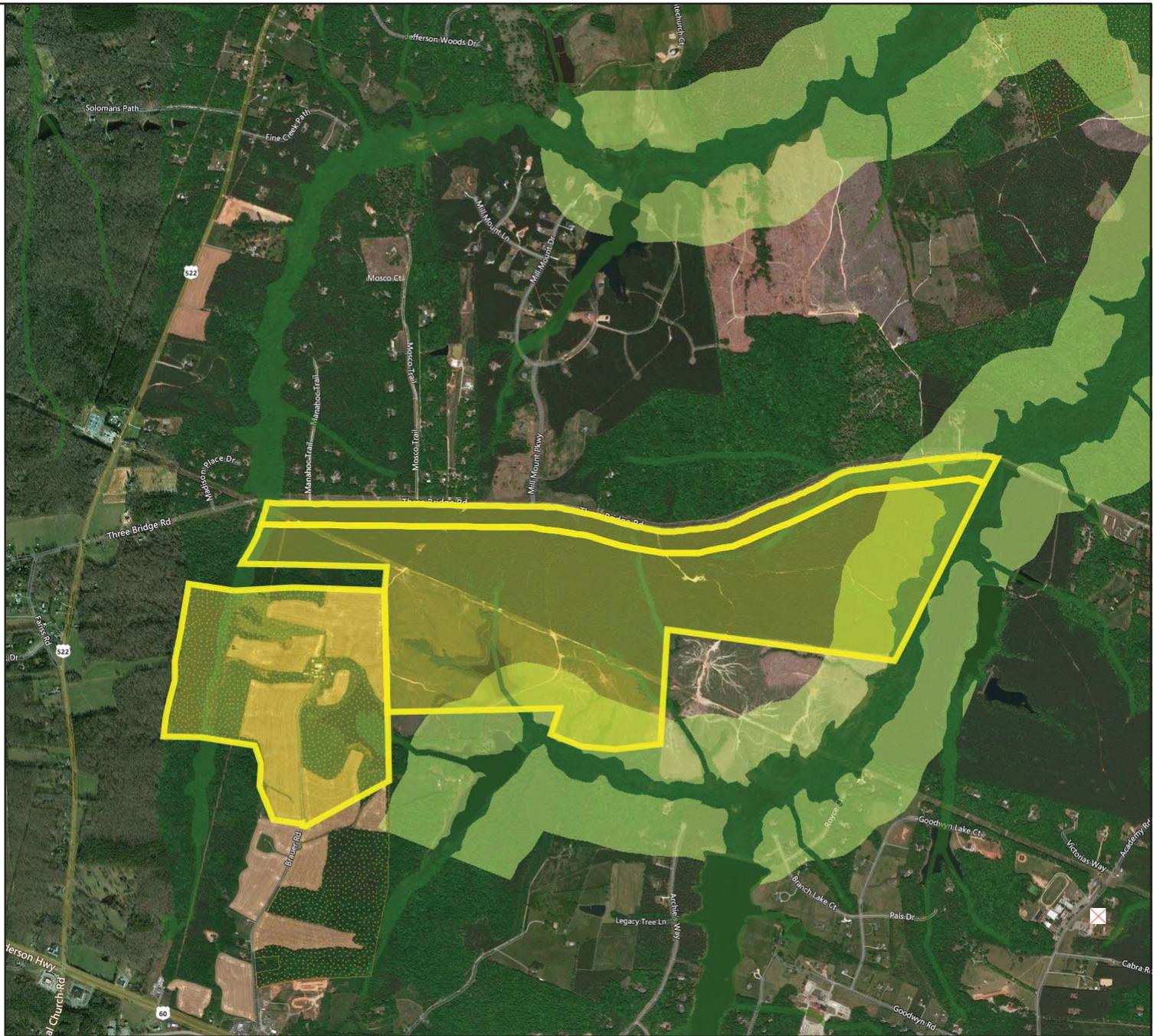
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Powhatan County

Legend

-  County Boundary
-  Places
-  Agricultural Forestal Properties
-  Natural Resources
-  Public Lands
-  Protected Lands
-  Priority Conservation Areas



Feet



0 600 1200 1800 2400
1:36,112 / 1"=3,009 Feet

Title: 19-04-CUP Prime Conservation Areas

Date: 8/27/2019

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**County of Powhatan,
Virginia**
Conditional Use Permit
Application

For Office Use Only

Case Number

Powhatan County, Virginia
Department of Community Development
3834 Old Buckingham Road: Suite F
Powhatan, VA 23139

Applicant Information	
Name of Applicant	Powhatan Solar I, LLC
Mailing Address	3402 Pico Blvd, Santa Monica, CA 90405
Phone Number	828-367-9035
Email Address	parker.sloan@ccrenew.com

RECEIVED
APR 05 2019
BY:

Owner Information (Complete this section if the applicant is not the current property owner)	
Name of Owner	David and Tamara Anderson
Mailing Address	2120 Stavemill Estates Drive, Powhatan, VA 23139
Phone Number	804-387-7226
Email Address	andersontamara@hotmail.com

If the applicant is not the owner, the applicant must provide written documentation that the current property owner consents to the application (see form entitled *Consent of Owner(s) to Request Rezoning*).

If there are multiple owners, all owners must sign the application or provide other documentation consenting to the

Applicant Representative (Complete this section if correspondence should be directed to someone other than the applicant)	
Name of Representative	Parker Sloan, Cypress Creek Renewables
Mailing Address	45 Banks Ave, Asheville, NC 28801
Phone Number	828-367-9035
Email Address	parker.sloan@ccrenew.com

Parcel Information	
Tax Map Number	027-14, 027-14A, 026-104
Physical Address	2660 Brauer Road, Powhatan, VA 23139
General Description of Property Location	Located south of Three Bridge Road and to the east of Maidens Road.
Election District	District 3
Total Acreage	The permit area is 350.9 acres. The maximum solar array area is 225 acres.
Current Zoning	A-10
Countywide Future Land Use: Land Use Designation	Forest/Undeveloped

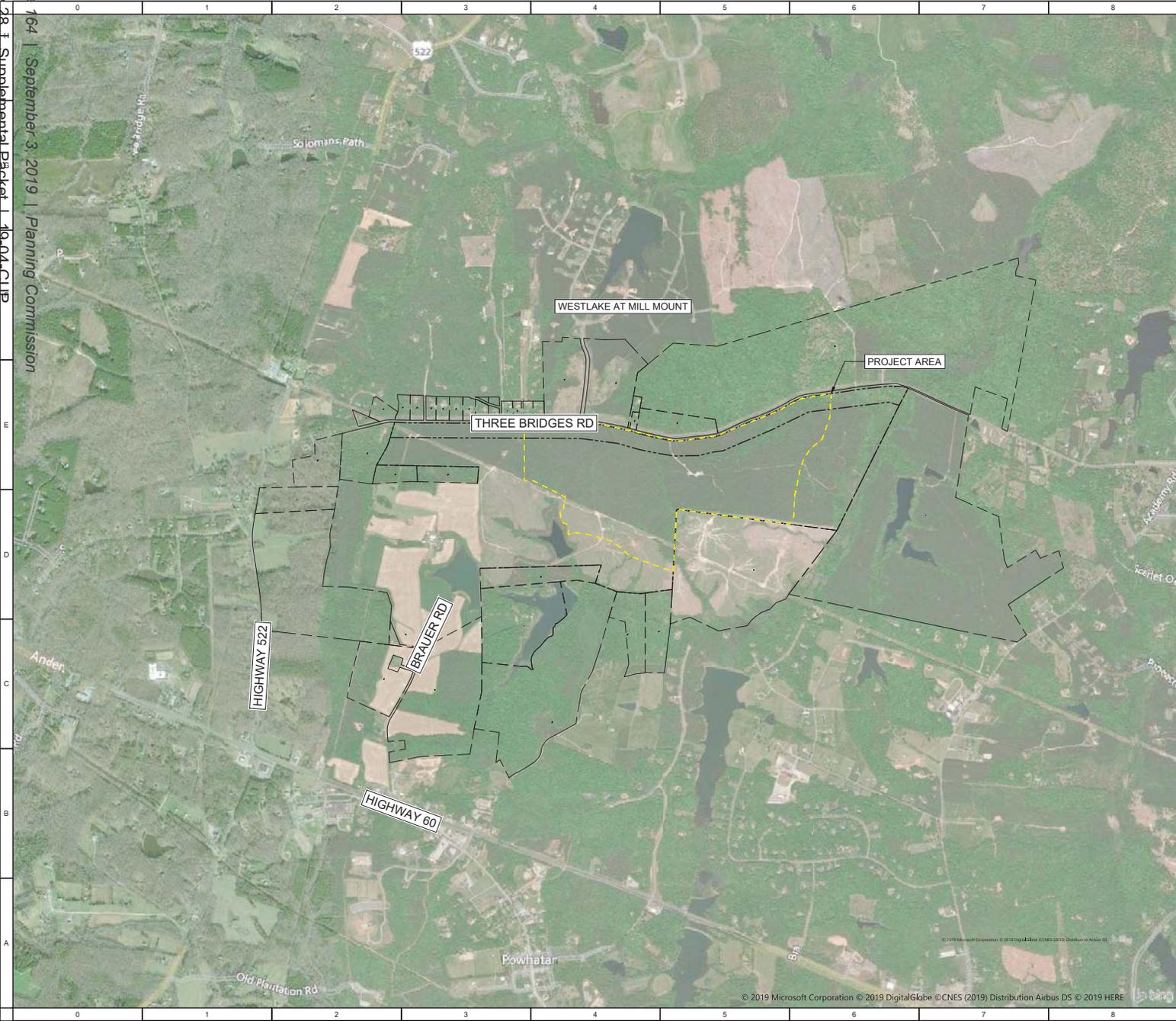
Proposed Use	
Proposed Use (Identify Use Listed in Zoning Ordinance)	Solar energy generating facility.
Proposed Use: Detailed Description	Ground mounted solar modules, inverters, transformers, enclosed within a perimeter fence.
If this request is approved, will new structures be constructed?	Yes. The new structures would include ground mounted solar modules, inverters, and transformers as well as a perimeter fence.
Are there existing structures on the subject property?	No
Will the proposed use connect to public water and/or sewer?	No
Will the proposed use have direct access to a public road?	Yes

A conceptual plan that shows the general configuration of the proposed development, including land uses, building locations (existing and proposed), pedestrian and vehicular circulation, open space, and resource protection areas, should be submitted with the application. This plan should also include measurements on how far existing and proposed structures, parking areas, and other activities associated with the proposed use will be from property lines.

Powhatan Solar I, LLC

Survey Plat

In lieu of submitting a survey plat of the property at this time, Powhatan Solar I, LLC has submitted an updated site plan on the next page.



3402 PICO BOULEVARD - SANTA MONICA, CA 90405
 5515 SUTTON AVE - BLOSSOM, OH 44122

PERMIT DRAWING - NOT RELEASED FOR CONSTRUCTION

CONTRACTOR

NO.	DATE	REVISIONS DESCRIPTION

POWHATAN I SOLAR, LLC
 2660 BAUER RD.
 POWHATAN, VA 23139

DATE: 07-30-19
 DRAWN BY: AR
 CHECKED BY:
 VICINITY MAP
Z 1.0

LEGEND

PROPERTY LINES: - - - - -
 PROJECT AREA: - - - - -

GRAPHIC SCALE
 1" = 1000'

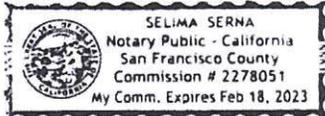
NORTH

Powhatan Solar I, LLC

Exhibit. List of Adjacent Property Owners

Tax Map No.	Owner Name	Mailing Address
027-3	Angela Perkins	3800 Three Bridge Road, Powhatan, VA 23139
016-52	Brett Zebrowski	34 Hermosa Avenue, Hermosa Beach, CA 90254
027-14	Bridge Lake LLC & Tamara R Anderson	2120 Stavemill Estates Drive, Powhatan, VA 23139
027-14A	Bridge Lake LLC & Tamara R Anderson	2120 Stavemill Estates Drive. Powhatan, VA 23139
027-47	Bridge Lake LLC & Tamara R Anderson	2120 Stavemill Estates Drive, Powhatan, VA 23139
027-1&2	Carol Breit	5602 Grove Avenue, Richmond, VA 23226
026-100B	Earl Moore and Sandra M Moore	3892 Three Bridge Road, Powhatan, VA 23139
026-100A	George Saunders and Judy A Saunders	3880 Three Bridge Road, Powhatan, VA 23139
016-A21	Gilda Sneed, Shannon C Samuel, and Garland Edwards	2885 Millmount Parkway, Powhatan, VA 23139
027-3A	Joshua Bartlett	3808 Three Bridge Road, Powhatan, VA 23139

026-104	Rancks LLC	2120 Stavemill Estates Drive, Powhatan, VA 23139
026-100C	Robert Weakley and Nancy R Weakley	3932 Three Bridge Road, Powhatan, VA 23139
027-29M	Tamara Anderson	2120 Stavemill Estates Drive, Powhatan, VA 23139

Statement of Validity of Information		
Every applicant shall sign the following document to substantiate the validity of submitted information.		
I, being duly sworn, depose and say that I am the Lessee/Owner of the property involved in the application. If I am not the Lessee/Owner, I will provide written certification from the owner granting me the right to submit this application.		
I declare that I have familiarized myself with the rules and regulations pertaining to preparing and filing this application. I further declare that the foregoing statements and answers provided throughout the various sections of this application are in all respects true and correct to the best of my knowledge and belief.		
Signature of Applicant		
Name of Applicant (Printed)	Kristen Ray	
State of California Commonwealth of Virginia ⁸³ County of <u>San Francisco</u> , to wit:		
Sworn and subscribed to before me a Notary Public in and for the jurisdiction aforesaid by <u>Kristen Ray</u> , whose name is signed to the above, on this <u>21</u> day of <u>March</u> 20 <u>19</u> .		
Notary Public		Seal 
Commission Expires	Feb 18, 2023	
Notary Number	#2278051	

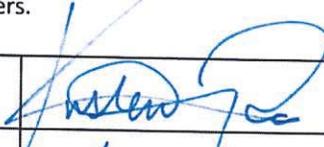
Ownership Disclosure

List below the names and addresses of all owners or parties in interest of the land subject to this request.

