

AGENDA
JAMES CITY COUNTY PLANNING COMMISSION
REGULAR MEETING
COUNTY GOVERNMENT CENTER BOARD ROOM
101 MOUNTS BAY ROAD, WILLIAMSBURG, VA 23185
November 1, 2023
6:00 PM

A. CALL TO ORDER

B. ROLL CALL

C. PUBLIC COMMENT

D. REPORTS OF THE COMMISSION

E. CONSENT AGENDA

1. Minutes of the October 4, 2023, Regular Meeting

F. PUBLIC HEARING(S)

1. Z-22-0004 and SUP-22-0026. 8290 Richmond Road Hankins-Dunn Rezoning and Residential Cluster Development
2. SUP-23-0027. 118 Winston Drive Short Term Rental
3. ORD-22-0001. Amendments for Scenic Roadway Protection
4. Comprehensive Plan Amendment: Community Character Corridor and Short-Term Rental Development Standards Revision

G. PLANNING COMMISSION CONSIDERATIONS

1. Yarmouth Creek Watershed Management Plan Update

H. PLANNING DIRECTOR'S REPORT

1. Planning Director's Report - November 2023

I. PLANNING COMMISSION DISCUSSION AND REQUESTS

J. ADJOURNMENT

MINUTES
JAMES CITY COUNTY PLANNING COMMISSION
REGULAR MEETING
COUNTY GOVERNMENT CENTER BOARD ROOM
101 MOUNTS BAY ROAD, WILLIAMSBURG, VA 23185
October 4, 2023
6:00 PM

A. CALL TO ORDER

Mr. Polster called the meeting to order at 6 p.m.

B. ROLL CALL

Planning Commissioners Present:

Frank Polster
Rich Krapf
Tim O'Connor
Jack Haldeman
Rob Rose
Barbara Null
Stephen Rodgers

Staff Present:

Susan Istenes, Director of Planning
Liz Parman, Deputy County Attorney
Paxton Condon, Deputy Zoning Administrator/Senior Planner
Andrea Case, Community Development Assistant

C. PUBLIC COMMENT

Mr. Polster opened Public Comment.

As no one wished to speak, Mr. Polster closed Public Comment.

D. REPORTS OF THE COMMISSION

Mr. Polster noted there were no reports for the month.

E. CONSENT AGENDA

1. Minutes of the September 6, 2023 Regular Meeting

Mr. Krapf made a motion to approve the Consent Agenda.

On a voice vote, the Commission approved the Consent Agenda. (7-0)

F. PUBLIC HEARING(S)

1. SUP-22-0017, Z-22-0002, & MP-22-0002, 4399 John Tyler Highway Five Forks Self Storage Facility

Ms. Paxton Condon, Deputy Zoning Administrator/Senior Planner, stated that Mr. Greg Davis, Kaufman & Canoles, P.C., had applied on behalf of Stein Investment Group to amend the adopted Master Plan and proffers for Governors Grove at Five Forks and a Special Use Permit (SUP) for a self-storage facility at 4399 John Tyler Highway. She stated the details regarding the use of a boundary line adjustment at 4365 John Tyler Highway for the use of stormwater facilities.

Ms. Condon noted the details for the acreage and zoning district, adding the properties were inside the Primary Service Area (PSA) and currently undeveloped. She stated the proposed facility would be three stories, approximately 100,000 square feet, and include 700 storage units.

Ms. Condon stated the proposed application included an entrance from the parcel to John Tyler Highway with a center left-turn lane addition onto John Tyler Highway. She noted staff found the proposal to be consistent with the 2045 Comprehensive Plan overall and recommended approval. Ms. Condon further noted the applicant was also available for questions.

Mr. Haldeman asked if one or two buildings were included in the application.

Ms. Condon stated one.

Mr. Krapf referenced a staff report point noting the project could serve as a primary commercial use for surrounding neighborhoods. He asked for elaboration as he had not envisioned a self-storage facility as a primary commercial use.

Ms. Condon noted on the original 2005 master plan that parcel had been designated for commercial use.

Mr. Krapf noted Condition No. 3 and his earlier email for insertion of an additional sentence pending no objection from his fellow Commissioners nor the applicant. He referenced supplemental plantings with the insertion to include a minimum 50% of additional plantings to include eastern Virginia native species. He asked if that additional sentence was acceptable to staff.

Ms. Condon confirmed yes.

Mr. Polster asked if the applicant was also agreeable to the addition.

Mr. Davis confirmed yes.

Mr. Polster opened the Public Hearing as the Commission had no additional questions or disclosures.

Mr. Greg Davis, Kaufman & Canoles, P.C., 4801 Courthouse Street, Suite 300, addressed the Board as representative for the developer, Stein Investment Group. Mr. Davis highlighted details of the project in a PowerPoint presentation. He noted the development team representatives present included Mr. Daniel Ginburg, Mr. Jason Linscott, and Mr. Jeff Stein. Mr. Davis stated he was also joined by Mr. Benny Zhang, his colleague at Kaufman & Canoles, P.C.

Mr. Davis continued the presentation highlighting Stein Investment Group and its projects throughout Virginia. He noted Stein Investment Group's regional locations and proximity to residential areas. Mr. Davis showed various conceptual views of the project and commented on

the architectural elevation renderings for conformance with the Primary Principles for the Five Forks Area.

Mr. Davis stated the Commission's Agenda Packet contained the drawings for the center turn lane off Route 5. He noted the evolution of self-storage facilities. Mr. Davis referenced Mr. Krapf's comment on commercial use. He noted Stein Investment Group analyzed these facilities as a local, neighborhood commercial use and not a destination use similar to Target. Mr. Davis identified statistics on the low-intensity use of the facility in relation to vehicle trips, County services, and other factors.

Mr. Davis noted compliance with the additional wording as suggested by Mr. Krapf. He addressed the reference to a more intensive use for the facility, adding further discussion with staff indicated agreement on that point. Mr. Davis noted the process for the conceptual review application had begun in March 2022.

Mr. O'Connor asked Mr. Davis about Exhibit No. 2 of the Traffic Impact Analysis and the depiction of two facilities and if only one 100,000-square-foot building was included or representation of potential redevelopment off Ironbound Road.

Mr. Davis confirmed only one building. He noted initially two buildings had been conceived, but due to changes regarding Ironbound Road, the master plan was revised to include one building.

Mr. O'Connor thanked Mr. Davis for the clarification.

Mr. Polster closed the Public Hearing as there were no additional speakers.

Mr. Rodgers, Berkeley District representative, noted many positive aspects of this project. He stated his support of the application.

Ms. Null commented on the attractiveness of the facility and the buffering. She commented on positive aspects and thought the project was very worthwhile.

Mr. O'Connor commented the concept was great, but not the right location. He referenced the 2045 Comprehensive Plan and use of higher density areas within the PSA. Mr. O'Connor noted opportunities for Mixed Use near schools with walkable environments. He referenced uses of the surrounding area with larger commercial uses moving into the residential area. Mr. O'Connor noted as the application stood that he was not in support of it.

Mr. Krapf noted his deliberation on the pros and cons of this application. He added a positive aspect was the commercial component to a residential area and other factors. Mr. Krapf noted concern at the original master plan which presented a 25,000-square-foot building to a revised plan with a 100,000-square-foot commercial building. He addressed his initial reaction to intensity versus density in relation to the Comprehensive Plan. Mr. Krapf noted while the square footage was increased, he felt the traffic was still negligible. He added he would likely support the application but acknowledged the validity of some of Mr. O'Connor's points.

Mr. Polster addressed the amount of open space that would buffer the project from nearby Clara Byrd Baker Elementary School. He also noted the physical separation from proximity to the Five Forks Desalination Plant. Mr. Polster referenced the long-standing desire to connect sidewalks along the road to the school, adding this project would accomplish that connection. He added the decreased growth intensity and traffic to this area were considerations and he stated his support of the application.

Dr. Rose referenced the sidewalk connections and asked if that slide could be shown. He questioned if the sidewalks stopped at property boundaries and if they were connectors.

Mr. Polster clarified he was referencing the connection heading toward Clara Byrd Baker Elementary School. He added there was no connection to the 7-Eleven store.

On a roll call vote, the Commission voted to recommend approval of the SUP, rezoning, and master plan amendment with attached proffers and modification to the wording as suggested by Mr. Krapf. (6-1)

G. PLANNING COMMISSION CONSIDERATIONS

Mr. Polster noted Ms. Null would serve as Planning Commission representative at the Board of Supervisors' October 10, 2023, meeting.

H. PLANNING DIRECTOR'S REPORT

1. Planning Director's Report - October 2023

Ms. Istenes stated she had no additions to the report. She extended congratulations to Ms. Terry Costello, winner of the 2023 Service Award at the Annual Virginia Association of Zoning Officials (VAZO), for her service as Chair of the Education Committee.

Mr. Polster noted a busy calendar and asked about plans for October Policy Committee and Development Review Committee meetings.

Ms. Istenes replied she did not have it before her but would get that information.

I. PLANNING COMMISSION DISCUSSION AND REQUESTS

Mr. Polster asked if any Commissioner had any comments.

Mr. Krapf noted the frequent question that arose regarding solar panels and buffering. He referenced the earlier amendment to Condition No. 3 and asked if particular verbiage could be incorporated addressing native grasses and pollinators. Mr. Krapf stated a 50% native eastern Virginia buffer be incorporated for buffering conditions.

Mr. Polster noted that may be part of the process incorporated by Mr. Jose Ribeiro, Senior Planner II/Landscape Planner, but it becomes less evident as cases are presented.

Ms. Istenes noted she would speak with Mr. Paul Holt, Director of Community Development, to address that point.

Mr. O'Connor inquired if the County Code required pollinators for solar panels.

Mr. Polster noted no Ordinance had been received yet.

Mr. Krapf stated the State Code required pollinators.

Mr. Polster noted direction from the Department of Environmental Quality (DEQ) would not be available until December 2024. He further noted the DEQ's recommendations in reports supported the pollinator requirement.

Discussion ensued.

Dr. Rose questioned if the 50% native vegetated buffers were monitored.

The Board members concurred on that point.

J. ADJOURNMENT

Ms. Null made a motion to adjourn.

The meeting was adjourned at approximately 6:31 p.m.

Paul D. Holt, III, Secretary

Frank Polster, Chair

**REZONING-22-0004 and SUP-22-0026. 8290 Richmond Road Hankins-Dunn Rezoning and Residential Cluster Development
Staff Report for the November 1, 2023, Planning Commission Public Hearing**

SUMMARY FACTS

Applicants: Mr. Ryan Stephenson, AES Consulting Engineers, and Mr. Phillip Martin and Mr. Hans Klinger, HHHunt Homes

Landowners: Mr. George M. Hankins and Ms. Sharon H. Dunn

Proposal: Rezoning of approximately 220 acres from A-1, General Agricultural to R-2, General Residential, Cluster Overlay with Proffers, to allow for up to 582 residential dwellings consisting of 443 single-family detached units and 139 single-family attached units.

Accompanying this rezoning is a request for a Special Use Permit (SUP) to allow for a density of up to 3.74 dwelling units per acre.

Location: 8290 Richmond Road

Tax Map/Parcel No.: 1240100011

Current Zoning: A-1, General Agricultural

Proposed Zoning: R-2, General Residential, Cluster Overlay with Proffers

Project Acreage: +/- 220.03 acres

Comprehensive Plan: Low Density Residential

Primary Service Area: Inside

Staff Contact: Terry Costello, Senior Planner

PUBLIC HEARING DATES

Planning Commission: September 6, 2023, 6:00 p.m. (Deferred)

Planning Commission: November 1, 2023, 6:00 p.m.

Board of Supervisors: December 12, 2023, 5:00 p.m. (Tentative)

SUMMARY STAFF RECOMMENDATION

At its meeting on September 6, 2023, the Planning Commission deferred action on this item until November 1, 2023, pursuant to the applicants' request. Staff has not received any updates or changes since the September 6, 2023, Planning Commission meeting. Staff has received a request from the applicants to defer this application to the December 6, 2023, Planning Commission meeting. Per Section 24-13 of the Zoning Ordinance, the Planning Commission must report within 100 days after this project has been referred to the Planning Commission, or the application will be deemed approved. Therefore, this application should not be extended beyond the December 6, 2023, Planning Commission date.

However, if the Planning Commission wishes to consider this application, staff continues to recommend denial of the rezoning and SUP applications. Should the Planning Commission recommend approval, proposed proffers and SUP conditions are included for review.

TC/md
RZ-SUPRRHnksDunnDef

This staff report is prepared by the James City County Planning Division to provide information to the Planning Commission and Board of Supervisors to assist them in making a recommendation on this application. It may be useful to members of the general public interested in this application.

**REZONING-22-0004 and SUP-22-0026. 8290 Richmond Road Hankins-Dunn Rezoning and Residential Cluster Development
Staff Report for the November 1, 2023, Planning Commission Public Hearing**

Attachments:

1. Staff Report, Planning Commission Meeting, September 6, 2023
2. Proposed SUP Conditions
3. Proposed Proffers
4. Location Map
5. Proposed Master Plan
6. Exhibit - Habitat Core
7. Exhibit - Prime Farmland
8. Proposed Design Guidelines
9. Community Impact Statement
10. Traffic Impact Analysis
11. Fiscal Impact Analysis
12. Mature Forest Report
13. Public Comment

This staff report is prepared by the James City County Planning Division to provide information to the Planning Commission and Board of Supervisors to assist them in making a recommendation on this application. It may be useful to members of the general public interested in this application.

REZONING-22-0004 and SUP-22-0026. 8290 Richmond Road Hankins-Dunn Rezoning and Residential Cluster Development
Staff Report for the September 6, 2023, Planning Commission Public Hearing

SUMMARY FACTS

Applicants: Mr. Ryan Stephenson, AES Consulting Engineers, Mr. Phillip Martin, HHHunt Homes, Mr. Hans Klinger, HHHunt Homes

Landowners: Mr. George M. Hankins and Ms. Sharon H. Dunn

Proposal: Rezoning of approximately 220 acres from A-1, General Agricultural to R-2, General Residential, Cluster Overlay with Proffers, to allow for up to 582 residential dwellings consisting of 443 single-family detached units and 139 single-family attached units.

Accompanying this rezoning is a request for a Special Use Permit (SUP) to allow for a density of up to 3.74 dwelling units per acre.

Location: 8290 Richmond Road

Tax Map/Parcel No.: 1240100011

Current Zoning: A-1, General Agricultural

Proposed Zoning: R-2, General Residential, Cluster Overlay, with Proffers

Project Acreage: +/- 220.03 acres

Comprehensive Plan: Low Density Residential

Primary Service Area: Inside (PSA)

Staff Contact: Terry Costello, Senior Planner

PUBLIC HEARING DATES

Planning Commission: September 6, 2023, 6:00 p.m.

Board of Supervisors: October 10, 2023, 5:00 p.m. (Tentative)

FACTORS FAVORABLE

1. Staff finds the proposed primary use for this rezoning, and those requested by the SUP, align with the recommended primary uses for the Low Density Designation in the adopted 2045 Comprehensive Plan.
2. Staff finds the proposal to be consistent with some recommendations in the adopted 2045 Comprehensive Plan.
3. The applicants have proffered transportation improvements to the entrance of the proposed development and its intersection with Richmond Road. Pedestrian connections to the adjacent White Hall development and Stonehouse Elementary School, and sidewalks on both sides of the internal public rights-of-way are also proffered.
4. Proffered recreational amenities are consistent with the James City County Parks and Recreation Master Plan.
5. The applicants have proffered a 150-foot Community Character Corridor (CCC) buffer, a 150-foot naturally forested buffer, and a five-acre preserved prime agricultural land to be set aside for community gardens.
6. The proposal requires a minimum of six density points, and the applicant has offered six-and-a-half density points.
7. See Impact Analysis on Pages 10-13.
8. See Comprehensive Plan Analysis on Pages 14-18.

This staff report is prepared by the James City County Planning Division to provide information to the Planning Commission and Board of Supervisors to assist them in making a recommendation on this application. It may be useful to members of the general public interested in this application.

REZONING-22-0004 and SUP-22-0026. 8290 Richmond Road Hankins-Dunn Rezoning and Residential Cluster Development

Staff Report for the September 6, 2023, Planning Commission Public Hearing

FACTORS UNFAVORABLE

1. The application does not fully meet all the required density bonus points. See Bonus Item Option C on Page 3.
2. The proposal does not pass the Adequate Public Schools Facilities Test. See Page 6.
3. The proposal does not pass the Adequate Transportation Facilities Test. See Pages 5-6.
4. The cash contributions for community impacts that are proffered are not consistent with the information generated from the County’s Fiscal Impact Model. See Pages 15-17.
5. This proposal does not align with the recommendations on workforce and affordable housing as stated in the 2045 Comprehensive Plan. See Page 4.
6. See Impact Analysis on Pages 10-13.
7. See Comprehensive Plan Analysis on Pages 14-18.

SUMMARY STAFF RECOMMENDATION

Staff recommends that the Planning Commission recommend denial of the proposed rezoning and SUP application. Should the Planning Commission recommend approval, proposed proffers and SUP conditions are included for review.

PROJECT DESCRIPTION

Mr. Ryan Stephenson on behalf of Mr. George Hankins and Ms. Sharon Dunn, has applied to rezone approximately 220.03 acres of land located at 8290 Richmond Road from A-1, General Agricultural, to R-2, General Residential, Cluster Overlay, with Proffers. An SUP

is required for a cluster development seeking more than one unit per acre but less than four units per acre. This application includes the following:

- The proposal is for 582 residential dwellings, with 443 single-family detached units and 139 multi-family units (townhomes).
- The parcel has approximately 61.26 acres of nondevelopable area which includes 58.76 acres of Resource Protection Area (RPA) and two-and-a-half acres of steep slopes (outside the RPA). The net developable area of the parcel is approximately 155.77 acres.
- This project proposes a density of up to 3.74 units per acre. In accordance with Section 24-549(a) of the Zoning Ordinance, the Board of Supervisors may grant a SUP for residential cluster developments of more than two units per acre, but no more than four units per acre.
- The applicants are proposing pedestrian connections to the White Hall Subdivision and Stonehouse Elementary School. Pedestrian accommodations will be provided on both sides of each public right-of-way located on the property. In accordance with the Pedestrian Accommodation Master Plan, the project will have a multiuse path along the frontage on Richmond Road.
- There is a 150-foot CCC buffer that is proposed along Richmond Road. A minimum 150-foot buffer of natural forest adjacent to the CCC buffer on the southwestern portion of the property is shown on the Master Plan.
- There is approximately a two-acre area designated on the Master Plan preserved Hardwood Forestland. No less than five acres is proposed to be preserved as Prime Agricultural Land adjacent to the CCC buffer on the northwestern portion of the property as shown on the Master Plan.

This staff report is prepared by the James City County Planning Division to provide information to the Planning Commission and Board of Supervisors to assist them in making a recommendation on this application. It may be useful to members of the general public interested in this application.

REZONING-22-0004 and SUP-22-0026. 8290 Richmond Road Hankins-Dunn Rezoning and Residential Cluster Development

Staff Report for the September 6, 2023, Planning Commission Public Hearing

- The proposal meets the Parks and Recreation Master Plan guidelines by providing one playground, 2.05 acres of park land, 2,800 feet of biking/jogging trails, a 25-meter competition pool, and one multiuse field.
- The proposal dedicates up to three acres (along School Lane) for future use by the Williamsburg-James City County (WJCC) School Division.
- At least 10% of the dwelling units permitted on the property shall be offered for sale at prices that are targeted at households earning 80% to 120% of the Area Median Income (AMI).
- Road improvements are proposed at the entrance on Route 60 and are as follows:
 - One southbound left-turn lane
 - Northbound right-turn lane on Route 60
 - Two exit lanes from the property
- The applicants have proposed cash contributions in order to mitigate impacts on the County from the development. The applicants have also proffered additional cash contributions per lot for the restoration of deteriorated streams on the property.

Residential Cluster Density Bonuses

The Residential Cluster Overlay District is intended “to achieve innovative and quality designs of residential developments above one dwelling unit per acre that provide avenues for affordable and workforce housing, minimize environmental impacts, provide for usable and meaningful open space, and provide recreation amenities within a more practical and efficient development.” Further, to achieve densities greater than three units per acre, it is expected that the development will provide community benefits such as “mixed-cost housing, affordable and workforce housing, unusual

environmental protection or development that adheres to the principles of open space development design.”

The development is required to have at least 35% of the developable acreage as open space and six density bonus points. The Master Plan shows that the developable acreage set aside as open space is approximately 55.26 acres, which is 35.5% of the total acreage. The applicants have offered six-and-a-half density points. The density bonus points are listed as follows, with staff comments in italics.

- Bonus Item Option C: Undertaking or funding a stream restoration project or stormwater management facility retrofit within the same subwatershed, as identified by an approved watershed management plan or by the Stormwater and Resource Protection (SRP) Division. (Bonus Point 1.5)

Proffer No. 13 offers an additional \$500 per lot to be paid to the County for use in stream restoration efforts located within the construction easement as shown on the Master Plan. Staff finds that this proffer does not fully meet the intent of the bonus item to undertake or fully fund a project. There is no mechanism stated in the proffer that the amount would be adjusted each year due to inflation. The total collected would be \$291,000 and it would be over several years. Staff finds that the application does not fully meet the intent of this bonus item.

- Bonus Item Option D: Meeting a majority of items (a)-(d) in Section 24-551. Open space development design elements, as determined by the Planning Director. (Bonus Point 1.5)

The layout of the development is of a compact design with pedestrian access on both sides. The area of development is mostly contained with previously farmed fields, limiting clearing of existing forest lands. The development will have a mixture of townhomes and single-family detached units with a variety of lot sizes. Some of the units front on open space and there is access

This staff report is prepared by the James City County Planning Division to provide information to the Planning Commission and Board of Supervisors to assist them in making a recommendation on this application. It may be useful to members of the general public interested in this application.

REZONING-22-0004 and SUP-22-0026. 8290 Richmond Road Hankins-Dunn Rezoning and Residential Cluster Development

Staff Report for the September 6, 2023, Planning Commission Public Hearing

to the open space via sidewalks and trails. Credit has been given for this density bonus point.

- Bonus Item Option H: Preserving a single area of healthy, mature, mixed hardwood forestland at least two acres in size within the developable portion of the site. (Bonus Point 1)

There is an area on the eastern portion of the property that borders Williamsburg Christian Academy that is noted on the Master Plan as the “Mature Woodland Preserve”. The applicants have been provided documentation by a Certified Arborist that the area conforms to these conditions. A Protective Deed has been proffered for this area to restrict the cutting of trees. Credit has been given for this density bonus.

- Bonus Point Option I: Retaining a single area of agricultural land designated on the United States (U.S.) Department of Agriculture (USDA) maps to be of prime or statewide importance that is at least five acres in size. (Bonus Point 1)

The Master Plan includes an area towards the entrance of the property labeled “Community Garden Area”. This area will be restricted to agricultural uses only for the residents. A Protective Deed has been proffered for this area. Credit has been given for this density bonus.

- Bonus Point Option K: Providing pedestrian accommodations on one side of all internal roadways, where this would exceed the requirements set forth in Section 24-35 of the Zoning Ordinance. (Bonus Point 1)

Sidewalks will be provided on both sides of all public rights-of-way. Credit has been given for this density bonus.

- Bonus Point Option L: Developing binding design guidelines for the development that include superior architectural and design

standards. Design guidelines shall be reviewed and approved by the Planning Director. (Bonus Point .5)

The design guidelines submitted have been reviewed and approved by the Planning Director. Credit has been given for this density bonus.

No density bonus is allowed for improvement, designs, or actions that are otherwise required by County, State, or Federal Law.

Housing Affordability Analysis

The 2045 Comprehensive Plan encourages inclusion of affordable and workforce units within new residential developments. Per the Comprehensive Plan recommendations, at least 20% of the development’s proposed new dwellings should be offered for sale at prices that are targeted at workers with incomes up to 80% of AMI level as determined by the U.S. Department of Housing and Urban Development. The applicants have proffered that at least 10% (up to 59) of the dwelling units shall be offered for sale at prices that are targeted at households earning 80% to 120% of the AMI. As written, the proffer would allow all of these units to be offered for sale at prices targeted to households earning 120% of the AMI. The table below provides the sales prices affordable at distinct percentages of AMI, which is currently \$100,500.

Affordable Sales Price by AMI %

| % AMI | Upper limit of the sales price affordable to this AMI level (2023 Prices) |
|-------|---|
| 30% | \$108,250 |
| 60% | \$213,900 |
| 80% | \$284,250 |
| 100% | \$354,800 |
| 120% | \$425,250 |

This staff report is prepared by the James City County Planning Division to provide information to the Planning Commission and Board of Supervisors to assist them in making a recommendation on this application. It may be useful to members of the general public interested in this application.

REZONING-22-0004 and SUP-22-0026. 8290 Richmond Road Hankins-Dunn Rezoning and Residential Cluster Development

Staff Report for the September 6, 2023, Planning Commission Public Hearing

Public Transportation: Vehicular

The scale of this proposal requires the submittal of a Transportation Impact Analysis (TIA). The TIA examines the existing conditions of vehicular traffic, including Level of Service (LOS), with a focus on the roads and intersections serving and impacted by the proposed development. The study projects that the development would generate 482 P.M. peak hour trips and approximately 4,977 daily trips.

The property fronts on Richmond Road which is a four-lane road with a median in this area. There will be a single entrance to the development at the existing crossover at the Bicast Publishing Company site. The entrance road will be a public right-of-way. The segment of Richmond Road along this development is currently operating at a LOS A-C and is anticipated to remain operating at these acceptable LOS through 2045.

The TIA analyzed the following intersections with varying degrees:

- Route 60 Richmond Road/Route 30 Barhamsville Road/Route 30 Rochambeau Drive
- Route 60 Richmond Road/VCA Andersons Corner Animal Hospital/Hickory Neck Boulevard
- Route 60 Richmond Road/Bicast Publishing Company
- Route 30 Rochambeau Drive/Preston Lane/Geddy Terrace
- Route 30 Rochambeau Drive/Hickory Neck Boulevard

The study included the following improvements to the existing crossover/proposed subdivision access intersection:

- One southbound left-turn lane on Route 60
- One northbound right-turn lane on Route 60
- Two exit lanes on Hankins-Dunn access: shared left/through and right-turn

The County adopted the Adequate Transportation Facilities Test by resolution on August 14, 2018. This policy requires a proposed SUP or rezoning to be tested during the application process to ensure that transportation facilities are adequate to mitigate traffic impacts.

Transportation improvements proffered include the entrance improvements to the development. There are unacceptable LOS that may occur at full buildout with no mitigating improvements proposed. They are as follows:

- The LOS for the P.M. peak hour westbound left-turn movement out of the White Hall development drops from a LOS “D” to a LOS “E”. The LOS for the P.M. peak hour eastbound left-turn movement drops from an acceptable LOS “C” to a LOS “D”.
- The P.M. peak hour eastbound left/right-turn from the Bicast Publishing Company site drops from an acceptable LOS “B” under existing conditions to a LOS “E” at buildout with the Stonehouse development and the Hazelwood Project included, (although this only affects 10 vehicles in the P.M. peak hour.
- The P.M. peak hour westbound left-turn out of the proposed Hankin-Dunn development will experience a LOS “F” from the onset.

The Virginia Department of Transportation (VDOT) has also expressed concerns over some of the minor street left-turning movements. However, as stated in their comments, this analysis does not consider that vehicles are likely to use the medians along Richmond Road to make two-stage turns - from the minor road to the median, and then from the median to Richmond Road. Based on a quick analysis, VDOT finds that this would result in a significant amount of this delay being reduced.

The applicants have stated in their response to the County and VDOT concerns that these are minor street lefts/throughs that inherently have

REZONING-22-0004 and SUP-22-0026. 8290 Richmond Road Hankins-Dunn Rezoning and Residential Cluster Development

Staff Report for the September 6, 2023, Planning Commission Public Hearing

increasing delay/decreasing LOS with increasing major street traffic. The alternative for minor street left/throughs on a median highway like Richmond Road is to divert on a right-turn and make a U-turn at the next crossover and thus avoid stopped delay.

However, staff find that these impacts that are stated in the TIA are not mitigated for the proposed development. Therefore, this proposal does not pass the Adequate Transportation Facilities Test.

Schools

The County adopted the Adequate Public Schools Facilities Test by resolution on June 23, 1998. A proposed rezoning or SUP application for residential development is required to show that the schools which would serve the future development currently have adequate design capacity to accommodate the existing student population plus the additional schoolchildren generated by the development. The schools shall be deemed adequate if the projected student population does not exceed 100% of the design capacity.

However, if the affected public schools currently exceed design capacity, but the schools’ student population will be brought under design capacity within three years of the time of the application’s review through either physical improvements programmed in the Capital Improvements Program (CIP), and/or through a redistricting plan that was approved by the School prior to application, then the application will be deemed to have passed the test.

The proposed development is anticipated to generate an additional 186 students per the estimate in the applicant’s CIS (see Page 10 in Attachment No. 8). As illustrated in the following table, the 186 students projected from the development would not cause the enrollment levels for Toano Middle or Warhill High Schools to exceed effective capacity. However, it would contribute to an enrollment level exceeding the effective capacity at Stonehouse Elementary School. The applicants have stated in the CIS, that with this extra capacity

within the entire Elementary School System, the addition of 82 elementary school students from this development keeps the overall elementary school capacity under 100%.

There are no current CIP applications for an expansion to Stonehouse Elementary School nor is there a redistricting plan. Thus, this proposal does not pass the Adequate Public Schools Facilities Test.

Student Enrollment and School Capacity, WJCC Schools 2022

| <i>School</i> | <i>Effective Capacity</i> | <i>Enrollment 2022-23</i> | <i>Projected Students Generated</i> | <i>Enrollment + Projected Students</i> |
|------------------------------|---------------------------|---------------------------|-------------------------------------|--|
| Stonehouse Elementary School | 747 | 802 | +82 | 884 |
| Toano Middle School | 790 | 678 | +43 | 721 |
| Warhill High School | 1,441 | 1,325 | +61 | 1,386 |

Parks and Recreation

This proposal includes up to 582 residential units. As illustrated in the following table on Page 7, the applicants are proffering to meet the development guidelines provided within the James City County Parks and Recreation Development Guidelines.

This staff report is prepared by the James City County Planning Division to provide information to the Planning Commission and Board of Supervisors to assist them in making a recommendation on this application. It may be useful to members of the general public interested in this application.

REZONING-22-0004 and SUP-22-0026. 8290 Richmond Road Hankins-Dunn Rezoning and Residential Cluster Development

Staff Report for the September 6, 2023, Planning Commission Public Hearing

James City County Parks and Recreation Development Guidelines Comparison

| <i>Minimum Requirement (units)</i> | <i>Minimum Required</i> | <i>Proffered or Shown on Master Plan</i> |
|------------------------------------|-------------------------|--|
| Parkland Acreage | 2.04 acres | 2.05 acres |
| Biking/Jogging Trails | 2,798.07 square feet. | 2,800 square feet |
| Playground | 1 | 1 |
| Sport Court or Pool | 1 | 1 Pool |
| Multiuse Field | 1 | 1 |

Proffers

Voluntary proffers have been offered by the applicants to mitigate the development’s impact on County resources. Staff has reviewed these proffers for enforceability and for their effectiveness in mitigating the impacts. Comments are provided in italics.

- Recitals.

There is no reference to the applicable section of the County Code.

- Proffer No. 1 Conceptual Master Plan.

There is no reference to the applicable section of the Zoning Ordinance.

- Proffer No. 4 Cash Contributions for Community Impacts. A contribution of \$9,046 for each dwelling unit other than Workforce units, and a contribution of \$6,332.20 for each Workforce unit shall be made to the County.

In alignment with the Board of Supervisors resolution directing staff to use the County’s Fiscal Impact Model, information provided by the applicants was used to analyze the fiscal impacts of this development. Staff was then able to run the model to determine the capital impacts per unit. The amount for single-family detached is \$25,061.35 and \$14,202.08 for single-family attached. Staff finds that the amount proffered by the applicants does not fully mitigate the fiscal impacts of the proposed development.

- Proffer No. 5 Mixed Cost Housing Units. At least 10% of the dwelling units permitted on the Property shall be offered for sale at prices that are targeted at households earning 80% to 120% of AMI.

There is no documentation offered that would confirm that this proffer would be met; therefore, this proffer does not fully meet the intent of the Cluster Overlay District by offering affordable workforce and mixed-income housing.

- Proffer No. 9 Community Character Corridor Buffer. There shall be a minimum of 150-foot-wide CCC buffer along Route 60 frontage of the Property.

There is no information provided as to whether the buffer would be bonded, and/or when the buffer would be installed. This proffer does not fully meet the intent of the Cluster Overlay District by preserving vegetative buffers along roads and scenic views.

- Proffer No. 10 Naturally Forested Buffer. There shall be a minimum 150-foot buffer of natural forest adjacent to the CCC buffer on the southwestern portion of the property shown on the Master Plan.

This staff report is prepared by the James City County Planning Division to provide information to the Planning Commission and Board of Supervisors to assist them in making a recommendation on this application. It may be useful to members of the general public interested in this application.

REZONING-22-0004 and SUP-22-0026. 8290 Richmond Road Hankins-Dunn Rezoning and Residential Cluster Development

Staff Report for the September 6, 2023, Planning Commission Public Hearing

There is no information provided as to whether the buffer would be bonded, and/or when the buffer would be installed. This proffer does not fully meet the intent of the Cluster Overlay District by preserving vegetative buffers along roads and scenic views.

- Proffer No. 13 Stream Restoration Funding. An additional \$500 per lot shall be paid to the County for use in stream restoration efforts.

This proffer is linked to Density Bonus Item Option C: Undertaking or funding a stream restoration project. The intent of this bonus item is that a project would be funded or completed by the applicants. This proffer as stated is intended to assist in the funding. There is also no mechanism suggested that this dollar amount would be adjusted each year to reflect any increase or decrease in the Marshall and Swift Building Cost Index. The amount collected would not be enough to completely fund or undertake a project, therefore this proffer does not fully meet the requirement for the density bonus.

- Proffer No. 15 Pedestrian Connections to Adjacent Properties. The Owner shall provide pedestrian connections between the property and the adjacent properties.

No information is provided as to when the plan would be required to be submitted to the Director of Planning for approval, or when these connections would be installed. This proffer does not fully meet the intent of the Cluster Overlay District by designing efficient pedestrian circulation to include trail systems.

- Proffer No. 16 Streetscape Guidelines. The Owner shall provide and install streetscape improvements.

There is no information provided about whether these improvements will be bonded, or when they will be installed.

- Proffer No. 17 Recreation. The following recreational facilities shall be provided at a minimum: one playground, 2.05 acres of park land, 2,800 feet of biking/jogging trails, one 25-meter competition pool and one multiuse rectangular field.

The proffer states that the location of the recreational facilities is to be approved by the Development Review Committee. However, the amenities are shown on the Master Plan and are typically approved by the Director of Planning. There is no information provided as to when the plan needs to be submitted for these amenities, if the amenities will be bonded, and when the amenities will be installed.

- Proffer No. 18 Sidewalks. There shall be sidewalks installed on both sides of each public street. The Owner shall construct a hard surface multiuse trail along Route 60.

There is no information provided as to the sidewalks being shown on a plan of development, if bonding will be required, or when the sidewalks will be installed.

- Proffer No. 19 Curb and Gutter. Streets within the property shall be constructed with curb and gutter, provided; however, this requirement may be waived or modified along those segments of street where structures are not planned.

There is no information given as to who may waive the requirement.

- Proffer No. 21 Dedication of Land to WJCC Schools. The Owner shall convey up to three acres of land in the location generally shown on the Master Plan to WJCC School Board to be used for site and/or building improvements.

It has not yet been determined if the three acres are developable. If the three acres are developable, this area could be used for

REZONING-22-0004 and SUP-22-0026. 8290 Richmond Road Hankins-Dunn Rezoning and Residential Cluster Development

Staff Report for the September 6, 2023, Planning Commission Public Hearing

teacher parking, parent pick-up, or the relocation of the bus loop and possible expansion of Stonehouse Elementary School. While the WJCC School System is aware of this proposed proffer, to date, they have not indicated a desire or need for this additional land.

PLANNING AND ZONING HISTORY

The current zoning for the property, A-1, General Agricultural, has been in place since the 1980s. There have been no legislative cases associated with this property.

The property has been owned by the Hankins family and in agricultural use for decades.

SURROUNDING ZONING AND DEVELOPMENT

North: R-2, General Residential Cluster Development
PL, Public Land
B-1, General Business

West: A-1, General Agricultural
B-1, General Business
M-1, Limited Business/Industrial

South: M-2, General Industrial

East: R-1, Limited Residential

The subject property is located south of the White Hall Subdivision and Stonehouse Elementary School, north of Hankins Industrial Park and Jacob’s Industrial Center, abuts the Wellington Subdivision to the east, and abuts Richmond Road to the west.

This staff report is prepared by the James City County Planning Division to provide information to the Planning Commission and Board of Supervisors to assist them in making a recommendation on this application. It may be useful to members of the general public interested in this application.

REZONING-22-0004 and SUP-22-0026. 8290 Richmond Road Hankins-Dunn Rezoning and Residential Cluster Development

Staff Report for the September 6, 2023, Planning Commission Public Hearing

IMPACT ANALYSIS

| Impacts/Potentially Unfavorable Conditions | Status <i>(No Mitigation Required/Mitigated/Not Fully Mitigated)</i> | Considerations/Proposed Mitigation of Potentially Unfavorable Conditions |
|---|--|---|
| Please note the information in the Status column indicated below does not include information from the Financial Impacts of Residential Units section of this staff report. | | |
| <u>Public Transportation: Vehicular</u> | <u>Not Fully Mitigated</u> | - See discussion on Pages 5-6. |
| <u>Public Transportation: Pedestrian/Bicycle</u> | <u>Mitigated</u> | <ul style="list-style-type: none"> - The County’s <i>Pedestrian Accommodation Master Plan</i> requires a multiuse path along Richmond Road. The <i>Regional Bikeways Map</i> proposes a bike lane along the frontage of Richmond Road. - Pursuant to Section 24-35 of the Zoning Ordinance, the proposed improvements shown on these maps are required to be shown on the construction plan and installed at development. <p>Proffers</p> <ul style="list-style-type: none"> - Proffer No. 18 states that a multiuse path along Richmond Road will be constructed in accordance with the Master Plan. |
| <u>Public Safety</u> | <u>No Mitigation Required</u> | <ul style="list-style-type: none"> - Fire Station No. 1 on the corner of Forge Road and Richmond Road serves this area of the County and is approximately 4 miles from this property. - The proposal does not generate impacts that require mitigation to the County’s emergency services or facilities. |
| <u>Public Schools</u> | <u>Not Mitigated</u> | - See discussion on Page 6. |
| <u>Public Parks and Recreation</u> | <u>Mitigated</u> | - See discussion on Pages 6-7. |
| <u>Public Libraries and Cultural Centers</u> | <u>No Mitigation Required</u> | - The proposal does not generate impacts that require mitigation to public libraries or cultural centers. |
| <u>Groundwater and Drinking Water Resources</u> | <u>Mitigated</u> | <ul style="list-style-type: none"> - The James City Service Authority (JCSA) has reviewed and approved this conceptual proposal on the Master Plan, as well as the projected water and sewer flows within the CIS. - JCSA regulations require the submittal of water conservation standards to be reviewed and approved by the JCSA prior to any development on the property. |

This staff report is prepared by the James City County Planning Division to provide information to the Planning Commission and Board of Supervisors to assist them in making a recommendation on this application. It may be useful to members of the general public interested in this application.

REZONING-22-0004 and SUP-22-0026. 8290 Richmond Road Hankins-Dunn Rezoning and Residential Cluster Development

Staff Report for the September 6, 2023, Planning Commission Public Hearing

| Impacts/Potentially Unfavorable Conditions | Status <i>(No Mitigation Required/Mitigated/Not Fully Mitigated)</i> | Considerations/Proposed Mitigation of Potentially Unfavorable Conditions |
|---|---|--|
| Please note the information in the Status column indicated below does not include information from the Financial Impacts of Residential Units section of this staff report. | | |
| | | <p>Conditions</p> <ul style="list-style-type: none"> - Condition No. 2 requires the submittal of an overall master water and sanitary sewer plan for the property, to be reviewed and approved by JCSA prior to any subdivision or development on the property. |
| <p><u>Watersheds, Streams, and Reservoirs</u></p> | <p><u>Mitigated</u></p> | <ul style="list-style-type: none"> - The Master Plan shows a conceptual layout for Stormwater Management Facilities, which includes Best Management Plans. The property is located within the Ware Creek watershed, which does have a currently adopted Watershed Management Plan. - Currently there is some stream deterioration on the northeastern part of the property due to the development of Stonehouse Elementary School. The applicants have submitted proffers granting the County a construction easement as well as contributing to the cost of the project. (This item is included in the Density Points Analysis). <p>Proffers</p> <ul style="list-style-type: none"> - Proffer No. 13 offers \$500 per lot to be collected for use in stream restoration efforts. - Proffer No. 22 dedicates a construction easement for the benefit of the County for the restoration of deteriorated streams as shown on the Master Plan. <p>Proposed SUP Conditions</p> <ul style="list-style-type: none"> - Condition No. 3 requires the submittal of nutrient management plans for each single-family unit and all common areas. |

This staff report is prepared by the James City County Planning Division to provide information to the Planning Commission and Board of Supervisors to assist them in making a recommendation on this application. It may be useful to members of the general public interested in this application.

REZONING-22-0004 and SUP-22-0026. 8290 Richmond Road Hankins-Dunn Rezoning and Residential Cluster Development

Staff Report for the September 6, 2023, Planning Commission Public Hearing

| Impacts/Potentially Unfavorable Conditions | Status <i>(No Mitigation Required/Mitigated/Not Fully Mitigated)</i> | Considerations/Proposed Mitigation of Potentially Unfavorable Conditions |
|---|---|---|
| Please note the information in the Status column indicated below does not include information from the Financial Impacts of Residential Units section of this staff report. | | |
| <u>Cultural/Historic</u> | <u>No Mitigation required</u> | <ul style="list-style-type: none"> - Per the County’s Geographic Information System, this property is identified as a Moderate sensitive area on the James City County archaeological assessment, meaning no archaeological study is required for this application as part of the legislative submittal. Per Section 19-27 of the Subdivision Ordinance, an archaeological study and natural resource inventory will be required at the development plan stage. |
| <u>Nearby and Surrounding Properties</u> | <u>Mitigated</u> | <ul style="list-style-type: none"> - This parcel is surrounded by residential, commercial, and public lands. - This parcel is located adjacent to White Hall Subdivision, Wellington Subdivision, Stonehouse Elementary School, and Hankins Industrial Park and Jacobs Industrial Park. - There is a large area to the south and east that is a RPA which will serve as a large buffer to Hankins and Jacobs Industrial Parks and the Wellington Subdivision. - There will be a large buffer to include the mature woodland preserve adjacent to Williamsburg Christian Academy. - Staff finds this proposal compatible with the character of the existing surrounding development. <p>Proffers</p> <p>Proffer No. 10 offers a minimum 150-foot-wide buffer of natural forest adjacent to the CCC buffer on the southwestern portion of the property as shown on the Master Plan. This will also screen the RV/Boat/Vehicle Storage from Richmond Road.</p> |

This staff report is prepared by the James City County Planning Division to provide information to the Planning Commission and Board of Supervisors to assist them in making a recommendation on this application. It may be useful to members of the general public interested in this application.

REZONING-22-0004 and SUP-22-0026. 8290 Richmond Road Hankins-Dunn Rezoning and Residential Cluster Development

Staff Report for the September 6, 2023, Planning Commission Public Hearing

| Impacts/Potentially Unfavorable Conditions | Status <i>(No Mitigation Required/Mitigated/Not Fully Mitigated)</i> | Considerations/Proposed Mitigation of Potentially Unfavorable Conditions |
|---|---|---|
| Please note the information in the Status column indicated below does not include information from the Financial Impacts of Residential Units section of this staff report. | | |
| <u>Community Character</u> | <u>Mitigated</u> | <ul style="list-style-type: none"> - The applicants have offered design guidelines for all development on the property in accordance with Section 24-549, Density Standards. These guidelines have been reviewed and approved by the Planning Director. <p>Proffers</p> <ul style="list-style-type: none"> - Proffer No. 9 offers a minimum 150-foot-wide CCC buffer along Richmond Road. - Proffer No. 11 offers at a minimum of two acres that shall be designated as preserved hardwood forest as shown on the Master Plan. - Proffer No. 12 preserves no less than five acres designated as Prime Agricultural Land. - Proffer No. 14 requires the installation of landscaping in the median along the Richmond Road frontage to the development. - Proffer No. 15 requires pedestrian connection between the White Hall Development and Stonehouse Elementary School. - Proffer No. 16 provides streetscape improvements in accordance with the County’s Streetscape Guidelines. - Proffer No. 18 provides for sidewalks on both sides of all public rights-of-way. <p>Proposed SUP Conditions</p> <ul style="list-style-type: none"> - Condition No. 4 states that a Design Review Board must be established to enforce the Design Guidelines. |

This staff report is prepared by the James City County Planning Division to provide information to the Planning Commission and Board of Supervisors to assist them in making a recommendation on this application. It may be useful to members of the general public interested in this application.

REZONING-22-0004 and SUP-22-0026. 8290 Richmond Road Hankins-Dunn Rezoning and Residential Cluster Development

Staff Report for the September 6, 2023, Planning Commission Public Hearing

NATURAL AND CULTURAL ASSETS

The site is identified as having natural and cultural assets on the Natural & Cultural Assets Plan maps (and/or other supplemental resources such as Virginia Lands and Energy Navigator (VaLENS) as follows:

| ASSET | PRESENCE | IMPACT |
|---------------------|---|---|
| Habitat Core | -Present on-site (see Attachment No. 5) | -All habitat cores identified in the Natural & Cultural Assets Plan are important ecologically. Of the 1-5 ranking system used in the Plan, the core on this property is ranked in the 2 category (with 1 being the lowest priority). -The portion of this parcel identified as habitat core is approximately 107 acres. This acreage is approximately 35% of the overall 310 acres in this habitat core. -Some of the habitat core acreage is located within the RPA and thus protected. |
| Corridors | Not applicable | Not applicable |
| Agricultural Assets | -Present on site (see Attachment No. 6) | -Approximately 97 acres or 44.1% of the property is rated prime farmland. |

2045 COMPREHENSIVE PLAN

The property is designated Low Density Residential on the adopted 2045 Comprehensive Plan Land Use Map and is adjacent to properties designated as General Industrial to the east and south (Toano Business Center and Hankins Industrial Park), Federal, State, County Land to

the north (Stonehouse Elementary School), and Low Density Residential to the north and west (White Hall, Windsor Ridge, Wellington Subdivisions). The following general guidance is stated for the Low Density Residential Designation:

- Land designated Low Density Residential are “located in the PSA where public services and utilities exist or are expected to be expanded to serve the sites over the next 20 years. The lands have natural characteristics such as terrain and soils suitable for residential development.” Principle uses included single-family and multi-family units, cluster or cottage homes, and recreation areas. Recommended density from one unit per acre up to four units per acre if particular public benefits are provided. These include mixed-cost housing, affordable and workforce housing, enhanced environmental protection, or development that adheres to the principles of open space design.

Staff finds that the proposed primary use is partially consistent with the recommendations for this designation. The applicant has proffered 10% of the units as affordable and mixed-income housing. Staff find that the development adheres to the principles of open space design.

The Comprehensive Plan’s Land Use Development Standards are to be used in conjunction with the land use descriptions when considering any new development. The following residential development standards are applicable for Low Density Residential:

- Permit new development where such developments are compatible with the character of adjoining uses and where the impacts can be adequately addressed.

The proposed development is adjacent to the White Hall Subdivision and Wellington Subdivision. The design guidelines proposed are very similar in nature to those in the White Hall Subdivision.

This staff report is prepared by the James City County Planning Division to provide information to the Planning Commission and Board of Supervisors to assist them in making a recommendation on this application. It may be useful to members of the general public interested in this application.

REZONING-22-0004 and SUP-22-0026. 8290 Richmond Road Hankins-Dunn Rezoning and Residential Cluster Development

Staff Report for the September 6, 2023, Planning Commission Public Hearing

- Locate residential uses immediately adjacent to non-residential, major roads, agricultural and forestal uses, and other conflicting uses only where the conflicts are adequately addressed.

The property is surrounded by a large area of RPA on the eastern and southern portion which will serve as a buffer to Hankins and Jacobs Industrial Parks.

- The timing and density of development will depend on the availability of and adequacy of public services, utilities, and facilities, and the maintenance of an acceptable LOS of roads and other public services.

Some impacts to parks and recreation, JCSA, and SRP have been identified and mitigated, there are other impacts that are not fully mitigated. These include transportation, schools, and fiscal impacts.

- The need for public services and facilities generated by a development should be met or mitigated by that development.

Stonehouse Elementary School is currently over capacity by 55 students. This proposal is projected to add an additional 82 students. The impacts on the schools are not fully mitigated.

- Developing the site in accordance with open space design standards.

The layout of the development is of a compact design with pedestrian access on both sides. The area of development is mostly contained within previously farmed fields, limiting clearing of existing forest lands. The development will have a mixture of townhomes and single-family detached units with a variety of lot sizes. Some of the units are fronted on open space and there is access to the open space via sidewalks and trails. There is a 150-foot-wide community character buffer along

Richmond Road, a 150-foot-wide naturally forested buffer adjacent to the CCC buffer on the southwestern portion of the property, a two-acre mature woodland preserve, and a five-acre preserved agricultural area known as the community garden area on the Master Plan.

- In addition to the open space design standards, the proposal should provide enhanced environmental protection.

There are SUP conditions for water conservation measures and nutrient management plans. The applicants are proffering a preserved Hardwood Forest area, and a 150-foot-wide buffer of natural forest adjacent to the CCC buffer.

- Minimize the impact of development proposals on overall mobility and traffic safety.

There are pedestrian connections proposed to the Whitehall development and Stonehouse Elementary School. There will be sidewalks on both sides of all internal public rights-of-way.

- Affordable workforce housing should be provided in accordance with the Comprehensive Plan, Zoning Ordinance, and any other adopted policies and regulations.

New residential development as stated in the Housing Chapter of the Comprehensive Plan, encourages housing at a range of income levels with at least 20% targeted to workers with incomes up to 80% of AMI. The applicants have proffered 10% of the dwelling units will be offered targeting households earning 80% to 120% of AMI.

Financial Impacts of Residential Units

The 2045 Comprehensive Plan includes Goals, Strategies and Actions (GSA) LU5, which states “continue land use planning and perform

REZONING-22-0004 and SUP-22-0026. 8290 Richmond Road Hankins-Dunn Rezoning and Residential Cluster Development

Staff Report for the September 6, 2023, Planning Commission Public Hearing

development review consistent with the capacity of existing and planned public facilities and services and the County’s ability to provide such facilities and services.” Land Use GSA 5.3 provides guidance for the County to ensure that developments subject to rezoning or special use permit review mitigate their impacts. Information on impacts and the mitigation provided by this application are included below.

In alignment with the Comprehensive Plan, on February 28, 2023, the Board of Supervisors adopted a resolution directing staff to use the County’s Fiscal Impact Model to assess the following for proposed developments:

- The fiscal impact to the County (both operating and capital budget) for the residential and nonresidential components of the project; and
- The incremental capital costs for public facilities for the residential component of the project.

Overall Impact (Capital and Operating)

Per the Fiscal Impact Model, the development is projected to result in a net fiscal impact to the County through the year 2045 that is negative \$5,264,658 (see Attachment 10 for additional details).

Capital Costs

Per the Fiscal Impact Model, the following are projected public facility impacts attributable to the proposed residential component of the project through 2045.

Table 1-Per Unit Fiscal Residential Impacts Information

| Category | Residential Impact | Mitigation through current application |
|-----------------------------|------------------------------------|--|
| Roadways | SFD \$112.79 SFA \$ 86.12 | See Note 1 |
| Parks and Recreation | SFD \$3,795.86 SFA \$2,511.11 | See Note 1 |
| Fire and Emergency Services | SFD \$1,149.45 SFA \$ 760.40 | See Note 1 |
| Police | SFD \$723.49 SFA \$478.62 | See Note 1 |
| Library | SFD \$480.63 SFA \$317.95 | See Note 1 |
| General Government | SFD \$143.22 SFA \$ 94.74 | See Note 1 |
| General Services | SFD \$268.48 SFA \$177.61 | See Note 1 |
| Courts | SFD \$844.93 SFA \$558.96 | See Note 1 |
| Schools | SFD \$17,542.50 SFA \$ 9,216.56 | See Note 1 and 2 |
| TOTAL | SFD \$25,061.35 SFA \$14,202.08 | See Note 1 and 2 |

SFD - Single Family Detached
SFA - Single Family Attached

Note 1: The applicants have proffered cash contributions for community impacts on the County from the physical development and operation of the Property. The proffered amounts are \$9,046 for each dwelling unit on the Property other than Workforce units and a contribution of \$6,332.20 for each Workforce unit shall be made. These amounts are to be adjusted according to the Marshall and Swift Building Costs Index on a yearly basis.

REZONING-22-0004 and SUP-22-0026. 8290 Richmond Road Hankins-Dunn Rezoning and Residential Cluster Development

Staff Report for the September 6, 2023, Planning Commission Public Hearing

Note 2: The applicants have proffered a dedication of up to three acres of land shown on the Master Plan for use by the WJCC Schools. This area can be used for site and/or building improvements to Stonehouse Elementary School.

The applicants have provided a narrative on Pages 14-15 of the Community Impact Statement (Attachment No. 8) further describing the items above.

Overall, staff finds that the application does not fully mitigate the fiscal impacts of the proposed development, and therefore is not consistent with the guidance in the Comprehensive Plan regarding the mitigation of impacts.

Goals, Strategies and Actions

Staff reviewed the application to determine if the proposal aligns with the Comprehensive Plan’s GSAs. The analysis is as follows.

Land Use

- GSA LU4 - Direct growth into designated growth areas in an efficient and low-impact manner by:
 - GSA LU4.2 - Provide for low density and moderate density residential development in appropriate locations inside the PSA and prohibit such development on rural lands outside the PSA.

The proposed development is within the PSA and designated Low Density Residential.

- GSA LU2 - Promote pedestrian, bicycle, and automotive linkages between adjacent land uses where practical.

The proposed development will have a multiuse path along

Richmond Road, sidewalks on both sides of all internal public rights-of-way, and will have pedestrian connections to the White Hall development and Stonehouse Elementary School.

- GSA LU5.3 - Ensure that developments are subject to zoning or special use permit review to mitigate their impacts through the following means:
 - GSA LU5.2.3 - Permit higher densities and more intensive development in accordance with the Future Land Use Map where existing public facilities and services are adequately provided.

Staff finds that while some impacts to parks and recreation, JCSA, and SRP have been identified and mitigated, there are other impacts that are not mitigated. These include transportation, schools, and fiscal impacts.

- GSA LU5.3.1 - Requiring sufficient documentation to determine the impacts of a proposed development.

Staff finds that there are several proffers that are lacking sufficient detail to determine whether the impact will be mitigated. These items include, but are not limited to, timing of installation of improvements, bonding of improvements, and required documentation to verify that the proffers have been completed.

Transportation

- GSA T1.2 – Expect new developments to follow recommended densities, intensities, and development patterns that will maintain an acceptable level of service.

There are some minor street lefts/throughs turns that are projected to have a LOS below an acceptable “C”. There are no

REZONING-22-0004 and SUP-22-0026. 8290 Richmond Road Hankins-Dunn Rezoning and Residential Cluster Development

Staff Report for the September 6, 2023, Planning Commission Public Hearing

improvements proposed to mitigate any of these impacts.

- GSA T1.2.2 - Provide a high degree of interconnectivity within new developments.

There is only one entrance to the property which does not provide any alternative routes for emergency access. There are pedestrian connections to adjacent properties, sidewalks and trails proposed.

Housing

- GSA H2.1 - Guide new developments to incorporate high housing quality and design.

This development provides a range of home types and prices, including open space, recreational amenities, connections between residential developments, trails, and sidewalks.

Community Character

- GSA CC1 - Preserve and enhance entrance corridors and roads that promote the rural, natural, or historic character of the County.

This proposal includes a 150-foot-wide CCC buffer, a 150-foot-wide naturally forested buffer, a community garden area, and a two-acre mature woodland preserve.

- GSA CC3 - Preserve and enhance neighborhood and community appearance.

This proposal has design guidelines that have been reviewed and approved by the Director of Planning. The applicant will install streetscapes in accordance with the County's Streetscape Guidelines policy.

STAFF RECOMMENDATION

Staff recommends that the Planning Commission recommend denial of the proposed rezoning and SUP application. Should the Planning Commission recommend approval of this application, staff has included the proposed proffers and SUP conditions for review.

TC/ap
RZ22-4_SUP22-6HnknsDunn

Attachments:

1. Proposed SUP Conditions
2. Proposed Proffers
3. Location Map
4. Proposed Master Plan
5. Exhibit - Habitat Core
6. Exhibit - Prime Farmland
7. Proposed Design Guidelines
8. Community Impact Statement
9. Traffic Impact Analysis
10. Fiscal Impact Analysis
11. Mature Forest Report
12. Public Input

Proposed conditions for SUP-22-0026 Hankins-Dunn Property

1. This Special Use Permit (the "SUP") shall be valid for the cluster development at a density of 3.74 dwelling units per acre located at 8290 Richmond Road, , and further identified as James City County Real Estate Tax Map No. 1240100011. Development of the Property shall be in accordance with the Master Plan titled: "Hankins-Dunn Property 8290 Richmond Road" and dated October 22, 2022 (the "Master Plan"), with any deviation considered per Section 24-23(a)(2) of the Zoning Ordinance, as amended .
2. Water and Sewer Master Plan. A Water and Sewer Master Plan must be submitted for review and approval by the James City Service Authority Director for the Property prior to the submission of any development plans for the Property.
3. Nutrient Management Plan. The Owner shall develop and implement a turf management plan ("Nutrient Management Plan") for the maintenance of lawns and landscaping on the Property to limit nutrient runoff into Ware Creek and its tributaries from the Property. Nutrient Management Plans shall be done for all single-family detached and attached units, along with all common areas. The Nutrient Management Plan shall be prepared by a landscape architect licensed to practice in Virginia. Each Nutrient Management Plan shall be submitted for review and approval the Stormwater and Resource Protection Director or designee prior to final certificate of occupancy for each residential unit. The Nutrient Management Plan shall include terms permitting enforcement by either the Owners Association or the County.
4. Design Guidelines and Review. The Property shall be developed in accordance with the design standards submitted as "White Hall Design Standards" on August 8, 2023. The Owner shall establish a Design Review Board to review all building plans and building elevations for conformity with the White Hall Design Standards. Once approved, the White Hall Design Standards may not be amended without the approval of the Development Review Committee.
5. Severability. This SUP is not severable. Invalidation of any word, phrase, clause sentence or paragraph shall invalidate the remainder.

3rd Submittal 2023-08-15

Tax Parcel: 1240100011

Prepared By: Vernon M. Geddy, III, Esquire (VSB No: 21902)
Geddy, Harris, Franck & Hickman
1177 Jamestown Road
Williamsburg, VA 2318

PROFFERS

THESE PROFFERS are made this 25th day of August, 2023 by GEORGE M. HANKINS, JR. and SHARON H. DUNN (together with their successors in title and assigns, the "Owner") and HHH LAND, LLC, a Virginia limited liability company.

RECITALS

A. Owner is the owner of a parcel of land located in James City County, Virginia, with an address of 8290 Richmond Road and being Tax Parcel No. 1240100011, containing approximately 220.026 acres, more or less, and being more particularly described on Schedule A hereto (the "Property").

B. HHH Land, LLC has contracted to purchase the Property contingent upon approval of the requested rezoning. Upon taking title to the Property, HHH Land, LLC shall be an "Owner" as defined herein.

C. The Property is designated Low Density Residential on the County's Comprehensive Plan Land Use Map, is within the Primary Service Area and is now zoned A-1. Owner has applied to rezone the Property from A-1 to R-2, with proffers and with a residential cluster development overlay.

C. Owner has submitted to the County a master plan entitled "Plan for Rezoning Hankins-Dunn Property 8290 Richmond Road" prepared by AES Consulting Engineers

dated October 26, 2022, last revised July 21, 2023 (the "Master Plan") for the Property in accordance with the County Zoning Ordinance.

D. Owners desire to offer to the County certain conditions on the development of the Property not generally applicable to land zoned R-2 in the form of the following Proffers.

NOW, THEREFORE, for and in consideration of the approval of the requested rezoning, and pursuant to Section 15.2-2303 of the Code of Virginia, 1950, as amended, and the County Zoning Ordinance, Owner agrees that it shall meet and comply with all the following conditions in developing the Property. If the requested rezoning is not granted by the County, these Proffers shall be null and void.

CONDITIONS

1. Conceptual Master Plan. Development of the property shall be in general conformance with the Master Plan, which Master Plan is conceptual in nature, with only minor changes thereto that the Development Review Committee determines do not change the basic concept or character of the development.

2. Density. There shall be a maximum of 582 single family attached and detached units on the property.

3. Owners Association. There shall be an organized master owner's association for the development (the "Association") in accordance with Virginia law in which all property owners in the development, by virtue of their property ownership, shall be members. The articles of incorporation, bylaws and restrictive covenants (together, the "Governing Documents") creating and governing the Association shall be submitted to and reviewed by the County Attorney for consistency with this Proffer. The

Governing Documents shall require that the Association adopt an annual maintenance budget, which shall include a reserve for capital components, and all other common areas (including open spaces) under the jurisdiction of the Association, shall require each purchaser of a lot to make a capital contribution to the Association and shall require that the Association (i) assess all members for the maintenance of all properties owned or maintained by the Association and (ii) file liens on members' properties for non-payment of such assessments. The Governing Documents shall provide that at such time as 75% of the Lots permitted on the Property designated on the Master Plan have been conveyed to purchasers other than builders, the declarant's right to unilaterally appoint and remove members of the Board of Directors of the Association shall terminate and the Board shall thereafter be elected by the lot owners (including the declarant). The requirements of this proffer may be met through annexation of the land into an existing owners' association with the same or similar restrictions as detailed herein.

4. Cash Contributions for Community Impacts: A contribution of \$9,046 for each dwelling unit on the Property other than Workforce Units (as defined in Condition 5) and a contribution of \$6,332.20 for each Workforce Unit shall be made to the James City County in order to mitigate impacts on the County from the physical development and operation of the Property. The contribution described above shall be paid to the County for each dwelling unit on the Property after completion of the final inspection and prior to the time of the issuance of any certificate of occupancy for the dwelling unit in question. The per dwelling unit contribution amounts shall consist of the amounts set forth above plus any adjustments included in the Marshall and Swift Building Costs

Index (the "Index") from 2023 to the year a payment is made if payments are made after on or after January 1, 2024. In no event shall the per dwelling unit contribution be adjusted to a sum less than the amount set forth in this Section. If the Index is not available, a reliable government or other independent publication evaluating information heretofore used in determining the Index (approved in advance by the County Manager of Financial Management Services) shall be relied upon in establishing an inflationary factor for purposes of increasing the per dwelling unit contribution to approximate the rate of annual inflation in the County.

5. Mixed Cost Housing Units: At least 10% of the dwelling units permitted on the Property shall be offered for sale at prices that are targeted at households earning 80% to 120% of the Area Median Income as determined by the U.S. Department of Housing and Urban Development ("AMI") as determined annually by the County's Office of Housing and Community Development (the "Workforce Units").

6. Road Construction and Dedications. Road improvements and/or dedications shall be made as follows at the property entrance on Route 60:

- a. One southbound left turn lane (200 feet storage, 200 feet taper).
- b. One inbound lane into the property.
- c. Northbound right turn lane on Rt. 60 (100 feet storage, 200 feet taper).
- d. Two exit lanes from the property: shared left/through and right turn

e. The turn lanes and tapers proffered hereby shall be constructed in accordance with Virginia Department of Transportation (“VDOT”) standards and shall be completed or their completion bonded in from satisfactory to the County Attorney prior to the issuance of any building permits for development on the Property.

7. Private Alleys. All private alleys on the Property shall conform to VDOT construction standards and shall be maintained by the Homeowner’s Association. The pavement section design must follow the applicable traffic count and loading design parameters for VDOT roads.

8. Underground Utilities. Except for junction boxes, meters, pedestals, transformers, and existing overhead utility lines, all new utility lines shall be installed underground.

9. Community Character Corridor Buffer. There shall be a minimum 150’ wide Community Character Corridor (CCC) Buffer along the Route 60 frontage of the Property in accordance with the County’s Community Character Corridor Buffer Treatment guidelines. Owner shall submit a landscape plan for this buffer during site plan review process for review and approval of the Director of Planning.

10. Naturally Forested Buffer. There shall be a minimum 150’ buffer of natural forest adjacent to the CCC Buffer on the southwestern portion of the property as shown on the Master Plan. This buffer shall be allowed to grow from natural regeneration but may be supplemented with additional vegetation to achieve a natural forest appearance. Owner shall submit a landscape plan for this buffer during site plan review process for review and approval of the Director of Planning.

11. Mature Hardwood Forestland Preservation. No less than 2.0 acres shall be designated as preserved Hardwood Forestland in the general location as shown on the Master Plan. With the first plan submittal, a protective deed shall be submitted to the Director of Planning for review and shall be recorded prior to the issuance of the first certificate of occupancy for a dwelling unit on the Property. The protective deed shall restrict the cutting of trees within this preserved area with limited exceptions.

12. Prime Agricultural Land Preservation. No less than 5.0 acres shall be designed as preserved Prime Agricultural Land in the general location as shown on the Master Plan. With the first plan submittal, a protective deed shall be submitted to the Director of Planning for review and shall be executed and recorded prior to the issuance of the first certificate of occupancy for a dwelling unit on the Property. The protective deed shall restrict use of this preserved area to agricultural uses only.

13. Stream Restoration Funding. At the time when cash proffers are paid for each lot, an additional \$500 per lot shall be paid to the County for use in stream restoration efforts located within the construction easement dedicated and more fully described in proffer #22 below.

14. Route 60 Median Landscaping. Owner, subject to the approval from VDOT, shall install landscaping in the Route 60 median along the Route 60 frontage to the development. This landscaping shall be designed to complement the Community corridor buffer landscaping and shall include trees, shrubs, and groundcovers in accordance with a plan submitted to and approved by the Director of Planning. The

median shall be planted, or the planting bonded, prior to the County being obligated to issue certificates of occupancy for dwelling units in the development.

15. Pedestrian Connections to Adjacent Properties. Owner shall provide pedestrian connections between the Property and the adjacent properties generally as shown on the Master Plan. Alternate locations may be determined at final design as approved by the Director of Planning.

16. Streetscape Guidelines. The Owner shall provide and install streetscape improvements in accordance with the applicable provisions of the County's Streetscape Guidelines policy. Street trees and other streetscape improvements shall be installed at the time of home construction. The streetscape improvements shall be shown on development plans for that portion of the property and submitted to the Director of Planning for approval during the site plan approval process.

17. Recreation. The following recreational facilities shall be provided at a minimum: 1 playground, 2.05 acres of park land, 2,800 ft of biking/jogging trails, one 25-meter competition pool and 1 multi-use rectangular field. The exact locations of the facilities proffered hereby and the equipment to be provided at such facilities shall be subject to the approval of the Development Review Committee.

18. Sidewalks. There shall be sidewalks installed on both sides of each public streets located in the Property (these may be in right of way or outside of right of way in a pedestrian access easement). Owner shall construct a hard surface multi-use trail along the Route 60 road frontage of the Property with a design approved by the Director of Planning.

19. Curb and Gutter. Streets (but not private alleys) within the Property shall be constructed with curb and gutter, provided, however, this requirement may be waived or modified along those segments of street, including entrance roads, where structures are not planned.

20. Master Stormwater Management Plan. Owner shall submit to the County a Master Stormwater Management Plan (MSWMP) no less than three (3) months in advance of the of the site construction plan for any project that is proposed as a multi-phase plan of development, to include the stormwater management BMP ponds, and, where appropriate and feasible, low impact design techniques, for review and approval by the Stormwater and Resource Protection Division. Owner acknowledges that concurrent submittals of the MSWMP and site construction plan will not be accepted. The MSWMP may be revised and/or updated during the development of the Property with prior approval of the Stormwater and Resource Protection Division. The County shall not be obligated to approve any final development plans for the Property until the master stormwater management plan has been approved by the Stormwater and Resource Protection Division. The MSWMP, as revised and/or updated, shall be implemented in all development plans for the Property. Areas of disconnected Forested Open Space per DEQ Specification #2, used for the purposes of lowering the water quality requirement total but not actually treating areas of development will not be approved.

21. Dedication of Land to Williamsburg-James City County Schools. Owner shall convey up to 3.0 acres of land in the location generally shown on the Master Plan to Williamsburg-James City County School Board to be used for site and/or building

improvements to Stonehouse Elementary School. Such conveyance shall be made upon the request of the School Board. Within 45 days of the receipt of such a request Owner shall cause to be prepared and submitted to the County any required subdivision or boundary line adjustment plat. The actual conveyance shall be made within five business days of final approval of the plat. If this conveyance is not requested before the last subdivision plat is recorded, this obligation will become null and void.

22. Dedication of Construction Easement. Owner shall dedicate a construction easement for the benefit of James City County for the restoration of deteriorated streams as generally shown on the Master Plan. With the first development plan submittal, a deed of easement shall be submitted to the Director of Planning for review and shall be executed and recorded prior to the County being obligated to issue the first certificate of occupancy for a dwelling unit on the Property. The intention of the easement is to allow James City County the legal authority to repair the downstream channels from stormwater runoff from Stonehouse Elementary School.

23. Severability. The unenforceability, elimination, revision or amendment of any proffer set forth herein, in whole or in part, shall not affect the validity or enforceability of any of the other proffers or the unaffected part of any such proffer.

[signatures appear on following pages]

WITNESS the following signatures and seals:

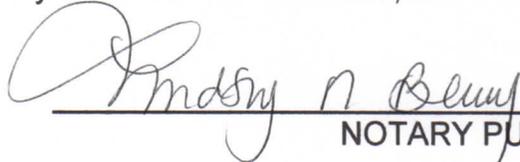
OWNER:



GEORGE M. HANKINS, JR.

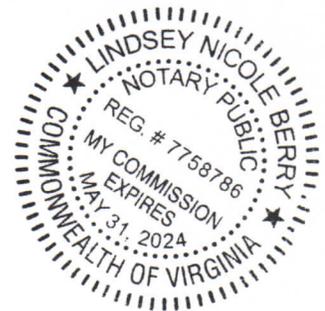
STATE OF Virginia
CITY/COUNTY OF Virginia Beach, to-wit:

The foregoing instrument was acknowledged before me this 25th day of
AUGUST, 2023 by GEORGE M. HANKINS, JR.



NOTARY PUBLIC

My commission expires: May 31, 2024
Registration No.: 7758786



OWNER:

Sharon H. Dunn
SHARON H. DUNN

STATE OF Virginia
CITY/COUNTY OF Virginia Beach, to-wit:

The foregoing instrument was acknowledged before me this 25 day of
AUGUST, 2023 by SHARON H. DUNN.

Lindsey N Berry
NOTARY PUBLIC

My commission expires: May 31, 2024
Registration No.: 7758786



APPLICANT:

HHH Land, LLC, a Virginia Limited liability company

By: HHHunt Corporation
Its: Manager

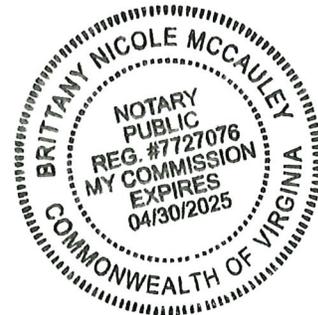
By: [Signature]
Title: Vice President

Commonwealth
STATE OF Virginia
CITY/COUNTY OF Henrico, to-wit:

The foregoing instrument was acknowledged before me this 25 day of August, 2023 by Jonathan Ridout, Vice President of HHHunt Corporation, a Virginia corporation, as Manager of HHH Land, LLC, a Virginia Limited liability company on behalf of the company.

[Signature]
NOTARY PUBLIC

My commission expires: 4/30/2025
Registration No.: 7727076



Schedule A

SURVEYED PROPERTY DESCRIPTION 8290 RICHMOND ROAD

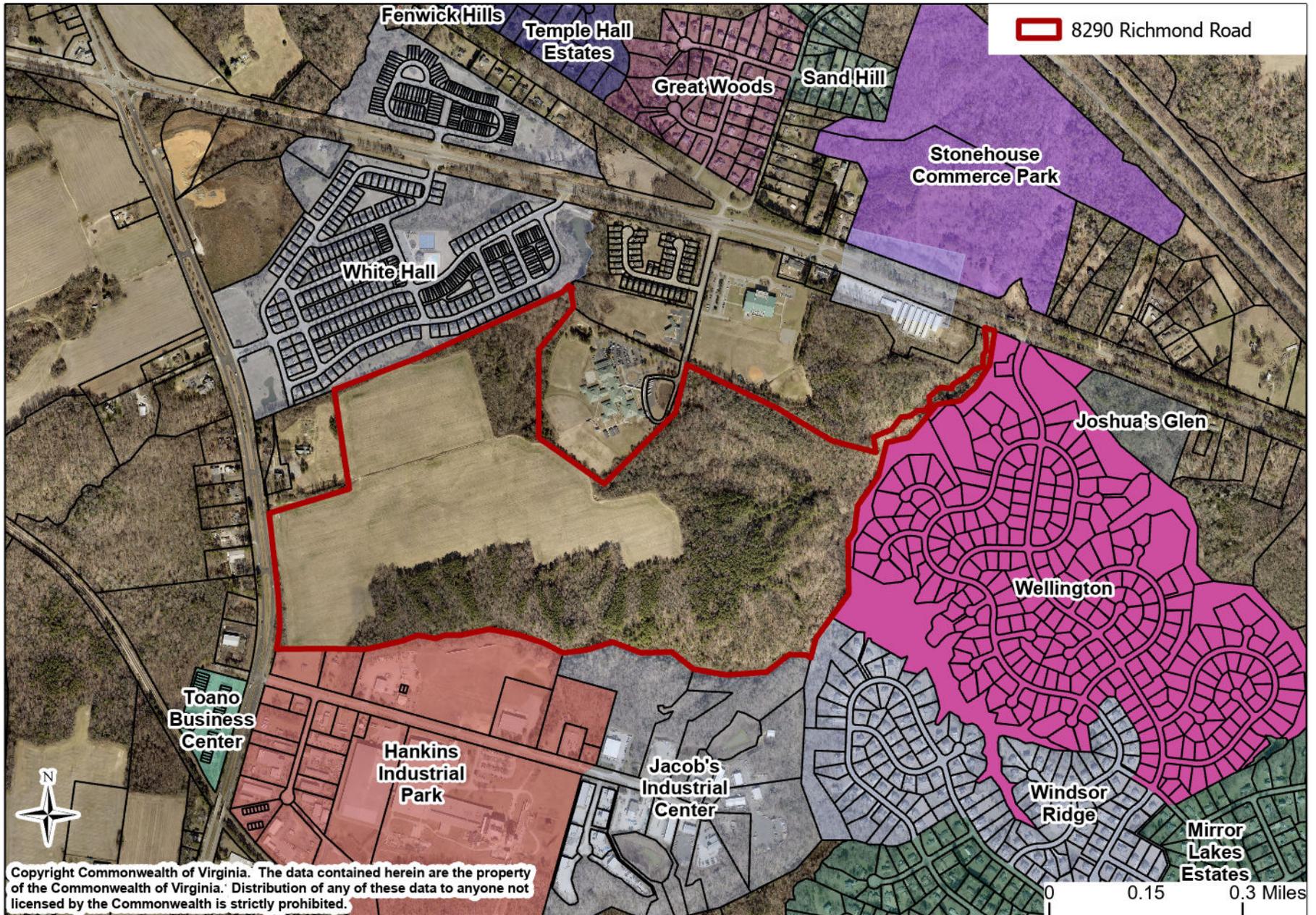
ALL THAT CERTAIN PIECE OR PARCEL OF LAND SITUATE LYING AND BEING IN THE COUNTY OF JAMES CITY, VIRGINIA AND MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT LYING ON THE EASTERLY RIGHT-OF-WAY OF U.S. ROUTE #60 (RICHMOND ROAD-VARIABLE WIDTH R/W) BEING A CORNER TO THIS PARCEL AND LANDS NOW OR FORMERLY STANDING IN THE NAME OF HUNTERS HORN ASSOCIATES, FROM WHICH AN IRON PIPE FOUND BEARS N89°52'15"W, A DISTANCE OF 1.80'; THENCE LEAVING THE LINE OF HUNTER HORN ASSOCIATES AND WITH THE RIGHT-OF-WAY OF U.S. ROUTE #60 ON A CURVE TO THE LEFT HAVING A RADIUS OF 1,185.92', A DELTA ANGLE OF 19°27'08", A LENGTH OF 402.63', A CHORD OF 400.70' AND A CHORD BEARING OF N02°59'21"E TO A POINT; THENCE N06°44'13"W, A DISTANCE OF 713.25' TO AN IRON ROD FOUND, BEING A CORNER TO THIS PARCEL AND LANDS NOW OR FORMERLY STANDING IN THE NAME OF HICKORY NECK CHURCH OF BLISSLAND PARISH; THENCE LEAVING THE RIGHT-OF-WAY OF U.S. ROUTE #60 AND WITH THE LINE OF HICKORY NECK CHURCH OF BLISSLAND PARISH, N73°27'52"E, A DISTANCE OF 686.37' TO AN IRON ROD FOUND; THENCE N08°21'58"W, A DISTANCE OF 832.08' TO AN IRON ROD FOUND, BEING A CORNER TO THIS PARCEL, HICKORY NECK CHURCH OF BLISSLAND PARISH AND LYING ON THE LINE OF LANDS NOW OR FORMERLY STANDING IN THE NAME OF WHITE HALL FOUNDATION INC.; THENCE LEAVING THE LINE OF HICKORY NECK CHURCH OF BLISSLAND PARISH AND WITH THE LINE OF WHITE HALL FOUNDATION INC. N69°06'33"E, A DISTANCE OF 738.88' TO AN IRON ROD FOUND; THENCE N65°37'06"E, A DISTANCE OF 1,296.31' TO A POINT BEING THE APPROXIMATE CENTERLINE OF A STREAM AND A CORNER TO THIS PARCEL, WHITE HALL FOUNDATION INC. AND LANDS NOW OR FORMERLY STANDING IN THE NAME OF FAITH FELLOWSHIP INCORPORATED; THENCE LEAVING THE LINE OF WHITE HALL FOUNDATION INC. AND WITH THE LINE OF FAITH FELLOWSHIP INCORPORATED WITH A SURVEY LINE ALONG THE CENTERLINE OF STREAM, S28°58'53"W, A DISTANCE OF 57.24' TO A POINT; THENCE S53°59'12"E, A DISTANCE OF 137.96' TO A BEECH STUMP FOUND, LYING ON THE LINE OF FAITH FELLOWSHIP INCORPORATED, BEING A CORNER TO THIS PARCEL AND LANDS NOW OR FORMERLY STANDING IN THE NAME OF WILLIAMSBURG-JAMES CITY COUNTY PUBLIC SCHOOLS; THENCE LEAVING THE LINE OF FAITH FELLOWSHIP INCORPORATED AND WITH THE LINE OF WILLIAMSBURG-JAMES CITY COUNTY PUBLIC SCHOOLS, S38°30'48"W, A DISTANCE OF 450.00' TO AN IRON ROD SET; THENCE S00°29'12"E, A DISTANCE OF 723.14' TO AN IRON ROD FOUND; THENCE S55°29'12"E, A DISTANCE OF 655.19' TO AN IRON ROD SET; THENCE N44°30'48"E, A DISTANCE OF 823.89' TO AN IRON ROD FOUND; THENCE N13°07'08"E, A DISTANCE OF 406.26' TO AN IRON ROD FOUND BEING A CORNER TO THIS PARCEL AND LANDS NOW OR FORMERLY STANDING IN THE NAME OF WILLIAMSBURG CHRISTIAN ACADEMY INC.; THENCE LEAVING THE LINE OF WILLIAMSBURG-JAMES CITY COUNTY

PUBLIC SCHOOLS AND WITH THE LINE OF WILLIAMSBURG CHRISTIAN ACADEMY INC., S64°28'48"E, A DISTANCE OF 339.39' TO AN IRON ROD FOUND; THENCE S64°57'38"E, A DISTANCE OF 475.04' TO AN IRON ROD FOUND; THENCE S59°54'46"E, A DISTANCE OF 529.70' TO AN IRON PIPE FOUND; THENCE S75°45'00"E, A DISTANCE OF 213.11' TO AN IRON PIPE FOUND; THENCE CONTINUE ALONG SAID LINE, A DISTANCE OF 159.29' TO A POINT BEING THE BEGINNING OF A SURVEY LINE AT THE APPROXIMATE CENTERLINE OF A STREAM; THENCE WITH SAID SURVEY LINE ALONG THE CENTERLINE OF THE STREAM (STREAM IS THE PROPERTY LINE), N09°51'36"W, A DISTANCE OF 127.30' TO A POINT; THENCE N67°05'47"E, A DISTANCE OF 160.84' TO A POINT; THENCE N37°03'32"E, A DISTANCE OF 128.56' TO A POINT; THENCE N83°16'55"E, A DISTANCE OF 74.51' TO A POINT; THENCE N51°08'57"E, A DISTANCE OF 73.23' TO A POINT; THENCE N86°44'13"E, A DISTANCE OF 62.08' TO A POINT; THENCE N39°08'40"E, A DISTANCE OF 68.53' TO A POINT; THENCE N10°47'58"W, A DISTANCE OF 56.60' TO A POINT; THENCE N50°01'00"E, A DISTANCE OF 125.58' TO A POINT; THENCE S83°37'10"E, A DISTANCE OF 90.48' TO A POINT; THENCE N13°33'43"E, A DISTANCE OF 34.17' TO A POINT; THENCE N59°27'13"E, A DISTANCE OF 141.57' TO A POINT; THENCE N38°21'21"E, A DISTANCE OF 60.38' TO A POINT; THENCE N72°01'16"E, A DISTANCE OF 91.98' TO A POINT; THENCE N00°25'59"W, A DISTANCE OF 93.53' TO A POINT; THENCE N33°24'23"E, A DISTANCE OF 45.50' TO A POINT; THENCE N00°12'49"W, A DISTANCE OF 93.11' TO A POINT; THENCE N10°03'27"W, A DISTANCE OF 87.19' TO AN IRON ROD SET, BEING A CORNER TO THIS PARCEL, WILLIAMSBURG CHRISTIAN ACADEMY INC. AND LYING ON THE SOUTHERLY RIGHT-OF-WAY OF STATE ROUTE #30 (ROCHAMBEAU DRIVE 250' MINIMUM R/W); THENCE LEAVING THE LINE OF WILLIAMSBURG CHRISTIAN ACADEMY INC. AND ALONG THE RIGHT-OF-WAY OF STATE ROUTE #30, S68°58'43"E, A DISTANCE OF 93.73' TO AN IRON ROD SET BEING A CORNER TO THIS PARCEL AND WELLINGTON SUBDIVISION SECTION ONE; THENCE LEAVING THE RIGHT-OF-WAY OF STATE ROUTE #30 AND WITH THE LINE OF WELLINGTON SUBDIVISION SECTION ONE, S08°22'35"W, A DISTANCE OF 287.50' TO A POINT; THENCE S32°25'35"W, A DISTANCE OF 215.00' TO A POINT; THENCE S48°30'35"W, A DISTANCE OF 166.00' TO A POINT; THENCE S80°50'35"W, A DISTANCE OF 193.20' TO A POINT; THENCE S39°30'35"W, A DISTANCE OF 356.00' TO A POINT, BEING A CORNER TO THIS PARCEL AND WELLINGTON SUBDIVISION SECTION THREE; THENCE WITH THE LINE OF WELLINGTON SUBDIVISION SECTION THREE, S77°30'35"W, A DISTANCE OF 187.32' TO A POINT; THENCE S14°45'35"W, A DISTANCE OF 284.00' TO A POINT; THENCE S35°20'35"W, A DISTANCE OF 294.00' TO A POINT; THENCE S07°00'35"W, A DISTANCE OF 212.50' TO A POINT; THENCE S33°30'35"W, A DISTANCE OF 94.50' TO A POINT; THENCE S00°39'25"E, A DISTANCE OF 430.00' TO A POINT, BEING A CORNER TO THIS PARCEL AND LANDS NOW OR FORMERLY STANDING IN THE NAME OF BOCA LAND INVESTORS, LLC; THENCE WITH THE LINE OF BOCA LAND INVESTORS, LLC, S36°09'53"W, A DISTANCE OF 462.46' TO A POINT BEING A CORNER TO THIS PARCEL AND LANDS NOW OR FORMERLY STANDING IN THE NAME OF WINDSOR RIDGE SECTION 2A; THENCE S13°38'18"W, A DISTANCE OF 160.13' TO A POINT LYING ON THE LINE OF

WINDSOR RIDGE SECTION 2A AT THE BEGINNING OF A SURVEY LINE, BEING A CORNER TO THIS PARCEL AND LANDS NOW OR FORMERLY STANDING IN THE NAME OF TAYLOR BUILDING, LLC; THENCE LEAVING THE LINE OF WINDSOR RIDGE SECTION 2A AND WITH THE LINE OF TAYLOR BUILDING, LLC ON A SURVEY LINE, N57°05'17"W, A DISTANCE OF 45.83' TO A POINT; THENCE CONTINUING WITH A SURVEY LINE BEING GENERALLY ALONG A STREAM (STREAM IS THE PROPERTY LINE) N88°26'09"W, A DISTANCE OF 138.16' TO A POINT; THENCE S52°13'03"W, A DISTANCE OF 236.10' TO A 12" ASH; THENCE S86°04'41"W, A DISTANCE OF 332.10' TO A POINT; THENCE N79°55'45"W, A DISTANCE OF 270.90' TO A POINT; THENCE N51°55'48"W, A DISTANCE OF 226.36' TO A POINT; THENCE S88°43'52"W, A DISTANCE OF 254.34' TO A POINT; THENCE N69°03'01"W, A DISTANCE OF 247.88' TO A POINT; THENCE S72°54'40"W, A DISTANCE OF 222.36' TO A POINT; THENCE S82°51'17"W, A DISTANCE OF 194.34' TO A POINT; THENCE N63°06'50"W, A DISTANCE OF 180.42' TO A POINT; THENCE N71°50'52"W, A DISTANCE OF 212.95' TO A POINT; THENCE N79°01'51"W, A DISTANCE OF 241.83' TO A POINT; THENCE S78°54'50"W, A DISTANCE OF 250.19' TO A POINT; THENCE S89°47'44"W, A DISTANCE OF 124.57' TO A POINT; THENCE S69°12'18"W, A DISTANCE OF 76.17' TO A POINT; THENCE N80°03'23"W, A DISTANCE OF 150.42' TO A MAPLE STUMP BEING A CORNER TO THIS PARCEL AND LANDS NOW OR FORMERLY STANDING IN THE NAME OF NICE COMMERCIAL PROPERTIES, LLC AND BEING THE TERMINUS OF THE SURVEY LINE; THENCE WITH THE LINE OF NICE COMMERCIAL PROPERTIES, S70°22'56"W, A DISTANCE OF 133.37' TO A 24" MAPLE; THENCE S76°47'28"W, A DISTANCE OF 237.72' TO A 26" MAPLE; THENCE S78°16'46"W, A DISTANCE OF 80.33' TO AN IRON PIPE FOUND, BEING A CORNER TO THIS PARCEL AND LANDS NOW OR FORMERLY STANDING IN THE NAME OF HUNTERS HORN ASSOCIATES; THENCE LEAVING THE LINE OF NICE COMMERCIAL PROPERTIES AND ALONG THE LINE OF HUNTERS HORN ASSOCIATES N89°52'15"W, A DISTANCE OF 312.35' TO AN IRON ROD FOUND; THENCE CONTINUE ALONG SAID LINE, A DISTANCE OF 410.70' TO A POINT, BEING THE POINT AND PLACE OF BEGINNING CONTAINING 9,584,315 SQUARE FEET OR 220.026 ACRES, MORE OR LESS.

Z-22-0004 / SUP-22-0026 8290 Richmond Road Hankins-Dunn Rezoning



NOTE:
SIDEWALKS AND TRAILS/PATHS SHALL BE PROVIDED THROUGHOUT IN ORDER TO PROMOTE PEDESTRIAN INTERCONNECTIVITY.

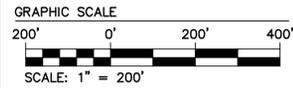
NOTE:
RECREATION AREAS INCLUDED WITH THIS DEVELOPMENT (AT A MINIMUM) SHALL INCLUDE THE FOLLOWING:
- ONE (1) PLAYGROUND
- 2.05 ACRES OF PARK LAND
- 2,800 FT OF BIKING/JOGGING TRAILS
- ONE (1) 25-METER COMPETITION POOL
- ONE (1) MULTI-USE RECTANGULAR FIELD

OPEN SPACE CALCULATIONS:

| | |
|---|--------------------|
| - TOTAL SITE AREA | 220.026± AC |
| - NONDEVELOPABLE OPEN SPACE | 61.260± AC |
| - DEVELOPABLE AREA | 155.766± AC |
| - DEVELOPABLE OPEN SPACE REQUIRED | 54.518± AC (35%) |
| - DEVELOPABLE OPEN SPACE PROVIDED | 55.262± AC (35.5%) |
| - AREA USED TO ACHIEVE DENSITY BONUS POINTS (SIDEWALKS) | 4.420± AC |
| - AREA IN REQUIRED RIGHT-OF-WAY AND PERIMETER BUFFERS | 9.286± AC |
| - AREA IN STORMWATER MANAGEMENT FACILITIES | 9.367± AC |
| - OTHER QUALIFYING OPEN SPACE AREAS | 32.189± AC |
| - TOTAL NONDEVELOPABLE AND DEVELOPABLE OPEN SPACE | 116.862± AC |

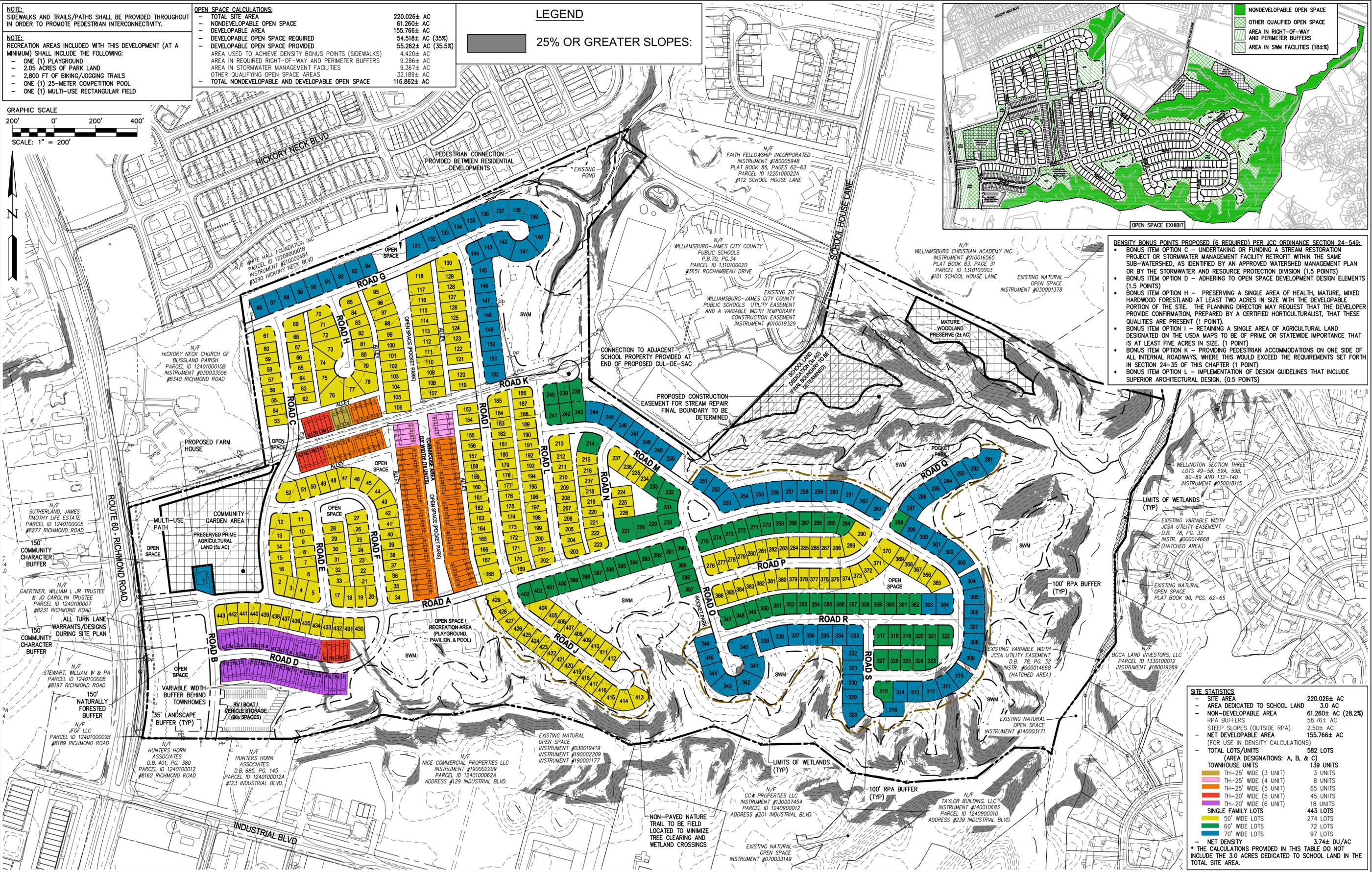
LEGEND

25% OR GREATER SLOPES:



DENSITY BONUS POINTS PROPOSED (6 REQUIRED) PER JCC ORDINANCE SECTION 24-549:

- BONUS ITEM OPTION C - UNDERTAKING OR FUNDING A STREAM RESTORATION PROJECT OR STORMWATER MANAGEMENT FACILITY RETROFIT WITHIN THE SAME SUB-WATERSHED, AS IDENTIFIED BY AN APPROVED WATERSHED MANAGEMENT PLAN OR BY THE STORMWATER AND RESOURCE PROTECTION DIVISION (1.5 POINTS)
- BONUS ITEM OPTION D - ADHERING TO OPEN SPACE DEVELOPMENT DESIGN ELEMENTS (1.5 POINTS)
- BONUS ITEM OPTION H - PRESERVING A SINGLE AREA OF HEALTH, MATURE, MIXED HARDWOOD FORESTLAND AT LEAST TWO ACRES IN SIZE WITH THE DEVELOPABLE PORTION OF THE SITE. THE PLANNING DIRECTOR MAY REQUEST THAT THE DEVELOPER PROVIDE CONFIRMATION, PREPARED BY A CERTIFIED HORTICULTURALIST, THAT THESE QUALITIES ARE PRESENT (1 POINT)
- BONUS ITEM OPTION I - RETAINING A SINGLE AREA OF AGRICULTURAL LAND DESIGNATED ON THE USDA MAPS TO BE OF PRIME OR STATEWIDE IMPORTANCE THAT IS AT LEAST FIVE ACRES IN SIZE (1 POINT)
- BONUS ITEM OPTION K - PROVIDING PEDESTRIAN ACCOMMODATIONS ON ONE SIDE OF ALL INTERNAL ROADWAYS, WHERE THIS WOULD EXCEED THE REQUIREMENTS SET FORTH IN SECTION 24-35 OF THIS CHAPTER (1 POINT)
- BONUS ITEM OPTION L - IMPLEMENTATION OF DESIGN GUIDELINES THAT INCLUDE SUPERIOR ARCHITECTURAL DESIGN. (0.5 POINTS)



SITE STATISTICS

| | |
|-----------------------------------|--------------------|
| - SITE AREA | 220.026± AC |
| - AREA DEDICATED TO SCHOOL LAND | 3.0 AC |
| - NON-DEVELOPABLE AREA | 61.260± AC (28.2%) |
| - RPA BUFFERS | 58.76± AC |
| - STEEP SLOPES (OUTSIDE RPA) | 2.50± AC |
| - NET DEVELOPABLE AREA | 155.766± AC |
| (FOR USE IN DENSITY CALCULATIONS) | |
| - TOTAL LOTS/UNITS | 582 LOTS |
| (AREA DESIGNATIONS: A, B, & C) | |
| - TOWNHOUSE UNITS | 139 UNITS |
| - TH-25' WIDE (3 UNIT) | 3 UNITS |
| - TH-25' WIDE (4 UNIT) | 8 UNITS |
| - TH-25' WIDE (5 UNIT) | 65 UNITS |
| - TH-20' WIDE (5 UNIT) | 45 UNITS |
| - TH-20' WIDE (6 UNIT) | 18 UNITS |
| - SINGLE FAMILY LOTS | 443 LOTS |
| - 50' WIDE LOTS | 274 LOTS |
| - 60' WIDE LOTS | 72 LOTS |
| - 70' WIDE LOTS | 97 LOTS |
| - NET DENSITY | 3.74± DU/AC |

* THE CALCULATIONS PROVIDED IN THIS TABLE DO NOT INCLUDE THE 3.0 ACRES DEDICATED TO SCHOOL LAND IN THE TOTAL SITE AREA.

| Rev | Date | Description | Revised By |
|-----|------------|--|------------|
| 3 | 08/04/2023 | REVISED PER JAMES CITY COUNTY COMMENTS | TRS/IGRR |
| 2 | 06/14/2023 | REVISED PER JAMES CITY COUNTY COMMENTS | TRS |
| 1 | 03/23/2023 | REVISED PER JAMES CITY COUNTY COMMENTS | TRS |

AES
CONSULTING ENGINEERS

5248 Olde Towne Road, Suite 1
Williamsburg, Virginia 23188
Phone: (757) 253-0040
Fax: (757) 220-8994
www.aesva.com

Hampton Roads | Central Virginia | Middle Peninsula

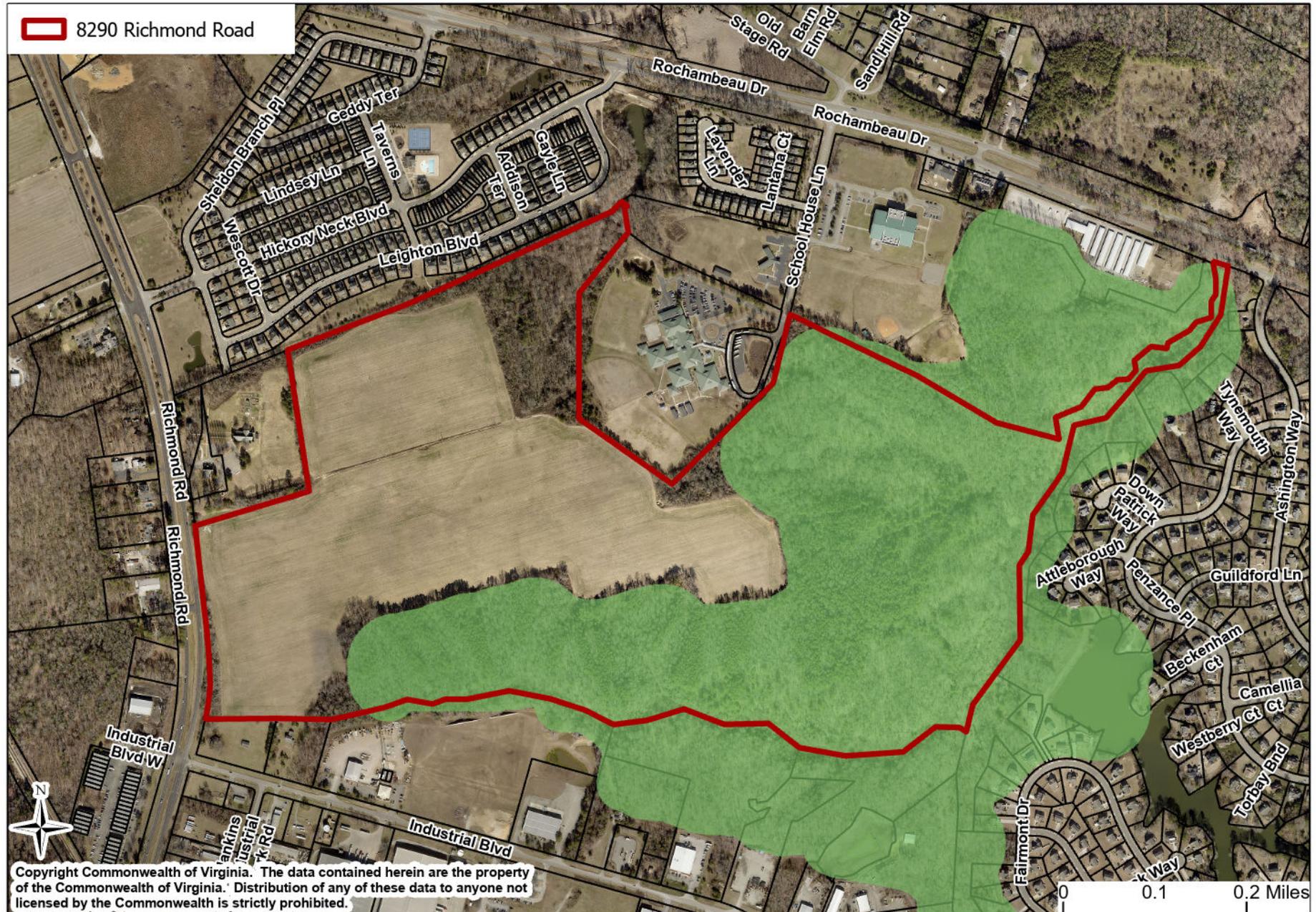
MASTER PLAN

HANKINS-DUNN PROPERTY
8290 RICHMOND ROAD

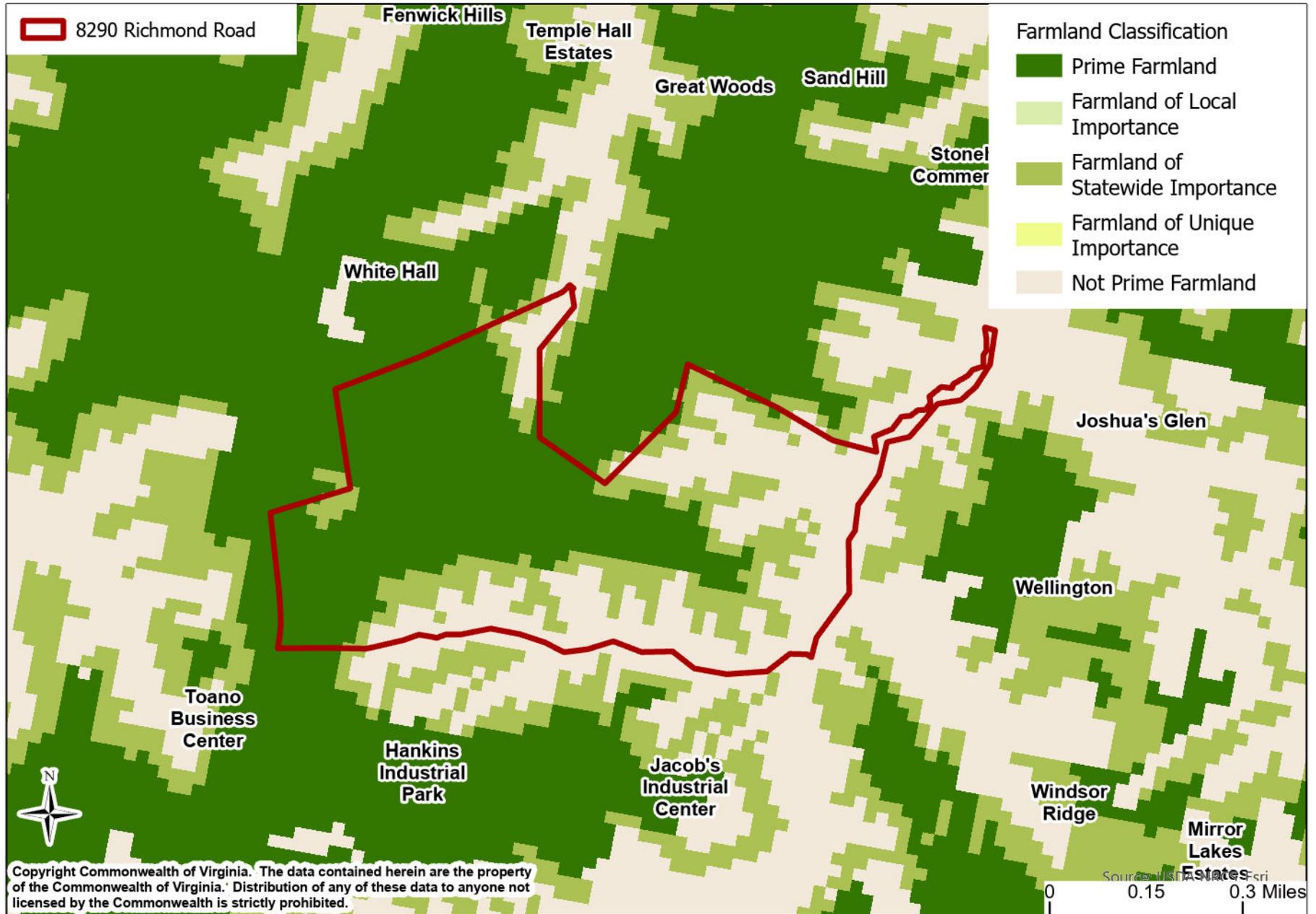
Project Contacts: TRS
Project Number: 9149-11
Scale: 1"=200'
Date: 10/26/2022
Sheet Number: **MP-03**

STONEHOUSE DISTRICT | JAMES CITY COUNTY | VIRGINIA

Z-22-0004 / SUP-22-0026 8290 Richmond Road Hankins-Dunn Rezoning - Ecological Habitat Core



Z-22-0004 / SUP-22-0026 8290 Richmond Road Hankins-Dunn Rezoning - Farmland Classification



WHITE HALL

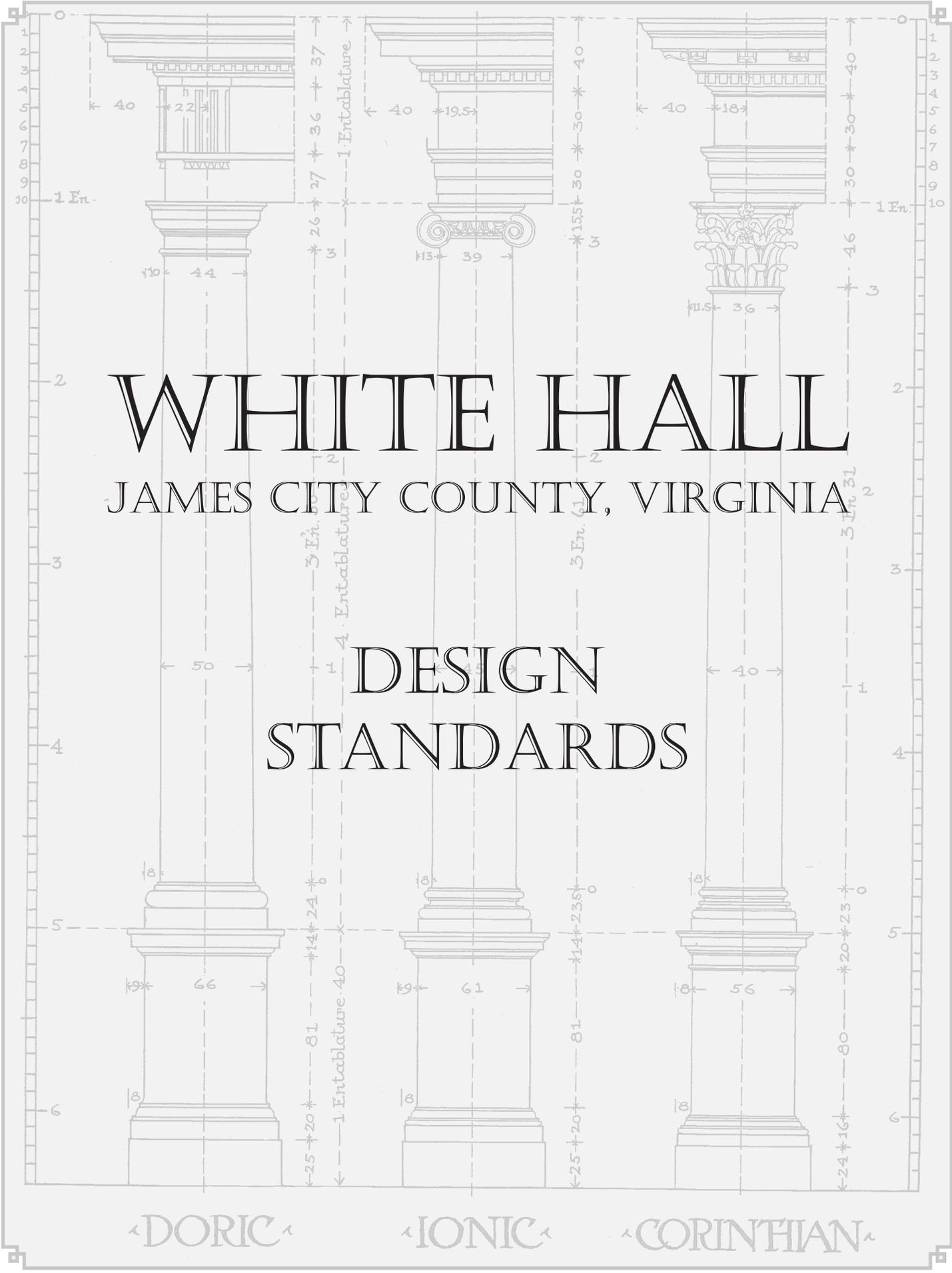
JAMES CITY COUNTY, VIRGINIA

DESIGN STANDARDS

^DORIC^

^IONIC^

^CORINTHIAN^



WHITE HALL
JAMES CITY COUNTY, VIRGINIA

SECTION 1 INTRODUCTION

| | |
|-------------------------|---|
| Introduction..... | 6 |
| The Overall Vision..... | 6 |
| Design Goals..... | 8 |

SECTION 2 AUTHORITY & RESPONSIBILITY

| | |
|---|----|
| 2.1 Authority to Establish Standards..... | 12 |
| 2.2 Responsibility for Obtaining Approvals..... | 14 |
| 2.3 Preparation of Submittals..... | 14 |

SECTION 3 NEW CONSTRUCTION

| | |
|--|----|
| 3.1 Introduction..... | 20 |
| 3.2 Homes and Architecture..... | 20 |
| 3.3 Zoning..... | 20 |
| 3.4 Submittal Requirements..... | 21 |
| 3.5 Preliminary Elevation Approvals..... | 21 |
| 3.6 General Requirements..... | 22 |
| 3.7 Site Management..... | 23 |
| 3.8 Clearing and Lot Preparation..... | 23 |
| 3.9 Grading and Erosion Control..... | 24 |
| 3.10 Locating Structures on a Lot..... | 24 |
| 3.11 Vinyl Siding Elevations..... | 26 |
| 3.12 Colors..... | 26 |
| 3.13 Foundations..... | 27 |
| 3.14 Siding..... | 27 |
| 3.15 Exterior Trim..... | 28 |
| 3.16 Windows..... | 29 |
| 3.17 Shutters..... | 30 |
| 3.18 Doors..... | 31 |
| 3.19 Garages..... | 31 |
| 3.20 Roofs and Roof Accessories..... | 33 |
| 3.21 Chimneys and Flues..... | 35 |
| 3.22 Lattice..... | 35 |
| 3.23 Porches and Decks..... | 35 |
| 3.24 Exterior Lighting..... | 38 |
| 3.25 Utility Equipment..... | 40 |
| 3.26 Trash Enclosures..... | 41 |
| 3.27 Driveways..... | 42 |
| 3.28 Walkways (main walkways)..... | 42 |
| 3.29 Landscaping..... | 43 |
| 3.30 Terracing and Retain Walls..... | 45 |
| 3.31 Signs..... | 45 |

SECTION 4 HIGH IMPACT LOTS

| | |
|---------------------------------------|----|
| 4.1 High Impact Lot Map..... | 48 |
| 4.1 High Impact Lot Requirements..... | 48 |

SECTION 5 MODIFICATIONS

| | |
|---------------------------------|----|
| 5.1 Introduction..... | 53 |
| 5.2 Submittal Requirements..... | 53 |

| | |
|--|-----------|
| 5.3 House Modifications..... | 54 |
| 5.3.1 Addition to Houses..... | 54 |
| 5.3.2 Accessory Structures..... | 55 |
| 5.3.3 Awnings..... | 55 |
| 5.3.4 Decks..... | 55 |
| 5.3.5 Doors- Storm and Screen..... | 55 |
| 5.3.6 Flags and Flagpoles..... | 55 |
| 5.3.7 Lighting (inc. Holiday Lighting & Decorations)..... | 56 |
| 5.3.8 Solar Panels..... | 56 |
| 5.3.9 Surveillance Cameras..... | 57 |
| 5.3.10 Window and Door Treatments..... | 57 |

| | |
|---|-----------|
| 5.4 Lot Modifications..... | 57 |
| 5.4.1 Accessory Structures..... | 57 |
| 5.4.2 Clotheslines..... | 58 |
| 5.4.3 Dog Houses, Dog Pens, Dog Runs..... | 58 |
| 5.4.4 Fencing (general information)..... | 59 |
| 5.4.5 Front Yard Fences..... | 60 |
| 5.4.6 Rear Yard Fences (Privacy Fences on Interior Lots..... | 62 |
| 5.4.7 Rear Yard Fences Privacy - High Impact..... | 64 |
| 5.4.8 Townhouse Fence (Interior/End Units - Not High Impact..... | 66 |
| 5.4.9 Townhouse Fence End Units - High Impact..... | 68 |
| 5.4.10 Fire Pits..... | 70 |
| 5.4.11 Fireplaces and Chimneys..... | 70 |
| 5.4.12 Gazebos..... | 70 |
| 5.4.13 Generators & Mech. Equipment... .. | 70 |
| 5.4.14 Greenhouses..... | 71 |
| 5.4.15 Holiday Decorations/Lighting..... | 71 |
| 5.4.16 Kitchens (outdoor)..... | 71 |
| 5.4.17 Landscaping and Gardens..... | 71 |
| 5.4.18 Landscape Accessories..... | 72 |
| 5.4.19 Landscape Lighting..... | 73 |
| 5.4.20 Patios and Outdoor Living..... | 73 |
| 5.4.21 Play Equipment..... | 73 |
| 5.4.22 Play Equipment - Basketball..... | 74 |
| 5.4.23 Play Equipment - Trampolines..... | 75 |
| 5.4.24 Ponds and Water Features..... | 75 |
| 5.4.25 Satellite Dishes and Antennas..... | 75 |
| 5.4.26 Signs..... | 76 |
| 5.4.27 Shade Structures..... | 76 |
| 5.4.28 Solar Panels..... | 78 |
| 5.4.29 Spas and Hot Tubs..... | 78 |
| 5.4.30 Swimming Pools..... | 78 |
| 5.4.31 Temporary Commercial Storage.. .. | 79 |
| 5.4.32 Trellises, Arbors and Pergolas..... | 79 |
| 5.4.33 Walkways (secondary)..... | 80 |

SECTION 5 FORMS AND APPLICATIONS

WHITE HALL
JAMES CITY COUNTY, VIRGINIA

INTRODUCTION

From the developer that brought you the award-winning communities of Wyndham, Wellesley, Twin Hickory, Rutland as well as White Hall, HHHunt Communities is proud to present an additional neighborhood to the White Hall community.