If this request is in the name of a corporation, artificial person, joint venture, trust, or other form of ownership, all officers, directors, and any stock holders owning ten percent or more of such stock must be listed.

Name	Address
David and Tamara Anderson	2120 Stavemill Estates Drive, Powhatan, VA 23139

I, Kristen Ray, do hereby swear and affirm to the best of my knowledge and belief, the above information is true and that I am the applicant requesting a conditional use permit for Tax Map 027-14, 027-14A, 026-104. If the information listed above changes at any time while this request is being considered, I will provide Powhatan County with an updated list of owners.

Signature of Applicant 

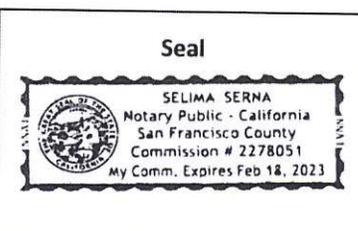
Name of Applicant (Printed) Kristen Ray

~~Commonwealth of Virginia~~
State of California ^{ss}

County of San Francisco, to wit:

Sworn and subscribed to before me a Notary Public in and for the jurisdiction aforesaid by Kristen Ray, whose name is signed to the above, on this 21 day of March 20 19.

Notary Public	
Commission Expires	<u>Feb 18, 2023</u>
Notary Number	<u>#2278051</u>



Consent of Owner(s) to Permit Request

If the applicant is not the owner, the applicant must provide written documentation that the current property owner consents to the conditional use permit (CUP) application.

I, ~~David~~ and Tamara Anderson am the authorized manager of _____, am the owner of the property subject to this CUP request and consent to the request submitted by Powhatan Solar I, LLC (Applicant) for a CUP to allow the construction of a solar energy generating facility (Requested Use) on Tax Map Parcel Numbers 027-14, 027-14A, 026-104.

Signature of Owner Tamara R Anderson

Name of Owner (Printed) TAMARA R. ANDERSON

Commonwealth of Virginia
 County of Virginia, to wit:
 Sworn and subscribed to before me a Notary Public in and for the jurisdiction aforesaid by Tamara R. Anderson, whose name is signed to the above, on this 12 day of March 2019.

Notary Public	<u>Stephanie G. Stowell</u>	Seal
Commission Expires	<u>10-31-21</u>	STEPHANIE G. STOWELL NOTARY PUBLIC Commonwealth of Virginia Reg. #368288 Commission Expires <u>10-31-21</u>
Notary Number	<u>368288</u>	

Applicant's Permission for Inspection of Property

I, Kristen Ray, hereby grant access to the Director of Community Development, Zoning Administrator, or assigns thereof, to enter my property during reasonable hours without prior notice to make inspections as deemed necessary for the evaluation of my application.

Signature of Applicant

[Handwritten Signature]

Name of Applicant (Printed)

Kristen Ray

~~Commonwealth of Virginia~~
State of California 85

County of San Francisco, to wit:

Sworn and subscribed to before me a Notary Public in and for the jurisdiction aforesaid by Kristen Ray, whose name is signed to the above, on this 21 day of March 2019.

Notary Public

[Handwritten Signature]

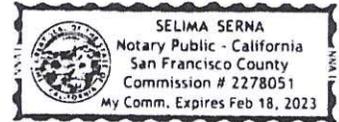
Commission Expires

Feb 18, 2023

Notary Number

#2278051

Seal

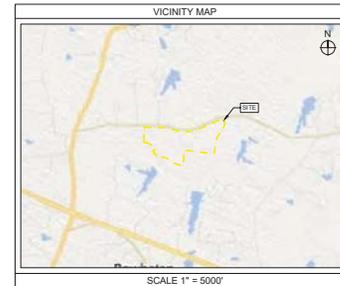
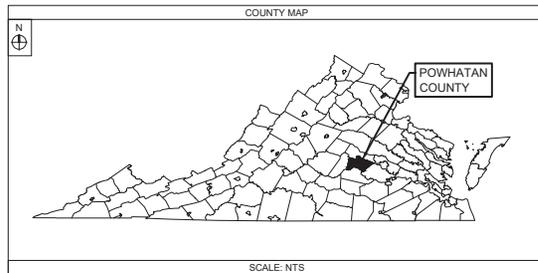


ZONING SITE PLANS

POWHATAN I SOLAR, LLC.

SOLAR POWER GENERATION FACILITY

POWHATAN, VA 23139 (POWHATAN COUNTY)
 LATITUDE: 37.575169, LONGITUDE: -77.928366



SHEET INDEX			
DWG. #	DRAWING TITLE	REV. #	REV. DATE
G 1.0	COVER SHEET	3	8/19/2019
V 1.0	VICINITY MAP	1	7/30/2019
Z 1.0	OVERALL ZONING SITE PLAN	3	8/19/2019
Z 2.0	ZONING SITE PLAN (A1)	3	8/19/2019
Z 3.0	ZONING SITE PLAN (A2)	3	8/19/2019
Z 4.0	ZONING SITE PLAN (A3)	3	8/19/2019
Z 5.0	SITE TOPOGRAPHY	2	8/19/2019
REN	OVERALL RENDER	1	7/24/2019
SEC A	SECTION A	1	7/24/2019
SEC B	SECTION B	1	7/24/2019



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NO.	DATE	BY	DESCRIPTION
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2	07-15-19	AR	ISSUED FOR PERMITTING
3	07-15-19	AR	ISSUED FOR PERMITTING
4	07-15-19	AR	ISSUED FOR PERMITTING
5	07-15-19	AR	ISSUED FOR PERMITTING
6	07-15-19	AR	ISSUED FOR PERMITTING
7	07-15-19	AR	ISSUED FOR PERMITTING
8	07-15-19	AR	ISSUED FOR PERMITTING
9	07-15-19	AR	ISSUED FOR PERMITTING
10	07-15-19	AR	ISSUED FOR PERMITTING

POWHATAN I SOLAR, LLC
 2660 BAUER RD.
 POWHATAN, VA 23139

DATE: 07-15-19
 DRAWN BY: AR
 CHECKED BY: -

COVER SHEET
 G 1.0



3402 PICO BOULEVARD - SANTA MONICA, CA 90405
5515 SUTTON AVE - BLOSSOM, IOWA 50501

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NO.	DATE	REVISIONS/DESCRIPTION

POWHATAN I SOLAR, LLC
2660 BAUER RD.
POWHATAN, VA 23139

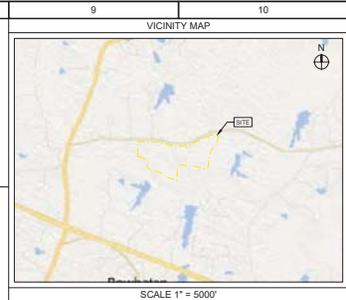
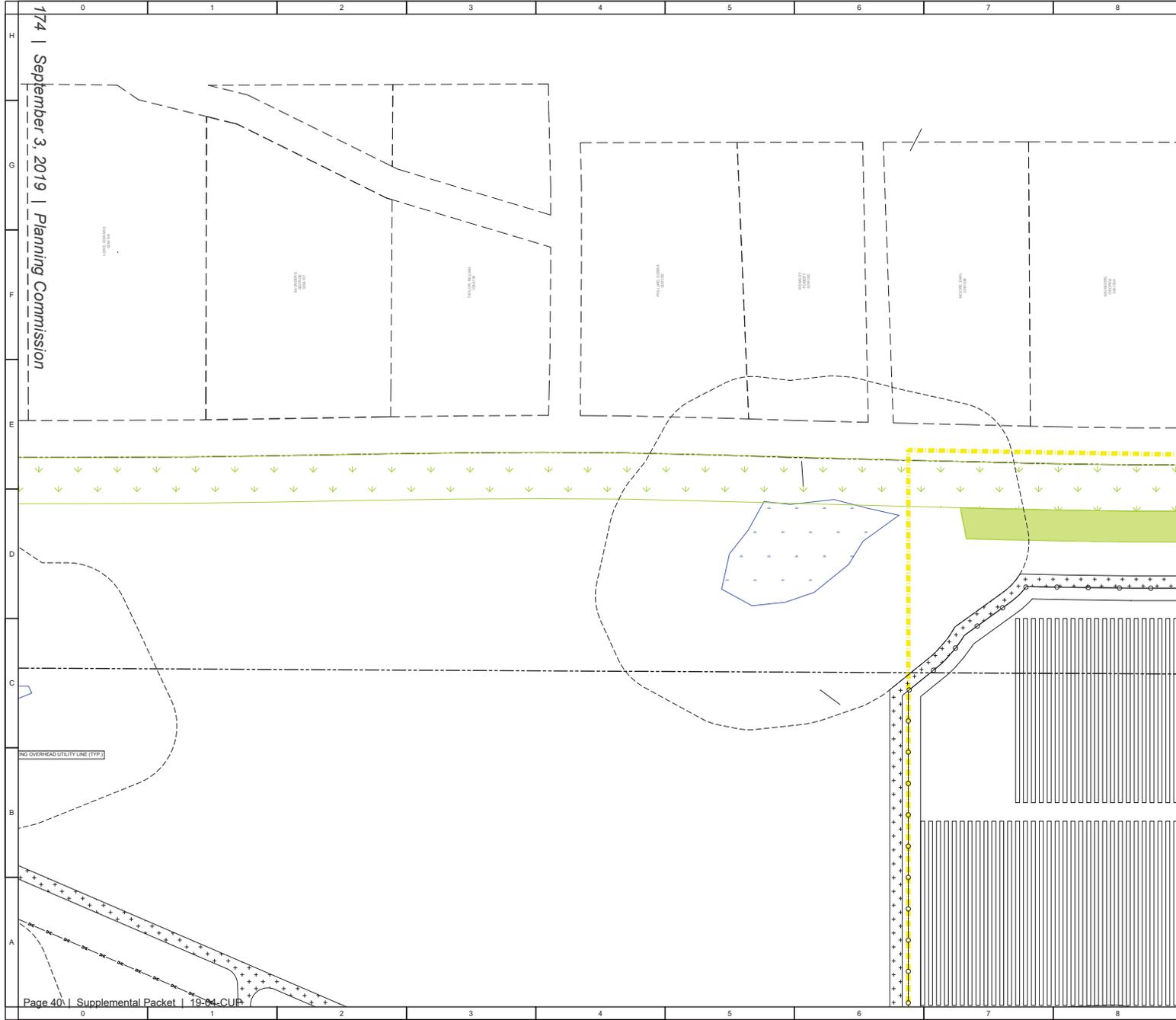
DATE: 07-30-19
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CHECKED BY:
VICINITY MAP
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LEGEND

PROPERTY LINES: - - - - -
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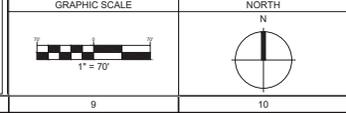
GRAPHIC SCALE
1" = 1000'

NORTH
N



PROJECT AREA: 350.9 ACRES
 MAX SOLAR ARRAY AREA: 225 ACRES
 *SITE ACCESS ROAD LAYOUTS ARE APPROXIMATE. PROJECT AREA IS DEFINED AS THE LIMIT OF POTENTIAL SOLAR ARRAYS.