These standards, for the addition to White Hall, are updated from the original White Hall Standards to reflect the existing community as well as current building trends. Likewise, while maintaining the high standards of the community, this document is intended to be simplified and easier to understand to assist the builders, homeowners and committees in achieving the goals of HHHunt and James City County.

These Standards are divided into four sections:

- Section 1: Introduction
- Section 2: Administration, Policies, Responsibility
- Section 3: New Construction
- Section 4: High Impact Lots & Requirements
- Section 4: Modifications

THE OVERALL VISION

White Hall - The Existing Community

White Hall represents more than two centuries of nearly continuous occupation by the Geddy family. Near Toano in James City County, the original property was known as Whitehall Plantation. The farmhouse was built for William Geddy in 1805-06.

Recognizing the importance of the farmhouse, it was restored and positioned as a focal point and central feature/amenity for the neighborhood. Streets were arranged in a traditional Tidewater Virginia manner with a variety of lot sizes. Many homes have alleys and many front the parks and open space. Along Route 60, a view corridor to the farmhouse and adjacent historic church is enhanced by a significant amount of land that remains as open space. With the neighborhood centered round the farmhouse / amenity center the remaining property was designed around natural and preserved woodlands.



The farmhouse, amenity center and open space comprised approximately 40% of the total site which includes two ponds, a creek, multi purpose playing field, nature trails.



White Hall Signage



The Farmhouse / Amenity Center



Single Family Homes Streetscape



Townhomes Streetscape

White Hall - The New Neighborhood

The additional property at White Hall is essentially an extension of the best that White Hall offers:

- streets arranged in a traditional Tidewater Virginia manner
- a variety of lot sizes
- homes on alleys
- view corridors to an iconic architectural feature (the amenity center)
- open space / pastoral landscape along Highway 60
- connectivity
- preservation of natural areas

In addition to the above mentioned items, the master plan for the White Hall addition has a 'mews' that connects the existing amenity center with an additional amenity center. A mews is essentially a linear park where houses front without a street in between as they are accessed by allies.

Architecture in the new neighborhood will remain consistent with White Hall although with more variation in styles and colors.

Examples of Toano architectural styles (see the following page) in a contemporary setting as a guide for White Hall builders:



DESIGN GOALS

The criteria developed in these Standards are all based on the following general design fundamentals established originally for White Hall as well as additional fundamentals as deemed appropriate for current planning and construction trends. The White Hall Design Committee (WHDC) and/or the Modifications Committee ("MC") will use these fundamentals as the basis for review of any new construction, improvement, or modification that is not otherwise addressed by more specific criteria.

Maintain High Appearance Standards

Every home, structure or improvement shall meet minimum standards of design and material quality consistent with the level of quality established for the community, all while attempting to capture the architectural character of the Toano area. Construction workmanship of any improvement shall be of workmanlike quality and finished appearance consistent with professional construction standards and techniques.

Encourage Contextual Design

Every home, structure or improvement shall be of a size and use that is consistent with the standards of this community, and shall be designed in styles, shapes, sizes, massing, and colors to be of good proportions, harmonious with each other, consistent and supportive of the general architectural style of Toano and in the existing neighborhoods of White Hall and appropriate to the general appearance characteristics of the community.

As noted in "Historic Structures Survey of James City County" (page 43) by The Ottery Group, Toano and James City County are like most other communities in that several historical architectural styles are found. *"Of the architectural styles available in the database system, the most frequently occurring styles were the vernacular and vernacular derivatives of late nineteenth and twentieth century styles. These are classified as Late Victorian, Late 19th and Early 20th Century American Movements, and Other. An additional set of popular styles are mostly twentieth century in usage. The Colonial Revival style and Bungalow/Craftsman style have their roots in the revivalism and classical*

revival styles of the late nineteenth century. The earliest (chronological) styles such as Colonial, Early Republic, Georgian, and Federal up to distinctive mid-nineteenth century styles such as Gothic Revival and Italianate styles occurred the fewest number of times during the survey."

Examples of Toano Architecture



Create a Balance of Community and Privacy

New homes and structures shall be designed and located on a lot in accordance with the Standards herein, and consistent with the character and setbacks of the community, so as to create a harmonious streetscape in relationship to existing structures, and so as not to compromise the privacy of any other lot below the general level enjoyed by other members of the community. The WHDC will judge the ability of each lot to meet this goal on its own merits based on subdivision design, lot orientation, topography, and vegetation. All streetscapes shall be in compliance with the James City County approved Streetscape Policy, as well as the overall community site plans and/or subdivision plans and related landscape plans, as approved by the County.

All Streets are Important

Houses on a **corner** play a stronger role in defining the character of the neighborhood than other buildings along the block face. They can act as informal entryways to the street, setting the tone for the streetscape that follows. Corner buildings must recognize their prominent location by embracing the public realm on both streets, regardless of which street the house faces, with a greater visual emphasis.

Public Spaces are Important

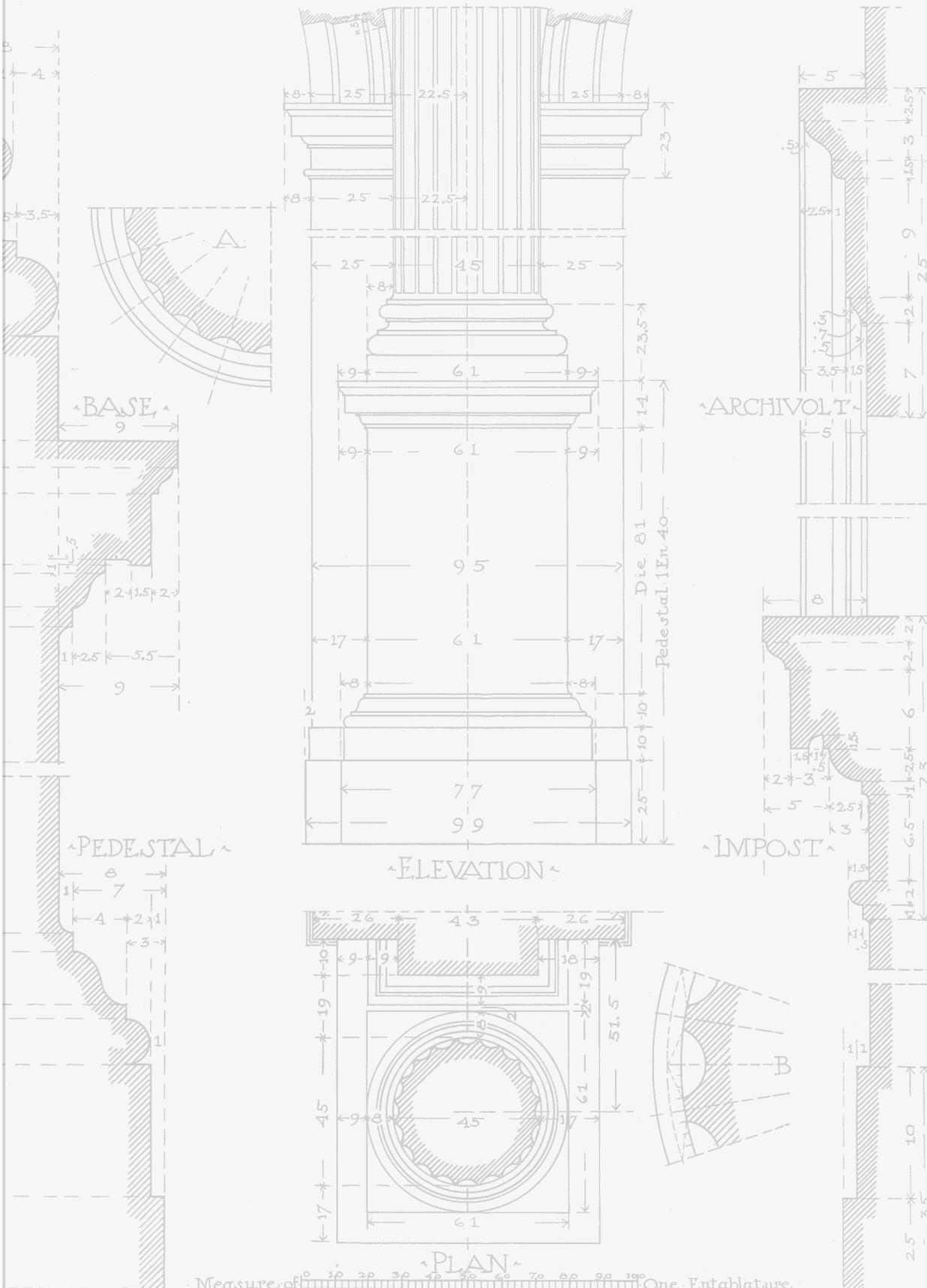
Some homes abut public spaces such as neighborhood parks, pedestrian or bicycle paths, or common areas. As with houses on corner lots, these homes have more than one facade facing a public space. Special attention is necessary to ensure that all of the building's facades and yards enhance the public realm

Preserve Environmental Quality

In order to preserve environmental quality, White Hall will follow all James City County Development Standards.

WHITE HALL
JAMES CITY COUNTY, VIRGINIA

IONIC DETAILS



PEDESTAL & IMPOST

SECTION 2 - AUTHORITY & RESPONSIBILITY

2.1 – AUTHORITY TO ESTABLISH STANDARDS AND CONDUCT DESIGN REVIEW

2.1.1 Purpose of the Standards

Town planning has a rich history dating back to the Italian Renaissance and carried through England in the 16th and 17th centuries. English settlers brought this concept to the new permanent settlements in the American Colonies including the early town of Williamsburg, only a few miles from White Hall. Today, both the visual character and the quality of life in these older towns and cities are still held as a standard by which people judge desirable design and livability of urban environments. It is with this intent and spirit that the Design Standards for White Hall (the “Standards”) have been developed.

2.1.2 Authority to Establish Standards and Conduct Design Review

The Standards are created by proffer to James City County (the “County”), and under the authority of the Declaration of Covenants, Conditions and Restrictions for White Hall Foundation, Inc. (the “Declaration”). The White Hall Design Committee (the “WHDC”) is established under the same proffer and authority. The WHDC will use the Standards in its review of all applications for exterior improvements to any property in White Hall. **Any amendments to the Standards must be approved by Director of Planning.** These Standards may be modified or amended by the WHDC without the approval of the County only when such changes are administrative amendments which do not materially alter the standards for architectural review and/or property modification. The County will receive a copy of amendments made to the Standards.

2.1.3 Review by the Declarant

The Declarant for the White Hall Foundation, Inc. (the “Declarant”) reserves the right to review, evaluate, and approve, disapprove, allow or not allow the use of all builders’ and/or Realtors’ marketing and/or advertising plans and programs related to the sale and construction of new homes to be built in White Hall.

2.1.4 Architectural Review Committee

The White Hall Design Committee (WHDC) has been established to implement these Standards and receives its authority from Article XIII of the Declaration. Although the Standards contain a listing of specific requirements to be followed, the very nature of design is an individualistic process. Consequently, it is the responsibility of the WHDC to interpret the goals of the community and these Standards as they relate to design submittals and the WHDC has sole discretion in this regard.

2.1.5 Interpretation

The WHDC and/or MC shall judge compliance with these policies in questions of appearance, aesthetics, or infringement by design upon the rights of other residents. The WHDC and/or MC preserve(s) the right to reject designs or to require modifications to designs including deletion, addition, or relocation of design elements in order to achieve compliance with these fundamentals.

2.1.6 Amendments and Deletions

The WHDC reserves the right to modify, add to, or delete from any specific section of the Standards from time to time. All changes must be approved by the Director of Planning prior to incorporation into these Standards. These Standards may be modified or amended by the WHDC without the approval of the County only when such changes are administrative amendments which do not materially alter the standards for architectural review and/or property modification. All other changes deemed substantive in nature shall be submitted to the County for review and approval per the applicable sections of the proffers for the Properties.

2.1.7 Variations in the Standards

The Standards have been created to implement the design goals for the Declarant and to reasonably protect the quality and character of the community. The WHDC and/or MC, and/or the White Hall Foundation, Inc. (the "Foundation"), will endeavor to interpret, implement, and enforce these Standards in a consistent, fair and reasonable manner throughout the community. The WHDC retains all authority to interpret these Standards as they apply to each application, and also has the authority to allow variations from specific requirements based on site-specific conditions that may, in the sole discretion of the WHDC, warrant such an exception and/or when allowing a variation in the Standards would result in a better design and still remain consistent with the goals on pages 8 and 9. What constitutes a "better design" will be determined in the sole discretion of the WHDC. Neither the Foundation nor MC may grant any variation without approval from the WHDC. No variations shall be granted if the request is determined to conflict with proffered conditions or County approved documents and plans.

2.1.8 Design Standards Not A Warranty

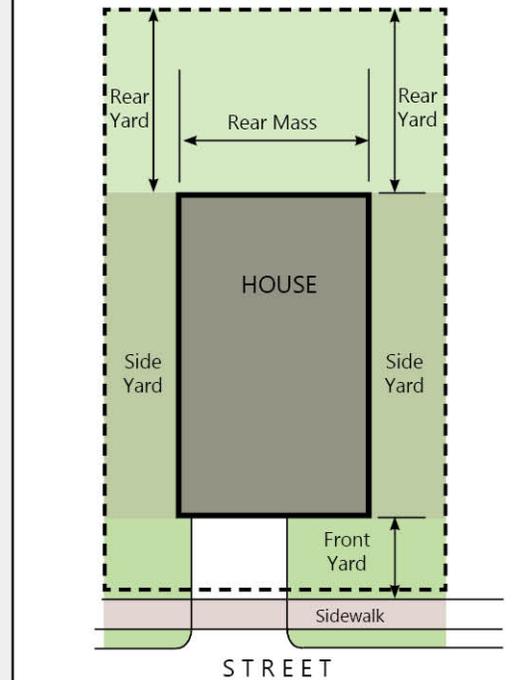
The White Hall Design Standards have been created to implement the Declarant's design goals for White Hall and to reasonably protect the quality and character of the community. The WHDC/MC, and the Foundation, will endeavor to interpret, implement, and enforce these Standards in a consistent, fair and reasonable manner throughout the community. The WHDC retains all authority to interpret these Standards as they apply to each application, and also has the authority to grant variations from specific requirements for site-specific conditions that may, in the sole discretion of the WHDC, warrant such an exception.

These Standards and the review activities of the WHDC do not constitute a warranty to any property owner or group of owners against any variation from these Standards occurring at any specific location in White Hall.

2.1.9 Definitions

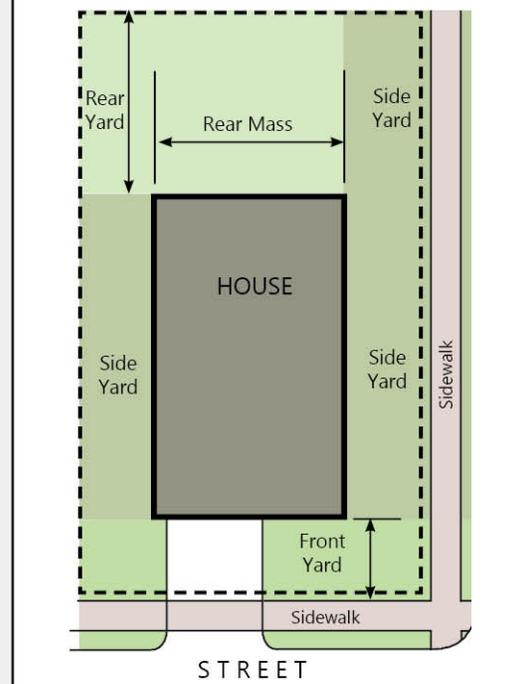
A. Yard Diagram and Terminology

Not to Scale



B. Yard Diagram and Terminology For Lots on Corners and Adjacent to Common Areas

Not to Scale



2.2 RESPONSIBILITY FOR OBTAINING APPROVALS

2.2.1 Property Owner is Responsible

A. New Construction and Reconstruction

Each builder, as the original lot owner, shall adhere to all standards and guidelines, presented herein, and shall first obtain required approvals from the WHDC prior to commencing clearing work or construction on any lot in White Hall. Builders shall be responsible for additional required submittal during construction, as described herein, and shall notify the WHDC when construction of each new home is completed so that the WHDC may conduct a final review and issue a Certificate of Compliance. Construction completion shall include all minimum yard and landscaping improvements as required in the Standards, and in accordance with all County approved documents and plans.

Each subsequent home or property owner is responsible for his or her property's compliance with these Standards. Any proposed improvements to be made to that property may affect that compliance, and the Declaration requires that the Owner obtain approvals from the WHDC and/or MC prior to making the improvements, in order to maintain compliance. This is true regardless of whether or not the work is being performed by the owner directly, by a contractor, or by any other individual.

B. Property Improvement

Each Owner is responsible for ensuring his or her Lot, as defined in Article I of the Declaration, is in compliance with these Standards. Any proposed improvements to be made to the Lot may affect compliance, and the Declaration requires that the Owner obtain approvals from the Designated Committee prior to making the improvements, in order to maintain compliance. This is true regardless of whether or not the work is being performed by the Owner directly, by a contractor, or by any other individual.

C. Notification

Property owner is responsible for notifying the Foundation, WHDC or MC, as applicable once an approved modification has been completed.

2.2.2 Complying with Proffers and Other Laws

In addition to approvals from the WHDC and/or MC, other approvals and permits may be required by the County, such as a building permit. It is not the responsibility of the Foundation, the Declarant, or the WHDC to provide notification of required permits nor to obtain any permits on behalf of a builder or property owner, nor to provide any guarantees or waive any legal requirements for compliance with any state or county law, with the Declaration or with the Standards.

For a complete list of the Proffers, notify the Planning Department at James City County.

2.3 PREPARATION OF SUBMITTALS

2.3.1 Introduction

Submittals shall be complete, accurate, and include sufficient detail to adequately explain the entire design. All requested information on the application forms shall be furnished. See Section 5 for all forms and applications.

Submittals with insufficient explanation of a design, including all visible details, and submittals that are incomplete or inaccurate cannot be accepted. The Designated Committee may, at its discretion, accept plans that are marked and initialed with late changes. Once the application is accepted, the applicant may be required to resubmit corrected and revised sheets.

All construction shall be completed in accordance with the application and the plans as approved. Any deviation from the approved plans shall be submitted and reviewed by the Designated Committee and given written approval prior to any construction. Applicants requesting design change approvals should consult with

the Designated Committee to determine if additional plans and specifications are required

For specific Submittal Requirements for new homes see Section 3.4 in New Construction.

For specific Submittal Requirements for modifications to existing home see Section 5.2 in Modifications.

2.3.2 Submittals Kept for Record

Submittals are kept on file for a record of approved designs. Therefore submitted drawings should be electronic originals, not the originals themselves.

2.3.3 Review Meetings

The WHDC and/or MC review(s) plans for new homes, modifications, additions and accessory buildings in regular, scheduled meetings. Contact the WHDC Chairperson or Community Manager for meeting times and dates.

To be included on the agenda, applications must be submitted no later than noon, 3 business days prior to the scheduled meeting day (for example, if the WHDC and/or MC meets on Wednesday, submittals for review would be due by noon the previous Friday). Any changes to these time frames for submittals are not considered a substantive amendment and do not require approval by the County.

To avoid construction delays, the WHDC and/or MC strongly recommends submitting plans for approval prior to or concurrent with applying for building permits from the County, if applicable.

If an independent MC is formed, that committee may establish its own deadlines for submittals exclusive of any WHDC deadline requirements.

Submittals will be reviewed generally within 30 days of receipt by the WHDC. If no response is received within 30 days, contact the WHDC in writing to verify the application was received, and request action on the submittal. If action is not taken promptly within 15 days following notification, the application will be deemed to be approved to the extent that it complies with all provisions of these Standards, and construction may begin. Action for this section means any response provided in writing to the applicant, including but not limited to,

Conditionally Approved, Not Approved, or Deferred.

2.3.4 Non- Review Meetings

To facilitate completion of a project or where there are extenuating circumstances, reviews may be conducted periodically between regular, scheduled meetings. Request for such reviews should be made to the WHDC and/or Community Manager at least seven (7) days prior to the anticipated need for approval.

2.3.5 Review Basis

The WHDC and/or MC base(s) reviews of each application on its interpretation of the Declaration, and these Standards as well as on the graphic and written information presented.

Due to time constraints, the WHDC and/or MC reviews of all applications occur without personal presentations by the applicant.

If, in the applicant's opinion, extenuating circumstances exist which would justify a variation from stated guidelines, this information should be presented in writing with the application.

2.3.6 Approvals

An application is deemed to have been reviewed when notice is delivered to the applicant in writing. **NO VERBAL APPROVALS OR FINDINGS SHALL BE GIVEN.** The following four decisions may be rendered:

A. Preliminary Review

Not approved for construction. This is a review of early design drawings to give the applicant direction as to what the concerns of the WHDC and/or MC are likely to be regarding that design. Comments are given to the applicant but no approval to proceed is granted without WHDC and/or MC review of a complete submittal in accordance with the requirements of the Standards.

B. Conditionally Approved

The application, as submitted, is approved for construction subject to the stated conditions in the approval letter being met. If any of the conditions require

modifying the plan or facade elevations, the applicant is required to re-submit with the conditions addressed.

C. Not Approved

The application, as submitted, is not approved for construction. Reasons for the decision shall be given in writing. The Designated Committee may provide suggestions for revisions but is not obligated to provide design solutions. A "Not Approved" action requires an appeal or a complete re-submittal by the applicant.

D) Deferred

Not approved for construction, additional information is required. Reasons for the decision stem from a lack of information that once received should be adequate for a final decision. This action requires submittal of the requested information only, and not a full re-submittal, before any approvals can be given.

2.3.7 Appeals

Should an application be denied on the basis of the Covenants or Standards, and the applicant feels that the submittal was misinterpreted or that there are extenuating circumstances which should justify an exception from these requirements, the applicant may appeal to the WHDC.

| <u>Review</u> | <u>1st Appeal</u> | <u>2nd Appeal</u> | <u>3rd Appeal</u> |
|---------------|-------------------|-----------------------------|-----------------------|
| WHDC | WHDC | Declarant (final appeal) | NA |
| MC | MC | WHDC | Declarant / Board* |

See Detailed Information Below

First Appeal

WHDC: Should an application be denied by the WHDC on the basis of the Declaration or the Standards and the applicant feels that the submittal was misinterpreted or that there are extenuating circumstances which should qualify for an exception from requirements, the applicant may request, in writing, a meeting with the WHDC to personally present the submittal and any requests for a variation in design and approval. The applicant is invited to

present the submittal, but the balance of the meeting shall be conducted in closed sessions as permitted in 55-510.1C. of the Virginia Code.

MC: If an independent MC is formed and the appeal applies to a decision made by that MC, the first appeal shall be to the MC in writing and with the same procedural guidelines detailed above.

Second Appeal

WHDC: If an applicant feels that he or she has been unfairly denied approval by the WHDC through the first appeal process, then a second appeal may be made in writing to the WHDC Chairperson, requesting that the submittal be sent to the Declarant for review. The Declarant may or may not request a personal meeting with the applicant and will issue a final decision in writing to the WHDC for communication to the applicant.

MC: If an independent MC is formed and the second appeal applies to a decision made by the MC, the second appeal must be to the WHDC in writing. The WHDC may or may not request a personal meeting with the applicant and will issue a final decision in writing to the applicant.

Third Appeal

WHDC: None Allowed

MC: If an applicant feels that he or she has been unfairly denied approval by the MC and WHDC through the appeals process, then a third appeal may be made in writing to the WHDC Chairperson, requesting that the submittal be sent to the Declarant for review. The Declarant may or may not request a personal meeting with the applicant and will issue a final decision in writing to the WHDC for communication to the applicant.

* If the rights of the WHDC have been conveyed by the Declarant to the MC, the final appeal would be to the White Hall Board of Directors instead of the Declarant. In this case, the White Hall Board of Directors may develop its own procedures for that appeal process. There are no further appeals provided.

2.3.8 Reuse of Previously Approved Plan

The WHDC will permit the re-use of previously approved designs within White Hall, but may also limit the use of such plans to avoid significant repetition.

Approval of a home for a given site does not guarantee approval on another site. The WHDC may issue restrictions on the number of re-uses of a house design on a street, a neighborhood and/or the entire community.

The WHDC reserves the right, at its option, to require significant modifications to a façade, or to reject the home design entirely, in order to control the amount of repetition.

See Section 3.10.5 for additional detail on proximity of similar houses.

2.3.9 Construction Changes

All construction shall be completed in accordance with the application and the plans as approved. Any deviation from the approved plans shall be submitted and reviewed by the WHDC and given written approval prior to any construction. Applicants requesting design change approvals should consult with the WHDC to determine if additional plans and specifications are required.

2.3.10 Final Compliance

A Certificate of Compliance is a written document from the WHDC, certifying that the builder has met all of the requirements under the Declaration and the Standards insofar as they pertain to new construction.

It is the responsibility of the builder to request a Certificate of Compliance within 15 days of completing construction.

If the WHDC identifies any items not completed in accordance with the Standards and/or Declaration, the builder must complete repair of these items within 30 days and request another inspection.

IN THE EVENT THAT THE SUBSEQUENT OWNER CLOSSES ON THE LOT PRIOR TO RECEIPT OF A CERTIFICATE OF COMPLIANCE, IT BECOMES THE SOLE RESPONSIBILITY OF THE NEW OWNER TO ENSURE COMPLIANCE WITH THE STANDARDS AND/OR DECLARATION.

Please Note: A Certificate of Compliance is different from a Certificate of Occupancy. A Certificate of Compliance is issued by the WHDC while the Certificate of Occupancy is issued by the County.

2.3.11 Review Fees

See Section 3.4.3.

WHITE HALL
JAMES CITY COUNTY, VIRGINIA

3.1 INTRODUCTION

The **New Homes** section of these Standards is intended to guide home builders with particular design standards specific to a lot or home before, during and after construction. New construction is defined as any proposed construction that occurs before a Certificate of Occupancy is issued from the County.

Generally acceptable practices for complying with the architectural standards outlined in this document are on the following pages. However, in some circumstances, such as the addition of a fence or patio, you may need to refer to the **Modifications Standards** in Section 5 for additional information, standards and/or clarification.

In some cases proposed homes that are allowed elsewhere may be denied because of the property location. It is, therefore, important that home builders not assume that an application will be approved simply because a similar house has been approved elsewhere. The WHDC must consider the impact of each proposed change on the property in question, neighboring properties, the street, the neighborhood, and the community as a whole.

Keep in mind that some lots are unique and houses have a greater visual impact than others. These are considered to be 'high impact lots' and homes. When this occurs, additional standards are required for the property and the house. These are identified on the High Impact Lot map with additional / special standards.

The MC and WHDC will reach their decision on individual applications by considering the intrinsic merits of each proposal as well as all relevant surrounding circumstances. Please refer to Sections 1 and 2 for more information on the community design goals, interpretations made by the WHDC, design variations, etc. that will help the WHDC and MC reach their decision.

3.2 HOMES AND ARCHITECTURE

3.2.1 Style and Form

As noted in the Design Goals, the architectural styles of White Hall will be traditional Toano Virginia architecture.

Houses shall utilize simple rectangular massing with traditional gable, hip and/or shed roofs as appropriate to the size and shape of the house. Traditional dormers are encouraged on roofs, and may be required to visually break up large roof expanses.

The WHDC may reject highly stylized houses with overstated eclectic design elements. Houses with overly mixed styles, or houses with insufficient stylistic theme or treatment shall not be permitted.

Houses should be designed so as to reduce the visibility of the garage. The WHDC encourages, and in some cases may require a side load garage where the layout of the lot supports that feature. For garages that extend further forward than the main body of the house, the WHDC reserves the right to require additional architectural or landscape elements.

3.2.2 Facades

Exterior facades which face a public street shall have a formal arrangement and organization of all elements including doors, windows, porches, columns, cornices, trim and details such as shutters, quoins, jack arches and the like.

Houses with facades that face two public streets shall maintain the same qualities on both facades.

All other facades located at a distance greater than 10' from an adjoining structure, shall be of a residential scale with sufficient openings for light, view and air consistent with the residential scale of the community.

The WHDC reserves the right to require that large planes be broken up with additional windows, off-sets, or other details to maintain appropriate scale.

3.3 ZONING

The extension to White Hall is zoned R2-Cluster. All setbacks and zoning requirements should follow this zoning classification. Being respectful of neighboring homes, use similar setbacks, but vary up to 5' the placement of the main façade.

3.4 SUBMITTAL REQUIREMENTS

3.4.1 Submittals to be Complete and Accurate

Submittals prepared for consideration by the WHDC and MC are required to be complete, accurate, include sufficient detail to adequately explain the entire design and shall include drawings prepared as described below. All requested information on the application forms needs to be furnished. The WHDC/MC will not accept applications that are incomplete or inaccurate.

The WHDC/MC may require that color chips accompany color applications.

3.4.2 Summary of Submittal Requirements

Proper submittals include drawings that are neat, accurate, drawn to scale, and with sufficient detail to adequately explain the entire design. Insufficient explanation of a design including all visible details is cause for non-acceptance of an application. The WHDC, at its discretion, may accept plans that are marked in red with late changes to design features; however, the WHDC may require that the marked sheets be corrected and revised, and re-submitted:

New Home Preliminary Submittal Requirements

- Preliminary Review Application
- Review Fee
- Floor Plans
- All Exterior Elevations: For preliminary review and approval, the ground level can be flat, however, when actual plans on a specific lot are submitted and the ground level is sloped, the actual elevation is required. If there is a significant change, it may require a new review and decision by the WHDC. See Section 3.5 for additional detail.
- Indicate finish materials.

New Home Construction Submittal Requirements

- New Construction Application
- Review Fee

- Stake Out (Stake out building location on lot and trees to be removed and/or saved and submit form when done and ready for inspection.)
- Site Plan
- Foundation Plan
- Floor Plans
- All Exterior Elevations: Show actual ground level, especially on sloped lots. If there is a significant change from Preliminary Approval, it may require a new review and decision by the WHDC. See Section 3.5 for more detail.
- Indicate finish materials.
- Exterior Color Selection (Submit on Color Form application)
- Finished Landscaping Plan (Submit on Landscape Form application with New Home plans)

Accessory Structures

- See Section 5.4.1 in Modifications

Other Site Improvements

- See Section 5 - Modifications

Fences:

- See Section 5.4.4 - 5.4.9 - Modifications

3.4.3 Architectural Review Fees

| <u>REVIEW TYPE:</u> | <u>CHARGE PER PLAN</u> |
|---------------------------|---|
| Preliminary Review: | \$200 per house plan |
| New Construction Review : | \$75 per application if the house plan has been Preliminarily approved \$275 per application if the house plan has not been preliminarily reviewed/ approved |
| Color Application Review: | First Review: No charge Subsequent reviews: \$25 |
| Landscape Plan Review: | First Review: No charge Subsequent reviews: \$25 |

Modifications Review Fee: There are no fees for modification reviews by the WHDC. If an independent Modification Committee is formed, that committee may recommend its own fee schedule subject to approval by the White Hall Board of Directors.

3.5 PRELIMINARY ELEVATION APPROVALS

As per Section 2.3.6 - Approvals, the WHDC will review preliminary design drawings to give the applicant direction as to what the concerns are likely to be regarding that design. 'Preliminary Approval' is general and not lot or site specific. Once approval has been granted these elevations are the basis for review for final construction plans.

A house approved during Preliminary Review does not necessarily mean it is approved when changes occur based on site conditions. For instance, when grading alters the elevations (as shown below) it would need to be resubmitted with the actual ground level and revised elevation and re-evaluated by the WHDC.

For example:



Assume 'Model M' had a Preliminary Review and was approved by the WHDC.



The same 'Model M' would not have Preliminary Approval because of the facade changes due to the topography. It would require a new submittal and review by the WHDC.

3.6 GENERAL REQUIREMENTS

3.6.1 Construction Schedule

Construction for all new construction shall commence within six months of the date of written approval and shall be completed within one year from the date of the approval.

Approval for projects not started within six months of initial approval shall expire and a new application package shall be required if the improvement is still desired.

3.6.2 Access to Lots

Submission of an application to the WHDC will constitute permission from the Owner to the WHDC, the MC or its agents to have access to the lot before, during and after construction for the purpose of reviewing the construction and assessing compliance with all approvals per the application.

3.6.3 Signs

See Section 4.5.18 for other sign requirements.

A) Construction Signs

Only one construction sign will be permitted per home for the identification of the builder and must be based on templates approved by the WHDC. This sign shall not exceed 3 square feet and shall be permanently mounted on a suitable post. Larger signs showing architectural renderings and similar information may be installed with prior WHDC approval.

B) Initial 'For Sale' Signs

Initial "For Sale" signs, other than those posted by the Declarant, shall be limited to one sign per home and shall be placed in the front of the home. Initial "For Sale" lead-in signs are not permitted to be placed by the builder. The WHDC reserves the right to restrict the size, placement, and design of any initial "For Sale" signage as it deems appropriate.

3.7 SITE MANAGEMENT

3.7.1 Trash Containment

Trash shall be contained on a site or removed daily. Dumpsters shall be placed prior to the commencement of framing operations on any construction site, and shall be maintained until the trim-out operations are completed. All construction debris and all construction personnel trash (food and drink containers, wrappers, etc.) shall be disposed of in the dumpster and may not be dumped on the job site, on other sites, or on common areas within the community.

3.7.2 Hazardous and Toxic Waste

No petroleum based products or other potentially hazardous or toxic substances may be disposed of on any lot, any storm drain, any drainage ditch, stream or pond within the properties.

3.7.3 Portable Toilets

During construction, every general contractor shall maintain portable construction site toilets on construction sites. Single toilets may serve multiple sites as permitted by the County. Toilet doors shall face the interior of the site. Where a construction site borders a completed home, the toilet shall be at least 10' away from the adjacent lot line.

3.7.4 Construction Entrances

Construction entrances shall be limited to the future permanent driveway location. Rock fill in construction driveways will be maintained to prevent the carrying of soil into the street by construction vehicles. Any soil deposited on White Hall roads by construction vehicles shall be immediately removed and the street area cleaned by the builder.

3.7.5 Construction Vehicle Parking

Construction vehicles, trailers, and equipment may be parked on streets during construction hours only. Vehicles and equipment may not be parked on streets overnight, nor on weekends or holidays without prior notification to and approval from the WHDC Chairperson.

3.8 CLEARING AND LOT PREPARATION

3.8.1 No Clearing Without Approval

No clearing or work of any kind shall commence on any lot until architectural plans and specifications (including a stakeout form) as defined in these guidelines have been submitted and approved by the WHDC. For new construction, an on-site clearing review must be completed and written approval received. Overall clearing and grading shall be in compliance with County approved documents and plans.

3.8.2 Clearing of Trees

The clearing of mature trees (over 6" in diameter) shall be as approved by the WHDC representative on-site during site clearing review. The WHDC encourages the saving of mature hardwood trees and ornamental trees where possible in front yards. Saving trees in groups is also encouraged. Trees shall be cleared to permit the proper grading and planting of a finished yard as specified elsewhere in these Standards. Yards may not be left entirely in a natural state, except for approved natural areas.

Tree stumps shall be removed or cut at grade in a manner to conserve remaining trees. Cleared material may not be dumped on other sites or common areas within the community.

The WHDC may require the removal of additional vegetation that is considered horticulturally obnoxious and unsightly. What constitutes horticulturally obnoxious and unsightly is in the sole discretion of the WHDC.

3.8.3 Required Tree Replacement

On lots where no significant trees can be saved, or where clearing is subsequently performed beyond what was approved, the WHDC reserves the right to require the planting of new nursery-grown trees in accordance with the criteria in the Landscaping section of these Standards.

3.8.4 Tree Removal on Improved Lots

See Tree Removal in the Modifications Section.

3.8.5 Wetlands and Wetland/Resource Protection Area (RPA) Buffers

Where wetlands or wetland/RPA buffers exist in the community, no structures of any kind may be installed. This includes but is not limited to fences, play structures and sheds.

3.9 GRADING AND EROSION CONTROL

3.9.1 Prevent Erosion During Construction

Compliance with applicable government regulations and code requirements in preventing silt runoff is required. Erosion control devices shall be installed prior to construction as required by the County and/or Virginia State Code, and maintained for the duration of construction. Any mud or silt runoff onto adjoining properties, common areas, sidewalks or streets shall be immediately stopped and residue removed.

3.9.2 Grading for Drainage

Site shall be graded to direct water away from residence and prevent ponding, standing water, or poorly drained areas. Final grading for drainage should be in accordance with the master drainage plan for the community.

A. Where the natural topography conducts drainage from one lot across another lot, drainage after development may be restored to this natural direction unless otherwise required by the master drainage plan.

B. Do not alter the topography to re-direct drainage across adjacent properties. When possible, drainage shall be directed to the rear of the lot or landscaped areas.

C. Do not alter the topography so as to result in water that would otherwise normally flow across the lot, being trapped on adjacent lots.

3.9.3 Terracing and Retaining Walls

Where necessary to stabilize slopes, retaining walls, stepped terraces or other forms of permanent erosion control should be provided. Any permanent structures constructed for erosion control, such as retaining walls, must be approved by the WHDC.

Any retaining wall visible from a street shall be constructed of brick or stone as appropriate to the house. Other retaining walls may be constructed of interlocking unit masonry.

Timber retaining walls are not permitted. All walls shall be constructed level and stepped as required for changes in slope.

For more information on the design of retaining walls, see Section 3.30.

3.10 LOCATING STRUCTURES ON A LOT

3.10.1 Proximity of Similar Townhouses

Note: Building refers to two or more connected units.

Unit refers to the individual townhouse that when connected with other units create a building.

Along the front façade of each townhouse building of five units or less, no two units or color scheme can be repeated. In buildings of six or seven units, one unit is allowed to be repeated provided its separated by two other units and colors are different. The first two adjacent units on either side of a unit shall present a "complete and discrete" vertical façade composition. Façade composition is the arrangement and proportion of materials and elements (e.g., windows, doors, columns, bays). "Complete and discrete" is a complementary but distinct composition of materials, fenestration proportions and color.

3.10.2 House Siting Requirements

A) Setbacks:

See R2 Cluster Zoning in James City County.

Varying building setback along the street is encouraged. Be respectful of neighboring houses and use similar setbacks, but vary up to 5' the placement of the main façade.

B) Orientation to the Street:

The building façade containing the primary entrance is considered as the primary façade and should face a public street. Corner lots should prioritize the frontage on

the more primary or public street. Houses in cul-de-sacs shall generally face the center of the cul-de-sac. Where site conditions make this unnecessarily difficult (in the sole opinion of the WHDC) the WHDC may approve an alternative site orientation.

3.10.3 Additions

See Modifications Section 5.3.1.

3.10.4 Accessory Structures

See Modifications Section 5.3.2.

3.10.5 Proximity of Similar Houses

Once house models have been preliminarily approved, a 'grid' will be prepared by the WHDC indicating which houses are considered 'the same or very similar' and cannot be located as described below and shown in the diagrams.

A) The same or very similar elevations or color schemes **shall not** X be located:

- 1) adjacent to;
- 2) directly across from on another;
- 3) diagonal from one another.

B) The same or very similar elevations or color schemes **may not** X be located:

- 1) 'two houses down' in both directions.

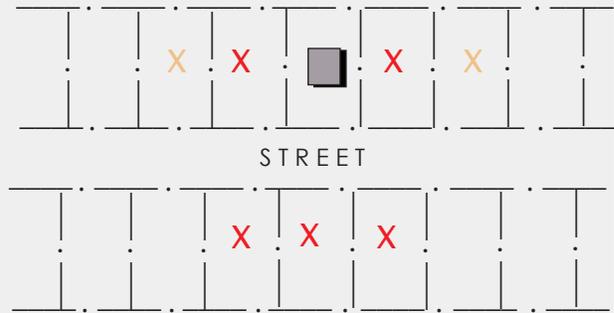
These will be reviewed on a case-by-case basis.

C) Homes with the same or very similar elevation or color scheme **shall not** X be located adjacent to one another on a cul-de-sac as shown to the right.

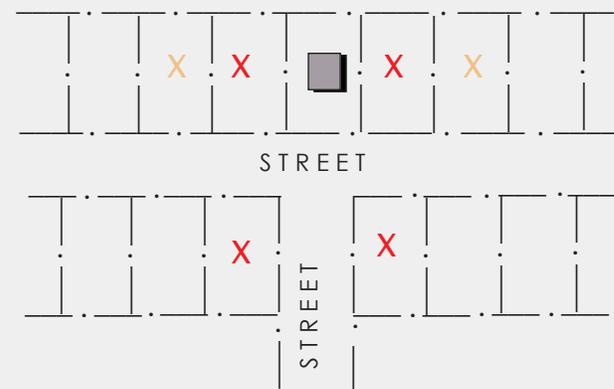
Homes with the same or very similar elevation or color scheme **may not** X be located a cul-de-sac as shown in the diagram. These will be reviewed on a case-by-case basis.

d) Houses interrupted by a street or common area will be reviewed on a case-by-case basis.

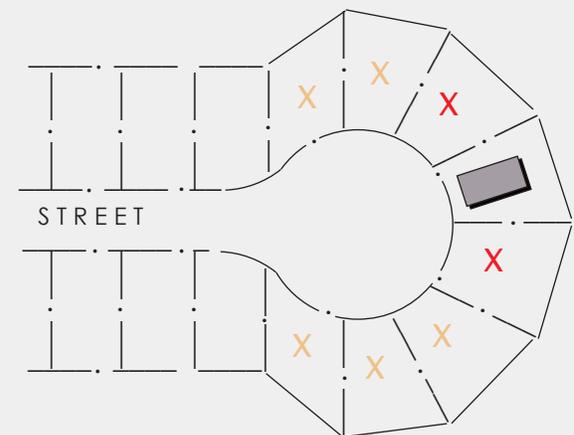
Example A Typical Street for Single Family Homes



Example B Intersection for Single Family Homes



Example C Cul-de-Sac for Single Family Homes



- X Lots where the same or similar houses or colors **shall not** be built
- X Lots where the same or similar houses or colors **may not** be built but will be reviewed on a case-by-case basis

3.11 VINYL SIDING ELEVATIONS

If the front wall elevation of a single family house has more than 75% vinyl siding, a minimum of three of the following features on this page is required. Note: for calculation purposes, doors, windows, garage, trim features, gables, etc. are not used in calculating the wall surface.



a) When a roof or roofs face the side yard, a decorative attic vent or window on the front elevation



b) When a roof or roofs face the side yard, a trim band on the front elevation to separate the attic from the living space



c) When a roof or roofs face the street, at least one dormer



d) A foundation material minimum



e) A Change in siding patterns



f) Shutters



g) A change or an architectural offset of at least 18" in the façade elevation (garage does not count)



h) A projecting architectural element such as an accent roof or pergola above garage doors (see section 3.19)



i) A change in siding colors (trim, door, foundation or garage doors do not count)



j) A front porch at least 25% of the width of the front façade

3.12 COLORS

3.12.1 Types of Approved Finishes

A) The WHDC/MC must approve all exterior colors prior to painting or the application of prefinished materials.

B) Vinyl siding shall be prefinished with an integral color, as approved, and shall not be painted.

C) Stains for approved wood siding will be considered by the WHDC/MC on a case by case basis.

3.12.2 Criteria for Judging Color

A) The same or very similar color schemes may not be used on homes that are side by side, directly across, or diagonal from each other or homes on corners that back up to each other.

B) The WHDC/MC may reject a proposed siding color if it determines that the color has been used on too many houses in the same neighborhood or on one street. The WHDC/MC have sole discretion in the determination of what colors are or are not acceptable.

C) Color selections are not limited to a restricted list; however, colors should generally be harmonious with each other and with other finishes such as masonry foundations and roof colors. Roof colors shall be submitted at the same time as house colors.

D) Additions and accessory buildings must be finished in the same colors as the house.

3.13 FOUNDATIONS

Houses shall be built on a minimum 12" continuous foundations over a basement or crawl space.

All visible portions of exterior foundations shall be constructed of brick or stone. For houses with primary facades constructed entirely of brick or stone, the foundation shall match the facade.

When required, foundation vents on street facing facades shall be wood or PVC traditional louvered vents, or as otherwise approved by the WHDC. Decorative vents shall match the house trim color.

Stepping the siding down below the first floor level is not permitted on any elevation of the house except for the rear elevation with walk-out basements. For walkout basements, the siding may extend to the foundation only on the rear elevation. The WHDC reserves the right to require additional windows if the siding extends to the foundation on the rear elevation.



Siding should be above the foundation as shown here



Siding should never be sloped



Siding should not be stepped

3.14 SIDING

3.14.1 Modifications by the WHDC

Modifications to wall surfaces including but not limited to the addition of windows, doors, or breaks in the surface, may be required by the WHDC in order to mitigate large unbroken wall expanses. This may be in addition to the minimum number of required windows.

3.14.2 Materials

Except as provided herein, house walls shall be faced with brick, stone (natural or cultured), horizontal lap siding, shingles or board and batten. Plywood, or metal siding is not allowed. Other materials will be reviewed on a case-by-case basis.

Horizontal lap siding, shingles and board and batten may be manufactured from natural wood, cement fiber board or premium vinyl (minimum .044" thickness). Other products will be considered on a case-by-case basis.

A maximum of four main wall materials or patterns may be used on any one facade of any home. Where multiple materials or patterns are used on a single elevation or a change in the elevation, material changes shall end in a logical place such on an inside corner to give the impression of three dimensionality or transition with the trim.

Portions of facades that are accessory to the main facade may use other materials as appropriate to the design and as approved by the WHDC, such as stucco in pediments, shiplap siding on dormer sides, or vertical board and batten siding on dependencies.

Materials used on the side and rear of the home must be consistent with one of the materials used on the front elevation.

Painted siding shall be painted with oil or latex based exterior house paint. Semi-transparent stains and clear finishes are generally not permitted.

See Section 3.13 for step-down siding.

See Section 4 for additional requirements for **High Impact Lots** requirements.

3.14.3 Criteria for Installing Vinyl Siding

A) Vinyl installation shall meet or exceed the standards in the handbook of the Vinyl Siding Institute, and the conditions stated below.

B) In any clear run of siding (between openings, corners, projection, etc.) of:

1) lengths of 12'-0" or less: only single length panels shall be used. **No joints are permitted.**

2) In clear runs greater than 12'-0" but less than 18'-0" in length: a maximum of one vertical joint is permitted in any horizontal line of siding. *

3) In clear runs greater than 18'-0" but less than 30'-0" a maximum of two joints are permitted in any horizontal line of siding.*

* In clear runs of siding over 12'-0": joints must be placed in a random pattern in the wall. No "stair-step" joint patterns shall be permitted.



'Stair-Stepping' siding is not permitted

C) On the left and right sides of the house all joints shall face the rear of the house / lot.



Seams (as shown above) should not be visible from the front of the house

D) When lap siding is used on dormers, it must be horizontal and not parallel to the roof pitch.



Correctly Installed



Incorrectly Installed

3.15 EXTERIOR TRIM

3.15.1 Door and Window Trim

Traditional windows on public street facing facades shall be trimmed with traditional 2" brick moldings, wide moldings, or shall have shutters (if appropriate to the style of the house).



Window trim is too small



Window trim is sized appropriately

Decorative window heads are not required in facades with lap siding, but may be permitted as appropriate to the architecture.

In brick or stone facades facing a street, jack arches or a soldier course are required over straight windows, masonry arches are required around circle-head or ellipse-head windows

On corner lots or high impact lots, all trim (including windows) on the facade facing the street or common area shall be a minimum of 4" or match those on the front facade.

3.15.2 Fascia and Soffits

A) Fascia shall be a minimum of 6" and may be aluminum wrapped only if pre-colored.

B) Soffits shall be the same color as the fascia.

3.15.3 Cornices & Eaves

A) Eaves shall generally be between 12" and 16" wide unless otherwise justified by the architectural style, in the opinion of the WHDC.

Small eaves such as on dormers shall be sized appropriately to the dormer.

B) All primary facades shall have a minimum three-member cornice and eave consisting of soffit, fascia and gutter.

c) Gable ends with projected box rakes shall contain compatible elements to the main cornice and eave.



'Pork Chop' eave returns are not allowed



Eave returns should return as shown in the picture or carry through to the opposite side.

d) Open end roof rafters (as shown below) may be permitted if appropriate to the style of the home (i.e. farmhouse or craftsman).



When appropriate open end rafters are allowed



3.15.4 Other Exterior Trim

- A) Corner boards shall be a minimum of 6"
- B) Frieze board trim of 4" is required on all front facing gables
- C) Trim material shall be consistent with the exterior siding material. Mixing of materials is not permitted.

3.16 WINDOWS

Aesthetic design consideration shall be given to the location of all windows and doors that face the front of the house or any other street. All windows and doors shall be of a style and size that is appropriate to the design of the home. Circle and ellipse head windows are permitted. The WHDC/MC reserves the right to require additional windows or different styles, sizes or locations of windows when, in its opinion, these changes are necessary to maintain the aesthetic quality of the facade.

3.16.1 Design

- A) Double-hung and Single-hung
- B) Casement
- C) Bay windows
 - 1) Must be wide enough to fill each bay facade without filling with siding. May include a picture window in the center panel of the bay.
 - 2) Cantilevered bay windows are not permitted on the first floor of street facing facades. Bay and box windows may be cantilevered on the second floor but must include decorative supports.
- D) Circle, ellipse head, custom or accent windows as appropriate to design. Specialty windows are encouraged in gables but the WHDC reserves the right to limit use of these specialty windows.
- E) No iron, steel, or similar bars shall be installed over any windows or doors.
- F) Window grid and trim color will be considered on a case-by-case basis and must be submitted with all exterior color selections/modifications.

3.16.2 Material

- A) Wood
- B) Clad wood (vinyl clad or metal clad)
- C) Solid PVC if designed in wood profile

3.16.3 Location

- A) Window styles on all facades shall be the same as windows on the front façade. Smaller decorative windows will be considered on a case-by-case basis.
- B) No window shall be located closer than 18" from a house corner unless otherwise approved.
- C) The WHDC reserves the right to require changes to window placement even if this requires floor plan changes.
- D) See Section 4 for additional requirements for window placement on high impact lots.

3.16.4 Minimum Number of Windows

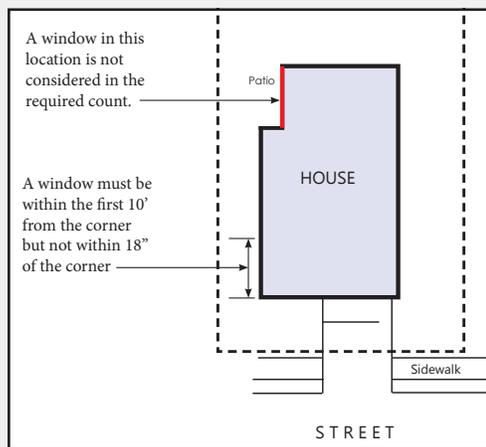
A) Front Elevations:

The quantity and location of front windows for all houses will be reviewed on a case-by-case review.

B) Side Elevations for Non-High Impact Lots

A minimum of three full size windows are required on the first floor and two on the second floor. For second floors where the roof is sloped and the second floor length is reduced, the WHDC will consider one window on the second floor.

Windows placed in recesses in the elevation when not visible from the street do not count (see diagram below).



A double window counts as one window.

At least one window must be within 10' from the front corner of the house.

C) Side Elevations for High Impact Lots

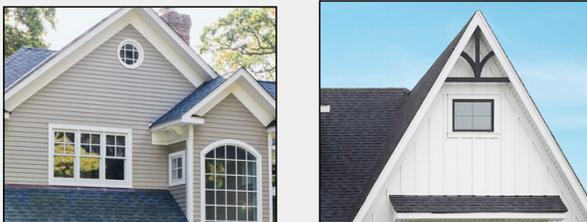
See Section 4

3.16.5 Gable Windows

A) Gable windows shall be centered in the gable

B) Horizontal sliders are not permitted.

C) See High Impact Lot Requirements for required gable windows.



3.17 SHUTTERS

Shutters shall be wood or vinyl, shall be appropriately sized to the window opening, and shall be operable with hinges and shutter dogs or appear to be operable with faux hardware. What is considered "appropriately sized" is in the sole discretion of the WHDC.

Shutters are not recommended on twin windows and are not permitted on triple or larger multiple windows.



Shutters, as shown on the left side of the house, are not permitted on double windows.

Shutters on the right side of the house are permitted but the ones in this photo are sized too large. They should be one-half the width of the window unless they are Bahama shutters.



Shutters in this illustration are sized correctly

3.18 DOORS

3.18.1 Entry Door Design

Door shall be constructed of wood, metal clad or wood veneer fiberglass.

Standard six-panel doors will generally be permitted as the minimum for the main front door of the house. Front doors may include side-lites and transom. Double front doors, doors with double side lites, and special design panel doors and doors with half lites will be judged on the basis of their compatibility with the house architecture.

Excess ornamentation not consistent with other ornamentation on the house, is prohibited.

In general, single full lite doors or traditional multiple lite doors which match the design characteristics of the doors they cover will be approved.

Door styles shall be submitted and reviewed for approval the WHDC and/or MC.

3.18.2 Entry Door Material

- A) Wood
- B) Metal clad
- C) Wood veneer fiberglass

3.18.3 Storm/Screen Doors

See Section 5.3.5 in Modifications

3.18.4 Sliding Doors

Sliding doors may be installed on side and rear façades only. Door styles shall be submitted for approval and shall be consistent with the architectural style, character, and color of the home.

3.18.5 Garage Doors

See Section 3.19.

3.19 GARAGES

3.19.1 Design

A) The front plane of the garage should be flush to or behind the front plane of the house or front porch. If, in a hardship case and in the opinion of the WHDC, a garage is allowed to project beyond the front plane of the house or porch by more than 5', an architectural detail, such as a window, must be added to the side of the garage facing the front door of the home.



B) Three-car garages on the front facade are not allowed.

3.19.2 Garage Doors

A garage door can change the aesthetic value of a house since it can comprise a significant portion of the facade. The style and detailing should complement the overall look of the house. Just as any part of the house design and the design, type, material and style of a garage door needs careful thought.

A) Any garage doors visible from a street shall use an upgraded garage door. An upgraded garage door is any door with a minimum of three (3) enhanced features. Enhanced features shall include"

- i. A projecting architectural element, such as an accent roof or pergola, above garage doors,
- ii. windows,
- iii. raised panels,
- iv. decorative panels,
- v. wood grain panel,
- vi. arches, and
- vii. hinge straps or other architectural features on the exterior that enhance the entry (i.e. decorative lintels, arches, columns, keystones, eyebrows, etc.).



A garage door such as this would not be allowed



The same house as the picture above but with a garage door that is acceptable.

B) For two car garages, two single doors are encouraged over one larger door.



For two-car garages, two doors is preferred

C) In the event the distance between the top of the trim of the garage door and the bottom of the trim of the second floor window(s) is within a continuous plane with the same siding pattern and color, and is greater than 6', the expanse of siding on the front façade of the home above the garage door must be mitigated by a change in siding patterns and/or color, or a feature such as a pergola, roof extension, cornice return or a band board. This is not required when the first floor and second floor are not a continuous plane.



This example would not be allowed since the spacing between the top of the garage door and the window or gable is greater than 6'.



The two examples above illustrate solutions to mitigate the expanse of siding between the top of the garage door and the second floor window or gable.

3.19.3 Garage Exterior Lighting

A) Number of Lights

For one-car garages, one light on the side of the door that's closest to the front walk is required or one light on each side of the door.

For double doors, lights should be placed on the left and right sides or between doors.

For two-car garages with one door, one light on each side is required.

B) Size of Lights

Exterior garage lights that are too small or too large will detract from the curb appeal of the house. As a general rule of thumb, fixtures should measure one-third to one-quarter the height of your garage door.

To calculate the specific fixture size you need, multiply the width of your garage door by 0.25 for a single door and 0.33 for a double door. Many fixtures include a suggested light source and estimated beam width to help you double-check your calculations.

C) Placement of Lights

Depending on the light fixture design, the center of the light should be approximately 5 1/2 to 6' from the ground.



Not Acceptable
This style of light should be beside the door



Not Acceptable
Lights are too small and are placed too high



Acceptable: Light size and placement are correct



3.20 ROOF AND ROOF ACCESSORIES

3.20.1 Main Roof Material

A) Dimensional architectural shingles (min. 30 year warranty)

B) Pre-finished standing seam metal

C) Slate (real or imitation)

D) Cedar shake (real or simulated)

E) Color and style of main roof will be considered on a case-by-case basis based on compatibility with the architecture of the home.

F) Flashing shall be real copper or pre-finished aluminum in bronze or black.

3.20.2 Secondary Roof Material

A) If not the same as the Main Roof Material, only one other roof material can be used on secondary roofs.

B) Dimensional architectural shingles (min. 30 year warranty)

C) Pre-finished standing seam metal

D) Real copper standing seam metal

E) Slate (real or simulated)

F) Cedar shake (real or simulated)

G) Color and material for secondary roofs will be considered on a case-by-case basis based on compatibility with the architecture of the home.

H) Flashing shall be real copper or pre-finished aluminum in bronze or black.

3.20.3 Roof Slope

A) The minimum roof slope of main house roofs shall be 8 in 12. Minor secondary roofs with slopes less than 8 in 12 may be permitted at the discretion of the WHDC/MC.

B) Roof slopes shall be consistent with the style of architecture of the house. The WHDC/MC may require steeper slopes for aesthetic reasons.

C) Small areas of flat roofs may be permitted when concealed from view from streets and amenities and integral to the house design.

D) Eaves/overhangs shall be a minimum of 12" and a maximum of 24". Other sizes can be reviewed on a case-by-case basis.

3.20.4 Gables & Dormers

A) Dormer windows & eyebrow window shall be consistent with the style of architecture of the house

B) Dormers are intended to only be large enough to house a window(s) and appropriate trim. Siding can be used when appropriate on a case-by-case basis and approved by the WHDC.



Unacceptable
Dormers are too large for the window



Acceptable
Dormers are appropriately sized for the window

3.20.5 Gutters and Downspouts

A) Color shall be real copper or pre-finished aluminum to match the color of the trim adjacent to the gutter/downspout to complement the overall color scheme.

B) Downspouts shall include short turnouts no longer than 8" at outlets or be piped below grade.

C) Downspouts shall not block sidewalks or access to garage doors or trash corrals.

3.20.6 Flashing

Highly visible roof flashing shall be real copper or prefinished to match the adjacent building material color. Painting is acceptable for less visible flashing however no exposed mill finished flashing is permitted.

3.20.7 Ventilation

A) Attic Vents

1) In general only continuous eave ridge vents, or power vents incorporated into the architectural elements of the house are permitted. If additional attic vents are needed, they shall be low profile designs.

2) No protruding attic vents are permitted on front elevation

3) Ridge vents shall be covered with shingles. All other attic vents shall be finished or painted to match roof shingles.

B) Gas flues & plumbing vents

1) Gas flues for heaters and fireplaces shall be no larger than 8" in diameter.

2) No roof penetrations or accessories shall be located on the front roof plane of the home.

3) Flues and plumbing vents shall be black or painted to match the roof shingles.

3.20.8 Skylights

Skylights are not permitted on any roof facing a street.

3.21 CHIMNEYS AND FLUES

3.21.1 Chimneys

A) Masonry chimneys are required on any façade or roof plane that faces a street (front or side). All chimneys shall have masonry foundations. Sided chimneys are permitted on roof planes or facades that do not face or are visible from a street.

B) Cantilevered chimneys are not permitted.

C) Chimneys shall be appropriately sized in proportion to the size and height of the house.

3.21.2 Flues

A) Direct-vent fireplaces are not permitted on any front facade.

B) All the exterior materials and finishes used to enclose the fireplace box shall match the adjacent façade.

C) Cantilevered direct vent fireplaces are not permitted on the front and side elevations. A continuous foundation to match the foundation of the house is required. Cantilevered direct vent fireplaces are not permitted on the first floor level of the rear elevation, but will be considered on a case-by-case basis only if the fireplace is surrounded by a deck.

3.22 LATTICE

When lattice is used for porches, decks, and any other use, it cannot have openings 2.75" or larger. Depending on the architectural style of the house, it can be vertical or the traditionally angled.

White is the preferred color but the WHDC will review other colors on a case-by-case basis.



Unacceptable installation



Acceptable installation

3.23 PORCHES AND DECKS

3.23.1 Definitions

Porch: a covered shelter projecting from the front, side, or rear entrance of a building



Short Porch: porches less than 1/3 of the width of the façade excluding a garage



Portico: a structure consisting of a roof supported by two columns or columns at regular intervals, typically attached as a porch to a building



Stoop: a platform that leads to the entrance of a house; often with stairs leading to it



Balcony: a platform enclosed by a balustrade on the outside of a house with access from an upper-floor window or door



Patio: a paved outdoor area situated directly on the ground typically adjoining a house



Deck: an elevated outdoor platform without a roof that extends from a house



3.23.2 Front Porches and Stoops

Front porches are encouraged to promote a pedestrian friendly community. The WHDC reserves the right to require a minimum number of porches on each street.

A) Design

- 1) Minimum porch depth: 5'
- 2) All front entry stoops and extended front porches shall be consistent with the architecture of the home and constructed of finished materials to match the house.
- 3) Any wood or composite steps as part of a front entry feature shall have closed risers.
- 4) Band boards, handrails and railings shall be painted wood or metal of a design to match the character and style of the house.
- 5) Columns supporting roofs of porches and covered stoops shall be appropriate to the character of the house.
- 6) Individual porches and porticoes shall be one-story in height.
- 7) Stacked first and second floor porches and porches with upper open floors are permitted

B) Foundations

- 1) Front stoops and short porches (1/3 the width of the front facade not including the garage) shall be constructed with continuous foundation walls.
- 2) Full front porches shall be constructed with a continuous foundation wall or masonry piers a minimum of 12" wide to match the foundation material of the home.
- 3) Spaces between piers under porch floors shall be enclosed with framed and finished lattice or other finished underpinning. Landscaping is required as per Section 3.29.

Foundation Examples



Continuous foundation



Foundation with brick piers



Lattice between piers



Architectural foundation wall



Wood stairs and lattice

C) Flooring

- 1) Exposed aggregate concrete
- 2) Broom finished concrete
- 3) Finished paving material (stone, tile or brick)
- 4) Finished wood (stained or painted)
- 5) Trimmed composite decking boards
- 6) Unfinished treated wood decking is prohibited.

D) Handrails, Railings & Band Boards

- 1) Handrails and railings shall be vinyl, finished painted wood or metal.
- 2) Band boards shall be aluminum or finished and painted to match the trim.
- 3) Pickets shall be supported on top and bottom rails that span between columns.
- 4) Colors of pickets, railing and band boards shall be reviewed on a case-by-case basis.
- 5) Front steps can be masonry to match the foundation or wood or composite to match the finish of the porch. Any wood or composite steps as part of a front entry feature shall have closed risers.

E) Columns

- 1) Columns shall be appropriate to the architecture of the home and may include one of the following:
 - i) Tapered round (Tuscan or Doric)
 - ii) Tapered square (min. 8" at base)
 - iii) Square box (min. 8" square)
 - iv) Masonry piers
 - v) Other styles of columns, arches, walls, and the like shall be considered on a case-by-case basis.

3.23.3 Side Porches

A) Side porches shall match the front porch in materials and design, but may be scaled down as appropriate to the porch.

B) Side porches may be constructed on masonry or wood piers except that porches on **High Impact Lots** shall be supported on masonry piers or continuous masonry wall to match the front porch. Posts should be a minimum 6" square box columns

C) Columns, rails, band boards, trim and the like, shall be finished to match house or front porch

D) See 3.20 Secondary Roofs for roof material. Where porch roof material is the same as another roof material on the home, the colors of those materials must match.

3.23.4 Rear Porches

A) Rear porches should match the front porch in material and design, but may be scaled down as appropriate to the porch.

B) Flooring, columns, rails and piers must, at a minimum, match like materials for decks as detailed in 5.3.4.

C) Spaces between piers 2' above grade (to the bottom of the band board) and less than 8' above grade shall be enclosed with framed and finished lattice or other finished underpinning. Screening with landscaping alone is not permitted.

D) May be screened with insect screen.

E) See 3.20 Secondary Roofs for roof material. Where porch roof material is the same as another roof material on the home, the colors of those materials must match.

F) **For High Impact Lots**, the porch must be a minimum of 7' from the property line adjacent to the street and appropriately landscaped.

3.23.5 Rear Decks**A) Design**

- 1) Decks shall be supported on minimum 6 x 6 wood posts.
- 2) Spaces between piers 6" above grade (to the bottom of the band board) and less than 7' above grade shall be enclosed with framed and finished lattice or other finished underpinning. Screening solely with landscaping is not permitted. Wood screening may be stained white or stained with a transparent or translucent stain in natural earth tones. Vinyl or composite screening may be white or a color to match the trim of the home.
- 3) If stained, deck stain color shall complement the colors of the home. In general only transparent or translucent stains in natural earth tones are permitted.

B) Location

- 1) decks shall be primarily located behind the mass of the home and totally behind the rear plane of the home.
- 2) No portion of the deck including the deck stairs, if applicable, may extend farther forward than the rear plane of the home.

For **High Impact Lots**, the deck must be a minimum of 7' from the property line adjacent to the street or the minimum county setback, whichever is greater. If not fenced, the deck should be landscaped on the street side as per the guidelines for houses on high impact lots.

C) Materials

- 1) Pressure treated wood
- 2) Composite decking
- 3) Railings can be wood, vinyl or metal. Alternate upgraded railing styles will be considered on a case-by-case basis.

3.24 EXTERIOR LIGHTING

Note: All lighting (other than with single family detached homes) shall follow Article II, Division 7 of the Zoning Ordinance.

3.24.1 Front Entry Light

A minimum of one wall-mounted light is required at the front entrance of the home. The light shall be of traditional design to match the style of the home.

3.24.2 Facade Architectural Accent Lighting

See Section 5.3.7 (a) in Modifications.

3.24.3 Landscape Lighting

See Section 5.4.19 in Modifications.

3.24.4 Floodlights

See Section 5.3.7 (b) in Modifications

3.24.5 Holiday and Festival Lighting

See Section 5.14.15i and 5.3.7 Modifications.

3.24.6 High Intensity Fixtures

See Section 5.3.7(c) in Modifications.

3.24.7 Post Lighting

A) Every house shall have one (1) Post light in the front yard. See detail on the following page. Post light must be located 2 feet from the back of the street sidewalk and no more than 3 feet from the side of the driveway.

B) For corner lots, up to three (3) additional post lights may be required.

C) Post lights shall be set in concrete or following manufacturer's specifications

D) Must be hot-wired "photocell"; control switches are not permitted in the home.

7'-9" (typical)
5'-6" (typical)
8'-9" (typical)
6'-7" (typical)

3" round pole
(to be painted
matt black)
Direct - bury
install

Grade

Fill with Concrete

Bolt to prevent
spinning

24" minimum

Townhouse
Light Post

Single Family
Light Post

Progress Lighting
P540004-020 (Gibbs Street)
(or similar)

Bulbs to be Phillips 75-Watt
Equivalent A19 LED Soft White

Category: Outdoor
Finish: Matt Black
Construction: Aluminum
Glass/Shade: Clear seeded glass

| MOUNTING | ELECTRICAL | LAMPING | ADDITIONAL INFORMATION |
|---|---|---|---|
| Post top - fitter for 3" post or pedestal mounted | Pre-wired 6" of wire supplied 120 V | Quantity: One 100w max. Medium Base E26 base ceramic socket | cCSAus Wet location listed 1 year warranty |

Post Light

HOUSE

HOUSE

Sidewalk

Street

Street

Sidewalk

Post Light

Lighting Notes

1. All houses to have a post light 3' from the driveway (on the front door side) and 2' from the public (street) sidewalk.
2. All corner houses are site specific but may be required to have up to an additional three (3) postlights on the side.
3. Details shown are conceptual and subject to change based on field conditions.
4. All measurements are from the center of the pole.

3.25 UTILITY EQUIPMENT

3.25.1 Utility Equipment

No equipment other than equipment placed by a utility provider for phone, electric, cable, Internet and for any household utility not yet contemplated but developed in the future and deemed in the sole discretion of the WHDC a standard utility under this provision, may be placed on a home except for standard residential heating and air conditioning equipment and/or satellite dishes in compliance with provisions of the Declaration and Section 3.25.

Window and/or through-wall heating and air conditioning units are prohibited.

Generators permanently installed and permanently affixed to the home and provided for emergency use are permitted on a case by case basis with regard to size and shall be subject to the same design standards provided for utility equipment pursuant to this Section 3.25.

3.25.2 Other Equipment

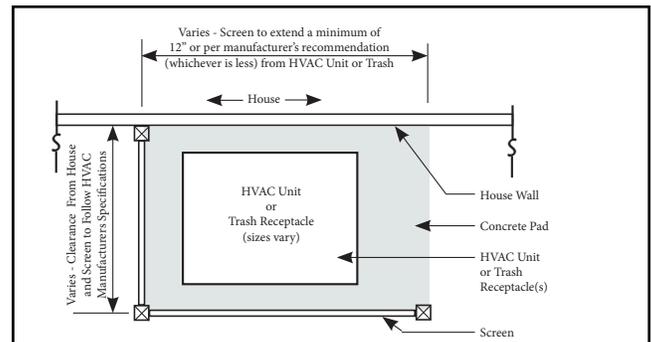
Mechanical equipment (detached from the home), yard equipment and other similar items, on or stored outside the home, must be located behind the mass of the home and located or screened so as to be reasonably concealed from view of neighboring lots, streets and property located adjacent to the lot. What constitutes "reasonably concealed" or "similar items" shall be in the sole discretion of the Designated Committee.

3.25.3 Utility Equipment Screening

HVAC equipment shall be enclosed in a screened enclosure shared with a trash enclosure or in separate enclosures.

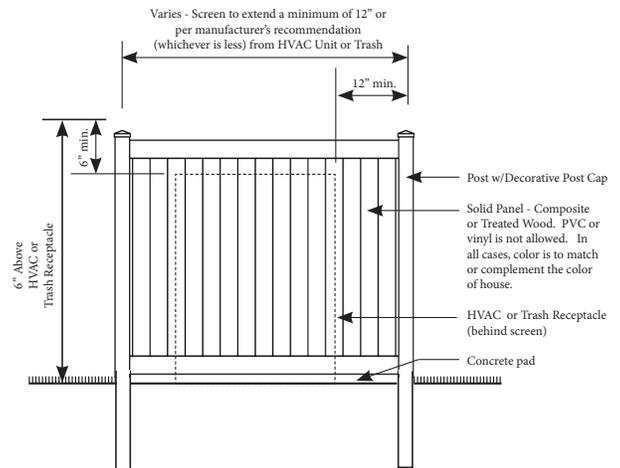
Enclosures may be located in the rear yard or on the side of the house toward the rear corner. No enclosures may be located on an adjacent lot or one the street side of high impact lots.

Fence enclosures shall be properly supported trimmed, level and plumb.



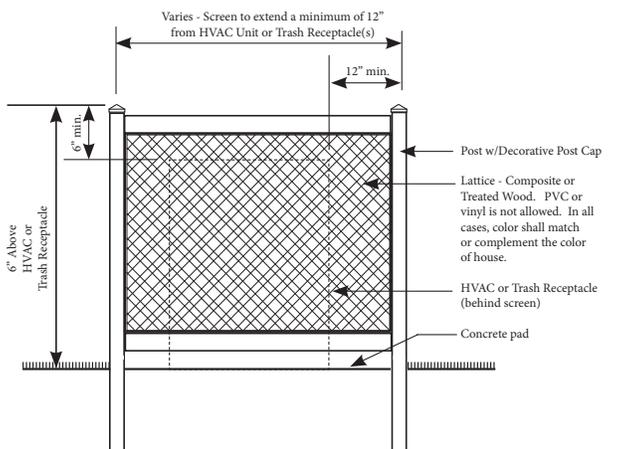
Plan View

Not to Scale



Elevation - Option A

Not to Scale



Elevation - Option B

Not to Scale

Equipment shall be screened facing the street and/or side lot lines, but may be open to the rear. The height of the screening enclosure shall be at least 6" higher than the equipment screened, but not more than 12" higher. In any case, the maximum height may not exceed 5'.

The Designated Committee reserves the right to require additional landscape screening when, in the sole discretion of the Designated Committee, it is determined that the siting of the enclosures so requires.

3.26 TRASH ENCLOSURES

3.26.1 Requirements

Trash enclosures are required for all single family homes as detailed on the preceding page.

For townhouses with alleys, trash receptacles can be kept adjacent to the rear of the house.

For townhouses without alleys, trash receptacles must be kept in the garage.

3.26.2 Location

Residential trash enclosures shall be located adjacent to the home in one of the following locations:

A) Rear yard

B) Side yard no closer than 10' from the front corner of the house where the trash enclosure will be located. For High Impact Lots, the enclosure should not be on the street side.

3.26.3 Design

A) Trash receptacles must be concealed with white vinyl lattice or decorative screening (must be approved in advance) to match the screening for HVAC units. See Screening Options on previous page for design specifications.

B) When the trash enclosure and HVAC screening are adjacent to one another, the screening should be one system rather than two separate enclosures.

C) The opening to the trash enclosure shall face the rear yard.

D) If planned for two or more receptacles, the 'long' dimension should run parallel to the house.

E) A minimum of three (3) 36" tall evergreen shrubs should be planted on the street side of the enclosure.

The Designated Committee reserves the right to require additional landscape screening when, in the sole discretion of the Designated Committee, it is determined that the siting of the enclosures so requires it.

F) Maximum height: no taller than 12" higher than the container. Minimum height: at least 6" taller than the container being screened.

G) Wooden enclosures: not allowed

H) Vinyl enclosures should be white. Other colors can be reviewed on a case-by-case basis.

I) Enclosure shall be properly supported, trim, level & plum.

3.27 DRIVEWAYS

Every improved lot in White Hall shall have a single paved driveway that conforms to the following criteria.

3.27.1 Design

A) Unless otherwise approved by the WHDC, driveway widths shall be no greater than the garage door plus 1' on each side. For multiple doors, the driveway may extend to 1' outside the outer door edges. For difficult lot conditions the WHDC may grant a variation in the design.

Only one driveway entrance is permitted per lot.

B) All driveways, regardless of location at entry, shall be held a minimum of 3' off of the side property lines unless otherwise approved by the WHDC.

C) Circular driveways, parking areas in front of the house, and other special conditions are generally discouraged where they substantially reduce the amount of front yard. The WHDC may approve certain applications where they feel that the front yard appearance will not be adversely affected or for other extenuating circumstances that, in the sole opinion of the WHDC, warrant such an approval as an exception.

D) 'Track' (ribbon) driveways (driveways with a grassed median) are encouraged. For driveways that intersect a street, a driveway apron shall be constructed at the street and 2 driving strips run the length of the driveway to the garage parking pad. For driveways that intersect an alley, no apron is required. The center of the driveway is required to be sodded or planted in a low groundcover.

3.27.2 Materials

Driveways and garage entrance aprons may be constructed of broom-finish concrete, exposed aggregate concrete, brick or concrete pavers. The WHDC encourages the use of pervious materials.

Regardless of the paving material used, where a driveway is intersected by a concrete sidewalk, the apron of the driveway, from the sidewalk to the roadway, must be concrete to match the sidewalk.

3.28 WALKWAYS

3.28.1 Street Sidewalks

All lots shall include sidewalks along street frontages, located as shown on overall construction drawings. Sidewalks shall be broom-finish concrete.

3.28.2 Front Walkway

A) Front walks shall extend either from the front steps to the driveway or from the front steps to the sidewalk in front of the home.

B) Minimum width: 4'

C) The WHDC encourages the use of pervious materials. Other materials will be reviewed on a case-by-case basis. The following materials are permitted for walkways:

- 1) Broom finished concrete
- 2) Exposed aggregate
- 3) Concrete pavers (color to complement the color of the house and must be approved in advance)
- 4) Cobblestone/brick (color to complement the color of the house and must be approved in advance)
- 5) Decorative edging may be considered on a case-by-case basis

3.28.3 Secondary Walkway

See Section 5.4.33 in Modifications.

3.28.4 Patios & Outdoor Living Spaces

See Section 5.4.20 in Modifications.

1) Foundation Planting Beds shall be a minimum of 4' wide from the house foundation.

2) House corners shall be visually softened with vertical accent shrubs (4'-5') or small evergreen trees (6'-8').

3) Planting beds shall contain a minimum of 50% evergreen material.

B) Corner Side Yards & High Impact Lots

For corner lots, foundation beds shall return down the full side facing a street.

Side yards shall be sodded to match front yards. The WHDC reserves the right to require additional landscaping on homes that are highly visible from a public street.

C) Rear Yards

Lawn areas in rear yards must be sodded. Yard areas may also be developed as gardens, planting beds with shrubs or trees, or mulched play areas. The WHDC reserves the right to require additional landscaping on homes that are highly visible from a public street.

3.29.4 Plant Examples

Groundcover

- (periwinkle, liriopse, pachysandra)
- 2 1/4" minimum pot size
- planted 12" apart in staggered rows

Small Shrubs

- (euonymous, helleri holly, azalea)
- 18" - 24" minimum size
- 30" spacing (when in rows)

Larger Shrubs

- (boxwood, pyracantha, arborvitae)
- 24" - 30" minimum size
- 48" spacing (when in rows)

Trees

- (Nellie Stevens Holly, redbud, maple)
- 5' - 6' height minimum size
- individually placed

3.29.5 Planting Bed Materials

The following types of mulch are permitted:

- Hardwood (shredded) chips
- rock (excluding white)

The colors for hardwood (shredded) chips, recycled rubber mulch shall be shades of brown, black or gray only. No shades of red, blue or green are permitted. All types of mulch shall be maintained and weed free.

All other materials & colors shall be considered on a case-by-case basis

3.29.6 Supplemental Trees

A) Single Family Homes

i) In addition to a Street Tree, there must be a minimum of one flowering or shade tree in each Front Yard.

ii) A minimum of one deciduous, flowering or shade tree is required in each Rear Yard where no existing mature (6" diameter or larger) shade trees exist.

B) Townhomes

i) Supplemental Trees are Not Required

C) Minimum Size - 2 1/2" caliper for shade trees or 8-10' tall for flowering tree.

D) Alley loading lots: the WHDC encourages the shade tree be planted close to the property line abutting the alley to create a tree line effect, however it shall not interfere with visibility.

E) Street Tree Program

1) Purpose

Builders shall plant deciduous shade trees along all rights of way abutting lots in accordance with the County approved Streetscape Policy and overall landscape plan.

Corner lots shall have trees along both streets.

All trees planted to meet these requirements shall have a minimum caliper of 2 ½" measured at 3'-0" above ground.

For additional restrictions on street trees, refer to Article IV of the Declaration.

2) Warranty

i) Should the street tree die after the warranty, it is the sole responsibility of the Owner to replace the street tree with one of the same species.

ii) Approval is required prior to removal or replacement unless removal is necessitated by emergency situations where the tree is damaged or has been made imminently dangerous by wind storms or other natural occurrences

3) Maintenance

i) At all times following the planting of the Street Tree, the Owner shall have the obligation to maintain the tree at Owner's expense.

ii) Any Street Tree which is required to be removed shall be replaced with a tree of the same type and similar size and in the identical location as the tree which was removed.

iii) Unless otherwise noted, all removal and replacement shall be at the sole expense of the Owner.

3.29.7 Irrigation

Permanent in-ground irrigation systems connected to the James City Service Authority are not permitted. Irrigation shall be by surface hose, and in accordance with any limitations set by the County, including James City County Ordinance Article VII – Outdoor Water Use, as amended, for water conservation.

Because the size of the water lines cannot accommodate irrigation, rain water conservation using rain barrels, cisterns or dry wells to capture roof water runoff, are encouraged by the WHDC. If rain barrels, cisterns, dry wells or other water conservation devices are used in conjunction with gutters/downspouts systems, they shall outlet to pervious areas. Rain barrels, cisterns, dry wells or other water conservation devices are considered landscape accessories and

must be submitted to the WHDC for review and approval as to color, size, material and location. If rain barrels, cisterns, dry wells or other water conservation devices are used, they shall be muted in color.

Variations may not be granted by the WHDC for this section and no changes, additions, or deletions shall be made without the prior written consent of James City County and/or James City Service Authority.

3.30 TERRACING AND RETAINING WALLS

3.30.1 Retaining Walls

A) Topography shall not be altered in such a way as to re-direct drainage across adjacent properties, nor shall it be altered in such a way as to result in water that would otherwise normally flow across the Lot being trapped on adjacent Lots. When possible, drainage shall be directed to the street or to the rear of the Lot.

B) Retaining walls on street facing yards shall be constructed of brick or stone as appropriate to the house.

C) Other retaining walls may be constructed of interlocking unit masonry or timber (no railroad ties).

D) All materials shall be compatible with the color of the home.

E) All walls shall be constructed level and stepped as required for changes in slopes.

F) Walls over 36" in height may require fencing or railings as per building codes. It is the responsibility of the builder to verify whether or not a fence/railing is required and submit the fence/railing to the MC or WHDC for review.

3.31 SIGNS

See Section 3.6.3

WHITE HALL
JAMES CITY COUNTY, VIRGINIA

4.1 HIGH IMPACT LOT MAP

High Impact House Examples



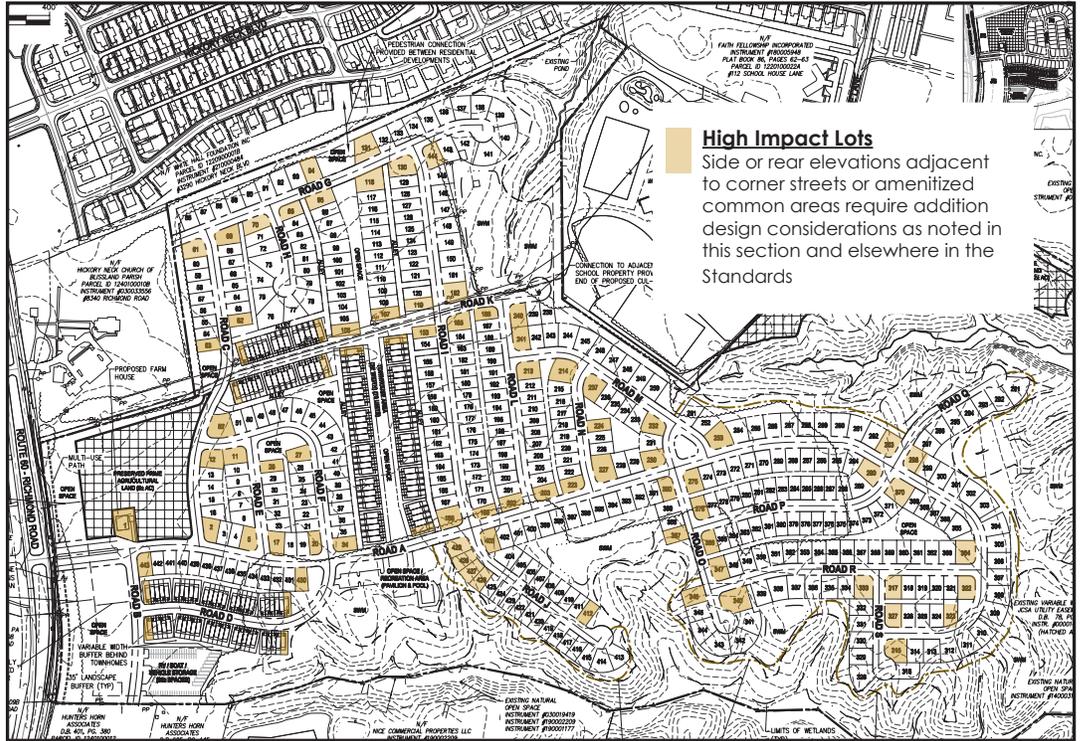
Historic corner house



New corner house



New corner house with garage



4.2 HIGH IMPACT LOT REQUIREMENTS

The following design considerations must be taken into account for corner lots and lots that are adjacent to amenitized common areas.

Note: The High Impact Lot Map is a conceptual land plan. As construction plans develop, there may be changes to the layout that affect lots that are currently shown and not shown. Therefore, there may be lots shown in future plans that fit this category and need to adhere to these guidelines. Generally, all corner lots, highly visible lots or lots that are adjacent to amenitized open space are considered high impact and shall follow these requirements.

A) The garage side of the house should be on the opposite side of the corner street or amenitized common area. The WHDC may allow exceptions on a case-by-case basis when the garage is detailed with windows or other architectural features.

B) A minimum of three windows per floor is required on the corner elevation or elevation that faces an amenitized common area in a fenestration pattern similar to the front facade (see illustration below). The WHDC can review on a case-by-case smaller windows or fewer windows for the second floor when a sloped roof reduces the length of the second floor.



Not Allowed (example)

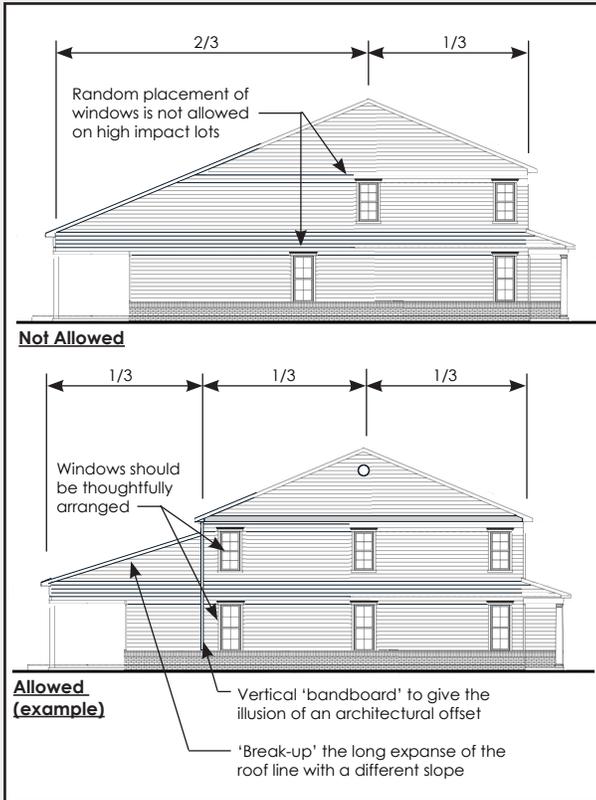
On High Impact Lots the side elevation facing the street cannot have randomly placed windows.



Allowed (example)

On High Impact Lots the side elevation facing the street must have windows in a fenestration pattern similar to the front facade.

C) On the street facing side for high impact lots, houses with asymmetric facades where one side is unproportionally long (as shown in the illustration example below) are not permitted. With minor adjustments, the facade can be changed to an acceptable street facing facade.



D) Shutters are not appropriate on all building styles, but when shutters are used on the front facade they need to be included on the side elevation that faces the corner street or an amenitized common area.

E) When more than one siding pattern, material or color is used on the front façade, at least two matching patterns, materials or colors need to be used on the side elevation facing the corner street or an amenitized common area.

F) As applicable, when the roof is 'pitched' toward the front and rear of the house, a minimum 10" trim shall be used to divide the first floor or second floor from the attic.

G) As applicable, when the roof is 'pitched' toward the front and rear of the house, a decorative attic vent or window needs to be incorporated in the design of the attic elevation.

H) Trim on the side elevation is to be a minimum of 4" wide.

I) Foundation beds shall return down the full side of the elevation and contain at least 50% evergreen material with two or more plant types. All shrubs should be a minimum of 24" at time of planting and spaced 3' on center (varies per plant).

J) When fencing is proposed, picket or ornate privacy fences are required. (see fencing section in Modifications for more detail)

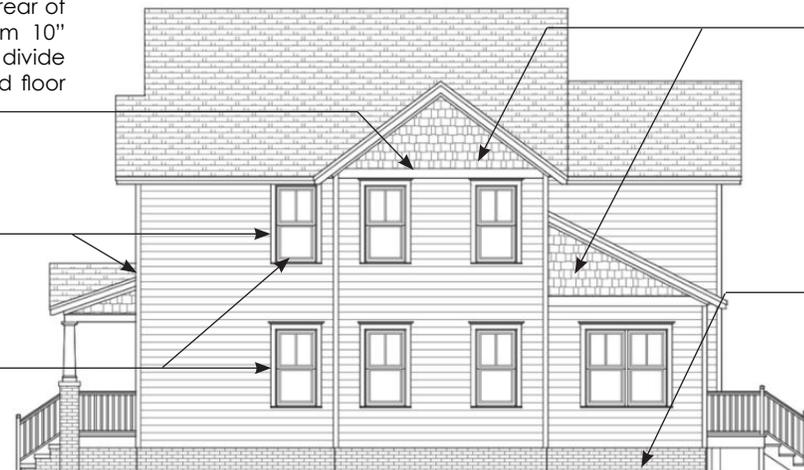
K) All efforts should be made to place HVAC, utilities, or any other similar component in the rear or side yard opposite the street. If any of the HVAC, utilities are on the street side, they will be initially screened with enclosures and landscaping.

When the roof is 'pitched' toward the front and rear of the house, a minimum 10" trim shall be used to divide the first floor or second floor from the attic.

Trim on the side elevation is to be a minimum of 4" wide.

Three windows per floor is required

NOTE:
Garage and HVAC units should not be on the elevation facing the street or the common area.



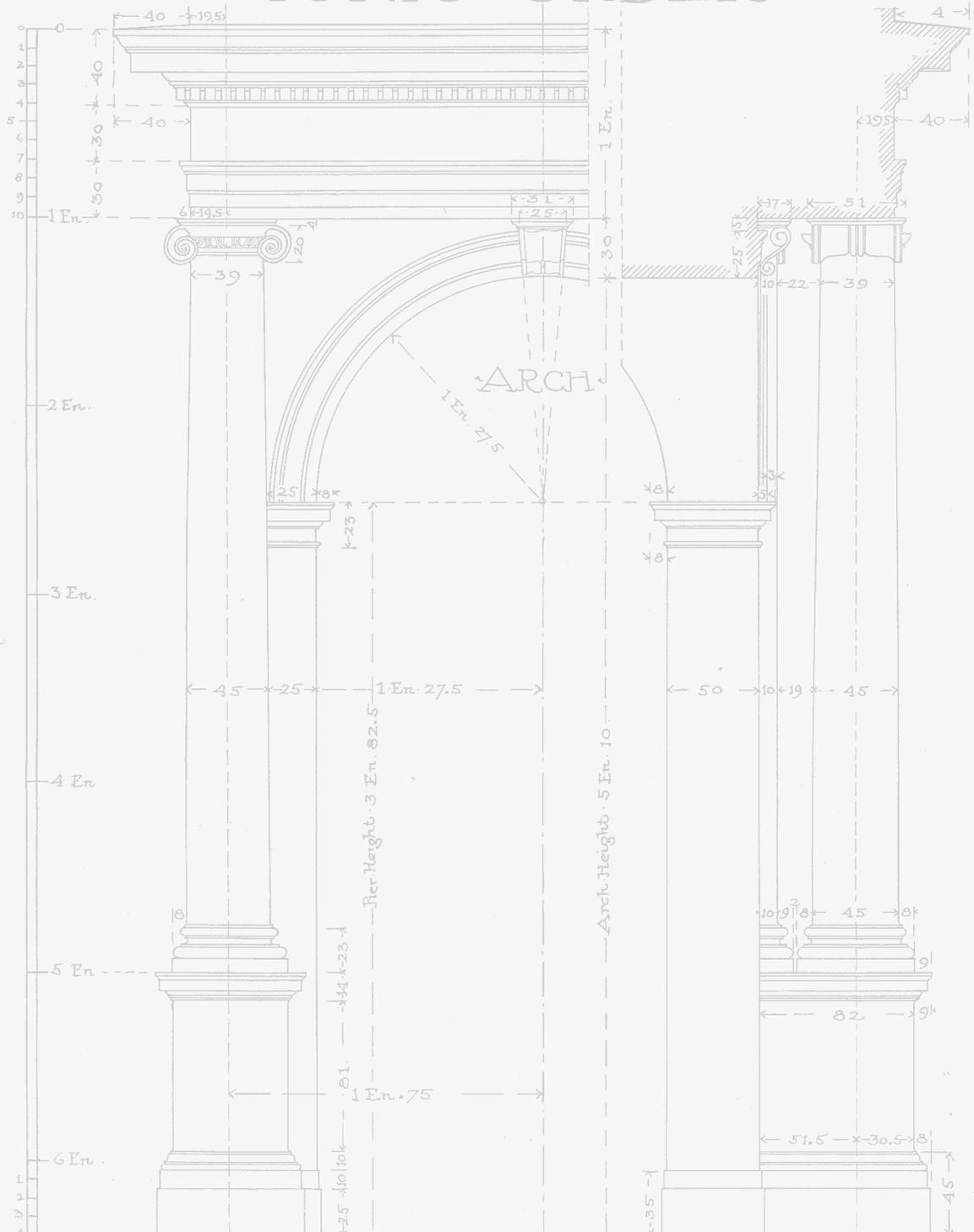
NOTE:
Not all requirements (such as landscaping or fencing) are shown on this diagram. Refer to the appropriate sections for more detail.

When more than one siding pattern, material or color is used on the front façade, at least two matching patterns, materials or colors need to be used on the side elevation

There shall be a minimum vertical height of twelve (12) inches of brick, stone or stone veneer above grade utilized on slab-on-grade foundations on all front, side, and rear elevations.

WHITE HALL
JAMES CITY COUNTY, VIRGINIA

IONIC ORDER



ELEVATION SECTION



PLAN

ARCHED DOORWAY

SECTION 5 - MODIFICATIONS

WHITE HALL
JAMES CITY COUNTY, VIRGINIA

5.1 INTRODUCTION

The **Modifications** section is intended to guide current and future homeowners regarding particular design situations and modifications that may arise once you've moved into your home.

The House Modifications Section of the Standards is divided into three sections:

Submittal Requirements (Section 5.2)

House Modifications (Section 5.3)

Lot Modifications (Section 5.4)

Submittal Requirements are an abbreviated version of the overall submittal requirements as detailed in Section 3.4. For more information or clarity, please refer to that section or contact the Community Manager.

House Modifications generally apply to anything that is related to the actual structure of the house. Projects in this category may include house additions, facade lighting, or attached flagpoles.

Lot Modifications generally include all items that require changes to the lot. Projects in this category may include a patio, landscaping, or fencing.

When reviewing the standards for a project, understand that it may fall into two different sections...one in Modifications and one in New Construction. For instance, an accessory building is listed in the Modifications section but may include elements, such as windows, in the New Construction section. Therefore, it is essential that all sections are reviewed when considering a house or lot modification.

Likewise, whether its New Construction, House Modifications, or Lot Modifications, all applications should verify whether or not its a **High Impact Lot** (see page 48) and follow those standards.

Please note that these guidelines may be neither universally applicable nor exhaustive.

Changes, materials, devices and design concepts that are generally not acceptable may also be indicated for your guidance.

It is important that owners not assume that an application will be approved simply because a similar exterior change has been approved

elsewhere. In some cases proposed exterior changes that are allowed elsewhere may have been approved because the applicant's property has unique characteristics, location, or topography made such a change suitable. The MC/WHDC must consider the impact of each proposed change on the property in question, neighboring properties and the community as a whole.

The MC/WHDC will reach its decision on individual applications by considering the intrinsic merits of each proposal as well as all relevant surrounding circumstances. Please refer to Section 1 for more information on community design goals and Section 2 for process and interpretations that will help the Modifications Committee and the White Hall Design Committee reach their decisions.

5.2 SUBMITTAL REQUIREMENTS

5.2.1 Submittals to be Complete and Accurate

Submittals prepared for consideration by the WHDC are required to be complete and accurate. Submittals for design review must include drawings prepared as described below. The WHDC/MC may require that color chips accompany color applications. All requested information on the application forms needs to be furnished. The WHDC/MC will not accept applications that are incomplete or inaccurate.

5.2.2 Submittal Requirements

Proper submittals include drawings that are neat, accurate, drawn to scale, and with sufficient detail to adequately explain the entire design. Insufficient explanation of a design including all visible details is cause for non-acceptance of an application. The WHDC, at its discretion, may accept plans that are marked in red with late changes to design features; however, the WHDC may require that the marked sheets be corrected and revised, and re-submitted:

ADDITIONS

- Site Plan - showing addition location, distances to property lines, and also showing any landscaping, if any, that is to be removed
- Floor plan(s) of Addition
- All Exterior Elevations of Addition including existing house (show finish materials)

ACCESSORY STRUCTURES

- Site Plan - showing location of new structure and existing house, with distances between each, distances to property lines, and also showing tree(s) or landscaping, if any, that are to be removed
- Floor Plan(s)
- All Exterior Elevations (show finish materials)

OTHER SITE IMPROVEMENTS

- DECK, PATIO, SWIMMING POOL, GAZEBO, ETC: site Plan showing location of improvement, existing structures, distances to property lines and also showing tree(s) and landscaping, if any, that are to be removed.
- FENCES: Site Plan - showing location, extent of fence and also showing tree(s) and landscaping, if any, that are to be removed. Drawing of fence with heights, materials and sizes identified.
- HOUSE COLORS: For changes to existing house colors, submit application form with manufacturer's names and color names. Submit color chips with application.

5.2.3 Review Fees

There are no fees for modification reviews by the WHDC.

If an independent Modification Committee is formed, that committee may recommend its own fee schedule subject to approval by the White Hall Board of Directors.

5.2.4 Additional Information

For additional information, or clarification, refer to Section 2.

5.3 HOUSE MODIFICATIONS

This section of the standards generally refers to any modification to the house.

Items are listed alphabetically.

For modifications to the land or lot, refer to Section 5.4

5.3.1 Additions to Houses

A) Design

To ensure consistency in the design of the house and minimize visual disruption of the community, additions shall match the design characteristics of the house. Specifically:

1) The architectural style of additions shall match the style of the house. The massing of the addition shall be similar in the use of shapes to that of the house, but proportionately smaller so as not to overpower the house. Roof styles and slope shall be similar.

2) Openings shall be required in additions, including windows and doors, in a similar fashion and extent as in the original house. Windows and doors shall be of matching material as those in the house. Exceptions may be granted for sunrooms at the discretion of the WHDC and/or MC.

3) Architectural elements such as corner and rake boards, soffits, eaves, window and door trim, shutter and siding shall match the style of the same elements on the house.

4) All exterior finish materials and colors shall match the house.

5) The space beneath any structure constructed on piers (including decks) higher than 2' above grade, but less than one story above grade shall be enclosed with lattice or other approved screening material.

6) Greenhouse additions shall be constructed of finished wood framing or

of a pre-finished metal consistent with the exterior color scheme of the home.

7) Foundation material and colors shall match the existing foundation. If built on piers (including decks), the space beneath any structure higher than 6" above grade, but less than one story or 7' above grade shall be enclosed with lattice or other approved screening material.

Screening with both lattice or underpinning and landscaping is encouraged and may be required at the discretion of the MC/WHDC.

B) Location

Additions may not extend beyond the approved setbacks set for construction of the main home. See Section 3.10 in New Construction.

In general the siting of additions shall not create a breach of privacy between neighboring houses. Where this is unavoidable, the WHDC may require screening of the view by the applicant. What constitutes a breach of privacy will be determined in the sole discretion of the WHDC.

5.3.2 Accessory Structures

See Section 5.4.1.

5.3.3 Awnings

Awnings (permanent or retractable) must be consistent with the architectural style, character and color of the house. The Modifications Committee and the WHDC reserve the right to prohibit the use of awnings on the front and side of any home. All awnings, including materials and colors will be reviewed on a case-by-case basis. Accurate drawings or pictures of awnings and color swatches are required for review.

Any visible disrepair, discoloration, staining, and/or tears must be repaired and replaced upon occurrence, or within thirty (30) days of notification from the Foundation. The Foundation has the authority to require repairs and maintenance or removal of damaged awnings when noted and when it is deemed necessary.

5.3.4 Decks

See Section 5.3.4.

5.3.5 Doors: Storm and Screen

Storm/screen doors shall be reviewed on a case-by-case basis by the WHDC and/or MC. They shall be the same color as the door they cover or the trim color of the home.

5.3.6 Flags and Flagpoles

No flag or flagpole of any size, shape, or form, temporary or permanent, shall be permitted on the exterior of any portion of a lot (as described in the Declaration) or improvement thereon, except as provided herein:

A) Flags mounted on houses

The WHDC and/or MC may grant written approval for a reasonable and aesthetic house mounted pole or poles, which are attached to and extend from the facade of the house. One house mounted pole may be attached to and extend from the façade by the front door of a unit without the prior written approval of the WHDC or MC as long as the pole does not exceed 6' in length and the flag displayed on the pole does not exceed 4' x 6'.

B) Vertical Flagpoles

Permanent and/or temporary vertical flagpoles are not permitted in front yards. Permanent and/or temporary flag pole not exceeding 15' in height, may be permitted in rear yards directly behind the mass of the house and no closer than 20' to any property line. Written approval from the WHDC and/or MC is required.

Outside of this stated approved guideline, the display of any flag or the installation of any necessary supporting structure(s) for any flag on or within the Properties, including on the exterior of any Lot (as described in the Declaration) or any improvement thereon within White Hall, is hereby expressly prohibited without prior written approval of the WHDC or MC. For the purpose of this section, any flag or flagpole or necessary supporting structure for any flag on any portion of a Lot (as described in the Declaration) is deemed an "exterior alteration or modification of existing improvements" as contemplated by the Declaration.

5.3.7 Lighting

Note: All lighting (other than with single family detached homes) shall follow Article II, Division 7 of the Zoning Ordinance.

See Section 3.24 for Post Lights and House Mounted Lighting.

All exterior lighting shall be submitted for review and approval of location & design prior to installation.

High intensity house or pole mounted area or security lights are prohibited unless permitted by the MC/WHDC for special conditions. "High intensity" refers to ballasted light fixtures using high or low-pressure sodium, mercury vapor, or metal halide lamps.

A) Facade Architectural Accent Lighting

Lighting should focus on architectural features of the facade. Only low voltage fixtures are allowed and the fixtures should be placed at ground level and concealed in landscape beds



B) Facade Floodlighting

Floodlighting of front facades will be permitted by the WHDC on condition that floodlights use only low voltage fixtures, and the fixtures are placed at ground level and concealed in landscape beds



C) Floodlights

1) In general, floodlights shall only be permitted in rear yards. Where the MC or WHDC permits floodlights in side or front yards, the flood lights must be on a motion sensor.