LEGEND	
EXISTING CONDITIONS	PROPOSED CONDITIONS
100 YEAR FLOOD ZONE	EASEMENTS
500 YEAR FLOOD ZONE	EQUIPMENT PAD
BUILDING SETBACK	LIMIT OF DISTURBANCE
EASEMENTS	ELECTRICAL (OVERHEAD)
EDGE OF PAVEMENT	ELECTRICAL (UNDERGROUND)
ELECTRICAL (OVERHEAD)	PROJECT AREA
EPHEMERAL STREAM	PROPERTY LINE
FENCE	SECURITY FENCE
INTERMITTENT STREAM	SITE ACCESS
JURISDICTIONAL DITCH	TREELINE
MAJOR CONTOURS	EXISTING TREES TO BE PRESERVED
MINOR CONTOURS	PROPOSED VEGETATIVE BUFFER
NON-JURISDICTIONAL DITCH	
PERENNIAL STREAM	
JURISDICTIONAL POND	
PROPERTY LINES	
PUC (ORIGINAL AREA)	
RAILROAD	
RIGHT-OF-WAY	
STREET CENTERLINE	
STRUCTURES	
TREELINE	
WETLAND	



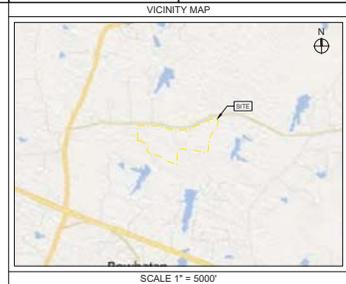
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DATE	07-15-19
DRAWN BY	AR
CHECKED BY	
ZONING	SITE PLAN (A1)
PROJECT NO.	2660 BAUER RD. POWHATAN, VA 23139

POWHATAN I SOLAR, LLC
 2660 BAUER RD.
 POWHATAN, VA 23139

Z 2.0



PROJECT AREA: 350.9 ACRES
 MAX SOLAR ARRAY AREA: 225 ACRES
 *SITE ACCESS ROAD LAYOUTS ARE APPROXIMATE. PROJECT AREA IS DEFINED AS THE LIMIT OF POTENTIAL SOLAR ARRAYS.



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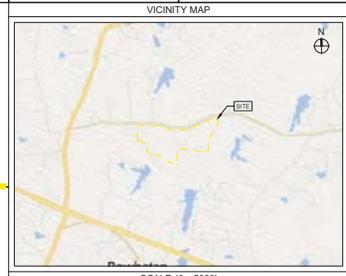
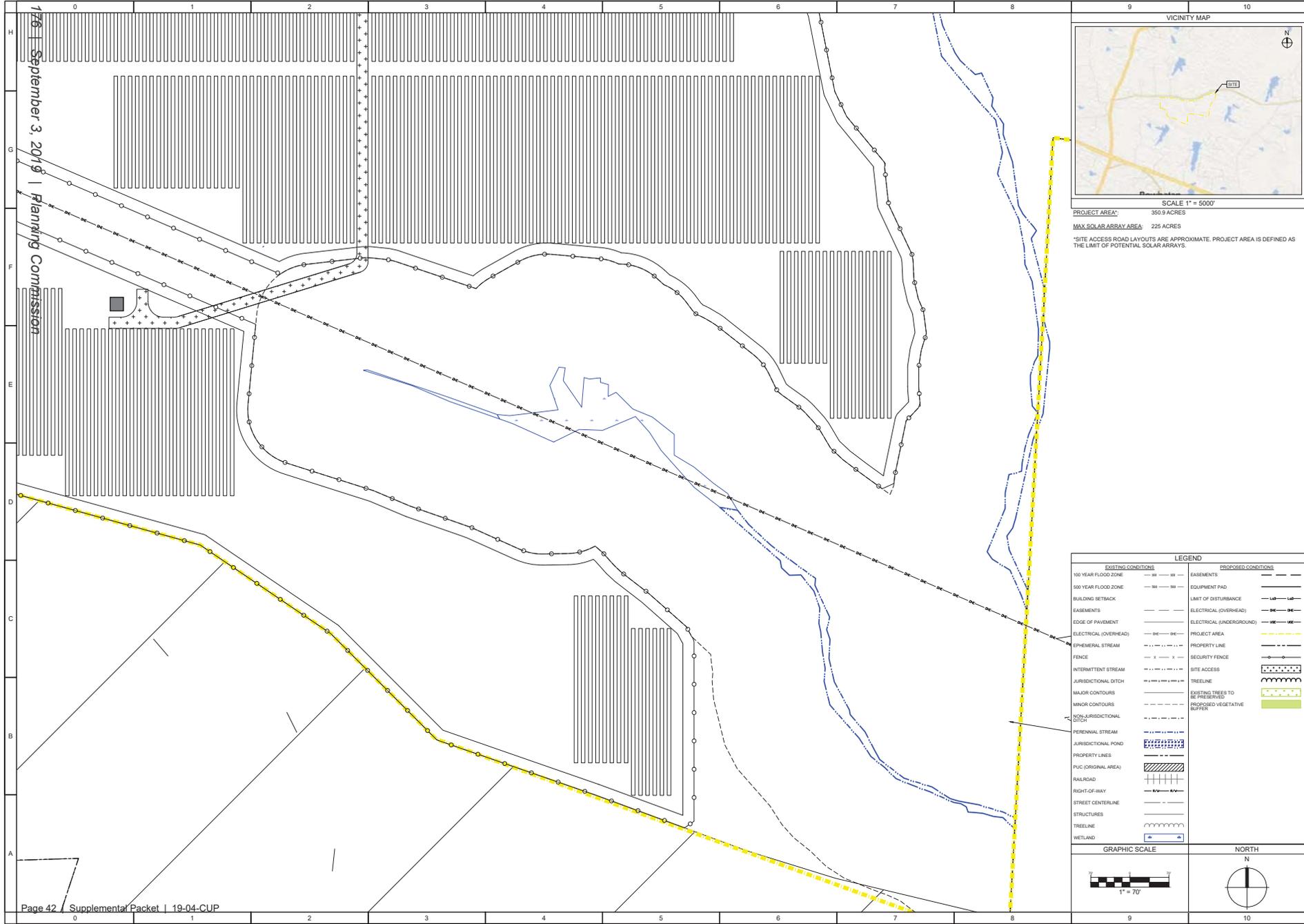
DATE	07-15-19
DRAWN BY	AR
CHECKED BY	
ZONING	
SITE PLAN (A2)	

NO. OF SHEETS	1
SHEET NO.	1
DATE	07-15-19
DRAWN BY	AR
CHECKED BY	
SCALE	1" = 70'

POWHATAN I SOLAR, LLC
 2660 BAUER RD.
 POWHATAN, VA 23139

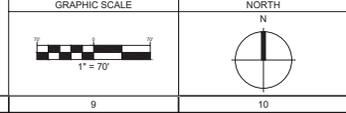
DATE	07-15-19
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CHECKED BY	
ZONING	
SITE PLAN (A2)	

Planning Commission | September 3, 2019 | Page 175



PROJECT AREA: 350.9 ACRES
 MAX SOLAR ARRAY AREA: 225 ACRES
 *SITE ACCESS ROAD LAYOUTS ARE APPROXIMATE. PROJECT AREA IS DEFINED AS THE LIMIT OF POTENTIAL SOLAR ARRAYS.

LEGEND	
EXISTING CONDITIONS	PROPOSED CONDITIONS
100 YEAR FLOOD ZONE	EASEMENTS
500 YEAR FLOOD ZONE	EQUIPMENT PAD
BUILDING SETBACK	LIMIT OF DISTURBANCE
EASEMENTS	ELECTRICAL (OVERHEAD)
EDGE OF PAVEMENT	ELECTRICAL (UNDERGROUND)
ELECTRICAL (OVERHEAD)	PROPERTY AREA
EPHEMERAL STREAM	PROPERTY LINE
FENCE	SECURITY FENCE
INTERMITTENT STREAM	SITE ACCESS
JURISDICTIONAL DITCH	TREELINE
MAJOR CONTOURS	EXISTING TREES TO BE PRESERVED
MINOR CONTOURS	PROPOSED VEGETATIVE BUFFER
NON-JURISDICTIONAL DITCH	
PERENNIAL STREAM	
JURISDICTIONAL POND	
PROPERTY LINES	
PUC (ORIGINAL AREA)	
RAILROAD	
RIGHT-OF-WAY	
STREET CENTERLINE	
STRUCTURES	
TREELINE	
WETLAND	



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DATE	07-15-19
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ZONING	SITE PLAN (A3)
PROJECT NO.	2660 BAUER RD. POWHATAN, VA 23139

POWHATAN SOLAR, LLC
 2660 BAUER RD.
 POWHATAN, VA 23139

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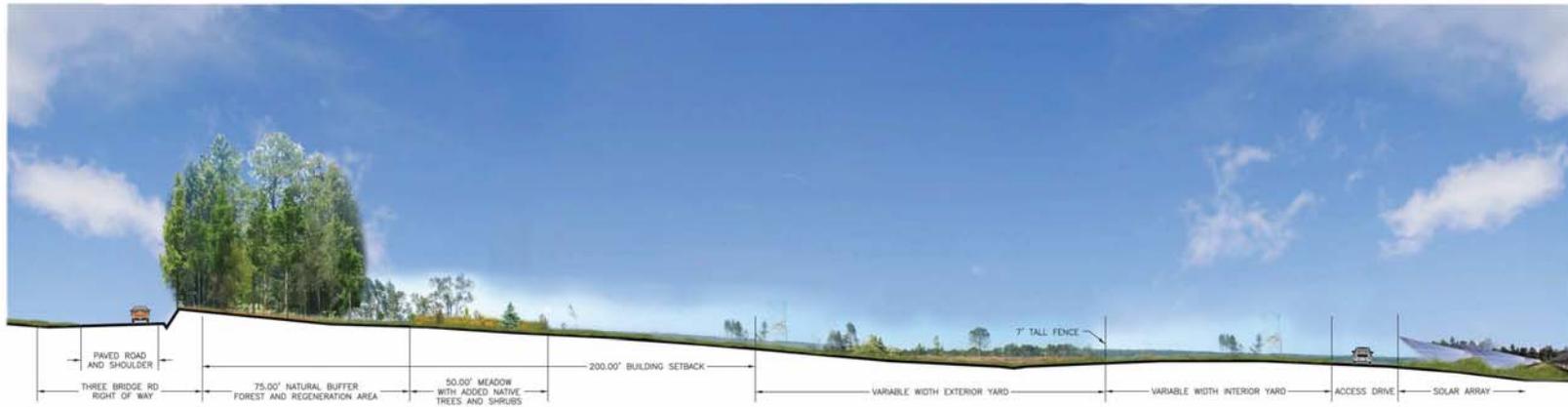
BALZER & ASSOCIATES
 PLANNERS / ARCHITECTS / ENGINEERS / SURVEYORS

JOB NO. 56190036
 07/24/2019
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SECTION A
 THREE BRIDGE ROAD (SR 615) - LOOKING EAST AT MILLMOUNT PARKWAY

JOB NO. 56190036
 07/24/2019
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 PLANNERS / ARCHITECTS / ENGINEERS / SURVEYORS



SECTION B- LOOKING EAST
THREE BRIDGE ROAD (SR 615) 0.6 MILES EAST OF MILLMOUNT PARKWAY



Powhatan County Planning Commission Agenda Item

Meeting Date: September 3, 2019

Agenda Item Title: **Case #19-05-CUP: HCE Powhatan Solar I (District #4: Powhatan Courthouse/Mt. Zion)** requests a conditional use permit (CUP) to permit a solar energy farm and related accessory uses within the Agricultural-10 (A-10) zoning district, per Sec. 83-162 of the Zoning Ordinance of the County of Powhatan. The proposed use will be located on a portion of Tax Map Parcel #37-23B, which has frontage on the west side of State Route 13 (Old Buckingham Road) at its intersection with Spoonbill Drive (private road). The subject property totals approximately 89.52 acres, with the proposed use located within a project area of approximately 45 acres. The 2019 Long-Range Comprehensive Plan designates the subject properties as Rural Preservation and Natural Conservation on the Countywide Future Land Use Plan.

Motion: In accordance with Section 83-123(f)(4) of the Powhatan County Zoning Ordinance and public necessity, convenience, general welfare, and good zoning practice, the Powhatan County Planning Commission recommends (*approval / denial / deferral*) of the request submitted by HCE Powhatan Solar I to permit a solar energy farm on Tax Map 37-23B subject to the conditions presented in this report.

Dates Previously Considered by PC: July 2, 2019 (Planning Commission Workshop)
August 6, 2019 (Planning Commission Workshop)

Summary of Item: The applicant is requesting a conditional use permit (CUP) to permit a solar energy farm within the Agricultural-10 (A-10) zoning district (Zoning Ordinance: Sec. 83-162). The proposed use would be located on a portion of Tax Map Parcel #37-23B, which is located on the west side of State Route 13 (Old Buckingham Road) at its intersection with Spoonbill Drive (Private Road) in central Powhatan County. In total, the property consists of 89.52 acres, of which approximately 8.2 acres will be occupied by the solar arrays.

Staff: Approve Disapprove See Comments

Attachments: Staff Report
Application Materials

Additional Materials Available at:
<http://powhatanva.gov/DocumentCenter/View/4626/19-05-CUP-Supplemental-Packet-PC-09-03-2019>

Staff/Contact: Andrew Pompei: Planning Director
(804) 598-5621 x2006
apompei@powhatanva.gov

If Planning Commission members have questions, please call the staff / contact prior to the meeting.



19-05-CUP HCE Powhatan Solar I

Request for a Conditional Use Permit
to Permit a *Solar Energy Farm*
within the Agricultural-10 (A-10) Zoning District
on Tax Map Parcel #37-23B
along State Route 13 (Old Buckingham Road)

Staff Report Prepared for the Planning Commission
September 3, 2019

I. PUBLIC MEETINGS

Neighborhood Meeting	June 13, 2019	
Planning Commission	July 2, 2019	Workshop
	August 6, 2019	Workshop
	September 3, 2019	Public Hearing

II. GENERAL INFORMATION

Request	Conditional Use Permit	
Proposed Use	Solar Energy Farm	
Proposed Density	N/A (No Residential Units Proposed)	
Existing Zoning	Agricultural-10 (A-10)	
Parcel Size	Total Parcel Area:	89.52 acres
	Fenced Area:	23.50 acres
	Maximum Solar Array Area:	8.20 acres
Parcel ID#	37-23B	
Applicant	HCE Powhatan Solar I	
Owner	Eric Bonifant Larsen et al	
Location of Property	Western side of State Route 13 (Old Buckingham Road) at its intersection with Spoonbill Drive (Private Road: Maconwood)	
Electoral District	(4) Powhatan Courthouse/Mt. Zion	
2019 Land Use Plan	Rural Preservation	
Recommendation	Natural Conservation	

III. EXECUTIVE SUMMARY

The applicant is requesting a conditional use permit (CUP) to permit a *solar energy farm* within the *Agricultural-10 (A-10)* zoning district (Zoning Ordinance: Sec. 83-162). The proposed use would be located on a portion of Tax Map Parcel #37-23B, which is located

on the west side of State Route 13 (Old Buckingham Road) at its intersection with Spoonbill Drive (Private Road) in central Powhatan County. In total, the property consists of 89.52 acres, of which approximately 8.2 acres will be occupied by the solar arrays.

IV. REVIEW STANDARDS

Conditional Use (A-10): Solar Energy Farm
<i>Solar energy farm</i> is listed as a conditional use within the A-10 zoning district [Sec. 83-162(26)].
Sec. 83-123(f)(4): Conditional Use Permit Review Standards
A Conditional Use Permit shall be approved if the applicant demonstrates the proposed conditional use: <ul style="list-style-type: none">a) Is consistent with the purposes, goals, objectives, and policies of the comprehensive plan and other applicable county-adopted plans;b) Complies with all applicable zoning district-specific standards in Articles III through VI;c) Complies with all applicable use-specific standards Article VII: Use Standards;d) Complies with all applicable development and design standards in Article VIII: Development Standards;e) Complies with all relevant subdivision and infrastructure standards in Chapter 68: Subdivisions of the Powhatan County Code;f) Is appropriate for its location and is compatible with the general character of surrounding lands and the uses allowed in the zoning district where proposed;g) Adequately screens, buffers, or otherwise minimizes adverse visual impacts on adjacent lands;h) Avoids significant adverse odor, noise, glare, and vibration impacts on surrounding lands regarding refuse collection, service delivery, parking and loading, signs, lighting, and other site elements;i) Avoids significant deterioration of water and air resources, scenic resources, and other natural resources;j) Maintains safe and convenient ingress and egress and traffic flow onto and through the site by vehicles and pedestrians, and safe road conditions around the site;k) Complies with all other relevant county, state and federal laws and standards; andl) Is required by the public necessity, convenience, general welfare, or good zoning practice.

Sec. 83-123(f)(5): Expiration of a Conditional Use Permit

A Conditional Use Permit shall expire in accordance with any expiration date or provisions in a condition of its approval. A Conditional Use Permit shall automatically expire if a Building Permit, Site Plan, or other county approval, whichever occurs first, for the development granted by the Conditional Use Permit, is not obtained within two (2) years after the date of approval of the Conditional Use Permit, or if no subsequent county approval is required, the development is not completed and operational within two (2) years.

V. PROPERTY DESCRIPTION

Location

The subject property, which is approximately 89.52 acres, is located on the western side of State Route 13 (Old Buckingham Road) at its intersection with Spoonbill Drive (private road within the Maconwood subdivision). It is approximately 0.4 miles north of the crossroads at Macon.

Existing Conditions

The property is undeveloped and primarily wooded. Intermittent streams (tributaries to Salmon Creek) and associated wetlands are generally located along the perimeter of the subject property, near its northern, southern, and western property lines.

Surrounding Properties

Direction	Zoning	Uses
North	Agricultural-10 (A-10)	<ul style="list-style-type: none"> • Vacant Land • Single-Family Residential
South	Agricultural-10 (A-10) Rural Residential-5 (RR-5)	<ul style="list-style-type: none"> • Single-Family Residential (Lots Approx. 2 – 10 Acres: Including Macon Orchard Subdivision)
East	Agricultural-10 (A-10)	<ul style="list-style-type: none"> • Single-Family Residential (Lots Approx. 2 – 10 Acres: Including Maconwood Subdivision)
West	Agricultural-10 (A-10)	<ul style="list-style-type: none"> • Vacant Land

VI. PROJECT ANALYSIS

Current Zoning

The subject property is currently zoned Agricultural-10 (A-10).

Proposed Use

The applicant is proposing a *solar energy farm*, which is defined as follows [Sec. 83-521]:

Solar energy farm means a system consisting of solar panels, modules, and related equipment (e.g., heat exchanger, pipes, inverter, wiring, storage) that collects solar radiation and transfers it as heat to a carrier fluid for use in hot water heating or space heating and cooling, and/or that collects solar energy and converts it into

electricity. It is designed to meet demands for a larger area and is typically mounted on the ground.

Solar energy farm is a conditional use within the Agricultural-10 (A-10) zoning district [Sec. 83-162(26)]. No specific standards applicable to this use are identified in Sec. 83-432 (Standards for Specific Principal Uses).

Land Use and Community Character

The surrounding area is rural in character, with a mixture of large, vacant parcels and single-family residential development on larger lots (generally ranging from two to ten acres in size). Immediately south of the subject property is the Macon Orchard subdivision (zoned RR-5). The Maconwood subdivision (zoned A-10) is located to the east of the subject property, on the other side of State Route 13 (Old Buckingham Road).

The proposed conditions included in this report are intended to help the proposed use blend with the surrounding rural areas. This is accomplished by:

- Requiring significant setbacks (at least 200 feet) from property lines (Conditions #8 and #9);
- Requiring vegetated buffers along State Route 13 (Old Buckingham Road) (Conditions #11 and #12); and
- Requiring significant riparian buffers (at least 200 feet wide) along wetlands and streams (Condition #13).

Environment/Natural Resources

Agency Comments: Environmental Review (Powhatan County)

A wetland delineation should be provided for all parcels that are to be considered for this request. A Land Disturbance Permit shall be obtained from Powhatan County. The use of native vegetation that support local ecology should be used as ground cover prior to the completion of the project. All Riparian Buffer should be shown on the Conceptual Plan and conform to the Powhatan County Zoning Ordinance.

On-Site Environmental and Historic Features

- *Topography*

The subject properties have varied topography, with steep slopes generally located at or around wetlands and streams. Per GIS, elevations range from approximately 290 feet above sea level to 350 feet above sea level, with the highest elevations in the central portion of the subject property. Based on analysis of public GIS data, significantly steep slopes (over fifteen percent slope) occur on approximately 4.07% of the total site area.¹

¹ In the 2019 Long-Range Comprehensive Plan, steep slopes are described as those with 15% or greater slopes (p. 64, 65, 69, 75, 81, 85).

- *Streams and Wetlands*

Per the wetland delineation map provided by the applicant (Timmons Group: Dated July 9, 2019), a perennial stream runs along the southern property line with wetlands located in the southeastern portion of the property. The delineation map also indicates that some smaller tributaries run perpendicular to the north, west, and south property lines, extending up to approximately 300 feet into the subject parcel.

- *Natural Habitats*

The subject property is wooded with a mix of mature and immature vegetation.

The applicant submitted a Limited NEPA Report (Timmons Group: Dated July 12, 2019), which identifies potential environmental resources found within or near the project area. The study indicated that one threatened species (Northern Long-Eared Bat) may be located in the general area.

- *Historic Resources*

Per the Limited NEPA Report (Timmons Group: Dated July 12, 2019), two potential onsite archaeological resources were identified (a terrestrial open air lithic workshop and camp). These resources have been avoided in the most recent conceptual site plan for the proposed solar facility.²

Erosion and Sediment Control

Prior to starting clearing and grading, a land disturbance permit (which identifies on-site erosion and sediment control measures) must be approved by Powhatan County. Regular inspections will occur throughout the construction process to ensure that adequate measures are taken to control erosion.³

Stormwater Management

Prior to site plan approval, a stormwater management plan will need to be submitted and approved by the Virginia Department of Environment Quality (DEQ) to ensure that the necessary infrastructure is in place to control the quantity and quality of runoff.

² Per the 2019 Long-Range Comprehensive Plan (Map 4: Historic Resources), no known historic resources are located on the subject properties or within the immediate areas.

³ Due to the project's size, Condition #18 requires that the applicant hire a third-party consultant to conduct regular inspections of erosion and sediment control measures, helping ensure that the project does not negatively impact adjacent properties and waterways.

Transportation

Agency Comments: Virginia Department of Transportation (VDOT)

VDOT supports the request by HCE Powhatan Solar I of its conditional use permit and offers the following comments:

1. Site Plan shall be submitted for VDOT review and approval prior to Land Disturbance. This review shall include potential Drainage Impacts upon Old Buckingham Road Rt. 13.
2. A VDOT Land Use Permit shall be required for the Temporary Construction Entrances and for the Low Volume Commercial entrance to the site along Old Buckingham Road Rt. 13.
3. Proposed Access from Old Buckingham Road Rt. 13 shall be subject to VDOT review and approval.
4. VDOT Access Management does not apply for Low Volume Commercial entrances, but stopping sight Distance is required.
5. While VDOT Access Management does not apply, the revised Sec. 68-175(e)(5) of the Powhatan County Subdivision Ordinance requires that any deviations from local spacing standards be approved by the Board of Supervisors, prior to VDOT site plan approval.

Local Road Network

The subject property has frontage on State Route 13 (Old Buckingham Road) at its intersection with Spoonbill Road (private road).

Roadway Characteristic	State Route 13 (Old Buckingham Road)
Functional Classification: VDOT	Major Collector
Functional Classification: Powhatan Co. Major Thoroughfare Plan	Major Arterial (Existing)
Traffic Volume Estimates (VDOT: 2018)	7,700

Site Access

The conceptual plan (dated August 21, 2019) shows one access point from State Route 13 (Old Buckingham Road).⁴

⁴ Condition #14 limits access to the site from one point along State Route 13 (Old Buckingham Road).

Utilities and Public Infrastructure

Agency Comments: Department of Public Works (Powhatan County)

The property, Tax Map Parcel #37-23B, is located outside of the County's Water and Wastewater Service District. The department has no further review comments.

Agency Comments: Virginia Department of Health

No comments received.

The proposed use is anticipated to have minimal impact on public utilities and infrastructure. After construction, the site will generally not be occupied, except for occasional maintenance visits. Lack of on-site office or industrial facilities means there will rarely be a need for emergency services, and there will be no need for on-site wells or septic systems.

Public Safety

Agency Comments: Sheriff's Office (Powhatan County)

No concerns at this time.