2) Flood lights shall be eave-mounted or placed on the trim in an inconspicuous manner or location and shall be located such that light is completely directed within the home's lot area.

3) Lighting fixtures shall be properly shielded to prevent seeing the actual light source from the street.

D) Landscape Lighting

See Section 5.4.19

E) Holiday / Festival Lighting & Decorations

All holiday lighting is subject to regulations adopted by the White Hall Board of Directors and may be prohibited and subjected to additional regulations. If the Foundation wishes to permit holiday lighting, holiday lighting may be displayed two months prior to and no more than one month after any commonly recognized holiday for which such lighting is traditionally displayed.

5.3.8 Solar Panels

Per Section 67-701 (A) of the Code of Virginia Covenants Restricting Solar Energy Collection Devices ("CRSECD"), no community association shall prohibit an Owner from installing or using solar energy collection devices. However, a community association may establish reasonable restrictions concerning the size, place, and manner of placement of such solar energy collection devices.

A) Solar collectors that lie flat against a roof plane may be used upon approval of the exterior components by the Designated Committee.

B) Should Section 67-701 of the CRSECD be amended in such a way as to render this section in conflict, state code shall supersede this section.

C) All conduit should be placed along the trim and eaves and match the color.

5.3.9 Surveillance Cameras

A) Cameras shall be mounted in such a location that they are not easily discernible from the street (i.e. eave mounted or flush mounted in the door frame or window well).



B) Cameras shall be located such that surveillance is not directed to a location where a person would have a reasonable expectation of privacy.

C) Cameras and all fixtures associated with the camera shall be of a color to match the color of the material on which they are mounted (trim or siding).

D) Cameras shall be submitted for review and approval of location & design prior to installation.

E) Doorbell cameras do not require approval.

5.3.10 Window and Door Treatments

The backings of window and/or door treatments shall not be brightly colored patterned or consist of any writing, logos or symbols. What is considered to be brightly colored is in the sole discretion of the WHDC and /or Foundation and will be reviewed on a case by case basis.

For more information on windows, see Section 3.16 and for doors see Section 5.3.5.

5.4 LOT MODIFICATIONS

This section of the standards generally refers to any modification to the lot or yard. Items are listed alphabetically.

For modifications to the house, refer to Section 5.3

5.4.1 Accessory Structures

A) General Information

Accessory structures consist of sheds, detached garages, green houses and any other structure that may not be included in other sections. Some accessory buildings, such as detached garages, may have additional information in other sections.

If the specific accessory building is not addressed here, submit the accessory building to the WHDC and/or MC for a case-by-case review and approval prior to construction.

B) Design

Accessory Buildings shall match either the main house (at a minimum) or may be specially designed in a unique style, to the extent that it enhances the over-all design of the house and lot in the sole opinion of the WHDC/MC.

For sheds, workshops and other outbuildings the maximum floor area shall be 64 square feet (e.g. 8' x 8'), unless otherwise approved by the WHDC and/or MC. Exceptions to this limit will be judged on the basis of exceptional design merit and on siting that does not significantly impact adjacent properties or the visual streetscape. The WHDC and/or MC reserve(s) the right to require additional screening.

For detached garages, the maximum floor area shall be 624 square feet unless otherwise approved by the WHDC and/or MC. Exceptions to this limit will be judged on the basis of exceptional design merit and on siting that does not significantly impact adjacent properties or the visual streetscape.

Windows and doors in accessory buildings shall be similar in style to those in the house. Alternate styles of shed doors may be approved at the discretion of the WHDC/MC.

Architectural elements such as corner and rake boards, soffits, eaves, window and door trim, shutters and vinyl shall match or complement the style of the same elements on the house.

All exterior finish materials and colors shall match the main house.

Sheds may be set on foundations that match the house, or may be set directly on the ground on skids. When skids are used, the shed must be set level and plumb. Any space greater than 12" that is visible beneath the shed must be concealed with lattice or plantings.

The maximum interior height of a shed shall be 8', measured at the eaves (exclusive of sloped roof height).

Roof styles and slopes shall be similar to that of the main house (i.e. gable roof with gable roof buildings, etc).

See Section 3 for additional architectural requirements that may be required for accessory buildings.

C) Location

Accessory buildings shall be located within the minimum setbacks from the rear and side lot line for such structures established by the County, however, minimum setbacks may be increased by the WHDC or MC on a case-by-case basis, taking into consideration specific lot conditions and privacy of neighbors.

Accessory buildings may only be constructed in rear yards only, no farther forward than the rear plane of the house (see diagram on page 13 for more information).

D) Effects on Neighboring Privacy

In general the siting of accessory buildings shall not create a breach of privacy between neighboring houses, nor shall it create a visual nuisance to neighboring houses. Where this is unavoidable, the MC/WHDC may require screening of the

view of the structure by the applicant. What constitutes a breach of privacy will be determined in the sole discretion of the WHDC/MC.

New windows or doors created by the accessory building shall not create a breach of privacy between neighboring houses. The MC/WHDC reserves the right to not approve certain openings or require screening by the applicant in situations where, in the opinion of the MC/WHDC, it is required. What constitutes a breach of privacy will be determined in the sole discretion of the MC/WHDC.

E) Temporary Commercial Storage Units (with or without wheels)

See Section 5.4.31.

5.4.2 Clotheslines

Retractable exterior clotheslines are permitted in rear yards, directly behind the house and not extending to the side past the house corners. Clotheslines shall be retracted when not in use.

5.4.3 Doghouses, Dog Pens & Dog Runs

A) Doghouses

Are not considered accessory buildings but have the same requirements as play structures: an interior height of 6'-0" or less floor-to ceiling, and with a total floor area of less than 36 square feet.

B) Dog Pens

Dog pens must be submitted to the Designated Committee and will be reviewed on a case-by-case basis. In no instance shall a dog pen extend beyond the front plane of the home. The Designated Committee reserves the right to require additional screening.

C) Dog Runs

In addition to Dog Pen standards, dog runs are permitted and shall be located behind the rear plane of the home.

1) A dog run is defined as a fenced area in which a dog can be confined and can exercise.

2) The dog run may be attached to the rear of the home or enclose a portion of the rear yard. Dog runs may be constructed with pressure treated wood or black chain link fencing screened by privacy fence or approved landscaping such that the chain link is not visible from any adjacent road or adjacent property. The fenced area shall not exceed four (4) feet in width and the fence shall not exceed six (6) feet in height.

5.4.4 Fencing - General Information

The purpose of fencing may be for functional reasons or merely aesthetic purposes – or both. Whether it is a privacy fence or picket style fence, it can have a great effect on the public realm and the experience of driving or walking the neighborhoods. A fence must achieve the balance of function (establishing a boundary) while maintaining or enhancing the appearance of the property as well as the public realm.

Regardless of the purpose of the fence, it is the intent of these standards to allow homeowners the enjoyment of their yard while promoting an aesthetic streetscape.

Any fence type not described in this article must be submitted for review by the WHDC to determine if it may be used.

A) Standards that apply to all fence types

- 1) Fences may be constructed up to, but not on, property lines.
- 2) Only one fence shall be constructed at the same location on any property line.
- 3) Fencing must remain outside of any VDOT easements or sight distance parameters.
- 4) Posts and panels for fences shall not impede the flow of water in swales. Fences may not be installed in the middle of the swale. Pickets or panels must be a minimum of 2" above grade.
- 5) The finished side of any fence should face out from the lot being fenced in.
- 6) Rear yard fences may be white vinyl, unfinished wood, or may be painted (or stained) white. All front yard fences shall be painted white. See Section 4 for requirements on high impact lots. Other colors will be reviewed on a case-by-case basis.

B) Prohibited Fence Types

The following fence types are examples of fences prohibited unless as an integral part of the overall design of the community:

- split rail,
- board and rail,
- turned rail.
- rough-cut rail fences

The following fence types are examples of fences prohibited for use in any area of White Hall:

- chain link fences,
- barbed wire fences,
- fences with metal posts (excluding aluminum picket fencing),
- stockade style solid picket fences,
- post and wire fences,
- others as determined by the MC/WHDC.

C) Gates

Where full yard enclosure is desired, swing gates are required where fences cross walks or driveways. Gates shall be constructed to match the fence and shall utilize decorative black metal fence hardware. Other hardware shall be considered by the WHDC on a case by case basis and reviewed within the context of the lot and overall community. Gates for swimming pool access shall be fitted with code approved security latches. All other gate types, hardware and latches shall be considered by the WHDC on a case by case basis and reviewed within the context of the lot and overall community.

D) Privacy Screen for Spas

See Section 5.4.29.

E) Swimming Pool Fences

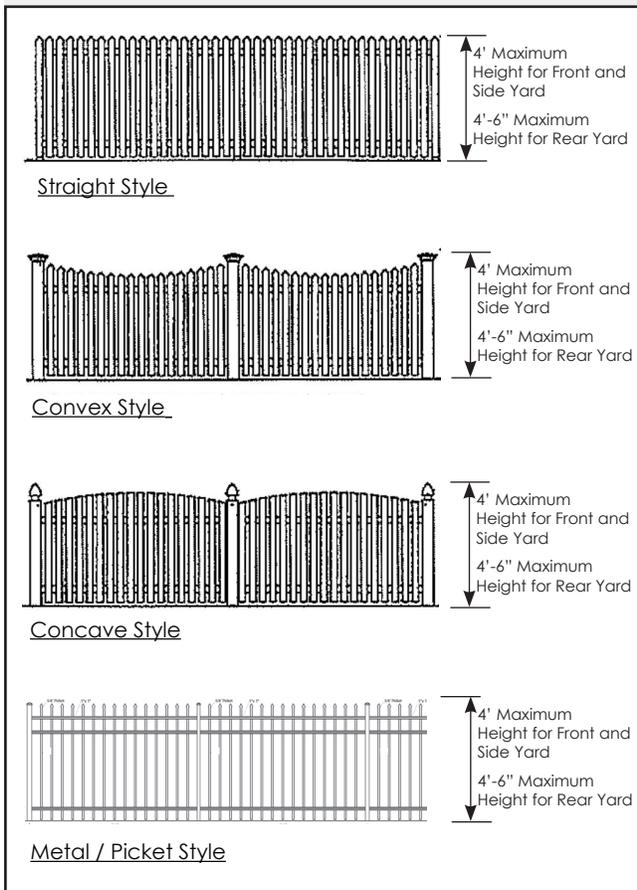
See Section 5.4.30.

5.4.5 Front Yard Fences

A) Definition

A front yard fence is defined as any fence constructed along the yard side of the front sidewalk 12" behind the sidewalk (unless a different dimension is approved by the WHDC); extending to the side lot lines, and then down the side lot lines to at least the front corners of the house, closing to the house.

B) Fence Types Allowed



C) Materials

1) Allowed:

Pressure/salt-treated wood
 PVC/Vinyl
 Composite
 Metal (picket style)
 Masonry in conjunction with one of the above mentioned fence types

2) Not Allowed in Front Yards:

Privacy Fences

3) Other material may be considered by the WHDC on a case-by-case basis.

D) Design

1) Maximum Height: 4' to the highest point in front and side yards and 4'-6" to the highest point in rear yards.

2) The vertical fence boards shall face out from the lot being fenced.

3) Front yard fences shall be painted white.

E) Location

1) Front yard fences should be a minimum of 12" from the sidewalk(s) and planted with evergreen shrubs or perennials. Spacing varies depending on species but should encompass the entire length of the fence.

A planting plan is required to be submitted with a fence application.

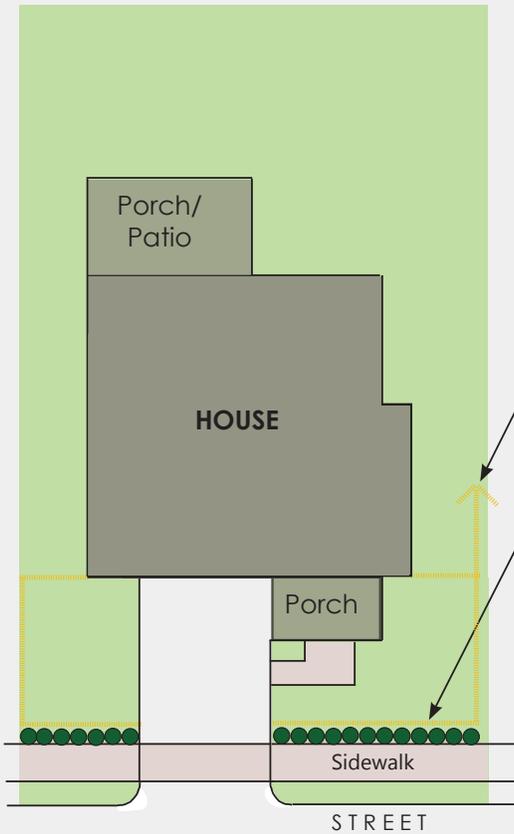
2) On high impact lots, fences should be a minimum of 12" from both sidewalks and planted with evergreen shrubs or perennials. Spacing varies depending on species but should encompass the entire length of the fence. **A planting plan is required to be submitted with a fence application.**

3) Front yard fences may extend to the side lot lines, and then down the side lot lines to at least the front corners of the house, closing to the house. Front yard fences may also continue back along the side of the house, and connect to an approved (picket style or privacy) rear yard fence.

4) Where an existing fence is already constructed on a property line, the new fence may extend up to it. **Only one fence shall be constructed at the same location on any property line.**

5) Any "Front Yard Fence" can also be installed in side and rear yards.

F) Front Yard Fence Illustration
Interior Lots or those that are NOT High Impact



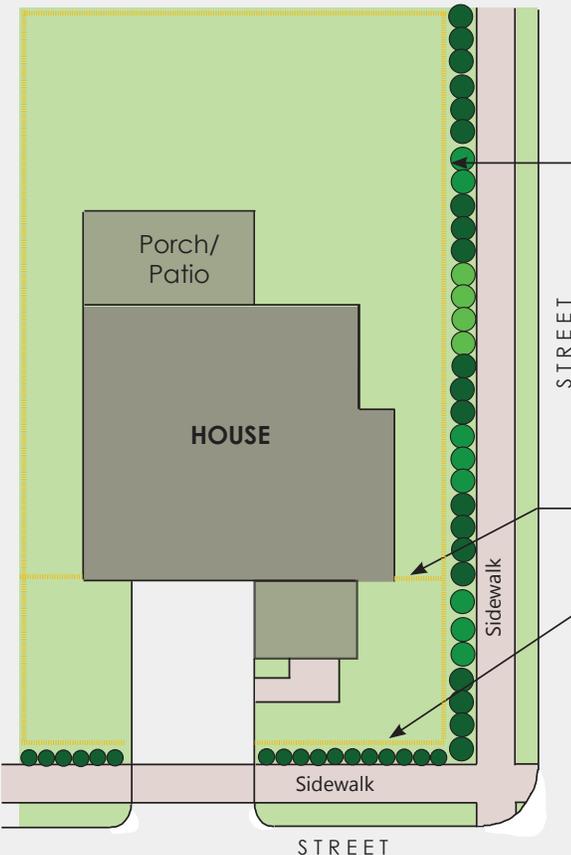
As an alternative to a fence, an approved, maintained, evergreen hedge may be installed. The type of evergreen hedge must be submitted to the Designated Committee for review and approval prior to installation.

Front yard fences may also continue back along the side of the house, and connect to an approved rear yard fence.

Front yard fences should be a minimum of 12" from the sidewalk and planted with evergreen shrubs or perennials. Spacing varies depending on species but should encompass the entire length of the fence.

Note: A planting plan is required to be submitted with a fence application.

G) Front Yard Fence Illustration
Lots that are High Impact



As an alternative to a fence, an approved, maintained, evergreen hedge may be installed. The type of evergreen hedge must be submitted to the Designated Committee for review and approval prior to installation.

When a picket style fence is proposed, fences must be a minimum of 3' from the sidewalk or the property line that abuts a public street. Evergreen shrubs, a minimum of 3' in height at time of planting, generally planted 3' from each other (depending on the species the spacing may vary) for any fence, excluding gates, that face a street. If the fence is 25' long or greater, at least two varieties of shrubs should be planted.

Optional fence at front house corner

Front yard fences should be a minimum of 12" from the sidewalk and planted with evergreen shrubs or perennials. Spacing varies depending on species but should encompass the entire length of the fence.

Note: A planting plan is required to be submitted with a fence application.

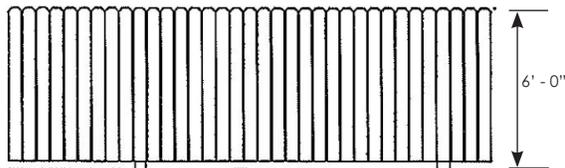
5.4.6 Rear Yard (Privacy) Fences (Interior Lots)

A) Definition

A rear yard fence is defined as any fence enclosing the area extending from the rear property line to no further forward than 50% of the side of the main body of the home. For circumstances where there is an architectural off-set, window, or other feature, the WHDC will review fence locations on a case-by-case basis.

Any rear yard fence type shall be acceptable fencing for pools as contemplated in section 5.4.31.

B) Fence Types Allowed



Dog Eared



Concave



Convex

Note: The Garden Style fence can be used on all sides where a rear yard fence is allowed.

C) Materials

1) Allowed:

Pressure/salt-treated wood

Composite

Vinyl / PVC

Masonry in a combination with any of the above type fences

2) Not Allowed:

Metal

Masonry

3) Other material may be considered by the WHDC on a case-by-case basis.

D) Design

1) Maximum Height: 6' to the highest point.

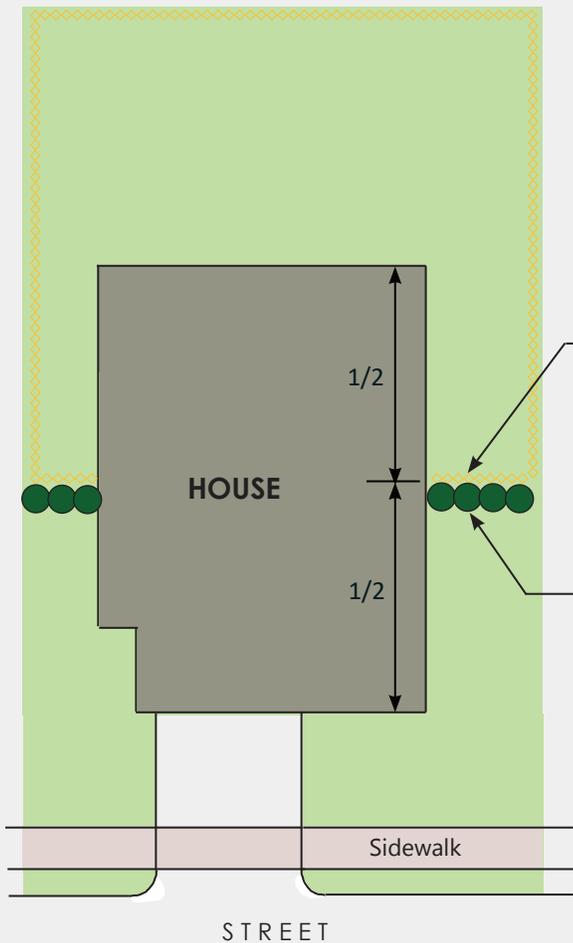
2) The vertical fence boards shall face out from the lot being fenced.

E) Location

1) Rear yard fences may extend no further forward than 50% of the side of the main body of the home. For circumstances where there is an architectural off-set, window, or other feature, the WHDC will review fence locations on a case-by-case basis.

2) Where an existing fence is already constructed on a property line, the new fence may extend up to it. **Only one fence shall be constructed at the same location on any property line.**

f) Rear Yard Fence Illustration
Interior Lots or those that are NOT High Impact



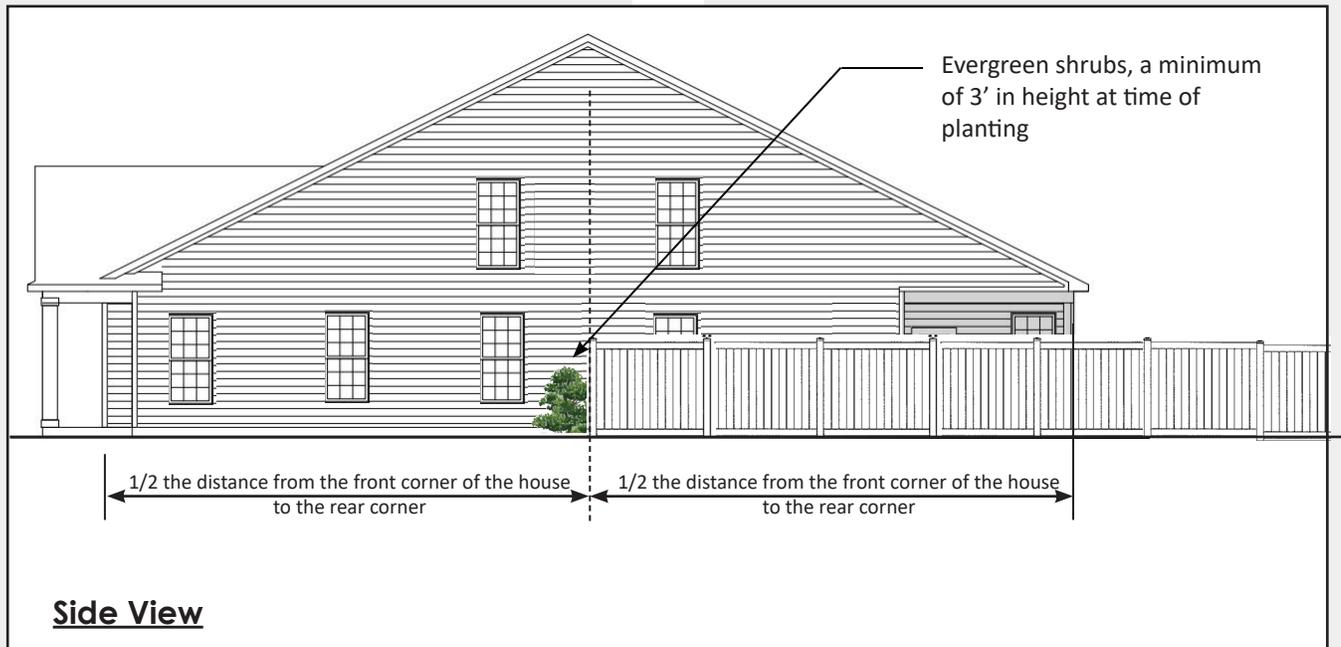
Plan View

Note: For high impact lots (corner lots or lots adjacent to an amenitized area) see the following pages 68 -69.

Rear yard fences may extend no further forward than 50% of the side of the main body of the home. For circumstances where there is an architectural off-set, window, or other feature, the WHDC will review fence locations on a case-by-case basis

Evergreen shrubs, a minimum of 3' in height at time of planting, generally planted 3' from each other (depending on the species the spacing may vary) for any fence, excluding gates, that face a street. If the fence is 25' long or greater, at least two varieties of shrubs should be planted.

Note: A planting plan should be submitted with all fence requests.



Side View

5.4.7 Rear Yard Privacy Fences

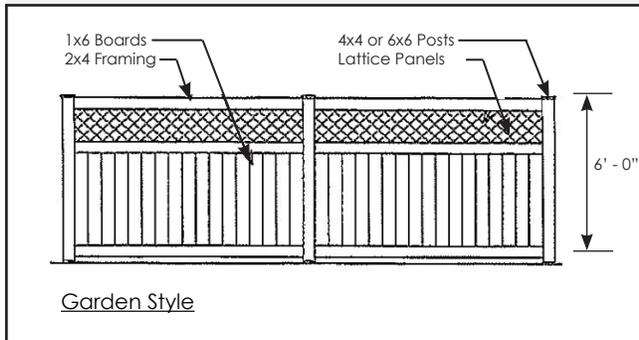
(High Impact Lots)

A) Definition

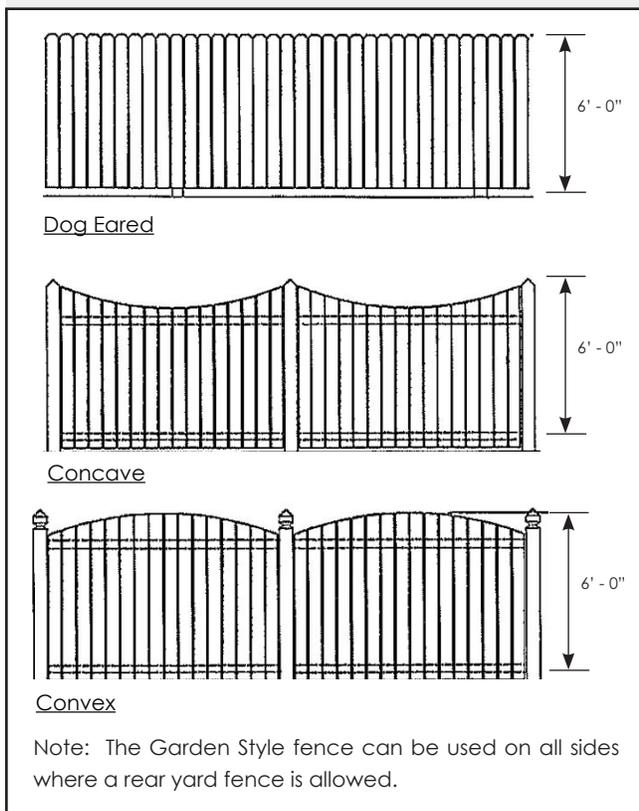
A rear yard fence is defined as any fence enclosing the area extending from the rear property line to no further forward than 50% of the side of the main body of the home. For circumstances where there is an architectural off-set, window, or other feature, the WHDC will review fence locations on a case-by-case basis.

Any rear yard fence type shall be acceptable fencing for pools as contemplated in section 3.10.6.

B) Fence Type Required on the High Impact Side of the Yard



C) Fence Types Allowed on the Rear Yards and Sides of the Yard that are not High Impact



D) Materials

1) Allowed:

Pressure/salt-treated wood

Composite

Vinyl / PVC

Masonry in a combination with any of the above type fences

2) Not Allowed:

Metal

Masonry

3) Other material may be considered by the WHDC on a case-by-case basis.

E) Design

1) Maximum Height: 6' to the highest point.

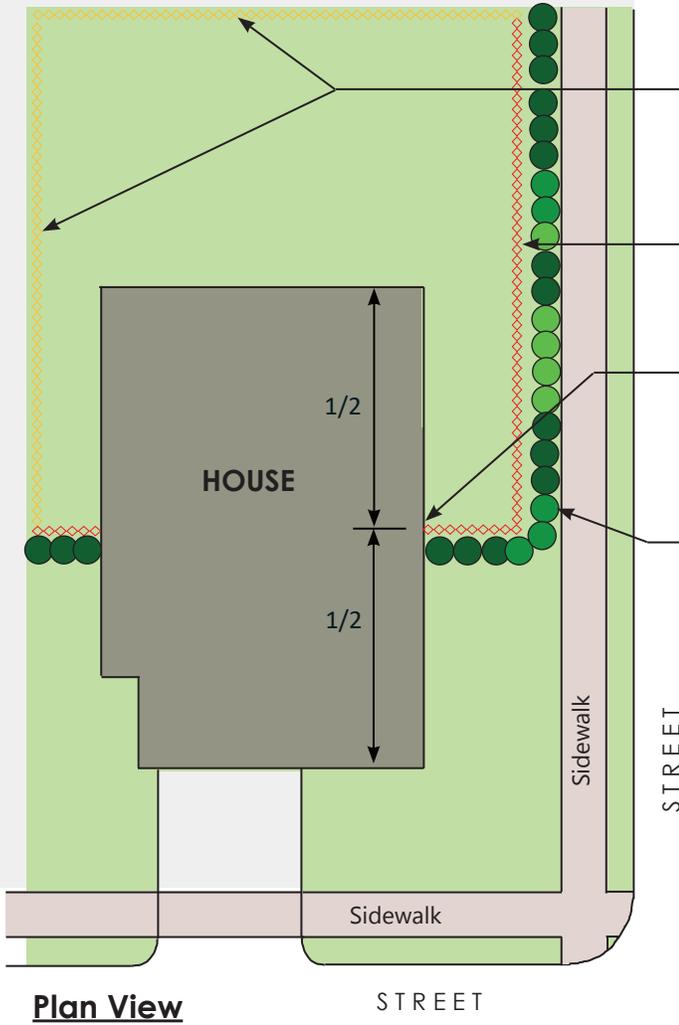
2) The vertical fence boards shall face out from the lot being fenced.

F) Location

1) Rear yard fences may extend no further forward than 50% of the side of the main body of the home. For circumstances where there is an architectural off-set, window, or other feature, the WHDC will review fence locations on a case-by-case basis.

2) Where an existing fence is already constructed on a property line, the new fence may extend up to it. **Only one fence shall be constructed at the same location on any property line.**

**G) Privacy Fence Illustration
High Impact Lots**

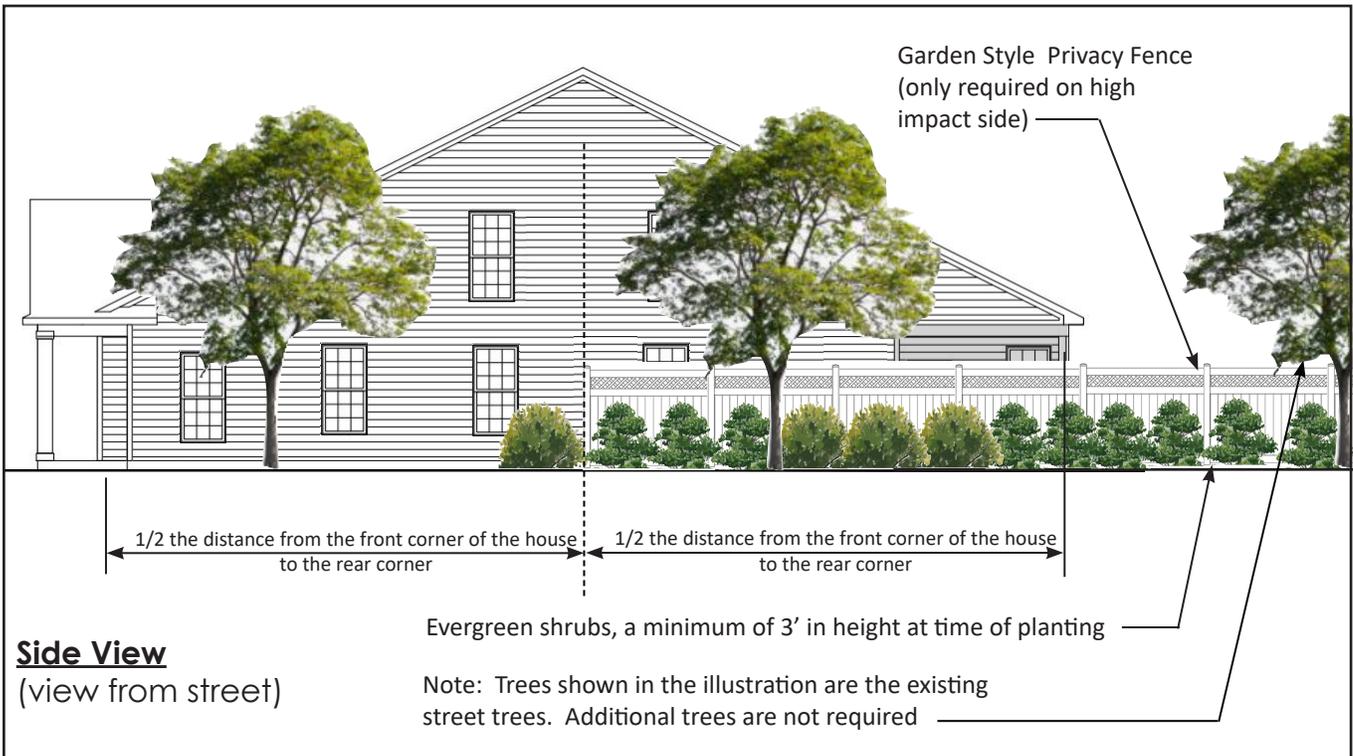


- ◇◇◇◇◇◇◇◇ Garden Style Privacy Fence
- ◇◇◇◇◇◇◇◇ Privacy Fence

- Privacy Fences that are not on the 'high impact side' are not required to be garden style privacy fences
- Garden Style Privacy Fences are required on the high impact sides, including all sides fronting a street (front and sides)
- Side yard fences shall not be closer than 1/2 the distance from the rear corner of the house to the front corner of the house.
- Evergreen shrubs, a minimum of 3' in height at time of planting, generally planted 3' from each other (depending on the species the spacing may vary) for any fence, excluding gates, that face a street. If the fence is 25' long or greater, at least two varieties of shrubs should be planted.

Note: A planting plan should be submitted with all fence requests.

Plan View



Side View
(view from street)

5.4.8 Townhouse Fences

Interior Units and End Units that are not High Impact*

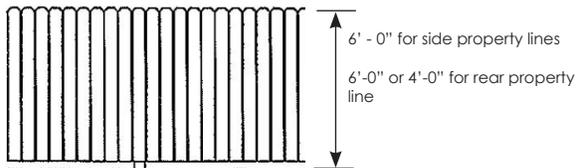
A) Definition

- Interior Unit
 - End Unit*
 - High Impact
- (See Section 3.4.2)

* Note: when walkways or other amenities are between two end units, they may be classified as high impact



B) Fence Type Allowed on Interior Units and End Units that are not High Impact



Note: The Garden Style fence can be used on all sides where a rear yard fence is allowed.

C) Materials

- 1) Allowed:
 - Pressure/salt-treated wood
 - Composite
 - Vinyl / PVC
 - Masonry in a combination with any of the above type fences
- 2) Not Allowed:
 - Metal
 - Masonry
- 3) Other material may be considered by the WHDC on a case-by-case basis.

D) Design

- 1) Fences constructed along side property lines shall be 6'-0" high to the top of the board pickets.
- 2) Fences constructed along rear property lines may be either 6'0" or 4'0" in height.
- 3) For Solid Board Privacy Fences, the vertical fence boards shall face out from the lot being fenced.
- 4) All fences shall be white and match the builders fence.
- 5) Evergreen shrubs, a minimum of 3' in height at time of planting, should be planted 3' from each other for any fence (excluding gates) that face a street.

E) Location

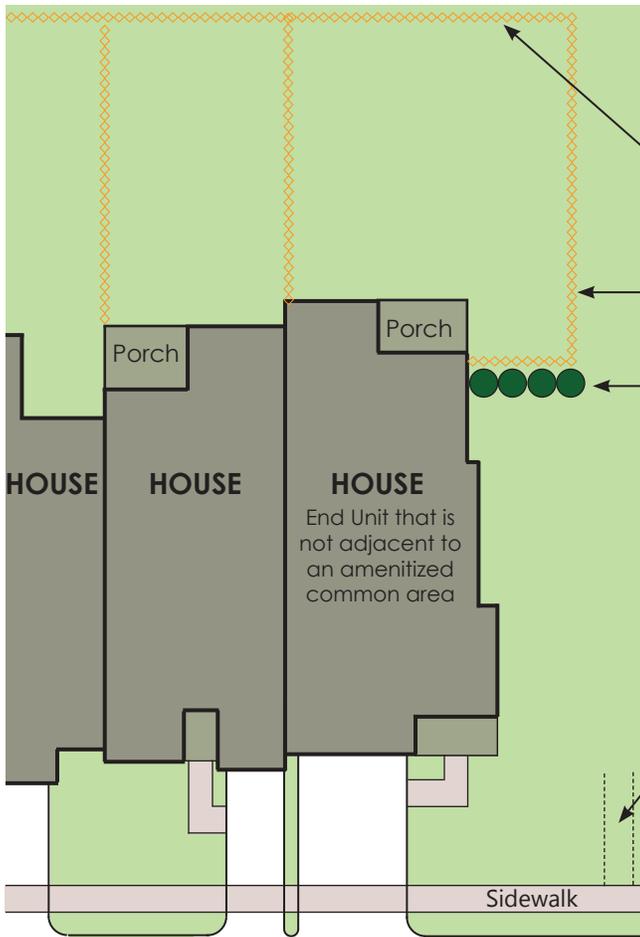
- 1) Fences shall be constructed from the rear corners of the house back to the rear lot line or rear fence setback line.
- 2) Where an existing fence is already constructed on a property line, the new fence may extend up to it. **Only one fence shall be constructed at the same location on any property line.**

For end unit fences that are not considered high impact, fences may continue up to the open side lot line and up to a point even with the house rear corner and then back to the house. For end unit fences, when there is a porch or patio on the rear corner of the house, the fence can be brought forward so that the porch or patio is included in the fenced yard.

For end unit fences where there is a walkway or other amenitized open space or end units considered high impact, see Section 5.4.9.

No type of fence (privacy or picket style) is allowed beyond the rear corner of the house.

F) Fence Illustration
Interior Lots or those that are NOT high impact or with side entry doors

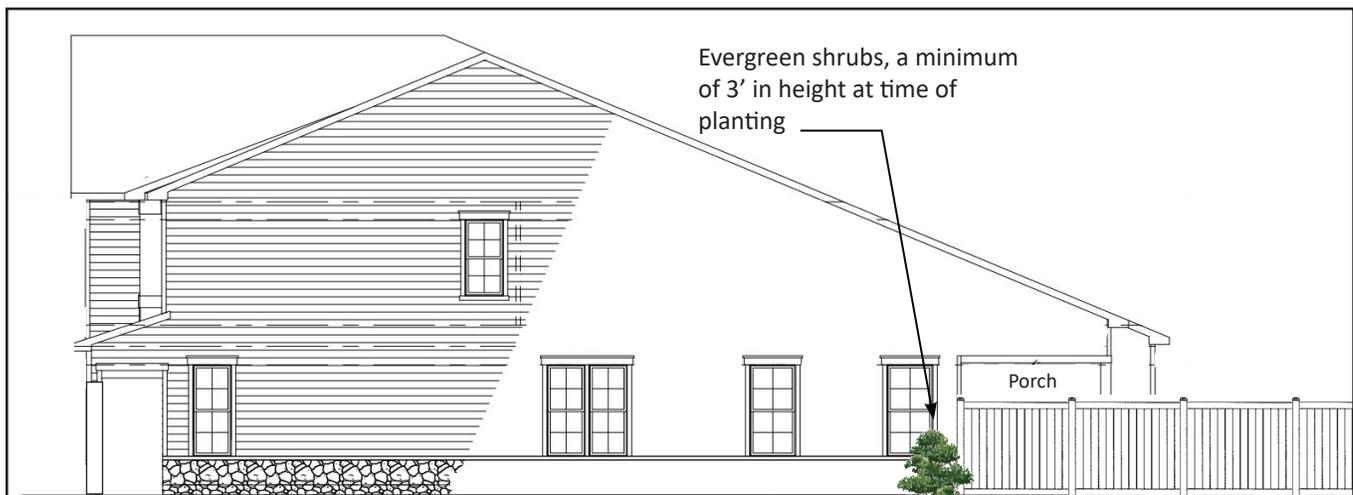


- The fence on the rear property line can be either 6' or 4' in height.
- The fence on side property lines shall be 6' in height.
- Evergreen shrubs, a minimum of 3' in height at time of planting, generally planted 3' from each other (depending on the species the spacing may vary) for any fence, excluding gates, that face a street. If the fence is 25' long or greater, at least two varieties of shrubs should be planted.

Note: A planting plan must be submitted with all fence requests.

Note: If there is a sidewalk or other amenitized open space, the end unit

Plan View



Evergreen shrubs, a minimum of 3' in height at time of planting

Note: If there is a porch or patio on the rear corner of the end units as shown in the diagram, the fence can encompass the porch, otherwise, the fence must connect to the rear corner

Side View (End Unit)
Not High Impact)

5.4.9 Townhouse Fences

End Units that are High Impact

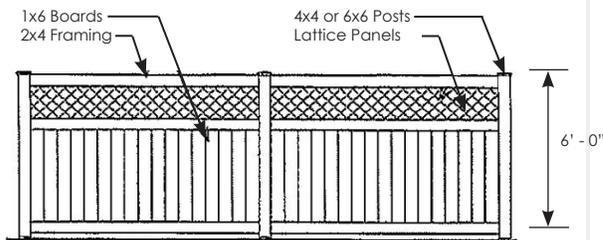
A) Definition

- Interior Unit
 - End Unit*
 - High Impact
- (See Section 3.4.2)

* Note: when walkways or other amenities are between two end units, they may be classified as high impact lots



B) Fence Type Allowed on High Impact



Garden Style

Note: fences on rear property lines can be either 6' or 4' high.

Fences that are NOT on the high impact side can be privacy fences as detailed in Section 5.4.8.

C) Materials

1) Allowed:

Pressure/salt-treated wood
Composite
Vinyl / PVC
Masonry in a combination with any of the above type fences

2) Not Allowed:

Metal
Masonry

3) Other material may be considered by the WHDC on a case-by-case basis.

D) Design

1) Fences constructed along side property lines shall be 6'-0" high to the top of the board pickets.

2) Fences constructed along rear property lines may be either 6'-0" or 4'-0" in height.

3) The vertical fence boards shall face out from the lot being fenced.

4) All fences shall be white and match the builders fence.

5) Evergreen shrubs, a minimum of 3' in height at time of planting, should be planted 3' from each other for any fence (excluding gates) that face a street.

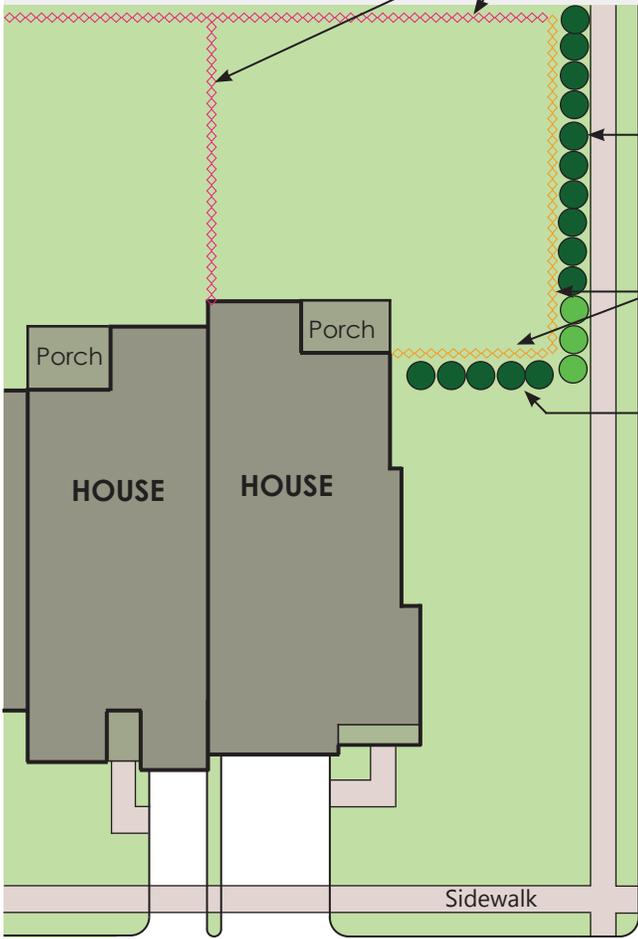
E) Location

1) When a garden style privacy fence is required, fences must be a minimum of 5' from the sidewalk or property line that abuts a public street.

2) Fences shall be constructed from the rear corners of the house back to the rear lot line or rear fence setback line. When there is a porch or patio on the rear corner of the house, the fence can be brought forward so that the porch or patio is included in the fenced yard.

2) Where an existing fence is already constructed on a property line, the new fence may extend up to it. **Only one fence shall be constructed at the same location on any property line.**

f) Fence Illustration
Lots that are high impact or with side entry doors



Garden Style Privacy fences are not required for interior property lines and the rear property line if the rear is not adjacent to an amenitized common area.

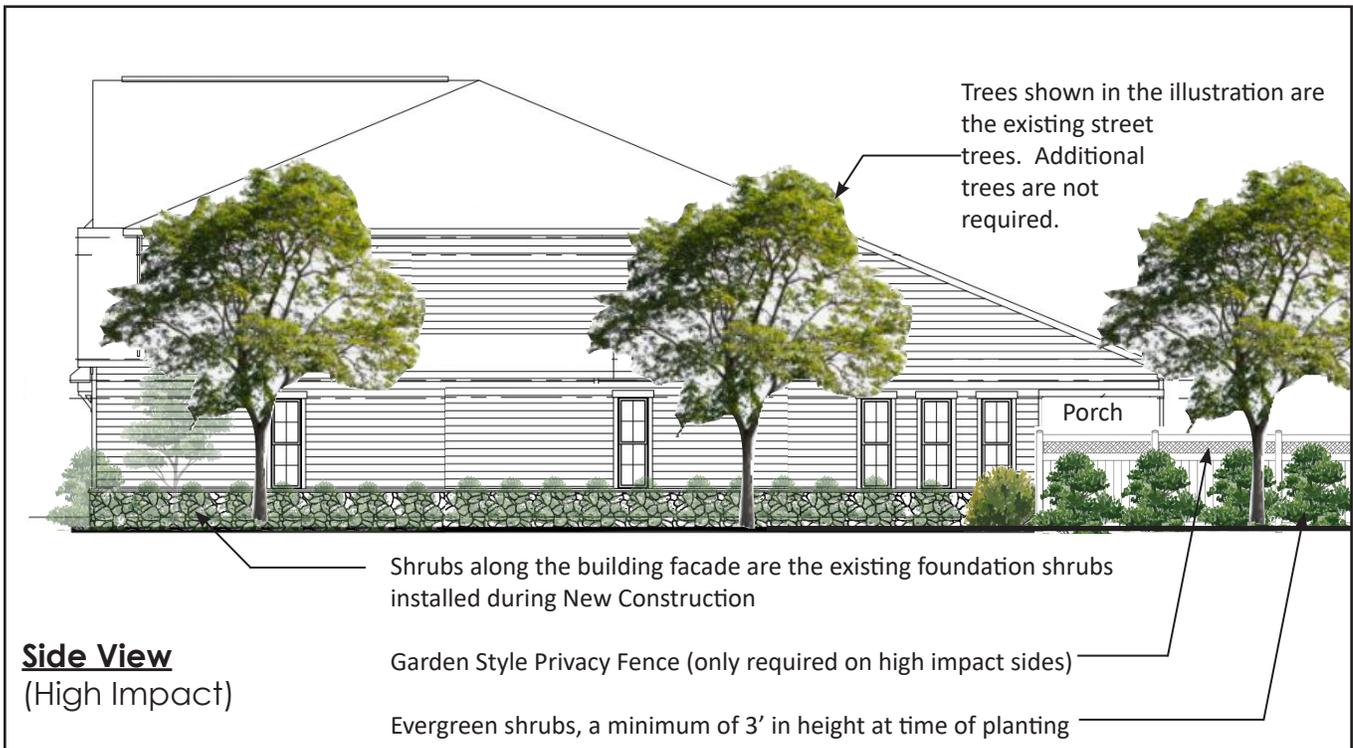
When a garden style privacy fence is required, fences must be a minimum of 5' from the sidewalk or property line that abuts a public street.

Ornate Privacy Fence

Evergreen shrubs, a minimum of 3' in height at time of planting, generally planted 3' from each other (depending on the species the spacing may vary) for any fence, excluding gates, that face a street. If the fence is 25' long or greater, at least two varieties of shrubs should be planted.

Note: A planting plan should be submitted with all fence requests.

Plan View



Side View
 (High Impact)

5.4.10 Fire Pits (permanent)

A) Design

Permanent Fire Pits shall be integrated into an overall patio or landscape/hardscape plan.

All pipes and wires necessary for operation of the Fire Pit must be reasonably concealed.

B) Location

Fire Pits must be located behind the rear plane of the home no closer than 8' to any property line unless the property line is adjacent to a buffer or natural area.

C) Materials

Permanent Fire Pits shall be constructed of masonry in colors and materials to complement the surrounding patio, if any, and home.

Use of cinder-blocks as a finishing material is prohibited.

5.4.11 Fireplaces / Chimneys (outdoor)

A) Design

Outdoor Chimneys shall be integrated into an overall landscape/hardscape plan and must be in keeping with the design of the home.

Outdoor Chimneys may be no taller than 12' from the ground to the top of the cap and the structure. The surrounding hearth may be no larger than 12' long by 5' wide. The Designated Committee may grant a design variation to these size requirements for exceptional design.

All pipes and wires necessary for operation of Outdoor Chimney must be reasonably concealed.

B) Location

Outdoor Chimneys must be located behind the mass of the home. The Designated Committee may approve a variation for exceptional design.

C) Materials

Outdoor Chimneys constructed of masonry in colors and materials to complement the surrounding patio, if any, and home.

Use of cinder-blocks as a finishing material is prohibited.

5.4.12 Gazebos

See Section 5.4.27

5.4.13 Generators & Mechanical Equipment

A) Generators permanently installed and permanently affixed to the home and provided for emergency use are permitted on a case-by-case basis with regard to size.

B) Generators shall be subject to the same screening requirements provided for other utility equipment in this Section 3.25.

C) Other Equipment:

No other equipment may be placed on a house or lot except for standard residential heating and air conditioning equipment which shall be screened from view, or satellite dishes in compliance with provisions of Section 3.4.25.

Window and through-wall air conditioning units are prohibited.

Above ground storage tanks, mechanical equipment (detached from the home), yard equipment and other similar items on or stored outside a home must be located behind the mass of the house and located or screened so as to be reasonably concealed from view of neighboring homes, streets and adjacent properties. What constitutes "reasonably concealed" or "similar items", shall be in the sole discretion of the WHDC and/or Modifications Committee.

5.4.14 Greenhouses

A) Design / Materials

Greenhouses (defined as having walls and roof made chiefly of transparent material) shall be constructed of finished wood framing or of a pre-finished metal complementary to the exterior color scheme of the home.

B) Location

Greenhouses may not extend beyond the approved setbacks set for construction of the main home.

In general the siting of greenhouses shall not create a breach of privacy between neighboring houses. Where this is unavoidable, the WHDC may require screening of the view by the applicant. What constitutes a breach of privacy will be determined in the sole discretion of the WHDC.

5.4.15 Holiday Decorations & Lighting

All holiday decorations are subject to regulations adopted by the White Hall Board of Directors and may be prohibited and/or subjected to additional regulations. Holiday decorations may be displayed 2 months prior to and no more than 1 month after any commonly recognized holiday for which such decorations are traditionally displayed. For holiday lighting guidelines, please refer to Section .

All holiday lighting is subject to regulations adopted by the White Hall Board of Directors and may be prohibited and subjected to additional regulations. If the Foundation wishes to permit holiday lighting, holiday lighting may be displayed 2 months prior to and no more than 1 month after any commonly recognized holiday for which such lighting is traditionally displayed

5.4.16 Kitchens (outdoor)

A) Portable Grills

Portable grills do not require approval but must remain behind the mass of the home or be otherwise concealed from view of the street or neighboring properties when not in use.

B) Design

Outdoor kitchens shall be integrated into an overall deck or patio plan.

All pipes and wires necessary for operation of the Outdoor Kitchen must be reasonably concealed. The backs of any kitchen cabinet or element that is visible from the street or neighboring property must be finished in a material and color to complement the house or adequately screened.

C) Location

Outdoor kitchens must be located behind the rear mass of the home no closer than 10' to any property line.

D) Materials

Outdoor Kitchens must be in colors and materials to complement the surrounding patio or deck.

If a pergola or overhead structure is proposed, see Sections 5.4.27 and 5.4.32.

5.4.17 Landscaping and Gardens

A) Lawns

All disturbed portions of the Front, Side and Rear Yards, excluding planting beds, shall be sodded with a drought resistant turf grass.

Artificial turf or plants are prohibited.

B) Vegetable Gardens

All vegetable gardens and any other gardens for non-decorative plants which are not part of normal property landscaping, are restricted to 10% of the rear yard for unfenced yards and 25% of fenced yards.

For fenced lots, gardens shall be located behind the rear plane of the home within the fenced area. For unfenced lots, gardens shall be located behind the mass of the home so as to be concealed from view from the street.

Small seasonal animal barrier fences constructed of wood or wire in neutral tones are permitted but must be removed when the garden is no longer active.

Vegetable climbing structures are restricted to be no taller than four (4) feet in height and shall be made of wood or wire cages. Vegetable climbing structures must be removed when the garden is no longer active.

C) Mulch Beds

Hardwood (shredded) chips and recycled rubber are the only acceptable materials. Color shall be shades of brown, black or gray only. No shades of red, blue or green are permitted.

D) Edging

Edging may be natural earth, stone or solid brick which must complement the color and texture of the foundation color of the residence. Steel edging is permitted but shall be black, brown or green only.

Retaining wall blocks and/or bricks may be used, multi-stacked (2 or more) with alternating courses so as to completely enclose the landscape area. If three or more blocks or bricks are used in a stack, it is considered a wall and must adhere to Section 3.30.

Wood edging may be used in the rear yard only.

Prohibited edging materials are plastic and cinder-block. Large rocks will be reviewed on a case-by-case basis.

Edging of walkways, driveways is not permitted, unless in conjunction with a mulch bed.

All edging must be maintained as to the appearance of the material and design. The Foundation has the authority to require the repair, replacement or removal of any edging.

E) Rock Gardens

Rock gardens are not permitted, except behind the mass of the home and must be part of an overall landscape design and approved by the WHDC.

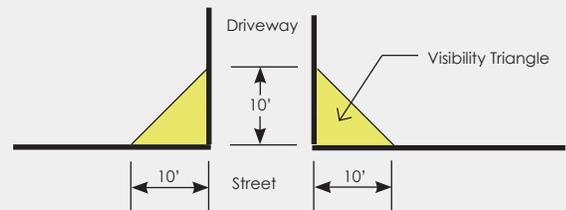
F) Water Diversion Areas

Water diversion areas made of rock or gravel are allowed, but may be no more

than 5% of the flower bed or garden bed. The rock color and texture must complement the natural color and texture of the foundation or the trim or base color of the residence. Rock or gravel is limited to one (1) inch in diameter. No rocks or gravel are permitted on the right-of-way areas on the property. All rock areas must be maintained and weed free.

G) Sight Visibility Triangle

At the intersection of a drive with a street, structures or plantings are not permitted that obstruct visibility between a height of 2 feet and 8 feet above the elevation of a driveway. The visibility triangle (as shown below) is determined by measuring in two directions from the intersection of the street and drive: 10 feet landward from the street and 10 feet parallel to the street and then connecting the two points with a straight line.



5.4.18 Landscape Accessories

DEFINITION: In addition to those items listed above, landscape accessories include but are not limited to: benches, arbors, trellises, fountains, log piles, permanent barbecues, decorative objects, and temporary shade structures. These accessories must be approved by the Designated Committee as to design and location.

PLACEMENT: In general, unless a design variation is granted by the WHDC, landscape accessories, excluding rain barrels, cisterns and other water conservation devices are permitted no farther forward than the rear corners of the home and shall be located behind the mass of the home. The Designated Committee may consider landscape accessories that are part of an overall landscape plan in front of the home on a case-by-case basis. The Designated Committee reserves the right to require additional screening for any landscape accessory.

5.4.19 Landscape Lighting

A) Landscape lighting fixtures may be utilized to illuminate landscaping, landscape beds, walkways, driveways, trees, decks, water features and patios.



Uplighting is allowed Path lighting is allowed

B) Light from landscape lighting must be directed completely within the Lot.

C) Only low voltage fixtures with white bulbs are permitted

D) Location

1) Except for path lighting, all landscape lighting shall be incorporated into a landscape bed

2) Landscape lighting shall be placed so as to face directly at the object(s) being illuminated.

E) For facade lighting, see Section 5.3.7(a).

F) For Holiday Lighting, see Section 5.4.15.

5.4.20 Patios and Outdoor Living Spaces

A) Design

1) The color and material of all patios and outdoor living spaces shall complement the home and be compatible with existing exterior improvements.

2) Sitting walls may be no taller than 2' including capstones

3) Screening may be required to mitigate the view of the patio from the road or neighboring properties.

4) For Outdoor Kitchens see Section 5.4.16.

5) For Fireplaces see Section 5.4.11.

6) For Fire Pits see Section 5.4.10.

B) Location

Patios should be located behind the rear plane of the home. In single family homes, no closer than 7' to the property lines. Variations for location will be considered on a case by case basis.

C) Materials

1) Patios are permitted of hard-surfaced materials including aggregate and patterned concrete, concrete pavers, or brick pavers either set in concrete or sand-set.

2) Loose laid stone and gravel patios are not permitted

D) Secondary Door Landings

Access door landings no larger than 9 sq. ft. are permitted and may be constructed of hard-surface materials including aggregate and patterned concrete, either set in concrete or sand-set. Larger size landings can be reviewed on a case-by-case basis.

5.4.21 Play Equipment - Play Sets, Enclosed Structures, Forts, Treehouses, Playhouses

A) Definitions

1) Children's Play Equipment

Play structures and equipment shall include but not be limited to: Swing Sets, Sliding Boards, Jungle Gyms, Climbing Structures, Trampolines and Skateboard Ramps. Factory built, pre-finished equipment is preferred but not required. Home-built play equipment shall be neat and orderly in appearance and finish. All structures shall be stained or painted in neutral or earth tone colors. All exterior play equipment must be submitted for approval and review by the Designated Committee prior to placement on the lot.

2) Enclosed Structures

Forts, playhouses, or other enclosed play buildings with an interior height of 6'-0" or less floor-to ceiling, and with a total floor area of less than 36

square feet shall be considered to be play equipment. Dog houses are also permitted under this section. Larger buildings are considered to be Accessory Buildings regulated under Section 5.8.

B) Placement and Screening

1) Placement

Recreational equipment shall be located in rear yards only, away from property lines that are adjacent to other houses or roads and away from neighbors' direct view where possible. Play sets must be located behind the mass of the house, and are not permitted in the side yard. Location variations may be granted by the WHDC on a case-by-case basis for wooden play structures to be located in the side yard pursuant to Section 1.2.4.

2) Screening

The Designated Committee may require that certain play equipment and/or enclosed structures be screened from view. The standard requirement for screening will be to provide densely shaped evergreen shrubs or trees of height, when planted, of at least 2/3 the height of the structure, and so placed as to provide a continuous screen on the stipulated side. Planting may be in a continuous row or staggered. A variety of shrubs/trees may be used in addition to single species solutions. It shall be the sole responsibility of the homeowner to submit to the Designated Committee a plan with proposed plant types, size and quantity for review.

C) Maintenance

1) Play equipment that has fallen into disrepair should be removed from the property.

2) The Foundation has the authority to require the removal of any play equipment in need of repair and/or maintenance.

5.4.22 Play Equipment - Basketball Goals

Basketball goals may be installed where shown on the illustrations for each lot type in Appendix D. The Foundation has the authority to require the removal of any basketball goal in need of repair and/or maintenance. Temporary basketball goals may not be used on community streets. Goals may be installed in accordance with the following criteria:

A) Pole Mounted

1) For homes with front loading garages, temporary and/or permanent pole mounted basketball goals may not directly face the street unless otherwise approved by the WHDC. Permanent basketball goals may be installed on the side of the driveway and no farther than 10' from the garage door.

2) For homes with side or rear load garages, permanent pole mounted basketball goals may be installed either at the head or side of the driveway. Permanent basketball goals installed on the side of the driveway may only be located in the side or rear yard behind the front plane of the home.

3) Pole mounted basketball goals, temporary and/or permanent, are permitted in rear yards, directly behind the mass of the house and no closer than 8' to any property line.

4) Mounting pole must be black pre-finished metal or painted a neutral earth tone.

5) Backboard must be gray, white or clear acrylic. Colored or patterned backboards are not permitted.

6) Written approval of the Designated Committee is required for temporary or permanent goals.

B) House Mounted

1) Basketball goals may be mounted only on the garage elevation of the home.

2) House mounted basketball goals must be gray, white or clear acrylic. Colored or patterned backboards are not permitted.

5.4.23 Play Equipment - Trampolines

Trampolines may be installed in accordance with the following criteria:

- A) All trampolines must be submitted to the Designated Committee for review indicating size and location. Brightly colored trampolines are not permitted.
- B) Trampolines must be located behind the mass of the house. Location variations may be granted by the WHDC on a case-by-case basis pursuant to Section 1.2.4.
- C) The Foundation has the authority to require the removal of any trampoline in need of repair and/or maintenance.
- D) Written approval of the Designated Committee is required.

5.4.24 Ponds and Water Features

Ponds, waterfalls, fountains, or other decorative water features must be approved by the WHDC, and will be permitted in rear yards only.

5.4.25 Satellite Dishes and Antennas

A) Permitted Antennas

The following antennas are permitted as required by the Federal Telecommunications Act:

- 1) An antenna that is designed to receive direct broadcast satellite service, including direct-to-home satellite services that is one meter (39") or less in diameter.
- 2) An antenna that is designed to receive video programming services via multi point distribution services, including multichannel, multi point distribution services, instructional television fixed services, and local multi point distribution services, and that is one meter (39") or less in diameter or diagonal measurement.
- 3) An antenna that is designed to receive television broadcast signals.

B) Location:

To the extent feasible, antennas should not be visible from street. The following priorities shall be observed in determining antenna locations:

- 1) Mounted directly on the rear of the home, on a roof plane facing the rear, or on the back side of a chimney.
- 2) Mounted on the ground in the rear yard.
- 3) Mounted on a pole, an existing other structure, or a tree in the rear yard.
- 4) If no clear signal may be obtained in any of the above locations, mounted on the ground or, if necessary, on a pole, in the front yard, or on the front plane of the home.
- 5) (Television Broadcast Antennas only): Antennas shall be located in the house attic unless it can be demonstrated that inadequate space exists in this location, or that adequate reception is not feasible here.

C) Appearance and Screening

Insofar as possible, the visibility of antennas should be minimized using one or both of the following methods:

- 1) Screen the antenna from view from the street with natural plantings, trees and shrubs; to the extent they do not comprise the signal reception.
- 2) Use antennas with a dark or muted color, or paint the antenna a muted color to blend with the background surface or with the surrounding landscape.
- 3) NO ADDITIONAL REGULATION BY THE FOUNDATION: Under Federal law, antennas that meet the requirements of this section may not be further regulated by the White Hall Board of Directors or the WHDC as to type or placement. Residents are encouraged to use care in the selection and placement of antennas to preserve the appearance and character of White Hall.

5.4.26 Signs

Except as noted below, all signs on lots in White Hall, as well as lead-in signs and builder's or realtor's signs, shall be based on templates approved by the WHDC, and must be approved as to placement. During initial house construction, only one construction sign will be permitted per lot, for the identification of the builder, architect, sub-contractors and/or suppliers. "For Sale" signs, other than those posted by the Declarant, shall be limited to one sign per lot and placed in the center of the front yard only. Rear yard signs are not permitted. No lead-in signs are permitted.

A) Real Estate Signs

Real estate signs for resale of a home may not exceed 4 square feet and may be placed in the front yard.

B) Security Signs

Signs indicating security systems are permitted in front of the home in landscape beds near the front door, not at the street. Security signs may not exceed a maximum of 10.5" x 8" in size.

C) Campaign Signs

Campaign signage may be on the Owner's lot and may not exceed 6 square feet and may not stand higher than 5' from the ground. Only one election sign (total) may be displayed per home in accordance with national, federal, local or community elections. The sign may be displayed no more than 2 months prior to or 7 days following any election.

D) Initial 'For Sale' Signs and Construction Signs

Initial For Sale/construction signs are signs placed by the original builder for the first sale of the home. Construction signs and initial For Sale signs are addressed in Section 3.6.

5.4.27 Shade Structures

(see also Section for trellis, pergola and arbors)

All temporary shade structures, permanent shade structures, and gazebos must be submitted to the Designated Committee for review and approval. If a temporary shade structure changes (i.e. location, size, or material), it must be resubmitted to the Designated Committee for review and approval. If considered a porch, see Section 3.23.3.

A) Awnings - See Section 5.3.3.

B) Temporary Shade Structures

Definition: Temporary shade structures are defined as an accessory structure, which may be attached to the home or freestanding, that provides cover or shade and lacks a permanent foundation, is assembled with non-permanent fasteners and is fold-able or collapsible.



Size: In general, temporary shade structures shall take up no more than 10% of the square footage of the rear yard. Larger temporary shade structures may be allowed on case-by-case basis at the discretion of the Foundation's Board of Directors and may remain on the Lot for no more than 7 days.

Location: Temporary shade structures shall be located behind the mass of the home. When not in use, temporary shade structures are to be stored so as not to be visible from the road or neighboring properties or common area.

Material / Finish: Poles must be wood or metal painted a muted color. The cover must be a solid muted color. Covers with a pattern can be reviewed by the reviewing committee on a case-by-case basis.

Time Frame: Temporary shade may be erected no earlier than April 15th and must be removed by October 15th of the same year.

C) Permanent Shade Structures

Definition: Permanent shade structures are defined as an accessory structure, which is freestanding. When attached to the house it is considered a porch. Permanent shade structures provide cover or shade and has a permanent foundation, is assembled with permanent fasteners and is not foldable or collapsible.



Size: Permanent shade structures may not exceed 10' in height from the deck or patio floor to the tallest point of the structure.

Construction: Permanent shade structures shall be constructed of weather resistant wood, preferably western red cedar, cypress, or redwood, although pressure treated southern yellow pine will be the acceptable minimum. All exposed wood members, shall be surfaced (finished smooth) on all exposed sides. Unfinished, dimensional lumber will not be approved for exposed open or freestanding members.

Colors and Finishes: Permanent shade structures shall be painted to match the trim color of the house, finished with a clear finish, or match the color of the deck. If roofed, roofing material and color should match or complement the house roof color and material.

Location: Permanent shade structures shall be located on a deck or patio behind the mass of the home, and are not permitted on lawn or garden areas. Location variations may be granted by the Designated Committee for permanent shade structures located out from behind the mass of the home should the permanent shade structure be deemed to be of a superior design and should the impact to neighboring properties be deemed minimal. What is deemed a superior design or minimal impact shall be in the sole discretion of the Designated Committee.

Time Frame: Permanent shade structures are permitted to remain on the lot year round, but the entire structure (shade source, poles, bracing, etc) must be removed when the structure is no longer being used for its intended purpose. The Foundation shall have the right to require full removal of any permanent shade structure if it is determined that the structure is deemed unkempt, in the sole discretion of the Foundation.

D) Gazebos

Definition: Gazebos are defined as accessory structures that are freestanding, roofed, and open on all sides. Gazebos can have railings. They provide shade, shelter, and an ornamental feature in the landscape.



Design: Acceptable gazebos shall generally be octagonal (8) sided structures consisting of a base deck, decorative columns or posts, optional railings, and a sloped roof. Stepped roofs and/or cupolas may be added. Structures of other shapes such as square structures (see also Shade Structures) will be considered on the basis of equal architectural merit.

Size: The maximum width of a gazebo across flat sides shall be 14'-0". The maximum height from gazebo deck to eave shall be 8'-0". Gazebos shall have roof slopes generally of at least 8 in 12. Slopes shall be appropriate to size and style of gazebo.

Construction: Gazebos shall be constructed of weather resistant wood, preferably western red cedar, cypress, or redwood, although pressure treated southern yellow pine will be the acceptable minimum. All exposed wood members, except decking, shall be surfaced (finished smooth) on all exposed sides. Posts, railings, and other open wood members shall be turned, edged, or worked into shapes consistent with traditional gazebo designs. Unfinished, dimensional lumber will not be approved for exposed open or free-standing members.

Additional trim, detailing, brackets, cupolas, etc. shall be appropriate to the design and size of the gazebo. The Designated Committee reserves the right to deny gazebo designs with excessive and inappropriate detail, as well as with insufficient detail.

Gazebos may be built on site or assembled from kits. Applications for approval must include either scale drawings of plans and elevations, or manufacturer's brochure showing the exact gazebo being purchased, with dimensions and specifications.

Colors and Finishes: Gazebos shall be painted to match the trim color of the house, finished with a clear finish, or match the color of the deck, and roofed with shingles that match the house shingles.

5.4.28 Solar Panels

A) Per Section 67-701 (A) of the Code of Virginia Covenants Restricting Solar Energy Collection Devices ("CRSECD"), no community association shall prohibit an owner from installing or using solar energy collection devices. However, a community association may establish reasonable restrictions concerning the size, place, and manner of placement of such solar energy collection devices.

B) Solar Panels must comply with the James City County Guidelines for Solar Energy Systems as may be amended or changed from time to time.

C) Should Section 67-701 of the CRSECD be amended in such a way as to render this section 3.7.6 in conflict, state code shall supersede this section.

5.4.29 Spas and Hot Tubs

For swimming pools, see Section 5.4.30.

A) Permitted behind the mass of the home only.

B) Screening is required to mitigate the view of the Hot Tub or Spa from the road, neighborhood amenities or neighboring properties.

C) Privacy screens may be constructed like vertical board privacy fences or may be framed lattice. They may be constructed on decks or directly adjacent to patios for the purpose of screening spas. The extent of these privacy screens will be reviewed by the WHDC and/or MC on a case-by-case basis, but in no case may extend to the side, past the rear corners of the house. The WHDC and/or MC reserve the right to require additional landscaping for the purpose of screening.

5.4.30 Swimming Pools

For spas and hot tubs, see Section 5.4.29.

A) In-ground swimming pools are permitted in rear yards behind the mass of the home. Variations may be granted by the WHDC pursuant to Section 2.1.8.

B) Pool wells may be located no closer to any property line than 15'.

C) Pool decks shall be concrete, brick or concrete pavers, and may be located up to 5' from any property line.

D) The WHDC and/or MC reserve(s) the right to require landscape screening between a pool deck and any property line.

E) Above ground swimming pools are not permitted unless completely enclosed by a deck. See Section 3.23.5 for deck restrictions.

F) All pumps, filters & equipment must be screened from view from the road, amenities or neighboring properties. Screening should match the HVAC screening or with landscaping.

G) Pools must be fenced per County code. See Section 5.4.4 for additional fencing details.

H) Pools shall be enclosed with any rear yard fence type as detailed in Section 5.4.5, 5.4.6, or 5.4.7. Black metal fencing (excluding chain link) may be submitted for consideration on a case by case basis. Gates for swimming pool access shall be fitted with code approved security latches.

5.4.31 Temporary Commercial Storage Units (with or without wheels)

Temporary Commercial Storage Units must be approved in advance by the White Hall Community Manager by letter or e-mail. Requests shall include dates on which the storage unit will be on site but may not exceed fourteen (14) days unless otherwise approved by the Community Manager. Only one storage unit is permitted and must be placed on the driveway and as close to the home as possible.

5.4.32 Trellises, Arbors and Pergolas

Although the terms often are used interchangeably, trellises, arbors, and pergolas are distinctly different structures.

A) Trellises

A trellis is typically a latticework built to support climbing plants or vines. It can be as simple as a panel attached to the side of a building, or it can be freestanding in a garden or yard.



Trellises come in all sorts of shapes and sizes; typically based on the wall or area where it's to be located. The material, style, and color of the arbor should match the features of the house. As trellises are typically used for vines or other plants, a planting plan (if any) should be included with the application. Materials for trellises include aluminum, wood, and PVC (vinyl). Prefabricated kits will be reviewed on a case-by-case basis.

B) Arbors

An arbor usually incorporates a trellis into its structure, creating a tunnel-like passageway of climbing plants. Arbors have a continuous run of latticework from one side of the



"tunnel" to the other, often in an arched shape.

Arbors come in all sorts of shapes, sizes and even colors. The architectural style of the arbor should match the style of the house. A standard arbor, as a gateway, is typically 3' - 6' wide and 6' - 8' tall. Materials for pergolas include aluminum, wood, and PVC (vinyl). Prefabricated kits will be reviewed on a case-by-case basis.

C) Pergolas

Pergolas, too, are designed to support climbing plants. Unlike arbors, though, pergolas have posts supporting an open, roof-like structure. They're most commonly used to shade a walkway or a deck. (see "Shade Structures on page ___ for other options)

Pergolas can vary in shape and sizes, but should be in scale with the house, patio, and/or yard.



A standard pergola will most often use 6 x 6 inch posts for support. A very small pergola may use 4 x 4 inch posts as long as it has less than 4 to 6 feet between posts. The height of pergolas typically are about 8 feet to 10 feet tall. Materials for pergolas include aluminum, wood, and PVC (vinyl).

D) Location

Trellises, arbors, and pergolas are permitted in the rear plane of the home but no closer than 7' to the property line unless the property line is adjacent to a natural or undeveloped property. For superior design or unique site conditions, the reviewing committee will consider other options.

5.4.33 Walkways (secondary)

A) Front / Main Walk

See Section 3.28

B) Secondary Walks

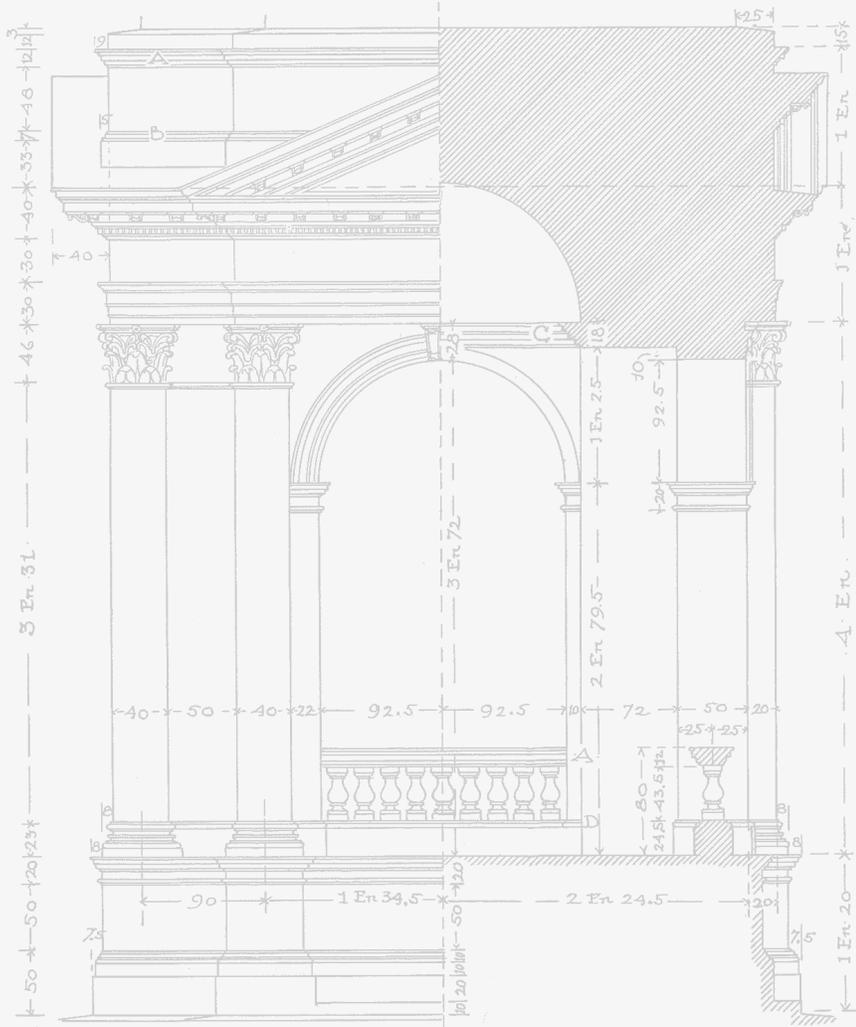
Secondary walkways located behind the front plane of the house or in the rear yard may include loose-laid stone in gravel or a mulch bed in addition to approved hard surface materials. Continuous landscape edging will be required along soft surface walks.

WHITE HALL
JAMES CITY COUNTY, VIRGINIA

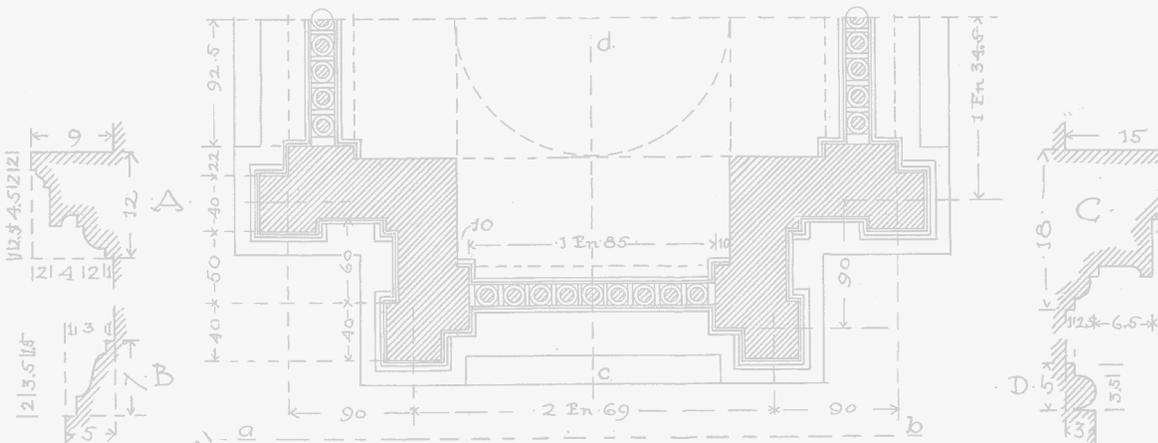
This page is intentionally left blank

WHITE HALL
JAMES CITY COUNTY, VIRGINIA

CORINTHIAN ORDER



ELEVATION A-B SECTION C-D



PLAN



CAMPANILE

WHITE HALL
JAMES CITY COUNTY, VIRGINIA



New Construction Application

Please refer to the Design Review Standards prior to submittal.

Date submitted: _____

Date Reviewed: _____

White Hall

11237 Nuckols Rd
Glen Allen, VA 23059
Phone: 804-762-0038

Property Information

Block _____ Lot # _____ Section: _____

Address of Lot: _____

Plan Name / Elevation: _____

Is this a High Impact Lot? _____

(See Map on Page 48)

Corner Lot

Adjacent to Amenitized Areas

Application Fee

Preliminary Review: \$250

Preliminary Review w/Lot: \$275

Subsequent Reviews: \$75

Check #: _____

Amount: _____

Applicant:

Applicant Name: _____

Contact Name: _____

Address: _____

Phone: _____

Builder: _____

Email: _____

(If different than applicant)

House Information

Finished Floor Area: _____ sq. ft.

Roof: _____

Proposed Materials:

Foundation: _____

Front Facade _____

Rear Deck: _____

What percent of vinyl is on the front? _____

Patio: _____

Rear: _____

Accents: _____

Sides: _____

Driveway _____

The following items must be submitted electronically with this application:

- One (1) copy of a site plan (1" = 30') including tree preservation information. Indicate finish driveway and walkway materials on the plan. HVAC and Trash to be shown. Post light and
- One (1) copy of architectural plans and elevations. Indicate total finished floor area for each floor on plans. Also indicate foundation, chimney, siding, brick and roofing materials.
- Payment fee for review of plans.
- Optional: Application for approval of landscape plan (provides for free landscape review). If submitted separately: fee is \$25.00 Street tree(s) and supplemental trees must be included.

Architectural plan review is for compliance with White Hall Covenants and Design Guidelines only. Approval does not relieve the Applicant of responsibility for obtaining all other necessary permits and compliance with applicable zoning and building codes.

DO NOT WRITE BELOW: For Committee Use Only

WHDC Action: Preliminary Review Conditional Approval Not Approved (resubmit) Incomplete (resubmit)

Signed for WHDC: _____ Date: _____

WHITE HALL
JAMES CITY COUNTY, VIRGINIA



Lot Clearing Application

Please refer to the Design Review Standards prior to submittal.

Date submitted: _____

Date Reviewed: _____

White Hall
 11237 Nuckols Rd
 Glen Allen, VA 23059
 Phone: 804-762-0038

Property Information

Block _____ Lot # _____ Section: _____

Address of Lot: _____

Date the Lot will be ready for Inspection: _____

Applicant:

Applicant Name: _____

Contact Name: _____

Address: _____

Phone: _____

Email: _____

Builder: _____
(If different than applicant)

Lot clearing / stakeout, submitted electronically, shall include the staking of all house corners and of the driveway. Tree which are to be saved are to be clearly marked and groupings of trees or areas to be left natural should be identified with tape.

The applicant shall be the property owner at the time of application.

Lot clearing / stakeout review is for compliance with the White Hall Design Standards only. Approval does not relieve the applicant of responsibility for obtaining all other necessary permits and compliance with applicable zoning and building codes.

DO NOT WRITE BELOW: *For Committee Use Only*

WHDC Action: Preliminary Review Conditional Approval Not Approved (resubmit) Incomplete (resubmit)

Signed for WHDC: _____ Date: _____

WHITE HALL
JAMES CITY COUNTY, VIRGINIA



Landscape Application

Please refer to the Design Review Standards prior to submittal.

Date submitted: _____

Date Reviewed: _____

White Hall

11237 Nuckols Rd
Glen Allen, VA 23059
Phone: 804-762-0038

Property Information

Block _____ Lot # _____ Section: _____

Address of Lot: _____

Plan Name / Elevation: _____

Is this a High Impact Lot? _____ Corner Lot
(See Map on Page 48) Adjacent to Amenitized Areas

Application Fee

First Time Review: No Charge

Subsequent Reviews: \$25

Check #: _____

Amount: _____

Applicant:

Applicant Name: _____

Contact Name: _____

Address: _____

Phone: _____

Builder: _____
(If different than applicant)

Email: _____

Landscape Contractor: _____

The following items must be submitted electronically with this application:

- Copies of your landscape plan submitted in the same scale as the site plan in accordance with the White Hall Design Standards, including location of all planting areas and major plants, with a plant schedule of plant species and sizes.
- The landscape plan show (or provide a note) the required street tree(s) and supplemental trees.
- The landscape plan should indicate all site improvements including the house, driveway, walks, other structures, fences, etc.
- Irrigation Plan
- Trash Enclosure shown on the plan
- Post Lights shown on the plan
- HVAC units shown on the plan

Note: Native plant material should be used as much as possible.

Landscape plan review is for compliance with Charter Colony Covenants and Design Guidelines only. Approval does not relieve the Applicant of responsibility for obtaining all other necessary permits and compliance with applicable zoning and building codes.

DO NOT WRITE BELOW: For Committee Use Only

WHDC Action: Preliminary Review Conditional Approval Not Approved (resubmit) Incomplete (resubmit)

Signed for WHDC: _____ Date: _____

WHITE HALL
JAMES CITY COUNTY, VIRGINIA



Color Application

Please refer to the Design Review Standards prior to submittal.

Date submitted: _____

Date Reviewed: _____

White Hall

11237 Nuckols Rd
Glen Allen, VA 23059
Phone: 804-762-0038

Property Information

Block _____ Lot # _____ Section: _____

Address of Lot: _____

Plan Name / Elevation: _____

Application Fee

First Time Review: No Charge

Subsequent Reviews: \$25

Check #: _____

Amount: _____

Requested Colors

| | Manufacturer | Color | Paint | Stain | Vinyl | Other |
|-------------------------|--------------|-------|--------------------------|--------------------------|--------------------------|--------------------------|
| Siding: _____ | _____ | _____ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Shake Siding: _____ | _____ | _____ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Trim: _____ | _____ | _____ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Shutters: _____ | _____ | _____ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Front Door: _____ | _____ | _____ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Front Door Style: _____ | _____ | _____ | | | | |
| Garage Door: _____ | _____ | _____ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Main Roof: _____ | _____ | _____ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Secondary Roof: _____ | _____ | _____ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Brick: _____ | _____ | _____ | | | | |
| Mortar: _____ | _____ | _____ | | | | |
| Stone: _____ | _____ | _____ | | | | |
| Deck Railings: _____ | _____ | _____ | | | | |
| Window Grids: _____ | _____ | _____ | | | | |
| Other: _____ | _____ | _____ | | | | |

Architectural plan review is for compliance with White Hall Covenants and Design Standards only. Approval does not relieve the Applicant of responsibility for obtaining all other necessary permits and compliance with applicable zoning and building codes.

DO NOT WRITE BELOW: For Committee Use Only

WHDC Action: Preliminary Review Conditional Approval Not Approved (resubmit) Incomplete (resubmit)

Signed for WHDC: _____ Date: _____



This Page Intentionally Left Blank



Final Application

Please refer to the Design Review Standards prior to submittal.

Date submitted: _____

Date Reviewed: _____

White Hall

11237 Nuckols Rd
Glen Allen, VA 23059
Phone: 804-762-0038

Property Information

Block _____ Lot # _____ Section: _____

Address of Lot: _____

Applicant:

Applicant Name: _____

Contact Name: _____

Address: _____

Phone: _____

Builder: _____

Email: _____

(If different than applicant)

Checklist

Yes No NA

- Is post light 'hot wired' with a hot wired photocell
- Site Plan: Is house sited as submitted and approved?
- House plan built as submitted and approved?
- Lot stakeout submitted and approved?
- Colors submitted and applied as approved?
- Driveway built as submitted and approved?
- Sidewalk installed and correctly sized in front of the home.
- Sidewalk installed to front door?
- Post light installed with concrete and located correctly?
- Landscaping installed as per the approved plan?
- HVAC and other utilities correctly screened?
- Trash Enclosure installed?
- Roof vents painted to match the roof?
- Lattice screening under deck (and front porch if applicable)?
- Sod installed in front, side and rear yards?
- Other: _____
- Other: _____

Modification Requests with Required Documentation

The lists below contain minimal information required for a submittal to the Modifications Committee. Every submittal is unique and therefore may require additional information. It is best to include as much or more information as possible to assist the Committee in their review of your request.

Note: If you are proposing a feature that is not included in this checklist, please request assistance from the management company

House Additions

- Plat showing all property lines, existing structures, decks and patios, driveways and walks, easements, setbacks and the house addition showing location and dimensions
- Architectural plans sealed by a registered architect
- All materials, including but not limited to, siding, roof, shutters, trim, windows, etc.
- Colors of all proposed materials
- Photographs of the house from all sides with the proposed location noted

Sheds & Accessory Buildings

- Plat showing all property lines, existing structures, decks and patios, driveways and walks, easements, setbacks and the shed or accessory building showing location and dimensions
- Exact size (Height, width, length). Photos or specifications from the manufacturer are helpful.
- Details including siding material, color, doors, windows, shutters
- Foundation material and details
- Any screening proposed (lattice and/or plants)
- Photographs of the house with a list of colors, type of siding and roof material.

Decks

- Plat showing all property lines, structures, existing decks and patios, driveways and walks, easements, setbacks and the deck showing location and dimensions
- Dimensions of deck flooring, railings (height and size) and posts (height and size)
- Material and exact name of color (stain, paint)
- Any screening proposed (lattice and/or plants)
- Photographs of the house, especially the proposed deck location

Fence

- Plat showing all property lines, structures, existing decks and patios, driveways and walks, easements, setbacks and the fence showing location and gate locations.
- Exact type of fence including size, material, stain or paint color (exact color name)
- Photos or specifications from the manufacturer.
- If available, a quotation from a contractor with specifications.
- Photographs of the site if unusual circumstances exists.

Play Equipment

- Plat showing all property lines, existing structures, decks and patios, driveways and walks, easements, setbacks and the play equipment showing location and dimensions
- Photographs or specifications from the manufacturer showing material, color, height, width and length
- Any proposed site additions such as mulch or landscaping.
- Photographs of the site location, especially how it relates to the neighbors

Landscaping

- Plat showing all property lines, existing structures, decks and patios, driveways and walks, easements, setbacks and the proposed landscaping showing location of plant beds and/or plant material.
- Plant locations and plant schedule showing plant names and sizes.
- If mulch is added, specify type and color.
- If edging is added, specify the material.
- Note on the plans if any grading is required. In certain circumstances a letter from a licensed engineer may be required.

Hardscaping (patios, fire pits, arbors, etc.)

- Plat showing all property lines, existing structures, decks and patios, driveways and walks, easements, setbacks and the proposed feature showing location and dimensions
- Details and materials such as stone/brick, finishes, colors, etc. that are specific to the feature
- If not hand built, photographs or specifications from the manufacturer showing material, color, size
- Any proposed site additions such as landscaping.
- Photographs of the house and site location, especially how it relates to the neighbors.

Trash Enclosure

- Plat showing all property lines, existing structures, decks and patios, driveways and walks, easements, setbacks and the trash enclosure showing location and dimensions
- Type of screening with all dimensions
- Materials and paint/stain color
- Photographs of the house, especially the proposed trash enclosure location



New Construction Application

Please refer to the Design Review Standards prior to submittal.

Date submitted: _____

Date Reviewed: _____

White Hall
 11237 Nuckols Rd
 Glen Allen, VA 23059
 Phone: 804-762-0038

| | | | | | |
|--------------------------|--------------------------|--------------------|--------------------------|-------------------------|--------------------------|
| New Application for MC | <input type="checkbox"/> | Re-Submittal to MC | <input type="checkbox"/> | Appeal to MC | <input type="checkbox"/> |
| New Application for WHDC | <input type="checkbox"/> | Appeal to MC | <input type="checkbox"/> | Resident Appeal to WHDC | <input type="checkbox"/> |

This section is for office use only:

| | |
|--|--------------------------------------|
| Conditional Approval: _____ | Assigned to Follow-Up: _____ |
| Variation(s) Granted: _____ | Not Approved: _____ |
| Deferred for Additional Information: _____ | Additional Information Needed: _____ |

Please fill out completely and make sure that all proper documentation, materials, etc. are included with the application, otherwise, the application will be deemed incomplete.

| | |
|---|---|
| Applicant Name: _____ | Contact Phone #: _____ |
| Address: _____ | Email: _____ |
| Do you currently own the lot: Yes <input type="checkbox"/> No <input type="checkbox"/> Lot #: _____ | Adjacent to Common Area? Yes <input type="checkbox"/> No <input type="checkbox"/> |

DESCRIPTION OF REQUEST: *Please check the appropriate box and include any specifications/explanations with the application.*

Addition
 Landscaping
 Solar Panels
 Patio
 Storm Door
 Accessory Building
 Play Structure
 Landscape Accessory
 Fence
 Screened Porch
 Deck
 Other: _____

REQUIRED: Submittal may not be reviewed unless all information is included for your request:

Application (required)

Plat / Survey of Property (required): The plat should include all improvements to the property including, but not limited to, structures, driveways and walks, decks and patios, easements, and setbacks.

Site Plan of Improvements (required): Identify the location of the proposed improvements and actual dimensions in relation to the existing structures, driveways, setbacks, easements, etc. Photographs of the site are usually beneficial.

Specifications (required): Provide detailed drawings, specifications and/or photos of the proposed improvement. List all materials, dimensions, types & colors. Provide material samples as applicable (color chip, type of rock, photos).

Architectural Plan (if applicable): When additions are being proposed, identify square footage, front, sides and rear elevations, color selection, and special details.

Landscape Plan (if applicable): Identify location of Landscape Improvements, property lines, existing walls and fences, landscape materials (sod, tree, shrub and ground cover types), irrigation and lighting (if applicable), utility easements, north arrow and scale. (A Landscaping Plan is required for any landscape improvements other than for maintenance purposes.)

I do, by my signature, understand and agree to the following:

- 1) The White Hall Foundation has encouraged me to review these plans with the adjacent owners to our lot as a courtesy.
- 2) It is the sole responsibility of the owner to obtain all county permits.
- 3) That all County codes supersede any approvals given and are the sole responsibility of the owner to research.
- 4) That I assume total responsibility for the upkeep and maintenance of all modification(s) made in the area. I also acknowledge that obtaining insurance for the improvement is my responsibility.
5. That the modification(s) will in no way hinder yard care.
6. The White Hall Foundation reserves the right to require removal or repair of the modification at my own expense if 1) the modification is not constructed or installed as per the specifications submitted for approval with this form; or 2) the modification is not maintained in a safe condition; or 3) the modification is not maintained in keeping with the surrounding structures and is not satisfactory to the Modifications Committee.
- 7) I certify that I have read and agree to follow the rules and regulations pertaining to architectural control and review.
- 8) There is no obligation on the part of the Applicant to ever start this modification. However, if Applicant does not start construction within six (6) months, approval will automatically be revoked without prior notice from the Association. Time extensions may be granted upon written receipt, at the discretion of the Association. When extensions are not granted, the application must be resubmitted for review.
- 9) This document will become part of the owner's homeowner file and will inure to any succeeding owners. Owner is encouraged to include disclosure of this document to any subsequent purchasers.

Date Applicant / Owner Signature

DO NOT WRITE BELOW: For Committee Use Only

| | | | |
|---------------------------|---------------------|-----------------------|---------|
| _____ | _____ | _____ | _____ |
| Date Received by MC Staff | Date Reviewed by MC | Follow-Up-Date | Initial |
| _____ | _____ | _____ | _____ |
| Date Received by WHDC | Received by | Date Reviewed by WHDC | Date |

Community Impact Statement
For
Hankins-Dunn Property



Prepared For

HHHunt

October 26, 2022

Revised: March 23, 2023

Revised: August 4, 2023

JCC Case Number: Z-22-0004/SUP-22-0026

AES Project Number: 9149-11

Prepared by:



5248 Olde Towne Road Suite 1
Williamsburg, Virginia 23188
Phone: 757-253-0040
Fax: 757-220-8994
www.aesva.com

TABLE OF CONTENTS

- I. INTRODUCTION.....2
- II. THE PROJECT TEAM2
- III. EXISTING CONDITIONS2
- IV. PROJECT DESCRIPTION3
- V. PLANNING CONSIDERATIONS
 - A. Land Use/Zoning4
 - B. Environmental.....5
 - C. Parks and Recreation5
- VI. ANALYSIS OF IMPACTS TO PUBLIC FACILITIES AND SERVICES
 - A. Public Water Facilities.....6
 - B. Public Sewer Facilities6
 - C. Fire Protection and Emergency Services..8
 - D. Solid Waste8
 - E. Utility Service Providers8
 - F. Schools.....8
- VII. ANALYSIS OF ENVIRONMENTAL IMPACTS.
 - A. Preliminary Wetland Determination9
 - B. Resource Protection Areas9
 - C. Soils.....9
- VIII. ANALYSIS OF STORMWATER MANAGEMENT10
- IX. ANALYSIS OF IMPACTS TO TRAFFIC10
- X. FISCAL IMPACT STUDY.....10
- XI. CONCLUSIONS.....11

I. INTRODUCTION

HHHunt, proposes to create a development consisting of a mix of residential single family attached and detached housing to complement the existing White Hall community which they also developed. The amenities in this new community would complement the existing amenities within the White Hall community and make possible a shared homeownership association.

II. THE PROJECT TEAM

The organizations that participated in the preparation of the information provided with this rezoning submission are as follows:

- Owner(s) - George M. Hankins Jr. & Sharon H. Dunn
- Developer - HHHunt
- Attorney - Geddy, Harris, Franck & Hickman, LLP
- Civil Engineering - AES Consulting Engineers
- Environmental/Wetlands - Wetland Studies and Solutions, Inc. (WSSI)
- Traffic - DRW Consulting
- Land Planning - AES Consulting Engineers

III. EXISTING CONDITIONS

Master Plan Sheet 2 contains detailed information on wetlands, buffers, soils, and slopes. A pre-development site analysis revealed the following results:

| | |
|--|-----------------------------|
| <i>Wetland areas, Buffers and Steep Slopes, etc...</i> | <i>61.260 acres</i> |
| <i>Developable Land</i> | <i>155.766 acres</i> |
| <i>Land Dedication to School Property</i> | <i>3.000 acres</i> |
| <i>Total Site Area</i> | <i>220.026 acres</i> |

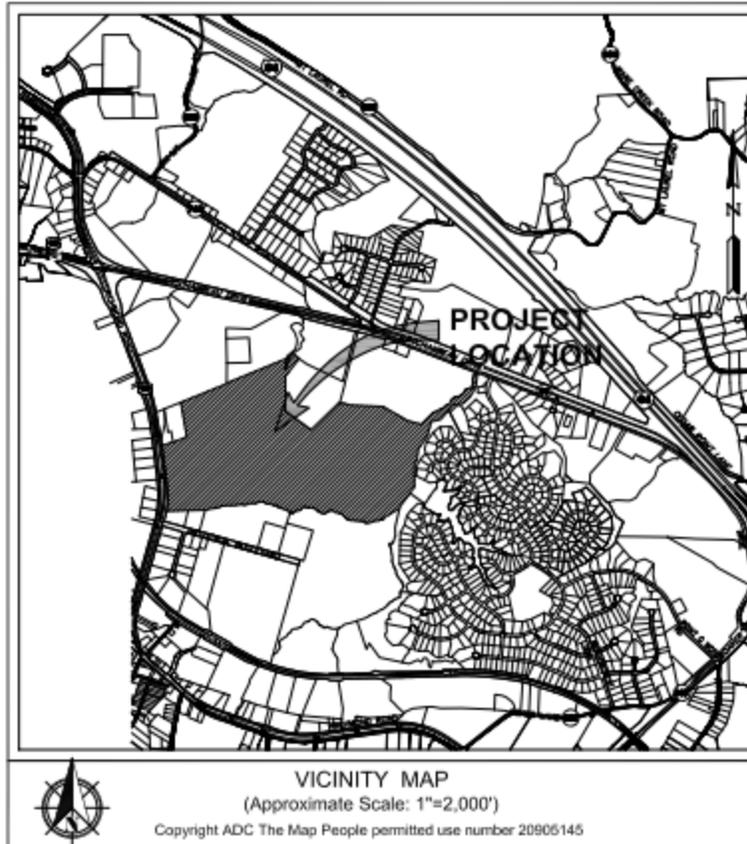


Figure 1 – Site Location

IV. PROJECT DESCRIPTION

HHHunt is proposing to develop a community on approximately 220 acres near Anderson's Corner in James City County. This location has been identified on the County's comprehensive plan as low density residential for multiple plan cycles and is a location recommended for concentrated development on the Alternative B plan from the County's Engage 2045 initiative. Current plans illustrate a mix of residential building types and open space connected by a series of interconnecting streets and alleys and further served by a 4-lane divided highway, Route 60.

The proposed project is located adjacent to Hickory Neck Episcopal Church and the White Hall subdivisions (also developed by HHHunt). The intent of the developer is to provide pedestrian connectivity and shared amenities between these developments under a common homeowner's association.

The planning efforts for the proposed project include several types of open space contributing to the unique character of the project. Buffers of 35' and more are provided around the perimeter of the community, with a 150' Community Character Corridor buffer along the Route 60 road frontage. Non developable open space consisting of wetlands, streams, and slopes of 25% or greater bound much of the eastern boundary of the property. Other developable lands have been provided as common open space either in the form of expanded buffer areas or recreation open space noted on the Master Plan. A detailed site analysis was conducted by Wetland Studies and Solutions that identified wetlands and stream beds and buffers of approximately 60 acres. The non-developable 61.260 acres is approximately 28% of the total parcel acreage. See the Environmental Inventory drawing identifying areas of non-developable and net developable acreages as they relate to this application included with the Master Plan drawings.

V. PLANNING CONSIDERATIONS

A. Land Use

The current zoning of the property is A-1. A-1 lands (General Agricultural District) provide for farming and forestry activities, low density residential uses, certain recreational uses, certain public or semipublic uses and institutional uses. A review of the Comprehensive Plan of James City County shows this area designated as Low Density Residential and lying within the PSA or Primary Service Area. Low density residential areas are developments or lands generally suited for gross densities of up to one dwelling unit per acre. Residential developments with densities greater than 1 unit per acre and up to 4 units per acre may be considered if they offer particular public benefits to the community. This application is proposing a rezoning from A-1 to R-2 with a Residential Cluster overlay. After discussion with planning staff, R-2 was chosen as the most appropriate underlying zoning given the requested residential uses because it provides design flexibility. This flexibility permits the ability to include townhome units along with single family units and the cluster facilitates the ability to provide a large percentage of the net developable land as open space and also provide for a more affordable housing mix.

The Master Plan was planned incorporating elements of the JCC Ordinance Section 24-551 – Open Space Development Design Elements. This community plan is a compact walkable neighborhood that preserves significant continuous open space and natural features around most of its perimeter. 35.5% of the developable land is being preserved as open space. Most of the community lies within the existing footprint of the existing farm fields so clearing the mature forestland will be kept at a minimum. Home types range from smaller townhome lots with parking

pads to larger single family detached homes that site on 70' wide lots. This variability in home sizes translates into a variability in home pricing that allows a maximum range of affordable homes. Cul-de-sacs have been minimally planned with the majority of streets on a gridded type of layout. The façade along Richmond Road will be landscaped consistently with that of White Hall with column entrances and black three board fence. The internal focal feature of the community is a lengthy mews that connects the proposed amenity center to the existing White Hall community. To achieve this planning feature, alleys are planned for the backs of these homes.

To achieve a community density above 1 unit per acre requires density bonus points per JCC Ordinance Section 24-549 – Density Standards. The Master Plan shows a maximum of 582 units on 217.026 gross acres and 155.766 net developable acres (does not include the 3.0 acres being gifted to County for school usage). The gross density is 2.68 units/acre but the adoption of Ordinance No. 31A-357 on May 9, 2023 requires that all densities now be referenced in terms of net density which is 3.74 units/acre. Whereas before the adoption of Ordinance No. 31-357 four (4) density bonus points would have been required, six (6) density bonus points are now required. 6.5 density bonus points are being provided as follows:

- *Bonus Item Option C – Undertaking or funding a stream restoration project or stormwater management facility retrofit within the same sub-watershed, as identified by an approved watershed management plan or by the engineering and resource protection division. (1.5 point)*

To assist in funding the restoration effort of existing degraded streams located downstream from the stormwater facilities on the Stonehouse Elementary School property as identified by the engineering resource protection division, in addition to the cash proffer, there shall be \$500, paid on a per lot basis, to contribute to stream restoration.

- *Bonus Item Option D – Meeting a majority of items (a) – (d) listed in section 24-551, open space development design elements (1.5 points)*

(a) The community, similar in design to White Hall, has a compact layout that encourages pedestrian movement with key open space either preserved or amenitized. More than 75% of the community is within a 10 minute walk of the amenity center and 100% within a 5 minute walk to a pocket park or the trail system.

(b) The development is mostly contained within the existing farmed fields with limited clearing of existing forest lands. Likewise, the plan avoids most of the steep slopes on the property.

(c) Home types will vary ranging from townhomes to larger single family detached homes; creating a diverse community or residents with different needs and/or economic situations..

(d) Like White Hall, the use of cul-de-sacs is minimal allowing for significant connectivity within the neighborhood.

(e) A planned trail system will connect this community through that continuous ribbon of wildlife habitat.

- *Bonus Item Option H – Preserving a single area of health, mature, mixed hardwood forestland at least two acres in size with the developable portion of the site. The planning director may request that the developer provide confirmation, prepared by a certified horticulturalist, that these qualities are present (1 point).*

An area 2 acres in size has been identified on the northern property line next to the Williamsburg Christian Academy. A certification from a WSSI arborist is included which confirms that the forestland is comprised of mature mixed hardwoods. Prior to the first occupancy permit, this area will be deed restricted prohibiting the clearing of trees.

- *Bonus Item Option I – Retaining a single area of agricultural land designated on the USDA maps to be of prime or statewide importance that is at least five acres in size. (1 point)*

An area 5 acres in size has been identified adjacent to the 150' CCC buffer on the southern side of the Hickory Neck Church. This land is confirmed as prime agricultural land on the USDA online maps. Prior to the first occupancy permit, this area will be deed restricted designating this area as for agricultural preservation.

- *Bonus Item Option K – Providing pedestrian accommodations on one side of all internal roadways, where this would exceed the requirements set forth in section 24-35 of this chapter (1 point)*

Sidewalks will be constructed on both sides of all public streets.

- *Bonus Item Option L – Implementation of Design Guidelines that include superior architectural design. (0.5 points)*

The design guidelines from White Hall have been updated in a new format and are presented to continue the neighborhood placemaking and quality of home construction as previously accomplished.

The above shall be implemented on this project through proffers or Master Plan designation.

B. Environmental

A detailed environmental site analysis was conducted on this property. The property is largely crop land that has been actively farmed for hundreds of years. The property is bounded at the east/southeast by wetlands and RPA buffers. Recent work performed by the Environmental Services Division of Wetlands Studies and Solutions identified approximately 61.26 acres of wetlands, streams and RPA buffers which account for approximately 28.2% of the site. Wetland Studies and Solutions, Inc. has also conducted a perennial stream analysis on the property and James City County Stormwater and Resource Protection Division concurred with the delineation and approved the RPA limits on April 24, 2023. Additional areas containing slopes of 25% or

greater have been mapped but account for limited portions of the developable area of the site (outside RPA buffers).

C. Parks and Recreation

HHHunt proposes to provide both active and passive recreational amenities designed to meet the needs of the anticipated residents within the proposed community. Based on the James City County Parks and Recreation Master Plan guidelines, the development will include a minimum of: 1 playground, 2.05 acres of park land, 2,800 ft of biking/jogging trails, 25-meter competition pool and 1 multi-use rectangular field. The intention is to annex this community into the existing White Hall community which will allow current White Hall residents to use these new amenities as well. A cohesive community under one homeowner management will be more financially stable than 2 separate communities.

VI. ANALYSIS OF IMPACTS TO PUBLIC FACILITIES AND SERVICES

The subject property is located within the Primary Service Area of James City County. Parcels and subsequent land development activities within the Primary Service Area are required to connect to public water and sanitary sewer service provided by the James City Service Authority (JCSA). Sheet 4 of the Master Plan, *The Master Utility Plan* is intended to supplement this report for information on public water and public sanitary sewer.

A. Public Water Facilities

The subject property will be served with public drinking water by the existing JCSA water distribution system in the area. JCSA currently maintains an existing 12-inch water main through the middle of this property which links the water mains along both Richmond Road and Rochambeau Drive. The water main on Richmond Road becomes a 16-inch water main north of Hickory Neck Church and continues to the Stonehouse Commerce Park north of the proposed development. A 12-inch water main lies along the south side of Rochambeau Drive and extends from the middle of the property towards interconnections with Stonehouse Elementary School. A water distribution system model will be completed and submitted prior to the site or subdivision

plans. During the model development, a meeting will be held with JCSA to review the water main layout. The model will examine flow rates and pressures throughout the immediate water system area. The water model will account for all single-family attached residential buildings.

B. Public Sewer Facilities

Sanitary sewer service can be provided to the subject development by two existing JCSA pumping stations. These stations convey sewage flow into the existing 20-inch HRSD force main which runs from the entrance of Stonehouse Commerce Park south along Barhamsville Road to Anderson's Corner, then along Rochambeau Drive eastwards to eventually discharge at the Williamsburg Wastewater Treatment Plant. In addition, a 12-inch JCSA force main runs along Richmond Road from JCSA Lift Station 6-8. This force main contains additional capacity for properties along its corridor, should it be necessary. Properties along School Lane, including Stonehouse Elementary, Faith Fellowship Assembly of God, and the Williamsburg Christian Academy operate and maintain individual grinder pump stations which connect to a common JCSA force main along School Lane. This pipeline is connected to the HRSD force main at the intersection with Rochambeau Drive.

JCSA Lift Station 9-7 is located on the north side of Old Stage Road and was built to initially serve the Fenwick Hills subdivision. A small fraction of the sewage flows generated from the proposed development will flow by gravity into this station. Table 1 below shows the flows generated by the development that will be conveyed to LS 9-7.

The remaining portion of the proposed development will flow by gravity to the east to existing JCSA Lift Station 9-5 located at the entrance to the Wellington subdivision at Rochambeau Drive. This sewer will require crossing the wetlands to connect to the existing JCSA sanitary main adjacent the Wellington Subdivision. Approval for this wetland impact is expected to occur soon with a nationwide permit authorization. This connection was anticipated with the design of LS 9-5. LS 9-5 was initially designed to serve a large area including the project area along School Lane. Table 1 below shows the flows generated by this development that will be conveyed to LS 9-5.

The total wastewater flow generated by the proposed development is shown in Table 1 below.

Table 1 – Wastewater Flows from Development

| Type of Development | No. of Units | Flow (GPD/ Unit) | Average Daily Flow (GPD) | Duration (hrs) | Avg. Flow (GPM) | Peak Flow (GPM) |
|---------------------|--------------|------------------|--------------------------|----------------|-----------------|-----------------|
| To LS 9-7 | 186 | 310 | 57,660 | 24 | 40.0 | 100.0 |
| To LS 9-5 | 396 | 310 | 122,760 | 24 | 85.3 | 213.3 |
| Total | 582 | | 180,420 | | 125.3 | 313.3 |

A thorough capacity study will take place prior to the site plan phase. The capacity study will include existing and future conditions and requires modeling with updated pressure information from HRSD. During the model development, a meeting will be held with JCSA to review modeling considerations and scenarios.

C. Fire Protection and Emergency Services

There are currently five fire stations providing fire protection and Emergency Medical Services (EMS) services to James City County. The closest fire station to the subject site is Station #1 located at 3135 Forge Road, approximately 1 mile south of this project. From this station, an estimated response time will be less than two minutes.

The next closest fire station to the subject site is station number 4 at 5312 Olde Towne Road. Although more distant than the Forge station, response time to the site is reasonable if an emergency event occurs requiring additional fire and life safety support. These two fire stations, and the emergency medical staff available at these stations, will provide a more than adequate response to potential emergencies. In addition, through cooperative agreements between Williamsburg, James City County and York County, the site may also be served by the York County station at Lightfoot.

D. Solid Waste

The proposed development on the subject property will generate solid wastes that will require collection and disposal to promote a safe and healthy environment. As currently happens in White Hall, reputable, private contractors, hired by the Homeowners Association will handle the

collection of solid waste. Both trash and recyclable material will be removed from this site to a solid waste transfer station.

E. Utility Service Providers

Virginia Natural Gas, Dominion Virginia Power, and Cox Communications provide, respectively, natural gas, electricity, cable TV service, and telephone service to this area. The current policy of these utility service providers is to extend service to the development at no cost to the developer when positive revenue is identified; plus, with new land development, these utility service providers are required to place all new utility service underground.

F. Schools

The property is located within the Stonehouse Elementary School, Toano Middle School, and Warhill High School districts. The development is expected to generate a total of 186 school age children (82 Elementary, 43 Middle, and 61 High)

Stonehouse Elementary School 82 additional elementary school students are expected to be generated by the development. For school year 2022-2023, SES was 107.4% of design capacity (802 students for a design capacity of 747 students). SES is over capacity by 55 students. However, the overall elementary school system was at 87.7% capacity (4,873 students with a capacity for 5,556). With extra capacity within the entire elementary school system, the addition of 82 elementary school students from this development still keeps the overall elementary school capacity under 100%.

Stonehouse Elementary School
Historical Enrollment

| Grade | 2013-14 | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | 2020-21 | 2021-22 | 2022-23 |
|--------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| K | 108 | 97 | 104 | 119 | 97 | 116 | 133 | 106 | 139 | 116 |
| 1 | 115 | 116 | 115 | 110 | 129 | 106 | 113 | 127 | 117 | 156 |
| 2 | 106 | 123 | 115 | 112 | 126 | 140 | 112 | 113 | 131 | 132 |
| 3 | 111 | 113 | 126 | 117 | 118 | 129 | 141 | 111 | 115 | 142 |
| 4 | 137 | 126 | 133 | 132 | 119 | 126 | 137 | 134 | 116 | 134 |
| 5 | 143 | 144 | 121 | 137 | 134 | 128 | 128 | 127 | 140 | 122 |
| Total | 720 | 719 | 714 | 727 | 723 | 745 | 764 | 718 | 758 | 802 |

Source: Williamsburg-James City County Public Schools, 9/30/22 Count

Williamsburg-James City County Public Schools

Historical Enrollment

| Grade | 2013-14 | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | 2020-21 | 2021-22 | 2022-23 |
|---------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| K | 778 | 751 | 760 | 813 | 770 | 807 | 788 | 670 | 763 | 786 |
| 1 | 831 | 809 | 810 | 792 | 863 | 791 | 811 | 765 | 724 | 847 |
| 2 | 828 | 851 | 832 | 808 | 808 | 886 | 832 | 747 | 803 | 779 |
| 3 | 804 | 839 | 865 | 860 | 828 | 825 | 902 | 762 | 772 | 814 |
| 4 | 821 | 824 | 871 | 868 | 868 | 840 | 833 | 843 | 784 | 825 |
| 5 | 841 | 838 | 841 | 887 | 881 | 875 | 853 | 796 | 879 | 822 |
| K - 5 Total | 4,903 | 4,912 | 4,979 | 5,028 | 5,018 | 5,024 | 5,019 | 4,583 | 4,725 | 4,873 |
| 6 | 853 | 852 | 887 | 879 | 857 | 897 | 884 | 824 | 836 | 922 |
| 7 | 839 | 860 | 859 | 886 | 876 | 872 | 892 | 864 | 851 | 869 |
| 8 | 854 | 855 | 873 | 863 | 907 | 872 | 879 | 867 | 898 | 874 |
| 6 - 8 Total | 2,546 | 2,567 | 2,619 | 2,628 | 2,640 | 2,641 | 2,655 | 2,555 | 2,585 | 2,665 |
| 9 | 1,021 | 980 | 953 | 1,008 | 931 | 989 | 940 | 958 | 1,015 | 1,036 |
| 10 | 908 | 986 | 976 | 965 | 1,035 | 948 | 1,005 | 912 | 932 | 991 |
| 11 | 806 | 875 | 939 | 918 | 959 | 958 | 897 | 964 | 833 | 886 |
| 12 | 814 | 796 | 837 | 884 | 894 | 901 | 932 | 886 | 928 | 857 |
| 9 - 12 Total | 3,549 | 3,637 | 3,705 | 3,775 | 3,819 | 3,796 | 3,774 | 3,720 | 3,708 | 3,770 |
| K - 12 Total | 10,998 | 11,116 | 11,303 | 11,431 | 11,477 | 11,461 | 11,448 | 10,858 | 11,018 | 11,308 |

Source: Williamsburg-James City County Public Schools, 9/30/22 Count

Toano Middle School 43 additional middle school students are expected to be generated by the development. For school year 2022-2023, TMS was 85.8% of design capacity (678 students for a design capacity of 790 students). TMS is under the design capacity by 112 students. The overall middle school system is at 85.2% of design capacity (2,665 students with a capacity for 3,129) with no single middle school over capacity. With extra capacity at TMS and within the entire middle school system, the addition of 43 middle school students from this development still keeps capacity under 100%.

Toano Middle School

Historical Enrollment

| Grade | 2013-14 | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | 2020-21 | 2021-22 | 2022-23 |
|--------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| 6 | 262 | 264 | 268 | 275 | 262 | 232 | 207 | 190 | 210 | 235 |
| 7 | 232 | 259 | 276 | 275 | 276 | 230 | 245 | 195 | 203 | 233 |
| 8 | 239 | 233 | 259 | 276 | 278 | 239 | 226 | 243 | 203 | 210 |
| Total | 733 | 756 | 803 | 826 | 816 | 701 | 678 | 628 | 616 | 678 |

Source: Williamsburg-James City County Public Schools, 9/30/22 Count

Williamsburg-James City County Public Schools

Historical Enrollment

| Grade | 2013-14 | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | 2020-21 | 2021-22 | 2022-23 |
|---------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| K | 778 | 751 | 760 | 813 | 770 | 807 | 788 | 670 | 763 | 786 |
| 1 | 831 | 809 | 810 | 792 | 863 | 791 | 811 | 765 | 724 | 847 |
| 2 | 828 | 851 | 832 | 808 | 808 | 886 | 832 | 747 | 803 | 779 |
| 3 | 804 | 839 | 865 | 860 | 828 | 825 | 902 | 762 | 772 | 814 |
| 4 | 821 | 824 | 871 | 868 | 868 | 840 | 833 | 843 | 784 | 825 |
| 5 | 841 | 838 | 841 | 887 | 881 | 875 | 853 | 796 | 879 | 822 |
| K - 5 Total | 4,903 | 4,912 | 4,979 | 5,028 | 5,018 | 5,024 | 5,019 | 4,583 | 4,725 | 4,873 |
| 6 | 853 | 852 | 887 | 879 | 857 | 897 | 884 | 824 | 836 | 922 |
| 7 | 839 | 860 | 859 | 886 | 876 | 872 | 892 | 864 | 851 | 869 |
| 8 | 854 | 855 | 873 | 863 | 907 | 872 | 879 | 867 | 898 | 874 |
| 6 - 8 Total | 2,546 | 2,567 | 2,619 | 2,628 | 2,640 | 2,641 | 2,655 | 2,555 | 2,585 | 2,665 |
| 9 | 1,021 | 980 | 953 | 1,008 | 931 | 989 | 940 | 958 | 1,015 | 1,036 |
| 10 | 908 | 986 | 976 | 965 | 1,035 | 948 | 1,005 | 912 | 932 | 991 |
| 11 | 806 | 875 | 939 | 918 | 959 | 958 | 897 | 964 | 833 | 886 |
| 12 | 814 | 796 | 837 | 884 | 894 | 901 | 932 | 886 | 928 | 857 |
| 9 - 12 Total | 3,549 | 3,637 | 3,705 | 3,775 | 3,819 | 3,796 | 3,774 | 3,720 | 3,708 | 3,770 |
| K - 12 Total | 10,998 | 11,116 | 11,303 | 11,431 | 11,477 | 11,461 | 11,448 | 10,858 | 11,018 | 11,308 |

Source: Williamsburg-James City County Public Schools, 9/30/22 Count

Warhill High School 61 additional high school students are expected to be generated by the development. For school year 2022-2023, WHS was at 92.0% of design capacity (1,325 students for a design capacity of 1,441 students). WHS is under the design capacity by 116 students. The overall high school system is at 95.1% of design capacity (3,770 students with a capacity for 3,963). With extra capacity at WHS and within the overall high school system, the addition of 61 high school students from this development still keeps capacity under 100%.

**Warhill High School
Historical Enrollment**

| Grade | 2013-14 | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | 2020-21 | 2021-22 | 2022-23 |
|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| 9 | 325 | 321 | 312 | 372 | 340 | 366 | 343 | 345 | 365 | 328 |
| 10 | 282 | 322 | 320 | 326 | 386 | 346 | 360 | 334 | 347 | 368 |
| 11 | 258 | 261 | 298 | 304 | 337 | 365 | 316 | 343 | 299 | 330 |
| 12 | 263 | 260 | 258 | 293 | 309 | 311 | 353 | 318 | 323 | 299 |
| Total | 1,128 | 1,164 | 1,188 | 1,295 | 1,372 | 1,388 | 1,372 | 1,340 | 1,334 | 1,325 |

Source: Williamsburg-James City County Public Schools, 9/30/22 Count

**Williamsburg-James City County Public Schools
Historical Enrollment**

| Grade | 2013-14 | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | 2020-21 | 2021-22 | 2022-23 |
|---------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| K | 778 | 751 | 760 | 813 | 770 | 807 | 788 | 670 | 763 | 786 |
| 1 | 831 | 809 | 810 | 792 | 863 | 791 | 811 | 765 | 724 | 847 |
| 2 | 828 | 851 | 832 | 808 | 808 | 886 | 832 | 747 | 803 | 779 |
| 3 | 804 | 839 | 865 | 860 | 828 | 825 | 902 | 762 | 772 | 814 |
| 4 | 821 | 824 | 871 | 868 | 868 | 840 | 833 | 843 | 784 | 825 |
| 5 | 841 | 838 | 841 | 887 | 881 | 875 | 853 | 796 | 879 | 822 |
| K - 5 Total | 4,903 | 4,912 | 4,979 | 5,028 | 5,018 | 5,024 | 5,019 | 4,583 | 4,725 | 4,873 |
| 6 | 853 | 852 | 887 | 879 | 857 | 897 | 884 | 824 | 836 | 922 |
| 7 | 839 | 860 | 859 | 886 | 876 | 872 | 892 | 864 | 851 | 869 |
| 8 | 854 | 855 | 873 | 863 | 907 | 872 | 879 | 867 | 898 | 874 |
| 6 - 8 Total | 2,546 | 2,567 | 2,619 | 2,628 | 2,640 | 2,641 | 2,655 | 2,555 | 2,585 | 2,665 |
| 9 | 1,021 | 980 | 953 | 1,008 | 931 | 989 | 940 | 958 | 1,015 | 1,036 |
| 10 | 908 | 986 | 976 | 965 | 1,035 | 948 | 1,005 | 912 | 932 | 991 |
| 11 | 806 | 875 | 939 | 918 | 959 | 958 | 897 | 964 | 833 | 886 |
| 12 | 814 | 796 | 837 | 884 | 894 | 901 | 932 | 886 | 928 | 857 |
| 9 - 12 Total | 3,549 | 3,637 | 3,705 | 3,775 | 3,819 | 3,796 | 3,774 | 3,720 | 3,708 | 3,770 |
| K - 12 Total | 10,998 | 11,116 | 11,303 | 11,431 | 11,477 | 11,461 | 11,448 | 10,858 | 11,018 | 11,308 |

Source: Williamsburg-James City County Public Schools, 9/30/22 Count

| Schools - Elementary Schools | Effective Capacity |
|------------------------------|--------------------|
| Clara Byrd Baker* | 599 |
| Laurel Lane* | 574 |
| DJ Montague* | 578 |
| Norge* | 725 |
| Matthew Whaley | 449 |
| James River | 528 |
| Stonehouse | 747 |
| Matoaka | 747 |
| Blayton* | 609 |
| Total | 5,556 |

| Schools - Middle Schools | Effective Capacity |
|--------------------------|--------------------|
| Berkeley | 779 |
| Toano | 790 |
| James Blair | 608 |
| Hornsby | 952 |
| Total | 3,129 |

| Schools - High Schools | Effective Capacity |
|------------------------|--------------------|
| Lafayette | 1,314 |
| Jamestown | 1,208 |
| Warhill | 1,441 |
| Total | 3,963 |

Source: FutureThink Report Enrollment Projections Update dated October 26, 2022

VII. ANALYSIS OF ENVIRONMENTAL IMPACTS

A. Preliminary Wetland Determination

Investigations were conducted by WSSI (Wetland Studies and Solutions). The extent of wetland features are shown on existing conditions map included in the master plan (Sheet 2). The U.S. Army Corps of Engineers confirmation of delineated wetlands is currently underway. In the Master Plan for the proposed development, we have attempted to avoid all impacts to the wetlands, however it may be necessary to provide minor impacts to the wetlands for utility and stormwater outfalls. In addition, there may be some temporary disturbances of some steep slopes associated with the construction of the stormwater management facilities. All of the above-described impacts are shown on Sheet 2 based on the anticipated development. These items will require further review and approvals from local, state and federal agencies prior to the issuance of James City County Land Disturbance Permits.

B. Resource Protection Areas

The wetlands on the property mandate the implementation of 100-ft Resource Protection Areas (RPA) buffers which are shown on Master Plan Sheet 2- Existing Conditions. These buffers are outlined by WSSI and have been confirmed by the James City County Stormwater and Resource Protection Division.

C. Soils

The *Soil Survey of James City and York Counties and the City of Williamsburg, Virginia* (USDA 1985) maps several soil types within the Anderson's Corner Site boundary. The hydrologic classifications of the mapped soil types range from group A (well drained) to group D (poorly drained). Among the mapped units, Johnston complex is classified by the NRCS as a hydric soil. However, Johnston soils are limited primarily to the areas of the unnamed drainage swales and intermittent stream. The Anderson's Corner Site is predominantly situated on well-drained soils and the shrink-swell potential is low to moderate in all soils mapped within the site boundary. Detailed soils breakdown is noted on sheet 2 of the master plan.

VIII. ANALYSIS OF STORMWATER MANAGEMENT

As the property falls within the upper reaches of the Ware Creek Watershed. The stormwater design for this project seeks to direct runoff through a series of stormwater controls (treatment train) prior to discharging stormwater into the receiving waters. Additionally, the site stormwater should benefit the watershed by taking a large track of farm field and providing water quality treatment. The preliminary stormwater management analysis and design has been performed as a component of the planning for this proposed project. The purpose of the stormwater management plan is to address the Department of Environmental Quality (DEQ) requirements for water quality and quantity control of flow generated. AES performed initial BMP sizing and determined the treatment levels of the proposed wet/dry ponds to satisfy a significant amount of the water quality and quantity requirements as outlined in the Virginia Runoff Reduction Method. Preliminary estimates suggest the development will need to remove a proposed 97.68 lbs. of phosphorus a year with our current envisioned design removing as approximately 104.54lbs. per year.

IX. ANALYSIS OF IMPACTS TO TRAFFIC

A traffic study has been prepared by DRW Consultants to review the Route 60 and Route 30 Corridors and intersections. The study has been attached which concludes that the impacts associated with the proposed development have minor impacts on the surrounding traffic but does note that there are high levels of background traffic that is increasing from forecasted traffic from proposed developments within the vicinity of the project. Traffic Improvements noted in the study include left and right turn lane storages on Richmond Road for entering the community as well as separate left and right turn lanes exiting the community.

X. FISCAL IMPACT STUDY

County Staff performed a fiscal impact analysis of the project for a 25-year period using the County's proprietary software program and County generated standard assessed values based on average data for the applicable fiscal analysis zone within the County that estimated total revenues of \$74,927,760 which is a combination of General Fund Revenues and Schools Revenues (\$52,354,866 + \$22,572,894).

Total projected expenditures were calculated by James City County to be \$80,192,417 which is a combination of Operating Expenditures (\$14,670,784), Schools Operating Expenditures (\$52,445,365), and Capital Expenditures (\$13,076,268).

A simple subtraction of revenues minus expenditures equates to a fiscal deficit of \$5,264,658 ($\$74,927,760 - \$80,192,417 = \$5,264,658$). The project team does not have access the inputs that went into the fiscal analysis the County provided to check the authenticity of the assumptions, so these numbers are assumed to be accurate. This analysis projects that the development will have an overall negative financial impact of \$5,264,658 on County services and schools. **Based on 582 homes/units, this cost is \$9,046 per home/unit.**

To ensure this development does not have a negative fiscal impact on James City County, a cash proffer is being voluntarily offered in the amount of \$9,046 for every market rate home in the development and a slightly reduced amount for proffered workforce housing units. To further mitigate future school overcrowding, 3.0 acres of land will be deeded to the County at no additional cost to the County for future expansion of Stonehouse Elementary.

County Staff also performed a fiscal impact analysis of the Project using the projected assessed values provided by the Applicant. The Applicant believes these projected assessed values are more realistic than those used by the County. This analysis is attached hereto. This analysis estimated total revenues of \$82,850,368 which is a combination of General Fund Revenues and Schools Revenues ($\$60,277,475 + \$22,572,894$).

Total projected expenditures were calculated by James City County were unchanged at \$80,192,417 which is a combination of Operating Expenditures (\$14,670,784), Schools Operating Expenditures (\$52,445,365), and Capital Expenditures (\$13,076,268).

A simple subtraction of revenues minus expenditures equates to a positive fiscal impact of \$2,657,951 ($\$82,850,368 - \$80,192,417 = \$2,657,951$). The cash proffers made by the Applicant further increase the positive fiscal impact on the County. In addition, the land proposed to be deeded to the Stonehouse Elementary School property will assist the County with any future expansion plans at that school.

XI. CONCLUSIONS

In summary, the Community Impact Statement for the rezoning and subsequent development of *the Hankins-Dunn Property* highlights the following conclusions and public benefits:

- This project proposes a mix of housing types and prices that are very much needed within James City County. The number of building permits within James City has declined in recent years and the County is unable to keep up with demand for housing.
- The rezoning is consistent with the intended land use designated on the current Comprehensive Plan for this area. In fact, on the preferred Alternative B map in the Engage 2045 study, this property was identified and overwhelmingly supported by the residents where residential growth should happen. Further, the proposed residential development is consistent with adjacent neighborhoods and is located within the County's Primary Service Area (PSA).
- The proposal achieves the necessary density bonus points to support the requested density (6 points required). Prior to adoption of Ordinance No. 31A-357 on May 9, 2023, only 4 points would have been required.
- As an additional public benefit, the proposal proffers 10% of the units will be offered for sale at prices qualifying as workforce housing.
- The project provides extensive active and passive recreation open space throughout the community. Developable open space meets the required amount for Cluster Development and Density Bonus criteria.
- The project at worst is a fiscal break even situation for the County and the Applicant submits based on its numbers that the project will more likely generate a significant positive fiscal impact to the County.
- There is adequate capacity in the system of roads serving this project and developer is proffering traffic improvements at the entrances to the development to provide safe access to the community.
- Adequate public services (water and sewer, fire) and utility services (gas, electricity, cable television, and telephone) are available for development.
- Adequate public schools capacity exists to accommodate the estimated 186 school students generated by the development. A majority of the community is within a walkable

distance from Stonehouse Elementary School and the road network will allow students to be dropped off by car which will help reduce the traffic backup that currently occurs on School House Lane.

- In addition to voluntary cash proffers, the Applicant is gifting approximately 3 acres of land, boundary to be determined by the County, adjacent to Stonehouse Elementary School for any future expansion needs.
- James City County's stormwater requirements, including the incorporation of SSC measures will be met.

Traffic Analysis For Hankins-Dunn Property

JAMES CITY COUNTY, VIRGINIA

For:
HHHunt

By:
DRW Consultants, LLC
Midlothian, VA

March 14, 2023

Traffic Analysis For Hankins-Dunn Property

JAMES CITY COUNTY, VIRGINIA

For:
HHHunt

By:
DRW Consultants, LLC
Midlothian, VA

March 14, 2023

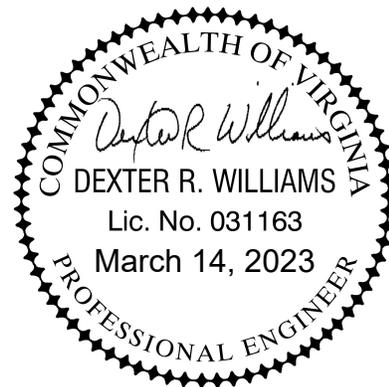
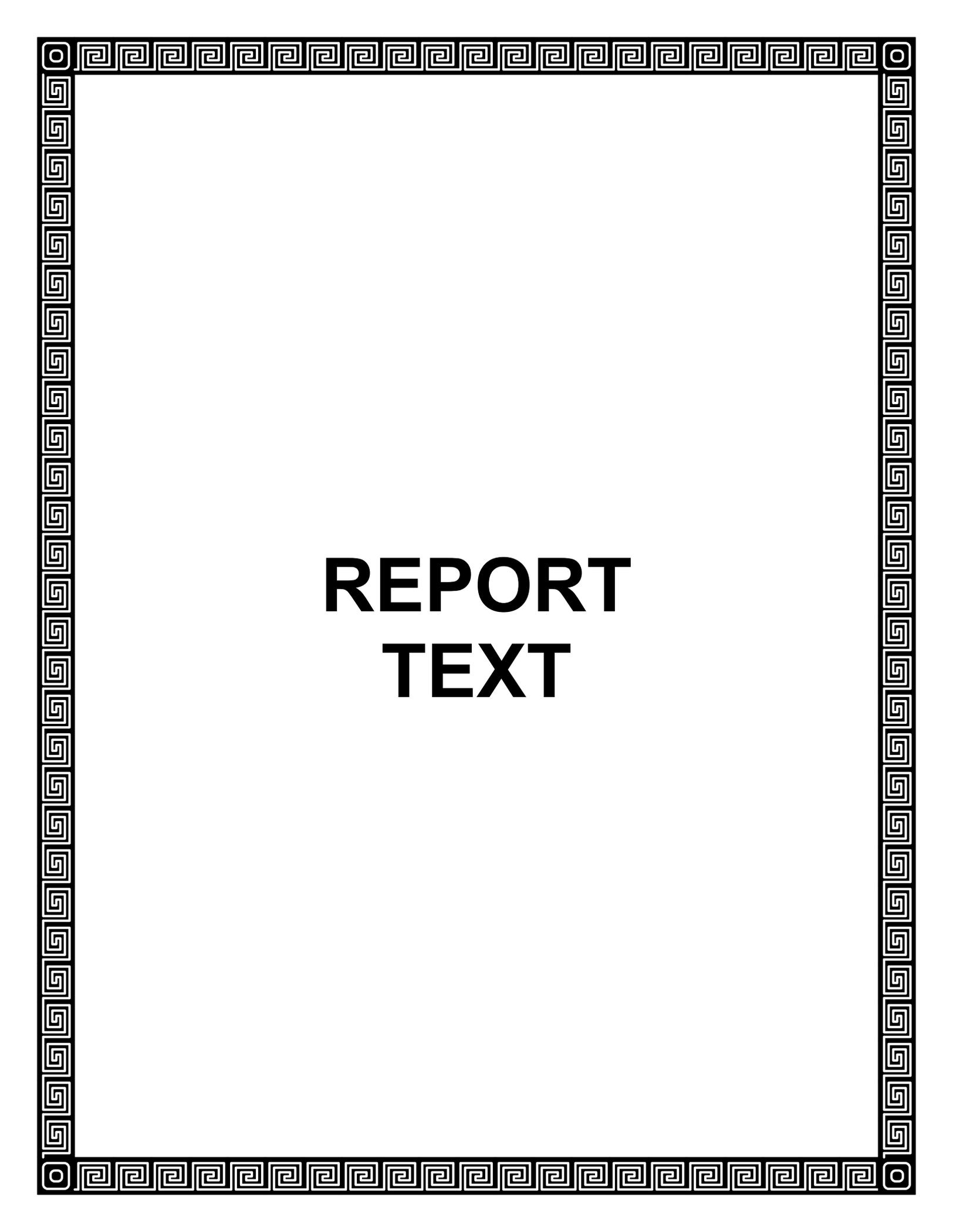


TABLE OF CONTENTS

| REPORT TEXT | Page |
|---|------|
| Introduction..... | 1 |
| Traffic Study Scope | 1 |
| 2022 Traffic Counts And Analysis | 2 |
| 2025 Background Traffic Forecast | 4 |
| Derivation Of Trip Distribution For Hankins-Dunn | 6 |
| Hankins-Dunn Property Trip Generation..... | 6 |
| 2025 Total Traffic With Stonehouse, Hazelwood & Hankins-Dunn..... | 7 |
| 2025 Total Traffic With Hankins-Dunn Only..... | 9 |
| Summary And Conclusions | 11 |

| REPORT EXHIBITS | Number |
|--|--------|
| Regional And Parcel Maps | 1 |
| Traffic Count Location & Site Layout..... | 2 |
| 2022 Counts With Balance | 3 |
| Rt. 60 Richmond Road Daily Traffic Counts And Trend | 4 |
| 2025 Background Traffic – Growth Factor Only..... | 5 |
| Distribution For Hazelwood & Stonehouse Traffic Derived From 2022 Counts | 5a |
| Hazelwood Buildout Trip Assignments..... | 5b |
| Stonehouse Buildout Trip Assignments..... | 5c |
| 2025 Peak Hour Traffic Background Traffic | 5d |
| White Hall 2022 Peak Hour Counts..... | 6 |
| White Hall 2022 Trip Distribution Based On Peak Hour Counts | 6a |
| Hankins-Dunn Property Trip Generation & Distribution | 7 |
| Hankins-Dunn Property Percentage Trip Distribution..... | 7a |
| Hankins-Dunn Property Trip Assignment | 7b |
| 2025 Total Traffic | 8 |
| 2025 Total Traffic Without Hazelwood & Stonehouse | 9 |

A decorative border surrounds the page, featuring a Greek key pattern. The top and bottom borders are composed of a repeating square motif, while the left and right borders are composed of a repeating square motif rotated 90 degrees.

REPORT TEXT

INTRODUCTION

HHHunt proposes to rezone the Hankins-Dunn property (Parcel ID 1240100011) to permit residential development. The property is located in James City County (JCC) and fronts on Rt. 60 Richmond Road. The property location in the VDOT Hampton Roads District is shown on the upper section of Exhibit 1 and the property location on the James City County parcel map is shown on the lower section of Exhibit 2.

TRAFFIC STUDY SCOPE

A traffic study scope memorandum dated July 15, 2022 was distributed for review by JCC and VDOT and is included as Appendix Exhibit R. The scope was reviewed in a conference call on August 9, 2022. The only revision to the July 15, 2022 scope was to add development traffic from Stonehouse and Hazelwood Farms to the background traffic forecast. A traffic analysis for the project dated October 21, 2022 was reviewed by JCC and VDOT. This traffic analysis includes revisions in response to comments by JCC and VDOT and an update of the proposed housing units and development plan.

The upper section of Exhibit 2 shows the traffic count and analysis intersections included in the scope memorandum:

1. Rt. 60 Richmond Road/Rt. 30 Barhamsville Road/Rt. 30 Rochambeau Drive. Signalized intersection. This is an analysis intersection.
2. Rt. 60 Richmond Road/VCA Andersons Corner Animal Hospital/Hickory Neck Blvd. Unsignalized crossover. This is an analysis intersection and also part of the trip distribution counts for White Hall.
3. Rt. 60 Richmond Road/Bicast Publishing. Unsignalized Crossover. This is the primary/only likely access for the Hankins-Dunn property development. This is an analysis intersection.
4. Rt. 30 Rochambeau Drive/Preston Lane/Geddy Terrace. Unsignalized crossover. This is not an analysis intersection and is part of the trip distribution counts for White Hall.
5. Rt. 30 Rochambeau Drive/Hickory Neck Boulevard. Unsignalized crossover. This is not an analysis intersection and is part of the trip distribution counts for White Hall.

In summary, the three intersections on Rt. 60 (intersections 1, 2 and 3) are included for counts and analysis. Intersection 2 and intersections 4 and 5 on Rt. 30 are included for derivation of trip distribution in the larger section of White Hall south of Rt. 30 Rochambeau Drive and east of Rt. 60. The derived trip distribution for White Hall is applied for Hankins-Dunn property trip distribution and assignments.

Another significant element of the scope is access for Hankins-Dunn property. The Hankins-Dunn property has primary access on Rt. 60 Richmond Road. The property does have frontage on the access road to Stonehouse Elementary School, but terrain on the Hankins-Dunn property

consists of steep slopes and wetlands is not developable. The property also fronts on the boundary of existing White Hall subdivision, but there is no right of way stub from White Hall to provide access to the Hankins-Dunn property. The property does not have any secondary access to another public road or subdivision stub road. The Hankins-Dunn property is planned to have a single access for development at the existing crossover at intersection 3 with subdivision street stub outs in accordance with VDOT SSAR connectivity requirements.

The lower section of Exhibit 2 shows the latest conceptual layout for the Hankins-Dunn property.

2022 TRAFFIC COUNTS AND ANALYSIS

2022 AM and PM peak hour counts without balance for the three intersections on Rt. 60 are shown on the study road network diagrams on Appendix Exhibit F. 2022 AM and PM peak hour counts with balance are shown on the study road network diagrams on Exhibit 3.

Following are software analysis protocols used in this report in general accordance with VDOT TOSAM 2 criteria:

- Peak hour factor for overall intersection applied to all movements.
- Truck percentages from traffic counts for each turning movement.
- Maximum queues for SimTraffic results.
- Storage lengths for turning lanes are length of full width storage plus one-half taper lengths in SimTraffic per VDOT TOSAM2 recommendations.
- Ten (10) SimTraffic simulation runs.
- Existing signal timing is actuated and uncoordinated.
- Signal timing optimized and adjusted for same cycle lengths for 2030 background (with Stonehouse and Hazelwood) and for 2030 total (Stonehouse, Hazelwood, Hankins-Dunn).

Following are traffic level of service (LOS) and queuing results for Rt. 30 Rochambeau Drive/Rt. 60 Richmond Road 2022 traffic counts (see Appendix Exhibits J1 and J2 for Synchro HCM6 signalized intersection report and Appendix Exhibit L1 and L2 for SimTraffic Queuing and Blocking reports):

| TABLE 1-1 RICHMOND ROAD/BARHAMSVILLE ROAD/ROCHAMBEAU DRIVE - 2022 COUNTS | | | | | | | |
|--|----|------|----|------|----------------|----------------|-----|
| SIGNALIZED LOS And Seconds Delay | | | | | Maximum Queues | | |
| | AM | | PM | | Storage Length | SimTraffic Q&B | |
| | C | 21.4 | C | 22.4 | | AM | PM |
| Overall | C | 21.4 | C | 22.4 | | | |
| EBL | C | 23.5 | C | 23.9 | 200 | 44 | 37 |
| EBT | B | 19.3 | B | 19.2 | | 65 | 44 |
| EBR | | 0.0 | | 0.0 | 400 | | |
| WBL | C | 24.1 | C | 24.4 | 250 | 41 | 40 |
| WBT | B | 19.2 | B | 19.9 | | 22 | 23 |
| WBR | | 0.0 | | 0.0 | 370 | | |
| NBL | C | 22.0 | C | 26.8 | 290 | 108 | 232 |
| NBT | C | 20.3 | C | 21.2 | | 103 | 189 |
| NBR | | 0.0 | | 0.0 | 195 | | |
| SBL | C | 23.8 | C | 23.8 | 310 | 119 | 128 |
| SBT | C | 21.7 | C | 22.4 | | 142 | 163 |
| SBR | | 0.0 | | 0.0 | 40 | | |

SimTraffic queue shown is maximum report value for multi-lane groups

There is overall LOS C in the AM and PM peak hours with LOS B and C for individual movements. All auxiliary lane maximum queues are within storage lengths.

Following are traffic level of service (LOS) and queuing results for Rt. 60 Richmond Road/Hickory Neck Blvd./VCA intersection (see Appendix Exhibits K1 and K2 for Synchro HCM6 unsignalized intersection report and Appendix Exhibits L1 and L2 for SimTraffic Queuing and Blocking reports):

| TABLE 1-2 RICHMOND ROAD/HICKORY NECK ROAD/VCA - 2022 COUNTS | | | | | | | |
|---|-----|-------|-----|-------|--------------------------|--------------------------|----|
| Traffic LOS And Seconds Delay | | | | | SimTraffic Maximum Queue | | |
| | AM | | PM | | Storage Length | SimTraffic Maximum Queue | |
| | LOS | Delay | LOS | Delay | | AM | PM |
| EBL/T/R | B | 11.6 | B | 13.2 | | 27 | 33 |
| WBL/T | B | 12.5 | C | 16.3 | | 61 | 57 |
| WBR | A | 9.3 | B | 10.6 | | 26 | 23 |
| NBL | A | 8.7 | A | 8.6 | 400 | 14 | 14 |
| NBR | | | | | 75 | 1 | |
| SBL | A | 9.1 | A | 9.5 | 310 | 25 | 26 |

There is LOS C or better for individual movements. All auxiliary lane maximum queues are within storage lengths.

Following are traffic level of service (LOS) and queuing results for Rt. 60 Richmond Road/Bicast/Hankins-Dunn (see Appendix Exhibits K1 and K2 for Synchro HCM6

unsignalized intersection report and Appendix Exhibits L1 and L2 for SimTraffic Queuing and Blocking reports):

| TABLE 1-3 RICHMOND ROAD/BICAST PUBLISHING - 2022 COUNTS | | | | | | | |
|---|----------------------------------|-------|-----|-------|--------------------------|----|----|
| | Traffic LOS And Seconds Delay By | | | | SimTraffic Maximum Queue | | |
| | AM | | PM | | Storage Length | AM | PM |
| | LOS | Delay | LOS | Delay | | | |
| EBL/R | B | 13.1 | B | 12.4 | | 15 | 37 |
| NBL/T | A | 8.8 | A | 8.7 | | 20 | 50 |
| SBU/T | | | | | | 5 | 44 |

There is LOS B or better for individual movements. Storage for northbound and southbound left turns/U-turns are on through lanes.

2030 BACKGROUND TRAFFIC FORECAST

The October 2022 study used a 2025 background forecast in accordance with the work scope. For consistency with overall planning for this project, a 2030 forecast year is used in this report.

One element for all 2030 traffic forecasts in this study is a growth factor applied to 2022 counts. Exhibit 4 shows VDOT daily traffic counts from 2015 to 2021. The 2015 to 2019 counts (pre-COVID) show an increasing trend and the 2015 to 2021 counts (with COVID effect) show a declining trend.

The 2015 to 2019 increasing trend is used in this study, which has a 1.05 growth factor from 2022 to 2030. Exhibit 5 shows 2030 background traffic only with the 1.05 growth factor applied.

Traffic forecasts for buildout of Stonehouse and Hazelwood Farms are also included in the background forecast. Appendix Exhibit P shows the Stonehouse Figure 23: Total Trips (2027 – Full Build) from the second submission TIA with revision date December 10, 2018 (original TIA date June 20, 2018.).

Traffic forecasts for build out of Hazelwood Farms from the January 2019 TIA are shown on Appendix Exhibits Q1 and Q2.

All Hazelwood Farms and Stonehouse traffic enters the study area on Rt. 30 Barhamsville Road north of Rt. 60 Richmond Road. The studies for Hazelwood Farms and Stonehouse did not distribute development traffic at the Rt. 60 Richmond Road/Rt. 30 Barhamsville Road/Rt. 30 Rochambeau Drive intersection. The 2022 turning movement counts to and from the north

on Rt. 30 Barhamsville Road are used for the Hazelwood Farms and Stonehouse trip distribution onto the study intersections. Exhibit 5a shows the derivation of directional splits at Rt. 60 Richmond Road/Rt. 30 Barhamsville Road/Rt. 30 Rochambeau Drive based on peak hour turning movements. The Hazelwood Farms trips at the three intersections on Rt. 60 are shown on Exhibit 5b. The Stonehouse trips at the three intersections on Rt. 60 are shown on Exhibit 5c. Complete 2030 background traffic with growth factor, Hazelwood Farms and Stonehouse is shown on Exhibit 5d.

Following are traffic level of service (LOS) and queuing results for Rt. 30 Rochambeau Drive/Rt. 60 Richmond Road (see Appendix Exhibits J3 and J4 for Synchro HCM6 signalized intersection reports and Appendix Exhibits L3 and L4 for SimTraffic Queuing and Blocking reports):

| TABLE 2-1 RICHMOND ROAD/BARHAMSVILLE ROAD/ROCHAMBEAU DRIVE - 2030 BACKGROUND | | | | | | | |
|--|----|------|----|------|----------------|----------------|-----|
| SIGNALIZED LOS And Seconds Delay | | | | | Maximum Queues | | |
| | AM | | PM | | Storage Length | SimTraffic Q&B | |
| Overall | C | 28.3 | C | 31.5 | | AM | PM |
| EBL | C | 30.5 | D | 35.1 | 200 | 151 | 109 |
| EBT | C | 25.5 | C | 30.6 | | 107 | 61 |
| EBR | | 0.0 | | 0.0 | 400 | 43 | 35 |
| WBL | C | 32.5 | D | 37.3 | 250 | 63 | 51 |
| WBT | C | 28.2 | C | 34.1 | | 20 | 44 |
| WBR | | 0.0 | | 0.0 | 370 | 61 | 87 |
| NBL | C | 29.5 | C | 34.7 | 290 | 127 | 290 |
| NBT | C | 29.1 | C | 30.2 | | 222 | 404 |
| NBR | | 0.0 | | 0.0 | 195 | 134 | 194 |
| SBL | C | 33.9 | D | 38.2 | 310 | 232 | 310 |
| SBT | C | 25.8 | C | 29.3 | | 244 | 592 |
| SBR | | 0.0 | | 0.0 | 40 | | |

SimTraffic queue shown is maximum report value for multi-lane groups

There is overall LOS C in the AM and PM peak hours with LOS C and D for individual movements. Most auxiliary lane maximum queues are within storage lengths. The northbound right turn queue of 194 feet is near maximum storage length 195 feet in the PM peak hour. The southbound left turn queue of 310 feet is at maximum storage length 310 feet in the PM peak hour.

Following are traffic level of service (LOS) and queuing results for Rt. 60 Richmond Road/Hickory Neck Blvd./VCA intersection (see Appendix Exhibits K3 and K4 for Synchro HCM6 unsignalized intersection report and Appendix Exhibits L3 and L4 for SimTraffic Queuing and Blocking reports):

| TABLE 2-2 RICHMOND ROAD/HICKORY NECK ROAD/VCA - 2030 BACKGROUND | | | | | | | |
|--|-----|-------|-----|-------|--------------------------|----|----|
| Traffic LOS And Seconds Delay | | | | | SimTraffic Maximum Queue | | |
| | AM | | PM | | Storage Length | AM | PM |
| | LOS | Delay | LOS | Delay | | | |
| EBL/T/R | C | 15.7 | C | 22.0 | | 33 | 52 |
| WBL/T | C | 18.8 | D | 31.0 | | 81 | 93 |
| WBR | B | 10.7 | B | 13.1 | | 28 | 23 |
| NBL | B | 10.3 | B | 11.0 | 400 | 12 | 21 |
| NBR | | | | | 75 | 0 | 0 |
| SBL | B | 11.3 | B | 12.1 | 310 | 33 | 38 |

There is LOS D or better for individual movements. All auxiliary lane maximum queues are within storage lengths.

Following are traffic level of service (LOS) and queuing results for Rt. 60 Richmond Road/Bicast/Hankins-Dunn (see Appendix Exhibits K3 and K4 for Synchro HCM6 unsignalized intersection report and Appendix Exhibits L3 and L4 for SimTraffic Queuing and Blocking reports):

| TABLE 2-3 RICHMOND ROAD/BICAST PUBLISHING - 2030 BACKGROUND | | | | | | | |
|--|-----|-------|-----|-------|--------------------------|----|-----|
| Traffic LOS And Seconds Delay By | | | | | SimTraffic Maximum Queue | | |
| | AM | | PM | | Storage Length | AM | PM |
| | LOS | Delay | LOS | Delay | | | |
| EBL/R | C | 18.6 | C | 18.9 | | 12 | 30 |
| NBL/T | B | 10.5 | B | 11.1 | | 48 | 163 |
| SBU/T | | | | | | 29 | 167 |

There is LOS C or better for individual movements. Storage for northbound and southbound left turns/U-turns are on through lanes.

DERIVATION OF TRIP DISTRIBUTION FOR HANKINS-DUNN

Exhibit 6 shows the peak hour traffic counts for the larger section of White Hall bounded by Rt. 60 on the west and Rt. 30 on the north. Trips at the Rt. 60 Richmond Road/Rt. 30 Barhamsville Road/Rt. 30 Rochambeau Drive intersection are distributed based on peak hour count splits at the intersection to and from the east on Rt. 30 Rochambeau Drive. The resulting AM and PM peak hour entering and exiting trip distribution for the larger section of White Hall is shown on Exhibit 6a.

HANKINS-DUNN PROPERTY TRIP GENERATION

The housing unit plan for this project has changed since the October 2022 study. Table One

on Exhibit 7 shows AM and PM peak hour trip generation for the current Hankins-Dunn property development proposal using Trip Generation Manual, 11th Edition (TGM11) as follows:

- 443 single family units are TGM11 Land Use Code (LUC) 210, single family detached.
- 139 townhomes are TGM11 LUC 215, single family attached.

Table 2 on 7 shows tabulated trip distribution for the Hankins-Dunn property derived from the larger section of White Hall. Exhibit 7a shows trip distribution percentages for the Hankins-Dunn property based on the Exhibit 6a trip distribution for the larger section of White Hall. Exhibit 7b shows trip assignments for the Hankins-Dunn property.

2030 TOTAL TRAFFIC WITH STONEHOUSE, HAZELWOOD & HANKINS-DUNN

Exhibit 8 shows 2030 AM and PM peak hour traffic with the proposed Hankins-Dunn property development.

Access improvements for Hankins-Dunn property includes the following elements at the existing crossover/proposed subdivision access intersection:

- One southbound left turn lane on Rt. 60 (200 feet full width lane, 200 feet taper, 300 feet TOSAM storage)
- Northbound right turn lane on Rt. 60 (100 feet full width lane, 200 feet taper, 200 feet TOSAM storage)
- Two exit lanes on Hankins-Dunn access: shared left/through and right turn
- One assumed entering lane on Hankins-Dunn property entrance

Following are traffic level of service (LOS) and queuing results for Rt. 30 Rochambeau Drive/Rt. 60 Richmond Road (see Appendix Exhibits J5 and J6 for Synchro HCM6 signalized intersection reports and Appendix Exhibits L5 and L6 for SimTraffic Queuing and Blocking reports):

| TABLE 3-1 RICHMOND ROAD/BARHAMSVILLE ROAD/ROCHAMBEAU DRIVE - 2030 TOTAL | | | | | | | |
|---|-----|-------|-----|-------|----------------|----------------|-----|
| SIGNALIZED LOS And Seconds Delay | | | | | Maximum Queues | | |
| | AM | | PM | | Storage Length | SimTraffic Q&B | |
| | LOS | Delay | LOS | Delay | | AM | PM |
| Overall | C | 29.2 | C | 33.3 | | | |
| EBL | C | 31.1 | D | 37.2 | 200 | 159 | 76 |
| EBT | C | 27.7 | C | 34.4 | | 77 | 63 |
| EBR | | 0.0 | | 0.0 | 400 | 38 | 37 |
| WBL | C | 32.3 | D | 43.4 | 250 | 101 | 224 |
| WBT | C | 28.7 | C | 32.5 | | 17 | 162 |
| WBR | | 0.0 | | 0.0 | 370 | 61 | 41 |
| NBL | C | 30.0 | D | 37.8 | 290 | 153 | 256 |
| NBT | C | 30.0 | C | 31.1 | | 239 | 319 |
| NBR | | 0.0 | | 0.0 | 195 | 174 | 195 |
| SBL | C | 34.8 | D | 39.6 | 310 | 234 | 308 |
| SBT | C | 26.3 | C | 30.5 | | 261 | 443 |
| SBR | | 0.0 | | 0.0 | 40 | | |

SimTraffic queue shown is maximum report value for multi-lane groups

There is overall LOS C in the AM and PM peak hours with LOS C and D for individual movements. Most auxiliary lane maximum queues are within storage lengths with the northbound right turn and southbound left turn maximum queue length at or near within TOSAM storage. The northbound right turn queue of 195 feet is at maximum storage length 195 feet in the PM peak hour. The southbound left turn queue of 308 feet is near maximum storage length 310 feet in the PM peak hour.

Following are traffic level of service (LOS) and queuing results for Rt. 60 Richmond Road/Hickory Neck Blvd./VCA intersection (see Appendix Exhibits K5 and K6 for Synchro HCM6 unsignalized intersection report and Appendix Exhibits L5 and L6 for SimTraffic Queuing and Blocking reports):

| TABLE 3-2 RICHMOND ROAD/HICKORY NECK ROAD/VCA - 2030 TOTAL | | | | | | | |
|--|-----|-------|-----|-------|--------------------------|----|-----|
| Traffic LOS And Seconds Delay | | | | | SimTraffic Maximum Queue | | |
| | AM | | PM | | Storage Length | AM | PM |
| | LOS | Delay | LOS | Delay | | | |
| EBL/T/R | C | 16.7 | D | 26.9 | | 35 | 45 |
| WBL/T | C | 22.9 | E | 37.2 | | 83 | 110 |
| WBR | B | 11.6 | B | 13.8 | | 33 | 23 |
| NBL | B | 10.6 | B | 12.1 | 400 | 16 | 18 |
| NBR | | | | | 75 | | |
| SBL | B | 12.8 | B | 12.9 | 310 | 39 | 23 |

There is LOS E or better for individual movements. All auxiliary lane maximum queues are within storage lengths.

Following are traffic level of service (LOS) and queuing results for Rt. 60 Richmond Road/Bicast/Hankins-Dunn (see Appendix Exhibits K5 and K6 for Synchro HCM6 unsignalized intersection report and Appendix Exhibits L5 and L6 for SimTraffic Queuing and Blocking reports):

| TABLE 3-3 RICHMOND ROAD/BICAST PUBLISHING/HANKINS-DUNN - 2030 TOTAL | | | | | | | |
|--|-----|-------|-----|-------|--------------------------|-----|-----|
| | | | | | SimTraffic Maximum Queue | | |
| | AM | | PM | | Storage Length | AM | PM |
| | LOS | Delay | LOS | Delay | | | |
| EBL/T/R | D | 26.3 | E | 38.3 | | 15 | 201 |
| WBL/T | D | 25.8 | F | 100.9 | | 287 | 909 |
| WBR | B | 13.0 | C | 16.3 | | 118 | 903 |
| NBL/T | B | 10.5 | B | 11.1 | | 23 | 94 |
| NBR | | | | | 200 | 8 | 28 |
| SBL | A | 9.9 | C | 18.0 | 300 | 79 | 281 |

There is LOS A through F for individual movements. The southbound left turn is within storage.

2030 TOTAL TRAFFIC WITH HANKINS-DUNN ONLY

Exhibit 9 shows 2030 AM and PM peak hour traffic with the proposed Hankins-Dunn property development only. Stonehouse and Hazelwood traffic is not included.

Access improvements for Hankins-Dunn property includes the following elements at the existing crossover/proposed subdivision access intersection:

- One southbound left turn lane on Rt. 60 (200 feet full width lane, 200 feet taper, 300 feet TOSAM storage)
- Northbound right turn lane on Rt. 60 (100 feet full width lane, 200 feet taper, 200 feet TOSAM storage)
- Two exit lanes on Hankins-Dunn access: shared left/through and right turn
- One assumed entering lane on Hankins-Dunn property entrance.

Following are traffic level of service (LOS) and queuing results for Rt. 30 Rochambeau Drive/Rt. 60 Richmond Road (see Appendix Exhibits J7 and J8 for Synchro HCM6 signalized intersection reports and Appendix Exhibits L7 and L8 for SimTraffic Queuing and Blocking reports):

| TABLE 4-1 RICHMOND ROAD/BARHAMSVILLE ROAD/ROCHAMBEAU DRIVE - 2030 TOTAL - W/O STONEHOUSE & HAZELWOOD | | | | | | | |
|--|-----|-------|-----|-------|----------------|----------------|-----|
| SIGNALIZED LOS And Seconds Delay | | | | | Maximum Queues | | |
| | AM | | PM | | Storage Length | SimTraffic Q&B | |
| | LOS | Delay | LOS | Delay | | AM | PM |
| Overall | C | 27.4 | C | 31.6 | | | |
| EBL | C | 31.7 | C | 34.9 | 200 | 64 | 44 |
| EBT | C | 23.7 | C | 29.3 | | 64 | 54 |
| EBR | | | | 0.0 | 400 | 20 | |
| WBL | C | 33.3 | D | 41.7 | 250 | 83 | 150 |
| WBT | C | 21.3 | C | 25.2 | | 18 | 32 |
| WBR | | 0.0 | | 0.0 | 370 | | |
| NBL | D | 41.7 | D | 40.4 | 290 | 134 | 224 |
| NBT | C | 24.7 | C | 25.5 | | 112 | 140 |
| NBR | | 0.0 | | 0.0 | 195 | | |
| SBL | C | 30.9 | D | 35.9 | 310 | 109 | 127 |
| SBT | C | 24.8 | C | 31.1 | | 161 | 194 |
| SBR | | 0.0 | | 0.0 | 40 | | |

SimTraffic queue shown is maximum report value for multi-lane groups

There is overall LOS C in the AM and PM peak hours with LOS C and D for individual movements. All auxiliary lane maximum queues are within storage lengths.

Following are traffic level of service (LOS) and queuing results for Rt. 60 Richmond Road/Hickory Neck Blvd./VCA intersection (see Appendix Exhibits K7 and K8 for Synchro HCM6 unsignalized intersection report and Appendix Exhibits L7 and L8 for SimTraffic Queuing and Blocking reports):

| TABLE 4-2 RICHMOND ROAD/HICKORY NECK ROAD/VCA - 2030 TOTAL- W/O STONEHOUSE & HAZELWOOD | | | | | | | |
|--|-----|-------|-----|-------|--------------------------|----|----|
| Traffic LOS And Seconds Delay | | | | | SimTraffic Maximum Queue | | |
| | AM | | PM | | Storage Length | AM | PM |
| | LOS | Delay | LOS | Delay | | | |
| EBL/T/R | B | 12.4 | C | 15.6 | | 32 | 34 |
| WBL/T | B | 14.8 | C | 19.6 | | 82 | 65 |
| WBR | B | 10.0 | B | 11.2 | | 30 | 23 |
| NBL | A | 9.0 | A | 9.4 | 400 | 12 | 17 |
| NBR | | | | | 75 | | 4 |
| SBL | B | 10.1 | B | 10.1 | 310 | 26 | 23 |

There is LOS C or better for individual movements. All auxiliary lane maximum queues are within storage lengths.

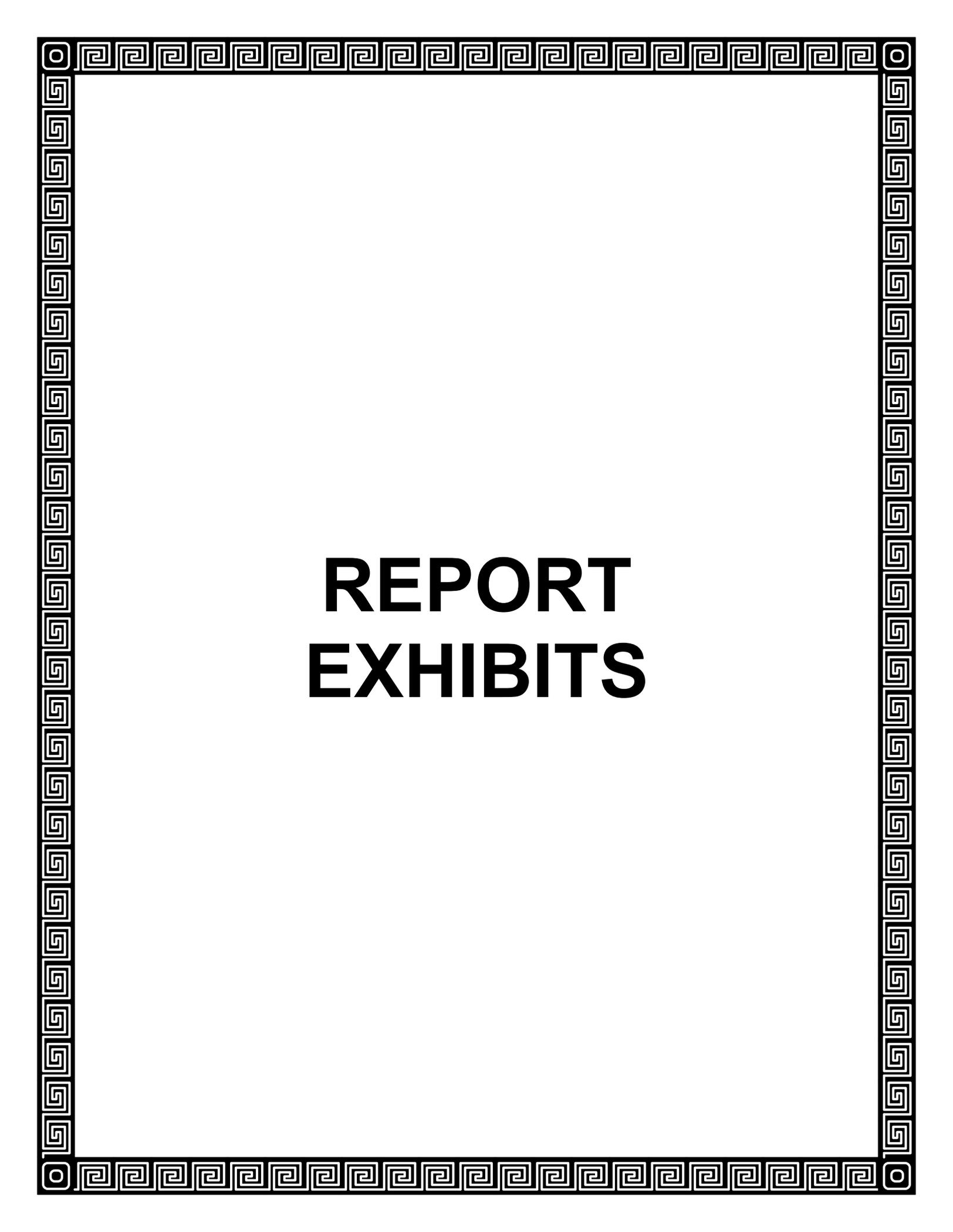
Following are traffic level of service (LOS) and queuing results for Rt. 60 Richmond Road/Bicast/Hankins-Dunn (see Appendix Exhibits K7 and K8 for Synchro HCM6 unsignalized intersection report and Appendix Exhibits L7 and L8 for SimTraffic Queuing and Blocking reports):

| TABLE 4-3 RICHMOND ROAD/BICAST PUBLISHING/HANKINS-DUNN - 2030 TOTAL- W/O STONEHOUSE & HAZELWOOD | | | | | | | |
|---|----------------------------------|-------|-----|-------|--------------------------|----|-----|
| | Traffic LOS And Seconds Delay By | | | | SimTraffic Maximum Queue | | |
| | AM | | PM | | Storage Length | AM | PM |
| | LOS | Delay | LOS | Delay | | | |
| EBL/R | C | 17.0 | C | 19.0 | | 21 | 49 |
| WBL/T | C | 15.9 | D | 31.3 | | 95 | 496 |
| WBR | B | 10.5 | B | 12.3 | | 78 | 170 |
| NBL/T | A | 8.9 | A | 8.8 | | 22 | 51 |
| NBR | | | | | 200 | 6 | 37 |
| SBL | A | 8.4 | B | 11.8 | 300 | 44 | 147 |

There is LOS A through D for individual movements. The southbound left turn is within storage length.

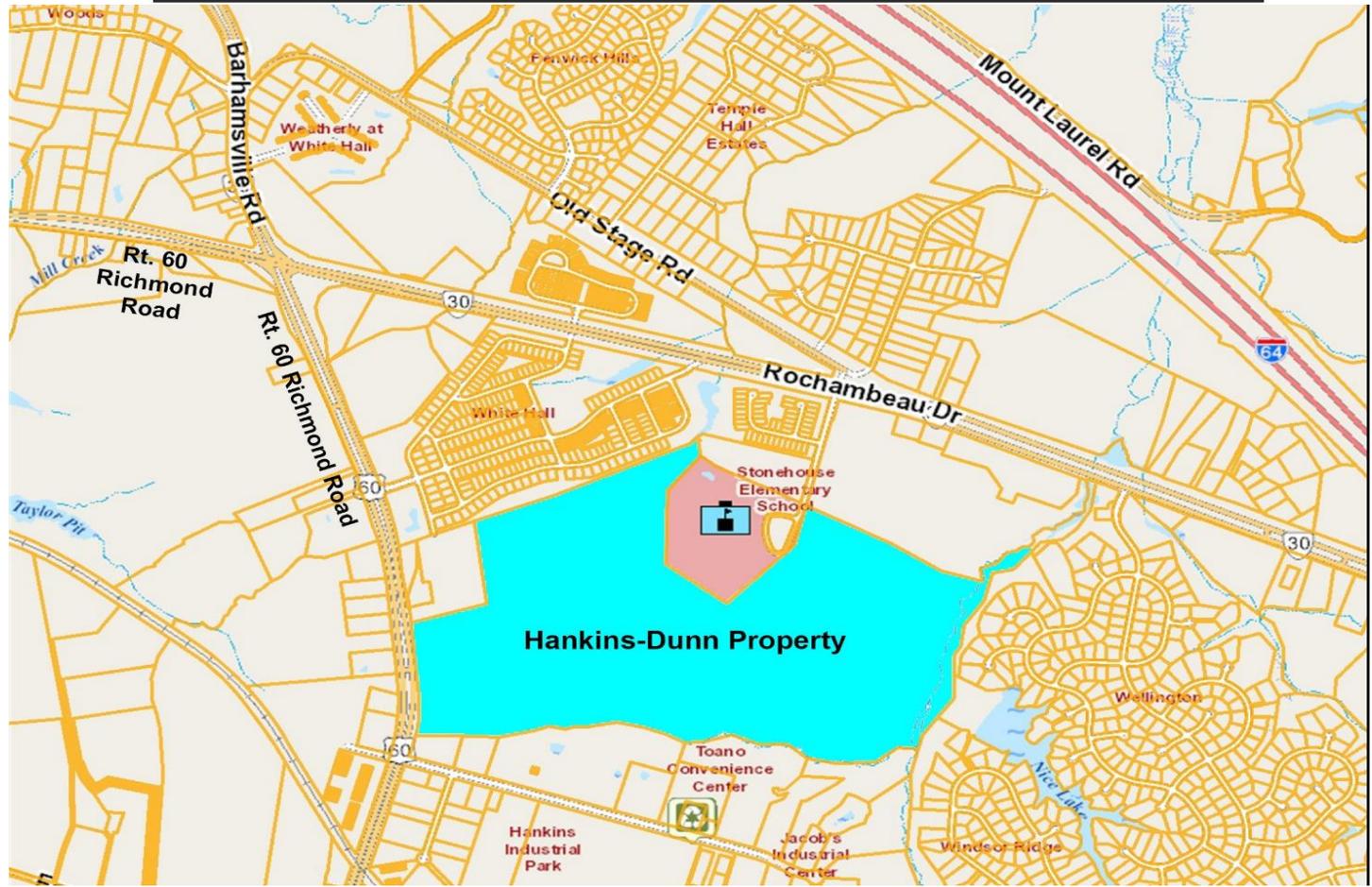
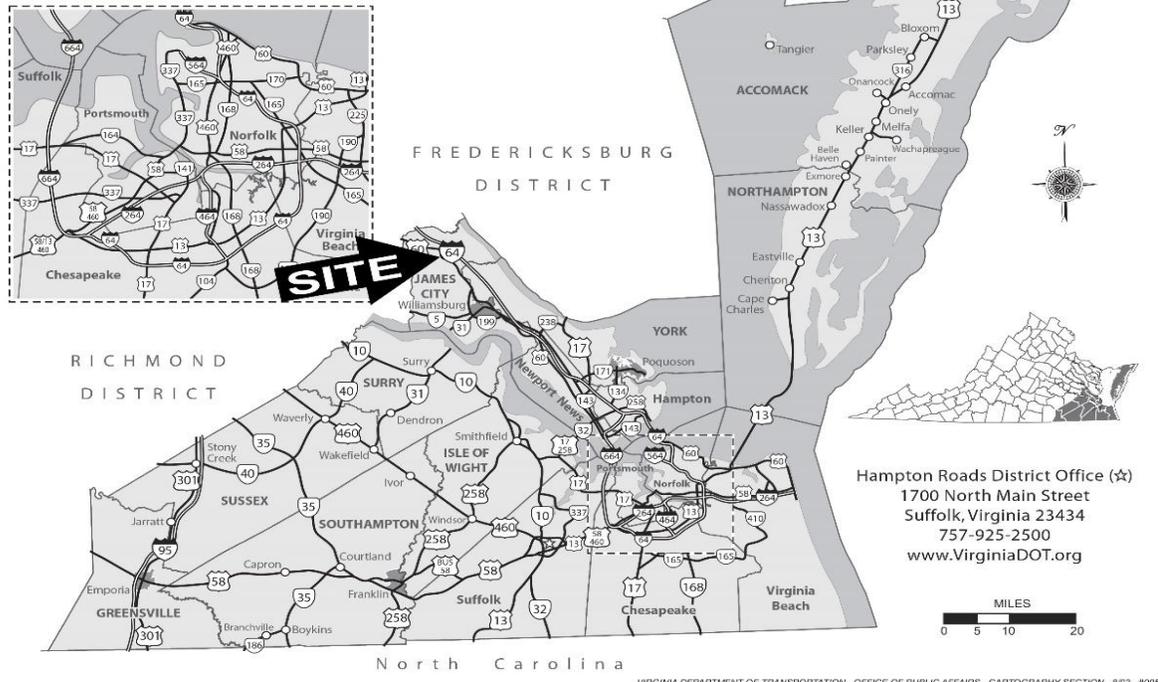
SUMMARY AND CONCLUSIONS

The existing road network easily accommodates traffic from the proposed development of the Hankins-Dunn property. If there are other substantial traffic increases in the area (such as the 74% forecast increase for Hazelwood and Stonehouse), then some queues at the signalized intersection of Rt. 60 Richmond Road/Rt.30 Rochambeau Drive will be at capacity and minor street exiting left turns at unsignalized crossovers will become more difficult.

A decorative border with a Greek key pattern surrounds the page. The top and bottom borders are composed of a repeating square Greek key motif. The left and right borders are composed of a repeating square Greek key motif, with the top and bottom corners of the left and right borders featuring a circular Greek key motif.

REPORT EXHIBITS

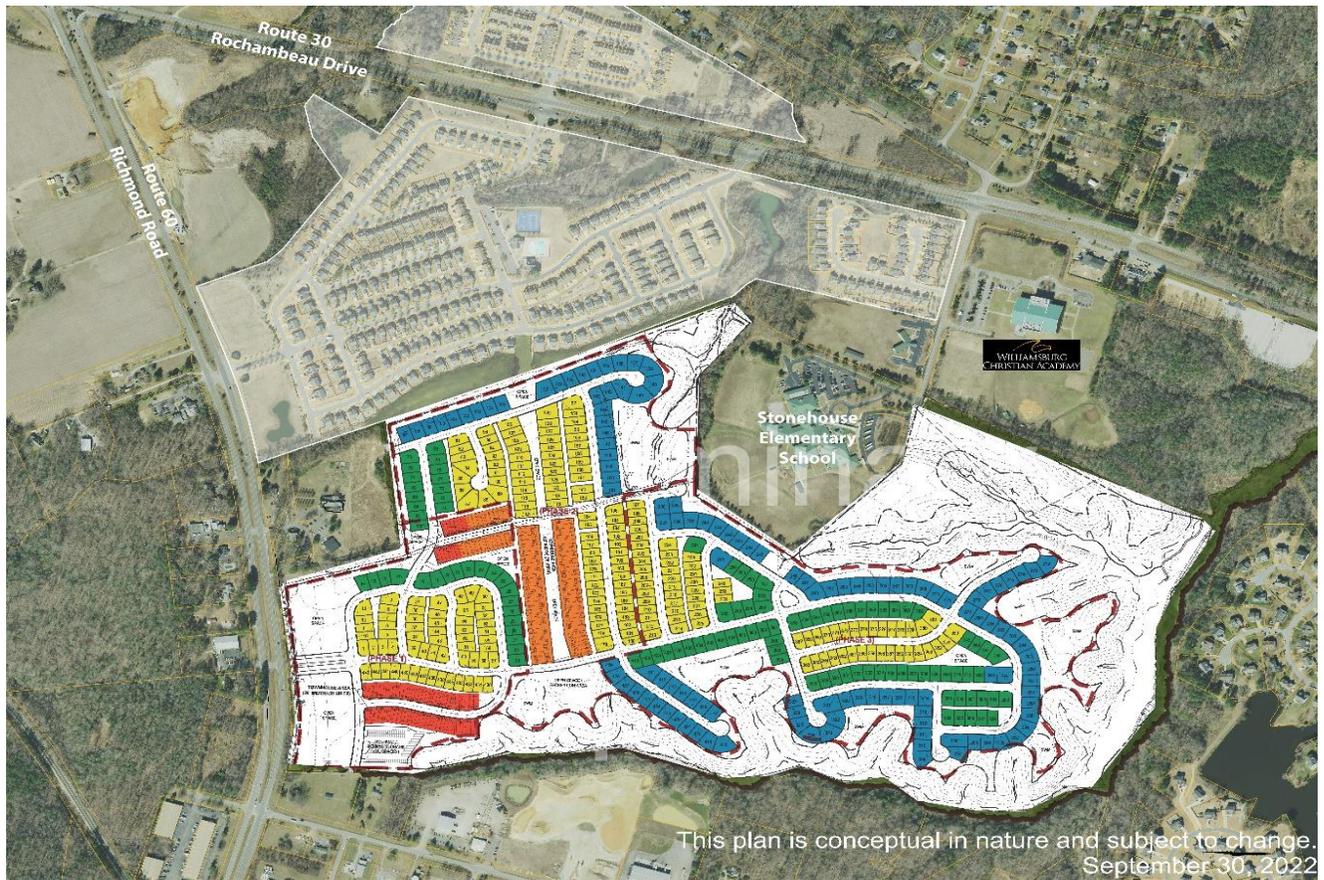
Virginia Department of Transportation HAMPTON ROADS DISTRICT



HANKINS-DUNN PROPERTY
REGIONAL AND AREA PARCEL MAPS

DRW Consultants, LLC
804-794-7312

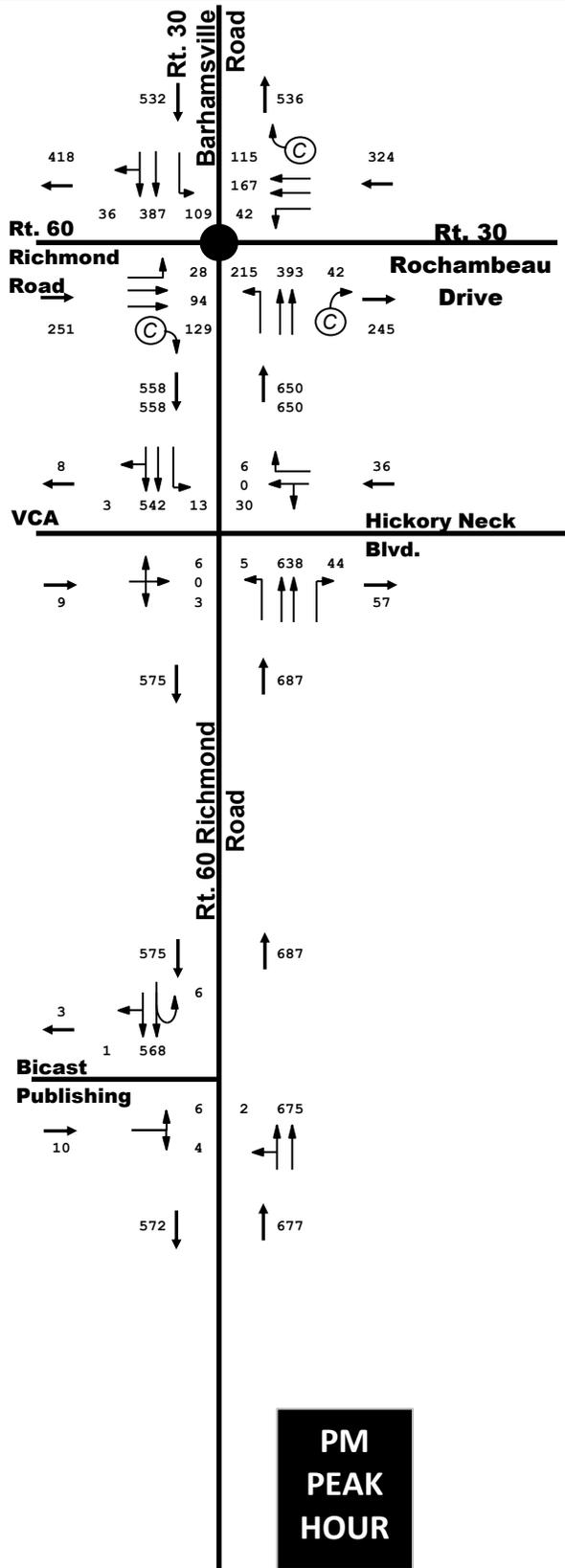
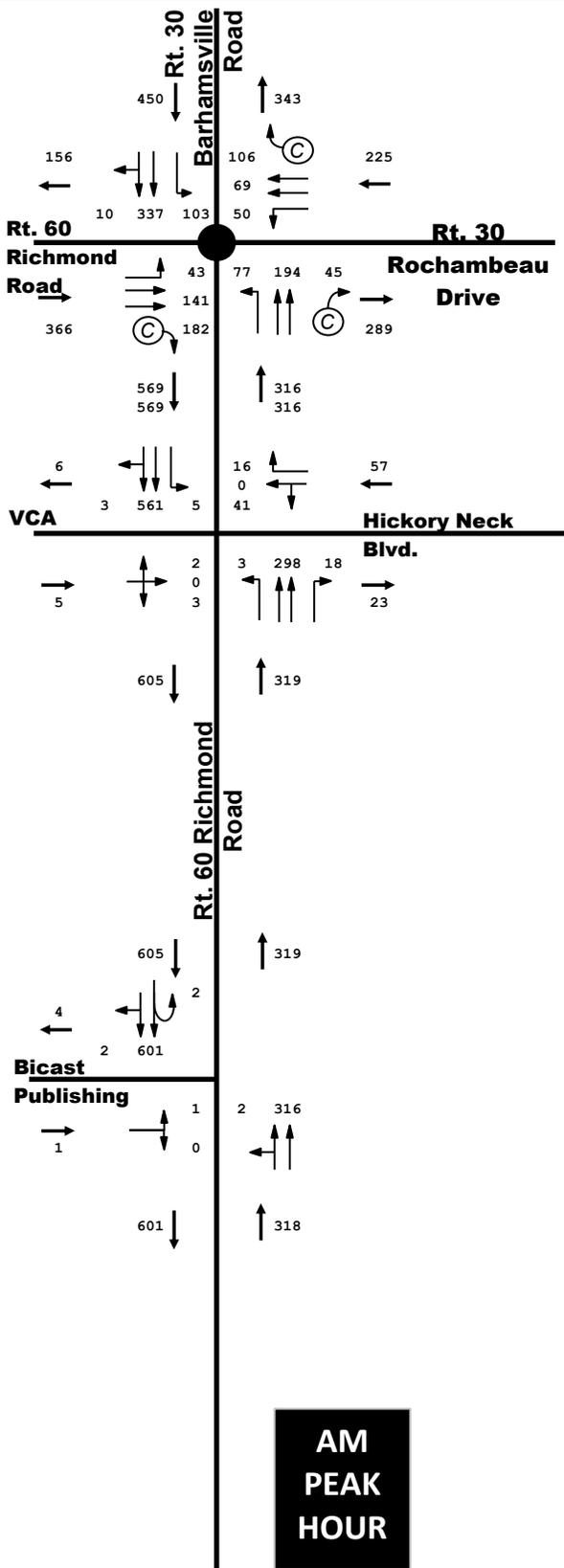
Exhibit 1



**HANKINS-DUNN PROPERTY
TRAFFIC COUNT LOCATION
AND SITE LAYOUT**

**DRW Consultants, LLC
804-794-7312**

Exhibit 2



LEGEND

- Intersection Approach Lanes:
- Traffic Signal:
- Link Volume:
- Channelized Right Turn:

Exhibit Reference

2022 PEAK HOUR COUNTS
 WITH BALANCE

DRW Consultants, LLC
 804-794-7312

Exhibit 3

Street: Rt. 60 Richmond Road

From: Rt. 30 North of Toano

To: Rt. 607 Croaker Road

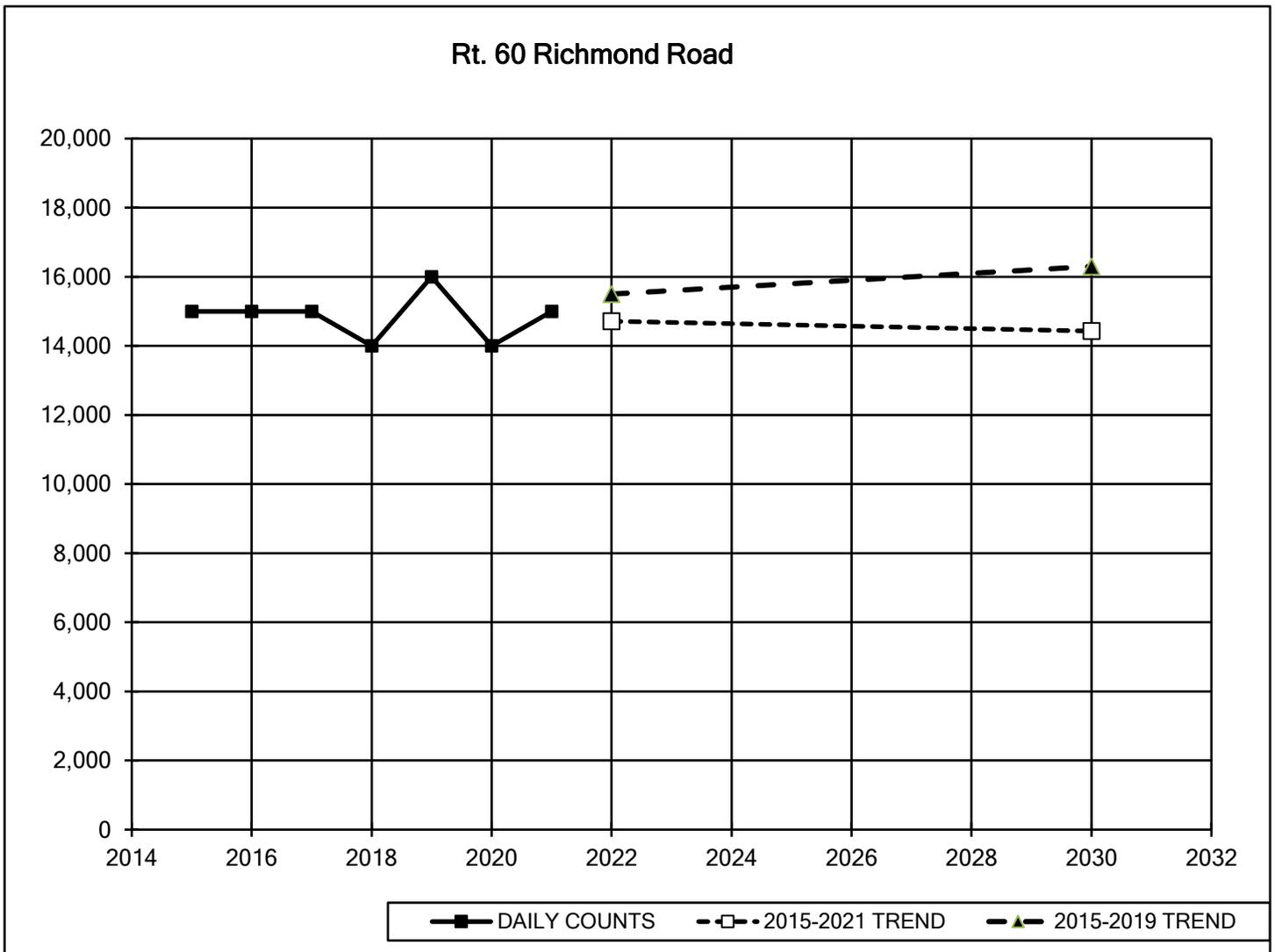
Source: VDOT AADT

DAILY COUNTS

| Year | NB | SB | 2 Way |
|------|----|----|--------|
| 2015 | | | 15,000 |
| 2016 | | | 15,000 |
| 2017 | | | 15,000 |
| 2018 | | | 14,000 |
| 2019 | | | 16,000 |
| 2020 | | | 14,000 |
| 2021 | | | 15,000 |

| 2015-2021 TREND | | $\Delta 22$ |
|-----------------|--------|-------------|
| 2022 | 14,714 | |
| 2030 | 14,429 | 0.98 |

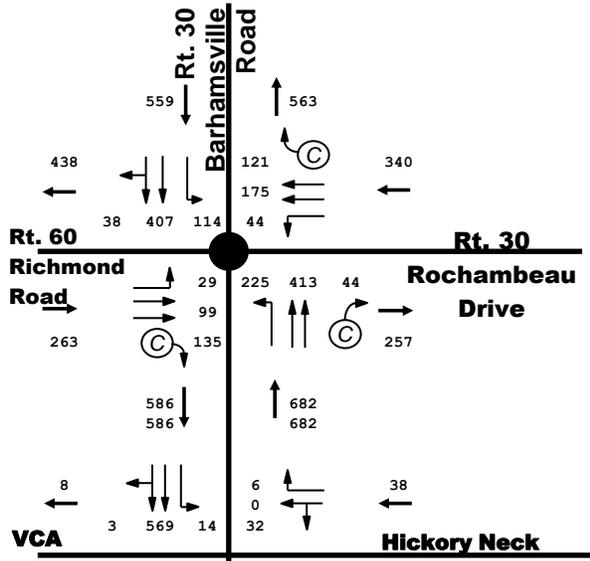
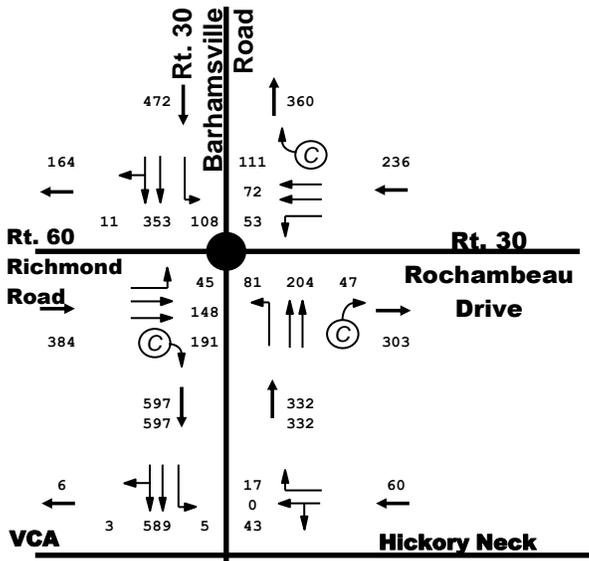
| 2015-2019 TREND | | $\Delta 22$ |
|-----------------|--------|-------------|
| 2022 | 15,500 | |
| 2030 | 16,300 | 1.05 |



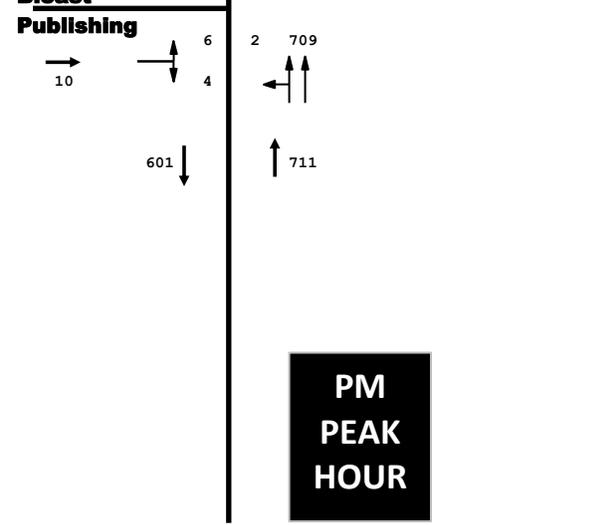
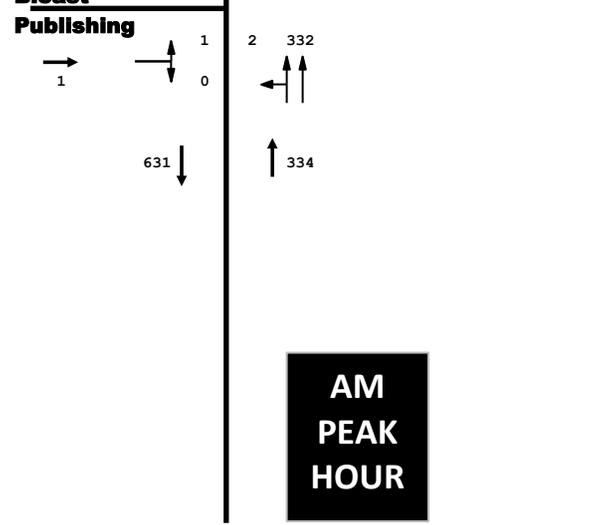
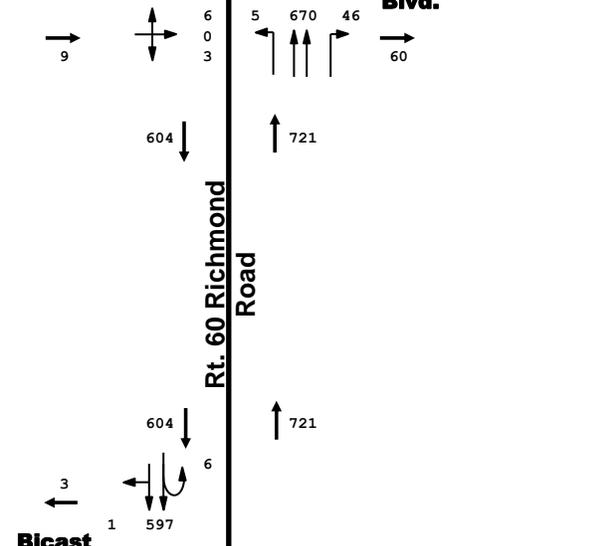
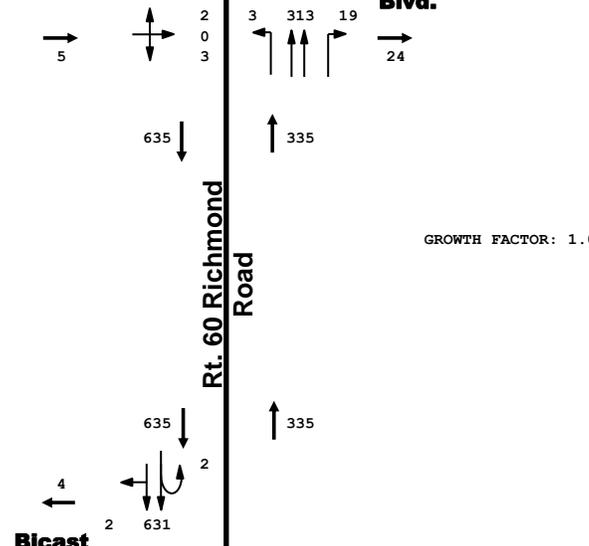
RT. 60 RICHMOND ROAD
AVERAGE ANNUAL WEEKDAY TRAFFIC AND TREND

DRW Consultants, LLC
804-794-7312

Exhibit 4



GROWTH FACTOR: 1.05



AM PEAK HOUR

PM PEAK HOUR

LEGEND

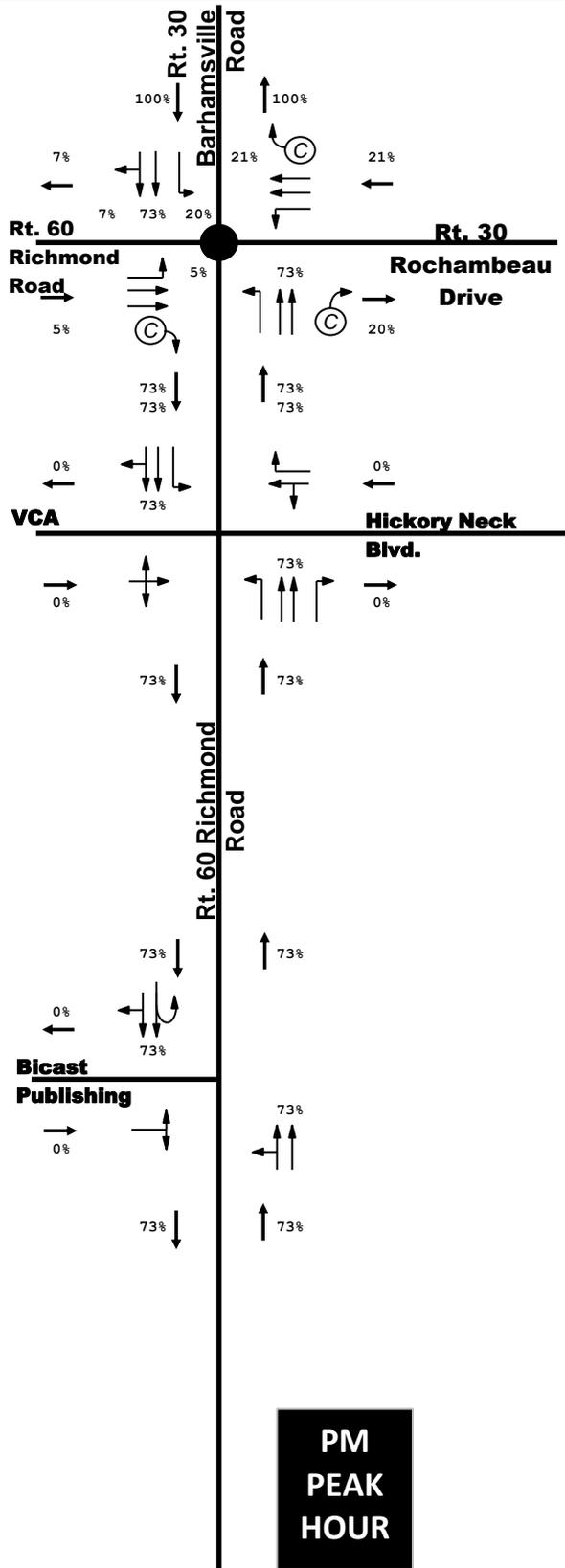
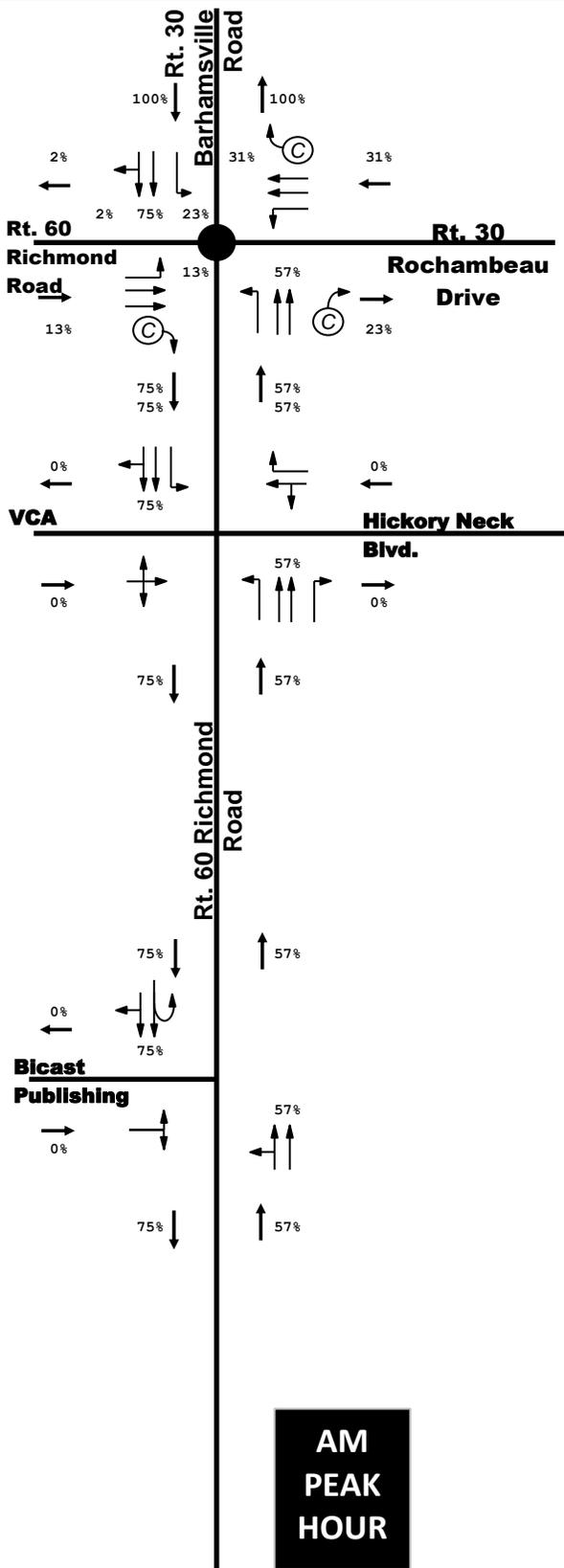
- Intersection Approach Lanes:
- Traffic Signal:
- Link Volume:
- Channelized Right Turn:

Exhibit Reference

2030 BACKGROUND TRAFFIC
 GROWTH FACTOR ONLY

DRW Consultants, LLC
 804-794-7312

Exhibit 5



LEGEND

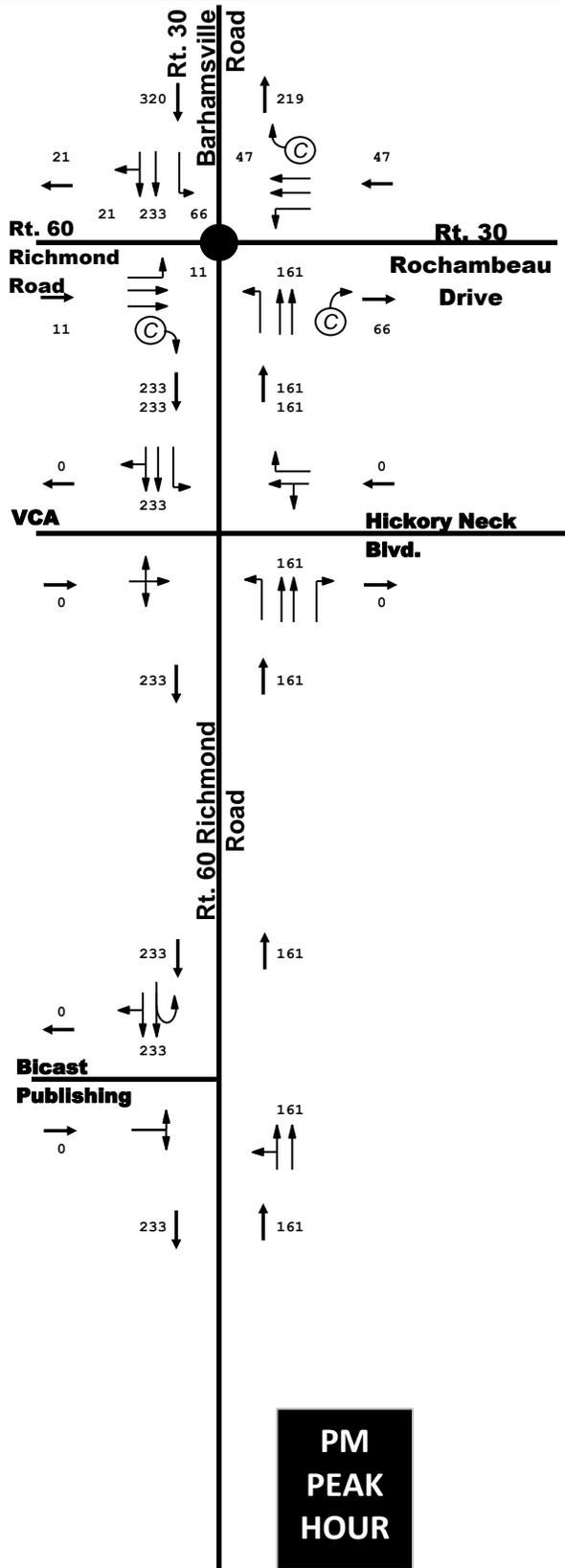
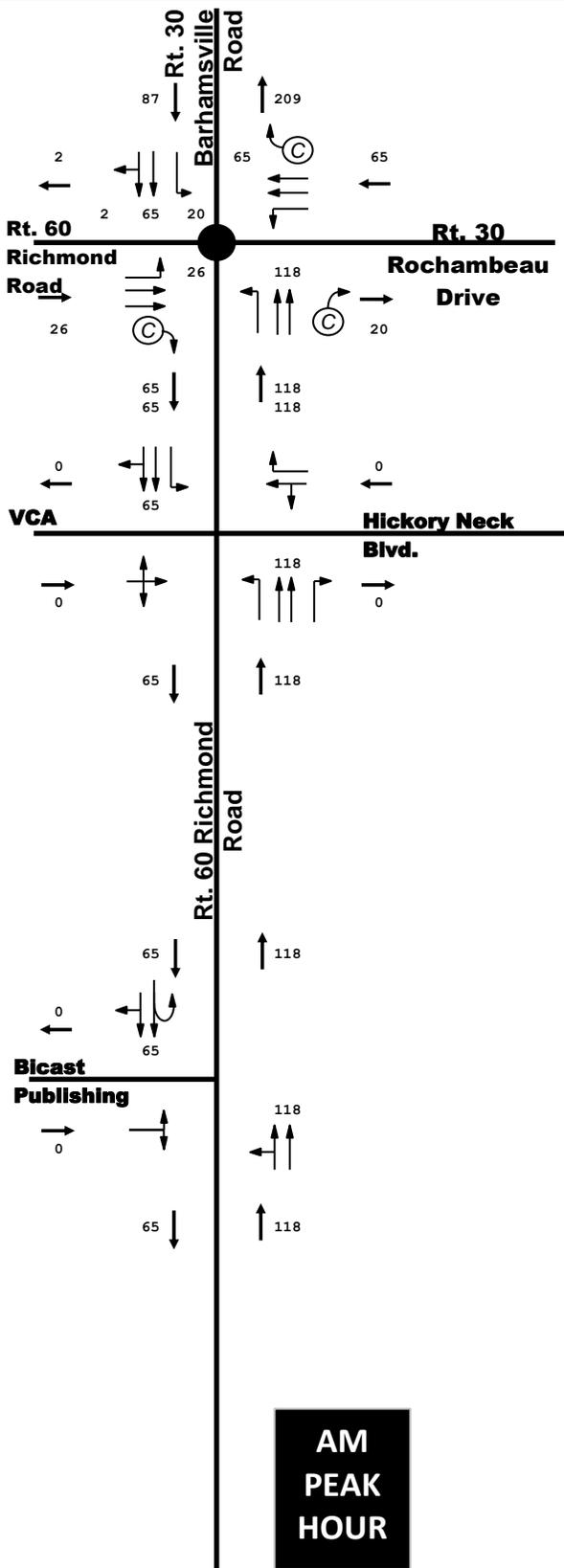
- Intersection Approach Lanes:
- Traffic Signal:
- Link Volume:
- Channelized Right Turn:



DISTRIBUTION FOR HAZELWOOD AND STONEHOUSE TRAFFIC
 DERIVED FROM 2022 COUNTS

DRW Consultants, LLC
 804-794-7312

Exhibit 5a



LEGEND

| | | | | | | | |
|-----------------------------|--|----------------|--|-------------|--|------------------------|--|
| Intersection Approach Lanes | | Traffic Signal | | Link Volume | | Channelized Right Turn | |
|-----------------------------|--|----------------|--|-------------|--|------------------------|--|

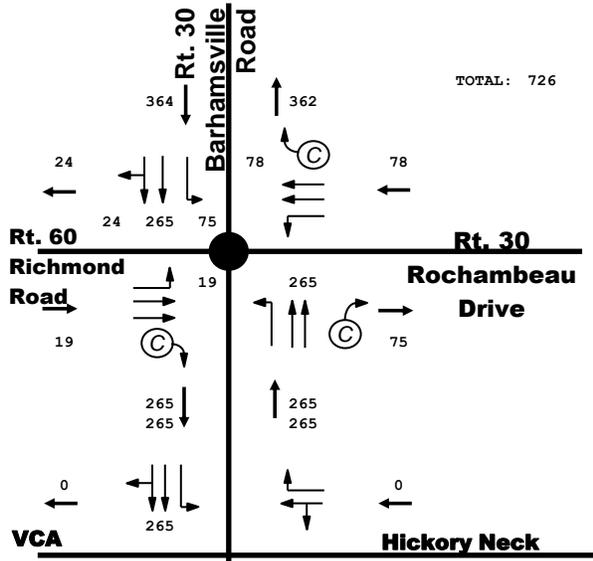
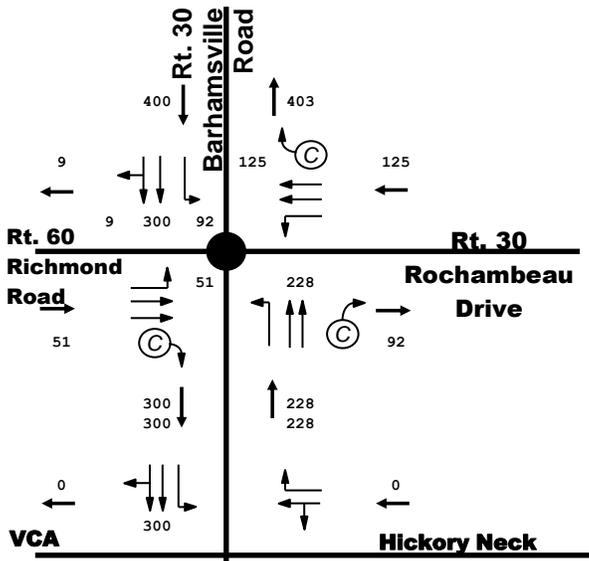
Exhibit Reference

HAZELWOOD TRIP BUILD OUT TRIP ASSIGNMENTS

DRW Consultants, LLC
 804-794-7312

Exhibit 5b

TOTAL: 726



AM PEAK HOUR

PM PEAK HOUR

LEGEND

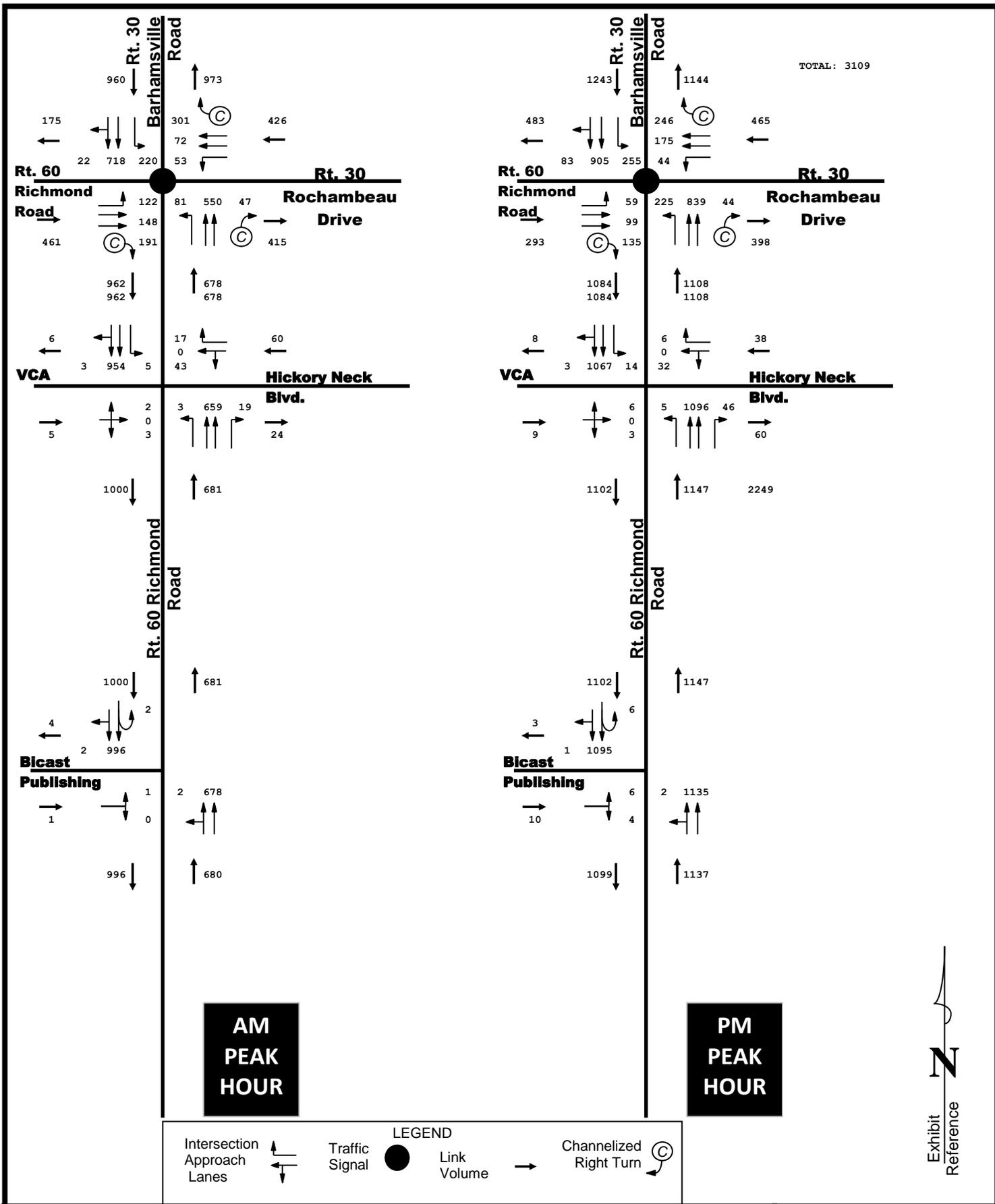
- Intersection Approach Lanes
- Traffic Signal
- Link Volume
- Channelized Right Turn



STONEHOUSE BUILD OUT TRIP ASSIGNMENTS

DRW Consultants, LLC
804-794-7312

Exhibit 5c



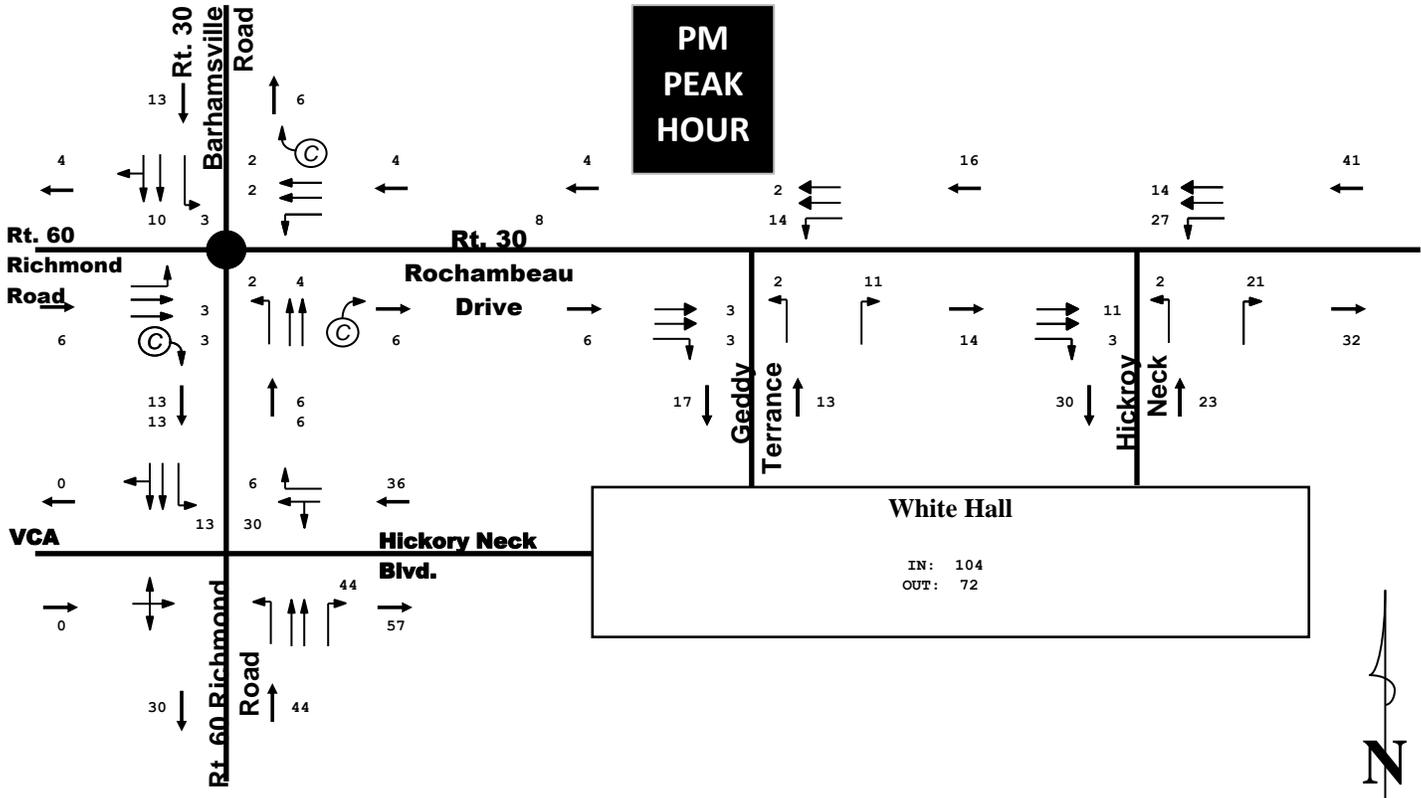
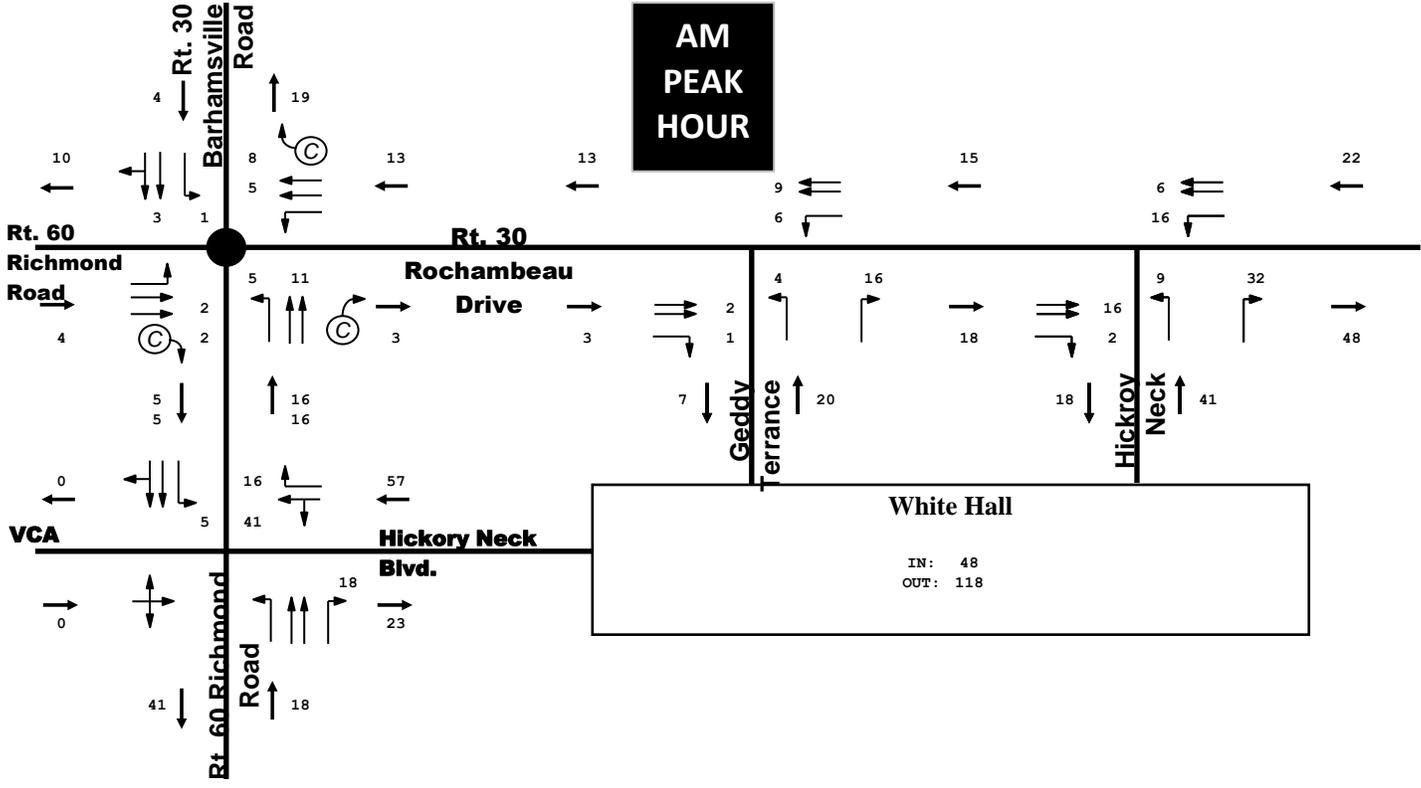
2030 PEAK HOUR BACKGROUND TRAFFIC
GROWTH FACTOR & HAZELWOOD & STONEHOUSE