Agency Comments: Fire Department (Powhatan County)

No comments received.

Per information provided by the applicant, the solar energy farm will be entirely enclosed by a fence and emergency responders will be given necessary access.

Development Requirements and Standards

Agency Comments: Building Inspections Department (Powhatan County)

A building permit will be required for any new structure over 256 square feet in size or 150 square feet in size if housing any type of utility (electricity, water, etc.). Most of the property is in a moderate shrink/swell area per the county GIS system. Any new structure will require a soil analysis and an engineered footing design.

Development Review: Next Steps

Prior to issuance of a building permit, the applicant will be required to submit a site plan(s) for review and approval [Sec. 83-123(g)].

All site plans are evaluated to ensure that proposed development adheres to standards set forth in Article VIII (Development Standards) of the zoning ordinance. These standards address several components of the development, including:

- Vehicular Access and Circulation [Sec. 68-175(e)];
- Off-Street Parking and Loading [Sec. 83-455];
- Landscaping and Buffers [Sec. 83-461];

- Exterior Lighting [Sec. 83-469];
- Open Space [Sec. 83-470]; and
- Signage [Sec. 83-488].

Site plan applications are reviewed by the Department of Community Development.

Fiscal Impacts

The applicant estimates that the project will generate approximately \$3,564 annually in tax revenue (approximately \$106,920 over the life of the project), due to increased property values.

VII. COMPREHENSIVE PLAN ANALYSIS

Countywide Future Land Use Plan

The *2019 Long-Range Comprehensive Plan* designates the subject properties as *Rural Preservation* and *Natural Conservation* on the Countywide Future Land Use Plan.

Land Use: Rural Preservation

Most of the subject properties are designated *Rural Preservation* in the *2019 Long-Range Comprehensive Plan*. This land use designation is described as follows (p. 68):

Rural Preservation areas will be rural in character, with preserved natural, cultural, and historic resources, including farms, agribusinesses and tourism, permanently-protected open spaces, permanent easement properties, hillsides, hilltops, floodplain, wooded and forested areas, historic landscapes, landmarks, and corridors. These areas will contribute to active agriculture, silviculture, agribusiness, equestrian operations, and tourism, with new residential development designed in such a way as to be balanced with the natural and existing manmade environment in order to minimize degradation of the rural, natural, cultural, and historic environment.

There are specific recommendations regarding the siting and design of *solar energy farms* located within areas designated *Rural Preservation* (p. 73).

Design Element	Adherence to Design Recommendations (Yes/No)	Analysis
Proximity to Major Thoroughfares	Yes	<p>The proposed solar energy farm is located along State Route 13 (Old Buckingham Road), which is designated as a major thoroughfare.</p> <p>Condition #14 limits site access.</p> <p>Condition #17 requires submittal of a construction traffic management plan.</p>
Screening and Buffering	Yes	<p>Condition #8 generally requires that solar panels and accessory structures be located at least 200 feet from property lines (including roadways).</p> <p>Natural buffers adjacent to roadways will be preserved and supplemented with native plantings (Conditions #11 and #12).</p>
Protection of Natural Resources	Yes	<p>The conceptual plan (which aligns with language in Condition #13) shows riparian buffers at least 200 feet wide adjacent to wetlands and intermittent streams.</p> <p>The applicant has submitted a Limited NEPA Report and a wetlands delineation map.</p> <p>Natural buffers adjacent to roadways will be preserved and supplemented with native plantings (Conditions #11 and #12).</p>
Protection of Cultural Resources	Yes	<p>The proposed conceptual plan accounts for the potential archaeological resources on the property by adequately avoiding the identified areas.</p>
Prohibition of Toxic Materials	Yes	<p>Condition #16 prohibits the use of solar panels containing cadmium and GenX chemicals.</p>
Project Size	Yes	<p>The proposed project area is 45 acres (with the maximum solar array area being approximately 8.9 acres), below the recommended maximum area of 500 acres.</p>

Land Use: Natural Conservation

Areas adjacent to intermittent streams on the property (tributaries to Salmon Creek) are designated *Natural Conservation* in the *2019 Long-Range Comprehensive Plan*. This land use designation is described as follows (p. 64):

Natural conservation indicates land with intrinsic natural features, such as perennial stream corridors, floodplains, floodways, wetlands, or steep slopes (over fifteen percent). As a secondary benefit, these same areas provide greenways for wildlife corridors. These areas are designated as “unbuildable” and should be maintained in a naturalized, undisturbed state. Local, state, and federal regulations apply to the conservation of these areas.

Areas designated *Natural Conservation* generally align with riparian buffers shown on the conceptual plan.

It is recommended that areas designated *Natural Conservation* include natural habitats, nature trails, and camps/retreats (p. 64).

Priority Conservation Areas

In the *2019 Long-Range Comprehensive Plan*, Map 3: Natural Resources (Prime Conservation Areas) identifies western portions of the property as a *Priority Conservation Area*. *Priority Conservation Areas* include critical wildlife habitat, old-growth woodlands, wetlands, sensitive soils, and other features which contribute to the ecological health and beauty of Powhatan County. It is recommended that development within these areas be designed to minimize impacts on significant environmental resources (p. 44 – 45).

The conceptual plan for the proposed solar energy farm identifies the location of *Priority Conservation Areas*. A portion of the proposed solar energy farm (approximately 1.75 acres within the northwestern portion of the fenced area) will be located within the designated *Priority Conservation Area*.

VIII. PUBLIC COMMENTS

The applicant held a neighborhood meeting on June 13, 2019 at the Powhatan County Public Library. The meeting was attended by one staff member and one member of the Planning Commission. No members of the general public attended the meeting.

The Department of Community Development has not received any formal comments on this request but has received phone calls with general questions about the application.

IX. STAFF RECOMMENDATION

Favorable Attributes of Request

- *Adherence to Comprehensive Plan Recommendations*
The design of the proposed solar energy farm incorporates many of the recommendations made in the *2019 Long-Range Comprehensive Plan* (Solar Energy Farms: p. 73).
- *Limited Demands on Public Services*
The use will not require significant public services. After construction, the site will generally not be occupied, except for occasional maintenance visits. Lack of on-site office or industrial facilities means there will rarely be a need for emergency services, and there will be no need for on-site wells or septic systems.
- *Limited Noise and Odors*
Once construction is complete, the use will generate little noise or odor.
- *Accommodates Future Agricultural and Forestal Uses (After Decommissioning)*
Once the solar energy farm reaches the end of its lifespan, the solar panels and most of the supporting infrastructure must be removed from the site (Condition #19), allowing agricultural and forestry uses to resume on the property.
- *Delays Subdivision of Subject Property*
Use of the property as a solar energy farm will prevent further subdivision of the subject property for several decades, limiting residential development with an area designated *Rural Preservation*.
- *Greater Environmental Standards than Permitted Agricultural Uses*
The design and construction of the solar energy farm will have to adhere to more stringent environmental standards than permitted agricultural and forestry uses.

Unfavorable Attributes of Request

- *Noise, Dust, and Traffic During Construction*
Construction of the project will generate additional traffic and may create noise and dust.

Recommendation

The Department of Community Development **recommends approval** of this request. With the recommended conditions, the use is generally compatible with the rural character of the surrounding area and generally reflects recommendations made in the *2019 Long-Range Comprehensive Plan*. The conditions address aesthetic and environmental concerns by:

- Increasing required setbacks and riparian buffers;
- Requiring the preservation of existing vegetation along adjacent roadways;
- Requiring additional plantings along adjacent roadways;
- Limiting construction activity and access to the site;
- Establishing procedures for future erosion and sediment control review and project decommissioning.

- Prohibiting the use of ad cadmium or GenX chemicals in solar panels.

X. RECOMMENDED CONDITIONS

If approved, the Department of Community Development recommends that the conditions listed below be incorporated into this request. These conditions are proposed to minimize negative impacts on surrounding properties and reflect recommendations made in the *2019 Long-Range Comprehensive Plan*.

1. The applicant(s) shall consent to annual administrative inspections by the Department of Community Development for compliance with the requirements of this CUP.
2. The applicant(s) shall sign the list of adopted conditions for this CUP signifying acceptance and intent to comply with these conditions.
3. Failure to comply with the conditions of this CUP may result in the issuance of a Notice of Violation (NOV) by the Zoning Administrator. The Zoning Administrator may present this CUP to the Board of Supervisors for revocation if the NOV is not resolved as directed.
4. All activities associated with this CUP shall be in compliance with all local, state, and federal laws.
5. This conditional use permit shall permit a *solar energy farm* and related accessory uses, as defined in Section 83-521 of the Powhatan County Zoning Ordinance. The extent of the project shall be limited to the area identified as the “Leased Boundary” and solar panels shall not be located outside of the area defined by the “Security Fence,” as generally shown on Sheet 01 of the Preliminary Drawing Site Plan dated August 21, 2019.
6. A site plan shall be submitted to Powhatan County for review and approval, in accordance with Section 83-123(g) of the Powhatan County Zoning Ordinance.
7. All site activity required for the construction and operation of the solar energy farm shall be limited to the following:
 - a. All clearing and grading of the site, including the construction and/or upgrade of any access roads needed for the project, shall be limited to the hours of 8 a.m. to 6 p.m., Monday through Saturday.
 - b. All pile driving activity shall be limited to the hours of 8 a.m. to 6 p.m., Monday through Saturday.
 - c. All other construction activity on site shall be permitted outside of those hours provided such activities are consistent with the provisions of Powhatan County’s Noise Ordinance.
8. Solar panels and accessory structures shall maintain a minimum setback of 200 feet from all property lines.
9. Solar panels and accessory structures (excluding fencing) shall maintain a setback of 250 from any residential dwelling existing on the date of approval of this CUP.
10. Any required security or perimeter fencing shall be installed in accordance with the following standards:

- a. Fencing shall not cross streams, wetlands, or riparian buffers; and
 - b. The use of barbed wire shall be prohibited along State Route 13 (Old Buckingham Road).
11. A natural buffer shall be provided along all property lines (the “Natural Buffer Area”). The width of the Natural Buffer Area shall be a minimum of:
- a. 125 feet from the northern property line; and
 - b. 175 feet from all other property lines.

Existing vegetation located within the Natural Buffer Area shall be maintained for the lifetime of the project. No clearing, grading, or excavation may occur within the Natural Buffer Area, except as necessary for utilities and driveways. Existing vegetation within the perimeter buffer shall be maintained to the greatest extent practicable, and the Zoning Administrator may require existing vegetation be supplemented with native trees and/or native shrubs to maintain the rural character of the site as seen from adjacent roadways, properties, and/or historic structures.

12. Along the project’s frontage with public roadways, additional plantings shall be provided directly adjacent to the perimeter fence, between the perimeter fence and the required Natural Buffer Area. Plantings shall be planted in a natural-appearing, staggered pattern and maintained for the lifetime of the project at the following rates:
- a. 8 native evergreen trees per 100 feet of road frontage; and
 - b. 10 native shrubs per 100 feet of road frontage.

At the time of installation, all new plantings shall adhere to the size requirements set forth in Sec. 83-461 of the Powhatan County Zoning Ordinance.

13. A riparian buffer at least 200 feet in width shall be maintained along all perennial streams, intermittent streams, and wetlands. Required riparian buffers shall be maintained as vegetated areas composed of an assemblage of trees, shrubs, and other vegetation that can effectively stabilize banks and slow down and filter stormwater runoff. If the buffer is not currently so vegetated, it shall be restored or allowed to develop into such a buffer. No mowing or disturbance shall occur within riparian buffers.
14. Access to the site shall be limited one point of access permitted along State Route 13 (Old Buckingham Road).
15. If needed, depending on weather and site conditions, dust control measures shall be implemented during construction.
16. Solar panels shall not contain cadmium or GenX chemicals.
17. A Construction Traffic Management Plan and mitigation measures shall be developed by the Applicant and submitted to the Virginia Department of Transportation (VDOT) and the County of Powhatan for review. The Plan shall address traffic control measures, a pre- and post-construction road evaluation, and any necessary repairs to the public road that are required as a result of damage from the Project. If a

traffic issue arises during the construction of the Project, the Applicant shall develop appropriate measures to mitigate the issue with input from the County and VDOT.