DRW Consultants, LLC
804-794-7312

Exhibit 5d

**AM
PEAK
HOUR**

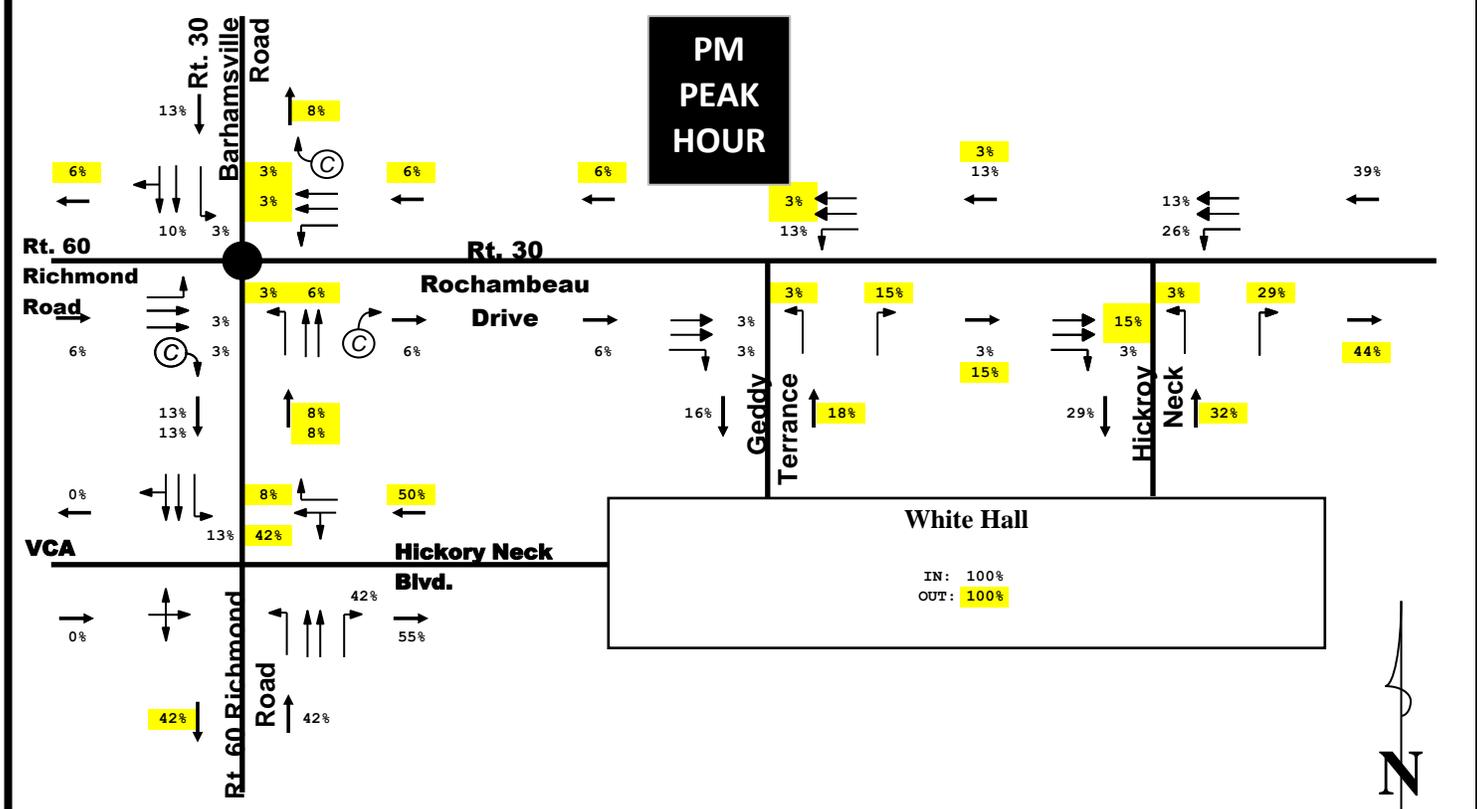
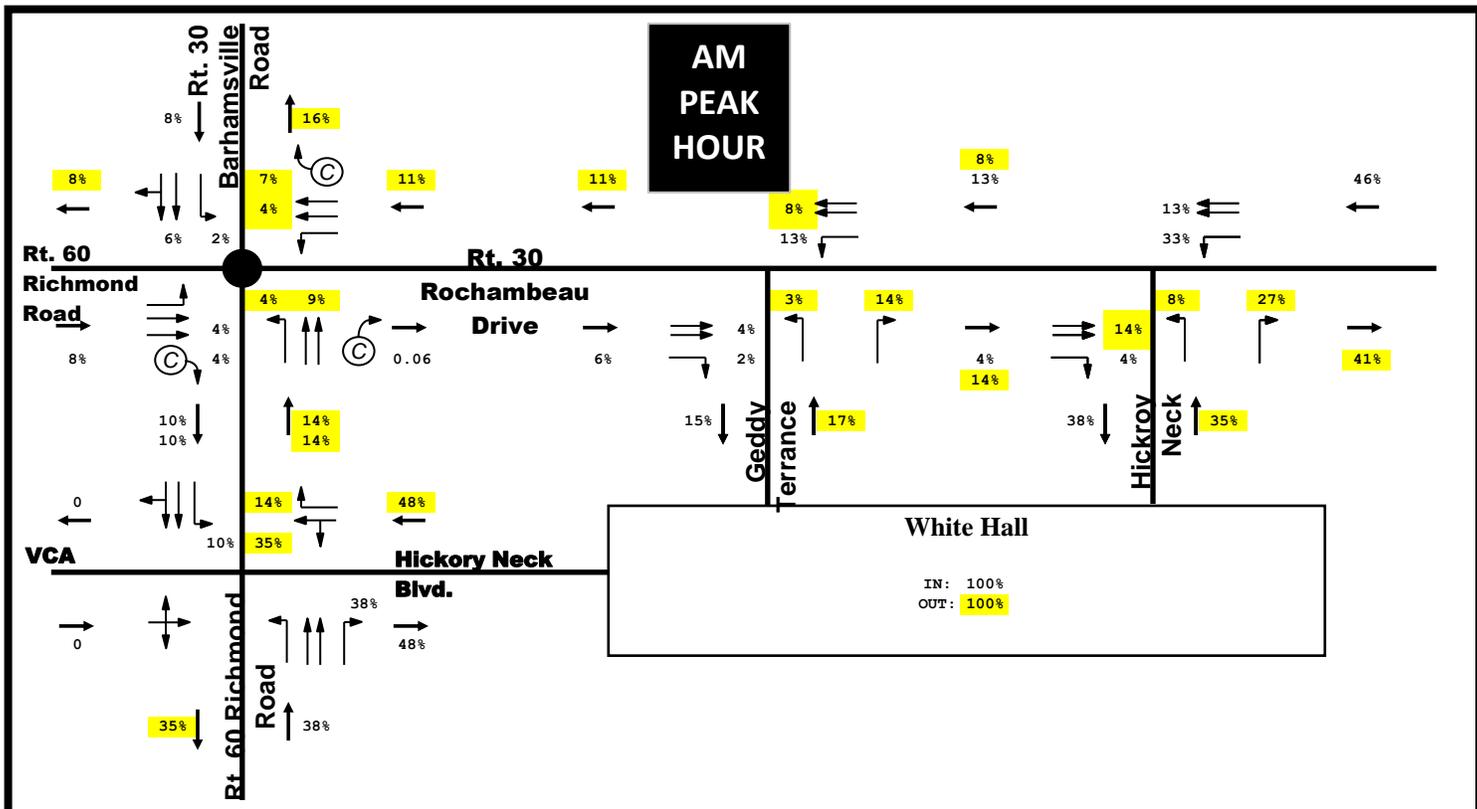
**PM
PEAK
HOUR**



LEGEND

- Intersection Approach Lanes:
- Traffic Signal:
- Link Volume:
- Channelized Right Turn:

Exhibit Reference
N



LEGEND

- Intersection Approach Lanes
- Traffic Signal
- Link Volume
- Channelized Right Turn

Exhibit Reference

WHITE HALL 2022 TRIP DISTRIBUTION
BASED ON PEAK HOUR COUNTS

DRW Consultants, LLC
804-794-7312

Exhibit 6a

| VALUE | | LAND USE | LAND USE CODE | SQ.FT., OTHER UNITS | WEEKDAY TRIP GENERATION | | | | | | DAILY |
|---------------------------------|------------------------|----------|---------------|---------------------|-------------------------|------|-------|--------------|------|-------|-------|
| | | | | | AM PEAK HOUR | | | PM PEAK HOUR | | | |
| | | | | | Enter | Exit | Total | Enter | Exit | Total | |
| TABLE ONE: SITE TRIP GENERATION | | | | | | | | | | | |
| eq.-adj. st. | Single-Family Detached | 210 | 443 units | | 75 | 214 | 289 | 254 | 149 | 403 | 3968 |
| eq.-adj. st. | Single-Family Attached | 215 | 139 units | | 21 | 46 | 67 | 45 | 34 | 79 | 1009 |
| | | | 582 units | | 96 | 260 | 356 | 299 | 183 | 482 | 4977 |

TABLE TWO: SITE TRIP DISTRIBUTION

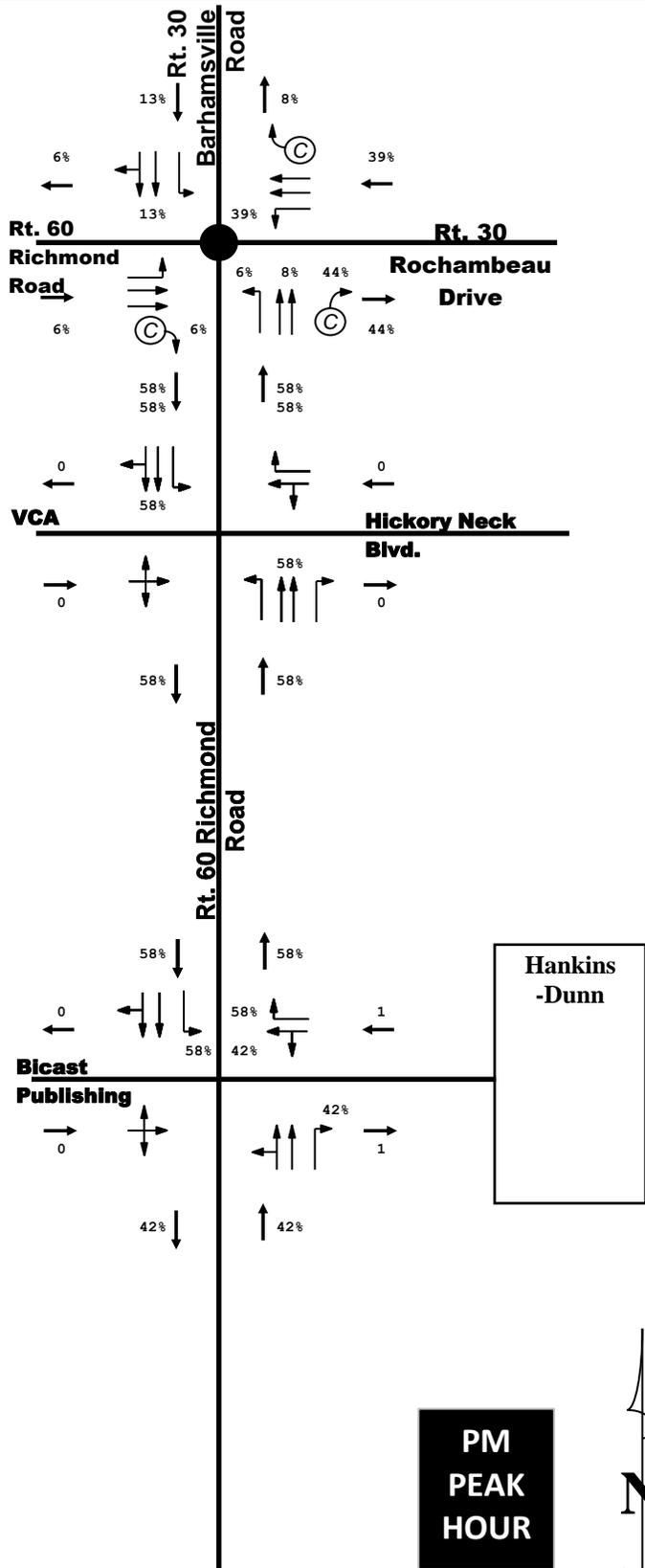
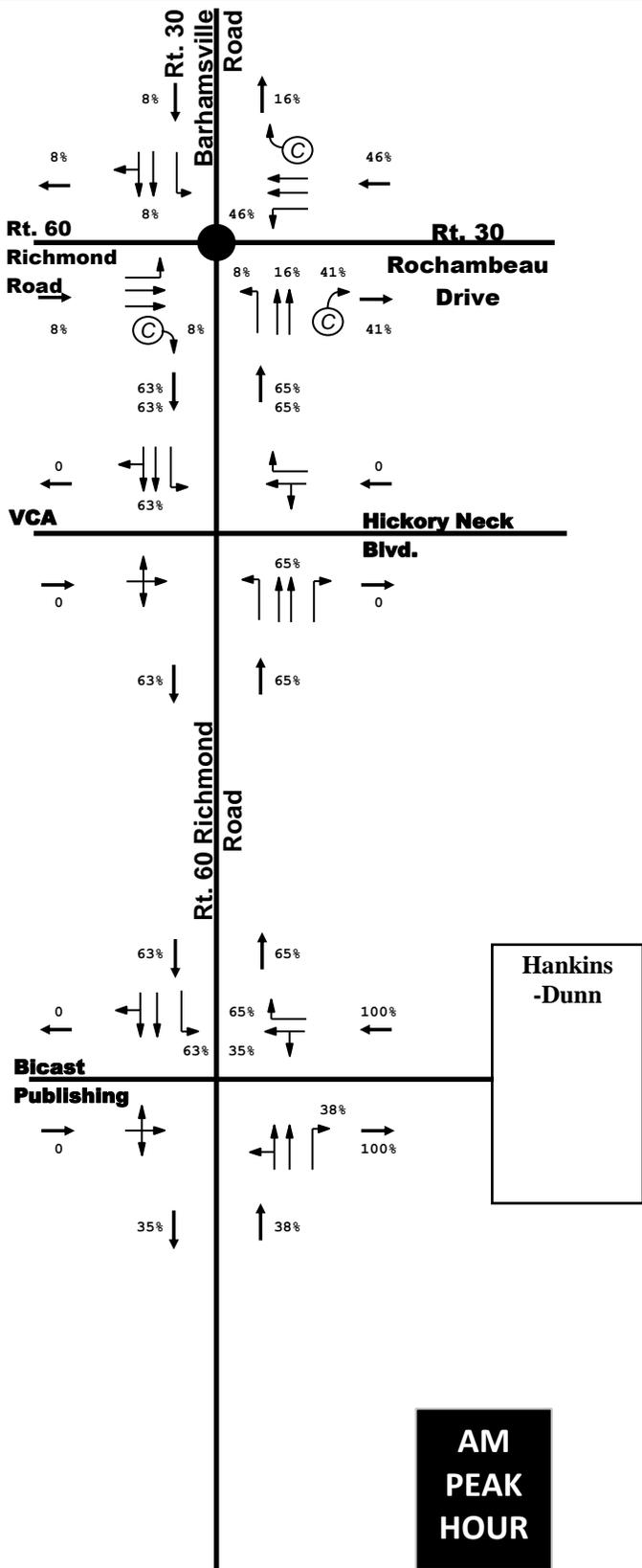
| Direction | 96 260 356 299 183 482 | | | | | | | | | |
|--------------------------------|------------------------|-------|-----------------|-------|---------|------------------|---------|-----------------|---------|-------|
| | AM Peak Hour | | | | | PM Peak Hour | | | | |
| | Entering Traffic | | Exiting Traffic | | | Entering Traffic | | Exiting Traffic | | |
| | % Dist. | Trips | % Dist. | Trips | % Dist. | Trips | % Dist. | Trips | % Dist. | Trips |
| Rt. 60 West Richmond Road | 8% | 8 | 8% | 22 | | 6% | 17 | 6% | 10 | |
| Rt. 30 North Barhamsville Road | 8% | 8 | 16% | 42 | | 13% | 37 | 8% | 15 | |
| Rt. 30 East Rochambeau Drive | 46% | 44 | 41% | 106 | | 39% | 118 | 44% | 82 | |
| Rt. 60 South Richmond Road | 38% | 36 | 35% | 90 | | 42% | 127 | 42% | 76 | |
| | 100% | 96 | 100% | 260 | | 100% | 299 | 100% | 183 | |

Trip generation rates from Trip Generation Manual, 11th Edition (TGM11) by the Institute of Transportation Engineers (ITE)

HANKINS-DUNN PROPERTY
 TRIP GENERATION AND DISTRIBUTION
 FEBRUARY 24, 2023 PLAN BY AES

DRW Consultants, LLC
 804-794-7312

Exhibit 7

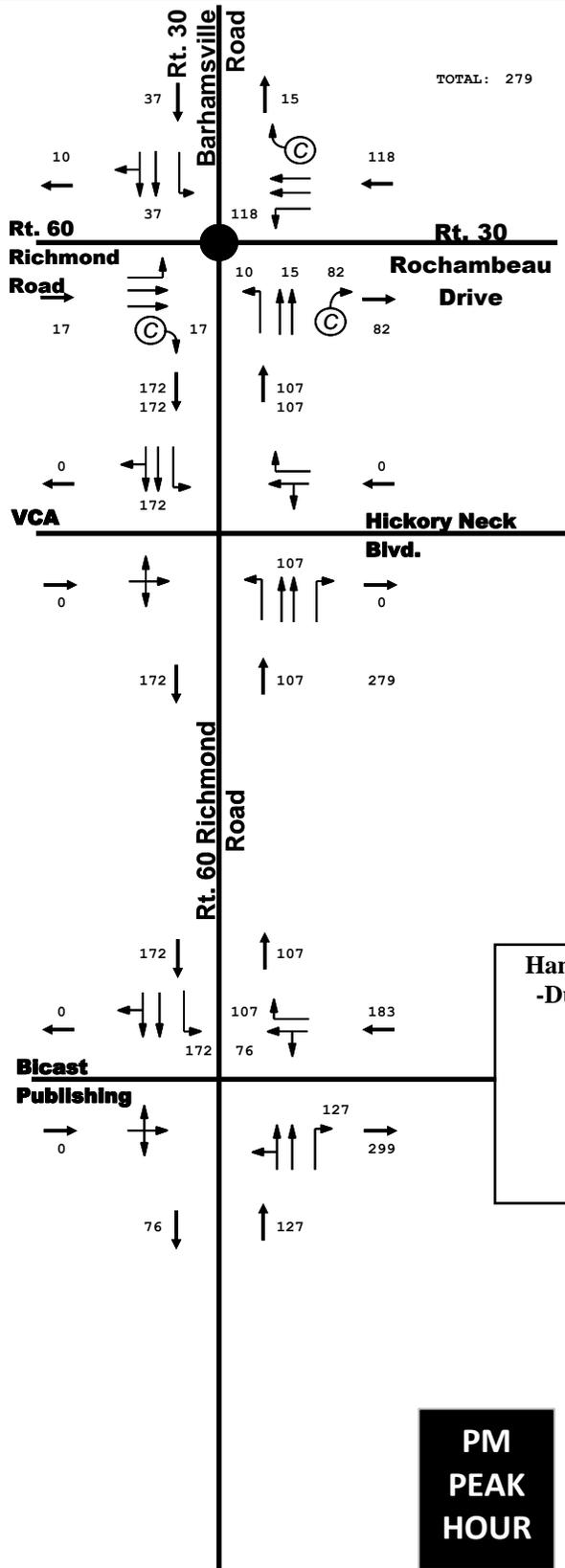
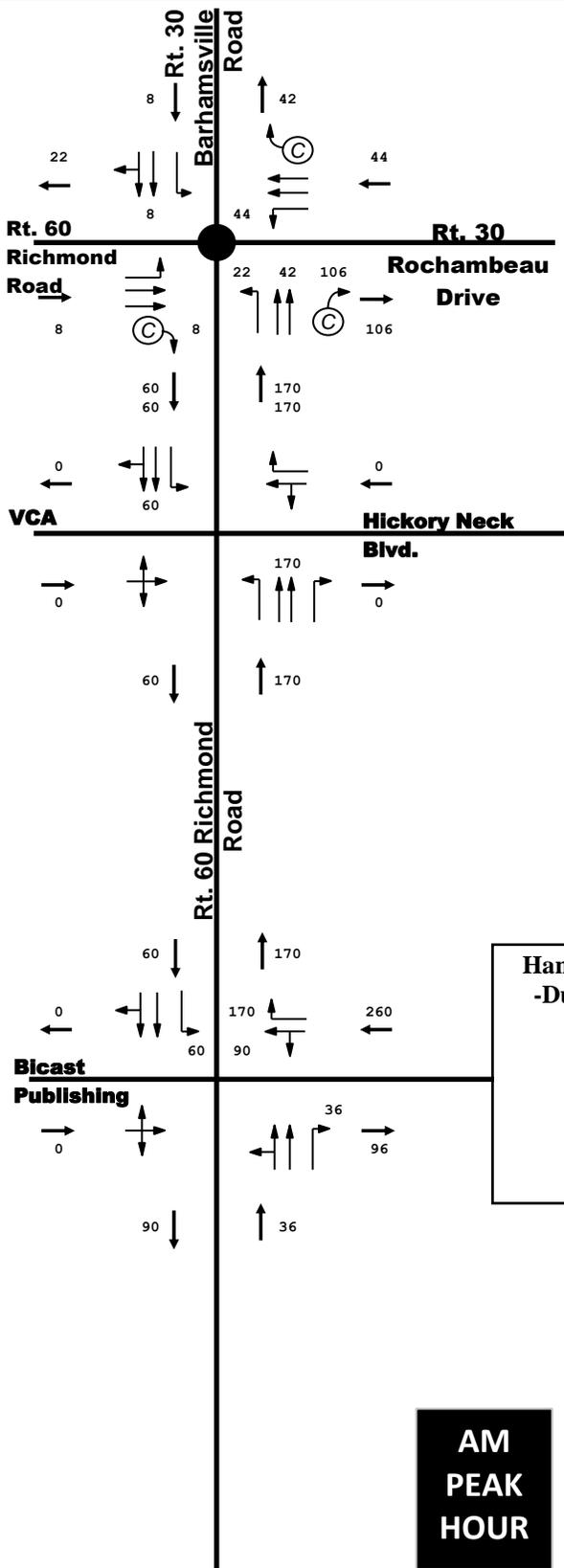


HANKINS-DUNN PERCENTAGE TRIP DISTRIBUTION

DRW Consultants, LLC
804-794-7312

Exhibit 7a

TOTAL: 279



LEGEND

- Intersection Approach Lanes:
- Traffic Signal:
- Link Volume:
- Channelized Right Turn:

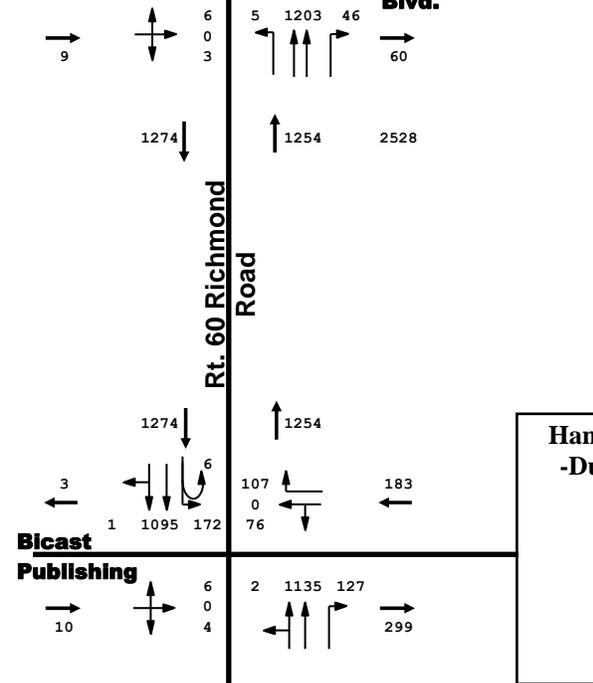
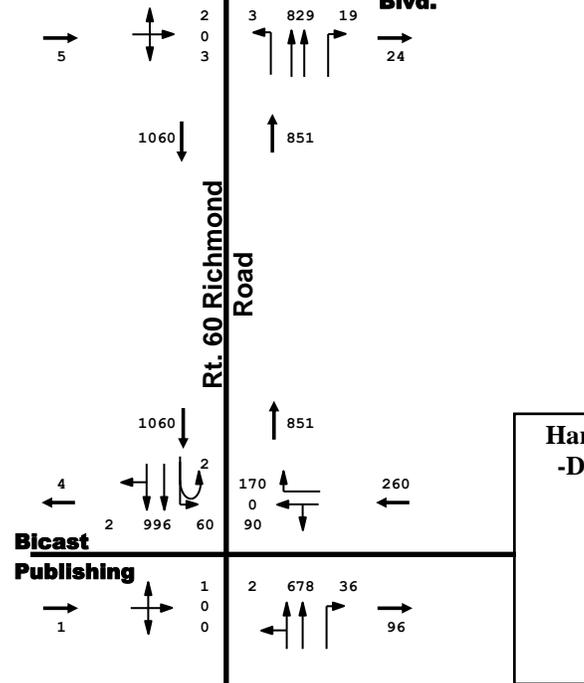
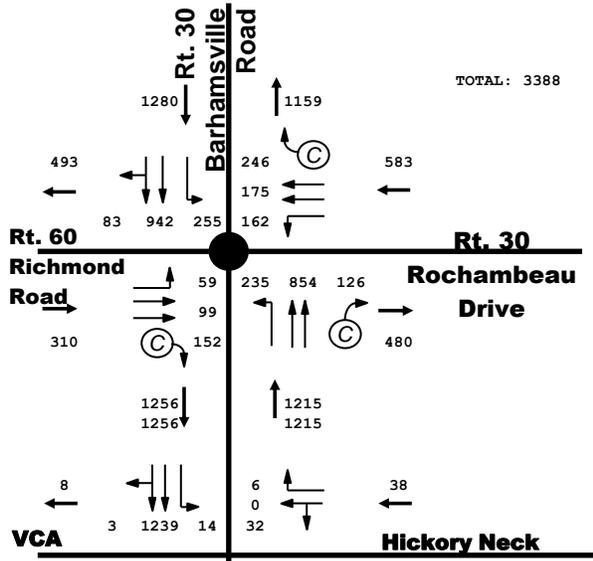
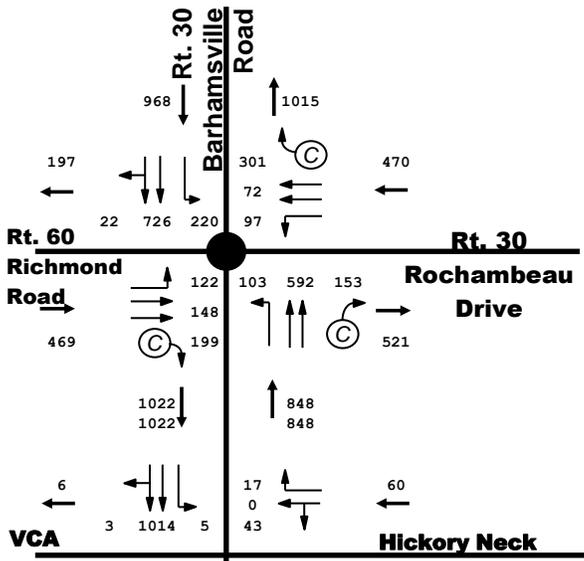


HANKINS-DUNN PROPERTY TRIP ASSIGNMENT

DRW Consultants, LLC
804-794-7312

Exhibit 7b

TOTAL: 3388



AM PEAK HOUR

PM PEAK HOUR

LEGEND

- Intersection Approach Lanes:
- Traffic Signal:
- Link Volume:
- Channelized Right Turn:

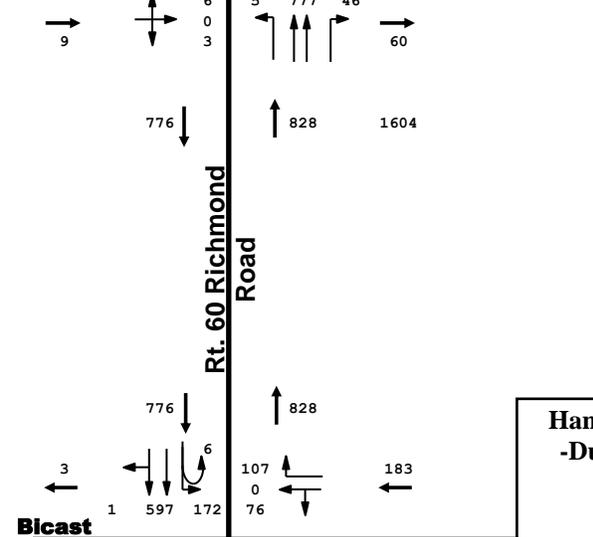
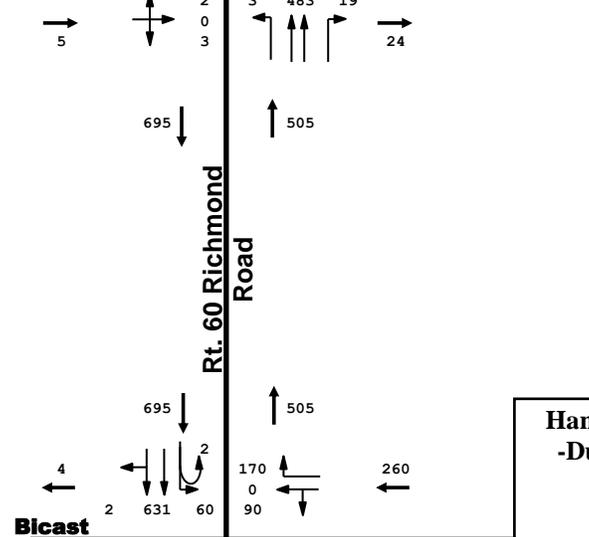
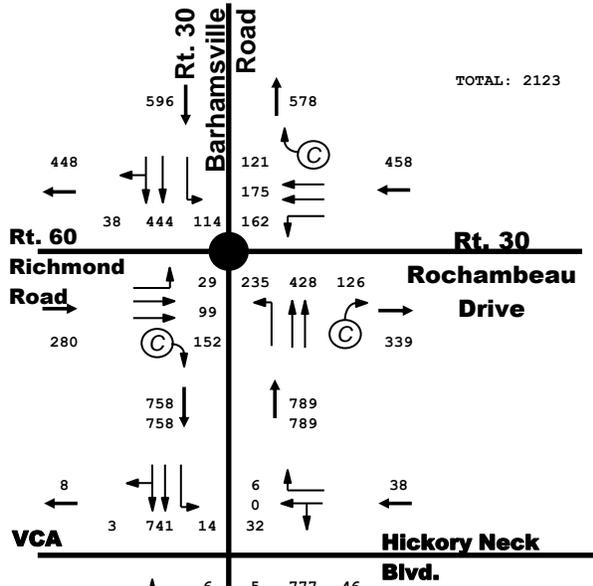
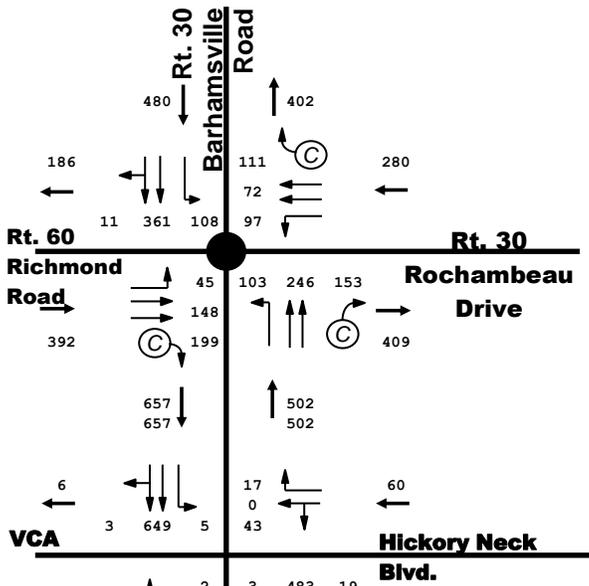
Exhibit Reference

2030 TOTAL TRAFFIC

DRW Consultants, LLC
804-794-7312

Exhibit 8

TOTAL: 2123



AM PEAK HOUR

PM PEAK HOUR

LEGEND

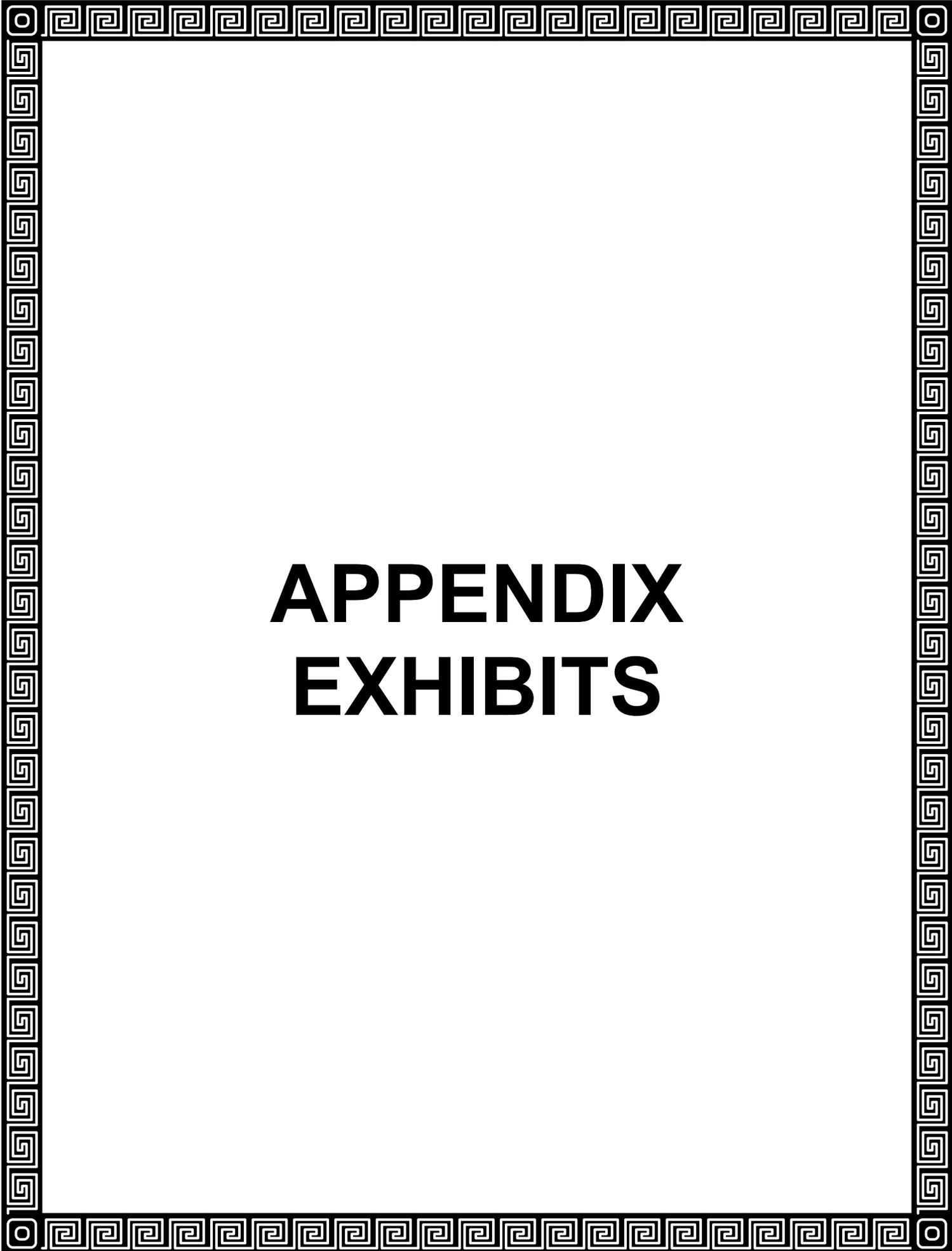
- Intersection Approach Lanes:
- Traffic Signal:
- Link Volume:
- Channelized Right Turn:



2030 TOTAL TRAFFIC WITHOUT HAZELWOOD & STONEHOUSE

DRW Consultants, LLC
804-794-7312

Exhibit 9



APPENDIX EXHIBITS

APPENDIX TABLE OF CONTENTS

| APPENDIX EXHIBITS | Number |
|---|----------|
| AM & PM Peak Hour Tabulated Traffic Counts | |
| Rt. 60 Richmond Road/Rt. 30 Barhamsville Road/Rt. 30 Rochambeau Drive | A |
| Rt. 60 Richmond Road/VCA Andersons Corner Animal Hospital/Hickory Neck Blvd | B |
| Rt. 60 Richmond Road/Bicast Publishing | C |
| Rt. 30 Rochambeau Drive/Preston Lane/Geddy Terrace..... | D |
| Rt. 30 Rochambeau Drive/Hickory Neck Boulevard..... | E |
| 2022 Count Without Balances..... | F |
| St. Luke’s Village Trip Assignments | |
| Existing Zoning Primary Trips | I1 |
| Existing Zoning Pass By Trips | I2 |
| Proposed Zoning Primary Trips..... | I3 |
| Proposed Zoning Pass By Trips..... | I4 |
| HCM6 Signalized Intersection LOS..... AM PM | |
| 2022 Balanced Traffic | J1 J2 |
| Rt. 60 Richmond Road/Rt. 30 Barhamsville Road/Rt. 30 Rochambeau Drive | Page 1 |
| 2025 Background Traffic..... | J3 J4 |
| Rt. 60 Richmond Road/Rt. 30 Barhamsville Road/Rt. 30 Rochambeau Drive | Page 1 |
| 2025 Total Traffic..... | J5 J6 |
| Rt. 60 Richmond Road/Rt. 30 Barhamsville Road/Rt. 30 Rochambeau Drive | Page 1 |
| 2025 Total Traffic Without Stonehouse & Hazelwood | J7 J8 |
| Rt. 60 Richmond Road/Rt. 30 Barhamsville Road/Rt. 30 Rochambeau Drive | Page 1 |
| HCM6 Unsignalized Intersection LOS AM PM | |
| 2022 Balanced Traffic | K1 K2 |
| Rt. 60 Richmond Road/VCA Andersons Corner Animal Hospital/Hickory Neck Blvd | Page 1 |
| Rt. 60 Richmond Road/Bicast Publishing | Page 2 |
| 2025 Background Traffic..... | K3 K4 |
| Rt. 60 Richmond Road/VCA Andersons Corner Animal Hospital/Hickory Neck Blvd | Page 1 |
| Rt. 60 Richmond Road/Bicast Publishing | Page 2 |
| 2025 Total Traffic..... | K5 K6 |
| Rt. 60 Richmond Road/VCA Andersons Corner Animal Hospital/Hickory Neck Blvd | Page 1 |
| Rt. 60 Richmond Road/Bicast Publishing/Hankins-Dunn..... | Page 2 |
| 2025 Total Traffic Without Stonehouse & Hazelwood | K7 K8 |
| Rt. 60 Richmond Road/VCA Andersons Corner Animal Hospital/Hickory Neck Blvd | Page 1 |
| Rt. 60 Richmond Road/Bicast Publishing/Hankins-Dunn..... | Page 2 |
| SimTraffic Queuing & Blocking Report..... AM PM | |
| 2022 Balanced Traffic | L1 L2 |
| 2025 Background Traffic..... | L3 L4 |
| 2025 Total Traffic..... | L5 L6 |
| Reference Documents | |
| Stonehouse Build Out Trips..... | P |
| Hazelwood Build Out Trips..... | Q |
| July 15, 2022 Workslope | R |
| VDOT Signal Timing: Rt. 60 Richmond Road/Rt. 30 Barhamsville Road | S |

TOTALS TURNING MOVEMENT COUNT - SUMMARY

Intersection of: Route 60 (Richmond Road)
and: Route 30
Location: James City County, VA

Counted by: VCU
Date: September 13, 2022
Weather: Partly Cloud, Warm
Entered by: ARG

Tuesday

Star Rating: 4



| TIME | EASTBOUND on: Route 60 | | | | | WESTBOUND on: Rochembeau Drive | | | | | NORTHBOUND on: Route 60 | | | | | SOUTHBOUND on: Barhamsville Road | | | | | TOTAL N + S + E + W |
|---------------------|---------------------------|------|------|-------|-------|-----------------------------------|------|------|-------|-------|----------------------------|------|------|-------|-------|-------------------------------------|------|------|-------|-------|------------------------------|
| | U-TN | LEFT | THRU | RIGHT | TOTAL | U-TN | LEFT | THRU | RIGHT | TOTAL | U-TN | LEFT | THRU | RIGHT | TOTAL | U-TN | LEFT | THRU | RIGHT | TOTAL | |
| AM | | | | | | | | | | | | | | | | | | | | | |
| 7:00-7:15 | 0 | 6 | 47 | 26 | 79 | 0 | 4 | 9 | 17 | 30 | 0 | 19 | 34 | 5 | 58 | 0 | 22 | 62 | 4 | 88 | 255 |
| 7:15-7:30 | 0 | 7 | 41 | 48 | 96 | 0 | 6 | 15 | 19 | 40 | 0 | 18 | 42 | 9 | 69 | 1 | 14 | 76 | 3 | 94 | 299 |
| 7:30-7:45 | 0 | 11 | 35 | 42 | 88 | 0 | 10 | 10 | 24 | 44 | 0 | 16 | 48 | 5 | 69 | 0 | 23 | 98 | 4 | 125 | 326 |
| 7:45-8:00 | 0 | 9 | 36 | 54 | 99 | 0 | 17 | 15 | 35 | 67 | 0 | 19 | 39 | 15 | 73 | 1 | 27 | 81 | 3 | 112 | 351 |
| 8:00-8:15 | 0 | 16 | 29 | 38 | 83 | 0 | 17 | 29 | 28 | 74 | 0 | 24 | 57 | 16 | 97 | 3 | 34 | 76 | 0 | 113 | 367 |
| 8:15-8:30 | 0 | 8 | 36 | 43 | 87 | 0 | 6 | 7 | 13 | 26 | 0 | 18 | 47 | 3 | 68 | 2 | 23 | 76 | 1 | 102 | 283 |
| 8:30-8:45 | 0 | 8 | 17 | 33 | 58 | 1 | 8 | 11 | 16 | 36 | 0 | 20 | 61 | 9 | 90 | 1 | 38 | 86 | 7 | 132 | 316 |
| 8:45-9:00 | 0 | 9 | 32 | 44 | 85 | 0 | 17 | 22 | 43 | 82 | 1 | 15 | 57 | 6 | 79 | 0 | 26 | 75 | 5 | 106 | 352 |
| 2 Hr Totals | 0 | 74 | 273 | 328 | 675 | 1 | 85 | 118 | 195 | 399 | 1 | 149 | 385 | 68 | 603 | 8 | 207 | 630 | 27 | 872 | 2549 |
| 1 Hr Totals | | | | | | | | | | | | | | | | | | | | | |
| 7:00-8:00 | 0 | 33 | 159 | 170 | 362 | 0 | 37 | 49 | 95 | 181 | 0 | 72 | 163 | 34 | 269 | 2 | 86 | 317 | 14 | 419 | 1231 |
| 7:15-8:15 | 0 | 43 | 141 | 182 | 366 | 0 | 50 | 69 | 106 | 225 | 0 | 77 | 186 | 45 | 308 | 5 | 98 | 331 | 10 | 444 | 1343 |
| 7:30-8:30 | 0 | 44 | 136 | 177 | 357 | 0 | 50 | 61 | 100 | 211 | 0 | 77 | 191 | 39 | 307 | 6 | 107 | 331 | 8 | 452 | 1327 |
| 7:45-8:45 | 0 | 41 | 118 | 168 | 327 | 1 | 48 | 62 | 92 | 203 | 0 | 81 | 204 | 43 | 328 | 7 | 122 | 319 | 11 | 459 | 1317 |
| 8:00-9:00 | 0 | 41 | 114 | 158 | 313 | 1 | 48 | 69 | 100 | 218 | 1 | 77 | 222 | 34 | 334 | 6 | 121 | 313 | 13 | 453 | 1318 |
| PEAK HOUR | | | | | | | | | | | | | | | | | | | | | |
| 7:15-8:15 | 0 | 43 | 141 | 182 | 366 | 0 | 50 | 69 | 106 | 225 | 0 | 77 | 186 | 45 | 308 | 5 | 98 | 331 | 10 | 444 | 1343 |
| %T & PHF | ##### | 5% | 5% | 4% | 5% | ##### | 2% | 14% | 2% | 6% | ##### | 10% | 12% | 13% | 12% | 20% | 0% | 5% | 0% | 4% | 0.915 |
| PM | | | | | | | | | | | | | | | | | | | | | |
| 4:00-4:15 | 0 | 7 | 22 | 29 | 58 | 0 | 9 | 48 | 23 | 80 | 0 | 51 | 107 | 7 | 165 | 1 | 20 | 83 | 12 | 116 | 419 |
| 4:15-4:30 | 0 | 6 | 23 | 29 | 58 | 0 | 8 | 42 | 30 | 80 | 0 | 47 | 107 | 16 | 170 | 3 | 27 | 80 | 10 | 120 | 428 |
| 4:30-4:45 | 0 | 9 | 35 | 34 | 78 | 0 | 13 | 48 | 26 | 87 | 0 | 55 | 107 | 9 | 171 | 1 | 21 | 80 | 4 | 106 | 442 |
| 4:45-5:00 | 0 | 5 | 21 | 41 | 67 | 0 | 12 | 34 | 26 | 72 | 0 | 45 | 86 | 10 | 141 | 0 | 29 | 99 | 5 | 133 | 413 |
| 5:00-5:15 | 0 | 10 | 20 | 30 | 60 | 0 | 9 | 39 | 29 | 77 | 0 | 55 | 85 | 16 | 156 | 4 | 29 | 108 | 19 | 160 | 453 |
| 5:15-5:30 | 0 | 5 | 18 | 24 | 47 | 0 | 8 | 46 | 34 | 88 | 0 | 60 | 115 | 7 | 182 | 1 | 24 | 88 | 8 | 121 | 438 |
| 5:30-5:45 | 0 | 7 | 21 | 39 | 67 | 0 | 8 | 45 | 33 | 86 | 0 | 45 | 107 | 6 | 158 | 2 | 15 | 73 | 3 | 93 | 404 |
| 5:45-6:00 | 0 | 8 | 20 | 32 | 60 | 0 | 7 | 33 | 23 | 63 | 1 | 51 | 95 | 13 | 160 | 4 | 21 | 80 | 3 | 108 | 391 |
| 2 Hr Totals | 0 | 57 | 180 | 258 | 495 | 0 | 74 | 335 | 224 | 633 | 1 | 409 | 809 | 84 | 1303 | 16 | 186 | 691 | 64 | 957 | 3388 |
| 1 Hr Totals | | | | | | | | | | | | | | | | | | | | | |
| 4:00-5:00 | 0 | 27 | 101 | 133 | 261 | 0 | 42 | 172 | 105 | 319 | 0 | 198 | 407 | 42 | 647 | 5 | 97 | 342 | 31 | 475 | 1702 |
| 4:15-5:15 | 0 | 30 | 99 | 134 | 263 | 0 | 42 | 163 | 111 | 316 | 0 | 202 | 385 | 51 | 638 | 8 | 106 | 367 | 38 | 519 | 1736 |
| 4:30-5:30 | 0 | 29 | 94 | 129 | 252 | 0 | 42 | 167 | 115 | 324 | 0 | 215 | 393 | 42 | 650 | 6 | 103 | 375 | 36 | 520 | 1746 |
| 4:45-5:45 | 0 | 27 | 80 | 134 | 241 | 0 | 37 | 164 | 122 | 323 | 0 | 205 | 393 | 39 | 637 | 7 | 97 | 368 | 35 | 507 | 1708 |
| 5:00-6:00 | 0 | 30 | 79 | 125 | 234 | 0 | 32 | 163 | 119 | 314 | 1 | 211 | 402 | 42 | 656 | 11 | 89 | 349 | 33 | 482 | 1686 |
| PEAK HOUR | | | | | | | | | | | | | | | | | | | | | |
| 4:30-5:30 | 0 | 29 | 94 | 129 | 252 | 0 | 42 | 167 | 115 | 324 | 0 | 215 | 393 | 42 | 650 | 6 | 103 | 375 | 36 | 520 | 1746 |
| %T & PHF | ##### | 0% | 0% | 4% | 2% | ##### | 2% | 1% | 2% | 2% | ##### | 3% | 2% | 0% | 2% | 0% | 3% | 4% | 3% | 3% | 0.964 |

TOTALS TURNING MOVEMENT COUNT - SUMMARY

Intersection of: Route 60 (Richmond Road)
and: Hickory Neck Blvs/Business Access
Location: James City County, VA

Counted by: VCU
Date: September 13, 2022
Weather: Partly Cloud, Warm
Entered by: ARG

Tuesday



Star Rating: 4

| TIME | EASTBOUND on: Animal Hospital Acces | | | | | WESTBOUND on: Hickory Neck Blvd | | | | | NORTHBOUND on: Route 60 | | | | | SOUTHBOUND on: Route 60 | | | | | TOTAL N + S + E + W |
|---------------------|--|------|-------|-------|-------|------------------------------------|------|-------|-------|-------|----------------------------|------|------|-------|-------|----------------------------|------|------|-------|-------|------------------------------|
| | U-TN | LEFT | THRU | RIGHT | TOTAL | U-TN | LEFT | THRU | RIGHT | TOTAL | U-TN | LEFT | THRU | RIGHT | TOTAL | U-TN | LEFT | THRU | RIGHT | TOTAL | |
| AM | | | | | | | | | | | | | | | | | | | | | |
| 7:00-7:15 | 0 | 1 | 0 | 1 | 2 | 0 | 3 | 0 | 3 | 6 | 0 | 1 | 60 | 3 | 64 | 0 | 0 | 110 | 2 | 112 | 184 |
| 7:15-7:30 | 0 | 1 | 0 | 2 | 3 | 0 | 2 | 0 | 3 | 5 | 0 | 2 | 66 | 3 | 71 | 0 | 0 | 124 | 0 | 124 | 203 |
| 7:30-7:45 | 0 | 0 | 0 | 1 | 1 | 0 | 10 | 0 | 3 | 13 | 0 | 0 | 69 | 4 | 73 | 0 | 1 | 148 | 0 | 149 | 236 |
| 7:45-8:00 | 0 | 0 | 0 | 0 | 0 | 0 | 19 | 0 | 6 | 25 | 0 | 0 | 67 | 1 | 68 | 0 | 2 | 158 | 2 | 162 | 255 |
| 8:00-8:15 | 0 | 1 | 0 | 0 | 1 | 0 | 10 | 0 | 4 | 14 | 0 | 1 | 96 | 10 | 107 | 0 | 2 | 131 | 1 | 134 | 256 |
| 8:15-8:30 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 2 | 7 | 0 | 0 | 69 | 3 | 72 | 0 | 1 | 120 | 2 | 123 | 202 |
| 8:30-8:45 | 0 | 3 | 0 | 1 | 4 | 0 | 9 | 0 | 3 | 12 | 0 | 1 | 81 | 2 | 84 | 0 | 0 | 128 | 2 | 130 | 230 |
| 8:45-9:00 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 2 | 9 | 0 | 0 | 76 | 4 | 80 | 0 | 0 | 129 | 4 | 133 | 222 |
| 2 Hr Totals | 0 | 6 | 0 | 5 | 11 | 0 | 65 | 0 | 26 | 91 | 0 | 5 | 584 | 30 | 619 | 0 | 6 | 1048 | 13 | 1067 | 1788 |
| 1 Hr Totals | | | | | | | | | | | | | | | | | | | | | |
| 7:00-8:00 | 0 | 2 | 0 | 4 | 6 | 0 | 34 | 0 | 15 | 49 | 0 | 3 | 262 | 11 | 276 | 0 | 3 | 540 | 4 | 547 | 878 |
| 7:15-8:15 | 0 | 2 | 0 | 3 | 5 | 0 | 41 | 0 | 16 | 57 | 0 | 3 | 298 | 18 | 319 | 0 | 5 | 561 | 3 | 569 | 950 |
| 7:30-8:30 | 0 | 1 | 0 | 1 | 2 | 0 | 44 | 0 | 15 | 59 | 0 | 1 | 301 | 18 | 320 | 0 | 6 | 557 | 5 | 568 | 949 |
| 7:45-8:45 | 0 | 4 | 0 | 1 | 5 | 0 | 43 | 0 | 15 | 58 | 0 | 2 | 313 | 16 | 331 | 0 | 5 | 537 | 7 | 549 | 943 |
| 8:00-9:00 | 0 | 4 | 0 | 1 | 5 | 0 | 31 | 0 | 11 | 42 | 0 | 2 | 322 | 19 | 343 | 0 | 3 | 508 | 9 | 520 | 910 |
| PEAK HOUR | | | | | | | | | | | | | | | | | | | | | |
| 7:15-8:15 | 0 | 2 | 0 | 3 | 5 | 0 | 41 | 0 | 16 | 57 | 0 | 3 | 298 | 18 | 319 | 0 | 5 | 561 | 3 | 569 | 950 |
| %T & PHF | ##### | 0% | ##### | 0% | 0% | ##### | 5% | ##### | 0% | 4% | ##### | 0% | 11% | 0% | 10% | ##### | 60% | 4% | 0% | 4% | 0.928 |
| PM | | | | | | | | | | | | | | | | | | | | | |
| 4:00-4:15 | 0 | 4 | 0 | 1 | 5 | 0 | 11 | 2 | 1 | 14 | 1 | 3 | 161 | 3 | 168 | 0 | 4 | 122 | 0 | 126 | 313 |
| 4:15-4:30 | 0 | 0 | 0 | 1 | 1 | 1 | 8 | 0 | 3 | 12 | 0 | 1 | 156 | 4 | 161 | 0 | 2 | 112 | 1 | 115 | 289 |
| 4:30-4:45 | 0 | 2 | 0 | 0 | 2 | 1 | 10 | 0 | 0 | 11 | 1 | 2 | 165 | 7 | 175 | 0 | 4 | 120 | 1 | 125 | 313 |
| 4:45-5:00 | 0 | 2 | 0 | 1 | 3 | 0 | 6 | 0 | 3 | 9 | 0 | 0 | 126 | 14 | 140 | 0 | 0 | 147 | 0 | 147 | 299 |
| 5:00-5:15 | 0 | 0 | 0 | 1 | 1 | 0 | 9 | 0 | 0 | 9 | 1 | 0 | 161 | 14 | 176 | 0 | 7 | 152 | 1 | 160 | 346 |
| 5:15-5:30 | 0 | 2 | 0 | 1 | 3 | 0 | 4 | 0 | 3 | 7 | 1 | 0 | 167 | 9 | 177 | 0 | 2 | 123 | 1 | 126 | 313 |
| 5:30-5:45 | 0 | 1 | 0 | 0 | 1 | 0 | 7 | 0 | 1 | 8 | 1 | 0 | 150 | 5 | 156 | 0 | 5 | 102 | 0 | 107 | 272 |
| 5:45-6:00 | 0 | 2 | 0 | 1 | 3 | 0 | 6 | 0 | 0 | 6 | 1 | 0 | 163 | 14 | 178 | 0 | 3 | 116 | 0 | 119 | 306 |
| 2 Hr Totals | 0 | 13 | 0 | 6 | 19 | 2 | 61 | 2 | 11 | 76 | 6 | 6 | 1249 | 70 | 1331 | 0 | 27 | 994 | 4 | 1025 | 2451 |
| 1 Hr Totals | | | | | | | | | | | | | | | | | | | | | |
| 4:00-5:00 | 0 | 8 | 0 | 3 | 11 | 2 | 35 | 2 | 7 | 46 | 2 | 6 | 608 | 28 | 644 | 0 | 10 | 501 | 2 | 513 | 1214 |
| 4:15-5:15 | 0 | 4 | 0 | 3 | 7 | 2 | 33 | 0 | 6 | 41 | 2 | 3 | 608 | 39 | 652 | 0 | 13 | 531 | 3 | 547 | 1247 |
| 4:30-5:30 | 0 | 6 | 0 | 3 | 9 | 1 | 29 | 0 | 6 | 36 | 3 | 2 | 619 | 44 | 668 | 0 | 13 | 542 | 3 | 558 | 1271 |
| 4:45-5:45 | 0 | 5 | 0 | 3 | 8 | 0 | 26 | 0 | 7 | 33 | 3 | 0 | 604 | 42 | 649 | 0 | 14 | 524 | 2 | 540 | 1230 |
| 5:00-6:00 | 0 | 5 | 0 | 3 | 8 | 0 | 26 | 0 | 4 | 30 | 4 | 0 | 641 | 42 | 687 | 0 | 17 | 493 | 2 | 512 | 1237 |
| PEAK HOUR | | | | | | | | | | | | | | | | | | | | | |
| 4:30-5:30 | 0 | 6 | 0 | 3 | 9 | 1 | 29 | 0 | 6 | 36 | 3 | 2 | 619 | 44 | 668 | 0 | 13 | 542 | 3 | 558 | 1271 |
| %T & PHF | ##### | 0% | ##### | 0% | 0% | 0% | 0% | ##### | 0% | 0% | 33% | 0% | 2% | 2% | 2% | ##### | 8% | 4% | 0% | 4% | 0.918 |

TOTALS TURNING MOVEMENT COUNT - SUMMARY

Intersection of: Route 60 (Richmond Road)
and: Bicast Publishing Access
Location: James City County, VA

Counted by: VCU
Date: September 13, 2022
Weather: Partly Cloud, Warm
Entered by: ARG

Tuesday

Star Rating: 4



| TIME | EASTBOUND on: Bicast Publishing | | | | | WESTBOUND on: | | | | | NORTHBOUND on: Route 60 | | | | | SOUTHBOUND on: Route 60 | | | | | TOTAL N + S + E + W | |
|---------------------|------------------------------------|------|-------|-------|-------|------------------|-------|-------|-------|-------|----------------------------|------|------|-------|-------|----------------------------|-------|------|-------|-------|------------------------------|--|
| | U-TN | LEFT | THRU | RIGHT | TOTAL | U-TN | LEFT | THRU | RIGHT | TOTAL | U-TN | LEFT | THRU | RIGHT | TOTAL | U-TN | LEFT | THRU | RIGHT | TOTAL | | |
| AM | | | | | | | | | | | | | | | | | | | | | | |
| 7:00-7:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 63 | 0 | 63 | 0 | 0 | 128 | 0 | 128 | 191 | |
| 7:15-7:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 74 | 0 | 74 | 0 | 0 | 125 | 0 | 125 | 199 | |
| 7:30-7:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 70 | 0 | 70 | 0 | 0 | 152 | 1 | 153 | 223 | |
| 7:45-8:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 68 | 0 | 69 | 1 | 0 | 176 | 1 | 178 | 247 | |
| 8:00-8:15 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 103 | 0 | 104 | 1 | 0 | 140 | 0 | 141 | 246 | |
| 8:15-8:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 74 | 0 | 74 | 0 | 0 | 130 | 0 | 130 | 204 | |
| 8:30-8:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 83 | 0 | 84 | 0 | 0 | 136 | 0 | 136 | 220 | |
| 8:45-9:00 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 82 | 0 | 83 | 0 | 0 | 128 | 1 | 129 | 213 | |
| 2 Hr Totals | 0 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 617 | 0 | 621 | 2 | 0 | 1115 | 3 | 1120 | 1743 | |
| 1 Hr Totals | | | | | | | | | | | | | | | | | | | | | | |
| 7:00-8:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 275 | 0 | 276 | 1 | 0 | 581 | 2 | 584 | 860 | |
| 7:15-8:15 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 315 | 0 | 317 | 2 | 0 | 593 | 2 | 597 | 915 | |
| 7:30-8:30 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 315 | 0 | 317 | 2 | 0 | 598 | 2 | 602 | 920 | |
| 7:45-8:45 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 328 | 0 | 331 | 2 | 0 | 582 | 1 | 585 | 917 | |
| 8:00-9:00 | 0 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 342 | 0 | 345 | 1 | 0 | 534 | 1 | 536 | 883 | |
| PEAK HOUR | | | | | | | | | | | | | | | | | | | | | | |
| 7:30-8:30 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 315 | 0 | 317 | 2 | 0 | 598 | 2 | 602 | 920 | |
| %T & PHF | ##### | 0% | ##### | ##### | 0% | ##### | ##### | ##### | ##### | ##### | ##### | 0% | 10% | ##### | 10% | 0% | ##### | 5% | 0% | 5% | 0.931 | |
| PM | | | | | | | | | | | | | | | | | | | | | | |
| 4:00-4:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 167 | 0 | 168 | 0 | 0 | 124 | 0 | 124 | 292 | |
| 4:15-4:30 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 172 | 0 | 172 | 0 | 0 | 126 | 0 | 126 | 299 | |
| 4:30-4:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 176 | 0 | 177 | 1 | 0 | 120 | 0 | 121 | 298 | |
| 4:45-5:00 | 0 | 3 | 0 | 1 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 139 | 0 | 139 | 0 | 0 | 153 | 1 | 154 | 297 | |
| 5:00-5:15 | 0 | 1 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 171 | 0 | 171 | 2 | 0 | 167 | 0 | 169 | 342 | |
| 5:15-5:30 | 0 | 2 | 0 | 2 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 168 | 0 | 169 | 3 | 0 | 126 | 0 | 129 | 302 | |
| 5:30-5:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 164 | 0 | 164 | 0 | 0 | 117 | 0 | 117 | 281 | |
| 5:45-6:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 170 | 0 | 170 | 0 | 0 | 115 | 0 | 115 | 285 | |
| 2 Hr Totals | 0 | 6 | 0 | 5 | 11 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 1327 | 0 | 1330 | 6 | 0 | 1048 | 1 | 1055 | 2396 | |
| 1 Hr Totals | | | | | | | | | | | | | | | | | | | | | | |
| 4:00-5:00 | 0 | 3 | 0 | 2 | 5 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 654 | 0 | 656 | 1 | 0 | 523 | 1 | 525 | 1186 | |
| 4:15-5:15 | 0 | 4 | 0 | 3 | 7 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 658 | 0 | 659 | 3 | 0 | 566 | 1 | 570 | 1236 | |
| 4:30-5:30 | 0 | 6 | 0 | 4 | 10 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 654 | 0 | 656 | 6 | 0 | 566 | 1 | 573 | 1239 | |
| 4:45-5:45 | 0 | 6 | 0 | 4 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 642 | 0 | 643 | 5 | 0 | 563 | 1 | 569 | 1222 | |
| 5:00-6:00 | 0 | 3 | 0 | 3 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 673 | 0 | 674 | 5 | 0 | 525 | 0 | 530 | 1210 | |
| PEAK HOUR | | | | | | | | | | | | | | | | | | | | | | |
| 4:30-5:30 | 0 | 6 | 0 | 4 | 10 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 654 | 0 | 656 | 6 | 0 | 566 | 1 | 573 | 1239 | |
| %T & PHF | ##### | 0% | ##### | 0% | 0% | ##### | ##### | ##### | ##### | ##### | 0% | 0% | 2% | ##### | 2% | 0% | ##### | 4% | 0% | 4% | 0.906 | |

TOTALS TURNING MOVEMENT COUNT - SUMMARY

Intersection of: Route 30 (Rochambeau Drive)
and: Preston Lane/Geddy Terrace
Location: James City County, VA

Counted by: VCU
Date: September 13, 2022
Weather: Partly Cloud, Warm
Entered by: ARG

Tuesday

Star Rating: 4



| TIME | EASTBOUND on: Route 30 | | | | | WESTBOUND on: Route 30 | | | | | NORTHBOUND on: Geddy Terrace | | | | | SOUTHBOUND on: Preston Lane | | | | | TOTAL N + S + E + W |
|--------------------|---------------------------|------|------|-------|-------|---------------------------|------|------|-------|-------|---------------------------------|------|------|-------|-------|--------------------------------|------|------|-------|-------|------------------------------|
| | U-TN | LEFT | THRU | RIGHT | TOTAL | U-TN | LEFT | THRU | RIGHT | TOTAL | U-TN | LEFT | THRU | RIGHT | TOTAL | U-TN | LEFT | THRU | RIGHT | TOTAL | |
| AM | | | | | | | | | | | | | | | | | | | | | |
| 7:00-7:15 | 0 | 0 | 74 | 0 | 74 | 0 | 1 | 28 | 2 | 31 | 0 | 0 | 0 | 4 | 4 | 0 | 6 | 0 | 2 | 8 | 117 |
| 7:15-7:30 | 0 | 2 | 63 | 0 | 65 | 0 | 0 | 35 | 2 | 37 | 0 | 2 | 0 | 6 | 8 | 0 | 11 | 0 | 3 | 14 | 124 |
| 7:30-7:45 | 0 | 1 | 66 | 1 | 68 | 0 | 3 | 44 | 0 | 47 | 0 | 0 | 0 | 4 | 4 | 0 | 8 | 0 | 2 | 10 | 129 |
| 7:45-8:00 | 0 | 1 | 71 | 0 | 72 | 0 | 2 | 59 | 3 | 64 | 0 | 1 | 0 | 3 | 4 | 0 | 3 | 1 | 8 | 12 | 152 |
| 8:00-8:15 | 0 | 0 | 97 | 0 | 97 | 0 | 1 | 67 | 2 | 70 | 0 | 1 | 0 | 3 | 4 | 0 | 7 | 2 | 2 | 11 | 182 |
| 8:15-8:30 | 0 | 0 | 50 | 0 | 50 | 0 | 2 | 25 | 3 | 30 | 0 | 0 | 0 | 3 | 3 | 0 | 2 | 0 | 2 | 4 | 87 |
| 8:30-8:45 | 0 | 1 | 78 | 0 | 79 | 1 | 0 | 30 | 2 | 33 | 0 | 1 | 0 | 5 | 6 | 0 | 4 | 0 | 4 | 8 | 126 |
| 8:45-9:00 | 0 | 3 | 50 | 0 | 53 | 0 | 6 | 81 | 5 | 92 | 0 | 1 | 0 | 6 | 7 | 0 | 4 | 0 | 2 | 6 | 158 |
| 2 Hr Totals | 0 | 8 | 549 | 1 | 558 | 1 | 15 | 369 | 19 | 404 | 0 | 6 | 0 | 34 | 40 | 0 | 45 | 3 | 25 | 73 | 1075 |
| 1 Hr Totals | | | | | | | | | | | | | | | | | | | | | |
| 7:00-8:00 | 0 | 4 | 274 | 1 | 279 | 0 | 6 | 166 | 7 | 179 | 0 | 3 | 0 | 17 | 20 | 0 | 28 | 1 | 15 | 44 | 522 |
| 7:15-8:15 | 0 | 4 | 297 | 1 | 302 | 0 | 6 | 205 | 7 | 218 | 0 | 4 | 0 | 16 | 20 | 0 | 29 | 3 | 15 | 47 | 587 |
| 7:30-8:30 | 0 | 2 | 284 | 1 | 287 | 0 | 8 | 195 | 8 | 211 | 0 | 2 | 0 | 13 | 15 | 0 | 20 | 3 | 14 | 37 | 550 |
| 7:45-8:45 | 0 | 2 | 296 | 0 | 298 | 1 | 5 | 181 | 10 | 197 | 0 | 3 | 0 | 14 | 17 | 0 | 16 | 3 | 16 | 35 | 547 |
| 8:00-9:00 | 0 | 4 | 275 | 0 | 279 | 1 | 9 | 203 | 12 | 225 | 0 | 3 | 0 | 17 | 20 | 0 | 17 | 2 | 10 | 29 | 553 |
| PEAK HOUR | | | | | | | | | | | | | | | | | | | | | |
| 7:15-8:15 | 0 | 4 | 297 | 1 | 302 | 0 | 6 | 205 | 7 | 218 | 0 | 4 | 0 | 16 | 20 | 0 | 29 | 3 | 15 | 47 | 587 |
| PM | | | | | | | | | | | | | | | | | | | | | |
| 4:00-4:15 | 0 | 3 | 43 | 0 | 46 | 1 | 7 | 71 | 6 | 85 | 0 | 1 | 0 | 0 | 1 | 0 | 3 | 0 | 4 | 7 | 139 |
| 4:15-4:30 | 0 | 1 | 65 | 2 | 68 | 0 | 4 | 73 | 4 | 81 | 0 | 0 | 0 | 3 | 3 | 0 | 3 | 1 | 4 | 8 | 160 |
| 4:30-4:45 | 2 | 3 | 56 | 0 | 61 | 0 | 5 | 77 | 4 | 86 | 0 | 1 | 0 | 1 | 2 | 0 | 2 | 0 | 2 | 4 | 153 |
| 4:45-5:00 | 0 | 3 | 61 | 0 | 64 | 0 | 3 | 74 | 6 | 83 | 0 | 0 | 0 | 4 | 4 | 0 | 1 | 0 | 2 | 3 | 154 |
| 5:00-5:15 | 0 | 0 | 64 | 1 | 65 | 1 | 2 | 79 | 6 | 88 | 0 | 1 | 0 | 3 | 4 | 0 | 7 | 0 | 0 | 7 | 164 |
| 5:15-5:30 | 0 | 2 | 45 | 0 | 47 | 0 | 5 | 84 | 2 | 91 | 0 | 1 | 0 | 2 | 3 | 0 | 1 | 0 | 1 | 2 | 143 |
| 5:30-5:45 | 1 | 2 | 41 | 1 | 45 | 0 | 5 | 84 | 3 | 92 | 0 | 1 | 0 | 8 | 9 | 0 | 1 | 0 | 1 | 2 | 148 |
| 5:45-6:00 | 0 | 3 | 42 | 1 | 46 | 0 | 7 | 66 | 8 | 81 | 0 | 2 | 0 | 0 | 2 | 0 | 1 | 2 | 0 | 3 | 132 |
| 2 Hr Totals | 3 | 17 | 417 | 5 | 442 | 2 | 38 | 608 | 39 | 687 | 0 | 7 | 0 | 21 | 28 | 0 | 19 | 3 | 14 | 36 | 1193 |
| 1 Hr Totals | | | | | | | | | | | | | | | | | | | | | |
| 4:00-5:00 | 2 | 10 | 225 | 2 | 239 | 1 | 19 | 295 | 20 | 335 | 0 | 2 | 0 | 8 | 10 | 0 | 9 | 1 | 12 | 22 | 606 |
| 4:15-5:15 | 2 | 7 | 246 | 3 | 258 | 1 | 14 | 303 | 20 | 338 | 0 | 2 | 0 | 11 | 13 | 0 | 13 | 1 | 8 | 22 | 631 |
| 4:30-5:30 | 2 | 8 | 226 | 1 | 237 | 1 | 15 | 314 | 18 | 348 | 0 | 3 | 0 | 10 | 13 | 0 | 11 | 0 | 5 | 16 | 614 |
| 4:45-5:45 | 1 | 7 | 211 | 2 | 221 | 1 | 15 | 321 | 17 | 354 | 0 | 3 | 0 | 17 | 20 | 0 | 10 | 0 | 4 | 14 | 609 |
| 5:00-6:00 | 1 | 7 | 192 | 3 | 203 | 1 | 19 | 313 | 19 | 352 | 0 | 5 | 0 | 13 | 18 | 0 | 10 | 2 | 2 | 14 | 587 |
| PEAK HOUR | | | | | | | | | | | | | | | | | | | | | |
| 4:15-5:15 | 2 | 7 | 246 | 3 | 258 | 1 | 14 | 303 | 20 | 338 | 0 | 2 | 0 | 11 | 13 | 0 | 13 | 1 | 8 | 22 | 631 |

TOTALS TURNING MOVEMENT COUNT - SUMMARY

Intersection of: Route 30 (Rochembeau Drive)
and: Hickory Neck Blvd
Location: James City County, VA

Counted by: VCU
Date: September 13, 2022
Weather: Partly Cloud, Warm
Entered by: ARG

Tuesday

Star Rating: 4



| TIME | EASTBOUND | | | | | WESTBOUND | | | | | NORTHBOUND | | | | | SOUTHBOUND | | | | | TOTAL N + S + E + W |
|--------------------|--------------|------|------|-------|-------|--------------|------|------|-------|-------|-----------------------|------|------|-------|-------|------------|------|------|-------|-------|------------------------------|
| | on: Route 30 | | | | | on: Route 30 | | | | | on: Hickory Neck Blvd | | | | | on: | | | | | |
| | U-TN | LEFT | THRU | RIGHT | TOTAL | U-TN | LEFT | THRU | RIGHT | TOTAL | U-TN | LEFT | THRU | RIGHT | TOTAL | U-TN | LEFT | THRU | RIGHT | TOTAL | |
| AM | | | | | | | | | | | | | | | | | | | | | |
| 7:00-7:15 | 0 | 0 | 86 | 0 | 86 | 23 | 2 | 30 | 0 | 55 | 0 | 1 | 0 | 13 | 14 | 0 | 0 | 0 | 0 | 0 | 155 |
| 7:15-7:30 | 0 | 0 | 78 | 0 | 78 | 26 | 2 | 38 | 0 | 66 | 0 | 1 | 0 | 13 | 14 | 0 | 0 | 0 | 0 | 0 | 158 |
| 7:30-7:45 | 0 | 0 | 82 | 0 | 82 | 22 | 3 | 44 | 0 | 69 | 0 | 1 | 0 | 4 | 5 | 0 | 0 | 0 | 0 | 0 | 156 |
| 7:45-8:00 | 0 | 0 | 74 | 2 | 76 | 24 | 7 | 57 | 0 | 88 | 0 | 6 | 0 | 8 | 14 | 0 | 0 | 0 | 0 | 0 | 178 |
| 8:00-8:15 | 0 | 0 | 100 | 0 | 100 | 23 | 4 | 69 | 0 | 96 | 0 | 1 | 0 | 7 | 8 | 0 | 0 | 0 | 0 | 0 | 204 |
| 8:15-8:30 | 0 | 0 | 57 | 0 | 57 | 19 | 3 | 30 | 0 | 52 | 0 | 0 | 0 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 118 |
| 8:30-8:45 | 0 | 0 | 84 | 1 | 85 | 24 | 3 | 34 | 0 | 61 | 0 | 0 | 0 | 16 | 16 | 0 | 0 | 0 | 0 | 0 | 162 |
| 8:45-9:00 | 0 | 0 | 61 | 2 | 63 | 23 | 9 | 88 | 0 | 120 | 0 | 2 | 0 | 9 | 11 | 0 | 0 | 0 | 0 | 0 | 194 |
| 2 Hr Totals | 0 | 0 | 622 | 5 | 627 | 184 | 33 | 390 | 0 | 607 | 0 | 12 | 0 | 79 | 91 | 0 | 0 | 0 | 0 | 0 | 1325 |
| 1 Hr Totals | | | | | | | | | | | | | | | | | | | | | |
| 7:00-8:00 | 0 | 0 | 320 | 2 | 322 | 95 | 14 | 169 | 0 | 278 | 0 | 9 | 0 | 38 | 47 | 0 | 0 | 0 | 0 | 0 | 647 |
| 7:15-8:15 | 0 | 0 | 334 | 2 | 336 | 95 | 16 | 208 | 0 | 319 | 0 | 9 | 0 | 32 | 41 | 0 | 0 | 0 | 0 | 0 | 696 |
| 7:30-8:30 | 0 | 0 | 313 | 2 | 315 | 88 | 17 | 200 | 0 | 305 | 0 | 8 | 0 | 28 | 36 | 0 | 0 | 0 | 0 | 0 | 656 |
| 7:45-8:45 | 0 | 0 | 315 | 3 | 318 | 90 | 17 | 190 | 0 | 297 | 0 | 7 | 0 | 40 | 47 | 0 | 0 | 0 | 0 | 0 | 662 |
| 8:00-9:00 | 0 | 0 | 302 | 3 | 305 | 89 | 19 | 221 | 0 | 329 | 0 | 3 | 0 | 41 | 44 | 0 | 0 | 0 | 0 | 0 | 678 |
| PEAK HOUR | | | | | | | | | | | | | | | | | | | | | |
| 7:15-8:15 | 0 | 0 | 334 | 2 | 336 | 95 | 16 | 208 | 0 | 319 | 0 | 9 | 0 | 32 | 41 | 0 | 0 | 0 | 0 | 0 | 696 |
| PM | | | | | | | | | | | | | | | | | | | | | |
| 4:00-4:15 | 0 | 0 | 46 | 1 | 47 | 13 | 7 | 84 | 0 | 104 | 0 | 2 | 0 | 5 | 7 | 0 | 0 | 0 | 0 | 0 | 158 |
| 4:15-4:30 | 0 | 0 | 70 | 1 | 71 | 7 | 6 | 83 | 0 | 96 | 0 | 0 | 0 | 5 | 5 | 0 | 0 | 0 | 0 | 0 | 172 |
| 4:30-4:45 | 0 | 0 | 57 | 1 | 58 | 13 | 8 | 87 | 0 | 108 | 0 | 0 | 0 | 7 | 7 | 0 | 0 | 0 | 0 | 0 | 173 |
| 4:45-5:00 | 0 | 0 | 66 | 0 | 66 | 13 | 8 | 83 | 0 | 104 | 0 | 1 | 0 | 3 | 4 | 0 | 0 | 0 | 0 | 0 | 174 |
| 5:00-5:15 | 0 | 0 | 71 | 1 | 72 | 21 | 5 | 87 | 0 | 113 | 0 | 1 | 0 | 6 | 7 | 0 | 0 | 0 | 0 | 0 | 192 |
| 5:15-5:30 | 0 | 0 | 49 | 0 | 49 | 11 | 15 | 88 | 0 | 114 | 0 | 0 | 0 | 7 | 7 | 0 | 0 | 0 | 0 | 0 | 170 |
| 5:30-5:45 | 0 | 0 | 47 | 1 | 48 | 15 | 7 | 88 | 0 | 110 | 0 | 2 | 0 | 2 | 4 | 0 | 0 | 0 | 0 | 0 | 162 |
| 5:45-6:00 | 0 | 0 | 44 | 0 | 44 | 8 | 5 | 80 | 0 | 93 | 0 | 0 | 0 | 7 | 7 | 0 | 0 | 0 | 0 | 0 | 144 |
| 2 Hr Totals | 0 | 0 | 450 | 5 | 455 | 101 | 61 | 680 | 0 | 842 | 0 | 6 | 0 | 42 | 48 | 0 | 0 | 0 | 0 | 0 | 1345 |
| 1 Hr Totals | | | | | | | | | | | | | | | | | | | | | |
| 4:00-5:00 | 0 | 0 | 239 | 3 | 242 | 46 | 29 | 337 | 0 | 412 | 0 | 3 | 0 | 20 | 23 | 0 | 0 | 0 | 0 | 0 | 677 |
| 4:15-5:15 | 0 | 0 | 264 | 3 | 267 | 54 | 27 | 340 | 0 | 421 | 0 | 2 | 0 | 21 | 23 | 0 | 0 | 0 | 0 | 0 | 711 |
| 4:30-5:30 | 0 | 0 | 243 | 2 | 245 | 58 | 36 | 345 | 0 | 439 | 0 | 2 | 0 | 23 | 25 | 0 | 0 | 0 | 0 | 0 | 709 |
| 4:45-5:45 | 0 | 0 | 233 | 2 | 235 | 60 | 35 | 346 | 0 | 441 | 0 | 4 | 0 | 18 | 22 | 0 | 0 | 0 | 0 | 0 | 698 |
| 5:00-6:00 | 0 | 0 | 211 | 2 | 213 | 55 | 32 | 343 | 0 | 430 | 0 | 3 | 0 | 22 | 25 | 0 | 0 | 0 | 0 | 0 | 668 |
| PEAK HOUR | | | | | | | | | | | | | | | | | | | | | |
| 4:15-5:15 | 0 | 0 | 264 | 3 | 267 | 54 | 27 | 340 | 0 | 421 | 0 | 2 | 0 | 21 | 23 | 0 | 0 | 0 | 0 | 0 | 711 |

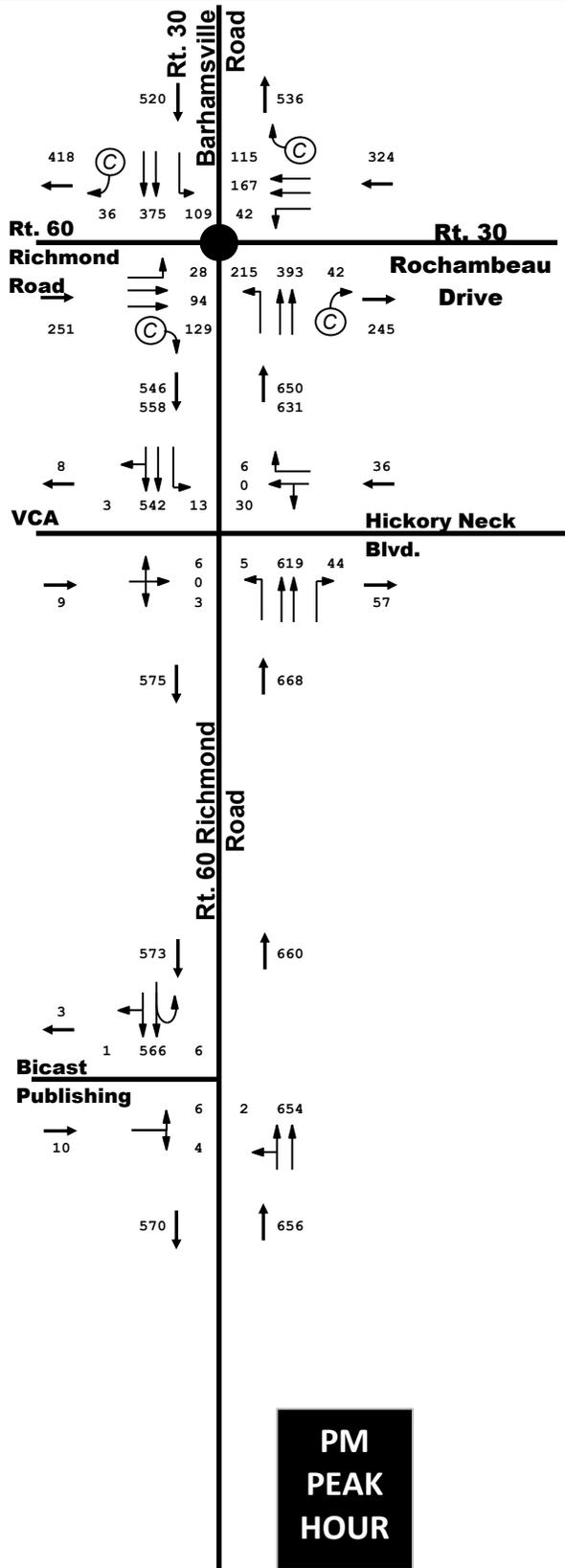
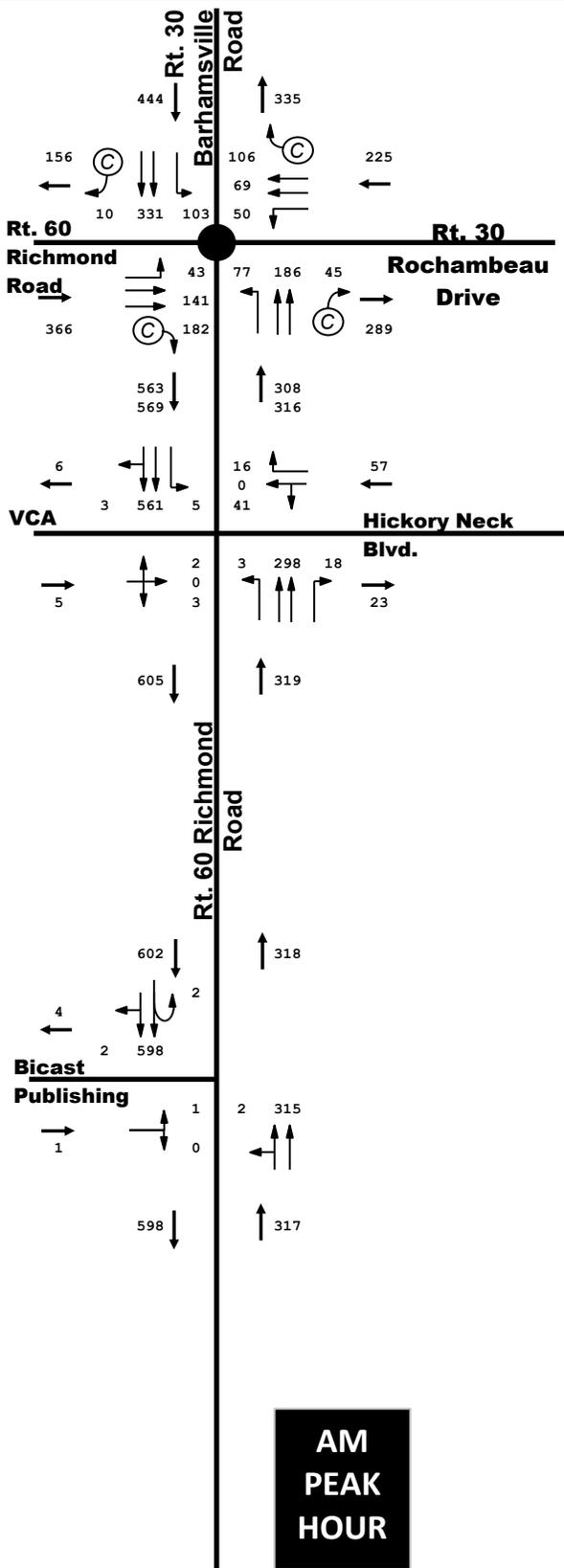


Exhibit Reference

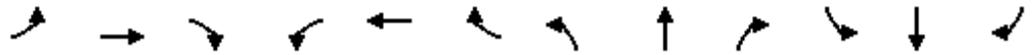
2022 PEAK HOUR COUNTS
 WITHOUT BALANCE

DRW Consultants, LLC
 804-794-7312

Exhibit F

HCM 6th Signalized Intersection Summary

1: Rt. 60 Richmond Road & Rt. 30 Rochambeau Drive & Rt. 30 Barhamsville Road



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | ↘ | ↑↑ | ↗ | ↘ | ↑↑ | ↗ | ↘ | ↑↑ | ↗ | ↘ | ↑↑ | |
| Traffic Volume (veh/h) | 43 | 141 | 182 | 50 | 69 | 106 | 77 | 194 | 45 | 103 | 337 | 10 |
| Future Volume (veh/h) | 43 | 141 | 182 | 50 | 69 | 106 | 77 | 194 | 45 | 103 | 337 | 10 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1826 | 1826 | 1841 | 1870 | 1693 | 1870 | 1752 | 1722 | 1707 | 1885 | 1826 | 1900 |
| Adj Flow Rate, veh/h | 47 | 153 | 0 | 54 | 75 | 0 | 84 | 211 | 0 | 112 | 366 | 0 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 5 | 5 | 4 | 2 | 14 | 2 | 10 | 12 | 13 | 1 | 5 | 0 |
| Cap, veh/h | 224 | 757 | | 213 | 672 | | 281 | 684 | | 257 | 725 | |
| Arrive On Green | 0.13 | 0.22 | 0.00 | 0.12 | 0.21 | 0.00 | 0.17 | 0.21 | 0.00 | 0.14 | 0.21 | 0.00 |
| Sat Flow, veh/h | 1739 | 3469 | 1560 | 1781 | 3216 | 1585 | 1668 | 3272 | 1447 | 1795 | 3561 | 0 |
| Grp Volume(v), veh/h | 47 | 153 | 0 | 54 | 75 | 0 | 84 | 211 | 0 | 112 | 366 | 0 |
| Grp Sat Flow(s),veh/h/ln | 1739 | 1735 | 1560 | 1781 | 1608 | 1585 | 1668 | 1636 | 1447 | 1795 | 1735 | 0 |
| Q Serve(g_s), s | 1.4 | 2.2 | 0.0 | 1.6 | 1.1 | 0.0 | 2.6 | 3.3 | 0.0 | 3.4 | 5.6 | 0.0 |
| Cycle Q Clear(g_c), s | 1.4 | 2.2 | 0.0 | 1.6 | 1.1 | 0.0 | 2.6 | 3.3 | 0.0 | 3.4 | 5.6 | 0.0 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 0.00 |
| Lane Grp Cap(c), veh/h | 224 | 757 | | 213 | 672 | | 281 | 684 | | 257 | 725 | |
| V/C Ratio(X) | 0.21 | 0.20 | | 0.25 | 0.11 | | 0.30 | 0.31 | | 0.44 | 0.50 | |
| Avail Cap(c_a), veh/h | 349 | 958 | | 238 | 672 | | 281 | 794 | | 270 | 842 | |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 |
| Uniform Delay (d), s/veh | 23.3 | 19.1 | 0.0 | 23.9 | 19.1 | 0.0 | 21.8 | 20.0 | 0.0 | 23.4 | 20.9 | 0.0 |
| Incr Delay (d2), s/veh | 0.2 | 0.2 | 0.0 | 0.2 | 0.1 | 0.0 | 0.2 | 0.4 | 0.0 | 0.4 | 0.8 | 0.0 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.5 | 0.7 | 0.0 | 0.6 | 0.4 | 0.0 | 0.9 | 1.1 | 0.0 | 1.3 | 1.9 | 0.0 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 23.5 | 19.3 | 0.0 | 24.1 | 19.2 | 0.0 | 22.0 | 20.3 | 0.0 | 23.8 | 21.7 | 0.0 |
| LnGrp LOS | C | B | | C | B | | C | C | | C | C | |
| Approach Vol, veh/h | | 200 | | | 129 | | | 295 | | | 478 | |
| Approach Delay, s/veh | | 20.3 | | | 21.3 | | | 20.8 | | | 22.2 | |
| Approach LOS | | C | | | C | | | C | | | C | |
| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 12.6 | 18.0 | 12.2 | 17.1 | 14.1 | 16.5 | 12.7 | 16.5 | | | | |
| Change Period (Y+Rc), s | 8.0 | * 8 | 10.0 | 6.5 | 8.0 | 6.5 | 10.0 | 6.5 | | | | |
| Max Green Setting (Gmax), s | 5.0 | * 12 | 3.0 | 14.0 | 5.0 | 12.0 | 7.0 | 10.0 | | | | |
| Max Q Clear Time (g_c+I1), s | 5.4 | 5.3 | 3.6 | 4.2 | 4.6 | 7.6 | 3.4 | 3.1 | | | | |
| Green Ext Time (p_c), s | 0.0 | 0.7 | 0.0 | 0.6 | 0.0 | 1.0 | 0.0 | 0.2 | | | | |

Intersection Summary

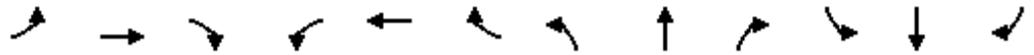
| | |
|--------------------|------|
| HCM 6th Ctrl Delay | 21.4 |
| HCM 6th LOS | C |

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
 Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary

1: Rt. 60 Richmond Road & Rt. 30 Rochambeau Drive & Rt. 30 Barhamsville Road



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 28 | 94 | 129 | 42 | 167 | 115 | 215 | 393 | 42 | 109 | 387 | 36 |
| Future Volume (veh/h) | 28 | 94 | 129 | 42 | 167 | 115 | 215 | 393 | 42 | 109 | 387 | 36 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1900 | 1900 | 1841 | 1870 | 1885 | 1870 | 1856 | 1870 | 1900 | 1856 | 1841 | 1856 |
| Adj Flow Rate, veh/h | 29 | 98 | 0 | 44 | 174 | 0 | 215 | 409 | 0 | 114 | 403 | 0 |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 1.00 | 1.00 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Percent Heavy Veh, % | 0 | 0 | 4 | 2 | 1 | 2 | 3 | 2 | 0 | 3 | 4 | 3 |
| Cap, veh/h | 209 | 764 | | 200 | 747 | | 324 | 789 | | 257 | 730 | |
| Arrive On Green | 0.12 | 0.21 | 0.00 | 0.11 | 0.21 | 0.00 | 0.18 | 0.22 | 0.00 | 0.15 | 0.21 | 0.00 |
| Sat Flow, veh/h | 1810 | 3610 | 1560 | 1781 | 3582 | 1585 | 1767 | 3554 | 1610 | 1767 | 3589 | 0 |
| Grp Volume(v), veh/h | 29 | 98 | 0 | 44 | 174 | 0 | 215 | 409 | 0 | 114 | 403 | 0 |
| Grp Sat Flow(s),veh/h/ln | 1810 | 1805 | 1560 | 1781 | 1791 | 1585 | 1767 | 1777 | 1610 | 1767 | 1749 | 0 |
| Q Serve(g_s), s | 0.9 | 1.3 | 0.0 | 1.3 | 2.4 | 0.0 | 6.8 | 6.1 | 0.0 | 3.5 | 6.2 | 0.0 |
| Cycle Q Clear(g_c), s | 0.9 | 1.3 | 0.0 | 1.3 | 2.4 | 0.0 | 6.8 | 6.1 | 0.0 | 3.5 | 6.2 | 0.0 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 0.00 |
| Lane Grp Cap(c), veh/h | 209 | 764 | | 200 | 747 | | 324 | 789 | | 257 | 730 | |
| V/C Ratio(X) | 0.14 | 0.13 | | 0.22 | 0.23 | | 0.66 | 0.52 | | 0.44 | 0.55 | |
| Avail Cap(c_a), veh/h | 362 | 994 | | 238 | 747 | | 324 | 860 | | 265 | 730 | |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 |
| Uniform Delay (d), s/veh | 23.8 | 19.1 | 0.0 | 24.2 | 19.7 | 0.0 | 22.7 | 20.5 | 0.0 | 23.4 | 21.2 | 0.0 |
| Incr Delay (d2), s/veh | 0.1 | 0.1 | 0.0 | 0.2 | 0.2 | 0.0 | 4.0 | 0.8 | 0.0 | 0.4 | 1.2 | 0.0 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.3 | 0.5 | 0.0 | 0.5 | 0.9 | 0.0 | 2.7 | 2.2 | 0.0 | 1.3 | 2.2 | 0.0 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 23.9 | 19.2 | 0.0 | 24.4 | 19.9 | 0.0 | 26.8 | 21.2 | 0.0 | 23.8 | 22.4 | 0.0 |
| LnGrp LOS | C | B | | C | B | | C | C | | C | C | |
| Approach Vol, veh/h | | 127 | | | 218 | | | 624 | | | 517 | |
| Approach Delay, s/veh | | 20.3 | | | 20.8 | | | 23.1 | | | 22.7 | |
| Approach LOS | | C | | | C | | | C | | | C | |
| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 12.7 | 18.8 | 11.7 | 16.7 | 15.0 | 16.5 | 11.9 | 16.5 | | | | |
| Change Period (Y+Rc), s | 8.0 | * 8 | 10.0 | 6.5 | 8.0 | 6.5 | 10.0 | 6.5 | | | | |
| Max Green Setting (Gmax), s | 5.0 | * 12 | 3.0 | 14.0 | 7.0 | 10.0 | 7.0 | 10.0 | | | | |
| Max Q Clear Time (g_c+I1), s | 5.5 | 8.1 | 3.3 | 3.3 | 8.8 | 8.2 | 2.9 | 4.4 | | | | |
| Green Ext Time (p_c), s | 0.0 | 1.1 | 0.0 | 0.4 | 0.0 | 0.5 | 0.0 | 0.5 | | | | |

Intersection Summary

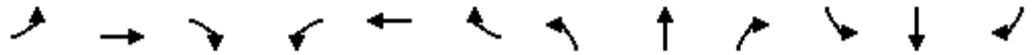
| | |
|--------------------|------|
| HCM 6th Ctrl Delay | 22.4 |
| HCM 6th LOS | C |

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
 Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary

1: Rt. 60 Richmond Road & Rt. 30 Rochambeau Drive & Rt. 30 Barhamsville Road



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | ↘ | ↑↑ | ↗ | ↘ | ↑↑ | ↗ | ↘ | ↑↑ | ↗ | ↘ | ↑↑ | ↗ |
| Traffic Volume (veh/h) | 122 | 148 | 191 | 53 | 72 | 301 | 81 | 550 | 47 | 220 | 718 | 22 |
| Future Volume (veh/h) | 122 | 148 | 191 | 53 | 72 | 301 | 81 | 550 | 47 | 220 | 718 | 22 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1826 | 1826 | 1841 | 1870 | 1693 | 1870 | 1752 | 1722 | 1707 | 1885 | 1826 | 1900 |
| Adj Flow Rate, veh/h | 133 | 161 | 0 | 58 | 78 | 0 | 88 | 598 | 0 | 239 | 780 | 0 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 5 | 5 | 4 | 2 | 14 | 2 | 10 | 12 | 13 | 1 | 5 | 0 |
| Cap, veh/h | 269 | 733 | | 186 | 518 | | 260 | 827 | | 347 | 1074 | |
| Arrive On Green | 0.15 | 0.21 | 0.00 | 0.10 | 0.16 | 0.00 | 0.16 | 0.25 | 0.00 | 0.19 | 0.31 | 0.00 |
| Sat Flow, veh/h | 1739 | 3469 | 1560 | 1781 | 3216 | 1585 | 1668 | 3272 | 1447 | 1795 | 3561 | 0 |
| Grp Volume(v), veh/h | 133 | 161 | 0 | 58 | 78 | 0 | 88 | 598 | 0 | 239 | 780 | 0 |
| Grp Sat Flow(s),veh/h/ln | 1739 | 1735 | 1560 | 1781 | 1608 | 1585 | 1668 | 1636 | 1447 | 1795 | 1735 | 0 |
| Q Serve(g_s), s | 5.4 | 3.0 | 0.0 | 2.3 | 1.6 | 0.0 | 3.6 | 13.0 | 0.0 | 9.6 | 15.5 | 0.0 |
| Cycle Q Clear(g_c), s | 5.4 | 3.0 | 0.0 | 2.3 | 1.6 | 0.0 | 3.6 | 13.0 | 0.0 | 9.6 | 15.5 | 0.0 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 0.00 |
| Lane Grp Cap(c), veh/h | 269 | 733 | | 186 | 518 | | 260 | 827 | | 347 | 1074 | |
| V/C Ratio(X) | 0.49 | 0.22 | | 0.31 | 0.15 | | 0.34 | 0.72 | | 0.69 | 0.73 | |
| Avail Cap(c_a), veh/h | 269 | 733 | | 230 | 539 | | 260 | 970 | | 347 | 1296 | |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 |
| Uniform Delay (d), s/veh | 30.0 | 25.3 | 0.0 | 32.2 | 28.0 | 0.0 | 29.2 | 26.5 | 0.0 | 29.1 | 23.9 | 0.0 |
| Incr Delay (d2), s/veh | 0.5 | 0.2 | 0.0 | 0.4 | 0.2 | 0.0 | 0.3 | 2.6 | 0.0 | 4.7 | 2.0 | 0.0 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 2.1 | 1.1 | 0.0 | 0.9 | 0.6 | 0.0 | 1.3 | 4.7 | 0.0 | 4.1 | 5.8 | 0.0 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 30.5 | 25.5 | 0.0 | 32.5 | 28.2 | 0.0 | 29.5 | 29.1 | 0.0 | 33.9 | 25.8 | 0.0 |
| LnGrp LOS | C | C | | C | C | | C | C | | C | C | |
| Approach Vol, veh/h | | 294 | | | 136 | | | 686 | | | 1019 | |
| Approach Delay, s/veh | | 27.8 | | | 30.0 | | | 29.2 | | | 27.7 | |
| Approach LOS | | C | | | C | | | C | | | C | |
| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 19.0 | 25.1 | 13.1 | 20.4 | 16.1 | 28.0 | 17.0 | 16.5 | | | | |
| Change Period (Y+Rc), s | 8.0 | * 8 | 10.0 | 6.5 | 8.0 | 6.5 | 10.0 | 6.5 | | | | |
| Max Green Setting (Gmax), s | 11.0 | * 21 | 5.0 | 12.5 | 5.0 | 26.5 | 7.0 | 10.5 | | | | |
| Max Q Clear Time (g_c+I1), s | 11.6 | 15.0 | 4.3 | 5.0 | 5.6 | 17.5 | 7.4 | 3.6 | | | | |
| Green Ext Time (p_c), s | 0.0 | 2.1 | 0.0 | 0.6 | 0.0 | 4.0 | 0.0 | 0.2 | | | | |

Intersection Summary

| | |
|--------------------|------|
| HCM 6th Ctrl Delay | 28.3 |
| HCM 6th LOS | C |

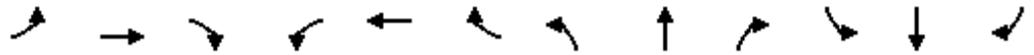
Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary

1: Rt. 60 Richmond Road & Rt. 30 Rochambeau Drive & Rt. 30 Barhamsville Road



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | ↘ | ↑↑ | ↗ | ↘ | ↑↑ | ↗ | ↘ | ↑↑ | ↗ | ↘ | ↑↑ | ↗ |
| Traffic Volume (veh/h) | 59 | 99 | 135 | 44 | 175 | 246 | 225 | 839 | 44 | 255 | 905 | 83 |
| Future Volume (veh/h) | 59 | 99 | 135 | 44 | 175 | 246 | 225 | 839 | 44 | 255 | 905 | 83 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1900 | 1900 | 1841 | 1870 | 1885 | 1870 | 1856 | 1870 | 1900 | 1856 | 1841 | 1856 |
| Adj Flow Rate, veh/h | 61 | 103 | 0 | 46 | 182 | 0 | 225 | 874 | 0 | 266 | 943 | 0 |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 1.00 | 1.00 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Percent Heavy Veh, % | 0 | 0 | 4 | 2 | 1 | 2 | 3 | 2 | 0 | 3 | 4 | 3 |
| Cap, veh/h | 217 | 630 | | 159 | 516 | | 354 | 1122 | | 367 | 1189 | |
| Arrive On Green | 0.12 | 0.17 | 0.00 | 0.09 | 0.14 | 0.00 | 0.20 | 0.32 | 0.00 | 0.21 | 0.34 | 0.00 |
| Sat Flow, veh/h | 1810 | 3610 | 1560 | 1781 | 3582 | 1585 | 1767 | 3554 | 1610 | 1767 | 3589 | 0 |
| Grp Volume(v), veh/h | 61 | 103 | 0 | 46 | 182 | 0 | 225 | 874 | 0 | 266 | 943 | 0 |
| Grp Sat Flow(s),veh/h/ln | 1810 | 1805 | 1560 | 1781 | 1791 | 1585 | 1767 | 1777 | 1610 | 1767 | 1749 | 0 |
| Q Serve(g_s), s | 2.7 | 2.1 | 0.0 | 2.1 | 4.0 | 0.0 | 10.1 | 19.4 | 0.0 | 12.2 | 21.1 | 0.0 |
| Cycle Q Clear(g_c), s | 2.7 | 2.1 | 0.0 | 2.1 | 4.0 | 0.0 | 10.1 | 19.4 | 0.0 | 12.2 | 21.1 | 0.0 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 0.00 |
| Lane Grp Cap(c), veh/h | 217 | 630 | | 159 | 516 | | 354 | 1122 | | 367 | 1189 | |
| V/C Ratio(X) | 0.28 | 0.16 | | 0.29 | 0.35 | | 0.64 | 0.78 | | 0.73 | 0.79 | |
| Avail Cap(c_a), veh/h | 250 | 630 | | 246 | 516 | | 354 | 1249 | | 367 | 1310 | |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 |
| Uniform Delay (d), s/veh | 34.8 | 30.4 | 0.0 | 36.9 | 33.5 | 0.0 | 31.8 | 27.0 | 0.0 | 32.1 | 25.9 | 0.0 |
| Incr Delay (d2), s/veh | 0.3 | 0.2 | 0.0 | 0.4 | 0.6 | 0.0 | 2.9 | 3.2 | 0.0 | 6.1 | 3.4 | 0.0 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 1.1 | 0.9 | 0.0 | 0.9 | 1.6 | 0.0 | 4.2 | 7.7 | 0.0 | 5.3 | 8.2 | 0.0 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 35.1 | 30.6 | 0.0 | 37.3 | 34.1 | 0.0 | 34.7 | 30.2 | 0.0 | 38.2 | 29.3 | 0.0 |
| LnGrp LOS | D | C | | D | C | | C | C | | D | C | |
| Approach Vol, veh/h | | 164 | | | 228 | | | 1099 | | | 1209 | |
| Approach Delay, s/veh | | 32.3 | | | 34.7 | | | 31.1 | | | 31.3 | |
| Approach LOS | | C | | | C | | | C | | | C | |
| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 22.0 | 32.9 | 12.7 | 19.1 | 21.4 | 33.5 | 15.4 | 16.5 | | | | |
| Change Period (Y+Rc), s | 8.0 | * 8 | 10.0 | 6.5 | 8.0 | 6.5 | 10.0 | 6.5 | | | | |
| Max Green Setting (Gmax), s | 14.0 | * 28 | 7.0 | 10.0 | 12.0 | 30.0 | 7.0 | 10.0 | | | | |
| Max Q Clear Time (g_c+I1), s | 14.2 | 21.4 | 4.1 | 4.1 | 13.1 | 23.1 | 4.7 | 6.0 | | | | |
| Green Ext Time (p_c), s | 0.0 | 3.5 | 0.0 | 0.2 | 0.0 | 3.9 | 0.0 | 0.4 | | | | |

Intersection Summary

| | |
|--------------------|------|
| HCM 6th Ctrl Delay | 31.5 |
| HCM 6th LOS | C |

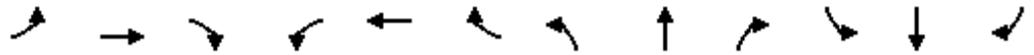
Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary

1: Rt. 60 Richmond Road & Rt. 30 Rochambeau Drive & Rt. 30 Barhamsville Road



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | ↘ | ↑↑ | ↗ | ↘ | ↑↑ | ↗ | ↘ | ↑↑ | ↗ | ↘ | ↑↑ | ↗ |
| Traffic Volume (veh/h) | 122 | 148 | 199 | 97 | 72 | 301 | 103 | 592 | 153 | 220 | 726 | 22 |
| Future Volume (veh/h) | 122 | 148 | 199 | 97 | 72 | 301 | 103 | 592 | 153 | 220 | 726 | 22 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1826 | 1826 | 1841 | 1870 | 1693 | 1870 | 1752 | 1722 | 1707 | 1885 | 1826 | 1900 |
| Adj Flow Rate, veh/h | 133 | 161 | 0 | 105 | 78 | 0 | 112 | 643 | 0 | 239 | 789 | 0 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 5 | 5 | 4 | 2 | 14 | 2 | 10 | 12 | 13 | 1 | 5 | 0 |
| Cap, veh/h | 266 | 640 | | 227 | 512 | | 270 | 856 | | 343 | 1075 | |
| Arrive On Green | 0.15 | 0.18 | 0.00 | 0.13 | 0.16 | 0.00 | 0.16 | 0.26 | 0.00 | 0.19 | 0.31 | 0.00 |
| Sat Flow, veh/h | 1739 | 3469 | 1560 | 1781 | 3216 | 1585 | 1668 | 3272 | 1447 | 1795 | 3561 | 0 |
| Grp Volume(v), veh/h | 133 | 161 | 0 | 105 | 78 | 0 | 112 | 643 | 0 | 239 | 789 | 0 |
| Grp Sat Flow(s),veh/h/ln | 1739 | 1735 | 1560 | 1781 | 1608 | 1585 | 1668 | 1636 | 1447 | 1795 | 1735 | 0 |
| Q Serve(g_s), s | 5.5 | 3.1 | 0.0 | 4.3 | 1.6 | 0.0 | 4.7 | 14.2 | 0.0 | 9.8 | 16.0 | 0.0 |
| Cycle Q Clear(g_c), s | 5.5 | 3.1 | 0.0 | 4.3 | 1.6 | 0.0 | 4.7 | 14.2 | 0.0 | 9.8 | 16.0 | 0.0 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 0.00 |
| Lane Grp Cap(c), veh/h | 266 | 640 | | 227 | 512 | | 270 | 856 | | 343 | 1075 | |
| V/C Ratio(X) | 0.50 | 0.25 | | 0.46 | 0.15 | | 0.41 | 0.75 | | 0.70 | 0.73 | |
| Avail Cap(c_a), veh/h | 266 | 662 | | 227 | 532 | | 270 | 958 | | 343 | 1281 | |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 |
| Uniform Delay (d), s/veh | 30.5 | 27.4 | 0.0 | 31.8 | 28.5 | 0.0 | 29.6 | 26.6 | 0.0 | 29.7 | 24.2 | 0.0 |
| Incr Delay (d2), s/veh | 0.6 | 0.3 | 0.0 | 0.5 | 0.2 | 0.0 | 0.4 | 3.4 | 0.0 | 5.2 | 2.1 | 0.0 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 2.1 | 1.2 | 0.0 | 1.7 | 0.6 | 0.0 | 1.7 | 5.2 | 0.0 | 4.2 | 6.0 | 0.0 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 31.1 | 27.7 | 0.0 | 32.3 | 28.7 | 0.0 | 30.0 | 30.0 | 0.0 | 34.8 | 26.3 | 0.0 |
| LnGrp LOS | C | C | | C | C | | C | C | | C | C | |
| Approach Vol, veh/h | | 294 | | | 183 | | | 755 | | | 1028 | |
| Approach Delay, s/veh | | 29.2 | | | 30.8 | | | 30.0 | | | 28.3 | |
| Approach LOS | | C | | | C | | | C | | | C | |
| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 19.0 | 26.1 | 15.0 | 18.5 | 16.7 | 28.3 | 17.0 | 16.5 | | | | |
| Change Period (Y+Rc), s | 8.0 | * 8 | 10.0 | 6.5 | 8.0 | 6.5 | 10.0 | 6.5 | | | | |
| Max Green Setting (Gmax), s | 11.0 | * 21 | 5.0 | 12.5 | 5.0 | 26.5 | 7.0 | 10.5 | | | | |
| Max Q Clear Time (g_c+I1), s | 11.8 | 16.2 | 6.3 | 5.1 | 6.7 | 18.0 | 7.5 | 3.6 | | | | |
| Green Ext Time (p_c), s | 0.0 | 1.9 | 0.0 | 0.5 | 0.0 | 3.9 | 0.0 | 0.2 | | | | |

Intersection Summary

| | |
|--------------------|------|
| HCM 6th Ctrl Delay | 29.2 |
| HCM 6th LOS | C |

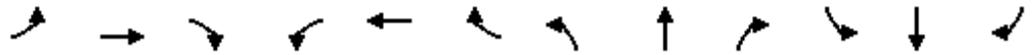
Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary

1: Rt. 60 Richmond Road & Rt. 30 Rochambeau Drive & Rt. 30 Barhamsville Road



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | ↘ | ↑↑ | ↗ | ↘ | ↑↑ | ↗ | ↘ | ↑↑ | ↗ | ↘ | ↑↑ | ↗ |
| Traffic Volume (veh/h) | 59 | 99 | 152 | 162 | 175 | 246 | 235 | 854 | 126 | 255 | 942 | 83 |
| Future Volume (veh/h) | 59 | 99 | 152 | 162 | 175 | 246 | 235 | 854 | 126 | 255 | 942 | 83 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1900 | 1900 | 1841 | 1870 | 1885 | 1870 | 1856 | 1870 | 1900 | 1856 | 1841 | 1856 |
| Adj Flow Rate, veh/h | 61 | 103 | 0 | 169 | 182 | 0 | 235 | 890 | 0 | 266 | 981 | 0 |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 1.00 | 1.00 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Percent Heavy Veh, % | 0 | 0 | 4 | 2 | 1 | 2 | 3 | 2 | 0 | 3 | 4 | 3 |
| Cap, veh/h | 182 | 479 | | 243 | 603 | | 342 | 1125 | | 361 | 1205 | |
| Arrive On Green | 0.10 | 0.13 | 0.00 | 0.14 | 0.17 | 0.00 | 0.19 | 0.32 | 0.00 | 0.20 | 0.34 | 0.00 |
| Sat Flow, veh/h | 1810 | 3610 | 1560 | 1781 | 3582 | 1585 | 1767 | 3554 | 1610 | 1767 | 3589 | 0 |
| Grp Volume(v), veh/h | 61 | 103 | 0 | 169 | 182 | 0 | 235 | 890 | 0 | 266 | 981 | 0 |
| Grp Sat Flow(s),veh/h/ln | 1810 | 1805 | 1560 | 1781 | 1791 | 1585 | 1767 | 1777 | 1610 | 1767 | 1749 | 0 |
| Q Serve(g_s), s | 2.8 | 2.2 | 0.0 | 8.0 | 3.9 | 0.0 | 10.9 | 20.1 | 0.0 | 12.4 | 22.5 | 0.0 |
| Cycle Q Clear(g_c), s | 2.8 | 2.2 | 0.0 | 8.0 | 3.9 | 0.0 | 10.9 | 20.1 | 0.0 | 12.4 | 22.5 | 0.0 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 0.00 |
| Lane Grp Cap(c), veh/h | 182 | 479 | | 243 | 603 | | 342 | 1125 | | 361 | 1205 | |
| V/C Ratio(X) | 0.33 | 0.21 | | 0.70 | 0.30 | | 0.69 | 0.79 | | 0.74 | 0.81 | |
| Avail Cap(c_a), veh/h | 247 | 512 | | 243 | 603 | | 342 | 1231 | | 361 | 1291 | |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 |
| Uniform Delay (d), s/veh | 36.8 | 34.1 | 0.0 | 36.3 | 32.1 | 0.0 | 33.0 | 27.4 | 0.0 | 32.8 | 26.3 | 0.0 |
| Incr Delay (d2), s/veh | 0.4 | 0.3 | 0.0 | 7.1 | 0.4 | 0.0 | 4.8 | 3.6 | 0.0 | 6.8 | 4.2 | 0.0 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 1.2 | 0.9 | 0.0 | 3.7 | 1.6 | 0.0 | 4.7 | 8.1 | 0.0 | 5.5 | 8.9 | 0.0 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 37.2 | 34.4 | 0.0 | 43.4 | 32.5 | 0.0 | 37.8 | 31.1 | 0.0 | 39.6 | 30.5 | 0.0 |
| LnGrp LOS | D | C | | D | C | | D | C | | D | C | |
| Approach Vol, veh/h | | 164 | | | 351 | | | 1125 | | | 1247 | |
| Approach Delay, s/veh | | 35.5 | | | 37.7 | | | 32.5 | | | 32.4 | |
| Approach LOS | | D | | | D | | | C | | | C | |
| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 22.0 | 33.4 | 17.0 | 15.7 | 21.0 | 34.3 | 13.9 | 18.8 | | | | |
| Change Period (Y+Rc), s | 8.0 | * 8 | 10.0 | 6.5 | 8.0 | 6.5 | 10.0 | 6.5 | | | | |
| Max Green Setting (Gmax), s | 14.0 | * 28 | 7.0 | 10.0 | 12.0 | 30.0 | 7.0 | 10.0 | | | | |
| Max Q Clear Time (g_c+I1), s | 14.4 | 22.1 | 10.0 | 4.2 | 12.9 | 24.5 | 4.8 | 5.9 | | | | |
| Green Ext Time (p_c), s | 0.0 | 3.3 | 0.0 | 0.2 | 0.0 | 3.3 | 0.0 | 0.4 | | | | |

Intersection Summary

| | |
|--------------------|------|
| HCM 6th Ctrl Delay | 33.3 |
| HCM 6th LOS | C |

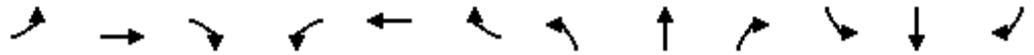
Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary

1: Rt. 60 Richmond Road & Rt. 30 Rochambeau Drive & Rt. 30 Barhamsville Road



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 45 | 148 | 199 | 97 | 72 | 111 | 103 | 246 | 153 | 108 | 361 | 11 |
| Future Volume (veh/h) | 45 | 148 | 199 | 97 | 72 | 111 | 103 | 246 | 153 | 108 | 361 | 11 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1826 | 1826 | 1841 | 1870 | 1693 | 1870 | 1752 | 1722 | 1707 | 1885 | 1826 | 1900 |
| Adj Flow Rate, veh/h | 49 | 161 | 0 | 105 | 78 | 0 | 112 | 267 | 0 | 117 | 392 | 0 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 5 | 5 | 4 | 2 | 14 | 2 | 10 | 12 | 13 | 1 | 5 | 0 |
| Cap, veh/h | 80 | 526 | | 135 | 583 | | 148 | 530 | | 151 | 629 | |
| Arrive On Green | 0.05 | 0.15 | 0.00 | 0.08 | 0.18 | 0.00 | 0.09 | 0.16 | 0.00 | 0.08 | 0.18 | 0.00 |
| Sat Flow, veh/h | 1739 | 3469 | 1560 | 1781 | 3216 | 1585 | 1668 | 3272 | 1447 | 1795 | 3561 | 0 |
| Grp Volume(v), veh/h | 49 | 161 | 0 | 105 | 78 | 0 | 112 | 267 | 0 | 117 | 392 | 0 |
| Grp Sat Flow(s),veh/h/ln | 1739 | 1735 | 1560 | 1781 | 1608 | 1585 | 1668 | 1636 | 1447 | 1795 | 1735 | 0 |
| Q Serve(g_s), s | 1.7 | 2.5 | 0.0 | 3.6 | 1.3 | 0.0 | 4.0 | 4.6 | 0.0 | 3.9 | 6.4 | 0.0 |
| Cycle Q Clear(g_c), s | 1.7 | 2.5 | 0.0 | 3.6 | 1.3 | 0.0 | 4.0 | 4.6 | 0.0 | 3.9 | 6.4 | 0.0 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 0.00 |
| Lane Grp Cap(c), veh/h | 80 | 526 | | 135 | 583 | | 148 | 530 | | 151 | 629 | |
| V/C Ratio(X) | 0.61 | 0.31 | | 0.78 | 0.13 | | 0.75 | 0.50 | | 0.77 | 0.62 | |
| Avail Cap(c_a), veh/h | 197 | 568 | | 202 | 583 | | 162 | 1055 | | 349 | 1456 | |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 |
| Uniform Delay (d), s/veh | 28.9 | 23.3 | 0.0 | 28.0 | 21.2 | 0.0 | 27.5 | 23.6 | 0.0 | 27.7 | 23.3 | 0.0 |
| Incr Delay (d2), s/veh | 2.8 | 0.5 | 0.0 | 5.2 | 0.1 | 0.0 | 14.2 | 1.1 | 0.0 | 3.2 | 1.4 | 0.0 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.7 | 0.9 | 0.0 | 1.5 | 0.4 | 0.0 | 2.0 | 1.6 | 0.0 | 1.6 | 2.3 | 0.0 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 31.7 | 23.7 | 0.0 | 33.3 | 21.3 | 0.0 | 41.7 | 24.7 | 0.0 | 30.9 | 24.8 | 0.0 |
| LnGrp LOS | C | C | | C | C | | D | C | | C | C | |
| Approach Vol, veh/h | | 210 | | | 183 | | | 379 | | | 509 | |
| Approach Delay, s/veh | | 25.6 | | | 28.2 | | | 29.7 | | | 26.2 | |
| Approach LOS | | C | | | C | | | C | | | C | |
| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 13.2 | 18.0 | 14.7 | 15.9 | 13.5 | 17.7 | 12.8 | 17.7 | | | | |
| Change Period (Y+Rc), s | 8.0 | * 8 | 10.0 | 6.5 | 8.0 | 6.5 | 10.0 | 6.5 | | | | |
| Max Green Setting (Gmax), s | 12.0 | * 20 | 7.0 | 10.1 | 6.0 | 25.9 | 7.0 | 10.1 | | | | |
| Max Q Clear Time (g_c+I1), s | 5.9 | 6.6 | 5.6 | 4.5 | 6.0 | 8.4 | 3.7 | 3.3 | | | | |
| Green Ext Time (p_c), s | 0.1 | 1.6 | 0.0 | 0.4 | 0.0 | 2.8 | 0.0 | 0.2 | | | | |

Intersection Summary

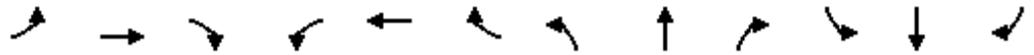
| | |
|--------------------|------|
| HCM 6th Ctrl Delay | 27.4 |
| HCM 6th LOS | C |

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
 Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary

1: Rt. 60 Richmond Road & Rt. 30 Rochambeau Drive & Rt. 30 Barhamsville Road



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | ↘ | ↑↑ | ↗ | ↘ | ↑↑ | ↗ | ↘ | ↑↑ | ↗ | ↘ | ↑↑ | ↗ |
| Traffic Volume (veh/h) | 29 | 99 | 152 | 162 | 175 | 121 | 235 | 428 | 126 | 114 | 444 | 38 |
| Future Volume (veh/h) | 29 | 99 | 152 | 162 | 175 | 121 | 235 | 428 | 126 | 114 | 444 | 38 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1900 | 1900 | 1841 | 1870 | 1885 | 1870 | 1856 | 1870 | 1900 | 1856 | 1841 | 1856 |
| Adj Flow Rate, veh/h | 30 | 103 | 0 | 169 | 182 | 0 | 235 | 446 | 0 | 119 | 462 | 0 |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 1.00 | 1.00 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Percent Heavy Veh, % | 0 | 0 | 4 | 2 | 1 | 2 | 3 | 2 | 0 | 3 | 4 | 3 |
| Cap, veh/h | 79 | 435 | | 208 | 693 | | 277 | 815 | | 151 | 625 | |
| Arrive On Green | 0.04 | 0.12 | 0.00 | 0.12 | 0.19 | 0.00 | 0.16 | 0.23 | 0.00 | 0.09 | 0.18 | 0.00 |
| Sat Flow, veh/h | 1810 | 3610 | 1560 | 1781 | 3582 | 1585 | 1767 | 3554 | 1610 | 1767 | 3589 | 0 |
| Grp Volume(v), veh/h | 30 | 103 | 0 | 169 | 182 | 0 | 235 | 446 | 0 | 119 | 462 | 0 |
| Grp Sat Flow(s),veh/h/ln | 1810 | 1805 | 1560 | 1781 | 1791 | 1585 | 1767 | 1777 | 1610 | 1767 | 1749 | 0 |
| Q Serve(g_s), s | 1.2 | 1.9 | 0.0 | 6.7 | 3.1 | 0.0 | 9.4 | 8.0 | 0.0 | 4.8 | 9.1 | 0.0 |
| Cycle Q Clear(g_c), s | 1.2 | 1.9 | 0.0 | 6.7 | 3.1 | 0.0 | 9.4 | 8.0 | 0.0 | 4.8 | 9.1 | 0.0 |
| Prop In Lane | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 0.00 |
| Lane Grp Cap(c), veh/h | 79 | 435 | | 208 | 693 | | 277 | 815 | | 151 | 625 | |
| V/C Ratio(X) | 0.38 | 0.24 | | 0.81 | 0.26 | | 0.85 | 0.55 | | 0.79 | 0.74 | |
| Avail Cap(c_a), veh/h | 175 | 502 | | 270 | 696 | | 365 | 1072 | | 268 | 863 | |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 |
| Uniform Delay (d), s/veh | 33.7 | 28.9 | 0.0 | 31.3 | 24.9 | 0.0 | 29.7 | 24.6 | 0.0 | 32.5 | 28.2 | 0.0 |
| Incr Delay (d2), s/veh | 1.1 | 0.4 | 0.0 | 10.4 | 0.3 | 0.0 | 10.7 | 0.8 | 0.0 | 3.4 | 2.9 | 0.0 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.5 | 0.8 | 0.0 | 3.2 | 1.2 | 0.0 | 4.3 | 3.0 | 0.0 | 2.0 | 3.6 | 0.0 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 34.9 | 29.3 | 0.0 | 41.7 | 25.2 | 0.0 | 40.4 | 25.5 | 0.0 | 35.9 | 31.1 | 0.0 |
| LnGrp LOS | C | C | | D | C | | D | C | | D | C | |
| Approach Vol, veh/h | | 133 | | | 351 | | | 681 | | | 581 | |
| Approach Delay, s/veh | | 30.5 | | | 33.1 | | | 30.6 | | | 32.1 | |
| Approach LOS | | C | | | C | | | C | | | C | |
| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Phs Duration (G+Y+Rc), s | 14.2 | 24.6 | 18.5 | 15.2 | 19.4 | 19.5 | 13.2 | 20.5 | | | | |
| Change Period (Y+Rc), s | 8.0 | * 8 | 10.0 | 6.5 | 8.0 | 6.5 | 10.0 | 6.5 | | | | |
| Max Green Setting (Gmax), s | 11.0 | * 22 | 11.0 | 10.1 | 15.0 | 17.9 | 7.0 | 14.1 | | | | |
| Max Q Clear Time (g_c+I1), s | 6.8 | 10.0 | 8.7 | 3.9 | 11.4 | 11.1 | 3.2 | 5.1 | | | | |
| Green Ext Time (p_c), s | 0.0 | 2.6 | 0.0 | 0.3 | 0.1 | 1.9 | 0.0 | 0.7 | | | | |

Intersection Summary

| | |
|--------------------|------|
| HCM 6th Ctrl Delay | 31.6 |
| HCM 6th LOS | C |

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 0.9 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↔ | | | ↔ | ↔ | ↔ | ↕ | ↕ | ↕ | ↕ | ↕ |
| Traffic Vol, veh/h | 2 | 0 | 3 | 41 | 0 | 16 | 3 | 298 | 18 | 5 | 561 | 3 |
| Future Vol, veh/h | 2 | 0 | 3 | 41 | 0 | 16 | 3 | 298 | 18 | 5 | 561 | 3 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None |
| Storage Length | - | - | - | - | - | 0 | 400 | - | 75 | 310 | - | - |
| Veh in Median Storage, # | - | 2 | - | - | 2 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 93 | 93 | 93 | 93 | 93 | 93 | 93 | 93 | 93 | 93 | 93 | 93 |
| Heavy Vehicles, % | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 11 | 0 | 60 | 4 | 0 |
| Mvmt Flow | 2 | 0 | 3 | 44 | 0 | 17 | 3 | 320 | 19 | 5 | 603 | 3 |

| Major/Minor | Minor2 | | Minor1 | | | Major1 | | | Major2 | | | |
|----------------------|--------|-----|--------|------|-----|--------|-----|---|--------|-----|---|---|
| Conflicting Flow All | 781 | 960 | 303 | 638 | 942 | 160 | 606 | 0 | 0 | 339 | 0 | 0 |
| Stage 1 | 615 | 615 | - | 326 | 326 | - | - | - | - | - | - | - |
| Stage 2 | 166 | 345 | - | 312 | 616 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.5 | 6.5 | 6.9 | 7.6 | 6.5 | 6.9 | 4.1 | - | - | 5.3 | - | - |
| Critical Hdwy Stg 1 | 6.5 | 5.5 | - | 6.6 | 5.5 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.5 | 5.5 | - | 6.6 | 5.5 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.5 | 4 | 3.3 | 3.55 | 4 | 3.3 | 2.2 | - | - | 2.8 | - | - |
| Pot Cap-1 Maneuver | 288 | 259 | 699 | 355 | 265 | 863 | 982 | - | - | 888 | - | - |
| Stage 1 | 450 | 485 | - | 652 | 652 | - | - | - | - | - | - | - |
| Stage 2 | 825 | 640 | - | 665 | 485 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | - | - | - |
| Mov Cap-1 Maneuver | 281 | 257 | 699 | 351 | 263 | 863 | 982 | - | - | 888 | - | - |
| Mov Cap-2 Maneuver | 414 | 418 | - | 524 | 420 | - | - | - | - | - | - | - |
| Stage 1 | 449 | 482 | - | 650 | 650 | - | - | - | - | - | - | - |
| Stage 2 | 806 | 638 | - | 658 | 482 | - | - | - | - | - | - | - |

| Approach | EB | | WB | | | NB | | | SB | | |
|----------------------|------|--|------|--|--|-----|--|--|-----|--|--|
| HCM Control Delay, s | 11.6 | | 11.6 | | | 0.1 | | | 0.1 | | |
| HCM LOS | B | | B | | | | | | | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | WBLn2 | SBL | SBT | SBR |
|-----------------------|-------|-----|-----|-------|-------|-------|-------|-----|-----|
| Capacity (veh/h) | 982 | - | - | 548 | 524 | 863 | 888 | - | - |
| HCM Lane V/C Ratio | 0.003 | - | - | 0.01 | 0.084 | 0.02 | 0.006 | - | - |
| HCM Control Delay (s) | 8.7 | - | - | 11.6 | 12.5 | 9.3 | 9.1 | - | - |
| HCM Lane LOS | A | - | - | B | B | A | A | - | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 0 | 0.3 | 0.1 | 0 | - | - |

Intersection

| Int Delay, s/veh | 0 | | | | | | |
|--------------------------|------|------|------|------|------|------|------|
| Movement | EBL | EBR | NBL | NBT | SBU | SBT | SBR |
| Lane Configurations | ↔ | | ↕↑ | | ↕↔ | | |
| Traffic Vol, veh/h | 1 | 0 | 2 | 316 | 2 | 601 | 2 |
| Future Vol, veh/h | 1 | 0 | 2 | 316 | 2 | 601 | 2 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | - | None |
| Storage Length | 0 | - | - | - | - | - | - |
| Veh in Median Storage, # | 2 | - | - | 0 | - | 0 | - |
| Grade, % | 0 | - | - | 0 | - | 0 | - |
| Peak Hour Factor | 93 | 93 | 93 | 93 | 93 | 93 | 93 |
| Heavy Vehicles, % | 0 | 0 | 0 | 10 | 0 | 5 | 0 |
| Mvmt Flow | 1 | 0 | 2 | 340 | 2 | 646 | 2 |

| Major/Minor | Minor2 | Major1 | | Major2 | | |
|----------------------|--------|--------|-----|--------|-----|-----|
| Conflicting Flow All | 825 | 324 | 648 | 0 | 340 | - 0 |
| Stage 1 | 651 | - | - | - | - | - |
| Stage 2 | 174 | - | - | - | - | - |
| Critical Hdwy | 6.8 | 6.9 | 4.1 | - | 6.4 | - |
| Critical Hdwy Stg 1 | 5.8 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.8 | - | - | - | - | - |
| Follow-up Hdwy | 3.5 | 3.3 | 2.2 | - | 2.5 | - |
| Pot Cap-1 Maneuver | 315 | 678 | 947 | - | 883 | - |
| Stage 1 | 486 | - | - | - | - | - |
| Stage 2 | 845 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 313 | 678 | 947 | - | 883 | - |
| Mov Cap-2 Maneuver | 448 | - | - | - | - | - |
| Stage 1 | 485 | - | - | - | - | - |
| Stage 2 | 842 | - | - | - | - | - |

| Approach | EB | NB | SB |
|----------------------|------|-----|----|
| HCM Control Delay, s | 13.1 | 0.1 | 0 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR |
|-----------------------|-------|-----|-------|-----|-----|
| Capacity (veh/h) | 947 | - | 448 | - | - |
| HCM Lane V/C Ratio | 0.002 | - | 0.002 | - | - |
| HCM Control Delay (s) | 8.8 | 0 | 13.1 | 0 | - |
| HCM Lane LOS | A | A | B | A | - |
| HCM 95th %tile Q(veh) | 0 | - | 0 | - | - |

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 0.7 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↔ | | | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ |
| Traffic Vol, veh/h | 6 | 0 | 3 | 30 | 0 | 6 | 5 | 638 | 44 | 13 | 542 | 3 |
| Future Vol, veh/h | 6 | 0 | 3 | 30 | 0 | 6 | 5 | 638 | 44 | 13 | 542 | 3 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None |
| Storage Length | - | - | - | - | - | 0 | 400 | - | 75 | 310 | - | - |
| Veh in Median Storage, # | - | 2 | - | - | 2 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 8 | 4 | 0 |
| Mvmt Flow | 7 | 0 | 3 | 33 | 0 | 7 | 5 | 693 | 48 | 14 | 589 | 3 |

| Major/Minor | Minor2 | | Minor1 | | Major1 | | | Major2 | | | | |
|----------------------|--------|------|--------|------|--------|-----|-----|--------|---|------|---|---|
| Conflicting Flow All | 976 | 1370 | 296 | 1026 | 1323 | 347 | 592 | 0 | 0 | 741 | 0 | 0 |
| Stage 1 | 619 | 619 | - | 703 | 703 | - | - | - | - | - | - | - |
| Stage 2 | 357 | 751 | - | 323 | 620 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.5 | 6.5 | 6.9 | 7.5 | 6.5 | 6.9 | 4.1 | - | - | 4.26 | - | - |
| Critical Hdwy Stg 1 | 6.5 | 5.5 | - | 6.5 | 5.5 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.5 | 5.5 | - | 6.5 | 5.5 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.5 | 4 | 3.3 | 3.5 | 4 | 3.3 | 2.2 | - | - | 2.28 | - | - |
| Pot Cap-1 Maneuver | 208 | 148 | 706 | 192 | 158 | 655 | 994 | - | - | 823 | - | - |
| Stage 1 | 448 | 483 | - | 399 | 443 | - | - | - | - | - | - | - |
| Stage 2 | 639 | 421 | - | 669 | 483 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | - | - | - |
| Mov Cap-1 Maneuver | 202 | 145 | 706 | 188 | 155 | 655 | 994 | - | - | 823 | - | - |
| Mov Cap-2 Maneuver | 382 | 321 | - | 352 | 337 | - | - | - | - | - | - | - |
| Stage 1 | 446 | 475 | - | 397 | 441 | - | - | - | - | - | - | - |
| Stage 2 | 629 | 419 | - | 655 | 475 | - | - | - | - | - | - | - |

| Approach | EB | | WB | | NB | | SB | |
|----------------------|------|--|------|--|-----|--|-----|--|
| HCM Control Delay, s | 13.2 | | 15.4 | | 0.1 | | 0.2 | |
| HCM LOS | B | | C | | | | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | WBLn2 | SBL | SBT | SBR |
|-----------------------|-------|-----|-----|-------|-------|-------|-------|-----|-----|
| Capacity (veh/h) | 994 | - | - | 451 | 352 | 655 | 823 | - | - |
| HCM Lane V/C Ratio | 0.005 | - | - | 0.022 | 0.093 | 0.01 | 0.017 | - | - |
| HCM Control Delay (s) | 8.6 | - | - | 13.2 | 16.3 | 10.6 | 9.5 | - | - |
| HCM Lane LOS | A | - | - | B | C | B | A | - | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 0.1 | 0.3 | 0 | 0.1 | - | - |

| Intersection | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 0.2 | | | | | | |
| Movement | EBL | EBR | NBL | NBT | SBU | SBT | SBR |
| Lane Configurations | ↔ | | ↕ | | ↔ | | |
| Traffic Vol, veh/h | 6 | 4 | 2 | 675 | 6 | 568 | 1 |
| Future Vol, veh/h | 6 | 4 | 2 | 675 | 6 | 568 | 1 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | - | None |
| Storage Length | 0 | - | - | - | - | - | - |
| Veh in Median Storage, # | 2 | - | - | 0 | - | 0 | - |
| Grade, % | 0 | - | - | 0 | - | 0 | - |
| Peak Hour Factor | 91 | 91 | 91 | 91 | 91 | 91 | 91 |
| Heavy Vehicles, % | 0 | 0 | 0 | 2 | 0 | 4 | 0 |
| Mvmt Flow | 7 | 4 | 2 | 742 | 7 | 624 | 1 |

| Major/Minor | Minor2 | Major1 | | Major2 | | |
|----------------------|--------|--------|-----|--------|-----|---|
| Conflicting Flow All | 1014 | 313 | 625 | 0 | 742 | 0 |
| Stage 1 | 639 | - | - | - | - | - |
| Stage 2 | 375 | - | - | - | - | - |
| Critical Hdwy | 6.8 | 6.9 | 4.1 | - | 6.4 | - |
| Critical Hdwy Stg 1 | 5.8 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.8 | - | - | - | - | - |
| Follow-up Hdwy | 3.5 | 3.3 | 2.2 | - | 2.5 | - |
| Pot Cap-1 Maneuver | 238 | 689 | 966 | - | 493 | - |
| Stage 1 | 493 | - | - | - | - | - |
| Stage 2 | 671 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 232 | 689 | 966 | - | 493 | - |
| Mov Cap-2 Maneuver | 419 | - | - | - | - | - |
| Stage 1 | 491 | - | - | - | - | - |
| Stage 2 | 656 | - | - | - | - | - |

| Approach | EB | NB | SB |
|----------------------|------|----|-----|
| HCM Control Delay, s | 12.4 | 0 | 0.2 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR |
|-----------------------|-------|-----|-------|-----|-----|
| Capacity (veh/h) | 966 | - | 497 | - | - |
| HCM Lane V/C Ratio | 0.002 | - | 0.022 | - | - |
| HCM Control Delay (s) | 8.7 | 0 | 12.4 | 0.1 | - |
| HCM Lane LOS | A | A | B | A | - |
| HCM 95th %tile Q(veh) | 0 | - | 0.1 | - | - |

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 0.7 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↔ | | | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ |
| Traffic Vol, veh/h | 2 | 0 | 3 | 43 | 0 | 17 | 3 | 659 | 19 | 5 | 954 | 3 |
| Future Vol, veh/h | 2 | 0 | 3 | 43 | 0 | 17 | 3 | 659 | 19 | 5 | 954 | 3 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None |
| Storage Length | - | - | - | - | - | 0 | 400 | - | 75 | 310 | - | - |
| Veh in Median Storage, # | - | 2 | - | - | 2 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 93 | 93 | 93 | 93 | 93 | 93 | 93 | 93 | 93 | 93 | 93 | 93 |
| Heavy Vehicles, % | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 11 | 0 | 60 | 4 | 0 |
| Mvmt Flow | 2 | 0 | 3 | 46 | 0 | 18 | 3 | 709 | 20 | 5 | 1026 | 3 |

| Major/Minor | Minor2 | | Minor1 | | Major1 | | | Major2 | | | | |
|----------------------|--------|------|--------|------|--------|-----|------|--------|---|-----|---|---|
| Conflicting Flow All | 1399 | 1773 | 515 | 1238 | 1754 | 355 | 1029 | 0 | 0 | 729 | 0 | 0 |
| Stage 1 | 1038 | 1038 | - | 715 | 715 | - | - | - | - | - | - | - |
| Stage 2 | 361 | 735 | - | 523 | 1039 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.5 | 6.5 | 6.9 | 7.6 | 6.5 | 6.9 | 4.1 | - | - | 5.3 | - | - |
| Critical Hdwy Stg 1 | 6.5 | 5.5 | - | 6.6 | 5.5 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.5 | 5.5 | - | 6.6 | 5.5 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.5 | 4 | 3.3 | 3.55 | 4 | 3.3 | 2.2 | - | - | 2.8 | - | - |
| Pot Cap-1 Maneuver | 102 | 84 | 510 | 129 | 86 | 647 | 683 | - | - | 576 | - | - |
| Stage 1 | 251 | 311 | - | 381 | 438 | - | - | - | - | - | - | - |
| Stage 2 | 636 | 428 | - | 498 | 310 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | - | - | - |
| Mov Cap-1 Maneuver | 98 | 83 | 510 | 127 | 85 | 647 | 683 | - | - | 576 | - | - |
| Mov Cap-2 Maneuver | 228 | 247 | - | 306 | 248 | - | - | - | - | - | - | - |
| Stage 1 | 250 | 308 | - | 379 | 436 | - | - | - | - | - | - | - |
| Stage 2 | 615 | 426 | - | 491 | 307 | - | - | - | - | - | - | - |

| Approach | EB | | WB | | NB | | | SB | | |
|----------------------|------|--|------|--|----|--|--|-----|--|--|
| HCM Control Delay, s | 15.7 | | 16.5 | | 0 | | | 0.1 | | |
| HCM LOS | C | | C | | | | | | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | WBLn2 | SBL | SBT | SBR |
|-----------------------|-------|-----|-----|-------|-------|-------|-------|-----|-----|
| Capacity (veh/h) | 683 | - | - | 341 | 306 | 647 | 576 | - | - |
| HCM Lane V/C Ratio | 0.005 | - | - | 0.016 | 0.151 | 0.028 | 0.009 | - | - |
| HCM Control Delay (s) | 10.3 | - | - | 15.7 | 18.8 | 10.7 | 11.3 | - | - |
| HCM Lane LOS | B | - | - | C | C | B | B | - | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 0 | 0.5 | 0.1 | 0 | - | - |

Intersection

| | | | | | | | |
|--------------------------|------------|------------|------------|------------|------------|------------|------------|
| Int Delay, s/veh | 0.1 | | | | | | |
| Movement | EBL | EBR | NBL | NBT | SBU | SBT | SBR |
| Lane Configurations | ↔ | | ↕↑ | | ↕↔ | | |
| Traffic Vol, veh/h | 1 | 0 | 2 | 678 | 2 | 996 | 2 |
| Future Vol, veh/h | 1 | 0 | 2 | 678 | 2 | 996 | 2 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | - | None |
| Storage Length | 0 | - | - | - | - | - | - |
| Veh in Median Storage, # | 2 | - | - | 0 | - | 0 | - |
| Grade, % | 0 | - | - | 0 | - | 0 | - |
| Peak Hour Factor | 93 | 93 | 93 | 93 | 93 | 93 | 93 |
| Heavy Vehicles, % | 0 | 0 | 0 | 10 | 0 | 5 | 0 |
| Mvmt Flow | 1 | 0 | 2 | 729 | 2 | 1071 | 2 |

| | | | | | | | |
|----------------------|---------------|---------------|------|---------------|-----|---|---|
| Major/Minor | Minor2 | Major1 | | Major2 | | | |
| Conflicting Flow All | 1445 | 537 | 1073 | 0 | 729 | - | 0 |
| Stage 1 | 1076 | - | - | - | - | - | - |
| Stage 2 | 369 | - | - | - | - | - | - |
| Critical Hdwy | 6.8 | 6.9 | 4.1 | - | 6.4 | - | - |
| Critical Hdwy Stg 1 | 5.8 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.8 | - | - | - | - | - | - |
| Follow-up Hdwy | 3.5 | 3.3 | 2.2 | - | 2.5 | - | - |
| Pot Cap-1 Maneuver | 125 | 494 | 657 | - | 502 | - | - |
| Stage 1 | 293 | - | - | - | - | - | - |
| Stage 2 | 675 | - | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - | - |
| Mov Cap-1 Maneuver | 123 | 494 | 657 | - | 502 | - | - |
| Mov Cap-2 Maneuver | 266 | - | - | - | - | - | - |
| Stage 1 | 292 | - | - | - | - | - | - |
| Stage 2 | 668 | - | - | - | - | - | - |

| | | | |
|----------------------|-----------|-----------|-----------|
| Approach | EB | NB | SB |
| HCM Control Delay, s | 18.6 | 0 | 0.1 |
| HCM LOS | C | | |

| | | | | | |
|------------------------------|------------|------------|--------------|------------|------------|
| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR |
| Capacity (veh/h) | 657 | - | 266 | - | - |
| HCM Lane V/C Ratio | 0.003 | - | 0.004 | - | - |
| HCM Control Delay (s) | 10.5 | 0 | 18.6 | 0.1 | - |
| HCM Lane LOS | B | A | C | A | - |
| HCM 95th %tile Q(veh) | 0 | - | 0 | - | - |

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 0.7 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↔ | | | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ |
| Traffic Vol, veh/h | 6 | 0 | 3 | 32 | 0 | 6 | 5 | 1096 | 46 | 14 | 1067 | 3 |
| Future Vol, veh/h | 6 | 0 | 3 | 32 | 0 | 6 | 5 | 1096 | 46 | 14 | 1067 | 3 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None |
| Storage Length | - | - | - | - | - | 0 | 400 | - | 75 | 310 | - | - |
| Veh in Median Storage, # | - | 2 | - | - | 2 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 8 | 4 | 0 |
| Mvmt Flow | 7 | 0 | 3 | 35 | 0 | 7 | 5 | 1191 | 50 | 15 | 1160 | 3 |

| Major/Minor | Minor2 | | Minor1 | | Major1 | | Major2 | | | | | |
|----------------------|--------|------|--------|------|--------|-----|--------|---|---|------|---|---|
| Conflicting Flow All | 1798 | 2443 | 582 | 1811 | 2394 | 596 | 1163 | 0 | 0 | 1241 | 0 | 0 |
| Stage 1 | 1192 | 1192 | - | 1201 | 1201 | - | - | - | - | - | - | - |
| Stage 2 | 606 | 1251 | - | 610 | 1193 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.5 | 6.5 | 6.9 | 7.5 | 6.5 | 6.9 | 4.1 | - | - | 4.26 | - | - |
| Critical Hdwy Stg 1 | 6.5 | 5.5 | - | 6.5 | 5.5 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.5 | 5.5 | - | 6.5 | 5.5 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.5 | 4 | 3.3 | 3.5 | 4 | 3.3 | 2.2 | - | - | 2.28 | - | - |
| Pot Cap-1 Maneuver | 51 | 32 | 461 | 50 | 34 | 452 | 608 | - | - | 525 | - | - |
| Stage 1 | 202 | 263 | - | 199 | 260 | - | - | - | - | - | - | - |
| Stage 2 | 456 | 246 | - | 453 | 263 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | - | - | - |
| Mov Cap-1 Maneuver | 49 | 31 | 461 | 48 | 33 | 452 | 608 | - | - | 525 | - | - |
| Mov Cap-2 Maneuver | 175 | 162 | - | 173 | 171 | - | - | - | - | - | - | - |
| Stage 1 | 200 | 255 | - | 197 | 258 | - | - | - | - | - | - | - |
| Stage 2 | 446 | 244 | - | 437 | 255 | - | - | - | - | - | - | - |

| Approach | EB | | WB | | NB | | SB | |
|----------------------|----|--|------|--|----|--|-----|--|
| HCM Control Delay, s | 22 | | 28.2 | | 0 | | 0.2 | |
| HCM LOS | C | | D | | | | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | WBLn2 | SBL | SBT | SBR |
|-----------------------|-------|-----|-----|-------|-------|-------|-------|-----|-----|
| Capacity (veh/h) | 608 | - | - | 221 | 173 | 452 | 525 | - | - |
| HCM Lane V/C Ratio | 0.009 | - | - | 0.044 | 0.201 | 0.014 | 0.029 | - | - |
| HCM Control Delay (s) | 11 | - | - | 22 | 31 | 13.1 | 12.1 | - | - |
| HCM Lane LOS | B | - | - | C | D | B | B | - | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 0.1 | 0.7 | 0 | 0.1 | - | - |

| Intersection | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 0.6 | | | | | | |
| Movement | EBL | EBR | NBL | NBT | SBU | SBT | SBR |
| Lane Configurations | T | | T | | T | | |
| Traffic Vol, veh/h | 6 | 4 | 2 | 1135 | 6 | 1095 | 1 |
| Future Vol, veh/h | 6 | 4 | 2 | 1135 | 6 | 1095 | 1 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | - | None |
| Storage Length | 0 | - | - | - | - | - | - |
| Veh in Median Storage, # | 2 | - | - | 0 | - | 0 | - |
| Grade, % | 0 | - | - | 0 | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 0 | 0 | 0 | 2 | 0 | 4 | 0 |
| Mvmt Flow | 7 | 4 | 2 | 1234 | 7 | 1190 | 1 |

| Major/Minor | Minor2 | Major1 | | Major2 | | |
|----------------------|--------|--------|------|--------|------|---|
| Conflicting Flow All | 1826 | 596 | 1191 | 0 | 1234 | 0 |
| Stage 1 | 1205 | - | - | - | - | - |
| Stage 2 | 621 | - | - | - | - | - |
| Critical Hdwy | 6.8 | 6.9 | 4.1 | - | 6.4 | - |
| Critical Hdwy Stg 1 | 5.8 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.8 | - | - | - | - | - |
| Follow-up Hdwy | 3.5 | 3.3 | 2.2 | - | 2.5 | - |
| Pot Cap-1 Maneuver | 70 | 452 | 593 | - | 239 | - |
| Stage 1 | 251 | - | - | - | - | - |
| Stage 2 | 504 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 63 | 452 | 593 | - | 239 | - |
| Mov Cap-2 Maneuver | 212 | - | - | - | - | - |
| Stage 1 | 248 | - | - | - | - | - |
| Stage 2 | 460 | - | - | - | - | - |

| Approach | EB | NB | SB |
|----------------------|------|-----|----|
| HCM Control Delay, s | 18.9 | 0.1 | 1 |
| HCM LOS | C | | |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR |
|-----------------------|-------|-----|-------|-----|-----|
| Capacity (veh/h) | 593 | - | 269 | - | - |
| HCM Lane V/C Ratio | 0.004 | - | 0.04 | - | - |
| HCM Control Delay (s) | 11.1 | 0.1 | 18.9 | 0.9 | - |
| HCM Lane LOS | B | A | C | A | - |
| HCM 95th %tile Q(veh) | 0 | - | 0.1 | - | - |

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 0.7 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↔ | | | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ |
| Traffic Vol, veh/h | 2 | 0 | 3 | 43 | 0 | 17 | 3 | 829 | 19 | 5 | 1017 | 3 |
| Future Vol, veh/h | 2 | 0 | 3 | 43 | 0 | 17 | 3 | 829 | 19 | 5 | 1017 | 3 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None |
| Storage Length | - | - | - | - | - | 0 | 400 | - | 75 | 310 | - | - |
| Veh in Median Storage, # | - | 2 | - | - | 2 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 93 | 93 | 93 | 93 | 93 | 93 | 93 | 93 | 93 | 93 | 93 | 93 |
| Heavy Vehicles, % | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 11 | 0 | 60 | 4 | 0 |
| Mvmt Flow | 2 | 0 | 3 | 46 | 0 | 18 | 3 | 891 | 20 | 5 | 1094 | 3 |

| Major/Minor | Minor2 | | Minor1 | | Major1 | | Major2 | | | | | |
|----------------------|--------|------|--------|------|--------|-----|--------|---|---|-----|---|---|
| Conflicting Flow All | 1558 | 2023 | 549 | 1454 | 2004 | 446 | 1097 | 0 | 0 | 911 | 0 | 0 |
| Stage 1 | 1106 | 1106 | - | 897 | 897 | - | - | - | - | - | - | - |
| Stage 2 | 452 | 917 | - | 557 | 1107 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.5 | 6.5 | 6.9 | 7.6 | 6.5 | 6.9 | 4.1 | - | - | 5.3 | - | - |
| Critical Hdwy Stg 1 | 6.5 | 5.5 | - | 6.6 | 5.5 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.5 | 5.5 | - | 6.6 | 5.5 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.5 | 4 | 3.3 | 3.55 | 4 | 3.3 | 2.2 | - | - | 2.8 | - | - |
| Pot Cap-1 Maneuver | 78 | 59 | 485 | 89 | 60 | 565 | 644 | - | - | 469 | - | - |
| Stage 1 | 228 | 289 | - | 295 | 361 | - | - | - | - | - | - | - |
| Stage 2 | 562 | 354 | - | 475 | 288 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | - | - | - |
| Mov Cap-1 Maneuver | 75 | 58 | 485 | 87 | 59 | 565 | 644 | - | - | 469 | - | - |
| Mov Cap-2 Maneuver | 205 | 216 | - | 247 | 217 | - | - | - | - | - | - | - |
| Stage 1 | 227 | 286 | - | 294 | 359 | - | - | - | - | - | - | - |
| Stage 2 | 541 | 352 | - | 467 | 285 | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|----------------------|------|------|----|-----|
| HCM Control Delay, s | 16.7 | 19.7 | 0 | 0.1 |
| HCM LOS | C | C | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | WBLn2 | SBL | SBT | SBR |
|-----------------------|-------|-----|-----|-------|-------|-------|-------|-----|-----|
| Capacity (veh/h) | 644 | - | - | 314 | 247 | 565 | 469 | - | - |
| HCM Lane V/C Ratio | 0.005 | - | - | 0.017 | 0.187 | 0.032 | 0.011 | - | - |
| HCM Control Delay (s) | 10.6 | - | - | 16.7 | 22.9 | 11.6 | 12.8 | - | - |
| HCM Lane LOS | B | - | - | C | C | B | B | - | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 0.1 | 0.7 | 0.1 | 0 | - | - |

| Intersection | | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 2.5 | | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBU | SBL | SBT | SBR |
| Lane Configurations | | ↕ | | | ↕ | ↕ | | ↕ | ↕ | | ↕ | ↕ | |
| Traffic Vol, veh/h | 1 | 0 | 0 | 90 | 0 | 170 | 2 | 678 | 36 | 2 | 60 | 996 | 2 |
| Future Vol, veh/h | 1 | 0 | 0 | 90 | 0 | 170 | 2 | 678 | 36 | 2 | 60 | 996 | 2 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | - | None |
| Storage Length | - | - | - | - | - | 0 | - | - | 200 | - | 300 | - | - |
| Veh in Median Storage, # | - | 2 | - | - | 2 | - | - | 0 | - | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | - | 0 | - |
| Peak Hour Factor | 93 | 93 | 93 | 93 | 93 | 93 | 93 | 93 | 93 | 93 | 93 | 93 | 93 |
| Heavy Vehicles, % | 0 | 2 | 0 | 2 | 2 | 2 | 0 | 10 | 2 | 0 | 2 | 5 | 0 |
| Mvmt Flow | 1 | 0 | 0 | 97 | 0 | 183 | 2 | 729 | 39 | 2 | 65 | 1071 | 2 |

| Major/Minor | Minor2 | | Minor1 | | Major1 | | | Major2 | | | | | |
|----------------------|--------|------|--------|------|--------|------|------|--------|---|-----|------|---|---|
| Conflicting Flow All | 1575 | 1978 | 537 | 1403 | 1940 | 365 | 1073 | 0 | 0 | 729 | 768 | 0 | 0 |
| Stage 1 | 1206 | 1206 | - | 733 | 733 | - | - | - | - | - | - | - | - |
| Stage 2 | 369 | 772 | - | 670 | 1207 | - | - | - | - | - | - | - | - |
| Critical Hdwy | 7.5 | 6.54 | 6.9 | 7.54 | 6.54 | 6.94 | 4.1 | - | - | 6.4 | 4.14 | - | - |
| Critical Hdwy Stg 1 | 6.5 | 5.54 | - | 6.54 | 5.54 | - | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.5 | 5.54 | - | 6.54 | 5.54 | - | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.5 | 4.02 | 3.3 | 3.52 | 4.02 | 3.32 | 2.2 | - | - | 2.5 | 2.22 | - | - |
| Pot Cap-1 Maneuver | 76 | 61 | 494 | 100 | 65 | 632 | 657 | - | - | 502 | 842 | - | - |
| Stage 1 | 198 | 255 | - | 378 | 424 | - | - | - | - | - | - | - | - |
| Stage 2 | 629 | 407 | - | 413 | 254 | - | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | | - | - |
| Mov Cap-1 Maneuver | 50 | 56 | 494 | ~93 | 59 | 632 | 657 | - | - | 808 | 808 | - | - |
| Mov Cap-2 Maneuver | 170 | 189 | - | 268 | 198 | - | - | - | - | - | - | - | - |
| Stage 1 | 197 | 234 | - | 376 | 422 | - | - | - | - | - | - | - | - |
| Stage 2 | 445 | 405 | - | 379 | 233 | - | - | - | - | - | - | - | - |

| Approach | EB | | WB | | NB | | SB | |
|----------------------|------|--|------|--|----|--|-----|--|
| HCM Control Delay, s | 26.3 | | 17.4 | | 0 | | 0.6 | |
| HCM LOS | D | | C | | | | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | WBLn2 | SBL | SBT | SBR |
|-----------------------|-------|-----|-----|-------|-------|-------|-------|-----|-----|
| Capacity (veh/h) | 657 | - | - | 170 | 268 | 632 | 808 | - | - |
| HCM Lane V/C Ratio | 0.003 | - | - | 0.006 | 0.361 | 0.289 | 0.083 | - | - |
| HCM Control Delay (s) | 10.5 | 0 | - | 26.3 | 25.8 | 13 | 9.9 | - | - |
| HCM Lane LOS | B | A | - | D | D | B | A | - | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 0 | 1.6 | 1.2 | 0.3 | - | - |

Notes
 ~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 0.6 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↔ | | | ↔ | ↔ | ↔ | ↕ | ↕ | ↕ | ↕ | ↕ |
| Traffic Vol, veh/h | 6 | 0 | 3 | 32 | 0 | 6 | 5 | 1203 | 46 | 14 | 1239 | 3 |
| Future Vol, veh/h | 6 | 0 | 3 | 32 | 0 | 6 | 5 | 1203 | 46 | 14 | 1239 | 3 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None |
| Storage Length | - | - | - | - | - | 0 | 400 | - | 75 | 310 | - | - |
| Veh in Median Storage, # | - | 2 | - | - | 2 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 8 | 4 | 0 |
| Mvmt Flow | 7 | 0 | 3 | 35 | 0 | 7 | 5 | 1308 | 50 | 15 | 1347 | 3 |

| Major/Minor | Minor2 | | Minor1 | | Major1 | | Major2 | | | | | |
|----------------------|--------|------|--------|------|--------|-----|--------|---|---|------|---|---|
| Conflicting Flow All | 2043 | 2747 | 675 | 2022 | 2698 | 654 | 1350 | 0 | 0 | 1358 | 0 | 0 |
| Stage 1 | 1379 | 1379 | - | 1318 | 1318 | - | - | - | - | - | - | - |
| Stage 2 | 664 | 1368 | - | 704 | 1380 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.5 | 6.5 | 6.9 | 7.5 | 6.5 | 6.9 | 4.1 | - | - | 4.26 | - | - |
| Critical Hdwy Stg 1 | 6.5 | 5.5 | - | 6.5 | 5.5 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.5 | 5.5 | - | 6.5 | 5.5 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.5 | 4 | 3.3 | 3.5 | 4 | 3.3 | 2.2 | - | - | 2.28 | - | - |
| Pot Cap-1 Maneuver | 34 | 20 | 401 | 35 | 22 | 414 | 516 | - | - | 472 | - | - |
| Stage 1 | 155 | 214 | - | 169 | 229 | - | - | - | - | - | - | - |
| Stage 2 | 421 | 217 | - | 398 | 214 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | - | - | - |
| Mov Cap-1 Maneuver | 32 | 19 | 401 | ~34 | 21 | 414 | 516 | - | - | 472 | - | - |
| Mov Cap-2 Maneuver | 136 | 135 | - | 146 | 142 | - | - | - | - | - | - | - |
| Stage 1 | 153 | 207 | - | 167 | 227 | - | - | - | - | - | - | - |
| Stage 2 | 410 | 215 | - | 382 | 207 | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|----------------------|------|------|----|-----|
| HCM Control Delay, s | 26.9 | 33.5 | 0 | 0.1 |
| HCM LOS | D | D | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | WBLn2 | SBL | SBT | SBR |
|-----------------------|-------|-----|-----|-------|-------|-------|-------|-----|-----|
| Capacity (veh/h) | 516 | - | - | 174 | 146 | 414 | 472 | - | - |
| HCM Lane V/C Ratio | 0.011 | - | - | 0.056 | 0.238 | 0.016 | 0.032 | - | - |
| HCM Control Delay (s) | 12.1 | - | - | 26.9 | 37.2 | 13.8 | 12.9 | - | - |
| HCM Lane LOS | B | - | - | D | E | B | B | - | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 0.2 | 0.9 | 0 | 0.1 | - | - |

Notes
 ~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

| Intersection | | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 4.8 | | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBU | SBL | SBT | SBR |
| Lane Configurations | | ↕ | | | ↕ | ↕ | | ↕ | ↕ | | ↕ | ↕ | |
| Traffic Vol, veh/h | 6 | 0 | 4 | 76 | 0 | 107 | 2 | 1135 | 127 | 6 | 172 | 1095 | 1 |
| Future Vol, veh/h | 6 | 0 | 4 | 76 | 0 | 107 | 2 | 1135 | 127 | 6 | 172 | 1095 | 1 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | - | None |
| Storage Length | - | - | - | - | - | 0 | - | - | 200 | - | 300 | - | - |
| Veh in Median Storage, # | - | 2 | - | - | 2 | - | - | 0 | - | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 0 | 0 | 0 | 2 | 2 | 2 | 0 | 2 | 2 | 0 | 2 | 4 | 0 |
| Mvmt Flow | 7 | 0 | 4 | 83 | 0 | 116 | 2 | 1234 | 138 | 7 | 187 | 1190 | 1 |

| Major/Minor | Minor2 | | Minor1 | | Major1 | | | Major2 | | | | | |
|----------------------|--------|------|--------|------|--------|------|------|--------|---|------|------|---|---|
| Conflicting Flow All | 2200 | 2955 | 596 | 2221 | 2817 | 617 | 1191 | 0 | 0 | 1234 | 1372 | 0 | 0 |
| Stage 1 | 1579 | 1579 | - | 1238 | 1238 | - | - | - | - | - | - | - | - |
| Stage 2 | 621 | 1376 | - | 983 | 1579 | - | - | - | - | - | - | - | - |
| Critical Hdwy | 7.5 | 6.5 | 6.9 | 7.54 | 6.54 | 6.94 | 4.1 | - | - | 6.4 | 4.14 | - | - |
| Critical Hdwy Stg 1 | 6.5 | 5.5 | - | 6.54 | 5.54 | - | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.5 | 5.5 | - | 6.54 | 5.54 | - | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.5 | 4 | 3.3 | 3.52 | 4.02 | 3.32 | 2.2 | - | - | 2.5 | 2.22 | - | - |
| Pot Cap-1 Maneuver | 25 | 15 | 452 | ~24 | 18 | 433 | 593 | - | - | 239 | 496 | - | - |
| Stage 1 | 116 | 171 | - | 186 | 246 | - | - | - | - | - | - | - | - |
| Stage 2 | 446 | 215 | - | 267 | 168 | - | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | | - | - |
| Mov Cap-1 Maneuver | 12 | 9 | 452 | ~16 | 10 | 433 | 593 | - | - | 468 | 468 | - | - |
| Mov Cap-2 Maneuver | 80 | 18 | - | 110 | 84 | - | - | - | - | - | - | - | - |
| Stage 1 | 114 | 101 | - | 183 | 242 | - | - | - | - | - | - | - | - |
| Stage 2 | 321 | 212 | - | 155 | 99 | - | - | - | - | - | - | - | - |

| Approach | EB | | WB | | NB | | SB | |
|----------------------|------|--|------|--|-----|--|-----|--|
| HCM Control Delay, s | 38.3 | | 51.4 | | 0.1 | | 2.5 | |
| HCM LOS | E | | F | | | | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | WBLn2 | SBL | SBT | SBR |
|-----------------------|-------|-----|-----|-------|-------|-------|-------|-----|-----|
| Capacity (veh/h) | 593 | - | - | 119 | 110 | 433 | 468 | - | - |
| HCM Lane V/C Ratio | 0.004 | - | - | 0.091 | 0.751 | 0.269 | 0.413 | - | - |
| HCM Control Delay (s) | 11.1 | 0.1 | - | 38.3 | 100.9 | 16.3 | 18 | - | - |
| HCM Lane LOS | B | A | - | E | F | C | C | - | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 0.3 | 4.1 | 1.1 | 2 | - | - |

Notes
 ~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 0.8 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↕↔ | | | ↕ | ↕ | ↕ | ↕↕ | ↕ | ↕ | ↕↔ | |
| Traffic Vol, veh/h | 2 | 0 | 3 | 43 | 0 | 17 | 3 | 483 | 19 | 5 | 649 | 3 |
| Future Vol, veh/h | 2 | 0 | 3 | 43 | 0 | 17 | 3 | 483 | 19 | 5 | 649 | 3 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None |
| Storage Length | - | - | - | - | - | 0 | 400 | - | 75 | 310 | - | - |
| Veh in Median Storage, # | - | 2 | - | - | 2 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 93 | 93 | 93 | 93 | 93 | 93 | 93 | 93 | 93 | 93 | 93 | 93 |
| Heavy Vehicles, % | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 11 | 0 | 60 | 4 | 0 |
| Mvmt Flow | 2 | 0 | 3 | 46 | 0 | 18 | 3 | 519 | 20 | 5 | 698 | 3 |

| Major/Minor | Minor2 | | Minor1 | | Major1 | | | Major2 | | | | |
|----------------------|--------|------|--------|------|--------|-----|-----|--------|---|-----|---|---|
| Conflicting Flow All | 976 | 1255 | 351 | 884 | 1236 | 260 | 701 | 0 | 0 | 539 | 0 | 0 |
| Stage 1 | 710 | 710 | - | 525 | 525 | - | - | - | - | - | - | - |
| Stage 2 | 266 | 545 | - | 359 | 711 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.5 | 6.5 | 6.9 | 7.6 | 6.5 | 6.9 | 4.1 | - | - | 5.3 | - | - |
| Critical Hdwy Stg 1 | 6.5 | 5.5 | - | 6.6 | 5.5 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.5 | 5.5 | - | 6.6 | 5.5 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.5 | 4 | 3.3 | 3.55 | 4 | 3.3 | 2.2 | - | - | 2.8 | - | - |
| Pot Cap-1 Maneuver | 208 | 173 | 651 | 235 | 178 | 745 | 905 | - | - | 712 | - | - |
| Stage 1 | 395 | 440 | - | 496 | 533 | - | - | - | - | - | - | - |
| Stage 2 | 722 | 522 | - | 624 | 439 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | - | - | - |
| Mov Cap-1 Maneuver | 201 | 171 | 651 | 232 | 176 | 745 | 905 | - | - | 712 | - | - |
| Mov Cap-2 Maneuver | 356 | 351 | - | 415 | 354 | - | - | - | - | - | - | - |
| Stage 1 | 394 | 437 | - | 495 | 531 | - | - | - | - | - | - | - |
| Stage 2 | 702 | 520 | - | 617 | 436 | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|----------------------|------|------|-----|-----|
| HCM Control Delay, s | 12.4 | 13.4 | 0.1 | 0.1 |
| HCM LOS | B | B | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | WBLn2 | SBL | SBT | SBR |
|-----------------------|-------|-----|-----|-------|-------|-------|-------|-----|-----|
| Capacity (veh/h) | 905 | - | - | 489 | 415 | 745 | 712 | - | - |
| HCM Lane V/C Ratio | 0.004 | - | - | 0.011 | 0.111 | 0.025 | 0.008 | - | - |
| HCM Control Delay (s) | 9 | - | - | 12.4 | 14.8 | 10 | 10.1 | - | - |
| HCM Lane LOS | A | - | - | B | B | B | B | - | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 0 | 0.4 | 0.1 | 0 | - | - |

| Intersection | | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 2.8 | | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBU | SBL | SBT | SBR |
| Lane Configurations | | ↕ | | | ↕ | ↕ | | ↕ | ↕ | | ↕ | ↕ | |
| Traffic Vol, veh/h | 1 | 0 | 0 | 90 | 0 | 170 | 2 | 332 | 36 | 2 | 60 | 631 | 2 |
| Future Vol, veh/h | 1 | 0 | 0 | 90 | 0 | 170 | 2 | 332 | 36 | 2 | 60 | 631 | 2 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | - | None |
| Storage Length | - | - | - | - | - | 0 | - | - | 200 | - | 300 | - | - |
| Veh in Median Storage, # | - | 2 | - | - | 2 | - | - | 0 | - | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | - | 0 | - |
| Peak Hour Factor | 93 | 93 | 93 | 93 | 93 | 93 | 93 | 93 | 93 | 93 | 93 | 93 | 93 |
| Heavy Vehicles, % | 0 | 2 | 0 | 2 | 2 | 2 | 0 | 10 | 2 | 0 | 2 | 5 | 0 |
| Mvmt Flow | 1 | 0 | 0 | 97 | 0 | 183 | 2 | 357 | 39 | 2 | 65 | 678 | 2 |

| Major/Minor | Minor2 | | Minor1 | | Major1 | | | Major2 | | | | | |
|----------------------|--------|------|--------|------|--------|------|-----|--------|---|------|------|---|---|
| Conflicting Flow All | 996 | 1213 | 340 | 834 | 1175 | 179 | 680 | 0 | 0 | 357 | 396 | 0 | 0 |
| Stage 1 | 813 | 813 | - | 361 | 361 | - | - | - | - | - | - | - | - |
| Stage 2 | 183 | 400 | - | 473 | 814 | - | - | - | - | - | - | - | - |
| Critical Hdwy | 7.5 | 6.54 | 6.9 | 7.54 | 6.54 | 6.94 | 4.1 | - | - | 6.4 | 4.14 | - | - |
| Critical Hdwy Stg 1 | 6.5 | 5.54 | - | 6.54 | 5.54 | - | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.5 | 5.54 | - | 6.54 | 5.54 | - | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.5 | 4.02 | 3.3 | 3.52 | 4.02 | 3.32 | 2.2 | - | - | 2.5 | 2.22 | - | - |
| Pot Cap-1 Maneuver | 202 | 181 | 662 | 261 | 190 | 833 | 922 | - | - | 862 | 1159 | - | - |
| Stage 1 | 343 | 390 | - | 630 | 624 | - | - | - | - | - | - | - | - |
| Stage 2 | 807 | 600 | - | 541 | 390 | - | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | | - | - |
| Mov Cap-1 Maneuver | 150 | 170 | 662 | 249 | 178 | 833 | 922 | - | - | 1134 | 1134 | - | - |
| Mov Cap-2 Maneuver | 301 | 318 | - | 428 | 327 | - | - | - | - | - | - | - | - |
| Stage 1 | 342 | 367 | - | 628 | 622 | - | - | - | - | - | - | - | - |
| Stage 2 | 628 | 598 | - | 509 | 367 | - | - | - | - | - | - | - | - |

| Approach | EB | | WB | | NB | | SB | |
|----------------------|----|--|------|--|----|--|-----|--|
| HCM Control Delay, s | 17 | | 12.4 | | 0 | | 0.7 | |
| HCM LOS | C | | B | | | | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | WBLn2 | SBL | SBT | SBR |
|-----------------------|-------|-----|-----|-------|-------|-------|-------|-----|-----|
| Capacity (veh/h) | 922 | - | - | 301 | 428 | 833 | 1134 | - | - |
| HCM Lane V/C Ratio | 0.002 | - | - | 0.004 | 0.226 | 0.219 | 0.059 | - | - |
| HCM Control Delay (s) | 8.9 | 0 | - | 17 | 15.9 | 10.5 | 8.4 | - | - |
| HCM Lane LOS | A | A | - | C | C | B | A | - | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 0 | 0.9 | 0.8 | 0.2 | - | - |

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 0.7 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↔ | | | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ |
| Traffic Vol, veh/h | 6 | 0 | 3 | 32 | 0 | 6 | 5 | 777 | 46 | 14 | 741 | 3 |
| Future Vol, veh/h | 6 | 0 | 3 | 32 | 0 | 6 | 5 | 777 | 46 | 14 | 741 | 3 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None |
| Storage Length | - | - | - | - | - | 0 | 400 | - | 75 | 310 | - | - |
| Veh in Median Storage, # | - | 2 | - | - | 2 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 8 | 4 | 0 |
| Mvmt Flow | 7 | 0 | 3 | 35 | 0 | 7 | 5 | 845 | 50 | 15 | 805 | 3 |

| Major/Minor | Minor2 | | Minor1 | | Major1 | | Major2 | | | | | |
|----------------------|--------|------|--------|------|--------|-----|--------|---|---|------|---|---|
| Conflicting Flow All | 1270 | 1742 | 404 | 1288 | 1693 | 423 | 808 | 0 | 0 | 895 | 0 | 0 |
| Stage 1 | 837 | 837 | - | 855 | 855 | - | - | - | - | - | - | - |
| Stage 2 | 433 | 905 | - | 433 | 838 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.5 | 6.5 | 6.9 | 7.5 | 6.5 | 6.9 | 4.1 | - | - | 4.26 | - | - |
| Critical Hdwy Stg 1 | 6.5 | 5.5 | - | 6.5 | 5.5 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.5 | 5.5 | - | 6.5 | 5.5 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.5 | 4 | 3.3 | 3.5 | 4 | 3.3 | 2.2 | - | - | 2.28 | - | - |
| Pot Cap-1 Maneuver | 127 | 88 | 602 | 123 | 94 | 585 | 826 | - | - | 717 | - | - |
| Stage 1 | 332 | 385 | - | 323 | 378 | - | - | - | - | - | - | - |
| Stage 2 | 577 | 358 | - | 577 | 384 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | - | - | - |
| Mov Cap-1 Maneuver | 123 | 86 | 602 | 120 | 91 | 585 | 826 | - | - | 717 | - | - |
| Mov Cap-2 Maneuver | 287 | 253 | - | 281 | 265 | - | - | - | - | - | - | - |
| Stage 1 | 330 | 377 | - | 321 | 376 | - | - | - | - | - | - | - |
| Stage 2 | 567 | 356 | - | 562 | 376 | - | - | - | - | - | - | - |

| Approach | EB | | WB | | NB | | SB | | | |
|----------------------|------|--|------|--|-----|--|-----|--|--|--|
| HCM Control Delay, s | 15.6 | | 18.3 | | 0.1 | | 0.2 | | | |
| HCM LOS | C | | C | | | | | | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | WBLn2 | SBL | SBT | SBR |
|-----------------------|-------|-----|-----|-------|-------|-------|-------|-----|-----|
| Capacity (veh/h) | 826 | - | - | 348 | 281 | 585 | 717 | - | - |
| HCM Lane V/C Ratio | 0.007 | - | - | 0.028 | 0.124 | 0.011 | 0.021 | - | - |
| HCM Control Delay (s) | 9.4 | - | - | 15.6 | 19.6 | 11.2 | 10.1 | - | - |
| HCM Lane LOS | A | - | - | C | C | B | B | - | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 0.1 | 0.4 | 0 | 0.1 | - | - |

| Intersection | | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 3.3 | | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBU | SBL | SBT | SBR |
| Lane Configurations | | ↕ | | | ↕ | ↕ | | ↕ | ↕ | | ↕ | ↕ | |
| Traffic Vol, veh/h | 6 | 0 | 4 | 76 | 0 | 107 | 2 | 709 | 127 | 6 | 172 | 597 | 1 |
| Future Vol, veh/h | 6 | 0 | 4 | 76 | 0 | 107 | 2 | 709 | 127 | 6 | 172 | 597 | 1 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | - | None |
| Storage Length | - | - | - | - | - | 0 | - | - | 200 | - | 300 | - | - |
| Veh in Median Storage, # | - | 2 | - | - | 2 | - | - | 0 | - | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 0 | 0 | 0 | 2 | 2 | 2 | 0 | 2 | 2 | 0 | 2 | 4 | 0 |
| Mvmt Flow | 7 | 0 | 4 | 83 | 0 | 116 | 2 | 771 | 138 | 7 | 187 | 649 | 1 |

| Major/Minor | Minor2 | | Minor1 | | Major1 | | | Major2 | | | | | |
|----------------------|--------|------|--------|------|--------|------|-----|--------|---|-----|------|---|---|
| Conflicting Flow All | 1428 | 1951 | 325 | 1488 | 1813 | 386 | 650 | 0 | 0 | 771 | 909 | 0 | 0 |
| Stage 1 | 1038 | 1038 | - | 775 | 775 | - | - | - | - | - | - | - | - |
| Stage 2 | 390 | 913 | - | 713 | 1038 | - | - | - | - | - | - | - | - |
| Critical Hdwy | 7.5 | 6.5 | 6.9 | 7.54 | 6.54 | 6.94 | 4.1 | - | - | 6.4 | 4.14 | - | - |
| Critical Hdwy Stg 1 | 6.5 | 5.5 | - | 6.54 | 5.54 | - | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.5 | 5.5 | - | 6.54 | 5.54 | - | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.5 | 4 | 3.3 | 3.52 | 4.02 | 3.32 | 2.2 | - | - | 2.5 | 2.22 | - | - |
| Pot Cap-1 Maneuver | 97 | 65 | 677 | 86 | 78 | 612 | 946 | - | - | 472 | 745 | - | - |
| Stage 1 | 251 | 311 | - | 357 | 406 | - | - | - | - | - | - | - | - |
| Stage 2 | 611 | 355 | - | 389 | 306 | - | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | | - | - |
| Mov Cap-1 Maneuver | 62 | 47 | 677 | ~68 | 57 | 612 | 946 | - | - | 723 | 723 | - | - |
| Mov Cap-2 Maneuver | 191 | 132 | - | 218 | 190 | - | - | - | - | - | - | - | - |
| Stage 1 | 250 | 228 | - | 356 | 404 | - | - | - | - | - | - | - | - |
| Stage 2 | 493 | 354 | - | 283 | 224 | - | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|----------------------|----|------|----|-----|
| HCM Control Delay, s | 19 | 20.2 | 0 | 2.7 |
| HCM LOS | C | C | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | WBLn2 | SBL | SBT | SBR |
|-----------------------|-------|-----|-----|-------|-------|-------|-------|-----|-----|
| Capacity (veh/h) | 946 | - | - | 268 | 218 | 612 | 723 | - | - |
| HCM Lane V/C Ratio | 0.002 | - | - | 0.041 | 0.379 | 0.19 | 0.268 | - | - |
| HCM Control Delay (s) | 8.8 | 0 | - | 19 | 31.3 | 12.3 | 11.8 | - | - |
| HCM Lane LOS | A | A | - | C | D | B | B | - | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 0.1 | 1.7 | 0.7 | 1.1 | - | - |

Notes
 ~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Queuing and Blocking Report

Intersection: 1: Rt. 60 Richmond Road & Rt. 30 Rochambeau Drive & Rt. 30 Barhamsville Road

| Movement | EB | EB | EB | WB | WB | WB | NB | NB | NB | SB | SB | SB | |
|-----------------------|-----|------|------|----|------|------|-----|------|------|-----|------|------|--|
| Directions Served | L | T | T | L | T | T | L | T | T | L | T | TR | |
| Maximum Queue (ft) | 44 | 65 | 35 | 41 | 22 | 13 | 108 | 88 | 103 | 119 | 142 | 121 | |
| Average Queue (ft) | 10 | 17 | 4 | 6 | 1 | 1 | 36 | 34 | 41 | 41 | 67 | 44 | |
| 95th Queue (ft) | 33 | 47 | 19 | 25 | 10 | 7 | 85 | 70 | 84 | 89 | 119 | 94 | |
| Link Distance (ft) | | 2497 | 2497 | | 3301 | 3301 | | 2318 | 2318 | | 1438 | 1438 | |
| Upstream Blk Time (%) | | | | | | | | | | | | | |
| Queuing Penalty (veh) | | | | | | | | | | | | | |
| Storage Bay Dist (ft) | 200 | | | | 250 | | | 290 | | | 310 | | |
| Storage Blk Time (%) | | | | | | | | | | | | | |
| Queuing Penalty (veh) | | | | | | | | | | | | | |

Intersection: 2: Rt. 60 Richmond Road & VCA/Hickory Neck

| Movement | EB | WB | WB | NB | NB | SB |
|-----------------------|-----|-----|-----|----|-----|----|
| Directions Served | LTR | LT | R | L | R | L |
| Maximum Queue (ft) | 27 | 61 | 26 | 14 | 1 | 25 |
| Average Queue (ft) | 4 | 23 | 11 | 1 | 0 | 2 |
| 95th Queue (ft) | 21 | 49 | 30 | 7 | 1 | 13 |
| Link Distance (ft) | 752 | 337 | 337 | | | |
| Upstream Blk Time (%) | | | | | | |
| Queuing Penalty (veh) | | | | | | |
| Storage Bay Dist (ft) | | | 400 | 75 | 310 | |
| Storage Blk Time (%) | | | | | | |
| Queuing Penalty (veh) | | | | | | |

Intersection: 3: Rt. 60 Richmond Road & Bicast

| Movement | EB | NB | SB |
|-----------------------|-----|-----|------|
| Directions Served | LR | LT | UT |
| Maximum Queue (ft) | 18 | 31 | 19 |
| Average Queue (ft) | 1 | 2 | 1 |
| 95th Queue (ft) | 9 | 15 | 9 |
| Link Distance (ft) | 650 | 980 | 1700 |
| Upstream Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |
| Storage Bay Dist (ft) | | | |
| Storage Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |

Network Summary

Network wide Queuing Penalty: 0

Queuing and Blocking Report

Intersection: 1: Rt. 60 Richmond Road & Rt. 30 Rochambeau Drive & Rt. 30 Barhamsville Road

| Movement | EB | EB | EB | WB | WB | WB | NB | NB | NB | SB | SB | SB |
|-----------------------|-----|------|------|-----|------|------|-----|------|------|-----|------|------|
| Directions Served | L | T | T | L | T | T | L | T | T | L | T | TR |
| Maximum Queue (ft) | 37 | 44 | 13 | 40 | 22 | 23 | 232 | 189 | 136 | 128 | 163 | 144 |
| Average Queue (ft) | 4 | 9 | 1 | 5 | 1 | 2 | 127 | 55 | 68 | 44 | 86 | 63 |
| 95th Queue (ft) | 22 | 31 | 7 | 23 | 10 | 11 | 228 | 127 | 114 | 93 | 142 | 119 |
| Link Distance (ft) | | 2497 | 2497 | | 3301 | 3301 | | 2318 | 2318 | | 1438 | 1438 |
| Upstream Blk Time (%) | | | | | | | | | | | | |
| Queuing Penalty (veh) | | | | | | | | | | | | |
| Storage Bay Dist (ft) | 200 | | | 250 | | | 290 | | | 310 | | |
| Storage Blk Time (%) | | | | | | | 1 | 0 | | | | |
| Queuing Penalty (veh) | | | | | | | 1 | 0 | | | | |

Intersection: 2: Rt. 60 Richmond Road & VCA/Hickory Neck

| Movement | EB | WB | WB | NB | SB |
|-----------------------|-----|-----|-----|-----|----|
| Directions Served | LTR | LT | R | L | L |
| Maximum Queue (ft) | 33 | 57 | 23 | 14 | 26 |
| Average Queue (ft) | 8 | 19 | 5 | 1 | 4 |
| 95th Queue (ft) | 30 | 46 | 21 | 8 | 15 |
| Link Distance (ft) | 752 | 337 | 337 | | |
| Upstream Blk Time (%) | | | | | |
| Queuing Penalty (veh) | | | | | |
| Storage Bay Dist (ft) | | | 400 | 310 | |
| Storage Blk Time (%) | | | | | |
| Queuing Penalty (veh) | | | | | |

Intersection: 3: Rt. 60 Richmond Road & Bicast

| Movement | EB | NB | SB |
|-----------------------|-----|-----|------|
| Directions Served | LR | LT | UT |
| Maximum Queue (ft) | 37 | 28 | 38 |
| Average Queue (ft) | 9 | 1 | 5 |
| 95th Queue (ft) | 32 | 14 | 24 |
| Link Distance (ft) | 650 | 980 | 1700 |
| Upstream Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |
| Storage Bay Dist (ft) | | | |
| Storage Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |

Network Summary

Network wide Queuing Penalty: 2

Queuing and Blocking Report
Baseline

03/06/2023

Intersection: 1: Rt. 60 Richmond Road & Rt. 30 Rochambeau Drive & Rt. 30 Barhamsville Road

| Movement | EB | EB | EB | EB | WB | WB | WB | WB | NB | NB | NB | NB |
|-----------------------|-----|------|------|-----|-----|------|------|-----|-----|------|------|-----|
| Directions Served | L | T | T | R | L | T | T | R | L | T | T | R |
| Maximum Queue (ft) | 151 | 107 | 69 | 43 | 63 | 20 | 8 | 61 | 127 | 209 | 222 | 134 |
| Average Queue (ft) | 59 | 22 | 10 | 3 | 9 | 1 | 0 | 4 | 45 | 120 | 121 | 4 |
| 95th Queue (ft) | 133 | 79 | 55 | 21 | 39 | 8 | 4 | 29 | 100 | 187 | 193 | 52 |
| Link Distance (ft) | | 2497 | 2497 | | | 3301 | 3301 | | | 2318 | 2318 | |
| Upstream Blk Time (%) | | | | | | | | | | | | |
| Queuing Penalty (veh) | | | | | | | | | | | | |
| Storage Bay Dist (ft) | 200 | | | 400 | 250 | | | 370 | 290 | | | 195 |
| Storage Blk Time (%) | 1 | 0 | | | | | | | | | 1 | 0 |
| Queuing Penalty (veh) | 1 | 0 | | | | | | | | | 0 | 0 |

Intersection: 1: Rt. 60 Richmond Road & Rt. 30 Rochambeau Drive & Rt. 30 Barhamsville Road

| Movement | SB | SB | SB |
|-----------------------|-----|------|------|
| Directions Served | L | T | TR |
| Maximum Queue (ft) | 232 | 244 | 223 |
| Average Queue (ft) | 114 | 136 | 119 |
| 95th Queue (ft) | 206 | 205 | 193 |
| Link Distance (ft) | | 1438 | 1438 |
| Upstream Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |
| Storage Bay Dist (ft) | 310 | | |
| Storage Blk Time (%) | | 0 | |
| Queuing Penalty (veh) | | 0 | |

Intersection: 2: Rt. 60 Richmond Road & VCA/Hickory Neck

| Movement | EB | WB | WB | NB | SB |
|-----------------------|-----|-----|-----|-----|----|
| Directions Served | LTR | LT | R | L | L |
| Maximum Queue (ft) | 33 | 81 | 28 | 12 | 33 |
| Average Queue (ft) | 6 | 30 | 11 | 1 | 3 |
| 95th Queue (ft) | 25 | 65 | 30 | 8 | 18 |
| Link Distance (ft) | 752 | 337 | 337 | | |
| Upstream Blk Time (%) | | | | | |
| Queuing Penalty (veh) | | | | | |
| Storage Bay Dist (ft) | | | 400 | 310 | |
| Storage Blk Time (%) | | | | | |
| Queuing Penalty (veh) | | | | | |

Intersection: 3: Rt. 60 Richmond Road & Bicast

| Movement | EB | NB | NB | SB |
|-----------------------|-----|-----|-----|------|
| Directions Served | LR | LT | T | UT |
| Maximum Queue (ft) | 12 | 48 | 12 | 29 |
| Average Queue (ft) | 1 | 2 | 0 | 2 |
| 95th Queue (ft) | 8 | 24 | 11 | 13 |
| Link Distance (ft) | 650 | 980 | 980 | 1700 |
| Upstream Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |
| Storage Bay Dist (ft) | | | | |
| Storage Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |

Network Summary

Network wide Queuing Penalty: 1

Queuing and Blocking Report
Baseline

03/06/2023

Intersection: 1: Rt. 60 Richmond Road & Rt. 30 Rochambeau Drive & Rt. 30 Barhamsville Road

| Movement | EB | EB | EB | EB | WB | WB | WB | WB | NB | NB | NB | NB |
|-----------------------|-----|------|------|-----|-----|------|------|-----|-----|------|------|-----|
| Directions Served | L | T | T | R | L | T | T | R | L | T | T | R |
| Maximum Queue (ft) | 109 | 61 | 34 | 35 | 51 | 41 | 44 | 87 | 290 | 404 | 337 | 194 |
| Average Queue (ft) | 29 | 9 | 4 | 1 | 7 | 9 | 9 | 11 | 175 | 189 | 168 | 6 |
| 95th Queue (ft) | 69 | 32 | 18 | 12 | 29 | 29 | 29 | 51 | 298 | 343 | 267 | 64 |
| Link Distance (ft) | | 2497 | 2497 | | | 3301 | 3301 | | | 2318 | 2318 | |
| Upstream Blk Time (%) | | | | | | | | | | | | |
| Queuing Penalty (veh) | | | | | | | | | | | | |
| Storage Bay Dist (ft) | 200 | | | 400 | 250 | | | 370 | 290 | | | 195 |
| Storage Blk Time (%) | | | | | | | | | 7 | 1 | 3 | 0 |
| Queuing Penalty (veh) | | | | | | | | | 30 | 3 | 1 | 0 |

Intersection: 1: Rt. 60 Richmond Road & Rt. 30 Rochambeau Drive & Rt. 30 Barhamsville Road

| Movement | SB | SB | SB |
|-----------------------|-----|------|------|
| Directions Served | L | T | TR |
| Maximum Queue (ft) | 310 | 592 | 430 |
| Average Queue (ft) | 204 | 274 | 258 |
| 95th Queue (ft) | 354 | 452 | 394 |
| Link Distance (ft) | | 1438 | 1438 |
| Upstream Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |
| Storage Bay Dist (ft) | 310 | | |
| Storage Blk Time (%) | 7 | 3 | |
| Queuing Penalty (veh) | 30 | 8 | |

Intersection: 2: Rt. 60 Richmond Road & VCA/Hickory Neck

| Movement | EB | WB | WB | NB | SB |
|-----------------------|-----|-----|-----|-----|----|
| Directions Served | LTR | LT | R | L | L |
| Maximum Queue (ft) | 52 | 93 | 23 | 21 | 38 |
| Average Queue (ft) | 8 | 32 | 4 | 2 | 5 |
| 95th Queue (ft) | 32 | 73 | 18 | 12 | 18 |
| Link Distance (ft) | 752 | 337 | 337 | | |
| Upstream Blk Time (%) | | | | | |
| Queuing Penalty (veh) | | | | | |
| Storage Bay Dist (ft) | | | 400 | 310 | |
| Storage Blk Time (%) | | | | | |
| Queuing Penalty (veh) | | | | | |

Intersection: 3: Rt. 60 Richmond Road & Bicast

| Movement | EB | SB | SB |
|-----------------------|-----|------|------|
| Directions Served | LR | UT | TR |
| Maximum Queue (ft) | 30 | 163 | 167 |
| Average Queue (ft) | 9 | 25 | 14 |
| 95th Queue (ft) | 31 | 99 | 76 |
| Link Distance (ft) | 650 | 1700 | 1700 |
| Upstream Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |
| Storage Bay Dist (ft) | | | |
| Storage Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |

Network Summary

Network wide Queuing Penalty: 72

Queuing and Blocking Report
Baseline

03/06/2023

Intersection: 1: Rt. 60 Richmond Road & Rt. 30 Rochambeau Drive & Rt. 30 Barhamsville Road

| Movement | EB | EB | EB | EB | WB | WB | WB | WB | NB | NB | NB | NB |
|-----------------------|-----|------|------|-----|-----|------|------|-----|-----|------|------|-----|
| Directions Served | L | T | T | R | L | T | T | R | L | T | T | R |
| Maximum Queue (ft) | 159 | 77 | 53 | 38 | 101 | 27 | 14 | 61 | 153 | 239 | 262 | 174 |
| Average Queue (ft) | 63 | 20 | 8 | 2 | 29 | 2 | 1 | 4 | 61 | 134 | 134 | 14 |
| 95th Queue (ft) | 132 | 55 | 31 | 19 | 80 | 15 | 8 | 28 | 125 | 210 | 213 | 97 |
| Link Distance (ft) | | 2497 | 2497 | | | 3301 | 3301 | | | 2318 | 2318 | |
| Upstream Blk Time (%) | | | | | | | | | | | | |
| Queuing Penalty (veh) | | | | | | | | | | | | |
| Storage Bay Dist (ft) | 200 | | | 400 | 250 | | | 370 | 290 | | | 195 |
| Storage Blk Time (%) | 0 | | | | | | | | | 0 | 1 | 0 |
| Queuing Penalty (veh) | 0 | | | | | | | | | 0 | 2 | 0 |

Intersection: 1: Rt. 60 Richmond Road & Rt. 30 Rochambeau Drive & Rt. 30 Barhamsville Road

| Movement | SB | SB | SB |
|-----------------------|-----|------|------|
| Directions Served | L | T | TR |
| Maximum Queue (ft) | 234 | 261 | 249 |
| Average Queue (ft) | 119 | 150 | 128 |
| 95th Queue (ft) | 212 | 238 | 213 |
| Link Distance (ft) | | 1438 | 1438 |
| Upstream Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |
| Storage Bay Dist (ft) | 310 | | |
| Storage Blk Time (%) | 0 | 0 | |
| Queuing Penalty (veh) | 2 | 0 | |

Intersection: 2: Rt. 60 Richmond Road & VCA/Hickory Neck

| Movement | EB | WB | WB | NB | NB | SB |
|-----------------------|-----|-----|-----|-----|----|-----|
| Directions Served | LTR | LT | R | L | R | L |
| Maximum Queue (ft) | 35 | 83 | 33 | 16 | 5 | 39 |
| Average Queue (ft) | 6 | 30 | 11 | 1 | 0 | 3 |
| 95th Queue (ft) | 27 | 68 | 32 | 8 | 5 | 20 |
| Link Distance (ft) | 752 | 337 | 337 | | | |
| Upstream Blk Time (%) | | | | | | |
| Queuing Penalty (veh) | | | | | | |
| Storage Bay Dist (ft) | | | | 400 | 75 | 310 |
| Storage Blk Time (%) | | | | | | |
| Queuing Penalty (veh) | | | | | | |

Queuing and Blocking Report
Baseline

03/06/2023

Intersection: 3: Rt. 60 Richmond Road & Bicast/Hankins-Dunn

| Movement | EB | WB | WB | NB | NB | SB | SB | SB |
|-----------------------|-----|-----|-----|-----|-----|-----|------|------|
| Directions Served | LTR | LT | R | LT | R | UL | T | TR |
| Maximum Queue (ft) | 15 | 287 | 118 | 23 | 8 | 79 | 8 | 12 |
| Average Queue (ft) | 1 | 157 | 39 | 1 | 0 | 26 | 0 | 0 |
| 95th Queue (ft) | 10 | 344 | 97 | 12 | 5 | 59 | 7 | 9 |
| Link Distance (ft) | 650 | 896 | 896 | 973 | | | 1699 | 1699 |
| Upstream Blk Time (%) | | | | | | | | |
| Queuing Penalty (veh) | | | | | | | | |
| Storage Bay Dist (ft) | | | | | 200 | 300 | | |
| Storage Blk Time (%) | | | | | | | | |
| Queuing Penalty (veh) | | | | | | | | |

Network Summary

Network wide Queuing Penalty: 4

Queuing and Blocking Report
Baseline

03/06/2023

Intersection: 1: Rt. 60 Richmond Road & Rt. 30 Rochambeau Drive & Rt. 30 Barhamsville Road

| Movement | EB | EB | EB | EB | WB | WB | WB | WB | NB | NB | NB | NB |
|-----------------------|-----|------|------|-----|-----|------|------|-----|-----|------|------|-----|
| Directions Served | L | T | T | R | L | T | T | R | L | T | T | R |
| Maximum Queue (ft) | 76 | 63 | 42 | 37 | 224 | 162 | 132 | 41 | 256 | 314 | 318 | 195 |
| Average Queue (ft) | 23 | 13 | 4 | 3 | 107 | 21 | 9 | 2 | 142 | 171 | 177 | 39 |
| 95th Queue (ft) | 59 | 41 | 20 | 22 | 215 | 130 | 66 | 19 | 252 | 282 | 279 | 166 |
| Link Distance (ft) | | 2497 | 2497 | | | 3301 | 3301 | | | 2318 | 2318 | |
| Upstream Blk Time (%) | | | | | | | | | | | | |
| Queuing Penalty (veh) | | | | | | | | | | | | |
| Storage Bay Dist (ft) | 200 | | | 400 | 250 | | | 370 | 290 | | | 195 |
| Storage Blk Time (%) | | | | | 2 | 0 | 0 | | 3 | 1 | 4 | 0 |
| Queuing Penalty (veh) | | | | | 2 | 1 | 0 | | 11 | 2 | 5 | 1 |

Intersection: 1: Rt. 60 Richmond Road & Rt. 30 Rochambeau Drive & Rt. 30 Barhamsville Road

| Movement | SB | SB | SB |
|-----------------------|-----|------|------|
| Directions Served | L | T | TR |
| Maximum Queue (ft) | 308 | 443 | 427 |
| Average Queue (ft) | 178 | 246 | 233 |
| 95th Queue (ft) | 310 | 387 | 372 |
| Link Distance (ft) | | 1438 | 1438 |
| Upstream Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |
| Storage Bay Dist (ft) | 310 | | |
| Storage Blk Time (%) | 2 | 2 | |
| Queuing Penalty (veh) | 10 | 6 | |

Intersection: 2: Rt. 60 Richmond Road & VCA/Hickory Neck

| Movement | EB | WB | WB | NB | SB | SB |
|-----------------------|-----|-----|-----|-----|-----|------|
| Directions Served | LTR | LT | R | L | L | TR |
| Maximum Queue (ft) | 45 | 110 | 23 | 18 | 23 | 0 |
| Average Queue (ft) | 10 | 36 | 4 | 2 | 4 | 0 |
| 95th Queue (ft) | 35 | 92 | 19 | 10 | 16 | 0 |
| Link Distance (ft) | 752 | 337 | 337 | | | 2318 |
| Upstream Blk Time (%) | | | | | | |
| Queuing Penalty (veh) | | | | | | |
| Storage Bay Dist (ft) | | | | 400 | 310 | |
| Storage Blk Time (%) | | | | | | |
| Queuing Penalty (veh) | | | | | | |

Queuing and Blocking Report
Baseline

03/06/2023

Intersection: 3: Rt. 60 Richmond Road & Bicast/Hankins-Dunn

| Movement | EB | WB | WB | NB | NB | NB | SB | SB | SB |
|-----------------------|-----|------|------|-----|-----|-----|-----|------|------|
| Directions Served | LTR | LT | R | LT | T | R | UL | T | TR |
| Maximum Queue (ft) | 201 | 909 | 903 | 94 | 50 | 28 | 281 | 365 | 228 |
| Average Queue (ft) | 101 | 787 | 595 | 5 | 2 | 5 | 154 | 51 | 35 |
| 95th Queue (ft) | 236 | 1079 | 1251 | 42 | 28 | 21 | 294 | 285 | 235 |
| Link Distance (ft) | 650 | 896 | 896 | 973 | 973 | | | 1699 | 1699 |
| Upstream Blk Time (%) | | 63 | 51 | | | | | | |
| Queuing Penalty (veh) | | 0 | 0 | | | | | | |
| Storage Bay Dist (ft) | | | | | | 200 | 300 | | |
| Storage Blk Time (%) | | | | | 0 | | 7 | 3 | |
| Queuing Penalty (veh) | | | | | 0 | | 39 | 5 | |

Network Summary

Network wide Queuing Penalty: 81

Queuing and Blocking Report
Baseline

03/06/2023

Intersection: 1: Rt. 60 Richmond Road & Rt. 30 Rochambeau Drive & Rt. 30 Barhamsville Road

| Movement | EB | EB | EB | EB | WB | WB | WB | NB | NB | NB | SB | SB |
|-----------------------|-----|------|------|-----|-----|------|------|-----|------|------|-----|------|
| Directions Served | L | T | T | R | L | T | T | L | T | T | L | T |
| Maximum Queue (ft) | 64 | 64 | 46 | 20 | 83 | 18 | 7 | 134 | 107 | 112 | 109 | 161 |
| Average Queue (ft) | 12 | 20 | 5 | 1 | 21 | 1 | 0 | 55 | 44 | 52 | 41 | 79 |
| 95th Queue (ft) | 40 | 53 | 25 | 14 | 63 | 10 | 4 | 111 | 89 | 93 | 86 | 134 |
| Link Distance (ft) | | 2497 | 2497 | | | 3301 | 3301 | | 2318 | 2318 | | 1438 |
| Upstream Blk Time (%) | | | | | | | | | | | | |
| Queuing Penalty (veh) | | | | | | | | | | | | |
| Storage Bay Dist (ft) | 200 | | | 400 | 250 | | | 290 | | | 310 | |
| Storage Blk Time (%) | | | | | | | | | | | | |
| Queuing Penalty (veh) | | | | | | | | | | | | |

Intersection: 1: Rt. 60 Richmond Road & Rt. 30 Rochambeau Drive & Rt. 30 Barhamsville Road

| Movement | SB |
|-----------------------|------|
| Directions Served | TR |
| Maximum Queue (ft) | 136 |
| Average Queue (ft) | 51 |
| 95th Queue (ft) | 106 |
| Link Distance (ft) | 1438 |
| Upstream Blk Time (%) | |
| Queuing Penalty (veh) | |
| Storage Bay Dist (ft) | |
| Storage Blk Time (%) | |
| Queuing Penalty (veh) | |

Intersection: 2: Rt. 60 Richmond Road & VCA/Hickory Neck

| Movement | EB | WB | WB | NB | SB |
|-----------------------|-----|-----|-----|-----|-----|
| Directions Served | LTR | LT | R | L | L |
| Maximum Queue (ft) | 32 | 82 | 30 | 12 | 26 |
| Average Queue (ft) | 5 | 28 | 11 | 1 | 2 |
| 95th Queue (ft) | 24 | 63 | 31 | 6 | 13 |
| Link Distance (ft) | 752 | 337 | 337 | | |
| Upstream Blk Time (%) | | | | | |
| Queuing Penalty (veh) | | | | | |
| Storage Bay Dist (ft) | | | | 400 | 310 |
| Storage Blk Time (%) | | | | | |
| Queuing Penalty (veh) | | | | | |

Queuing and Blocking Report
Baseline

03/06/2023

Intersection: 3: Rt. 60 Richmond Road & Bicast/Hankins-Dunn

| Movement | EB | WB | WB | NB | NB | SB | SB |
|-----------------------|-----|-----|-----|-----|-----|-----|------|
| Directions Served | LTR | LT | R | LT | R | UL | TR |
| Maximum Queue (ft) | 21 | 95 | 78 | 22 | 6 | 44 | 6 |
| Average Queue (ft) | 1 | 42 | 34 | 1 | 0 | 13 | 0 |
| 95th Queue (ft) | 10 | 79 | 60 | 14 | 4 | 35 | 3 |
| Link Distance (ft) | 650 | 896 | 896 | 973 | | | 1699 |
| Upstream Blk Time (%) | | | | | | | |
| Queuing Penalty (veh) | | | | | | | |
| Storage Bay Dist (ft) | | | | | 200 | 300 | |
| Storage Blk Time (%) | | | | | | | |
| Queuing Penalty (veh) | | | | | | | |

Network Summary

Network wide Queuing Penalty: 0

Queuing and Blocking Report
Baseline

03/10/2023

Intersection: 1: Rt. 60 Richmond Road & Rt. 30 Rochambeau Drive & Rt. 30 Barhamsville Road

| Movement | EB | EB | EB | WB | WB | WB | NB | NB | NB | SB | SB | SB |
|-----------------------|-----|------|------|-----|------|------|-----|------|------|-----|------|------|
| Directions Served | L | T | T | L | T | T | L | T | T | L | T | TR |
| Maximum Queue (ft) | 44 | 54 | 21 | 150 | 32 | 30 | 224 | 137 | 140 | 127 | 194 | 183 |
| Average Queue (ft) | 6 | 13 | 2 | 55 | 3 | 2 | 112 | 65 | 80 | 51 | 117 | 91 |
| 95th Queue (ft) | 24 | 39 | 11 | 120 | 18 | 15 | 193 | 118 | 126 | 104 | 180 | 169 |
| Link Distance (ft) | | 2497 | 2497 | | 3301 | 3301 | | 2318 | 2318 | | 1438 | 1438 |
| Upstream Blk Time (%) | | | | | | | | | | | | |
| Queuing Penalty (veh) | | | | | | | | | | | | |
| Storage Bay Dist (ft) | 200 | | | 250 | | | 290 | | | 310 | | |
| Storage Blk Time (%) | | | | | | | 0 | | 0 | | | |
| Queuing Penalty (veh) | | | | | | | 0 | | 0 | | | |

Intersection: 2: Rt. 60 Richmond Road & VCA/Hickory Neck

| Movement | EB | WB | WB | NB | NB | SB |
|-----------------------|-----|-----|-----|-----|----|-----|
| Directions Served | LTR | LT | R | L | R | L |
| Maximum Queue (ft) | 34 | 65 | 23 | 17 | 4 | 23 |
| Average Queue (ft) | 8 | 21 | 4 | 1 | 0 | 3 |
| 95th Queue (ft) | 29 | 50 | 19 | 7 | 4 | 13 |
| Link Distance (ft) | 752 | 337 | 337 | | | |
| Upstream Blk Time (%) | | | | | | |
| Queuing Penalty (veh) | | | | | | |
| Storage Bay Dist (ft) | | | | 400 | 75 | 310 |
| Storage Blk Time (%) | | | | | | |
| Queuing Penalty (veh) | | | | | | |

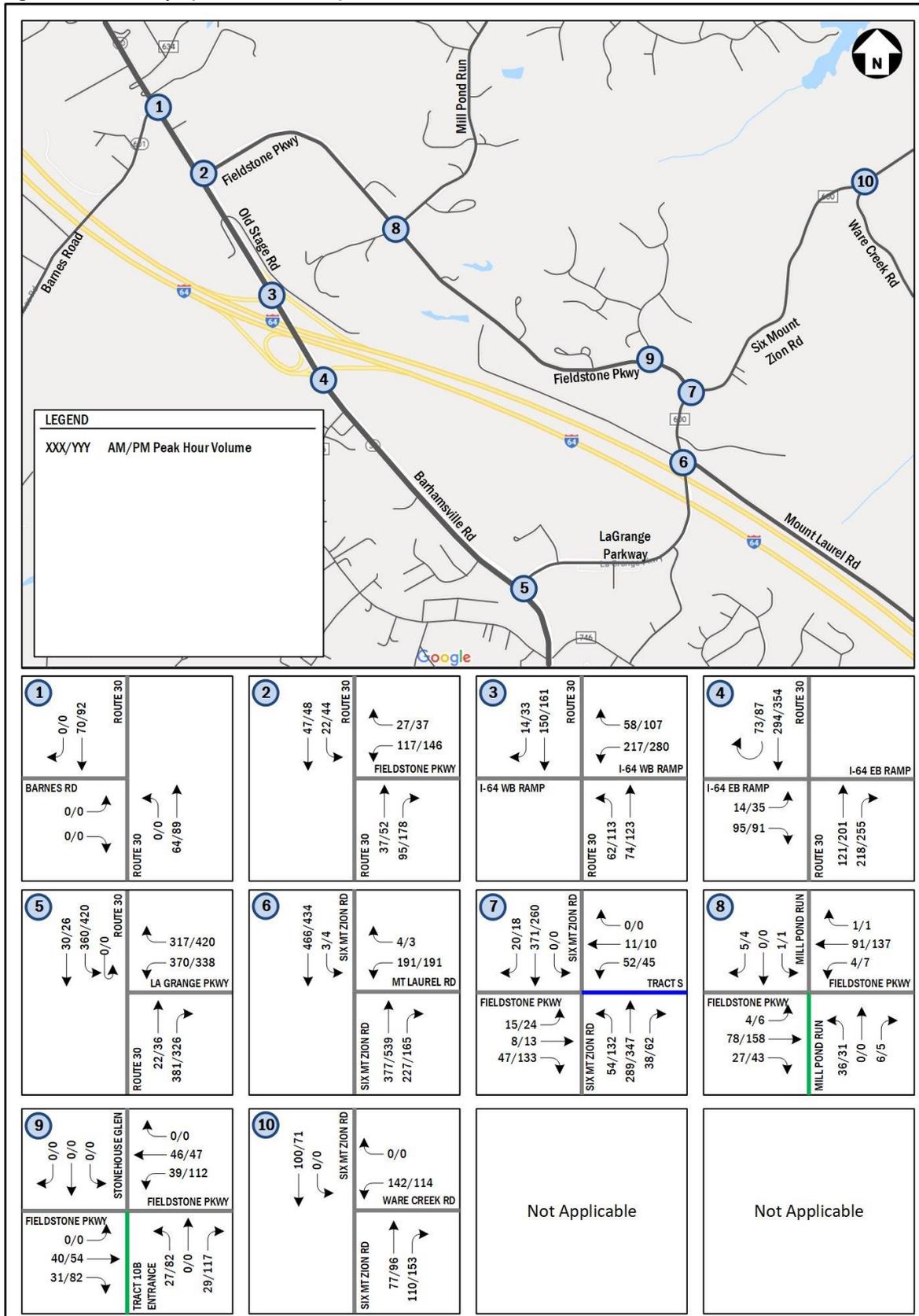
Intersection: 3: Rt. 60 Richmond Road & Bicast/Hankins-Dunn

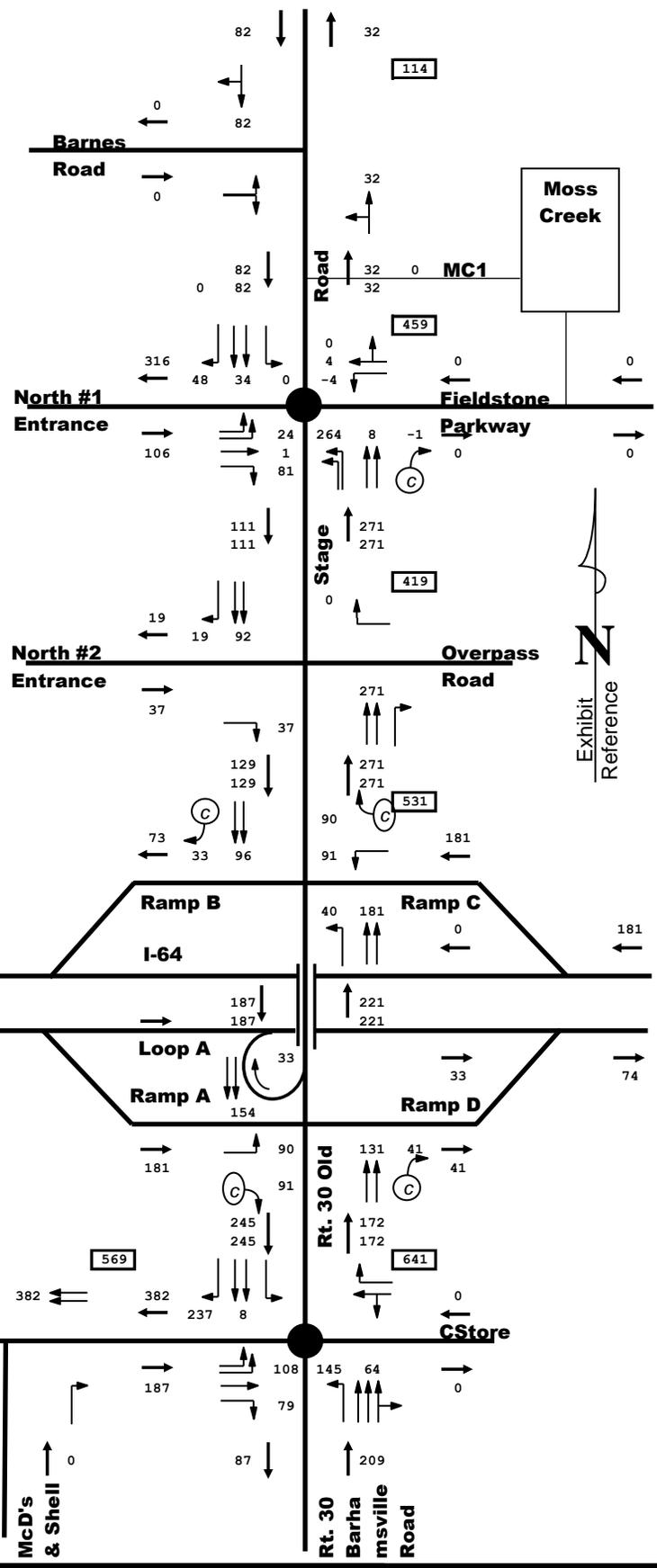
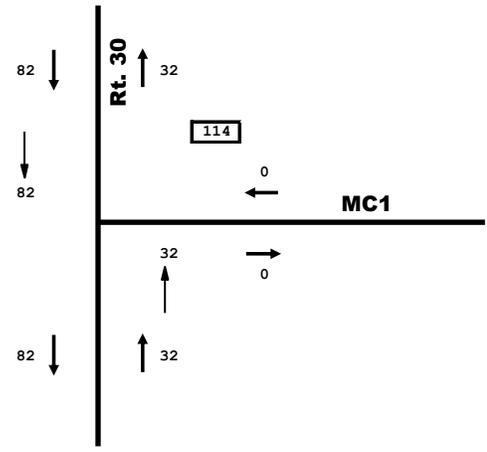
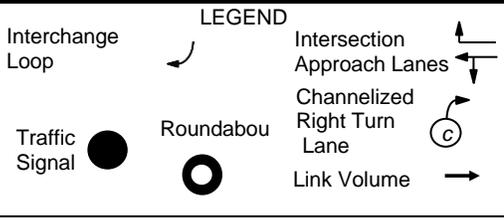
| Movement | EB | WB | WB | NB | NB | SB | SB | SB |
|-----------------------|-----|-----|-----|-----|-----|-----|------|------|
| Directions Served | LTR | LT | R | LT | R | UL | T | TR |
| Maximum Queue (ft) | 49 | 496 | 170 | 51 | 37 | 147 | 11 | 2 |
| Average Queue (ft) | 11 | 287 | 60 | 3 | 6 | 62 | 0 | 0 |
| 95th Queue (ft) | 37 | 633 | 320 | 25 | 24 | 118 | 6 | 2 |
| Link Distance (ft) | 650 | 896 | 896 | 973 | | | 1699 | 1699 |
| Upstream Blk Time (%) | | 3 | 2 | | | | | |
| Queuing Penalty (veh) | | 0 | 0 | | | | | |
| Storage Bay Dist (ft) | | | | | 200 | 300 | | |
| Storage Blk Time (%) | | | | | | | | |
| Queuing Penalty (veh) | | | | | | | | |

Network Summary

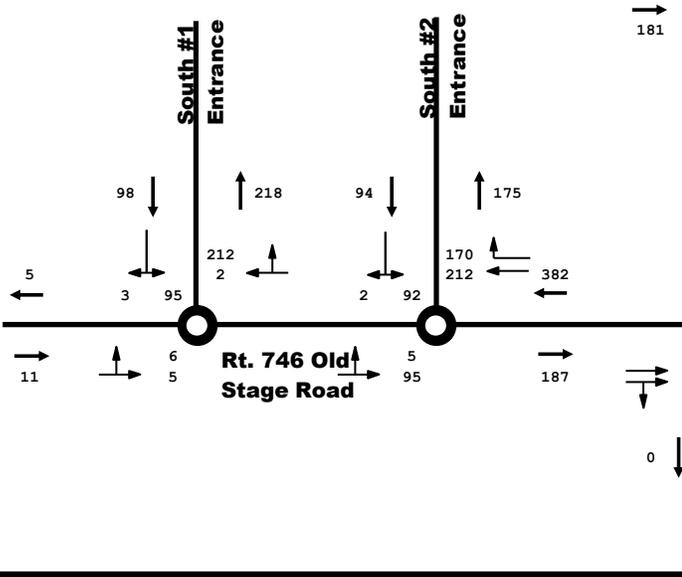
Network wide Queuing Penalty: 0

Figure 23: Total Trips (2027 – Full Build)





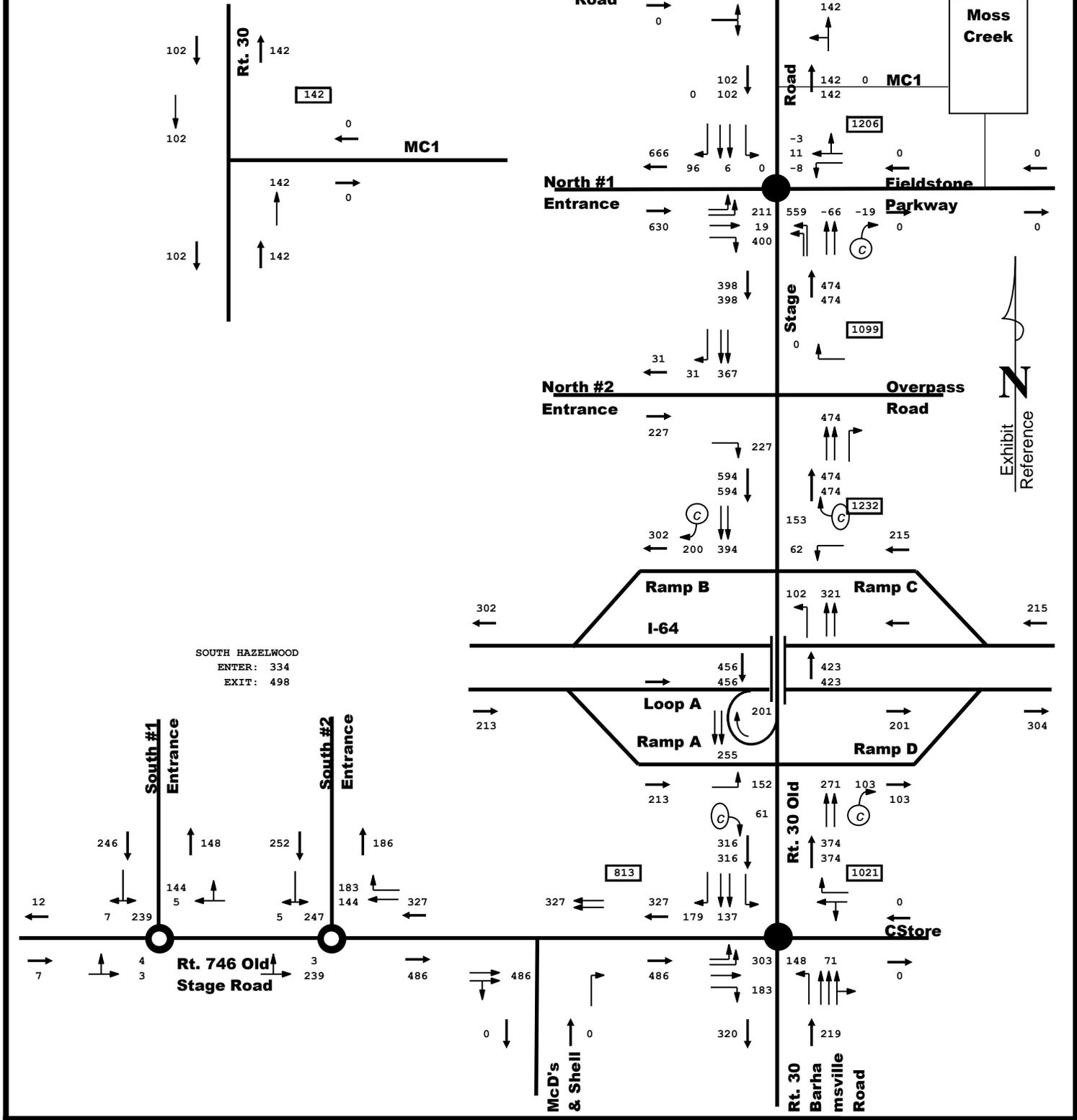
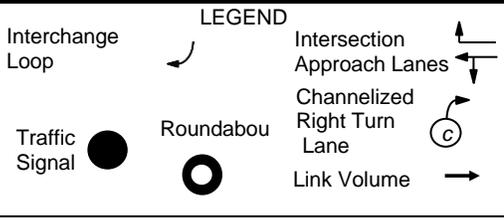
SOUTH HAZELWOOD
 ENTER: 393
 EXIT: 192



NORTH AND SOUTH HAZELWOOD FARMS
 AM PEAK HOUR TRIPS

DRW Consultants, LLC
 804-794-7312

Exhibit Q1



NORTH AND SOUTH HAZELWOOD FARMS
PM PEAK HOUR TRIPS

DRW Consultants, LLC
804-794-7312

Exhibit Q2



TO: Paul Holt, Director, JCC Planning
 FROM: Dexter R. Williams, P. E.
 SUBJECT: TIA Workslope For Hankins-Dunn Property
 DATE: July 15, 2022

HHHunt proposes to rezone the Hankins-Dunn property (Parcel ID 1240100011) to permit residential development. This memo and attachment provide a proposed scope of work for the rezoning traffic impact analysis (TIA).