18. At the request of Powhatan County, the applicant shall provide a qualified third party consultant to review the site's Erosion and Sediment Control (ESC) plan and to conduct ongoing inspections of the site to ensure compliance with the Virginia Erosion and Sediment Control Law. Powhatan County shall approve of the third party consultant provided to conduct said reviews and inspections.
19. If the solar energy farm is not in active use for a continuous period of 24 months, it shall be considered abandoned, and the owner of the facility, the land owner of the property on which the solar energy farm is located, or their successors or assigns shall remove the facilities within six months of receipt of notice from the county. Decommissioning includes the removal of the solar systems, buildings, cabling, electrical components, roads, foundations, pilings, and fencing to a depth of 36 inches, and shall comply with the following:
 - a. Any agricultural land upon which the facility was located shall be restored to tillable soil suitable for agricultural use, forestry, ponds and/or wetlands. The Zoning Administrator may permit the fence, roads and support buildings to remain with the property owner's approval so long as they continue to be screened as required.
 - b. The owner of the facility shall secure the costs of decommissioning by providing and keeping in force a decommissioning agreement and financial surety in a form agreed to by the county attorney. The owner of the facilities shall every five years submit updated cost estimates for decommissioning the facilities, adjusted for changes in inflation. At its option, the county may require the surety amount be increased based on the net cost of decommissioning.
 - c. If the facility is not removed within the specified time, the county may contract for removal. Thereafter, the county may cause removal of the facility with costs being borne by the owner of the facilities and/or the land owner. In the event that the financial surety does not cover the cost of removal, all additional costs shall be charged to the landowner and become a lien on the property on which the facility was located.

XI. PROPOSED RESOLUTION

In accordance with Section 83-123(f)(4) of the Powhatan County Zoning Ordinance and public necessity, convenience, general welfare, and good zoning practice, the Powhatan County Planning Commission recommends (*approval / denial / deferral*) of the request submitted by HCE Powhatan Solar I to permit a *solar energy farm* on Tax Map Parcel #37-23B subject to the conditions presented in this report.

Attachment(s)

1. Application
2. Vicinity Map
3. Zoning Map
4. Countywide Future Land Use Map (2019)
5. Prime Conservation Areas Map
6. Application
7. Conceptual Plan

The following materials are included in a supplemental packet, which is available at:
<http://powhatanva.gov/DocumentCenter/View/4626/19-05-CUP-Supplemental-Packet-PC-09-03-2019>

Applicant Prepared Guidance Compliance Document ([p. 3](#))

Appendix 1: Preliminary Site Plan ([p. 14](#))

Appendix 2a. Limited NEPA ([p. 16](#))

Appendix 2b. VDCR Memo ([p. 70](#))

Appendix 3. Neighboring Landowners ([p. 74](#))

Appendix 4. Neighborhood Meeting Invitation ([p. 76](#))

Appendix 5. Neighborhood Meeting Presentation ([p. 78](#))

Appendix 6. Planning Commission Workshop Meeting Presentation ([p. 84](#))

Appendix 7. Wetland Delineation Map ([p. 89](#))

Appendix 8. Environmental and Historic Resources Context Map ([p. 91](#))

Appendix 9. Decommissioning Plan ([p. 93](#))

Appendix 10. Fiscal Impact Report ([p. 101](#))

Appendix 11. Battery Storage Environmental Considerations ([p. 106](#))

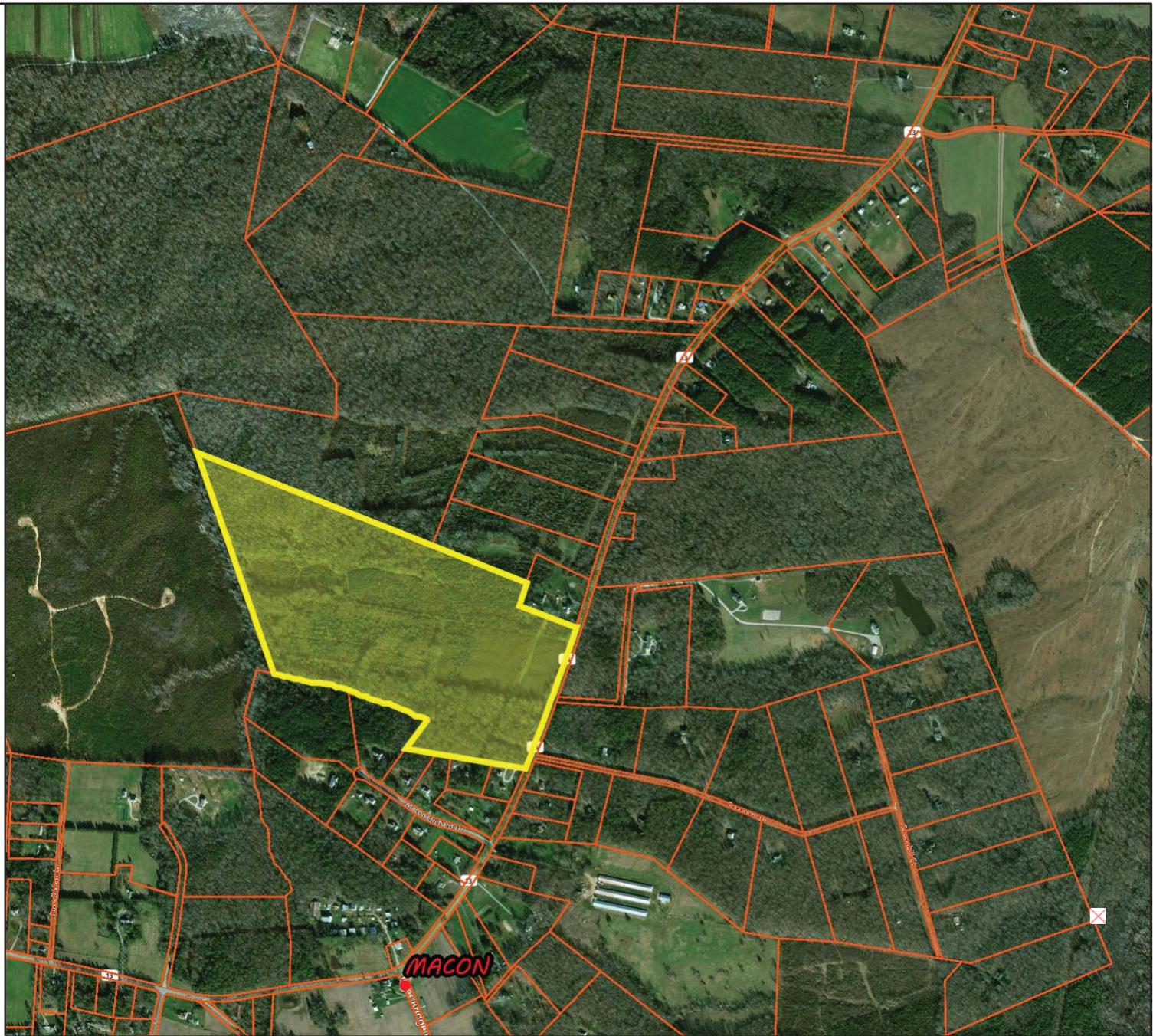
Appendix 12. Topographic Survey ([p. 206](#))

Appendix 13. Existing Vegetation Memo ([p. 208](#))

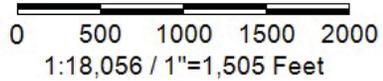
Powhatan County

Legend

-  County Boundary
-  Places
-  Parcels



Feet



Title: 19-05-CUP Vicinity Map

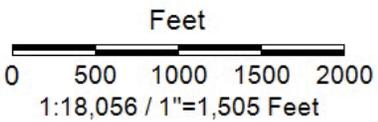
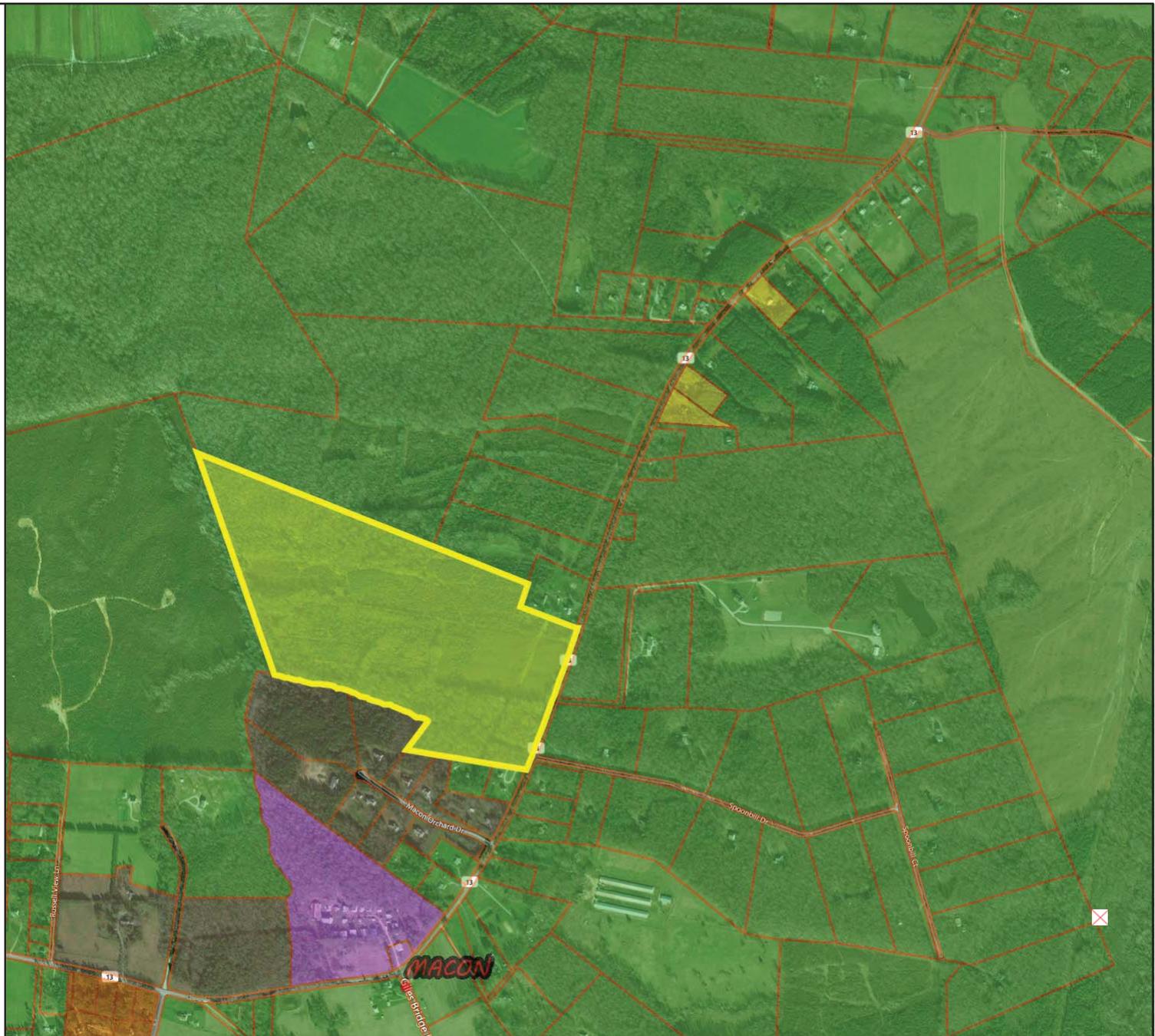
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Powhatan County

Legend

-  County Boundary
-  Places
-  Parcels
-  Zoning
-  Agriculture A-10
-  Agricultural/Animal Confinement
-  Commerce Center Planned Development
-  Commerce Center
-  Commercial
-  Courthouse Square Center
-  Industrial - 1
-  Industrial - 2
-  Mining
-  Office
-  Residential - 2
-  Rural Residential 5
-  Residential Commercial
-  Residential Utility
-  Rural Residential
-  Village Center Planned Development
-  Village Center