PROPERTY LOCATION

The attached Hankins Dunn Parcel – Access Plan PDF shows the entire 157.61-acre parcel. The primary practical access to the property is at the Rt. 60 Richmond Road crossover with an entrance to Bicast Publishing across Rt. 60 from the property. This is shown as Boulevard Entrance on the Access Plan. Two other access locations are shown to provide connectivity to adjacent parcels.

TRIP GENERATION

Single family detached and attached residential units are proposed for the development. The following table shows trip generation for estimated units using Trip Generation Manual, 11th Edition (TGM11):

TABLE ONE: HANKINS-DUNN PARCEL
 TRIP GENERATION

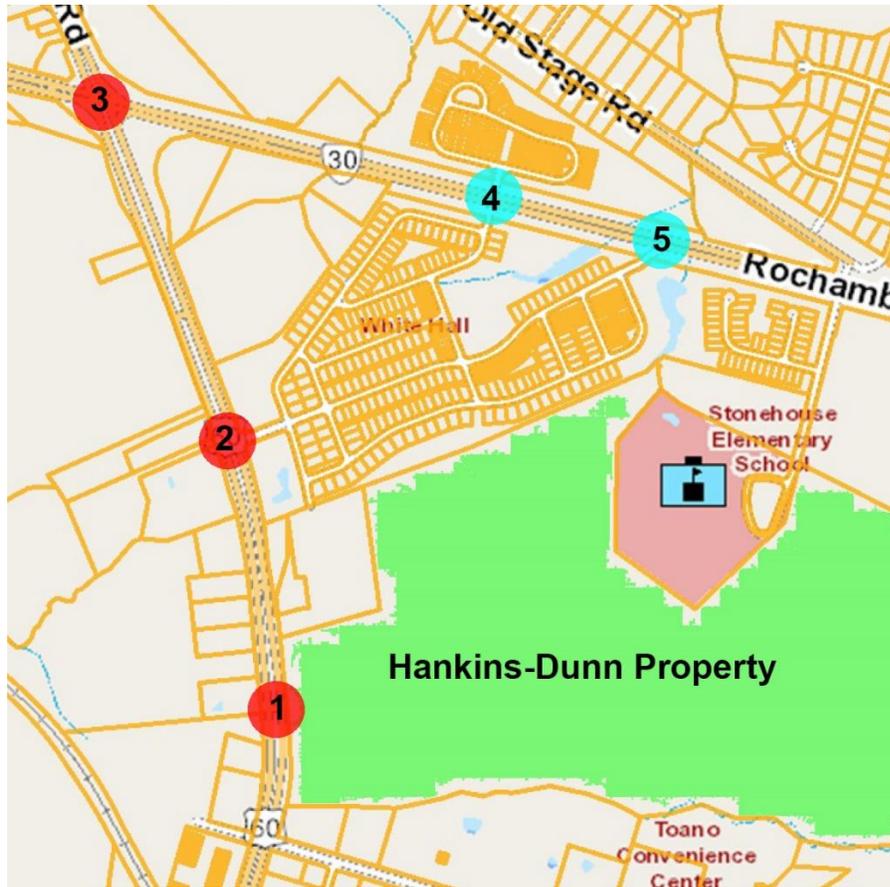
| VALUE | LAND USE | LAND USE CODE | SQ.FT., OTHER UNITS | WEEKDAY TRIP GENERATION | | | | | | DAILY |
|--------------|------------------------|---------------|------------------------|-------------------------|------|-------|--------------|------|-------|-------|
| | | | | AM PEAK HOUR | | | PM PEAK HOUR | | | |
| | | | | Enter | Exit | Total | Enter | Exit | Total | |
| eq.-adj. st. | Single-Family Detached | 210 | 484 units | 81 | 232 | 313 | 276 | 162 | 438 | 4305 |
| eq.-adj. st. | Single-Family Attached | 215 | 85 units | 12 | 27 | 39 | 27 | 20 | 47 | 597 |
| | | | TOTAL: | 93 | 259 | 352 | 303 | 182 | 485 | 4902 |

Daily trip generation is less than the 5,000 vehicle per day threshold for requiring a VDOT Ch. 527 traffic study.

DATA COLLECTION

7 to 9 AM and 4 to 6 PM turning movements counts will be conducted at the five locations shown on Figure 1:

Figure 1: Peak Hour Count Locations



Following is an explanation of selected count locations:

1. Rt. 60 Richmond Road/Bicast Publishing. Unsignalized Crossover. This is the primary/only likely access for the Hankins-Dunn property development. This is an analysis intersection.
2. Rt. 60 Richmond Road/VCA Andersons Corner Animal Hospital/Hickory Neck Blvd. Unsignalized crossover. This is an analysis intersection and also part of the trip distribution counts for White Hall.
3. Rt. 60 Richmond Road/Rt. 30 Barhamsville Road/Rt. 30 Rochambeau Drive. Signalized intersection. This is an analysis intersection.
4. Rt. 30 Rochambeau Drive/Preston Lane/Geddy Terrace. Unsignalized crossover. This is not an analysis intersection and is part of the trip distribution counts for White Hall.
5. Rt. 30 Rochambeau Drive/Hickory Neck Boulevard. Unsignalized crossover. This is not an analysis intersection and is part of the trip distribution counts for White Hall.

TRAFFIC ANALYSIS SCENARIOS

There are three traffic analysis scenarios:

1. 2022 counts.
2. 2025 background traffic without site (traffic increase based on last five years VDOT daily

July 15, 2022

counts and growth trend).

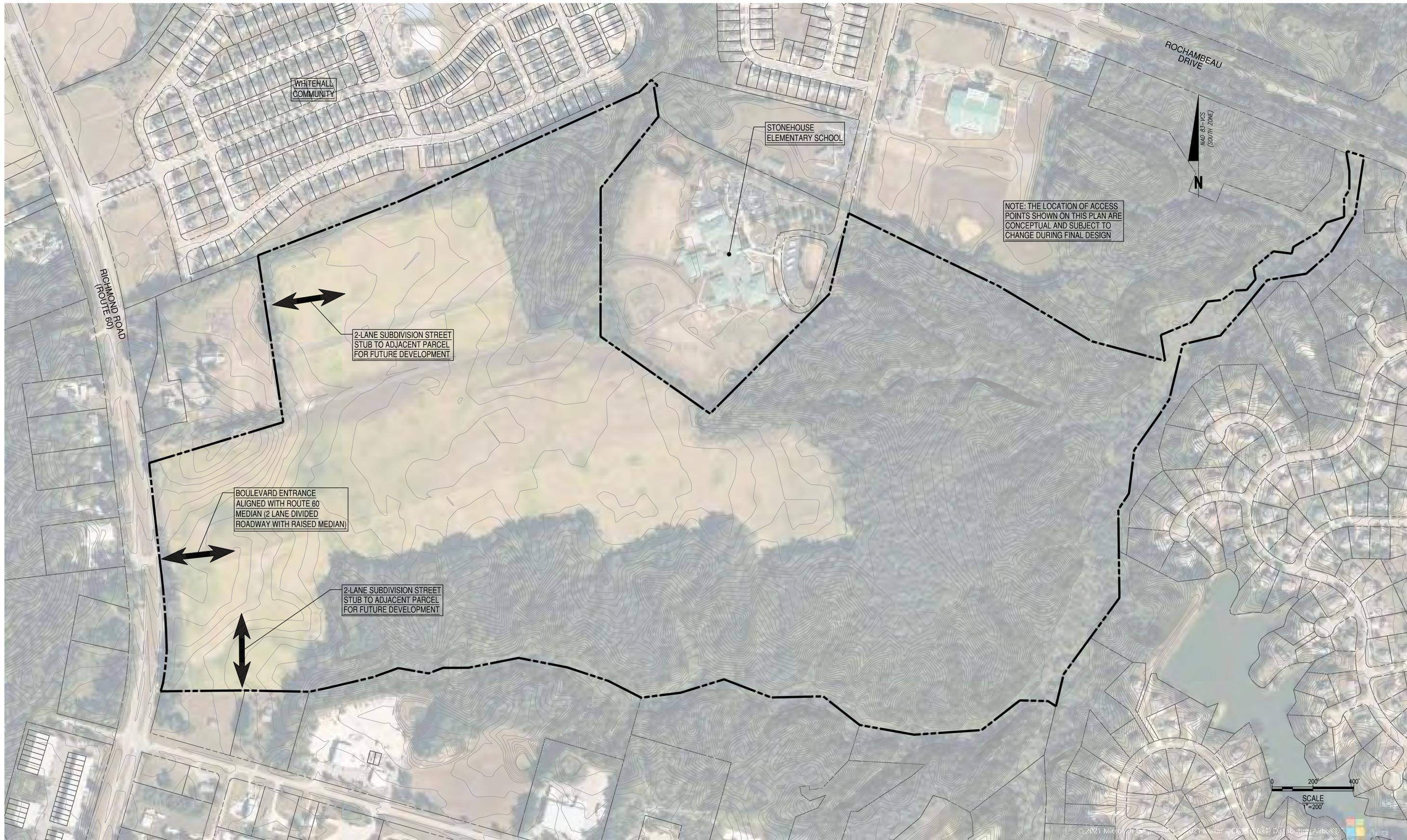
3. 2025 with site. Site trips assigned to network and added to 2025 background traffic for 2025 total traffic.

SITE TRIP DISTRIBUTION

Site trip distribution will be derived from the three count locations for White Hall.

TRAFFIC ANALYSIS

Synchro intersection LOS reports and SimTraffic queuing reports will be generated for AM and PM peak hours of the three analysis scenarios for intersections 1, 2 and 3. General VDOT TOSAM v2.0 criteria will be used (e.g., turn lane storage length measurement, peak hour factors) will be used.



HANKINS DUNN
CONCEPTUAL ACCESS PLAN

SCALE: 1" = 200'
DATE: 4/22/2022

DESIGNED BY: TJW
DRAWN BY: TJW

Exhibit R4

Rt 60 & 30 Andersons Corner

Phase Timing

10/13/2022 7:15:40 AM

| Phase | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|--------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Min Green | 3 | 10 | 3 | 10 | 3 | 10 | 5 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Veh Ext | 2.0 | 4.0 | 2.0 | 4.0 | 2.0 | 4.0 | 2.0 | 4.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Max Green 1 | 20 | 35 | 30 | 35 | 20 | 35 | 40 | 35 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Max Green 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Max Green 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Max Ext | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Yellow | 5.0 | 5.5 | 5.0 | 5.5 | 5.0 | 5.5 | 5.0 | 5.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Red Clr | 3.0 | 1.0 | 5.0 | 1.0 | 3.0 | 1.0 | 5.0 | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Adv Flash | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Bike MG | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Walk | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped Clr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Walk2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sol DW | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Early Wlk | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Delay Wlk | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Added | 0.0 | 2.0 | 0.0 | 0.0 | 0.0 | 2.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Max Initial | 0 | 20 | 0 | 0 | 0 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Min Gap | 1.0 | 3.0 | 1.0 | 3.0 | 1.0 | 3.0 | 1.5 | 3.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Reduce After | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TTReduce | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CS Min Green | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CS Max Green | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Red Revert | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Neg Ped | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| AP Disc | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pmt Green | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pmt Walk | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pmt Ped Clr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Return Green | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Rt 60 & 30 Andersons Corner

Phase Options

10/13/2022 7:15:40 AM

| Phases | 1-8 | | | | | | | | 9-16 | | | | | | | | |
|-------------------|-----|---|---|---|---|---|---|---|------|--|--|--|--|--|--|--|--|
| Min Recalls | 2 | | | | 6 | | | | | | | | | | | | |
| Max Recalls | | | | | | | | | | | | | | | | | |
| Ped Recalls | | | | | | | | | | | | | | | | | |
| Soft Recall | | | | | | | | | | | | | | | | | |
| Dual Entry | | | 4 | | | | | 8 | | | | | | | | | |
| Red Rest | | | | | | | | | | | | | | | | | |
| Walk Rest | | | | | | | | | | | | | | | | | |
| Walk Expand | | | | | | | | | | | | | | | | | |
| Ped Recycle | | | | | | | | | | | | | | | | | |
| Sim Ped Term | | | | | | | | | | | | | | | | | |
| PC Thru Clr | | | | | | | | | | | | | | | | | |
| Guar Passage | 2 | | | | 6 | | | | | | | | | | | | |
| No Simult Gap | | | | | | | | | | | | | | | | | |
| Yel Lock | | | | | | | | | | | | | | | | | |
| Red Lock | | | | | | | | | | | | | | | | | |
| PhaseNext Lock | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | | | | | | |
| No Term Call | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | | | | | | |
| Cond Serv | | | | | | | | | | | | | | | | | |
| CS Enable | | | | | | | | | | | | | | | | | |
| Cond Reserve | | | | | | | | | | | | | | | | | |
| Reserve | | | | | | | | | | | | | | | | | |
| Veh Omit | | | | | | | | | | | | | | | | | |
| Ped Omit | | | | | | | | | | | | | | | | | |
| Perm Phase | | | | | | | | | | | | | | | | | |
| Protect Calls | | | | | | | | | | | | | | | | | |
| Protect Calls 2 | | | | | | | | | | | | | | | | | |
| Flash Entry | | | | | | | | | | | | | | | | | |
| Flash Exit | | | | | | | | | | | | | | | | | |
| Flash Exit Yel | | | | | | | | | | | | | | | | | |
| Flash Exit Red | | | | | | | | | | | | | | | | | |
| Ped Scramble | | | | | | | | | | | | | | | | | |
| No Min Yel | | | | | | | | | | | | | | | | | |
| No Min Red Rev | | | | | | | | | | | | | | | | | |
| Max Scramble Walk | | | | | | | | | | | | | | | | | |
| Flash Yellow | | | | | | | | | | | | | | | | | |
| Flash FYA | | | | | | | | | | | | | | | | | |
| CNA 1 | | | | | | | | | | | | | | | | | |
| CNA 2 | | | | | | | | | | | | | | | | | |

Rt 60 & 30 Andersons Corner

Phase Startup Options

10/13/2022 7:15:40 AM

Startup Flash Mode
 Startup All Red Yellow

| Phases | 1-8 | | | | | | | | 9-16 | | | | | | | |
|-----------------|-----|---|---|---|---|---|---|---|------|--|--|--|--|--|--|--|
| Startup Phases | | 2 | | | | 6 | | | | | | | | | | |
| Startup Yellow | | 2 | | | | 6 | | | | | | | | | | |
| Startup Red | | | | | | | | | | | | | | | | |
| Startup No Walk | | | | | | | | | | | | | | | | |
| Startup Next | | | | 4 | | | | 8 | | | | | | | | |
| Startup Yel Fls | | | | | | | | | | | | | | | | |
| Startup FYA | | | | | | | | | | | | | | | | |
| No Veh Call | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | | | | | |
| No Ped Call | | 2 | | 4 | | 6 | | 8 | | | | | | | | |

Phase Startup Timing

| Phase | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|-----------------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|
| Start Walk | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Start Min Green | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Start Max Green | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Unit

Red Revert Ped Protect AdvFls in Flash

Rt 60 & 30 Andersons Corner

Ring Sequence / Conflicting Phases

10/13/2022 7:15:40 AM

Ringgroup 1

| | | | | | | | | | | | | | | | |
|--------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ring 1 | 1 | 2 | 4 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ring 2 | 5 | 6 | 7 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Ringgroup 2

Custom Sequences

| | | | | | | | | | | | | | | | |
|-------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Seq 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Seq 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Seq 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Seq 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Seq 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Seq 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Seq 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Seq 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Conflicting Phases

1-8

9-16

| | | | | | | | | | | | | | | | |
|----------|--|--|--|---|--|--|--|--|--|--|--|--|--|--|--|
| Phase 1 | | | | | | | | | | | | | | | |
| Phase 2 | | | | | | | | | | | | | | | |
| Phase 3 | | | | 7 | | | | | | | | | | | |
| Phase 4 | | | | | | | | | | | | | | | |
| Phase 5 | | | | | | | | | | | | | | | |
| Phase 6 | | | | | | | | | | | | | | | |
| Phase 7 | | | | | | | | | | | | | | | |
| Phase 8 | | | | | | | | | | | | | | | |
| Phase 9 | | | | | | | | | | | | | | | |
| Phase 10 | | | | | | | | | | | | | | | |
| Phase 11 | | | | | | | | | | | | | | | |
| Phase 12 | | | | | | | | | | | | | | | |
| Phase 13 | | | | | | | | | | | | | | | |
| Phase 14 | | | | | | | | | | | | | | | |
| Phase 15 | | | | | | | | | | | | | | | |
| Phase 16 | | | | | | | | | | | | | | | |

Rt 60 & 30 Andersons Corner

FYA/FRA

10/13/2022 7:15:40 AM

| FYA | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---------------|----------|----------|----------|----------|----------|----------|----------|----------|
| Prot Phs | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Opp Thru | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Start Phs | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Opp Ped | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Min FYA | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Skip Prot Red | Disabled |
| Head Mode | FYA 1 |

Ped Hawk 1

Veh Phase

Ped Phase

Flash Yel Dark Signal

Flash Delay Flash Carryover

Green Mode

Ped Hawk 2

Veh Phase

Ped Phase

Flash Yel Dark Signal

Flash Delay Flash Carryover

Green Mode

Ped Hawk 3

Veh Phase

Ped Phase

Flash Yel Dark Signal

Flash Delay Flash Carryover

Green Mode

Ped Hawk 4

Veh Phase

Ped Phase

Flash Yel Dark Signal

Flash Delay Flash Carryover

Green Mode

Rt 60 & 30 Andersons Corner

Coordination Options

10/13/2022 7:15:40 AM

Sync Time

RTC Set Time

Transition Mode

Ped Adjust

Trans Short %

Trans Long %

Offset Reference

Short Cycles

Dual Entry

Overlap F/O

Master Sync Mode

Master Sync Length

Adapt Thresh

Adapt Step

External Plan Max

Hardwire No Match

Hardwire Sync Fail

Override Omit/Recall

Phases 1-8

9-16

No Trans Recall

| | | | | | | | |
|--|--|--|--|--|--|--|--|
| | | | | | | | |
|--|--|--|--|--|--|--|--|

| | | | | | | | |
|--|--|--|--|--|--|--|--|
| | | | | | | | |
|--|--|--|--|--|--|--|--|

Trans Ped Recall

| | | | | | | | |
|--|--|--|--|--|--|--|--|
| | | | | | | | |
|--|--|--|--|--|--|--|--|

| | | | | | | | |
|--|--|--|--|--|--|--|--|
| | | | | | | | |
|--|--|--|--|--|--|--|--|

Trans Phases

| | | | | | | | |
|--|--|--|--|--|--|--|--|
| | | | | | | | |
|--|--|--|--|--|--|--|--|

| | | | | | | | |
|--|--|--|--|--|--|--|--|
| | | | | | | | |
|--|--|--|--|--|--|--|--|

Rt 60 & 30 Andersons Corner

Hardwire Plans

10/13/2022 7:15:40 AM

| Hardwire | Plan Select | Pattern | Offset | Mode |
|----------|-------------|---------|--------|----------|
| Plan 1 | | 0 | 0 | Hardwire |
| Plan 2 | | 0 | 0 | Hardwire |
| Plan 3 | | 0 | 0 | Hardwire |
| Plan 4 | | 0 | 0 | Hardwire |
| Plan 5 | | 0 | 0 | Hardwire |
| Plan 6 | | 0 | 0 | Hardwire |
| Plan 7 | | 0 | 0 | Hardwire |
| Plan 8 | | 0 | 0 | Hardwire |
| Plan 9 | | 0 | 0 | Hardwire |
| Plan 10 | | 0 | 0 | Hardwire |
| Plan 11 | | 0 | 0 | Hardwire |
| Plan 12 | | 0 | 0 | Hardwire |
| Plan 13 | | 0 | 0 | Hardwire |
| Plan 14 | | 0 | 0 | Hardwire |
| Plan 15 | | 0 | 0 | Hardwire |
| Plan 16 | | 0 | 0 | Hardwire |
| Plan 17 | | 0 | 0 | Hardwire |
| Plan 18 | | 0 | 0 | Hardwire |
| Plan 19 | | 0 | 0 | Hardwire |
| Plan 20 | | 0 | 0 | Hardwire |
| Plan 21 | | 0 | 0 | Hardwire |
| Plan 22 | | 0 | 0 | Hardwire |
| Plan 23 | | 0 | 0 | Hardwire |
| Plan 24 | | 0 | 0 | Hardwire |
| Plan 25 | | 0 | 0 | Hardwire |
| Plan 26 | | 0 | 0 | Hardwire |
| Plan 27 | | 0 | 0 | Hardwire |
| Plan 28 | | 0 | 0 | Hardwire |
| Plan 29 | | 0 | 0 | Hardwire |
| Plan 30 | | 0 | 0 | Hardwire |
| Plan 31 | | 0 | 0 | Hardwire |
| Plan 32 | | 0 | 0 | Hardwire |

Rt 60 & 30 Andersons Corner

Soft Interconnect

10/13/2022 7:15:40 AM

| | | | |
|------------------|------------------------------------|-------------------|--------------------------------|
| Mode | <input type="text" value="Slave"/> | Remote Int Number | <input type="text" value="0"/> |
| Yield Delay | <input type="text" value="0"/> | | |
| Yield Duration | <input type="text" value="0"/> | | |
| Permissive | <input type="text" value="0"/> | | |
| Local Hold Limit | <input type="text" value="0"/> | | |

| Phases | 1-8 | 9-16 | | | | | | | | | | | | | | | | |
|----------------------|---|------|--|--|--|--|--|--|--|---|--|--|--|--|--|--|--|--|
| Local Control Phases | <table border="1"><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table> | | | | | | | | | <table border="1"><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table> | | | | | | | | |
| | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | |
| Local Hold Phases | <table border="1"><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table> | | | | | | | | | <table border="1"><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table> | | | | | | | | |
| | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | |
| Local Perm Phases | <table border="1"><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table> | | | | | | | | | <table border="1"><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table> | | | | | | | | |
| | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | |
| Local Call Phases | <table border="1"><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table> | | | | | | | | | <table border="1"><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table> | | | | | | | | |
| | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | |
| Remote Perm Phases | <table border="1"><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table> | | | | | | | | | <table border="1"><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table> | | | | | | | | |
| | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | |
| Remote Hold Phases | <table border="1"><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table> | | | | | | | | | <table border="1"><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table> | | | | | | | | |
| | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | |

Rt 60 & 30 Andersons Corner

Preempt Inputs

10/13/2022 7:15:40 AM

| Preempt Input | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|----------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Delay | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Checkout Limit | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Locked | No |
| Interlock | Disabled |
| Input Number | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Input Priority | All |
| Delay Mode | Inp |

Preempt Priority

| Preempt Priority | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|------------------|---|---|---|---|---|---|---|---|---|----|
| Priority | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Remote Preemption

| Remote Preempt | RM 1 | RM 2 | RM 3 | RM 4 | RM 5 | RM 6 | RM 7 | RM 8 |
|----------------|------|------|------|------|------|------|------|------|
| Int Number | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PE Number | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mode | Dis |
| Slack | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Travel Time | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Alt TT 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Alt TT 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Alt TT 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Alt TT 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Alt TT 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Alt TT 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Alt TT 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Rt 60 & 30 Andersons Corner

Preempt 1 (Configuration)

10/13/2022 7:15:40 AM

| | | |
|---|---|--|
| Enabled <input style="width: 100%;" type="text" value="Yes"/> | Dwell Mode <input style="width: 100%;" type="text" value="Normal"/> | Output Mode <input style="width: 100%;" type="text" value="All"/> |
| Output2 Mode <input style="width: 100%;" type="text" value="All"/> | Fail Action <input style="width: 100%;" type="text" value="Preempt Off"/> | Exit Mode <input style="width: 100%;" type="text" value="Normal"/> |
| Override Flash <input style="width: 100%;" type="text" value="No"/> | Change Phasenext <input style="width: 100%;" type="text" value="Yes"/> | |

| | | | | | | | |
|----------------|--------------------------|--------------------------|--------------------------|--------------------------|-----------------|--------------------------|---|
| | 1-8 | 9-16 | | | 1-8 | | |
| Enable Phases | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | LRV Disable | <input type="checkbox"/> | Max <input style="width: 50px;" type="text" value="0"/> |
| Preempt Inputs | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | LRV Dwell Flash | <input type="checkbox"/> | |
| | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | LRV Omit | <input type="checkbox"/> | Delay <input style="width: 50px;" type="text" value="0"/> |
| | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | LRV No Yel | <input type="checkbox"/> | |

Preempt 1 (Timing/Phases/Overlaps)

| | | | | | | | |
|-----------------------|--------------------------|--------------------------|--------------------------|------------------|---|---------------|---|
| | 1-8 | 9-16 | | | | | |
| Phases/Overlaps | | | | Start Green | <input style="width: 50px;" type="text" value="0"/> | Start Walk | <input style="width: 50px;" type="text" value="0"/> |
| Omit Olap Grn Clr | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | Start Ped Clr | <input style="width: 50px;" type="text" value="0"/> |
| Phs EWlk to Grn | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | Track Clear 1 | <input style="width: 50px;" type="text" value="0"/> |
| TClr 1 Veh Phases | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Track Clear 2 | <input style="width: 50px;" type="text" value="0"/> | TC1 Max | <input style="width: 50px;" type="text" value="0"/> |
| TClr 1 Ped Phases | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | TC1 Extend | <input style="width: 50px;" type="text" value="0"/> | Exit Yellow | <input style="width: 50px;" type="text" value="0.0"/> |
| TClr 1 Olap | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Exit Ped Clr | <input style="width: 50px;" type="text" value="0"/> | Exit Red | <input style="width: 50px;" type="text" value="0.0"/> |
| TClr 1 Olap Ped | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Exit Red | <input style="width: 50px;" type="text" value="0.0"/> | Min Dwell | <input style="width: 50px;" type="text" value="0"/> |
| TClr 2 Veh Phases | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Min Dwell | <input style="width: 50px;" type="text" value="0"/> | Min Duration | <input style="width: 50px;" type="text" value="0"/> |
| TClr 2 Ped Phases | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Dwell Extend | <input style="width: 50px;" type="text" value="0"/> | Max Dwell | <input style="width: 50px;" type="text" value="0"/> |
| TClr 2 Olap | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Max Dwell | <input style="width: 50px;" type="text" value="0"/> | Max Call | <input style="width: 50px;" type="text" value="180"/> |
| TClr 2 Olap Ped | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Reserve Inh Same | <input style="width: 50px;" type="text" value="0"/> | | |
| Init Dwell Phases | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Reserve Inh All | <input style="width: 50px;" type="text" value="0"/> | | |
| Dwell Veh Phases | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Delay | <input style="width: 50px;" type="text" value="0"/> | | |
| Dwell Ped Phases | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | |
| Dwell Olap | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | |
| Dwell Olap Ped | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | |
| Exit Veh Phases | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | |
| Exit Ped Phases | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | |
| Exit Olap | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | |
| Exit Olap Ped | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | |
| Zero Phase Walk | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | |
| Zero Phase Ped Clr | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | |
| Zero Phase Green | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | |
| Zero Olap Walk | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | |
| Zero Olap Ped Clr | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | |
| Zero Olap Green | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | |
| Dwell-Phase Red | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | |
| Dwell-Phase Red Flash | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | |
| Dwell-Phase Yel Flash | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | |
| Dwell-Olap Red Flash | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | |
| Dwell-Olap Yel Flash | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | |
| Dwell-Ped Dark | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | |
| Dwell-Olap Ped Dark | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | |

| | | |
|-----------------|--------------------------|--------------------------|
| | 1-8 | 9-16 |
| Phases/Overlaps | | |
| TClr 1 FR Olap | <input type="checkbox"/> | <input type="checkbox"/> |
| TClr 2 FR Olap | <input type="checkbox"/> | <input type="checkbox"/> |
| Dwell FR Olap | <input type="checkbox"/> | <input type="checkbox"/> |
| TClr 1 FYA | <input type="checkbox"/> | <input type="checkbox"/> |
| TClr 2 FYA | <input type="checkbox"/> | <input type="checkbox"/> |
| Dwell FYA | <input type="checkbox"/> | <input type="checkbox"/> |

Rt 60 & 30 Andersons Corner

Preempt 2 (Configuration)

10/13/2022 7:15:40 AM

| | | |
|---|---|--|
| Enabled <input style="width: 100%;" type="text" value="Yes"/> | Dwell Mode <input style="width: 100%;" type="text" value="Normal"/> | Output Mode <input style="width: 100%;" type="text" value="All"/> |
| Output2 Mode <input style="width: 100%;" type="text" value="All"/> | Fail Action <input style="width: 100%;" type="text" value="Preempt Off"/> | Exit Mode <input style="width: 100%;" type="text" value="Normal"/> |
| Override Flash <input style="width: 100%;" type="text" value="No"/> | Change Phasenext <input style="width: 100%;" type="text" value="Yes"/> | |

| | | | | | | | |
|----------------|--------------------------|--------------------------|--------------------------|--------------------------|-----------------|--------------------------|---|
| | 1-8 | 9-16 | | | 1-8 | | |
| Enable Phases | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | LRV Disable | <input type="checkbox"/> | Max <input style="width: 50px;" type="text" value="0"/> |
| Preempt Inputs | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | LRV Dwell Flash | <input type="checkbox"/> | |
| | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | LRV Omit | <input type="checkbox"/> | Delay <input style="width: 50px;" type="text" value="0"/> |
| | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | LRV No Yel | <input type="checkbox"/> | |

Preempt 2 (Timing/Phases/Overlaps)

| | | | | | | | |
|-----------------------|--------------------------|--------------------------|--------------------------|-------------|---|------------------|---|
| | 1-8 | 9-16 | | | | | |
| Phases/Overlaps | | | | Start Green | <input style="width: 50px;" type="text" value="0"/> | Start Walk | <input style="width: 50px;" type="text" value="0"/> |
| Omit Olap Grn Clr | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | Start Ped Clr | <input style="width: 50px;" type="text" value="0"/> |
| Phs EWlk to Grn | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | Track Clear 1 | <input style="width: 50px;" type="text" value="0"/> |
| TClr 1 Veh Phases | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | Track Clear 2 | <input style="width: 50px;" type="text" value="0"/> |
| TClr 1 Ped Phases | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | TC1 Extend | <input style="width: 50px;" type="text" value="0"/> |
| TClr 1 Olap | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | TC1 Max | <input style="width: 50px;" type="text" value="0"/> |
| TClr 1 Olap Ped | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | Exit Ped Clr | <input style="width: 50px;" type="text" value="0"/> |
| TClr 2 Veh Phases | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | Exit Red | <input style="width: 50px;" type="text" value="0.0"/> |
| TClr 2 Ped Phases | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | Exit Yellow | <input style="width: 50px;" type="text" value="0.0"/> |
| TClr 2 Olap | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | Min Dwell | <input style="width: 50px;" type="text" value="0"/> |
| TClr 2 Olap Ped | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | Min Duration | <input style="width: 50px;" type="text" value="0"/> |
| Init Dwell Phases | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | Dwell Extend | <input style="width: 50px;" type="text" value="0"/> |
| Dwell Veh Phases | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | Max Dwell | <input style="width: 50px;" type="text" value="0"/> |
| Dwell Ped Phases | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | Reserve Inh Same | <input style="width: 50px;" type="text" value="0"/> |
| Dwell Olap | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | Reserve Inh All | <input style="width: 50px;" type="text" value="0"/> |
| Dwell Olap Ped | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | Delay | <input style="width: 50px;" type="text" value="0"/> |
| Exit Veh Phases | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | |
| Exit Ped Phases | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | |
| Exit Olap | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | |
| Exit Olap Ped | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | |
| Zero Phase Walk | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | |
| Zero Phase Ped Clr | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | |
| Zero Phase Green | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | |
| Zero Olap Walk | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | |
| Zero Olap Ped Clr | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | |
| Zero Olap Green | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | |
| Dwell-Phase Red | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | |
| Dwell-Phase Red Flash | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | |
| Dwell-Phase Yel Flash | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | |
| Dwell-Olap Red Flash | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | |
| Dwell-Olap Yel Flash | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | |
| Dwell-Ped Dark | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | |
| Dwell-Olap Ped Dark | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | |

| | | |
|-----------------|--------------------------|--------------------------|
| | 1-8 | 9-16 |
| Phases/Overlaps | | |
| TClr 1 FR Olap | <input type="checkbox"/> | <input type="checkbox"/> |
| TClr 2 FR Olap | <input type="checkbox"/> | <input type="checkbox"/> |
| Dwell FR Olap | <input type="checkbox"/> | <input type="checkbox"/> |
| TClr 1 FYA | <input type="checkbox"/> | <input type="checkbox"/> |
| TClr 2 FYA | <input type="checkbox"/> | <input type="checkbox"/> |
| Dwell FYA | <input type="checkbox"/> | <input type="checkbox"/> |

Rt 60 & 30 Andersons Corner

Preempt 3 (Configuration)

10/13/2022 7:15:40 AM

| | | |
|---|---|--|
| Enabled <input style="width: 100%;" type="text" value="Yes"/> | Dwell Mode <input style="width: 100%;" type="text" value="Normal"/> | Output Mode <input style="width: 100%;" type="text" value="All"/> |
| Output2 Mode <input style="width: 100%;" type="text" value="All"/> | Fail Action <input style="width: 100%;" type="text" value="Preempt Off"/> | Exit Mode <input style="width: 100%;" type="text" value="Normal"/> |
| Override Flash <input style="width: 100%;" type="text" value="No"/> | Change Phasenext <input style="width: 100%;" type="text" value="Yes"/> | |

| | | | | | | | |
|----------------|--------------------------|--------------------------|--------------------------|--------------------------|-----------------|--------------------------|---|
| | 1-8 | 9-16 | | | 1-8 | | |
| Enable Phases | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | LRV Disable | <input type="checkbox"/> | Max <input style="width: 50px;" type="text" value="0"/> |
| Preempt Inputs | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | LRV Dwell Flash | <input type="checkbox"/> | |
| | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | LRV Omit | <input type="checkbox"/> | Delay <input style="width: 50px;" type="text" value="0"/> |
| | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | LRV No Yel | <input type="checkbox"/> | |

Preempt 3 (Timing/Phases/Overlaps)

| | | | | | | | |
|-----------------------|--------------------------|--------------------------|--------------------------|-----------------|---|------------------|---|
| | 1-8 | 9-16 | | | | | |
| Phases/Overlaps | | | | Start Green | <input style="width: 50px;" type="text" value="0"/> | Start Walk | <input style="width: 50px;" type="text" value="0"/> |
| Omit Olap Grn Clr | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | Start Ped Clr | <input style="width: 50px;" type="text" value="0"/> |
| Phs EWlk to Grn | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | Track Clear 1 | <input style="width: 50px;" type="text" value="0"/> |
| TClr 1 Veh Phases | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Track Clear 2 | <input style="width: 50px;" type="text" value="0"/> | TC1 Max | <input style="width: 50px;" type="text" value="0"/> |
| TClr 1 Ped Phases | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | TC1 Extend | <input style="width: 50px;" type="text" value="0"/> | Exit Yellow | <input style="width: 50px;" type="text" value="0.0"/> |
| TClr 1 Olap | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Exit Ped Clr | <input style="width: 50px;" type="text" value="0"/> | Exit Red | <input style="width: 50px;" type="text" value="0.0"/> |
| TClr 1 Olap Ped | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Exit Red | <input style="width: 50px;" type="text" value="0.0"/> | Min Dwell | <input style="width: 50px;" type="text" value="0"/> |
| TClr 2 Veh Phases | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Min Dwell | <input style="width: 50px;" type="text" value="0"/> | Dwell Extend | <input style="width: 50px;" type="text" value="0"/> |
| TClr 2 Ped Phases | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Dwell Extend | <input style="width: 50px;" type="text" value="0"/> | Max Dwell | <input style="width: 50px;" type="text" value="0"/> |
| TClr 2 Olap | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Max Dwell | <input style="width: 50px;" type="text" value="0"/> | Reserve Inh Same | <input style="width: 50px;" type="text" value="0"/> |
| TClr 2 Olap Ped | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Reserve Inh All | <input style="width: 50px;" type="text" value="0"/> | Delay | <input style="width: 50px;" type="text" value="0"/> |
| Init Dwell Phases | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | |
| Dwell Veh Phases | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | |
| Dwell Ped Phases | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | |
| Dwell Olap | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | |
| Dwell Olap Ped | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | |
| Exit Veh Phases | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | |
| Exit Ped Phases | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | |
| Exit Olap | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | |
| Exit Olap Ped | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | |
| Zero Phase Walk | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | |
| Zero Phase Ped Clr | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | |
| Zero Phase Green | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | |
| Zero Olap Walk | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | |
| Zero Olap Ped Clr | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | |
| Zero Olap Green | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | |
| Dwell-Phase Red | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | |
| Dwell-Phase Red Flash | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | |
| Dwell-Phase Yel Flash | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | |
| Dwell-Olap Red Flash | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | |
| Dwell-Olap Yel Flash | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | |
| Dwell-Ped Dark | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | |
| Dwell-Olap Ped Dark | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | |

| | | |
|-----------------|--------------------------|--------------------------|
| | 1-8 | 9-16 |
| Phases/Overlaps | | |
| TClr 1 FR Olap | <input type="checkbox"/> | <input type="checkbox"/> |
| TClr 2 FR Olap | <input type="checkbox"/> | <input type="checkbox"/> |
| Dwell FR Olap | <input type="checkbox"/> | <input type="checkbox"/> |
| TClr 1 FYA | <input type="checkbox"/> | <input type="checkbox"/> |
| TClr 2 FYA | <input type="checkbox"/> | <input type="checkbox"/> |
| Dwell FYA | <input type="checkbox"/> | <input type="checkbox"/> |

Rt 60 & 30 Andersons Corner

Preempt 4 (Configuration)

10/13/2022 7:15:40 AM

| | | |
|---|---|--|
| Enabled <input style="width: 100%;" type="text" value="Yes"/> | Dwell Mode <input style="width: 100%;" type="text" value="Normal"/> | Output Mode <input style="width: 100%;" type="text" value="All"/> |
| Output2 Mode <input style="width: 100%;" type="text" value="All"/> | Fail Action <input style="width: 100%;" type="text" value="Preempt Off"/> | Exit Mode <input style="width: 100%;" type="text" value="Normal"/> |
| Override Flash <input style="width: 100%;" type="text" value="No"/> | Change Phasenext <input style="width: 100%;" type="text" value="Yes"/> | |

| | | | | | | |
|----------------|---|---|--|-----------------|---|---|
| | 1-8 | 9-16 | | | 1-8 | |
| Enable Phases | <input type="checkbox"/> | <input type="checkbox"/> | | LRV Disable | <input type="checkbox"/> | Max <input style="width: 50px;" type="text" value="0"/> |
| Preempt Inputs | <input type="checkbox"/> | <input type="checkbox"/> | | LRV Dwell Flash | <input type="checkbox"/> | |
| | <input type="checkbox"/> | <input type="checkbox"/> | | LRV Omit | <input type="checkbox"/> | Delay <input style="width: 50px;" type="text" value="0"/> |
| | <input type="checkbox"/> | <input type="checkbox"/> | | LRV No Yel | <input type="checkbox"/> | |

Preempt 4 (Timing/Phases/Overlaps)

| | | | | | | |
|-----------------------|---|---|-------------|---|------------------|---|
| | 1-8 | 9-16 | | | | |
| Phases/Overlaps | | | Start Green | <input style="width: 50px;" type="text" value="0"/> | Start Walk | <input style="width: 50px;" type="text" value="0"/> |
| Omit Olap Grn Clr | <input type="checkbox"/> | <input type="checkbox"/> | | | Start Ped Clr | <input style="width: 50px;" type="text" value="0"/> |
| Phs EWlk to Grn | <input type="checkbox"/> | <input type="checkbox"/> | | | Track Clear 1 | <input style="width: 50px;" type="text" value="0"/> |
| TClr 1 Veh Phases | <input type="checkbox"/> | <input type="checkbox"/> | | | Track Clear 2 | <input style="width: 50px;" type="text" value="0"/> |
| TClr 1 Ped Phases | <input type="checkbox"/> | <input type="checkbox"/> | | | TC1 Extend | <input style="width: 50px;" type="text" value="0"/> |
| TClr 1 Olap | <input type="checkbox"/> | <input type="checkbox"/> | | | TC1 Max | <input style="width: 50px;" type="text" value="0"/> |
| TClr 1 Olap Ped | <input type="checkbox"/> | <input type="checkbox"/> | | | Exit Ped Clr | <input style="width: 50px;" type="text" value="0"/> |
| TClr 2 Veh Phases | <input type="checkbox"/> | <input type="checkbox"/> | | | Exit Yellow | <input style="width: 50px;" type="text" value="0.0"/> |
| TClr 2 Ped Phases | <input type="checkbox"/> | <input type="checkbox"/> | | | Exit Red | <input style="width: 50px;" type="text" value="0.0"/> |
| TClr 2 Olap | <input type="checkbox"/> | <input type="checkbox"/> | | | Min Dwell | <input style="width: 50px;" type="text" value="0"/> |
| TClr 2 Olap Ped | <input type="checkbox"/> | <input type="checkbox"/> | | | Min Duration | <input style="width: 50px;" type="text" value="0"/> |
| Init Dwell Phases | <input type="checkbox"/> | <input type="checkbox"/> | | | Dwell Extend | <input style="width: 50px;" type="text" value="0"/> |
| Dwell Veh Phases | <input type="checkbox"/> | <input type="checkbox"/> | | | Max Dwell | <input style="width: 50px;" type="text" value="0"/> |
| Dwell Ped Phases | <input type="checkbox"/> | <input type="checkbox"/> | | | Reserve Inh Same | <input style="width: 50px;" type="text" value="0"/> |
| Dwell Olap | <input type="checkbox"/> | <input type="checkbox"/> | | | Reserve Inh All | <input style="width: 50px;" type="text" value="0"/> |
| Dwell Olap Ped | <input type="checkbox"/> | <input type="checkbox"/> | | | Delay | <input style="width: 50px;" type="text" value="0"/> |
| Exit Veh Phases | <input type="checkbox"/> | <input type="checkbox"/> | | | | |
| Exit Ped Phases | <input type="checkbox"/> | <input type="checkbox"/> | | | | |
| Exit Olap | <input type="checkbox"/> | <input type="checkbox"/> | | | | |
| Exit Olap Ped | <input type="checkbox"/> | <input type="checkbox"/> | | | | |
| Zero Phase Walk | <input type="checkbox"/> | <input type="checkbox"/> | | | | |
| Zero Phase Ped Clr | <input type="checkbox"/> | <input type="checkbox"/> | | | | |
| Zero Phase Green | <input type="checkbox"/> | <input type="checkbox"/> | | | | |
| Zero Olap Walk | <input type="checkbox"/> | <input type="checkbox"/> | | | | |
| Zero Olap Ped Clr | <input type="checkbox"/> | <input type="checkbox"/> | | | | |
| Zero Olap Green | <input type="checkbox"/> | <input type="checkbox"/> | | | | |
| Dwell-Phase Red | <input type="checkbox"/> | <input type="checkbox"/> | | | | |
| Dwell-Phase Red Flash | <input type="checkbox"/> | <input type="checkbox"/> | | | | |
| Dwell-Phase Yel Flash | <input type="checkbox"/> | <input type="checkbox"/> | | | | |
| Dwell-Olap Red Flash | <input type="checkbox"/> | <input type="checkbox"/> | | | | |
| Dwell-Olap Yel Flash | <input type="checkbox"/> | <input type="checkbox"/> | | | | |
| Dwell-Ped Dark | <input type="checkbox"/> | <input type="checkbox"/> | | | | |
| Dwell-Olap Ped Dark | <input type="checkbox"/> | <input type="checkbox"/> | | | | |

| | | |
|-----------------|---|---|
| | 1-8 | 9-16 |
| Phases/Overlaps | | |
| TClr 1 FR Olap | <input type="checkbox"/> | <input type="checkbox"/> |
| TClr 2 FR Olap | <input type="checkbox"/> | <input type="checkbox"/> |
| Dwell FR Olap | <input type="checkbox"/> | <input type="checkbox"/> |
| TClr 1 FYA | <input type="checkbox"/> | <input type="checkbox"/> |
| TClr 2 FYA | <input type="checkbox"/> | <input type="checkbox"/> |
| Dwell FYA | <input type="checkbox"/> | <input type="checkbox"/> |

Rt 60 & 30 Andersons Corner

TOD Pattern Events

10/13/2022 7:15:40 AM

| | Time | DOW | | | | | | | Holidays | | | | | | | Mode | Pattern | Offset |
|----------|-------|-----|--|--|--|--|--|--|----------|--|--|--|--|--|-------|------|---------|--------|
| Event 1 | 00:00 | | | | | | | | | | | | | | Sched | 0 | 0 | |
| Event 2 | 00:00 | | | | | | | | | | | | | | Sched | 0 | 0 | |
| Event 3 | 00:00 | | | | | | | | | | | | | | Sched | 0 | 0 | |
| Event 4 | 00:00 | | | | | | | | | | | | | | Sched | 0 | 0 | |
| Event 5 | 00:00 | | | | | | | | | | | | | | Sched | 0 | 0 | |
| Event 6 | 00:00 | | | | | | | | | | | | | | Sched | 0 | 0 | |
| Event 7 | 00:00 | | | | | | | | | | | | | | Sched | 0 | 0 | |
| Event 8 | 00:00 | | | | | | | | | | | | | | Sched | 0 | 0 | |
| Event 9 | 00:00 | | | | | | | | | | | | | | Sched | 0 | 0 | |
| Event 10 | 00:00 | | | | | | | | | | | | | | Sched | 0 | 0 | |
| Event 11 | 00:00 | | | | | | | | | | | | | | Sched | 0 | 0 | |
| Event 12 | 00:00 | | | | | | | | | | | | | | Sched | 0 | 0 | |
| Event 13 | 00:00 | | | | | | | | | | | | | | Sched | 0 | 0 | |
| Event 14 | 00:00 | | | | | | | | | | | | | | Sched | 0 | 0 | |
| Event 15 | 00:00 | | | | | | | | | | | | | | Sched | 0 | 0 | |
| Event 16 | 00:00 | | | | | | | | | | | | | | Sched | 0 | 0 | |
| Event 17 | 00:00 | | | | | | | | | | | | | | Sched | 0 | 0 | |
| Event 18 | 00:00 | | | | | | | | | | | | | | Sched | 0 | 0 | |
| Event 19 | 00:00 | | | | | | | | | | | | | | Sched | 0 | 0 | |
| Event 20 | 00:00 | | | | | | | | | | | | | | Sched | 0 | 0 | |
| Event 21 | 00:00 | | | | | | | | | | | | | | Sched | 0 | 0 | |
| Event 22 | 00:00 | | | | | | | | | | | | | | Sched | 0 | 0 | |
| Event 23 | 00:00 | | | | | | | | | | | | | | Sched | 0 | 0 | |
| Event 24 | 00:00 | | | | | | | | | | | | | | Sched | 0 | 0 | |
| Event 25 | 00:00 | | | | | | | | | | | | | | Sched | 0 | 0 | |
| Event 26 | 00:00 | | | | | | | | | | | | | | Sched | 0 | 0 | |
| Event 27 | 00:00 | | | | | | | | | | | | | | Sched | 0 | 0 | |
| Event 28 | 00:00 | | | | | | | | | | | | | | Sched | 0 | 0 | |
| Event 29 | 00:00 | | | | | | | | | | | | | | Sched | 0 | 0 | |
| Event 30 | 00:00 | | | | | | | | | | | | | | Sched | 0 | 0 | |
| Event 31 | 00:00 | | | | | | | | | | | | | | Sched | 0 | 0 | |
| Event 32 | 00:00 | | | | | | | | | | | | | | Sched | 0 | 0 | |

Rt 60 & 30 Andersons Corner

TS1 Outputs (Connector A)

10/13/2022 7:15:40 AM

| | | | | | | | | |
|--------|--------|--------|--------|--------|--------|-------|-------|--------|
| | Pin D | Pin E | Pin F | Pin G | Pin H | Pin J | Pin X | Pin Y |
| Output | VehRed | DntWlk | VehRed | DntWlk | PedClr | Walk | Flash | Free |
| Index | 1 | 1 | 2 | 2 | 2 | 2 | 0 | 0 |
| | Pin Z | Pin a | Pin b | Pin c | Pin d | Pin e | Pin r | Pin s |
| Output | VehYel | PedClr | VehYel | VehGrn | PhsChk | PhsOn | Free | VehGrn |
| Index | 1 | 1 | 2 | 2 | 2 | 2 | 0 | 1 |
| | Pin t | Pin u | Pin CC | Pin DD | | | | |
| Output | Walk | PhsChk | Free | PhsOn | | | | |
| Index | 1 | 1 | 0 | 1 | | | | |

TS1 Outputs (Connector B)

| | | | | | | | | |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | Pin A | Pin C | Pin D | Pin E | Pin F | Pin G | Pin H | Pin J |
| Output | PhsNxt | PhsNxt | VehGrn | VehYel | VehRed | VehRed | PedClr | DntWlk |
| Index | 1 | 2 | 3 | 3 | 3 | 4 | 4 | 4 |
| | Pin K | Pin Y | Pin Z | Pin a | Pin b | Pin c | Pin d | Pin e |
| Output | PhsChk | Walk | PedClr | DntWlk | VehGrn | VehYel | Walk | PhsOn |
| Index | 4 | 3 | 3 | 3 | 4 | 4 | 4 | 4 |
| | Pin f | Pin p | Pin q | Pin r | Pin s | Pin t | Pin u | Pin w |
| Output | PhsNxt | OlpYel | OlpRed | PhsChk | PhsOn | PhsNxt | OlpRed | OlpGrn |
| Index | 4 | 1 | 1 | 3 | 3 | 3 | 4 | 4 |
| | Pin AA | Pin BB | Pin CC | Pin DD | Pin EE | Pin FF | Pin GG | Pin HH |
| Output | OlpGrn | OlpYel | OlpRed | OlpRed | OlpYel | OlpGrn | OlpGrn | OlpYel |
| Index | 1 | 2 | 2 | 3 | 4 | 3 | 2 | 3 |

Rt 60 & 30 Andersons Corner

TS1 Outputs (Connector C)

10/13/2022 7:15:40 AM

| | Pin A | Pin B | Pin C | Pin D | Pin E | Pin F | Pin G | Pin H |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Output | Free | Free | DntWlk | VehRed | VehYel | VehRed | VehRed | VehRed |
| Index | 0 | 0 | 8 | 8 | 7 | 7 | 6 | 5 |
| | Pin J | Pin K | Pin L | Pin M | Pin N | Pin c | Pin d | Pin e |
| Output | VehYel | PedClr | DntWlk | PhsNxt | PhsOn | Free | Walk | VehYel |
| Index | 5 | 5 | 5 | 5 | 5 | 0 | 8 | 8 |
| | Pin f | Pin g | Pin h | Pin i | Pin j | Pin k | Pin w | Pin x |
| Output | VehGrn | VehGrn | VehYel | VehGrn | Walk | PhsChk | PedClr | VehGrn |
| Index | 7 | 6 | 6 | 5 | 5 | 5 | 8 | 8 |
| | Pin y | Pin z | Pin AA | Pin BB | Pin CC | Pin DD | Pin FF | Pin GG |
| Output | DntWlk | DntWlk | PedClr | PhsChk | PhsOn | PhsNxt | PhsChk | PhsOn |
| Index | 7 | 6 | 6 | 6 | 6 | 6 | 8 | 8 |
| | Pin HH | Pin JJ | Pin KK | Pin LL | Pin MM | Pin NN | Pin PP | |
| Output | PhsNxt | Walk | PedClr | Walk | PhsChk | PhsOn | PhsNxt | |
| Index | 8 | 7 | 7 | 6 | 7 | 7 | 7 | |

TS1 Outputs (Connector D)

| | Pin z | Pin AA | Pin BB | Pin CC | Pin DD | Pin EE | Pin FF | Pin GG |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Output | VehRed |
| Index | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Pin HH | Pin JJ | Pin LL | | | | | |
| Output | VehRed | VehRed | VehRed | | | | | |
| Index | 0 | 0 | 0 | | | | | |

Rt 60 & 30 Andersons Corner

TS1 Inputs (Connector A)

10/13/2022 7:15:40 AM

| | Pin K | Pin L | Pin M | Pin N | Pin P | Pin R | Pin S | Pin T |
|-------|--------|--------|--------|--------|--------|---------|--------|--------|
| Input | VehDet | PedDet | Hold | StopTm | MaxInh | ExtStr | IntAdv | None |
| Index | 2 | 2 | 2 | 5 | 1 | 1 | 1 | 0 |
| | Pin f | Pin g | Pin h | Pin i | Pin j | Pin k | Pin m | Pin n |
| Input | VehDet | PedDet | Hold | Force | MinRec | ManCtrl | CNA | None |
| Index | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 |
| | Pin q | Pin v | Pin w | Pin x | Pin y | Pin z | Pin AA | Pin BB |
| Input | None | PedOmt | OmtRed | RedRst | None | CNA | None | None |
| Index | 0 | 2 | 1 | 1 | 0 | 2 | 0 | 0 |
| | Pin EE | Pin FF | Pin GG | Pin HH | | | | |
| Input | PedOmt | PedRcy | Maxll | None | | | | |
| Index | 0 | 1 | 1 | 0 | | | | |

TS1 Inputs (Connector B)

| | Pin B | Pin L | Pin M | Pin N | Pin P | Pin R | Pin S | Pin T |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|
| Input | None | VehDet | PedDet | VehDet | PedDet | VehOmt | VehOmt | PedOmt |
| Index | 0 | 4 | 4 | 3 | 3 | 3 | 2 | 5 |
| | Pin U | Pin V | Pin W | Pin X | Pin g | Pin h | Pin i | Pin j |
| Input | VehOmt | PedRcy | None | None | VehOmt | Hold | Hold | PedOmt |
| Index | 1 | 2 | 0 | 0 | 4 | 4 | 3 | 3 |
| | Pin k | Pin m | Pin n | Pin v | Pin x | Pin z | | |
| Input | PedOmt | PedOmt | PedOmt | None | PedOmt | Maxll | | |
| Index | 6 | 7 | 8 | 0 | 4 | 2 | | |

Rt 60 & 30 Andersons Corner

TS1 Inputs (Connector C)

10/13/2022 7:15:40 AM

| | Pin P | Pin R | Pin S | Pin T | Pin U | Pin V | Pin W | Pin X |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|
| Input | VehDet | PedDet | VehDet | PedDet | PedDet | VehDet | PedDet | Hold |
| Index | 5 | 5 | 6 | 6 | 7 | 7 | 8 | 8 |
| | Pin Y | Pin Z | Pin a | Pin b | Pin m | Pin n | Pin p | Pin q |
| Input | Force | StopTm | MaxInh | None | Hold | VehOmt | None | VehOmt |
| Index | 2 | 2 | 2 | 0 | 5 | 5 | 0 | 6 |
| | Pin r | Pin s | Pin t | Pin u | Pin v | Pin EE | | |
| Input | VehOmt | VehOmt | VehDet | RedRst | OmtRed | Hold | | |
| Index | 7 | 8 | 8 | 2 | 2 | 7 | | |

TS1 Inputs (Connector D)

| | Pin A | Pin B | Pin C | Pin D | Pin E | Pin F | Pin G | Pin H |
|-------|---------|---------|---------|---------|-------|-------|--------|-------|
| Input | VehDet | None | Preempt | None | None | None | VehDet | None |
| Index | 9 | 0 | 5 | 0 | 0 | 0 | 10 | 0 |
| | Pin J | Pin K | Pin L | Pin M | Pin N | Pin P | Pin R | Pin S |
| Input | Preempt | Preempt | Preempt | Preempt | None | None | None | None |
| Index | 1 | 2 | 3 | 4 | 0 | 0 | 0 | 0 |
| | Pin T | Pin U | Pin V | Pin W | Pin X | Pin Y | Pin Z | Pin a |
| Input | Alarm | None | None | None | None | None | None | None |
| Index | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Pin b | Pin c | Pin d | Pin e | Pin f | Pin g | Pin h | Pin i |
| Input | None | None | None | Alarm | Alarm | None | Alarm | None |
| Index | 0 | 0 | 0 | 2 | 3 | 0 | 14 | 0 |
| | Pin j | Pin k | Pin m | Pin n | Pin p | Pin q | Pin r | Pin s |
| Input | Alarm | Alarm | Alarm | Alarm | None | None | None | None |
| Index | 1 | 2 | 3 | 4 | 0 | 0 | 0 | 0 |
| | Pin t | Pin u | Pin v | Pin w | Pin x | Pin y | | |
| Input | Preempt | Preempt | Preempt | Preempt | None | None | | |
| Index | 1 | 2 | 3 | 4 | 0 | 0 | | |

Rt 60 & 30 Andersons Corner

Vehicle Detector 1

10/13/2022 7:15:40 AM

Delay Extend Carryover Queue Limit

Mode Added System

Fail Mode Max Pres No Act Erratic Fail Time

Delay 2

Phases 1-8 9-16

| | | | | | | | | | | | | | | | | | |
|--------------------|--|--|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Call Phases | | | 4 | | | | | | | | | | | | | | |
| Yellow Lock Phases | | | | | | | | | | | | | | | | | |
| Red Lock Phases | | | | | | | | | | | | | | | | | |
| Extend Phases | | | 4 | | | | | | | | | | | | | | |
| XSwitch Phases | | | | | | | | | | | | | | | | | |
| Bike Call Phases | | | | | | | | | | | | | | | | | |

Vehicle Detector 2

Delay Extend Carryover Queue Limit

Mode Added System

Fail Mode Max Pres No Act Erratic Fail Time

Delay 2

Phases 1-8 9-16

| | | | | | | | | | | | | | | | | | |
|--------------------|--|--|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Call Phases | | | 4 | | | | | | | | | | | | | | |
| Yellow Lock Phases | | | | | | | | | | | | | | | | | |
| Red Lock Phases | | | | | | | | | | | | | | | | | |
| Extend Phases | | | 4 | | | | | | | | | | | | | | |
| XSwitch Phases | | | | | | | | | | | | | | | | | |
| Bike Call Phases | | | | | | | | | | | | | | | | | |

Rt 60 & 30 Andersons Corner

Vehicle Detector 5

10/13/2022 7:15:40 AM

Delay Extend Carryover Queue Limit

Mode Added System

Fail Mode Max Pres No Act Erratic Fail Time

Delay 2

Phases

1-8

9-16

| | | | | | | | | | | | | | | | | |
|--------------------|--|--|--|--|---|--|--|--|--|--|--|--|--|--|--|--|
| Call Phases | | | | | 5 | | | | | | | | | | | |
| Yellow Lock Phases | | | | | | | | | | | | | | | | |
| Red Lock Phases | | | | | | | | | | | | | | | | |
| Extend Phases | | | | | 5 | | | | | | | | | | | |
| XSwitch Phases | | | | | | | | | | | | | | | | |
| Bike Call Phases | | | | | | | | | | | | | | | | |

Vehicle Detector 6

Delay Extend Carryover Queue Limit

Mode Added System

Fail Mode Max Pres No Act Erratic Fail Time

Delay 2

Phases

1-8

9-16

| | | | | | | | | | | | | | | | | |
|--------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|
| Call Phases | | | | | | | | | | | | | | | | 8 |
| Yellow Lock Phases | | | | | | | | | | | | | | | | |
| Red Lock Phases | | | | | | | | | | | | | | | | |
| Extend Phases | | | | | | | | | | | | | | | | 8 |
| XSwitch Phases | | | | | | | | | | | | | | | | |
| Bike Call Phases | | | | | | | | | | | | | | | | |

Fiscal Impact Analysis Comment

In alignment with the 2045 Comprehensive Plan, on February 28, 2023, the Board of Supervisors adopted a resolution directing staff to use the County's Fiscal Impact Model to assess proposed developments. To that end, staff has taken the information provided by the applicant in the fiscal input form dated 2/15/23 and used the County's model to analyze fiscal impacts.

1. Overall fiscal impact (capital and operating costs). The fiscal model output information is below – this includes the model default (standard) assessed unit values based on average data for the applicable fiscal analysis zone within the County (Attachment A).
2. Capital Expenditures. This amount represents impacts to County facilities and services attributable to this proposed development. This amount is shown in Attachment A and is further broken out below by type of capital expenditure and by unit type (Attachment B).

Staff has also run the model using the estimated assessed unit values as projected by the applicant for informational purposes (Attachment C).

Attachment A

| NET FISCAL IMPACT | Hankins Dunn/Default Values | % |
|------------------------------------|-----------------------------------|-------------|
| PROJECTED REVENUES | | |
| General Property Taxes | \$43,782,889 | 84% |
| Other Local Taxes | \$5,025,911 | 10% |
| Licenses, Permits & Fees | \$885,161 | 2% |
| Fines & Forfeitures | \$77,048 | 0% |
| Use of Money & Prop | \$0 | 0% |
| Commonwealth | \$0 | 0% |
| Federal Government | \$0 | 0% |
| Charges for Services | \$2,583,858 | 5% |
| Miscellaneous | \$0 | 0% |
| Total General Fund Revenues | \$52,354,866 | 100% |
| Schools Revenues (Non-Court | \$22,572,894 | |
| GRAND TOTAL REVENUES | \$74,927,760 | |

| | | |
|---|---------------------|-------------|
| PROJECTED EXPENDITURES | | |
| Operating Expenditures | | |
| General Administration | \$193,237 | 0% |
| Court Services | \$216,718 | 0% |
| Public Safety | \$6,840,807 | 10% |
| Financial Administration | \$192,214 | 0% |
| Info Resources Management | \$116,506 | 0% |
| Community Development | \$47,151 | 0% |
| General Services | \$1,520,776 | 2% |
| Parks & Recreation | \$264,410 | 0% |
| Other Contributions And Transfe | \$5,278,964 | 8% |
| Total General Fund Expenditure | \$14,670,784 | 22% |
| School Operating Expenditures | \$52,445,365 | 78% |
| GRAND TOTAL OPERATING EXPENDITURES | \$67,116,149 | 100% |
| Capital Expenditures | | |
| Non-Schools Capital | \$4,023,838 | 31% |
| Schools Capital | \$9,052,430 | 69% |
| GRAND TOTAL CAPITAL EXPENDITURES | \$13,076,268 | 100% |
| GRAND TOTAL EXPENDITURES | \$80,192,417 | |

| | |
|---|----------------------|
| CUMULATIVE NET FISCAL IMPACT | (\$5,264,658) |
| <i>Average Annual Net Fiscal Impact</i> | <i>(\$210,586)</i> |

| CAPITAL IMPACTS PER UNIT | | Hankins Dunn//Default |
|------------------------------------|------------------------|--------------------------|
| Transportation | | |
| | Single Family Detached | \$112.79 |
| | Single Family Attached | \$86.12 |
| Parks and Recreation | | |
| | Single Family Detached | \$3,795.86 |
| | Single Family Attached | \$2,511.11 |
| Fire and Emergency Services | | |
| | Single Family Detached | \$1,149.45 |
| | Single Family Attached | \$760.40 |
| Police | | |
| | Single Family Detached | \$723.49 |
| | Single Family Attached | \$478.62 |
| Library | | |
| | Single Family Detached | \$480.63 |
| | Single Family Attached | \$317.95 |
| General Government | | |
| | Single Family Detached | \$143.22 |
| | Single Family Attached | \$94.74 |
| General Services | | |
| | Single Family Detached | \$268.48 |
| | Single Family Attached | \$177.61 |
| Courts | | |
| | Single Family Detached | \$844.93 |
| | Single Family Attached | \$558.96 |
| Schools | | |
| | Single Family Detached | \$17,542.50 |
| | Single Family Attached | \$9,216.56 |
| TOTAL | | |
| | Single Family Detached | \$25,061.35 |
| | Single Family Attached | \$14,202.08 |

| NET FISCAL IMPACT | Hankins Dunn/Develo per Values | % |
|------------------------------------|--------------------------------------|-------------|
| PROJECTED REVENUES | | |
| General Property Taxes | \$51,106,980 | 85% |
| Other Local Taxes | \$5,468,125 | 9% |
| Licenses, Permits & Fees | \$1,041,464 | 2% |
| Fines & Forfeitures | \$77,048 | 0% |
| Use of Money & Prop | \$0 | 0% |
| Commonwealth | \$0 | 0% |
| Federal Government | \$0 | 0% |
| Charges for Services | \$2,583,858 | 4% |
| Miscellaneous | \$0 | 0% |
| Total General Fund Revenues | \$60,277,475 | 100% |
| Schools Revenues (Non-Count | \$22,572,894 | - |
| GRAND TOTAL REVENUES | \$82,850,368 | |

| | | |
|---|---------------------|-------------|
| PROJECTED EXPENDITURES | | |
| Operating Expenditures | | |
| General Administration | \$193,237 | 0% |
| Court Services | \$216,718 | 0% |
| Public Safety | \$6,840,807 | 10% |
| Financial Administration | \$192,214 | 0% |
| Info Resources Management | \$116,506 | 0% |
| Community Development | \$47,151 | 0% |
| General Services | \$1,520,776 | 2% |
| Parks & Recreation | \$264,410 | 0% |
| Other Contributions And Transfe | \$5,278,964 | 8% |
| Total General Fund Expenditure | \$14,670,784 | 22% |
| School Operating Expenditures | \$52,445,365 | 78% |
| GRAND TOTAL OPERATING EXPENDITURES | \$67,116,149 | 100% |
| Capital Expenditures | | |
| Non-Schools Capital | \$4,023,838 | 31% |
| Schools Capital | \$9,052,430 | 69% |
| GRAND TOTAL CAPITAL EXPENDITURES | \$13,076,268 | 100% |
| GRAND TOTAL EXPENDITURES | \$80,192,417 | |

| | |
|---|--------------------|
| CUMULATIVE NET FISCAL IMPACT | \$2,657,951 |
| <i>Average Annual Net Fiscal Impact</i> | \$106,318 |

Project Arborist Report

To: Hans C. Klinger hcklinger@hhhunt.com
From: Troy Savage, ISA Certified Arborist: ISA/MA-6146A, tsavage@wetlands.com 757-513-6041
CC: Rebecca Napier/ rnapiet@wetlands.com
Date: June 13th, 2023
Project: Hankins-Dunn Site – Arborist Hardwood Forest Assessment
Location: James City County, Virginia
WSSI Project #31914.01

| | |
|----|--|
| 1. | Project Arborist Hardwood Forest Assessment. Hankins-Dunn (AKA White Hall Extension) 4.97ac |
| 2. | Forest Conditional Assessment: Staff Qualifications <i>The Hankins-Dunn site was assessed by Troy Savage P.W.S., P.W.D., Q.E.P., C.A., C.E. Professional Wetland Scientist #2556, Society of Wetlands Scientists Certification Program, Inc.; Certified Professional Wetland Delineator #34020000168, VDPOR Board of Professional Soil Scientists and Wetland Delineators, Qualified Environmental Professional #1406630, Certified Arborist ISA/MA-6146A, Ecological Society of America; Certified Ecologist. Field work was conducted on June 5, 2023.</i> |
| 3. | Forest Conditional Assessment: <i>Summarize Site Location: The study area is located entirely in James City County and adjacent to the Hankins-Dunn property, east of School House Lane and New Elementary School. See Attached <u>Exhibit A</u>.</i> |
| 4. | Forest Conditional Assessment: <i>Methods:</i> <i>The entire site was transected with qualitative measurements taken on each distinct assemblage of trees. Measurements included relative dominance of each species in the assemblage, approximate age of dominant trees based on Diameter at Breast Height (DHB), and approximate age and composition of understory tree species if present.</i> |
| 5. | Forest Conditional Assessment: Conclusions <i>The entire site consists of late successional hardwood forest in excellent condition. The forest stand is best defined as an Oak-Beech-Hickory-Poplar assemblage with most individuals ranging between 55 and 110 years old, with occasional outliers and specimen trees that are significantly older. Bottomland areas also contain mature Maple, Elm, Iron wood, and Polar. It is my professional opinion that the site meets the conditions set forth in: the James City County bonus density item in code section 24-549.H:</i> |



| | | |
|----|---|---|
| H. | Preserving a single area of healthy, mature, mixed hardwood forestland at least two acres in size within the developable portion of the site. The planning director may request that the developer provide confirmation, prepared by a certified horticulturalist, that these qualities are present | 1 |
|----|---|---|

Photo #1: Hickory-Beech forest on the northeastern portion of the site.



Photo #2: Oak-Beech assemblage located on the western portion of the site.



Photo #3: Oak-Hickory-Beech assemblage in the south-central portion of the site.



Photo #4: Oak-Hickory-Beech assemblage in the south-central portion of the site.



Photo #5: Oak-Poplar-Beech assemblage in the central portion of the site.

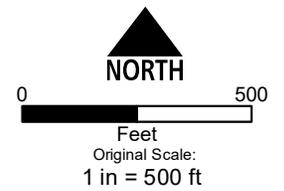


L:\31000s\31900\31914.01\Admin\05-ENVR\Forest Evaluation White Hall HHHunt.docx



 Site (4.97 ac)

Vicinity Map Hankins Dunn Tree Assessment



Source: World Street Map - ESRI

Terry Costello

From: Anne Atkinson <annehatkinson@gmail.com>
Sent: Wednesday, July 26, 2023 6:25 PM
To: Terry Costello; Planning
Subject: [External]Development next to White Hall at Route 60 in Toano.

It is not advisable to allow the developers to have the property referenced above rezoned to allow over 3 homes per acre, an increase from the current 1 house per 20 acres. This valuable agricultural land is needed for the area.

The proposed change would mean a dramatic increase in traffic, a lower quality of life for current residents, a greater demand on the area's water and services as well as an increase in pollution.

I look forward to the upcoming hearing.

Thank you,

Anne Atkinson

Terry Costello

From: Adrienne <adrienne-gary@cox.net>
Sent: Tuesday, September 5, 2023 2:03 PM
To: Terry Costello
Subject: [External]Development

Plan Number: **Z-22-0004** - 582 homes

Dear Terry,

Both my husband and I are very concerned about the proposed development on Richmond Road that backs up to Stonehouse School.

We endorse what Lee Alexander said in reference to the proposal.

The size of the development will cause more traffic issues, and pressure on schools and other county infrastructure.

If it is like WhiteHall, you will see building after building from Richmond Road. An urban instead of rural view with very little green.

It would also take away from the historical view of the Old Hickory Neck Church.

Gary and I conduct citizen science related to butterflies and other insects. We have counted butterflies at the Hickory Neck Church and the Stonehouse School Garden. Without native plants nearby, both of the locations will be worthless for pollinators.

Growth is out-of-control in the upper county.

Sadly,

Adrienne Frank and Gary Driscole
114 Crescent Drive
Williamsburg

Terry Costello

From: Alia Stutts <stutts.alia@yahoo.com>
Sent: Sunday, July 23, 2023 2:10 AM
To: Terry Costello
Cc: Planning
Subject: [External]Rezoning Toano

I am appalled at this proposal to rezone Toano. I live off of Racefield Dr. There is enough traffic here especially when I-64 is backed up. No amount of stop lights is going to change that and adding 582 residents will be detrimental to our traffic as that's AT LEAST 582 more cars if not more. When will the construction end? We live in/near a colonial area yet everything is being built over. The schools are already packed here and I'm sure with the staffing crises they are understaffed. The poor deer barely have anywhere to go now you constantly see them watching cars at night right by the street and dead on the road. Think of how many more animals will be dead and have no habitat. Think of how much more littering will occur. Think of the residents already here, isn't stone house enough? Will humans ever stop to think about how all of this will kill the planet? Look at how many businesses can't even survive in the heart of Williamsburg yet let's build more and more... NOT! I'm begging you all to consider how ridiculous this is. PLEASE PRESERVE TOANO !!!!

Toano Resident

[Sent from Yahoo Mail for iPhone](#)

Terry Costello

From: Beth Klapper
Sent: Wednesday, September 6, 2023 10:49 AM
To: Terry Costello
Cc: Paul Holt; Susan Murray; Josh Crump
Subject: FW: [External]Z-22-0004 and SUP-22-0026

From: waters8@cox.net <waters8@cox.net>
Sent: Wednesday, September 6, 2023 9:19 AM
To: Planning <planning@jamescitycountyva.gov>
Subject: [External]Z-22-0004 and SUP-22-0026

Please do not approve 8290 Richmond Road Hankins-Dunn Rezoning and Residential Cluster Development. Problem areas on our roadways can't handle more congestion. My main concern is the 4 lights from Richmond Rd from Lightfoot Rd to the 2nd 199 interchange and the crossroads / exit ramps. The light schedule has changed multiple times over the last few years most likely to prevent gridlock. Please plan a fix for traffic congestion before adding housing.

Best regards,
Bobby Waters
236 Nina Ln, 23188

Terry Costello

From: Cheryl Mathews <cheryl.m.mathews@gmail.com>
Sent: Sunday, July 23, 2023 10:29 PM
To: Terry Costello; Planning
Subject: [External]Proposed Hankins Development

Dear Sirs:

I find it difficult to believe that having so recently put into place the change to one house to 20 acres in upper James City County you could even entertain the high density housing proposed by this project. Would you allow me to subdivide my 46 acres on Forge Road at this density? Of course not! I am stunned and ashamed that the planning commission would allow this proposal to even be discussed.

I vehemently oppose such additional development in the upper county. It appears that you did not really intend to preserve what is left of our agricultural property when you imposed that 20 acre minimum. Please turn this project down outright and without delay. I can see no justification for approving such an outrageous proposal. Do not let a developer override what a planning commission should be protecting.

Sincerely,

Cheryl M Mathews
2116 Forge Road

Sent from my iPhone

Terry Costello

From: Crystal Orlowsky <crystalraanee78@gmail.com>
Sent: Thursday, December 15, 2022 11:15 AM
To: Terry Costello
Subject: [External]Proposed rezoning in upper JCC

Good afternoon,

I am a resident of upper JCC and have some concerns about the proposed rezoning and development by HHHunt. I live in the section of White Hall on Schoolhouse Ln. We only have the one entrance into our neighborhood because it is not connected to the main part of White Hall on Rochambeau/Richmond Rd. That entrance is already a challenge with the amount of traffic during school pick up and drop off times for both Stonehouse Elementary and Williamsburg Christian academy. There have been times that I have had to wait upwards of 30 minutes to just get from Rochambeau, to the entrance of White Hall on Schoolhouse Ln. With the proposed new development, there will be even more families and even longer lines to wait in.

Also, the current traffic at the intersection of Rochambeau and Schoolhouse Ln is already dangerous. Add over 500 more cars to the area and that intersection becomes an even bigger problem. Visibility during pick up and drop off is minimal and if there is not an officer sitting near by, many people still turn left onto Rochambeau from across the street. I worry about the safety of all those children, and my neighbors.

In order to support this new development, we would need a connecting road between the two sections of Whitehall, a traffic light at the intersection, and another Elementary school to support the influx of new families.

Also, the reason why many of us chose to live in upper JCC is because of the calmness and lack of traffic. It is slowly being erased.

Thank you for your sincere consideration.

Terry Costello

From: Carey Sydney <careysydney21@gmail.com>
Sent: Thursday, December 15, 2022 11:48 AM
To: Terry Costello
Subject: [External]Questions and concerns about proposed development on Richmond Rd

Hello,

It's my understanding that there is a rezoning proposal by HH Hunt to rezone about 200 acres on Richmond Rd (near Whitehall) to allow for residential construction of 460 single family homes and 85 town homes. I'm very concerned about the impact of this proposed neighborhood on WJCC schools, traffic along Richmond Rd, and the rural character of upper James City County. I would appreciate answers to my questions/concerns below.

What schools would this neighborhood be zoned for? How will the county mitigate the burden of extra students on the already over-crowded upper JCC schools? Based on the limited location information I have, it seems the new neighborhood would be zoned for Stonehouse Elementary, which is already over-capacity and the most crowded elementary school in WJCC. The next closest school, Norge Elementary, is close to capacity. How will the county address this? Are there enough classrooms and teachers at these schools to handle the extra students? Enough bus drivers and buses? Will classroom size at the schools increase (a fact which is correlated to decreased classroom performance)? The JCC Board of Supervisors has made it clear they do not support building a new elementary school to deal with the already overcrowded situation, so I'm concerned about the impact of additional students in this area without a clear plan to address this. As a parent of two WJCC elementary students, education and student safety are my top priorities. I don't want classroom sizes getting bigger or the quality of education degraded. I don't want my children taught in a trailer or taking tests in hallways because there is not enough room (something already happening in WJCC). I'm attaching a screenshot of WJCC's recent enrollment projections which is concerning enough as it is prior to this proposed neighborhood.

Elementary – MO

| School | Effective Capacity |
|-------------------|--------------------|
| Clara Byrd Baker* | 618 |
| Laurel Lane* | 628 |
| DJ Montague* | 582 |
| Norge* | 736 |

How will the county address the impact of this new neighborhood on traffic on Richmond Rd and surrounding areas in upper JCC? I already deal with an abundant number of tailgaters, reckless drivers, road ragers on this part of Richmond Rd as it is. I'm concerned about the impact on the increase of traffic on road safety in this area. There have already been two fatal accidents in this part of JCC in the past few months. Increased traffic will just make this worse.

Are there any measures in place to ensure this won't further erode the rural character of upper JCC? I'm confused how this can even happen after the JCC BOS passed a policy requiring 20 acre minimum purchases. The public in JCC has overwhelmingly voiced their preference for preserving JCC's rural spaces and character and to limit development. Are our voices being heard? Like the overwhelming majority of the county, I'm concerned about overdevelopment that erodes our county's history and character, and any negative impact to my own property value.

Thank you,

Carey Sydney

Date: August 30, 2023

From: Linda Rice, President of Friends of Forge Road and Toano
2394 Forge Road
Toano, VA 23168
lindarice678@cox.net

To: The Honorable Members of the Planning Commission

Re: Opposition to Rezoning Application Z-22-0004 and Special Use Permit
Application SUP-22-0026

Friends of Forge Road and Toano (F.O.R.T.) is a non-profit group founded in 2004 by concerned citizens in Upper James City County. We work with neighborhood associations and various other groups to promote the preservation of rural areas, enhance awareness of our region's historical significance, and support agri-tourism. We currently have approximately 125 paid members. Some of our members have served on the James City County Planning Commission, the Chesapeake Bay Board, the Wetlands Board, the James City County Historical Commission and the Purchase of Development Rights Committee.

F.O.R.T strongly objects to this rezoning application, which is in direct opposition to the general welfare and quality of life of the citizens of the upper James City County.

In the ten months since this rezoning application was filed, it has been reviewed by:

Planning Staff

JCSA

Senior Landscaping Planner

Fire Department

Police Department

VDOT

Stormwater and Resource Protection Division

The review process generated over 80 documents on PermitLink on the County website. This lengthy process has consumed countless hours of staff time, at an untold cost to the taxpayers of James City County.

The developer purported to obtain input from F.O.R.T. on this project. In two meetings with the developer, we strongly communicated our community concerns with this project, most particularly its density and the attendant consequences of that density. What was the developer's response to these concerns?

**The proposed development WAS ACTUALLY EXPANDED
from 549 homes to 582 homes on 155 acres!**

This project will increase daily traffic on already-congested Richmond Road by at least 582 cars. Per the County's formula, (which we believe is unrealistically conservative) the development will add at least 82 students to Stonehouse Elementary School which was already **over capacity** by 55 students for the 2022-

2023 school year. And, it will further strain the availability of ground water. Many residents of the upper county are on wells and rely on ground water for personal and farm use.

This land is currently zoned A-1, allowing 1 residence for every 20 acres. That is not dense enough for this developer. The developer was advised to apply for rezoning to R-2, which would permit one single-family home per acre. This is still not dense enough for this developer. So, overlays have been added through a complicated “point system” to allow for 3.74 homes per buildable acre. In fact, per the JCC Police Department, the streets of this development are so narrow that parking will have to be restricted to one side of each street to allow emergency vehicles to pass.

In a meeting with F.O.R.T. on July 12, 2023, the developer was asked why they were cramming so many homes into this project. The developer’s unpersuasive response was simply that we like density.

In this rezoning effort the developer has proposed a few modest accommodations that amount to mere window dressing, and do not address citizen concerns. For example, the developer has offered:

--“Up to 3” acres of land to the County for expansion of Stonehouse Elementary School. Unfortunately, the County has determined that this land is unusable. The developer disagrees.

--A couple of “pocket parks” which are actually long, narrow alleys between long rows of homes, and are not in any way “parks.”

--Five acres of this entire tract be set aside as a mini-farm that the Homeowners Association will have to maintain. A large home is planned by the developer on this mini-farm, and will likely be sold for yet more revenue.

The developer will argue that this land is located in the PSA and thus is ideal for housing. However, the US Department of Agriculture disagrees. The USDA has conducted comprehensive soil testing throughout the country, and designated this property as “prime farmland.” As stated on USDA.gov:

“Prime farmland is of major importance in meeting the Nation’s short- and long-range needs for food and fiber. Because the supply of high-quality farmland is limited, the U.S. Department of Agriculture recognizes that responsible levels of government, as well as individuals, should encourage and facilitate the wise use of our Nation’s prime farmland.”

Clearly, rezoning land to allow 582 houses on 155 acres is neither responsible nor wise use of our prime farmland.

Yes, this is private property. However, private property rights must be exercised within the parameters of existing zoning laws. Such laws are not mere suggestions to be discarded in response to one family’s desires. They exist to protect the citizens of James City County from developments like this one. The developer will leave, but all JCC citizens will have to pay for the long-term impacts.

We respectfully submit that this rezoning application must be rejected, or we will continue down the slippery slope of uncontrolled growth, losing valuable farmland and our community's distinct character.

Terry Costello

From: Fernando Mendiola <jenando96@gmail.com>
Sent: Wednesday, September 6, 2023 6:41 PM
To: Planning; Terry Costello
Subject: [External]Development next to White Hall in Toano

Dear planning commission,

I am a veteran of 22 years of service to this nation. I was assigned to Joint Base Langley. We purchased a home in white hall years back. My family and I request the denial for modification request from developer to the zoning law which permits approximately 3.74 homes per acre and 1 home per acre. The land should be used for agricultural or preservation of local plants and other native species. We must take into consideration the impacts of this development and our resources. This will increase strain on our schools, roadways, and environment. Our children's education will be degraded as a result of increased students. Emergency services will be affected as we are already strained. Thank you for your consideration and may god bless this great nation and its people.

Mr Fernando M
Sent from my iPhone

Terry Costello

From: Lee Alexander <lalex1103@aol.com>
Sent: Friday, September 8, 2023 6:53 AM
To: Terry Costello
Subject: [External]8290 Richmond Road Hankins-Dunn Rezoning - Plan Number: Z-22-0004

After further review of the subject proposal, I am going to amend my comments submitted on 5 Sep, to add the following comments, which deal with the traffic analysis conducted for this rezoning application.

I note the Traffic Impact Analysis (TIA) analyzed five traffic intersections, including:

Route 60, Richmond Road/Route 30, Rochambeau/Route 30, Barhamsville Road
Route 60, Richmond Road/VCA Andersons Corner Veterinarian Hospital/Hickory Neck Blvd.
Route 60, Richmond Road/ Bicast Publishing Company
Route 30 Rochambeau Dr./Preston Lane/Geddy Terrace
Route 30 Rochambeau Dr./Hickory Neck Blvd.

The farthest south along Richmond Road this TIA considers is the segment of Road down by the Bicast parking lot, which is a few hundred feet south of the proposed entrance. The farthest along Route 30 Rochambeau, is Hickory Neck Blvd., less than two miles from the entrance to the proposed site, (and still short of Stonehouse Elementary). Aside from those sites mentioned above, no analysis was done to determine the traffic impact at any other major intersection or highway segments in that part of the county. It's not that the data gathered is useless. Actually the data shows significant drops in the Level Of Service (LOS) during peak rush hour times, which should lead to a no vote for this application. But there is an aspect to this traffic analysis that is not being looked at.

Obviously, the impact of the traffic stemming from this proposed development will not end at the Bicast parking lot. Like the rest of the traffic in the county, the traffic generated by this development will continue on to its destination, and its impact will be felt far down stream. That downstream effect needs to be measured. We should be measuring the potential impact of this traffic on that part of the county; Toano, Norge, Lightfoot and on the roads along the I-64 corridor.

The JCC 2045 Comp Plan in its chapter on Transportation should be considered. In that chapter, on page 244, it states that "a travel model was developed using data that reflected the land use pattern shown on the Future Land Use Map as recommended by the Planning Commission Working Group in April 2021. The results are shown in Map T-2 and Table T-3. It goes on to state, "The travel model developed during this Comprehensive Plan **will continue to be used to analyze transportation and land use considerations on an on-going basis**". This makes sense. Why not do so?

Within this chapter, table T-3 lists a number of road segments along with predictions of how traffic will develop into 2045. Why not choose from this list for the TIA? Add other sites and intersections to the TIA when necessary. In this particular case, I would urge the county to at least add the segments of road associated with the Richmond Road/Croker Road, and Croker Road/Rochambeau intersections. I would also consider adding sites in Lightfoot, as this area was identified as a future traffic problem in the JCC 2045 Comp Plan, Table T-3.

Change is not isolated to one neighborhood or locality. We live in an increasingly complex

county. The JCC2045 Comp Plan speaks to this on page 235, "James City County's roadways are part of a larger interconnected system, with many journeys within the County originating elsewhere. As traffic increases or decreases in surrounding localities, it can impact roadways within the County."

I recommend rezoning of this property, as currently proposed, be denied. I recommend the Planning Commission take into consideration these comments for future applications. Thank you for your service to the county. I ask that this be made part of the official record.

Best Regards,

Lee Alexander
209 Crescent Dr.
Williamsburg VA. 23188
7575668637

Terry Costello

From: Lee Alexander <lalex1103@aol.com>
Sent: Tuesday, September 5, 2023 12:41 PM
To: Terry Costello
Subject: [External]8290 Richmond Road Hankins-Dunn Rezoning - Plan Number: Z-22-0004

Terry, sorry again for the mistake. Lee

My name is Lee Alexander. I am a resident of James City County. I recommend rezoning of this property, as currently proposed, be denied.

Although somewhat dated, the 2019 JCC Comprehensive Plan Survey is still relevant to this issue. An excerpt from the conclusion on Page 31 reads..

"The rural nature of the county was mentioned by many respondents: its beauty, landscape, parks, and relative lack of development compared to other locations. Many statements about the rural character of James City County included a sense of wistfulness—it was better before all the current development— or a plea for caution and slowing down future development. Residents are afraid that the things they love about the County will disappear. One respondent said they liked the "rural quality, but that that is fast disappearing." Said another, "Love the entire area. Sorry to see how much it's grown."

In the next section dealing with what respondents want to change, we hear this comment...

"One theme does stand out: stop development and growth. Many comments pertained to there being too much residential development and too much retail development, when there are empty stores and malls. A number of respondents said essentially that they like how things are and don't want any change."

I know, just so much stuff. Some would say these statements do not reflect reality. Wistfulness was the word used. I think a better expression would be that the county residents responding to the survey sensed a problem, and were trying the best way they could to express it. I believe the sentiment of over development is still relevant to county residents, and should not be ignored.

Concerning Traffic I note in the staff report the problems associated with the turning movements. The Level Of Service cited in the various scenarios look to be unacceptable for traffic safety. I also note that VDOT has similar concerns, but apparently they can live with it, which potentially forces us to live with it. There is another aspect to the traffic issue, and that is the cumulative downstream effect of additional traffic in the area beyond the Traffic Impact Analysis (TIS) locations identified in the staff report. I would think a good part of the traffic generated from this development would travel east on Richmond Road and be funneled into an increasingly congested Toano, Croker Road and Norge communities. Let me pose this question. Is there a TIS for these areas, to include taking into account the development already under construction (i.e. Blaine Landing)?

Concerning Schools. It is clear that Stonehouse is over capacity now. The additional student load resulting from this development would add another 82 students to a school that is right now 55

students over capacity.

I respectfully ask that the rezoning of this property be denied. Thank you for your service to the county. I ask that this be made part of the record.

Best Regards
Lee Alexander
209 Crescent Drive,
Williamsburg VA.
757566 8637

Terry Costello

From: Mark Dasinger <mdasinger1@outlook.com>
Sent: Friday, September 8, 2023 4:22 PM
To: Terry Costello
Subject: [External]Proposed Housing Development

To: Terry Costello,

Dear Sir,

I am currently a resident of White Hall Town Homes here in Toano.

This letter is to inform that I am very displeased with the proposed rezoning of agriculture land to R-2 with the intension of building over 500 homes next to the White Hall subdivision.

We have way too much traffic as it is. Also this will put excess demand on our schools, utilities, emergency services and police. I moved to Toano to get away from all the traffic and congestion. Please don't allow them to trash this area like they do everywhere else.

Respectfully,

Mark Dasinger
Mdasinger1@outlook.com

Sent from [Mail](#) for Windows

Terry Costello

From: Michael Lemn <mclmn@msn.com>
Sent: Thursday, December 15, 2022 6:37 PM
To: Terry Costello
Subject: [External]White Hall Project

Sir,

I was unable to attend tonight's meeting but thank you for reaching out to the public.

My question concerns the local school systems. With the new Ryan Homes project and the development for Lennar Homes this will add around 600 plus homes to the area. If we add 400 plus to this number think of the impact to the schools. Has the county and school board taken this under study and what are the plans for additional schools to accommodate these additional children.

I just moved to Stonehouse 3 years ago. I came from Virginia Beach, and I saw firsthand the overgrowth of too many projects being built too fast without planning for the growth in the schools.

How many portables will be needed to accommodate this growth. These are my questions and concerns.

Thank you,

Michael Lemn

Sent from [Outlook](#)

Terry Costello

From: Rich and Pat Murphy <devlinmurphy@yahoo.com>
Sent: Saturday, September 9, 2023 7:07 PM
To: Terry Costello
Subject: [External]Proposed Development in upper James City County

Dear Terry,

I do not live in the upper part of James City County, but I spent a number of hours restoring the school garden at Stonehouse Elementary this summer. I was charmed by how pristine and quiet this part of JCC is. I saw and identified my first Red Spotted Purple Butterfly laying eggs on a native cherry tree on the periphery of the school yard as I used a wheelbarrow to place garden clippings in the woods. There were already two portables on what had once been a verdant, lush, field to run and play children's games on. By the third week of August when the school garden restoration was nearing completion, two more portables were delivered with the commencement of school right on the deliveries heels. Someone's projection numbers were off.

I saw a friend the other day at the Williamsburg Botanical Garden where we both volunteer time and she informed me of the proposal to the Board of Supervisors to allow almost 600 homes to be built in this quiet, bucolic, area reminiscent of the original James City County. I was appalled and at the same time disheartened. The County seems to have lost its focus. We are fighting against additional housing projects down in the south end of the County. My neighborhood school, James River Elementary, has no bussing for children who live within half a mile of school. What everyone forgot about is that U.S. Route 60 which is Pocahontas Trail down by me is a very busy thoroughfare which is often used as an alternative to the increasingly congested Interstate 64. Who is going to be looking after our children down in the southern part of JCC and up on School House Lane as it crosses State Route 30? No one seems to be thinking about the children.

What a joke the developer has planned, placing a tiny "Community Character Buffer" and a "Community Garden" at the west end of the development off U.S. Route 60! Pretty slick way of hiding another Levittown, NY. Has anyone done an environmental impact study on this project? A water usage projection? Why would you even consider congesting this area with so many people? How about we spend our time in James City County filling all the vacant properties before we consider building anything new! James City County needs to place a moratorium on building until we come to terms with our diminished capacity to support any further growth.

Sincerely,

Patricia L. Murphy
Concerned JCC Resident

Terry Costello

From: intnl1732@aol.com
Sent: Monday, August 28, 2023 9:12 PM
To: Terry Costello
Subject: [External]HH Hunt Toano Development

Dear Mr. Costello

On September 6th, HH Hunt will submit a request for zoning change to build 582 residences on Rt; 60 (Richmond Road) in Toano. This development will be adjacent to the existing White Hall community.

As a resident of White Hall, I cannot begin to tell you how adversely 582 additional residences will impact logistics and the quality of life in our area.

Not only will there be more than 870 additional vehicles **daily** jamming Rts. 60 and 30, more road usage will only contribute to the already heavy traffic in greater Toano. At the single entry/exit point of the planned community, there is not even a proposed traffic signal to ensure smooth traffic flow and pedestrian safety.

There will also be greater demands on schools, emergency services and police as well as increased strain on County water, sewer, power, gas and connectivity.

This development is a bad idea that will affect Toano's and James City County's livability for decades to come. I urge you and the Commission to reject HH Hunt's zoning proposal and to not consider high density building permits for this area now and in the future.

Sincerely,

Robert Mandrioli
3432 Westham Lane
Toano, Virginia 23168

Terry Costello

From: solilly@aol.com
Sent: Wednesday, December 14, 2022 8:32 PM
To: Terry Costello
Subject: [External]12/15 2022 meeting

I have plans that I can not change for this meeting but I am against this development and will do my best to be at other meetings and want to know how and what I can do to help stop this move. I live in the Croaker area of Williamsburg and we need to stop the growth. Thanks for any information you can give me. Yours truly Lillian Sommerville

PETITION TO REAFFIRM 2045 COMPREHENSIVE PLAN VISION

In response to the explosion of growth and development in James City County resulting from the granting of rezoning and special use permit applications, we the undersigned request that the James City County Planning Commission and Board of Supervisors reaffirm their commitment to the Vision Statement of the 2045 Comprehensive Plan which reads, in part:

We must strive to manage growth and balance the needs of development with historical and environmental protection, the needs for infrastructure, transportation, quality schools, and the availability of water. We will not settle for less than first-class education, medical care, public safety, recreation, and entertainment that strengthen the fabric of our community. (Intro-5)

Most immediately, we urge you to deny approval of the rezoning (Z-22-0004) and special use permit (SUP-22-0026) applications for the Hanks-Dunn proposed development located at 8290 Richmond Road, Toano.

| DATE | SIGNATURE | PRINTED NAME | ADDRESS |
|----------|-----------|-----------------------|---------------------------------------|
| 10/13/23 | | Brittney Wilson | 3644 Mar:gold Ct, Toano |
| 10/13/23 | | Stephanie McCallister | 7625 Beechwood Dr Laneta, VA 23089 |
| 10/14/23 | | Jacob Dacier | 203 RiverView Plantation Dr, |
| 10/15/23 | | Chris W. Heron | 101 Viking Rd. WMBG 23188 |
| 10/19/23 | | Lisa Ripchick | 115 Crescent Dr. Wmbg 23188 |
| 10/19/23 | | Joseph R. Ripchick | 115 Crescent dr. Wmbg 23188 |
| 10/19/23 | | Alis Ripchick | 115 Crescent Dr. Wmbg 23188 |

PETITION TO REAFFIRM 2045 COMPREHENSIVE PLAN VISION

In response to the explosion of growth and development in James City County resulting from the granting of rezoning and special use permit applications, we the undersigned request that the James City County Planning Commission and Board of Supervisors reaffirm their commitment to the Vision Statement of the 2045 Comprehensive Plan which reads, in part:

We must strive to manage growth and balance the needs of development with historical and environmental protection, the needs for infrastructure, transportation, quality schools, and the availability of water. We will not settle for less than first-class education, medical care, public safety, recreation, and entertainment that strengthen the fabric of our community. (Intro-5)

Most immediately, we urge you to deny approval of the rezoning (Z-22-0004) and special use permit (SUP-22-0026) applications for the Hanks-Dunn proposed development located at 8290 Richmond Road, Toano.

| DATE | SIGNATURE | PRINTED NAME | ADDRESS |
|----------|-----------|-----------------|--|
| 10/11/23 | | Bonnie L Brown | 105 Crescent Dr. Williamsburg, Va - 23188 |
| 10/11/23 | | Meredith Potts | 262 Thompson Ln Williamsburg VA 23188 |
| 10/11/23 | | Karen Dunn | 201 Loch Haven Drive Williamsburg VA 23188 |
| 10/11/23 | | Dorothy Goltare | 5127 Flowering peach Ln Providence Forge VA 23140 |
| 10/11/23 | | Ashley crossman | 7405 Tracher Drive Toano, VA 23148 |
| 10/11/23 | | Ashley Frier | 8745 Richmond Rd W Toano, VA 23168 |
| 10/11/23 | | Lavan claw | 4957 Hickory Synapse Rd Williamsburg VA 23185 |

**SPECIAL USE PERMIT-23-0027. 118 Winston Drive Short-Term Rental
Staff Report for the November 1, 2023, Planning Commission Public Hearing**

SUMMARY FACTS

Applicants: Ms. Julia Holland and Mr. David Holland, L&A Renovation, LLC

Landowner: L&A Renovation, LLC

Proposal: To allow for the short-term tourist home rental of a three-bedroom single-family dwelling.

Location: 118 Winston Drive

Tax Map/Parcel No.: 4811000035

Property Acreage: ± 0.28 acres

Zoning: R-2, General Residential

Comprehensive Plan: Low Density Residential

Primary Service Area: Inside (PSA)

Staff Contact: Tess Lynch, Planner II

PUBLIC HEARING DATES

Planning Commission: November 1, 2022, 6:00 p.m.

Board of Supervisors: December 12, 2023, 5:00 p.m. (Tentative)

FACTORS FAVORABLE

1. The applicants have acknowledged that, should this application be approved, they will obtain the proper licensing and inspections through the County and will be subject to appropriate use-based taxes.
2. Impacts: See Impact Analysis on Pages 3-4.

FACTORS UNFAVORABLE

1. Staff finds the proposal is not consistent with the short-term rental recommendations of the *Our County, Our Shared Future: James City County 2045 Comprehensive Plan*.
2. Impacts: See Impact Analysis on Pages 3-4.
3. See Comprehensive Plan Analysis on Page 5.

SUMMARY STAFF RECOMMENDATION

Staff finds the proposal to be incompatible with surrounding development and not consistent with the recommendations of the 2045 Comprehensive Plan. Staff, therefore, cannot recommend approval of this application. Should the Planning Commission recommend approval of this application, staff has included proposed conditions for consideration (Attachment No. 1).

PROJECT DESCRIPTION

L&A Renovation, LLC, has applied for a Special Use Permit to allow for a short-term rental of a three-bedroom single-family dwelling as a tourist home. The proposal includes no changes to the size or footprint of the home.

This staff report is prepared by the James City County Planning Division to provide information to the Planning Commission and Board of Supervisors to assist them in making a recommendation on this application. It may be useful to members of the general public interested in this application.

**SPECIAL USE PERMIT-23-0027. 118 Winston Drive Short-Term Rental
Staff Report for the November 1, 2023, Planning Commission Public Hearing**

The Zoning Ordinance defines a tourist home as “a dwelling where lodging or lodging and meals are provided for compensation for up to five rooms which are open to transients.”

The property has an existing driveway sufficient to accommodate parking for guests. The three-bedroom single-family dwelling is on public water and sewer. In previous tourist home applications, staff calculated the number of occupants to be two people per bedroom. Therefore, proposed Condition No. 4 states that the maximum number of occupants per contract, including children, is six.

PLANNING AND ZONING HISTORY

- There have been no legislative cases associated with the residence that was built in 1960.

SURROUNDING ZONING AND DEVELOPMENT

- The property is located internally to a subdivision.
- The properties surrounding this parcel to the north, south, east, and west are all zoned R-2, General Residential.

This staff report is prepared by the James City County Planning Division to provide information to the Planning Commission and Board of Supervisors to assist them in making a recommendation on this application. It may be useful to members of the general public interested in this application.

**SPECIAL USE PERMIT-23-0027. 118 Winston Drive Short-Term Rental
Staff Report for the November 1, 2023, Planning Commission Public Hearing**

| Impacts/Potentially Unfavorable Conditions | Status <i>(No Mitigation Required/Mitigated/Not Fully Mitigated)</i> | Considerations/Proposed Mitigation of Potentially Unfavorable Conditions |
|--|--|---|
| <u>Public Transportation: Vehicular</u> | <u>No Mitigation Required</u> | <ul style="list-style-type: none"> - The proposal is not anticipated to generate traffic exceeding a typical residential use. - The subject property is located on a local road. |
| <u>Public Transportation: Bicycle/Pedestrian</u> | <u>No Mitigation Required</u> | <ul style="list-style-type: none"> - Pedestrian/bicycle accommodations are not triggered when there are no changes proposed to the building footprint. |
| <u>Public Safety</u> | <u>No Mitigation Required</u> | <ul style="list-style-type: none"> - Staff finds this project does not generate impacts that require mitigation to the County’s Fire Department facilities or services. - The closest fire station, Fire Station 3, is 1.3 miles away. |
| <u>Public Schools</u> | <u>No Mitigation Required</u> | <ul style="list-style-type: none"> - Staff finds this project does not generate impacts that require mitigation. |
| <u>Public Parks and Recreation</u> | <u>No Mitigation Required</u> | <ul style="list-style-type: none"> - Staff finds this project does not generate impacts that require mitigation. |
| <u>Public Libraries and Cultural Centers</u> | <u>No Mitigation Required</u> | <ul style="list-style-type: none"> - Staff finds this project does not generate impacts that require mitigation. |
| <u>Groundwater and Drinking Water Resources</u> | <u>No Mitigation Required</u> | <ul style="list-style-type: none"> - The property receives public water and sewer. - The proposal does not generate impacts that require mitigation to groundwater or drinking water resources. |
| <u>Watersheds, Streams, and Reservoirs</u> Project is located in the College Creek Watershed. | <u>No Mitigation Required</u> | <ul style="list-style-type: none"> - The Stormwater and Resource Protection Division has reviewed this application and provided comments. - This project will need to demonstrate full compliance with environmental regulations if any additional development will occur on the property, but no other specific environmental impacts have been identified for mitigation. |
| <u>Cultural/Historic</u> | <u>No Mitigation Required</u> | <ul style="list-style-type: none"> - The subject property has been previously disturbed and has no known cultural resources on-site. |

This staff report is prepared by the James City County Planning Division to provide information to the Planning Commission and Board of Supervisors to assist them in making a recommendation on this application. It may be useful to members of the general public interested in this application.

**SPECIAL USE PERMIT-23-0027. 118 Winston Drive Short-Term Rental
Staff Report for the November 1, 2023, Planning Commission Public Hearing**

| Impacts/Potentially Unfavorable Conditions | Status <i>(No Mitigation Required/Mitigated/Not Fully Mitigated)</i> | Considerations/Proposed Mitigation of Potentially Unfavorable Conditions |
|---|--|---|
| <u>Nearby and Surrounding Properties</u> | <u>No Mitigation Required</u> | - Traffic is anticipated to be typical of a residential home. The subject property must adhere to the County’s Noise Ordinance. |
| <u>Community Character</u> | <u>No Mitigation Required</u> | - Winston Drive is not a Community Character Corridor and this property is not located within a Community Character Area. |
| <u>Covenants and Restrictions</u> | <u>No Mitigation Required</u> | - Staff is not aware of any covenants or restrictions on the property that prohibit the proposed use. |

This staff report is prepared by the James City County Planning Division to provide information to the Planning Commission and Board of Supervisors to assist them in making a recommendation on this application. It may be useful to members of the general public interested in this application.

**SPECIAL USE PERMIT-23-0027. 118 Winston Drive Short-Term Rental
Staff Report for the November 1, 2023, Planning Commission Public Hearing**

2045 COMPREHENSIVE PLAN

The site is designated Low Density Residential on the 2045 Comprehensive Plan Land Use Map. The Comprehensive Plan provides recommendations regarding locations for short-term rentals.

Per the adopted Comprehensive Plan, due to the unique impacts that can arise from transient residents in short-term rentals, the County should continue to carefully consider the impacts these uses can have on a community's quality of life. The thriving rural character of James City County continues to offer a variety of agri-tourism opportunities, for which short-term rentals may provide a truly unique opportunity and experience; one that provides economic benefits to rural property owners but does not directly compete with more conventional tourism-based opportunities inside the PSA. If located within a residential context, short-term rentals should serve to complement the residential character of the area rather than altering its nature. Therefore, while every location can be considered uniquely, short-term rentals are most appropriately located subject to the following development standards:

- Be located on lands designated Rural Lands, Neighborhood Commercial, Community Commercial, Mixed Use, or Economic Opportunity.

This property is designated General Residential on the adopted 2045 Comprehensive Plan Land Use Map. Therefore, the application does not meet this recommendation set forth in the Comprehensive Plan.

- Be located on the edge or corner of an existing platted subdivision, rather than internal to it.

This property is located within an existing platted subdivision. It is internal to the subdivision. Therefore, the application does not meet this recommendation set forth in the Comprehensive Plan.

- Be located on a major road.

This property is located on Winston Drive, which is classified by the Virginia Department of Transportation as a local road. Therefore, the application does not meet this recommendation set forth in the Comprehensive Plan.

- Be operated in a manner such that the property owner will continue to live and reside on the property during the rental.

The owner of the home will not reside on the same property as the proposed rental. The homeowner does not reside in James City County.

Staff finds the proposal is inconsistent with the recommendations of 2045 Comprehensive Plan.

PROPOSED SPECIAL USE PERMIT (SUP) CONDITIONS

Proposed conditions are provided in Attachment No. 1.

STAFF RECOMMENDATION

Staff does not find the proposal compatible with surrounding zoning and development and inconsistent with the recommendations of the adopted 2045 Comprehensive Plan.

Staff, therefore, does not recommend approval of the proposed SUP. Should the Planning Commission wish to recommend approval, staff has included proposed conditions for consideration.