Title: 19-05-CUP Zoning Map

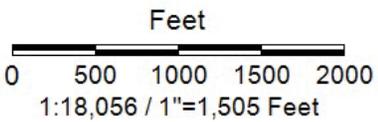
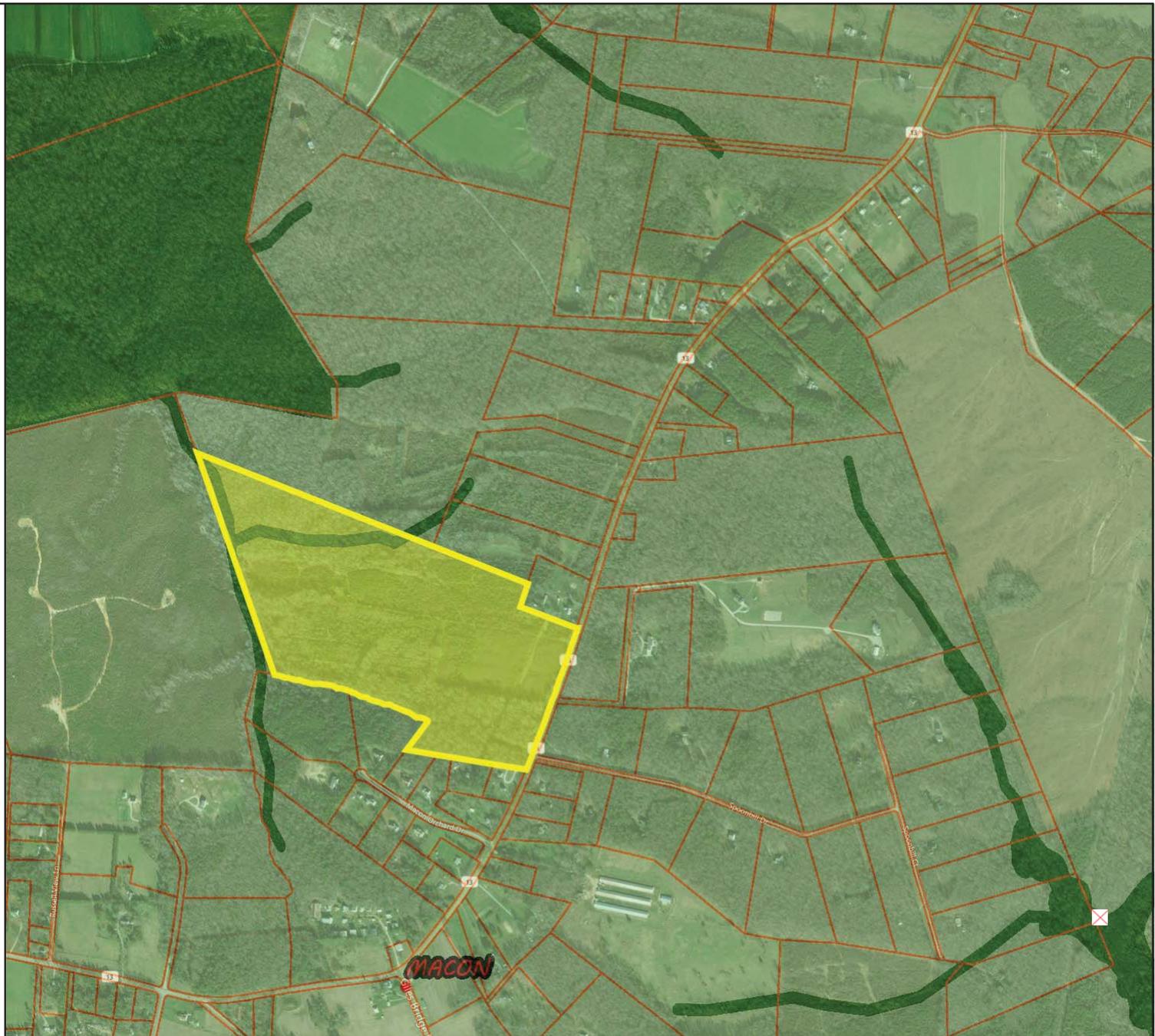
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Powhatan County

Legend

-  County Boundary
-  Places
-  Parcels
- Future Land Use**
-  Public Lands
-  Natural Conservation
-  Rural Preservation
-  Rural Residential
-  Low Density Residential
-  Village Residential
-  Village Center
-  Commerce Center
-  Economic Opportunity
-  Industrial



Title: 19-05-CUP Future Land Use Map

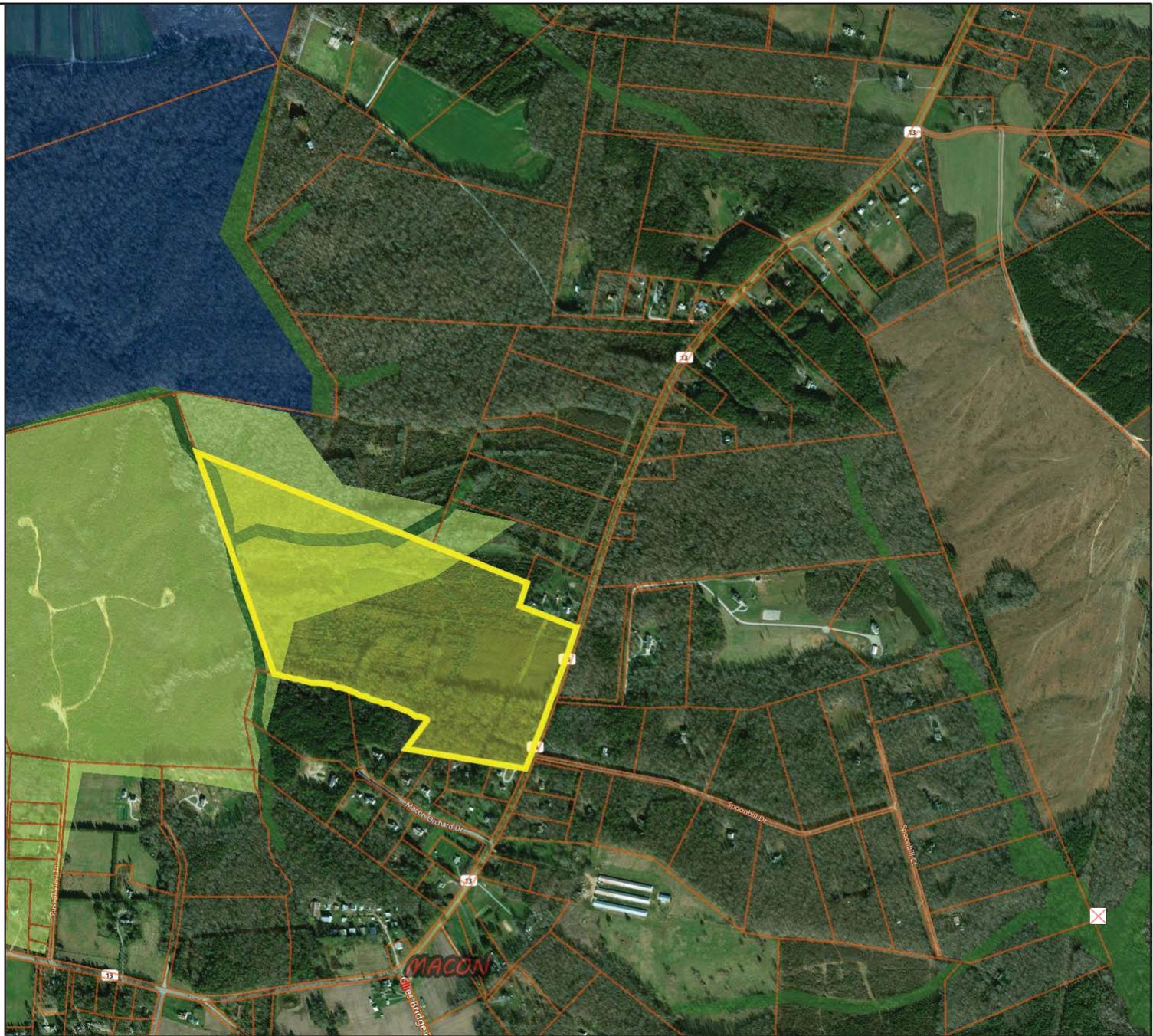
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Powhatan County

Legend

- County Boundary
- Places
- Parcels
- Agricultural Forestal Properties
- Natural Resources
- Public Lands
- Protected Lands
- Priority Conservation Areas



Title: 19-05-CUP Prime Conservation Areas

Date: 8/27/2019

DISCLAIMER: ALL INFORMATION DEPICTED ON THIS MAP SHALL BE TREATED AS CONFIDENTIAL INFORMATION AND SHALL ONLY BE USED FOR THE SOLE PURPOSE FOR WHICH IT WAS PROVIDED. ANY OTHER USE OF THIS MAP, OR THE INFORMATION INCLUDED THEREON, IS STRICTLY PROHIBITED. THE DATA SHOWN ON THIS MAP IS FOR INFORMATION PURPOSES ONLY. THIS MAP MAY NOT BE COPIED OR OTHERWISE MADE AVAILABLE TO ANY OTHER PARTY IN PAPER OR ELECTRONIC FORMAT.



**County of Powhatan,
Virginia**
Conditional Use Permit
Application

For Office Use Only

Case Number

19-05-CUP

Powhatan County, Virginia
Department of Community Development
3834 Old Buckingham Road: Suite F
Powhatan, VA 23139

Applicant Information	
Name of Applicant	HCE Powhatan Solar I
Mailing Address	727 W. Hargett St, Ste 201 Raleigh, NC 27603
Phone Number	919-829-0037
Email Address	

Owner Information (Complete this section if the applicant is not the current property owner)	
Name of Owner	Eric Bonifant Larsen et al
Mailing Address	C/O Lisa Bonifant 6343 School Street SW Lakewood, WA 98499
Phone Number	253-312-8857
Email Address	Lisabonifant@gmail.com

If the applicant is not the owner, the applicant must provide written documentation that the current property owner consents to the application (see form entitled *Consent of Owner(s) to Request Rezoning*).

If there are multiple owners, all owners must sign the application or provide other documentation consenting to the

Applicant Representative (Complete this section if correspondence should be directed to someone other than the applicant)	
Name of Representative	Stephen Young
Mailing Address	727 W. Hargett St, Ste. 201 Raleigh, NC 27603
Phone Number	919-829-0037 x 105
Email Address	stephen.young@holocene-energy.com

Parcel Information	
Tax Map Number	037-23B
Physical Address	Rte. 13, Macon
General Description of Property Location	Open fallow land on Route 13 near Macon
Election District	4
Total Acreage	89.52
Current Zoning	Agricultural-10
Countywide Future Land Use: Land Use Designation	rural residential and natural conservation

Proposed Use	
Proposed Use (Identify Use Listed in Zoning Ordinance)	Solar generation facility
Proposed Use: Detailed Description	The applicant desires to build a solar generation facility on the designated property. The facility will consist of photovoltaic solar panels, racking, inverters and transformers and will connect to the local utility grid.
If this request is approved, will new structures be constructed?	Yes. The solar farm has no traditional structures per say, but there will be an enclosure for monitoring and energy storage equipment
Are there existing structures on the subject property?	No
Will the proposed use connect to public water and/or sewer?	No
Will the proposed use have direct access to a public road?	Yes

A conceptual plan that shows the general configuration of the proposed development, including land uses, building locations (existing and proposed), pedestrian and vehicular circulation, open space, and resource protection areas, should be submitted with the application. This plan should also include measurements on how far existing and proposed structures, parking areas, and other activities associated with the proposed use will be from property lines.

Proposed Use (Continued)

Describe any impacts the proposed use may have on adjacent properties and the surrounding neighborhood (e.g. noise, glare, smells, traffic, etc.).

The solar farm will not have a material impact on the surrounding neighborhood. The site is less than 50 acres, set back from the road, and screened from view by existing and planted vegetative buffers to mitigate visual impact from the highway. The system is designed to minimize land disturbance and will follow best management practices set out by VA DEQ for stormwater control.

The solar farm will produce no notiable odor or sounds and will be in harmony with the surrounding community. Through the development process, studies are performed to ensure no harm comes to protected species. Site preparation will include planting native VA vegetation and installing a security fence.

Although traffic may be created via construction; traffic will be limited to quarterly maintenance. At the end of the solar farm's useful life, the property can be returned to timber or agriculture or prepared for development.

Statement of Validity of Information

Every applicant shall sign the following document to substantiate the validity of submitted information.

I, being duly sworn, depose and say that I am the Lessee/Owner of the property involved in the application. If I am not the Lessee/Owner, I will provide written certification from the owner granting me the right to submit this application.

I declare that I have familiarized myself with the rules and regulations pertaining to preparing and filing this application. I further declare that the foregoing statements and answers provided throughout the various sections of this application are in all respects true and correct to the best of my knowledge and belief.

Signature of Applicant

Stan Allison

Name of Applicant (Printed)

Stan Allison, Manager

Wake

County, North Carolina:

I certify that the following person(s) personally appeared before me this day, each acknowledging to me that he or she signed the foregoing document: Stan Allison

Date: April 18, 2019

Notary Public Signature

Laura B. Tillett

Notary Public Name

Laura B. Tillett

My commission expires:

10-23-2021

Official Seal

LAURA B TILLET
NOTARY PUBLIC
WAKE COUNTY, NC
My Commission Expires 10-23-2021

Ownership Disclosure

List below the names and addresses of all owners or parties in interest of the land subject to this request.

If this request is in the name of a corporation, artificial person, joint venture, trust, or other form of ownership, all officers, directors, and any stock holders owning ten percent or more of such stock must be listed.

Name	Address
Ethel B Bonifant Bern M Bonifant	6715 LAKE AVE SW., LAKENOOD, WA. 98499 19898 ALEXANDRAS GROVE DR., ASHBURN, VA 20147
Phil M Bonifant Stephen S Bonifant	2252 INDIAN RIVER ROAD, VIRGINIA BEACH, VA 23456 211 HOLLY LN., AUSTIN, ARKANSAS 72007
Janet B Robinson Lisa C Bonifant	403 MIRROR LAKE PL., FAYETTEVILLE, NC 28303 6343 SCHOOL ST SW., LAKENOOD, WA 98499
Eric Larsen Jeffrey Hershey	9610 MOHAWK LANE, BETHESDA, MD 20817 1504 W. 31 ST STREET, AUSTIN, TX 78703

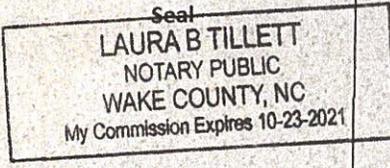
I, STAN ALLISON, do hereby swear and affirm to the best of my knowledge and belief, the above information is true and that I am the applicant requesting a conditional use permit for Tax Map 037-23B.
If the information listed above changes at any time while this request is being considered, I will provide Powhatan County with an updated list of owners.

Signature of Applicant	<i>Stan Allison</i>
Name of Applicant (Printed)	STANFORD H. ALLISON

Commonwealth of Virginia
County of Wake, North Carolina to wit:

Sworn and subscribed to before me a Notary Public in and for the jurisdiction aforesaid by Stanford H. Allison, whose name is signed to the above, on this 25th day of April 2019.

Notary Public	<i>Laura B. Tillett</i>
Commission Expires	10-23-2021
Notary Number <i>N/A</i>	<i>Laura B. Tillett</i>



Consent of Owner(s) to Permit Request

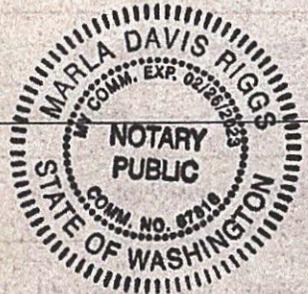
If the applicant is not the owner, the applicant must provide written documentation that the current property owner consents to the conditional use permit (CUP) application.

I, Lisa Bonifant, am the owner of the property subject to this CUP request and consent to the request submitted by HCE Powhatan Solar I (Applicant) for a CUP to allow a Solar Energy Farm (Requested Use) on Tax Map 037-23B.

Signature of Owner	
Name of Owner (Printed)	<u>LISA C. BONIFANT</u>

~~Commonwealth of Virginia~~ State of Washington
County of Pierce, to wit:
Sworn and subscribed to before me a Notary Public in and for the jurisdiction aforesaid by Lisa C Bonifant, whose name is signed to the above, on this 24 day of April 20 19.

Notary Public	<u>Marla Davis Riggs</u>	Seal
Commission Expires	<u>2/26/23</u>	
Notary Number	<u>Comm. # 67816</u>	



Applicant's Permission for Inspection of Property		
I, <u>STANFORD H. ALLISON</u> , hereby grant access to the Director of Community Development, Zoning Administrator, or assigns thereof, to enter my property during reasonable hours without prior notice to make inspections as deemed necessary for the evaluation of my application.		
Signature of Applicant	<u>SH Allison</u>	
Name of Applicant (Printed)	<u>STANFORD H. ALLISON</u>	
<u>Wake</u> County, North Carolina:		
I certify that the following person(s) personally appeared before me this day, each acknowledging to me that he or she signed the foregoing document: <u>Stan Allison</u>		
Date: <u>April 18, 2019</u>		
Notary Public Signature	<u>Laura B. Tillett</u>	Official Seal LAURA B TILLETT NOTARY PUBLIC WAKE COUNTY, NC My Commission Expires 10-23-2021
Notary Public Name	<u>Laura B. Tillett</u>	
My commission expires:	<u>10-23-2021</u>	

Powhatan County Planning and Community Development
Attn: Andrew Pompei
3834 Old Buckinghame Rd
Powhatan, VA 23139

Re: Representation of Authority on Behalf of the Heirs of Eric Bonifant Larsen's Property in the Matter of HCE Powhatan Solar I, LLC Conditional Use Permit Application on Tax Map 037-23B

Mr. Pompei,

In reference to the Conditional Use Permit Application for a Solar Energy Farm on Tax Map 037-23B, I am acting as the designated representative for the heirs who jointly own said property formerly belonging to Eric Bonifant Larsen. I have been acting with expressed permission on the behalf of the individuals listed below.

Ethel B Bonifant
Bern M Bonifant
Phil M Bonifant
Stephen S Bonifant
Janet B Robinson
Lisa C Bonifant
Eric Larsen
Jeffrey Hershey

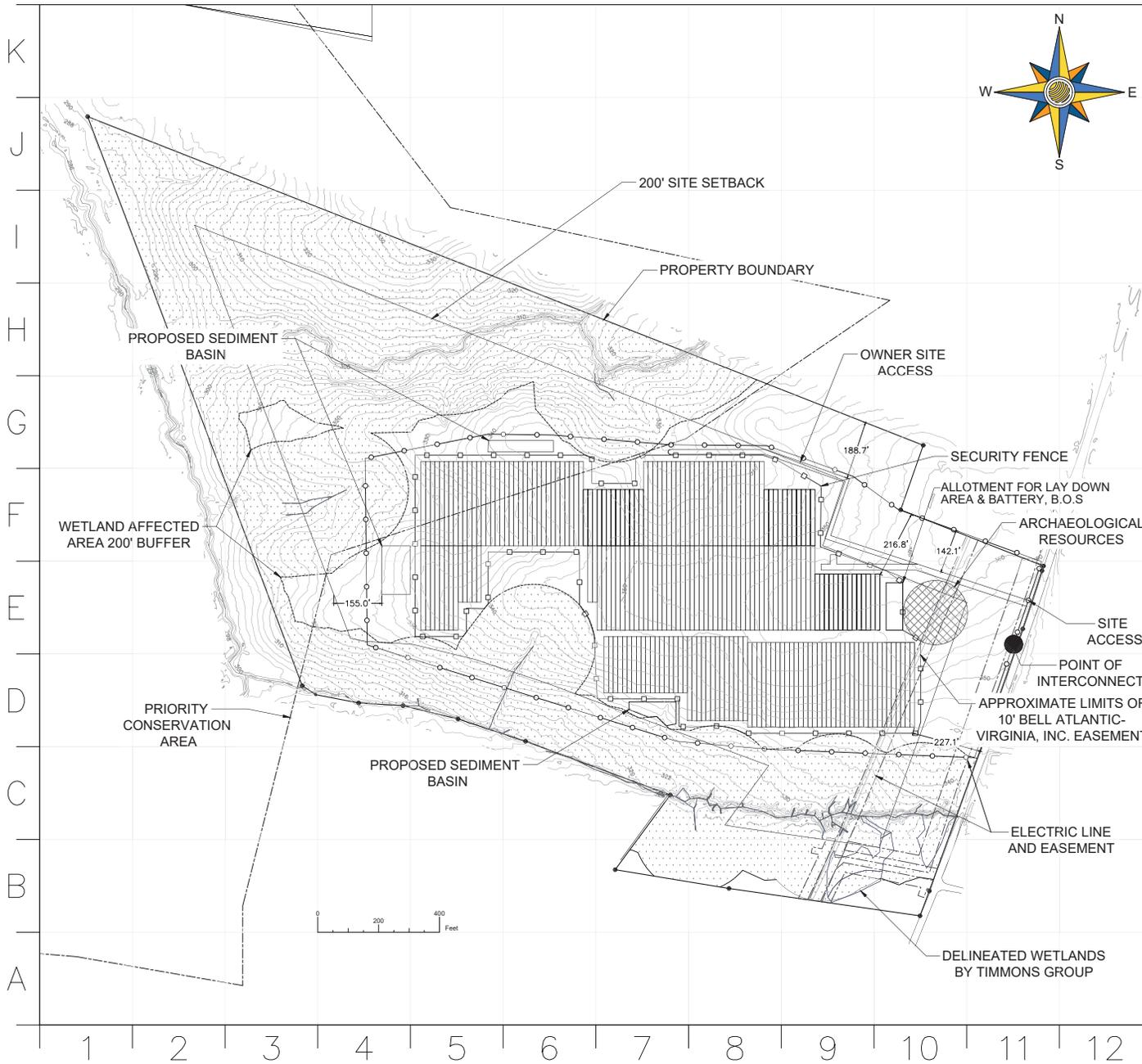
I hereby represent that the above individuals constitute a complete list of all persons with an interest in the property. I have been granted authority by said individuals to sign as Owner under the Conditional Use Permit Application made by Holocene Finance on the behalf of HCE Powhatan Solar I, LLC for the solar farm located on Tax Map 037-23B in Powhatan County.

Sincerely,



Lisa C. Bonifant

253-312-8857
Lisabonifant@gmail.com



NOTES:

General
 Owner: Larsen
 Powhatan County
 10' Contour Interval
 15' Racking Pitch

System
 5.0 MW AC
 6.53 MW DC
 1.3 DC/AC Ratio

Equipment
 Jinko 390W Module (or equal)
 SMA 2500kW Inverter (or equal)
 RBI N-S Tracker (or equal)

Zoning Requirements
 Zone: Agricultural-10
 200' Setback from residential property
 200' Setback from all wetland features

Civil Takeoffs	
Parcel Acreage:	89.85
Lease Acreage:	40.16
Fence Acreage:	23.5
Acreage Covered By Panels:	8.2
Acreage to Clear:	26.5
Fence [LF]:	5525
Silt Fence [LF]:	5550
Access Road [LF]:	700
Cut/Fill [CY]:	5,000
Building Demolition:	0

Notes

- Existing vegetation to satisfy vegetative screening requirements
- Historical resources to be identified by Timmons Group
- Wetland delineation to be completed by Timmons Group
- Seeding mix to include Piedmont Virginia native species as commercially available

Storm Water and Erosion & Control will be designed at a later date to meet county regulations.

*Locations are approximate. Subject to change based on environmental and electrical studies, permitting, civil work, surveying, county requirements, and final equipment selection.



HOLOCENE DESIGN
 BUILD, LLC
 4325 LAKE BOONE TRAIL
 SUITE 220
 RALEIGH, NC 27607
 UNITED STATES

POWHATAN SOLAR I
 4420 OLD BUCKINGHAM
 RD
 POWHATAN, VA 23139

PRELIMINARY
 DRAWING
 NOT FOR
 CONSTRUCTION

DATE ISSUED: 8.21.19
 DRAWN BY: HJH
 DESIGNED BY: HJH

SHEET NAME
 1.3 DC/AC Ratio
 15' Pitch

SHEET NUMBER
 01

POWHATAN SOLAR I



Powhatan County Planning Commission Agenda Item

Meeting Date: September 3, 2019

Agenda Item Title: Discussion: Case #19-06-REZC
(Rezoning from Agricultural-10 and General Commercial with Proffered Conditions to Village Residential Planned Development with Proffered Conditions and Commerce Center with Proffered Conditions: Tax Map Parcels #42-55, 42-55A, 42-55B, 42-57G, and 42-72)

Motion: n/a

Dates Previously Considered by PC: Workshop: August 6, 2019

Summary of Item: Markel Eagle Partners, LLC has submitted an application requesting the rezoning of several properties with frontage along the north side of U.S. Route 60 (Anderson Highway) at its intersection with State Route 1101 (Holly Hills Road) and along the south side of State Route 675 (Page Road) at its intersection with State Route 1110 (Old Powhatan Estates).

The subject properties total approximately 53.32 acres, with the applicant requesting that:

- Approximately 49.82 acres be rezoned to Village Residential Planned Development (VR-PD) with proffered conditions, accommodating up to 85 dwelling units (single-family detached dwellings).
- Approximately 3.50 acres be rezoned to Commerce Center (CC) with proffered conditions, accommodating commercial development.

A neighborhood meeting regarding this request was held on July 1, 2019.

The applicant provided an initial overview of this request at the workshop on August 6, 2019 ([August 6, 2019 Agenda Packet: p. 366](#)). Based on feedback provided by members of the Planning Commission at that workshop, the applicant has submitted a revised conceptual plan. These revisions will be presented at the workshop on September 3, 2019.

Attachments: Updated Conceptual Plan

Staff/Contact: Andrew Pompei: Planning Director
(804) 598-5621 x2006
apompei@powhatanva.gov

If Planning Commission members have questions, please call the staff / contact prior to the meeting.

Donnelly Creek
Illustrative Master Plan