TL/ap
SUP23-27_118WnstnDr

Attachments:

1. Proposed SUP Conditions
2. Location Map
3. Master Plan
4. Applicant Narrative

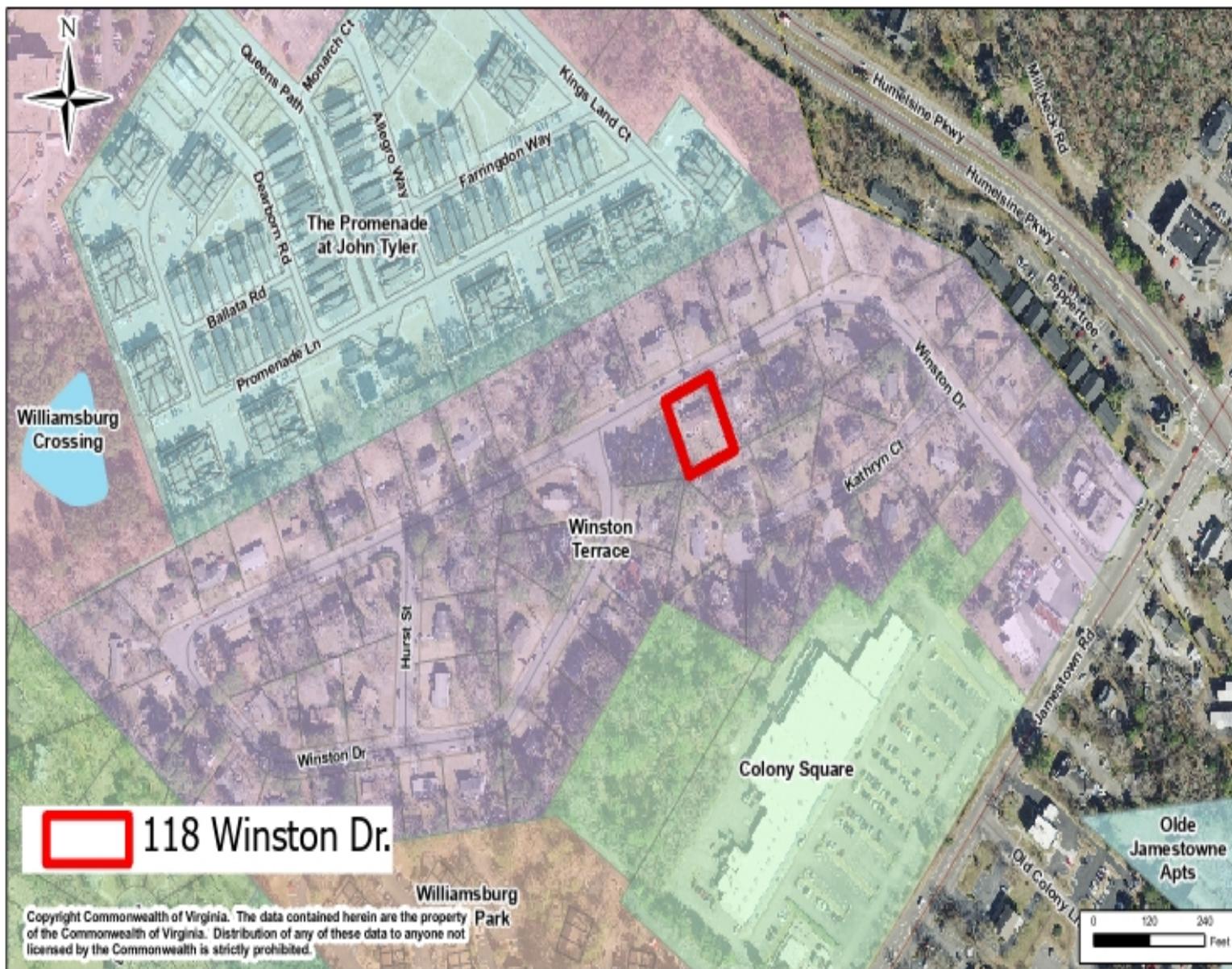
This staff report is prepared by the James City County Planning Division to provide information to the Planning Commission and Board of Supervisors to assist them in making a recommendation on this application. It may be useful to members of the general public interested in this application.

Draft Conditions – SUP-23-0027, 118 Winston Drive Short Term Rental

1. **Master Plan.** This SUP shall permit a tourist home on property located at 118 Winston Drive and further identified as James City County Real Estate Tax Map Parcel No. 4811000035 (the “Property”). The use and layout of the Property shall be generally as shown on the document entitled “SUP-23-0027, 118 Winston Drive Short Term Rental” and date stamped October 17, 2023 (the “Master Plan”), with any deviations considered per Section 24-23(a)(2) of the Zoning Ordinance as amended. This condition does not restrict improvements typical of a residential property as determined by the Director of Planning.
2. **Commencement.** An updated certificate of occupancy and evidence of a business license shall be provided to the Director of Planning within twelve (12) months from the issuance of the SUP, or this SUP shall automatically become void.
3. **Water Conservation.** Water conservation standards shall be enforced on the Property. Water conservation standards shall be submitted to and approved by the James City Service Authority within six (6) months from the issuance of the SUP.
4. **Number of rental rooms and occupants.** There shall be no more than three (3) bedrooms available for rent to visitors and no more than six (6) rental occupants total at any one time.
5. **Signage.** No signage related to the tourist home shall be permitted on the Property.
6. **Lighting.** No additional exterior lighting shall be permitted on the Property, other than lighting typically used at a single-family residence.
7. **Parking.** Off-site parking for the tourist home shall be prohibited. No oversized commercial vehicles such as but not limited to, buses and commercial trucks and trailers, associated with rental occupants of the tourist home, shall be allowed to park on the Property. No more than two (2) cars shall be allowed to be parked on the Property.
8. **Contracts per rental period.** There shall not be simultaneous rentals of the Property under separate contracts.
9. **Compliance Review.** On or before November 28, 2025, the owner of the Property must submit a letter to the Director of Planning requesting either continuance or cancellation of the SUP. If the owner requests cancellation of the SUP or does not submit the required letter, the Director of Planning shall initiate proceedings for the Board of Supervisors to revoke the SUP pursuant to section 24-12 of the County Code. If the owner of the Property requests continuance of the SUP, the owner must also submit a statement certifying that the use and Property are in compliance with all SUP conditions. The Director of Planning shall then prepare a memorandum setting forth any and all complaints received by staff since issuance of the SUP and any violations of the SUP conditions. The Director of Planning shall place the compliance review on the Board of Supervisors’ February 2026 Board meeting as a Public Hearing item at no cost to the Property owner. Following the public hearing, the Board of Supervisors shall determine whether to initiate proceedings to revoke the SUP due to incompatibility with the surrounding neighborhood, violation of the SUP conditions, or any other reason related to the health, safety, and welfare of the community or may instead set a new compliance review date.
10. **Severance Clause.** This SUP is not severable. Invalidation of any word, phrase, clause, sentence or paragraph shall invalidate the remainder.

SUP-23-0027

118 Winston Drive Short Term Rental



SUP-23-0027, 118 Winston Drive Short Term Rental

Property Information

4811000035
L&A Renovation, LLC
118 Winston Drive
Williamsburg, VA 23185
Zoning: R-2, General
Residential
Comp. Plan: Low Density
Residential
Acres: 0.28

General Notes

1. Site is served by public water and sewer.
2. Property is not located in a FEMA floodplain zone.
3. Property does not contain Resource Protection Area.
4. Property has an existing driveway.
5. A maximum of two parking sports shall be provided.

October 17, 2023



Sheet Index

1. Cover Page
2. Location Map
3. Site Photos

Adjacent Properties

4810900007
Samuel A. Miller and Chelsea A. Miller
3600 NW 91st Ave.
Hollywood, FL 33024-8138
R-2, General Residential

4811000034
Jason A. Zickefoose and Anna M. Zickefoose
120 Winston Dr.
Williamsburg, VA 23185-3322
R-2, General Residential

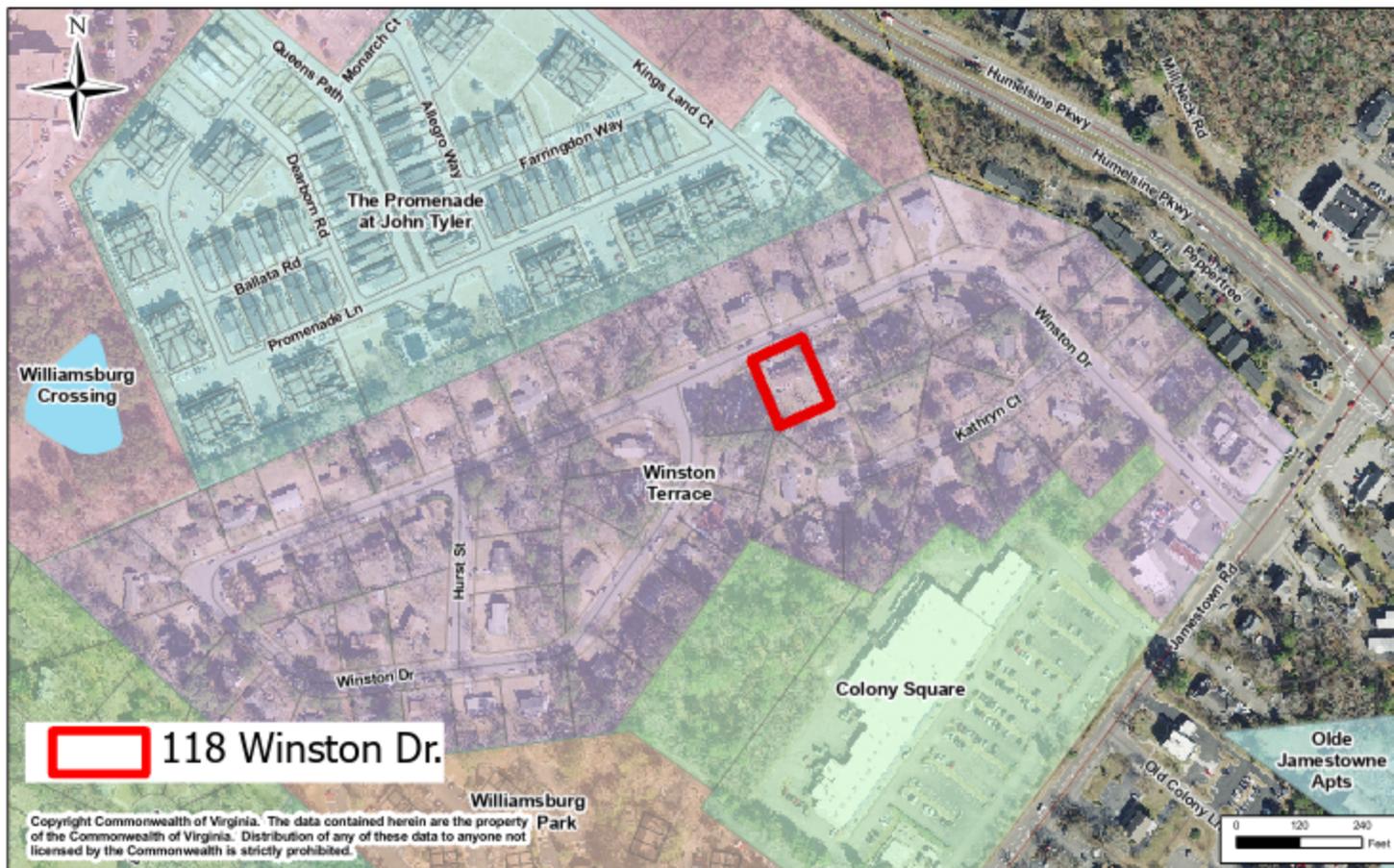
4811000039
Laurie Rafferty and Virginia Struyk
7232 Timber Lane
Falls Church, VA 22046-2732
R-2, General Residential

4811000008
Francis P. Francks
1072C Long Beach Blvd.
Beach Haven, NJ 08008-5626
R-2, General Residential

4811000036
John P. Waltner
116 Winston Dr.
Williamsburg, VA 23185-3322
R-2, General Residential

SUP-23-0027

118 Winston Drive Short Term Rental



Williamsburg Crossing

The Promenade at John Tyler

Winston Terrace

Colony Square

Olde Jamestown Apts

 118 Winston Dr.

Copyright Commonwealth of Virginia. The data contained herein are the property of the Commonwealth of Virginia. Distribution of any of these data to anyone not licensed by the Commonwealth is strictly prohibited.

0 120 240 Feet



118 Winston Dr. Tourist Home Applicant Narrative

Julia Holland & David Holland
L&A Renovation, LLC
201 Tam O Shanter Blvd., Apt 18A
Williamsburg, VA 23185

My husband and I are longtime Williamsburg residents with years of hospitality and customer service experience. It has always been a dream of ours to own a business that would enhance our lives and allow us to use the valuable hospitality skills we have acquired throughout the years. As an avid traveler myself, I find that a well-run tourist home allows visitors to immerse themselves in the local community, compared to staying at a national hotel franchise which provides a more impersonal and detached experience. I would love to provide the same level of personal comfort and immersion to tourists who visit the Williamsburg area.

The property at 118 Winston Drive is very close to Jamestown Road, and provides easy access to the College of William and Mary, Colonial Williamsburg, Jamestown, and New Town, among other destinations. We have already invested around \$18,000 into this property to modernize and ensure the structural soundness of the residence.

In order to maintain the character of the neighborhood and minimize potential negative impacts, we intend to institute various policies designed around those goals. For example, we intend to require a minimum stay of two to three days to allow for proper turn around and inspection of the property, and to keep the impact on traffic, along with loading and unloading of guests, low. Additionally, we would have a maximum vehicle policy of two to three per party, for the same reasons as above. We are open to discuss any additional policies and requirements that the Planning Commission suggests or that the Board may require.

We also have acquired an extensive umbrella policy with a local insurance agency to protect ourselves and visitors. Subleasing by visitors will not be allowed. The property will only be listed on Airbnb and Vrbo, and only the entire property will be listed; we will not permit partial rentals of rooms, and only one party at a time will be able to reserve the property.

We live about 5 miles from the property, and would be able to quickly assist the guests with any needs. We will be managing the property initially, but if necessary, we would engage a local property manager to ensure prompt attention to any issues.

As property owners, we have a vested interest in maintaining the nature, quality and integrity of the neighborhood as well as keeping our property well managed. Our

efforts will be focused on meeting those goals while providing a unique opportunity for travelers to experience Williamsburg as if they were a local resident. Therefore, I ask that you grant my application for a special use permit.

Please let me know if any further information is required. I look forward to hearing from you.

Julia Holland

MEMORANDUM

DATE: November 1, 2023

TO: The Planning Commission

FROM: Thomas Wysong, Senior Planner II
Jose L. Ribeiro, Senior Landscape Planner II
John Risinger, Senior Planner

SUBJECT: ORD-22-0001. Amendments for Scenic Roadway Protection

Introduction

At its meeting on October 26, 2021, the Board of Supervisors unanimously adopted the 2045 James City County Comprehensive Plan: *Our County, Our Shared Future*. The adopted plan includes the following strategy within the Goals, Strategies, and Actions (GSAs) portion of the Land Use Chapter that focuses on preserving scenic roadways:

LU 6.3 - To help retain the character of Rural Lands, develop additional zoning and subdivision tools (e.g., scenic easement dedication requirements, increased minimum lot sizes, increased setbacks, and/or overlay districts) to protect and preserve scenic roadways such as Forge Road. Consider 400-foot setbacks along Community Character Corridors outside the PSA.

Aligning with this adopted strategy, the Board of Supervisors adopted an Initiating Resolution pertaining to the Zoning Ordinance and Subdivision Ordinance (see Attachment No. 1) at its meeting on November 23, 2021. The Initiating Resolution directs staff to consider additional requirements in both the Zoning Ordinance and Subdivision Ordinance to preserve scenic roadways such as Forge Road.

Since the adoption of this initiating resolution, the Policy Committee has met multiple times to provide staff direction on how to proceed with this amendment and has worked in conjunction with the Board of Supervisors to determine the proposed buffering and setback requirements. The proposed buffering and setback concepts detailed in this memo have been previously reviewed by the Board of Supervisors at their respective January 24, 2023, May 23, 2023, and July 25, 2023, meetings and have been revised in accordance with Board guidance and is now presented for the Planning Commission's consideration.

Policy Committee Direction

Scenic Roadway Designation Determination

The Policy Committee directed staff, for the purpose of this Ordinance amendment, to identify the portion of those Community Character Corridors (CCCs) located outside of the Primary Service Area (PSA) within the Comprehensive Plan as those scenic roadways referenced in GSA LU 6.3, which are listed below:

1. Forge Road (classified as "Open/Agricultural")
2. Old Stage Road (classified as "Open/Agricultural")
3. Richmond Road (classified outside the PSA as "Wooded")
4. Monticello Avenue (classified outside the PSA as "Wooded")
5. John Tyler Memorial Highway (classified outside the PSA as "Wooded")
6. Riverview Road (classified as "Wooded")

Scenic Road Protection Approach: Open/Agricultural CCCs 400-foot Setback

The Policy Committee directed staff to propose protection tools tailored to the intent of each CCC type as expressed within the Comprehensive Plan. Per the adopted Comprehensive Plan, the Open/Agricultural CCCs are intended to preserve the viewshed and integrity of farm fields and natural open spaces. The Policy Committee determined a setback is the best tool for addressing this intent. The Policy Committee considered minimum setbacks of 100 feet, 200 feet, 300 feet, and 400 feet, using setback exhibits provided by EPR PC for reference (see Attachment No. 2). Based on these exhibits and the language referenced within the GSA, the Policy Committee selected 400 feet as the appropriate setback.

As such, the Policy Committee directed staff to establish a setback requirement of 400 feet for parcels zoned A-1, General Agricultural, and abutting a roadway designated an Open/Agricultural CCC in the Comprehensive Plan and located outside of the PSA. At their July 25, 2023, meeting, the Board of Supervisors provided specific guidance that this concept be pursued with a tiering system to ensure that each lot affected by this setback concept would retain a building envelope. The proposed draft language would allow for lots with a depth of 300 feet or less to have the 75-foot setback requirement, lots with a depth greater than 300 feet and up to and including 500 feet to have a setback requirement of 200 feet, and lots with a depth greater than 500 feet to have the 400-foot setback (see Attachment Nos. 3 and 4 for draft setback language).

Furthermore, to provide flexibility for structures made nonconforming by this proposed setback, the Policy Committee directed staff to prepare draft language that permits said nonconforming structures to expand, provided said expansion is not further within the setback (see Attachment No. 5 for nonconformity analysis and Attachment Nos. 6 and 7 for draft revisions to the nonconformity language).

Scenic Road Protection Approach: Wooded CCCs Enhanced Buffering

Per the adopted Comprehensive Plan, Wooded CCCs are intended to preserve natural wooded areas and encourage supplementary planting to ensure that buffers visually screen development from the road, which is best accomplished by buffering rather than an enhanced setback.

As such, the Policy Committee directed staff to prepare draft language that accomplishes the following:

- Propose landscape buffer requirements along Wooded CCCs located outside the PSA to include a 100-foot-wide buffer average for commercial projects (see Attachment Nos. 8 and 9 for draft revisions).
- Propose a 200-foot-wide buffer average requirement for major residential developments along Wooded CCCs located outside the PSA (see Attachment Nos. 10-13).
- Propose a timbering setback of at least 50 feet on properties along Wooded CCCs outside the PSA (see Attachment Nos. 14 and 15 for revised text).

Policy Committee Recommendation

At its October 12, 2023, Regular Meeting, the Policy Committee recommended approval of the attached draft language by a 3-1 vote.

Staff Recommendation

Overall, staff finds this draft language will fulfill the intent of the Initiating Resolution for ORD-22-0001. Planning staff recommends the Planning Commission recommend approval of the draft language for the Board's consideration at its December 12, 2023, meeting.

TW/JLR/JR/md

ORD22-1AmdSRPro-mem

Attachments:

1. Initiating Resolution
2. Setback Exhibits
3. A-1 Setback Open/Agricultural CCC Strikethrough
4. A-1 Setback Open/Agricultural CCC Clean Copy
5. Nonconformity Analysis
6. Nonconformity Revision Strikethrough
7. Nonconformity Revision Clean Copy
8. Commercial Landscape Buffer Strikethrough
9. Commercial Landscape Buffer Clean Copy
10. Major Residential Buffer Strikethrough
11. Major Residential Buffer Clean Copy
12. Subdivision Ordinance Buffering Strikethrough
13. Subdivision Ordinance Buffering Clean Copy
14. Timber Setback Strikethrough
15. Timber Setback Clean Copy

RESOLUTION

INITIATION OF CONSIDERATION OF AMENDMENTS TO THE ZONING ORDINANCE AND

SUBDIVISION ORDINANCE TO PROVIDE ADDITIONAL REQUIREMENTS TO PROTECT

AND PRESERVE SCENIC ROADWAYS SUCH AS FORGE ROAD

WHEREAS, section 15.2-2286(A)(7) of the Code of Virginia, 1950, as amended (the "Virginia Code"), and County Code Section 24-13 authorize the Board of Supervisors of James City County, Virginia (the "Board"), to, by resolution, initiate amendments to the regulations of the Zoning Ordinance that the Board finds to be prudent and required by public necessity, convenience, general welfare, or good zoning practice; and

WHEREAS, section 15.2-2253 of the Virginia Code and County Code Section 19-10 authorize the Board to request the Planning Commission to prepare and recommend amendments to the Subdivision Ordinance; and

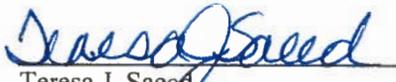
WHEREAS, the Board is of the opinion that the public necessity, general welfare, and good zoning practice warrant the consideration of amendments to the Zoning Ordinance and Subdivision Ordinance.

NOW, THEREFORE, BE IT RESOLVED that the Board of Supervisors of James City County, Virginia, does hereby initiate amendment of the James City County Code, Chapter 24, Zoning in order to consider additional requirements to protect and preserve scenic roadways such as Forge Road. The Planning Commission shall hold at least one public hearing on the consideration of amendments to said Zoning Ordinances and shall forward its recommendation to the Board of Supervisors in accordance with the law.

BE IT FURTHER RESOLVED that the Board of Supervisors of James City County, Virginia, does hereby request the Planning Commission to prepare and recommend amendments to Chapter 19, Subdivisions, in order to consider additional requirements to protect and preserve scenic roadways such as Forge Road. The Planning Commission shall hold at least one public hearing on the consideration of amendments to said Subdivision Ordinances and shall forward its recommendation to the Board of Supervisors in accordance with the law.


Michael J. Hipple
Chairman, Board of Supervisors

ATTEST:


Teresa J. Saeed
Deputy Clerk to the Board

| | VOTES | | | |
|-----------|-------------------------------------|--------------------------|--------------------------|--------------------------|
| | <u>AYE</u> | <u>NAY</u> | <u>ABSTAIN</u> | <u>ABSENT</u> |
| SADLER | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| ICENHOUR | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| LARSON | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| MCGLENNON | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| HIPPLE | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Adopted by the Board of Supervisors of James City County, Virginia, this 23rd day of November, 2021.

InitConsdForgeRd-res



Rural Roadway Preservation



James City County Zoning Update
DRAFT August 2, 2022

Prepared by EPR,PC

Contents

| | |
|---|----|
| Part 1. Visual Analysis of Viewsheds..... | 2 |
| Introduction | 2 |
| Ground Level Visualizations | 2 |
| Methodology..... | 2 |
| Results | 3 |
| House A: | 4 |
| House B. | 6 |
| Conclusions | 8 |
| Aerial Visualizations | 9 |
| Methodology..... | 9 |
| Results: | 9 |
| Conclusions..... | 13 |

Rural Roadway Preservation

Part 1. Visual Analysis of Viewsheds

Introduction

In 2021, the James City County Board of Supervisors approved a Resolution to initiate the amendment of the James City Zoning and Subdivision ordinances in order to consider additional requirements to protect and preserve scenic roadways such as Forge Road. As part of an analysis to consider new standards for protection of these scenic roadways, EPR, PC was asked to develop analytic visualizations of the visual impacts of the viewshed on Forge Road.

The results of this analysis are presented here in two parts:

1. **Ground Level Visualizations** - The first part is a series of photomontages that were developed based on alternative measured distances from the road.
2. **Aerial Visualizations** - The second part is a series of aerial photographs of the Forge Road corridor showing different distances from the road as colored buffers along the roadway, with existing structures highlighted to show where they fall within the distance buffers.

It is important to note that, even though these are illustrative visualizations, they are based on actual measured dimensions using computer mapping for the distances so they represent a reasonably accurate representation of what potential distance standards could look like in reality.

Ground Level Visualizations

Methodology

For the purposes of the visualizations, a photograph of a segment of Forge Road was used that represents a typical “view from the road” on a relatively level portion of the road without any existing screening or buffering along the roadway. Using computer mapping, house sites were located at the following distances from the edge of the roadway (which is also the edge of the Right of Way):

- 100 feet
- 200 feet
- 300 feet
- 400 feet



Figure 1. Existing photo of Forge Road with computer mapping of different setback distances

Secondly, photographs of two typical houses were selected at the same view angle as the “view from the road” photograph to be used in composing the photomontages. House A was a simple one story brick home with attached garage and minimal landscaping and House B was a more elaborate house with detached garage and extensive landscaping in the front yard.

These houses were then photo montaged into the existing Forge Road photograph precisely at each of the distance points to show a reasonably realistic view of the visual impact of the houses at each distance parameter.

Results

The images below show the final photomontages with each house at each of the distances from the road.

House A:



Figure 2. House A. 100 ft. distance



Figure 4. House A. 200 ft. distance



Figure 3. House A. 300 ft. distance



Figure 5. House A. 400 ft. distance

House B.



Figure 6. House B. 100 ft. distance



Figure 7. House B. 200 ft. distance



Figure 8. House B. 300 ft. distance



Figure 9. House B. 400 ft. distance

Conclusions

The use of computer aided photomontage visualizations is a practical way to assess the potential visual impacts of alternative provisions for distances from the road. However, it is important to recognize that many other factors can influence the perception of different distances to houses when viewed from the road. These include topography, the presence of existing vegetation, and the general architectural character of structures. The above visualizations are of course open to different interpretations regarding what distance standards should be developed. From the consultant’s perspective, a few observations are offered for consideration from a professional planning perspective:

- The visual impact of both houses at the 100 foot distance is considerable. This scale of this distance is more reminiscent of a suburban development pattern than what is typically seen in a rural, farming based landscape.
- 300 to 400 foot distances are more similar to a typically rural context and view from the road, although houses on large lots are frequently set back even more than that. Often, homeowners who purchased large lots prefer a wide set back from the road to maintain their sense of private space and rural character.
- Particularly at the 400 foot distance line, there is an opportunity to create buffering and screening around the houses with vegetation that would be more reminiscent of a rural farm scape rather than a suburban landscape pattern.
- The architecture and landscaping around the house also influence the character of the view from the road. Large suburban houses with tall roofs and suburban style landscaping create more of a discontinuity with the rural landscape than a low ranch house with an attached garage.

Aerial Visualizations

Methodology

Based on County staff request, EPR developed an aerial mapping analysis of different distance widths applied to a section of Forge Road located outside of the PSA. The maps were presented as aerial photos with the distances shown as colored buffers on the photos and as oblique aerial views of segments of Forge Road showing existing structures.

The following maps were developed:

- **Baseline Setback Map.** This map shows the setback that currently applies under the existing zoning requirements for A-1.
- **Potential Alternate Distance Analysis Map:** This maps shows potential distances of 100', 200', 300' and 400'.
- **Oblique Aerials of Segments of Forge Road.** These maps show detailed oblique views of five segments of Forge Road with the potential distance ranges from 100' to 400' and highlight existing structures.

Results:

JAMES CITY COUNTY ZONING ANALYSIS | Forge Rd. Basemap (Existing Setback)

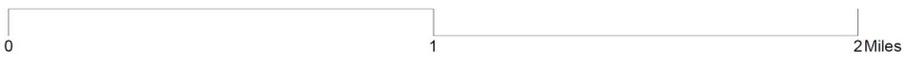
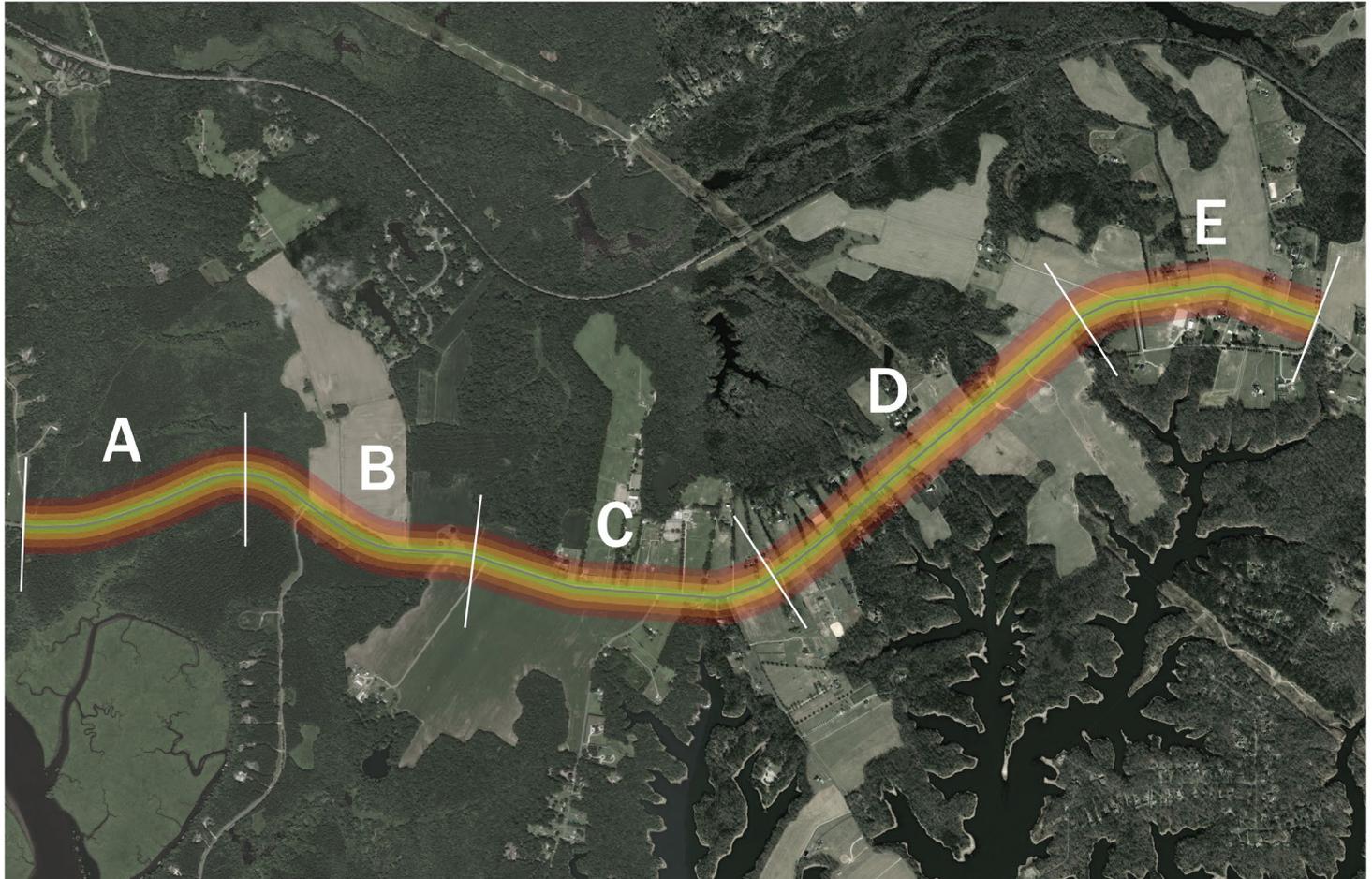


Gray: Forge Rd.
Purple: Existing 75' Setback



Figure 10. Base Map showing Existing Setback for A1 Zone

JAMES CITY COUNTY ZONING ANALYSIS | Forge Rd. Basemap (Proposed Setbacks)



Gray: Forge Rd. Green: 100'
 Orange: 200' Red: 300'
 Dark Red: 400'



Figure 11. Base map showing alternate distances from the roadway

JAMES CITY COUNTY ZONING ANALYSIS | Forge Rd. Basemap (Proposed Setbacks) - Segment A

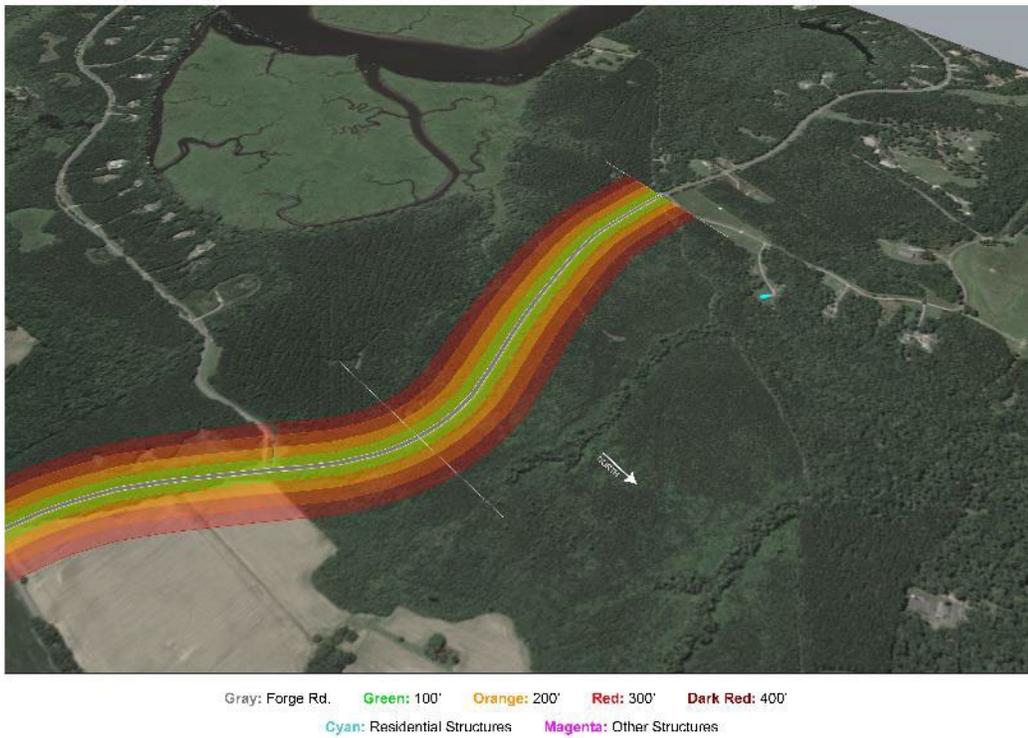


Figure 13. Potential distances - Segment A.

JAMES CITY COUNTY ZONING ANALYSIS | Forge Rd. Basemap (Proposed Setbacks) - Segment B

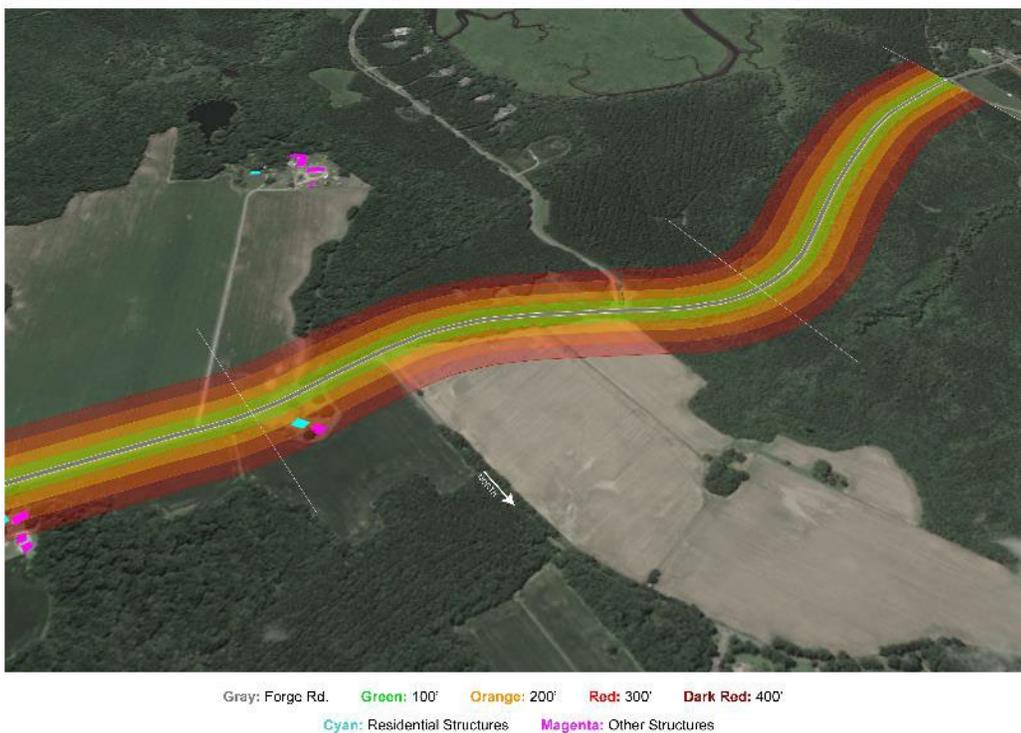


Figure 12. Potential distances - Segment B.

JAMES CITY COUNTY ZONING ANALYSIS | Forge Rd. Basemap (Proposed Setbacks) - Segment C

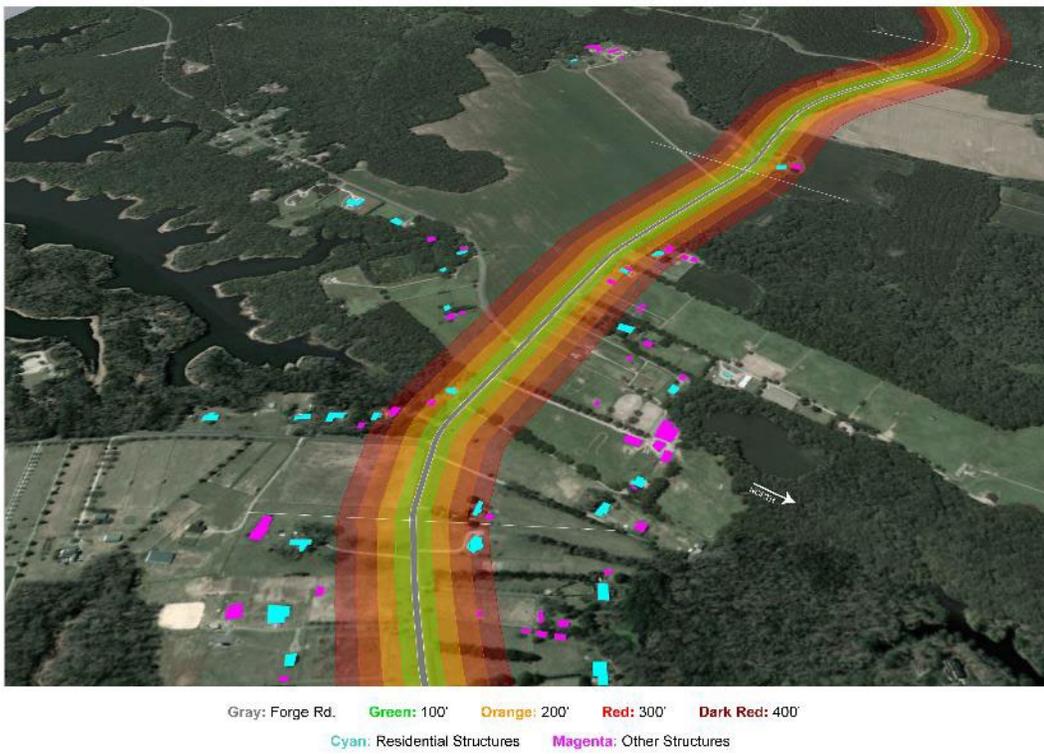


Figure 15. Potential distances - Segment C.

JAMES CITY COUNTY ZONING ANALYSIS | Forge Rd. Basemap (Proposed Setbacks) - Segment D

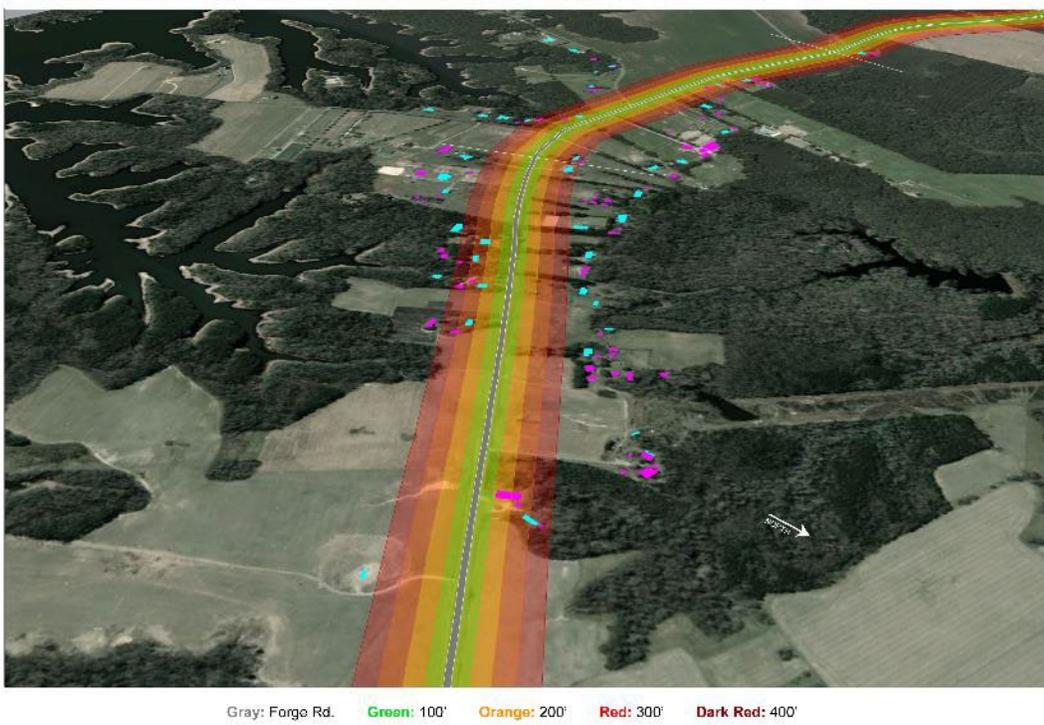


Figure 14. Potential distances - Segment D.

JAMES CITY COUNTY ZONING ANALYSIS | Forge Rd. Basemap (Proposed Setbacks) - Section E



Figure 16. Potential distances - Segment E.

Conclusions

The analysis of existing and potential distances through aerial photography provides a useful assessment of the existing conditions along Forge Rd and the existing setbacks of existing structures. A few summary findings from this analysis include:

- Very few existing structures are built right up to the existing setback line of 75 feet for the A1 zoning district.
- Only one residential structure in segment C and one residential structure in segment D approach the 100 foot distance line. Also, one nonresidential structure in segment D is also built at the 100 foot distance line.
- The majority of structures that fall within the potential distance buffers range from 200 to 400 foot distances.
- a great number of structures are set back well beyond the 400 foot distance line. Segments C and D show a wide variety of structures set well back from the road up to 1000 feet or more.
- In general, both the diversity of setbacks of existing structures and the extensive average distance from the road contribute to the scenic character of Forge Rd and ensure that view sheds are not dominated by views of houses or other structures.
- In addition, the rolling terrain and pattern of existing trees and vegetation break up the views of the structures and contribute to the overall pastoral viewsheds from the road.

Sec. 24-215. Setback requirements.

- (a) *Except for those roadways identified in Sec. 24-215 (c),* structures, except those associated with intensive agricultural uses, shall be located a minimum of 50 feet from any street right-of-way which is 50 feet or greater in width. If the street right-of-way is less than 50 feet in width, structures shall be located a minimum of 75 feet from the centerline of the street; except that where the minimum lot area is three acres or more, the minimum setback shall be 75 feet from any street right-of-way which is 50 feet or greater in width and 100 feet from the centerline of any street right-of-way less than 50 feet in width. Devices for nutrient management plans, pens, and structures associated with intensive agricultural uses shall be 250 feet from any dwelling not owned by the operator of the use, all property lines not associated with the use, all public roads, and 1,000 feet from platted residential subdivisions, residentially zoned districts, areas designated for residential use on the comprehensive plan, schools, parks and playgrounds, recreation areas, public wells, water tanks and reservoirs.
- (b) All subdivisions platted and recorded prior to March 1, 1969, with building setback lines shown on their recorded plat will be allowed to adhere to these established setback lines.
- (c) *For parcels abutting a portion of a road right-of-way designated an Open/Agricultural Community Character Corridor and located outside of the Primary Service Area on the Comprehensive Plan Future Land Use Map, structures shall be located a minimum of 400 feet from the right-of-way. For those parcels containing a lot depth greater than 300 feet but less than or equal to 500 feet as of January 1, 2023, structures shall be located a minimum of 200 feet from the right-of-way. For those parcels containing a lot depth of 300 feet or less or those parcels approved as a flag lot as of January 1, 2023, the applicable setback shall be pursuant to Sec. 24-215 (a).*

(Ord. No. 31A-88, § 20-31, 4-8-85; Ord. No. 31A-114, 5-1-89; Ord. No. 31A-165, 9-18-95; Ord. No. 31A-169, 5-28-96; Ord. No. 31A-257, 11-22-11)

Sec. 24-215. Setback requirements.

- (a) Except for those roadways identified in Sec. 24-215 (c), structures, except those associated with intensive agricultural uses, shall be located a minimum of 50 feet from any street right-of-way which is 50 feet or greater in width. If the street right-of-way is less than 50 feet in width, structures shall be located a minimum of 75 feet from the centerline of the street; except that where the minimum lot area is three acres or more, the minimum setback shall be 75 feet from any street right-of-way which is 50 feet or greater in width and 100 feet from the centerline of any street right-of-way less than 50 feet in width. Devices for nutrient management plans, pens, and structures associated with intensive agricultural uses shall be 250 feet from any dwelling not owned by the operator of the use, all property lines not associated with the use, all public roads, and 1,000 feet from platted residential subdivisions, residentially zoned districts, areas designated for residential use on the comprehensive plan, schools, parks and playgrounds, recreation areas, public wells, water tanks and reservoirs.
- (b) All subdivisions platted and recorded prior to March 1, 1969, with building setback lines shown on their recorded plat will be allowed to adhere to these established setback lines.
- (c) For parcels abutting a portion of a road right-of-way designated an Open/Agricultural Community Character Corridor and located outside of the Primary Service Area on the Comprehensive Plan Future Land Use Map, structures shall be located a minimum of 400 feet from the right-of-way. For those parcels containing a lot depth greater than 300 feet but less than or equal to 500 feet as of January 1, 2023, structures shall be located a minimum of 200 feet from the right-of-way. For those parcels containing a lot depth of 300 feet or less or those parcels approved as a flag lot as of January 1, 2023, the applicable setback shall be pursuant to Sec. 24-215 (a).

(Ord. No. 31A-88, § 20-31, 4-8-85; Ord. No. 31A-114, 5-1-89; Ord. No. 31A-165, 9-18-95; Ord. No. 31A-169, 5-28-96; Ord. No. 31A-257, 11-22-11)

Nonconformity Summary

Forge Road: 400-foot Setback, 200-foot Setback for lot depth greater than 300 and less than or equal 500 feet, 75-foot Setback lot depth of 300 feet or less)

| | Structures Within 400 Feet | Exempt Parcel Structures | Final |
|----------------------|----------------------------|--------------------------|-------|
| Residences | 16 | -2 | 14 |
| Accessory Structures | 24 | -2 | 22* |
| Total | 40 | -4 | 36 |

**Staff notes that 8 of the 22 accessory structures appear to be utilized for agricultural purposes.*

Sec. 24-633. Expansion/improvements to nonconforming uses.

- (a) *Restriction for structure.* A nonconforming use may be extended throughout any part of a structure originally arranged or designed for such activity; provided, that current parking requirements shall be adhered to upon such extension.
- (b) *Restriction for area.* Any permitted expansion shall occur only on the lot occupied by the nonconforming use or structure and no area of any lot not originally devoted to the nonconforming use shall be utilized for any aspect of such expansion notwithstanding the combination of lots to bring a nonconforming structure into compliance.
- (c) *One-family dwellings.* For a nonconforming one-family dwelling use, the dwelling may be expanded without limitation, except as provided for in this chapter. In addition, new or expanded residential accessory structures and uses (such as a storage shed, garage, swimming pool, etc.) may be permitted subject to the provisions of this chapter. Expansion of the dwelling and new or expanded accessory structures and uses shall meet all current zoning requirements, including height, yard and setbacks, for the zoning district in which they are located or the R-1 zoning district if such dwelling is not located in a zoning district where a residential use is permitted. In no case shall a nonconforming one-family dwelling be modified to accommodate additional dwelling units.
- (d) *Business or industrial uses.* For uses in any district where the activity is permitted in the zoning district in which the lot is located, but where the current zoning requirements (including, but not limited to, parking, yards, setbacks, landscaping, screening and buffering, height, signs, lot coverage, connection to public sewer and water) are not met, expansion of the building, and expansion of the land area within the lot devoted to activities other than buildings, may be approved, provided all current zoning requirements applicable to the expansion are met.
- (e) *Businesses or industrial uses not connected to public water and sewer.* Expansion of a use meeting all zoning requirements except for connection to public water and public sewer may be permitted upon approval of a special use permit excepting the use from the public water and public sewer requirements.
- (f) *Expansion allowance resulting from right-of-way dedication.* Existing business or industrial uses which are permitted within any district and which have been made nonconforming with respect to open space, perimeter landscape requirements or setback requirements as a result of a right-of-way dedication to the county or the Virginia Department of Transportation without compensation shall be allowed to expand in accordance with the current zoning ordinance under the conditions which existed prior to the dedication.
- (g) *Miscellaneous changes.* Minor alterations, cosmetic modifications, interior renovations and similar changes for nonconforming uses or structures may be permitted, subject to the following standards:
 - (1) Such changes shall not increase the land area occupied by any aspect of the nonconforming use and shall not increase the gross floor area of any nonconforming structure; and,
 - (2) Such construction shall meet all current zoning ordinance requirements for the zoning district in which the nonconforming use is located or the zoning district assigned by the zoning administrator as a part of the nonconforming use verification process, whichever requirements are more strict.
- (h) *Expansion required by law.* Improvements may be made to the nonconforming use or structure for the sole purpose of accessibility or public safety when such improvements are necessitated by a local, state, or federal law. Such improvements may be approved by the zoning administrator and are not subject to paragraphs (d) and (g) of this section.
- (i) *Expansion allowance for Community Character Corridor-Open/Agricultural.* Existing structures or uses that are permitted within any district and which have been made nonconforming as a result of the establishment

of the setback requirements per Sec. 24-215 (c) shall be allowed to expand, provided the expansion does not further encroach within the setback than the existing structure or use.

(Ord. No. 31A-188, 4-13-99; Ord. No. 31A-268, 6-12-12)

Sec. 24-633. Expansion/improvements to nonconforming uses.

- (a) *Restriction for structure.* A nonconforming use may be extended throughout any part of a structure originally arranged or designed for such activity; provided, that current parking requirements shall be adhered to upon such extension.
- (b) *Restriction for area.* Any permitted expansion shall occur only on the lot occupied by the nonconforming use or structure and no area of any lot not originally devoted to the nonconforming use shall be utilized for any aspect of such expansion notwithstanding the combination of lots to bring a nonconforming structure into compliance.
- (c) *One-family dwellings.* For a nonconforming one-family dwelling use, the dwelling may be expanded without limitation, except as provided for in this chapter. In addition, new or expanded residential accessory structures and uses (such as a storage shed, garage, swimming pool, etc.) may be permitted subject to the provisions of this chapter. Expansion of the dwelling and new or expanded accessory structures and uses shall meet all current zoning requirements, including height, yard and setbacks, for the zoning district in which they are located or the R-1 zoning district if such dwelling is not located in a zoning district where a residential use is permitted. In no case shall a nonconforming one-family dwelling be modified to accommodate additional dwelling units.
- (d) *Business or industrial uses.* For uses in any district where the activity is permitted in the zoning district in which the lot is located, but where the current zoning requirements (including, but not limited to, parking, yards, setbacks, landscaping, screening and buffering, height, signs, lot coverage, connection to public sewer and water) are not met, expansion of the building, and expansion of the land area within the lot devoted to activities other than buildings, may be approved, provided all current zoning requirements applicable to the expansion are met.
- (e) *Businesses or industrial uses not connected to public water and sewer.* Expansion of a use meeting all zoning requirements except for connection to public water and public sewer may be permitted upon approval of a special use permit excepting the use from the public water and public sewer requirements.
- (f) *Expansion allowance resulting from right-of-way dedication.* Existing business or industrial uses which are permitted within any district and which have been made nonconforming with respect to open space, perimeter landscape requirements or setback requirements as a result of a right-of-way dedication to the county or the Virginia Department of Transportation without compensation shall be allowed to expand in accordance with the current zoning ordinance under the conditions which existed prior to the dedication.
- (g) *Miscellaneous changes.* Minor alterations, cosmetic modifications, interior renovations and similar changes for nonconforming uses or structures may be permitted, subject to the following standards:
 - (1) Such changes shall not increase the land area occupied by any aspect of the nonconforming use and shall not increase the gross floor area of any nonconforming structure; and,
 - (2) Such construction shall meet all current zoning ordinance requirements for the zoning district in which the nonconforming use is located or the zoning district assigned by the zoning administrator as a part of the nonconforming use verification process, whichever requirements are more strict.
- (h) *Expansion required by law.* Improvements may be made to the nonconforming use or structure for the sole purpose of accessibility or public safety when such improvements are necessitated by a local, state, or federal law. Such improvements may be approved by the zoning administrator and are not subject to paragraphs (d) and (g) of this section.
- (i) *Expansion allowance for Community Character Corridor-Open/Agricultural.* Existing structures or uses that are permitted within any district and which have been made nonconforming as a result of the establishment

of the setback requirements per Sec. 24-215 (c) shall be allowed to expand, provided the expansion does not further encroach within the setback than the existing structure or use.

(Ord. No. 31A-188, 4-13-99; Ord. No. 31A-268, 6-12-12)

Sec. 24-98. Landscape area(s) along right(s)-of-way.

- (a) *Width requirements.* A landscape area having an average width as specified in the following chart shall be provided adjacent to any existing or planned road right-of-way.

| Width Requirements for Landscape Areas along Right(s)-of-Way. | | | |
|--|-----------------|--|--|
| (1) Community Character Corridors | | | |
| | Standard | Minimum width conditioned upon approval of planning director. Reference section 24-98(e) for the criteria. | Reduction for lots less than 1.5 acres which were recorded or legally in existence prior to July 3, 1990. |
| Average Width | 50-feet | 30-feet | 20-feet or 10% of the average lot depth, whichever is greater. |
| Minimum Width | 25-feet | 20-feet | 15-feet |
| (2) Wooded Community Character Corridors Outside the Primary Service Area | | | |
| | <i>Standard</i> | | <i>Reduction for lots less than 1.5 acres which were recorded or legally in existence prior to July 3, 1990.</i> |
| <i>Average Width</i> | <i>100-feet</i> | | <i>20-feet or 10% of the average lot depth, whichever is greater.</i> |
| <i>Minimum Width</i> | <i>50-feet</i> | | <i>15-feet</i> |
| (23) All Other Roads | | | |
| | Standard | | Reduction for lots less than 1.5 acres which were recorded or legally in existence prior to July 3, 1990. |
| Average Width | 30-feet | | 20-feet or 10% of the average lot depth, whichever is greater. |
| Minimum Width | 15-feet | | 15-feet |
| (34) Further Reductions for Master Planned Communities with Approved Design Guidelines. | | | |
| The standards provided above can be further reduced for developments that are part of an approved master-planned community and have a governing set of design guidelines approved by the county. The design guidelines shall specify architectural standards, building placement and massing, parking location, sidewalks, street-lighting, streetscape standards, landscaping, signage, and other important community aesthetic features. | | | |

- (b) *Square footage calculation for landscape areas.* All landscape areas along a right-of-way shall contain a minimum amount of square footage which shall be equal to:

| Square Footage Calculation |
|---|
| Square Footage = [Applicable Average Width Requirement] * [Length of Right-of-Way Frontage] |

In no case shall any portion of any landscape area located more than 125 feet from the right-of-way of a Wooded Community Character Corridor outside the Primary Service Area, 65 feet from the right-of-way of all other Community Character Corridors or 45 feet from the right-of-way along all other roads be counted toward meeting the requirements of this paragraph. All required square footage shall be contiguous and located in an area that is directly adjacent to the right-of-way except as provided for in section 24-98 (f)(1).

- (c) *Outdoor operations and storage.*

Any commercial or industrial operation or storage conducted in whole or in part out-of-doors shall:

- (1) Be screened from the right of way and conform to the landscape requirements in section 24-98 and 24-100 (a) of the zoning ordinance. Evergreen tree and shrub mixture requirements of section 24-94 (b) shall be used to screen the outdoor operations from the public right-of-way; and
 - (2) Be well drained with adequate provisions to control storm drainage and erosion; and
 - (3) Where the ground cover would be routinely disturbed because of the nature of the activity to be conducted or because of vehicular traffic, the area shall be maintained in an all-weather surface; and
 - (4) Be screened from adjacent property by landscaping and fencing, except that outdoor displays for sale of vehicles, equipment, machinery and/or plant materials shall be exempt from the screening requirements where such screening would materially interfere with the visibility of the items for sale from a public road; and
 - (5) Be limited to uses and items to be stored which do not create noise, odor, dust or other objectionable effects. The effects of an activity shall be assessed at the nearest property line.
- (d) *"Construction zone" setback for structures.*
- (1) All structures shall be setback a minimum of 15-feet from the perimeter of the landscape area buffer required in section 24-98 (a). For example, if the required landscape area buffer measures 50-feet in width from the right-of-way, then the structure(s) shall be no closer than 65-feet from the right-of-way.
 - (2) The "construction zone" setback shall be clearly delineated on the site plan.
 - (3) This "construction zone" setback shall not apply to parking lots. Parking lots may be constructed up to the edge of the required landscape buffer provided no grading, tree removal, or land disturbance occurs within the required landscape buffer.
- (e) *Waiver criteria for landscape areas along Community Character Corridors.* The average width requirement of the required landscape areas along Community Character Corridors may be reduced by the planning director if subsection(s) (1) and/or (2) provided below is satisfied. In no case shall the total reduction exceed 20 feet. In deciding whether a reduction in the standard landscape area width is warranted, the planning director shall consider the impact of proposed road and/or utility improvements on existing trees and vegetation. Planned road and/or utility improvements that will remove existing trees and vegetation will reduce the likelihood of a reduction in landscape area required. In approving a reduction request, the planning director may require additional plantings beyond the minimum ordinance requirements, alter the mixture of plantings provided, and/or specify the types of plantings to be used.
- (1) The applicant may achieve a maximum reduction of 10 feet by providing superior site design with a combination of elements such as:
 - a. Parking located away from public view behind buildings or screened by other architectural features (i.e. decorative brick walls);
 - b. Innovative use of grading and topography to minimize visual impacts of parking and other unsightly features (i.e. dumpsters, HVAC equipment, loading areas, etc.);
 - c. Provision of pedestrian amenities beyond what the ordinance requires. Examples may include brick pavers to connect existing and planned pedestrian walkways, lighting, and benches; or
 - d. The use of monument style signs that are of a scale and type that complement the positive features of the surrounding architecture and streetscape. The use of wood, brick, or other natural features is recommended.
 - (2) The applicant may achieve a maximum reduction of 15 feet by providing superior architecture and building materials that meet the following standards.

-
- a. The building architecture and materials complement the positive features of nearby existing or planned development and/or the character of Colonial Williamsburg and James City County;
 - b. Architecture and materials should be unique and not replicate standard and/or conventional prototypes; and
 - c. The proposed location of the building and parking areas shall not require the removal of specimen trees or large stands of viable mature trees.
- (f) *Right-of-way landscape area performance standards.*
- (1) Permitted breaks in landscape areas.
 - a. All landscape areas along rights-of-way shall be continuous along the road right-of-way frontage, except where driveway, utility or other breaks running perpendicular to the right-of-way are necessary, and shall be designed in a manner that achieves the intent of this division.
 - b. No new utilities, outside of those running parallel to permitted breaks in the required landscape areas, shall be located within the required landscape area(s) unless a waiver is granted by the planning director. The planning director shall grant a waiver only if the applicant can sufficiently demonstrate that there are unavoidable physical or regulatory constraints that warrant an intrusion into the landscape area.
 - (2) Tree preservation and criteria for tree removal.
 - a. All existing viable mature trees (eight inches or greater diameter at breast height (DBH)) and specimen trees (24 inches or greater DBH) shall be preserved within the required right-of-way landscape area. All understory trees of two inches or greater DBH shall be preserved.
 - b. The planning director or his designee may permit the removal of understory and overstory trees exceeding these size thresholds after an on-site inspection. The trees must be tagged to allow for easy identification. The planning director or his designee shall authorize removal of the tagged trees only if they are of poor quality, diseased, not consistent with the existing or planned plant species and design, poorly situated so as to interfere with the growth of other viable trees and/or shrubs, compromise safety, or interfere with other planned site improvements such as sidewalks and/or signs.
 - (3) Buffer grooming and enhancement.
 - a. Trees below the size thresholds stated above in paragraph (2) and underbrush may be hand-removed from the landscape area. No grading shall be permitted; however, hand grooming is permitted.
 - b. Overstory tree limbs may be removed/"limbed-up" to a maximum height of ten feet above the base of the tree. Understory tree limbs may be removed/"limbed-up" to a maximum height of six feet. These height limitations shall not restrict the removal of dead, diseased, or injured tree limbs above the height limits mentioned above.
 - (4) Tree protection required. The required landscape area shall be fully protected by a substantial, temporary fence or barrier with a minimum height of 40-inches. The location, type, and installation standards for this fence shall be clearly shown on the site plan. This fence shall be installed prior to the issuance of a land disturbance permit and shall remain standing until all construction activities on site have been completed.
 - (5) Landscaping required. Required landscape areas shall be supplemented where necessary with planted trees and shrubs to achieve the minimum number of trees and shrubs specified in section 24-96.

-
- (6) Landscaping treatments of community character corridor buffers. Right-of-way landscape areas along community character corridors as designated on the Community Character Corridor Buffer Designation and Treatment Map shall be designed to meet the design standards found in the Community Character Corridor Buffer Treatment Guidelines as determined by the planning director.

(Ord. No. 31A-88, § 20-12.2, 4-8-85; Ord. No. 31A-123, 7-2-90; Ord. No. 31A-125, 8-20-90; Ord. No. 31A-145, 7-6-92; Ord. No. 31A-168, 5-14-96; Ord. No. 31A-200, 7-13-99; Ord. No. 31A-253, 11-22-11)

Sec. 24-98. Landscape area(s) along right(s)-of-way.

- (a) *Width requirements.* A landscape area having an average width as specified in the following chart shall be provided adjacent to any existing or planned road right-of-way.

| Width Requirements for Landscape Areas along Right(s)-of-Way. | | | |
|--|----------|--|---|
| (1) Community Character Corridors | | | |
| | Standard | Minimum width conditioned upon approval of planning director. Reference section 24-98(e) for the criteria. | Reduction for lots less than 1.5 acres which were recorded or legally in existence prior to July 3, 1990. |
| Average Width | 50-feet | 30-feet | 20-feet or 10% of the average lot depth, whichever is greater. |
| Minimum Width | 25-feet | 20-feet | 15-feet |
| (2) Wooded Community Character Corridors Outside the Primary Service Area | | | |
| | Standard | | Reduction for lots less than 1.5 acres which were recorded or legally in existence prior to July 3, 1990. |
| Average Width | 100-feet | | 20-feet or 10% of the average lot depth, whichever is greater. |
| Minimum Width | 50-feet | | 15-feet |
| (3) All Other Roads | | | |
| | Standard | | Reduction for lots less than 1.5 acres which were recorded or legally in existence prior to July 3, 1990. |
| Average Width | 30-feet | | 20-feet or 10% of the average lot depth, whichever is greater. |
| Minimum Width | 15-feet | | 15-feet |
| (4) Further Reductions for Master Planned Communities with Approved Design Guidelines. | | | |
| The standards provided above can be further reduced for developments that are part of an approved master-planned community and have a governing set of design guidelines approved by the county. The design guidelines shall specify architectural standards, building placement and massing, parking location, sidewalks, street-lighting, streetscape standards, landscaping, signage, and other important community aesthetic features. | | | |

- (b) *Square footage calculation for landscape areas.* All landscape areas along a right-of-way shall contain a minimum amount of square footage which shall be equal to:

| |
|---|
| Square Footage Calculation |
| Square Footage = [Applicable Average Width Requirement] * [Length of Right-of-Way Frontage] |

In no case shall any portion of any landscape area located more than 125 feet from the right-of-way of a Wooded Community Character Corridor outside the Primary Service Area, 65 feet from the right-of-way of all other Community Character Corridors *or* 45 feet from the right-of-way along all other roads be counted toward meeting the requirements of this paragraph. All required square footage shall be contiguous and located in an area that is directly adjacent to the right-of-way except as provided for in section 24-98 (f)(1).

(c) *Outdoor operations and storage.*

Any commercial or industrial operation or storage conducted in whole or in part out-of-doors shall:

- (1) Be screened from the right of way and conform to the landscape requirements in section 24-98 and 24-100 (a) of the zoning ordinance. Evergreen tree and shrub mixture requirements of section 24-94 (b) shall be used to screen the outdoor operations from the public right-of-way; and
- (2) Be well drained with adequate provisions to control storm drainage and erosion; and
- (3) Where the ground cover would be routinely disturbed because of the nature of the activity to be conducted or because of vehicular traffic, the area shall be maintained in an all-weather surface; and
- (4) Be screened from adjacent property by landscaping and fencing, except that outdoor displays for sale of vehicles, equipment, machinery and/or plant materials shall be exempt from the screening requirements where such screening would materially interfere with the visibility of the items for sale from a public road; and
- (5) Be limited to uses and items to be stored which do not create noise, odor, dust or other objectionable effects. The effects of an activity shall be assessed at the nearest property line.

(d) *"Construction zone" setback for structures.*

- (1) All structures shall be setback a minimum of 15-feet from the perimeter of the landscape area buffer required in section 24-98 (a). For example, if the required landscape area buffer measures 50-feet in width from the right-of-way, then the structure(s) shall be no closer than 65-feet from the right-of-way.
- (2) The "construction zone" setback shall be clearly delineated on the site plan.
- (3) This "construction zone" setback shall not apply to parking lots. Parking lots may be constructed up to the edge of the required landscape buffer provided no grading, tree removal, or land disturbance occurs within the required landscape buffer.

(e) *Waiver criteria for landscape areas along Community Character Corridors.* The average width requirement of the required landscape areas along Community Character Corridors may be reduced by the planning director if subsection(s) (1) and/or (2) provided below is satisfied. In no case shall the total reduction exceed 20 feet. In deciding whether a reduction in the standard landscape area width is warranted, the planning director shall consider the impact of proposed road and/or utility improvements on existing trees and vegetation. Planned road and/or utility improvements that will remove existing trees and vegetation will reduce the likelihood of a reduction in landscape area required. In approving a reduction request, the planning director may require additional plantings beyond the minimum ordinance requirements, alter the mixture of plantings provided, and/or specify the types of plantings to be used.

- (1) The applicant may achieve a maximum reduction of 10 feet by providing superior site design with a combination of elements such as:

- a. Parking located away from public view behind buildings or screened by other architectural features (i.e. decorative brick walls);
 - b. Innovative use of grading and topography to minimize visual impacts of parking and other unsightly features (i.e. dumpsters, HVAC equipment, loading areas, etc.);
 - c. Provision of pedestrian amenities beyond what the ordinance requires. Examples may include brick pavers to connect existing and planned pedestrian walkways, lighting, and benches; or
 - d. The use of monument style signs that are of a scale and type that complement the positive features of the surrounding architecture and streetscape. The use of wood, brick, or other natural features is recommended.
- (2) The applicant may achieve a maximum reduction of 15 feet by providing superior architecture and building materials that meet the following standards.
- a. The building architecture and materials complement the positive features of nearby existing or planned development and/or the character of Colonial Williamsburg and James City County;
 - b. Architecture and materials should be unique and not replicate standard and/or conventional prototypes; and
 - c. The proposed location of the building and parking areas shall not require the removal of specimen trees or large stands of viable mature trees.
- (f) *Right-of-way landscape area performance standards.*
- (1) Permitted breaks in landscape areas.
 - a. All landscape areas along rights-of-way shall be continuous along the road right-of-way frontage, except where driveway, utility or other breaks running perpendicular to the right-of-way are necessary, and shall be designed in a manner that achieves the intent of this division.
 - b. No new utilities, outside of those running parallel to permitted breaks in the required landscape areas, shall be located within the required landscape area(s) unless a waiver is granted by the planning director. The planning director shall grant a waiver only if the applicant can sufficiently demonstrate that there are unavoidable physical or regulatory constraints that warrant an intrusion into the landscape area.
 - (2) Tree preservation and criteria for tree removal.
 - a. All existing viable mature trees (eight inches or greater diameter at breast height (DBH)) and specimen trees (24 inches or greater DBH) shall be preserved within the required right-of-way landscape area. All understory trees of two inches or greater DBH shall be preserved.
 - b. The planning director or his designee may permit the removal of understory and overstory trees exceeding these size thresholds after an on-site inspection. The trees must be tagged to allow for easy identification. The planning director or his designee shall authorize removal of the tagged trees only if they are of poor quality, diseased, not consistent with the existing or planned plant species and design, poorly situated so as to interfere with the growth of other viable trees and/or shrubs, compromise safety, or interfere with other planned site improvements such as sidewalks and/or signs.
 - (3) Buffer grooming and enhancement.

- a. Trees below the size thresholds stated above in paragraph (2) and underbrush may be hand-removed from the landscape area. No grading shall be permitted; however, hand grooming is permitted.
 - b. Overstory tree limbs may be removed/"limbed-up" to a maximum height of ten feet above the base of the tree. Understory tree limbs may be removed/"limbed-up" to a maximum height of six feet. These height limitations shall not restrict the removal of dead, diseased, or injured tree limbs above the height limits mentioned above.
- (4) Tree protection required. The required landscape area shall be fully protected by a substantial, temporary fence or barrier with a minimum height of 40-inches. The location, type, and installation standards for this fence shall be clearly shown on the site plan. This fence shall be installed prior to the issuance of a land disturbance permit and shall remain standing until all construction activities on site have been completed.
- (5) Landscaping required. Required landscape areas shall be supplemented where necessary with planted trees and shrubs to achieve the minimum number of trees and shrubs specified in section 24-96.
- (6) Landscaping treatments of community character corridor buffers. Right-of-way landscape areas along community character corridors as designated on the Community Character Corridor Buffer Designation and Treatment Map shall be designed to meet the design standards found in the Community Character Corridor Buffer Treatment Guidelines as determined by the planning director.

Sec. 24-223. Buffer requirements.

(a) *Right-of-way buffer. Within any major subdivision approved under this division, there shall be planned and maintained buffers along all external existing and planned road rights-of-way, as follows:*

- (1) *The minimum right-of-way buffer on Wooded Community Character Corridors located outside the Primary Service area as defined in the Comprehensive Plan shall be 200 feet.*
- (2) *The right-of-way buffer shall be planted in accordance with section 24-96, General landscape area standards and shall also adhere to the Community Character Corridor Buffer Treatment Guidelines and Map.*
- (3) *Waiver provisions. The planning director may reduce the buffer depth requirements specified in (1) of this section for residential developments when:*

(i)The developer demonstrates that due to natural or protected features, or due to adjoining physical features, a reduced buffer will screen the development as effectively as a full buffer; or

(ii)The developer demonstrates that the development will be adequately screened and buffered from the road using berms and landscaping. Such a request shall be supplemented with a landscaping plan and/or planting plan with photos of the existing site.

In no case shall the right-of-way buffer be reduced by a waiver provision to less than 100 feet. The planning director may also, in the event of granting a waiver, require additional landscaping as determined on a case-by-case basis.

(b) *Requirements for buffers. All required buffers shall be exclusive of lots, remain free of structures and parking, and remain undisturbed, except for additional plantings and selective clearing approved by the planning director or his designee. Soil stockpiles and staging areas shall not be permitted within any buffer, except that temporary soil stockpiles may be allowed upon approval by the planning director under the following circumstances:*

- (1) *The buffer in which the temporary stockpile is to occur is non-wooded, defined as having no mature trees.*
- (2) *The stockpile shall not be visible from a Community Character Corridor or Community Character Area, unless the soil stockpiling is needed for approved berming in that buffer.*
- (3) *Stockpiles shall not exceed 35 feet in height.*
- (4) *Stockpiles shall be temporary, with a time limit of six months.*
- (5) *Once the use of the temporary soil stockpiles is completed, the ground must be adequately prepared for planting and revegetated in a manner that meets or exceeds the amount and quality of vegetation on the site previously.*
- (6) *Stockpiling shall conform with any applicable requirements of the Virginia erosion and sediment control regulations, the Virginia erosion and sediment control handbook and county erosion and sediment control program policies.*

(c) *Limitations on buffers. Structural BMPs such as wet and dry ponds shall not generally be permitted in the buffers, except that the planning director may approve them under the following circumstances:*

- (1) *The need is necessitated by site conditions rather than economic factors; and*
- (2) *The screening/buffering effect of the buffer has been retained by the design of the BMP and any degradation has been mitigated with additional plantings or berms as necessary.*

(d) *Improvements allowable within buffers. An entrance road, community and directional signage, bicycle and/or pedestrian paths, and utility connections and drainage improvements shall be permitted within the buffer with approval of the planning director. Permitted utilities and constructed drainage conveyance systems shall*

cross the buffer at or near a perpendicular angle to the property line, with clearing kept to a minimum necessary to accommodate the utilities, except that minor improvements to natural drainage channels may be permitted at a different angle to the property line upon approval of the planning director.

- (e) Roads within buffers. Entrance roads through these buffers shall be built to the narrowest cross-section possible. Roads and open space shall be located and designed in a manner that minimizes views of structures within the development from the adjoining primary or secondary road as determined by the planning director.*
 - (f) Appeals. In the event the planning director disapproves the items specified in this section or recommends conditions or modifications that are unacceptable to the applicant, the applicant may appeal the decision of the planning director to the development review committee which shall forward a recommendation to the planning commission. Any appeal shall be in writing and may be subject to fees as specified in article I of this chapter.*
-

Sec. 24-223. Buffer requirements.

- (a) Right-of-way buffer. Within any major subdivision approved under this division, there shall be planned and maintained buffers along all external existing and planned road rights-of-way, as follows:
- (1) The minimum right-of-way buffer on Wooded Community Character Corridors located outside the Primary Service area as defined in the Comprehensive Plan shall be 200 feet.
 - (2) The right-of-way buffer shall be planted in accordance with section 24-96, General landscape area standards and shall also adhere to the Community Character Corridor Buffer Treatment Guidelines and Map.
 - (3) Waiver provisions. The planning director may reduce the buffer depth requirements specified in (1) of this section for residential developments when:
 - (i) The developer demonstrates that due to natural or protected features, or due to adjoining physical features, a reduced buffer will screen the development as effectively as a full buffer; or
 - (ii) The developer demonstrates that the development will be adequately screened and buffered from the road using berms and landscaping. Such a request shall be supplemented with a landscaping plan and/or planting plan with photos of the existing site.
- In no case shall the right-of-way buffer be reduced by a waiver provision to less than 100 feet. The planning director may also, in the event of granting a waiver, require additional landscaping as determined on a case-by-case basis.
- (b) Requirements for buffers. All required buffers shall be exclusive of lots, remain free of structures and parking, and remain undisturbed, except for additional plantings and selective clearing approved by the planning director or his designee. Soil stockpiles and staging areas shall not be permitted within any buffer, except that temporary soil stockpiles may be allowed upon approval by the planning director under the following circumstances:
- (1) The buffer in which the temporary stockpile is to occur is non-wooded, defined as having no mature trees.
 - (2) The stockpile shall not be visible from a Community Character Corridor or Community Character Area, unless the soil stockpiling is needed for approved berming in that buffer.
 - (3) Stockpiles shall not exceed 35 feet in height.
 - (4) Stockpiles shall be temporary, with a time limit of six months.
 - (5) Once the use of the temporary soil stockpiles is completed, the ground must be adequately prepared for planting and revegetated in a manner that meets or exceeds the amount and quality of vegetation on the site previously.
 - (6) Stockpiling shall conform with any applicable requirements of the Virginia erosion and sediment control regulations, the Virginia erosion and sediment control handbook and county erosion and sediment control program policies.
- (c) Limitations on buffers. Structural BMPs such as wet and dry ponds shall not generally be permitted in the buffers, except that the planning director may approve them under the following circumstances:
- (1) The need is necessitated by site conditions rather than economic factors; and
 - (2) The screening/buffering effect of the buffer has been retained by the design of the BMP and any degradation has been mitigated with additional plantings or berms as necessary.
- (d) Improvements allowable within buffers. An entrance road, community and directional signage, bicycle and/or pedestrian paths, and utility connections and drainage improvements shall be permitted within the buffer with approval of the planning director. Permitted utilities and constructed drainage conveyance
-

systems shall cross the buffer at or near a perpendicular angle to the property line, with clearing kept to a minimum necessary to accommodate the utilities, except that minor improvements to natural drainage channels may be permitted at a different angle to the property line upon approval of the planning director.

- (e) Roads within buffers. Entrance roads through these buffers shall be built to the narrowest cross-section possible. Roads and open space shall be located and designed in a manner that minimizes views of structures within the development from the adjoining primary or secondary road as determined by the planning director.
- (f) Appeals. In the event the planning director disapproves the items specified in this section or recommends conditions or modifications that are unacceptable to the applicant, the applicant may appeal the decision of the planning director to the development review committee which shall forward a recommendation to the planning commission. Any appeal shall be in writing and may be subject to fees as specified in article I of this chapter.

19-73.2 Buffer Requirement

Buffering shall be required for all major subdivisions abutting a roadway designated a Wooded Community Character Corridor and located outside the Primary Service Area, as identified on the Land Use Plan Map in the Comprehensive Plan in accordance with Sec.24-223 of the zoning ordinance.

19-73.2 Buffer Requirement

Buffering shall be required for all major subdivisions abutting a roadway designated a Wooded Community Character Corridor and located outside the Primary Service Area, as identified on the Land Use Plan Map in the Comprehensive Plan in accordance with Sec.24-223 of the zoning ordinance.

Sec. 24-43. Buffer and setback requirements for timbering activities.

The requirements in this section shall apply to timbering activities located in all districts. This section shall not apply to tree removal activities conducted as part of a site plan, subdivision plan, or building permit that is currently under review by the county or has received final approval. Approval of site plans, subdivision plans, or building permits shall be in accordance with other provisions of the zoning ordinance and shall not be governed or guided by the provisions of this section. This section shall also not apply to timbering activities where all timbering is conducted outside of the buffers or setback for timbering listed in paragraph (1), (2) or (3) or for timbering within such buffers or setback for timbering to construct access drives having a maximum width of 30 feet. The following provisions shall apply to all timbering activities subject to this section except as otherwise noted:

- (1) *Buffer along public roads.* This paragraph shall not apply to the General Agricultural District, A-1. An undisturbed buffer at least 75 feet wide shall be maintained along all public roads. No trees or other vegetation shall be removed from this buffer except as permitted under this section.
- (2) *Buffer along community character corridor.* This paragraph shall not apply to the General Agricultural District, A-1. On all other property fronting on roads that are identified as community character corridors on the comprehensive plan, an undisturbed buffer at least 150 feet wide shall be maintained along the community character corridor on properties that are zoned residential. No trees or other vegetation shall be removed from this buffer except as permitted under this section.
- (3) *Setback for timbering.* In the General Agricultural District, A-1, for properties that are in the primary service area, all timbering activities shall be located a minimum of 50 feet from any public road right-of-way unless done in accordance with other provisions in section 24-43. This distance shall be known as the setback for timbering. In the general agricultural district, A-1, for properties outside the primary service area, there shall be no setback for timbering *except that those parcels adjacent to Wooded Community Character Corridors shall have a 50 feet wide setback for timbering.*
- (4) *Buffer and setback for timbering measurement and determinations.* The width of required buffers and setbacks for timbering shall exclude any planned future right-of-way as designated on the Six-Year Primary or Secondary Road Plan.
- (5) *Tree protection.* Required buffer areas and setbacks for timbering shall be marked by painting trees along the interior edge of the buffer. Equipment, timber, or other materials shall not be placed within the buffer or setback for timbering area.
- (6) *Processing requirements.* Prior to commencing any timbering activities within a buffer or setback for timbering except for a 30-foot access drive, the property owner or agent shall complete a timber buffer modification application and submit it along with a James City County Tax Map (with topography) to the planning director that shows the site's property lines, any existing and proposed driveway entrances, required buffer areas, and setbacks for timbering, and tree protection measures. The planning director shall determine whether to permit timbering activities within a buffer or setback for timbering in accordance with paragraphs (7) and (8) below. Upon approval of the application by the planning director, timbering activities within a buffer or setback for timbering may proceed. All timbering activities within a buffer or setback for timbering including location of driveways or any other land disturbing activities, shall take place only in those areas indicated on the approved map and in accordance with the methods approved by the planning director. The planning director shall have no more than ten working days from the filing of such application to approve or disapprove the application. If disapproved, the planning director shall write a letter to the applicant identifying the revisions to be made to gain approval.
- (7) *Modifications.* The planning director may grant modifications to the buffer, setback for timbering, and tree protection requirements when, in the opinion of the planning director, an alternative design

provides equivalent measures, or retains the rural character of the property, or when buffers, setbacks for timbering, or tree protection are unnecessary due to a site's physical conditions such as topography or presence of streambeds, wetlands or other natural features. The planning director may also permit tree removal within the buffer or setback for timbering when trees are weakened, dying, diseased, or insect damaged, or, in the opinion of the state forester or a certified horticulturalist, unlikely to survive or such removal will enhance the long term effectiveness of the buffer or setback for timbering as a visual barrier.

- (8) *Partial timbering within a buffer or setback for timbering.* The planning director may approve partial timbering of buffer areas and setback for timbering and the use and type of equipment for partial timbering, after considering the following:
- a. The effect of the timbering on the long-term effectiveness of the buffer area, or setback for timbering and on adjacent roads and properties;
 - b. The anticipated development of the property and the surrounding area;
 - c. The condition of any adjacent dwelling or subdivision including whether the structures are abandoned or dilapidated;
 - d. Any recommendations of the state forester or a certified horticulturalist, including recommendations on the use and type of equipment for partial timbering;
 - e. The health and diversity of trees with emphasis on protection of mixed hardwood trees, and the reforestation of the buffer or setback for timbering; and
 - f. The market value of the timber in the buffer or setback for timbering and the timber to be removed, and the market value of the timber on the balance of the property.
- (9) *Development review committee review.* The development review committee shall consider the timber buffer modification application if there are unresolved problems between the applicant and the planning director.
- (10) *Tree Replacement.* If timbering occurs within the buffers or setbacks for timbering described above in paragraphs (1), (2) and (3) and such timbering is not approved in accordance with paragraphs (7) and (8) above, trees shall be replaced at a ratio of one tree for each 800 square feet of area timbered. All replacement trees shall be of a species native to eastern Virginia. Such trees shall meet the standards for trees stated in section 24-2. The number and type of trees and their placement shall be approved by the planning director.

All trees shall be planted within 30 days from the date the trees were removed from the buffer or setback unless such period does not fall within the planting season. In such cases, their replacement in the next planting season (October 1 through March 31) shall be guaranteed by entering into a written agreement with the county and furnishing to the county a certified check, bond with surety satisfactory to the county, or a letter of credit in an amount to cover all costs of the plantings and their installation as estimated by the planning director. Such written agreement shall be entered into and such financial guarantee shall be provided to the county within 30 days from the date the trees were removed. The form of the agreement, financial guarantee, or type of surety shall be to the satisfaction of and approved by the county attorney. If the improvements are not completed in a timely manner, the planning director shall proceed to complete the improvements by calling on the surety or financial guarantee. After the first full growing season (February 1 to November 30) after planting, any trees not in a healthy growing condition or determined to be dead, diseased, or dying, shall be replaced as determined by the planning director. Thereafter, all trees shall be maintained in a healthy growing environment and in a healthy growing condition.

The planning director may allow some or all of the trees required by this paragraph to be planted outside the buffer or off-site when, if in the opinion of the planning director, such an alternative mitigates the environmental, buffering, or wildlife habitat impacts of the tree removal.

- (11) *Violations and penalties.* Prior to any criminal or civil enforcement under this section, the administrator or his designee shall give five days written notice of the violation to the owner of the property prior to commencing enforcement. The violation of any provision of this section concerning tree replacement in paragraph 10 above is subject to a civil fine pursuant to section 24-22. The violation of any other provisions in this section is subject to a criminal sanction under section 24-22.

(Ord. No. 31A-167, 3-26-96; Ord. No. 31A-169, 5-28-96; Ord. No. 31A-204, 5-8-01; Ord. No. 31A-257, 11-22-11)

Sec. 24-43. Buffer and setback requirements for timbering activities.

The requirements in this section shall apply to timbering activities located in all districts. This section shall not apply to tree removal activities conducted as part of a site plan, subdivision plan, or building permit that is currently under review by the county or has received final approval. Approval of site plans, subdivision plans, or building permits shall be in accordance with other provisions of the zoning ordinance and shall not be governed or guided by the provisions of this section. This section shall also not apply to timbering activities where all timbering is conducted outside of the buffers or setback for timbering listed in paragraph (1), (2) or (3) or for timbering within such buffers or setback for timbering to construct access drives having a maximum width of 30 feet. The following provisions shall apply to all timbering activities subject to this section except as otherwise noted:

- (1) *Buffer along public roads.* This paragraph shall not apply to the General Agricultural District, A-1. An undisturbed buffer at least 75 feet wide shall be maintained along all public roads. No trees or other vegetation shall be removed from this buffer except as permitted under this section.
- (2) *Buffer along community character corridor.* This paragraph shall not apply to the General Agricultural District, A-1. On all other property fronting on roads that are identified as community character corridors on the comprehensive plan, an undisturbed buffer at least 150 feet wide shall be maintained along the community character corridor on properties that are zoned residential. No trees or other vegetation shall be removed from this buffer except as permitted under this section.
- (3) *Setback for timbering.* In the General Agricultural District, A-1, for properties that are in the primary service area, all timbering activities shall be located a minimum of 50 feet from any public road right-of-way unless done in accordance with other provisions in section 24-43. This distance shall be known as the setback for timbering. In the general agricultural district, A-1, for properties outside the primary service area, there shall be no setback for timbering except that those parcels adjacent to Wooded Community Character Corridors shall have a 50 feet wide setback for timbering.
- (4) *Buffer and setback for timbering measurement and determinations.* The width of required buffers and setbacks for timbering shall exclude any planned future right-of-way as designated on the Six-Year Primary or Secondary Road Plan.
- (5) *Tree protection.* Required buffer areas and setbacks for timbering shall be marked by painting trees along the interior edge of the buffer. Equipment, timber, or other materials shall not be placed within the buffer or setback for timbering area.
- (6) *Processing requirements.* Prior to commencing any timbering activities within a buffer or setback for timbering except for a 30-foot access drive, the property owner or agent shall complete a timber buffer modification application and submit it along with a James City County Tax Map (with topography) to the planning director that shows the site's property lines, any existing and proposed driveway entrances, required buffer areas, and setbacks for timbering, and tree protection measures. The planning director shall determine whether to permit timbering activities within a buffer or setback for timbering in accordance with paragraphs (7) and (8) below. Upon approval of the application by the planning director, timbering activities within a buffer or setback for timbering may proceed. All timbering activities within a buffer or setback for timbering including location of driveways or any other land disturbing activities, shall take place only in those areas indicated on the approved map and in accordance with the methods approved by the planning director. The planning director shall have no more than ten working days from the filing of such application to approve or disapprove the application. If disapproved, the planning director shall write a letter to the applicant identifying the revisions to be made to gain approval.
- (7) *Modifications.* The planning director may grant modifications to the buffer, setback for timbering, and tree protection requirements when, in the opinion of the planning director, an alternative design

provides equivalent measures, or retains the rural character of the property, or when buffers, setbacks for timbering, or tree protection are unnecessary due to a site's physical conditions such as topography or presence of streambeds, wetlands or other natural features. The planning director may also permit tree removal within the buffer or setback for timbering when trees are weakened, dying, diseased, or insect damaged, or, in the opinion of the state forester or a certified horticulturalist, unlikely to survive or such removal will enhance the long term effectiveness of the buffer or setback for timbering as a visual barrier.

- (8) *Partial timbering within a buffer or setback for timbering.* The planning director may approve partial timbering of buffer areas and setback for timbering and the use and type of equipment for partial timbering, after considering the following:
- a. The effect of the timbering on the long-term effectiveness of the buffer area, or setback for timbering and on adjacent roads and properties;
 - b. The anticipated development of the property and the surrounding area;
 - c. The condition of any adjacent dwelling or subdivision including whether the structures are abandoned or dilapidated;
 - d. Any recommendations of the state forester or a certified horticulturalist, including recommendations on the use and type of equipment for partial timbering;
 - e. The health and diversity of trees with emphasis on protection of mixed hardwood trees, and the reforestation of the buffer or setback for timbering; and
 - f. The market value of the timber in the buffer or setback for timbering and the timber to be removed, and the market value of the timber on the balance of the property.
- (9) *Development review committee review.* The development review committee shall consider the timber buffer modification application if there are unresolved problems between the applicant and the planning director.
- (10) *Tree Replacement.* If timbering occurs within the buffers or setbacks for timbering described above in paragraphs (1), (2) and (3) and such timbering is not approved in accordance with paragraphs (7) and (8) above, trees shall be replaced at a ratio of one tree for each 800 square feet of area timbered. All replacement trees shall be of a species native to eastern Virginia. Such trees shall meet the standards for trees stated in section 24-2. The number and type of trees and their placement shall be approved by the planning director.

All trees shall be planted within 30 days from the date the trees were removed from the buffer or setback unless such period does not fall within the planting season. In such cases, their replacement in the next planting season (October 1 through March 31) shall be guaranteed by entering into a written agreement with the county and furnishing to the county a certified check, bond with surety satisfactory to the county, or a letter of credit in an amount to cover all costs of the plantings and their installation as estimated by the planning director. Such written agreement shall be entered into and such financial guarantee shall be provided to the county within 30 days from the date the trees were removed. The form of the agreement, financial guarantee, or type of surety shall be to the satisfaction of and approved by the county attorney. If the improvements are not completed in a timely manner, the planning director shall proceed to complete the improvements by calling on the surety or financial guarantee. After the first full growing season (February 1 to November 30) after planting, any trees not in a healthy growing condition or determined to be dead, diseased, or dying, shall be replaced as determined by the planning director. Thereafter, all trees shall be maintained in a healthy growing environment and in a healthy growing condition.

The planning director may allow some or all of the trees required by this paragraph to be planted outside the buffer or off-site when, if in the opinion of the planning director, such an alternative mitigates the environmental, buffering, or wildlife habitat impacts of the tree removal.

- (11) *Violations and penalties.* Prior to any criminal or civil enforcement under this section, the administrator or his designee shall give five days written notice of the violation to the owner of the property prior to commencing enforcement. The violation of any provision of this section concerning tree replacement in paragraph 10 above is subject to a civil fine pursuant to section 24-22. The violation of any other provisions in this section is subject to a criminal sanction under section 24-22.

(Ord. No. 31A-167, 3-26-96; Ord. No. 31A-169, 5-28-96; Ord. No. 31A-204, 5-8-01; Ord. No. 31A-257, 11-22-11)

MEMORANDUM

DATE: November 1, 2023

TO: The Planning Commission

FROM: Thomas Wysong, Senior Planner II
Jose L. Ribeiro, Senior Landscape Planner II
John Risinger, Senior Planner

SUBJECT: Comprehensive Plan Amendment: Community Character Corridor and Short-Term Rental Development Standards Revision

Introduction

At its September 12, 2023, meeting, the Board of Supervisors directed Planning staff to prepare a focused and limited amendment to the Comprehensive Plan to include only the following two items (see Attachment No. 1):

1. Revise the Community Character Corridor (CCC) Table CC-1: County CCC Designations list such that the portion of Old Stage Road located outside of the Primary Service Area will no longer be classified as a Community Character Corridor.
2. Remove the following recommended development standard for short-term rentals: “Be operated in such a manner that the property owner will continue to live and reside on the property during the rental.” The other three criteria will remain and continue to be used in staff’s evaluation of these applications. Staff’s approach and review process for short-term rentals will not change because of this amendment.

Draft Revision

The proposed revisions to the approved Comprehensive Plan regarding Old Stage Road are provided in Attachment Nos. 2 and 3. The proposed revision to the approved Comprehensive Plan regarding the recommended development standards for short-term rentals is provided in Attachment Nos. 4 and 5.

Policy Committee Recommendation

At its October 12, 2023, meeting, the Policy Committee recommended approval of the proposed amendment to the CCC Table by a vote of 3-1. The Policy Committee unanimously recommended denial of the proposed amendment to the short-term rental by a vote of 4-0.

Recommendation

Planning staff recommends the Planning Commission recommend approval of both revisions, per the rationale presented by the Board of Supervisors in the approved Initiating Resolution (see Attachment No. 1).

TW/JLR/JR/ap
CPlnAmd-CCC_STR-mem

Attachments:

1. Initiating Resolution
2. CCC Comprehensive Plan Revisions Strikethrough
3. CCC Comprehensive Plan Revisions Clean Copy
4. Short-Term Rental Comprehensive Plan Revisions Strikethrough
5. Short-Term Rental Comprehensive Plan Revisions Clean Copy

RESOLUTION

INITIATION OF CONSIDERATION OF AMENDMENT TO THE COMPREHENSIVE PLAN

TO REVISE THE COMMUNITY CHARACTER CORRIDOR DESIGNATION CATEGORY

AND TO REMOVE A RECOMMENDATION THAT SHORT-TERM RENTALS BE

OPERATED IN A MANNER WHERE THE OWNER RESIDES ON THE PROPERTY

DURING THE RENTAL

WHEREAS, at its October 26, 2021, meeting, the Board of Supervisors of James City County, Virginia, adopted the James City County Comprehensive Plan, *Our County, Our Shared Future: James City County 2045 Comprehensive Plan* (the "Comprehensive Plan"); and

WHEREAS, under Section 15.2-2229 of the Virginia Code, the Board of Supervisors may consider amendments to the Comprehensive Plan; and

WHEREAS, at its July 25, 2023, meeting, the Board of Supervisors, in response to concerns regarding the development pressure on Forge Road and in coordination with fulfilling "ORD-22-0001: Amendments for Scenic Roadway Protection" requested staff prepare a limited amendment to said Comprehensive Plan to revise the Community Character Corridor Designation list such that the portion of Old Stage Road located outside of the Primary Service Area no longer be classified as a Community Character Corridor; and

WHEREAS, also at its July 25, 2023, meeting, the Board of Supervisors, in response to concerns from the County Attorney's Office regarding the Comprehensive Plan's recommendation that short-term rentals "be operated in a manner such that the property owner will continue to live and reside on the property during the rental" may run afoul of recent jurisprudence, requested that staff remove such recommendation from the short-term rental section.

NOW, THEREFORE, BE IT RESOLVED that the Board of Supervisors of James City County, Virginia, does hereby initiate an amendment to the Comprehensive Plan to (1) revise the Community Character Designation category such that the portion of Old Stage Road located outside of the Primary Service Area is no longer included within this category and (2) remove the recommendation that short-term rentals be operated in a manner such that the property owner will continue to live and reside on the property during the rental.




Michael J. Hipple
Chairman, Board of Supervisors

ATTEST:

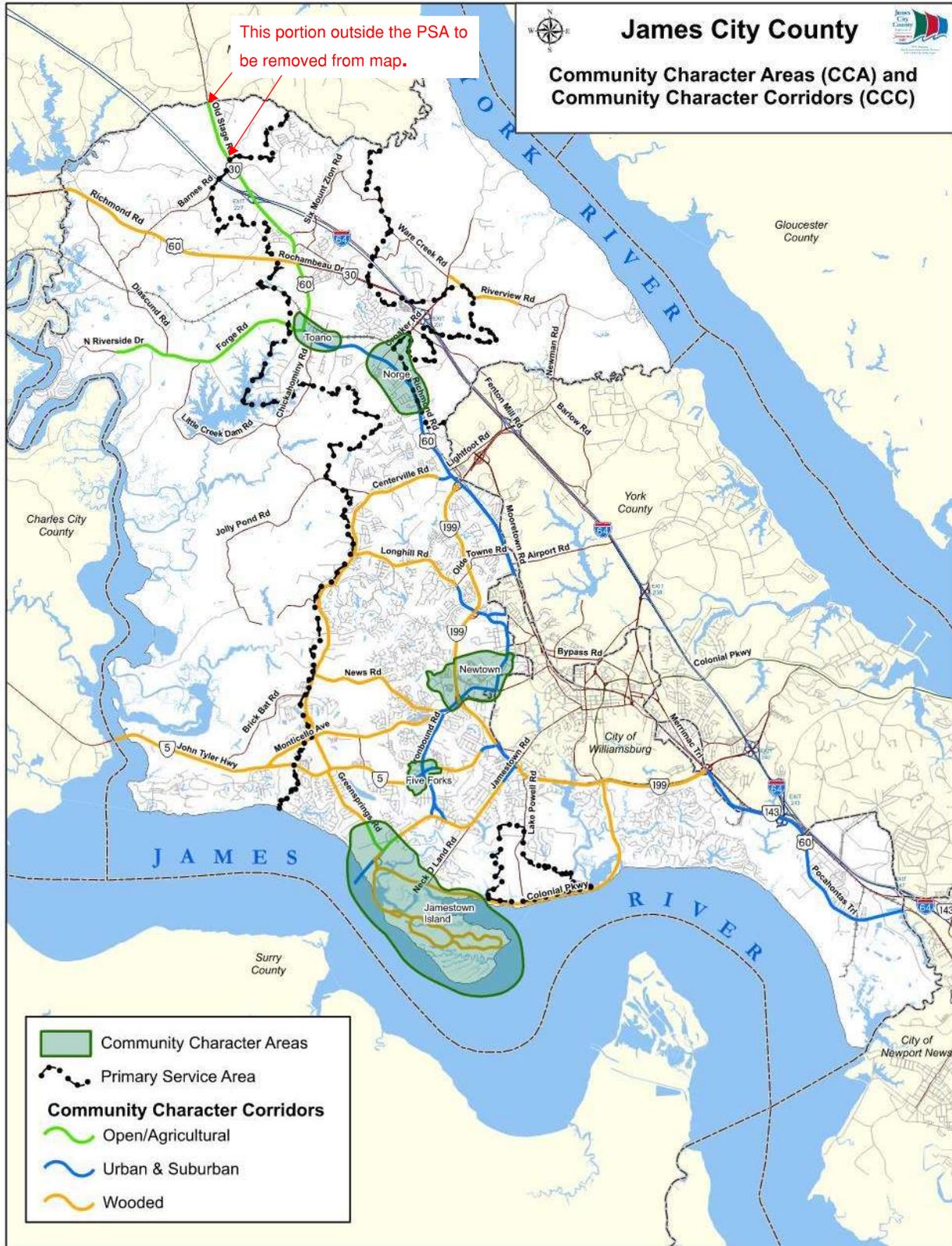

Teresa J. Saeed
Deputy Clerk to the Board

| | VOTES | | | |
|-----------|-------------------------------------|------------|----------------|-------------------------------------|
| | <u>AYE</u> | <u>NAY</u> | <u>ABSTAIN</u> | <u>ABSENT</u> |
| SADLER | — | — | — | <input checked="" type="checkbox"/> |
| ICENHOUR | <input checked="" type="checkbox"/> | — | — | — |
| MCGLENNON | <input checked="" type="checkbox"/> | — | — | — |
| LARSON | <input checked="" type="checkbox"/> | — | — | — |
| HIPPLE | <input checked="" type="checkbox"/> | — | — | — |

Adopted by the Board of Supervisors of James City County, Virginia, this 12th day of September, 2023.

InitConsCCC-STRnt-res

Map CC-1. Community Character Areas and Community Character Corridors



Community Character Corridors

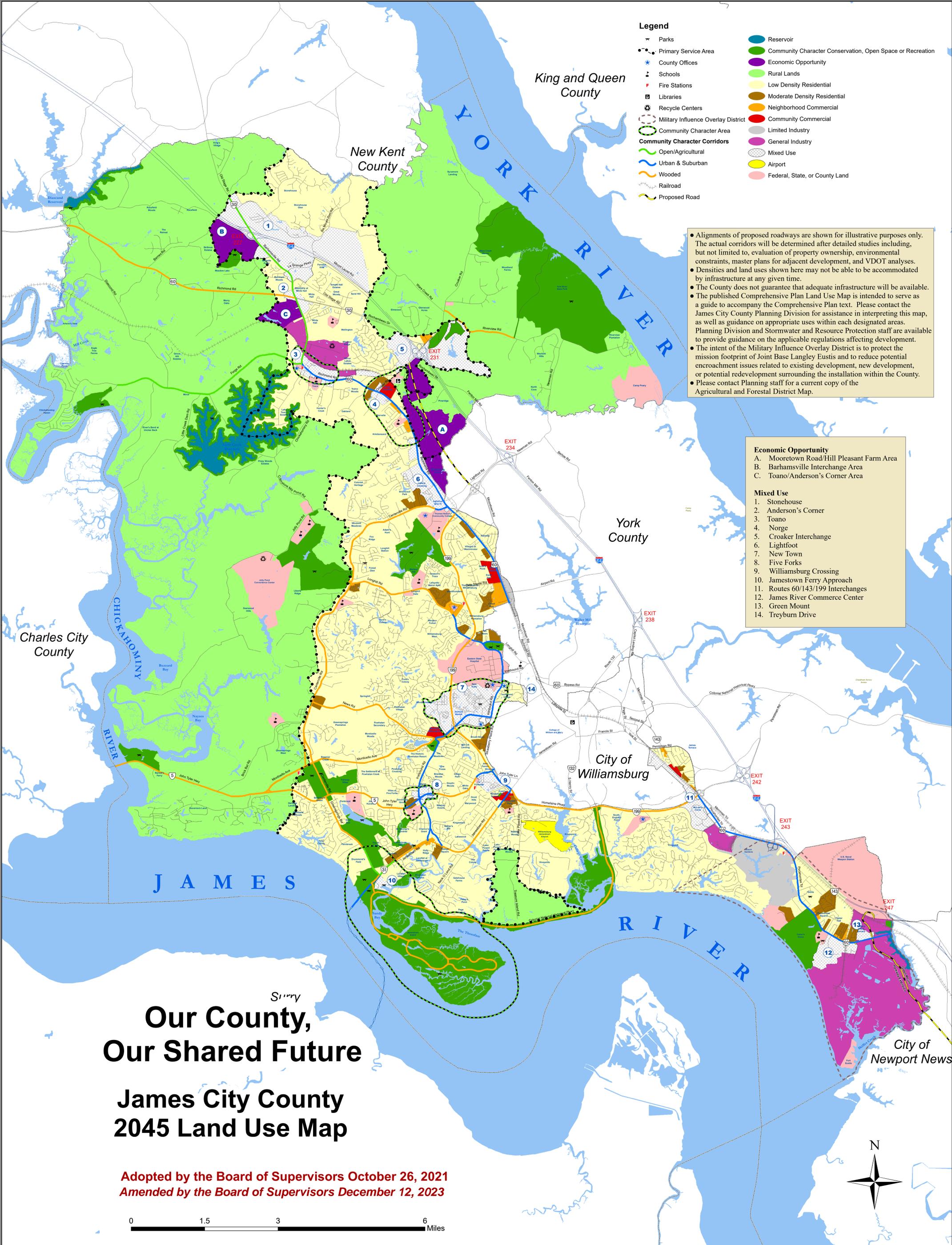
Community Character Corridors (CCCs) are roads in the County that were previously designated as greenbelt roads, described in the 1991 Comprehensive Plan as entrance corridors and roads which promoted the rural, natural, or historic character of the County. In 1997 they were adopted as CCCs and have played an instrumental role in helping to preserve the original character of these roads. More attention has been given to the roads which are considered to be entrance corridors, or gateways, because they set the important first impression that many visitors have of the area.

Since the 1997 Comprehensive Plan, each plan has identified the following three types of CCCs and their corresponding goals: Open/Agricultural, Wooded, and Urban/Suburban. Some roads have more than one designation depending on the location within the County.

Table CC-1. County CCC Designations (Revised December 12, 2023)

| Road | Open/ Agricultural | Wooded | Urban/ Suburban |
|--|-----------------------|--------|--------------------|
| Centerville Road | | X | X |
| Colonial Parkway | | X | |
| DePue Road | | | X |
| Forge Road | X | | |
| Greensprings Road | X | X | |
| Humelsine Parkway (Route 199) | | X | X |
| Ironbound Road from Jamestown Road to News Road | | | X |
| Ironbound Road from Strawberry Plains Road to City of Williamsburg border | | | X |
| Jamestown Road | | X | X |
| John Tyler Highway | | X | X |
| Longhill Road | | X | X |
| Monticello Avenue | | X | X |
| News Road | | X | |
| Old Stage Road and Barhamsville Road from Anderson's Corner (intersection of Routes 30 and 60) to New Kent County <i>the intersection of Barnes Road and Route 30</i> | X | | |
| Pocahontas Trail south of Humelsine Parkway to Newport News border | | | X |
| Richmond Road from Anderson's Corner to New Kent County border | | X | |
| Richmond Road from Anderson's Corner to City of Williamsburg border | X | | X |
| Riverview Road from Croaker Road to the entrance of York River State Park | | X | |
| Sandy Bay Road from Ironbound Road to Jamestown Road | | | X |

The County has created standards and guidelines for how CCC buffers are to be treated during development and how to preserve the unique community character along these key corridors throughout the County. To give better guidance regarding landscape treatments along the different Community Character Corridors, in January 2011, the Board of Supervisors adopted buffer treatment guidelines and a map showing the location of the corridors and their buffer type designations.



- Legend**
- ✖ Parks
 - Primary Service Area
 - ★ County Offices
 - 🏫 Schools
 - 🚒 Fire Stations
 - 📖 Libraries
 - ♻️ Recycle Centers
 - 🛡️ Military Influence Overlay District
 - 🌿 Community Character Area
 - 📏 Community Character Corridors
 - 🌱 Open/Agricultural
 - 🏘️ Urban & Suburban
 - 🌳 Wooded
 - 🚂 Railroad
 - 🛣️ Proposed Road
 - 🌊 Reservoir
 - 🌳 Community Character Conservation, Open Space or Recreation
 - 🏡 Economic Opportunity
 - 🌾 Rural Lands
 - 🏠 Low Density Residential
 - 🏡 Moderate Density Residential
 - 🏪 Neighborhood Commercial
 - 🏢 Community Commercial
 - 🏭 Limited Industry
 - 🏢 General Industry
 - 🏠 Mixed Use
 - ✈️ Airport
 - 🇺🇸 Federal, State, or County Land

• Alignments of proposed roadways are shown for illustrative purposes only. The actual corridors will be determined after detailed studies including, but not limited to, evaluation of property ownership, environmental constraints, master plans for adjacent development, and VDOT analyses.

• Densities and land uses shown here may not be able to be accommodated by infrastructure at any given time.

• The County does not guarantee that adequate infrastructure will be available.

• The published Comprehensive Plan Land Use Map is intended to serve as a guide to accompany the Comprehensive Plan text. Please contact the James City County Planning Division for assistance in interpreting this map, as well as guidance on appropriate uses within each designated areas. Planning Division and Stormwater and Resource Protection staff are available to provide guidance on the applicable regulations affecting development.

• The intent of the Military Influence Overlay District is to protect the mission footprint of Joint Base Langley Eustis and to reduce potential encroachment issues related to existing development, new development, or potential redevelopment surrounding the installation within the County.

• Please contact Planning staff for a current copy of the Agricultural and Forestal District Map.

- Economic Opportunity**
- A. Mooretown Road/Hill Pleasant Farm Area
 - B. Barhamsville Interchange Area
 - C. Toano/Anderson's Corner Area
- Mixed Use**
- 1. Stonehouse
 - 2. Anderson's Corner
 - 3. Toano
 - 4. Norge
 - 5. Croaker Interchange
 - 6. Lightfoot
 - 7. New Town
 - 8. Five Forks
 - 9. Williamsburg Crossing
 - 10. Jamestown Ferry Approach
 - 11. Routes 60/143/199 Interchanges
 - 12. James River Commerce Center
 - 13. Green Mount
 - 14. Treyburn Drive

**Our County,
Our Shared Future**

**James City County
2045 Land Use Map**

**Adopted by the Board of Supervisors October 26, 2021
Amended by the Board of Supervisors December 12, 2023**

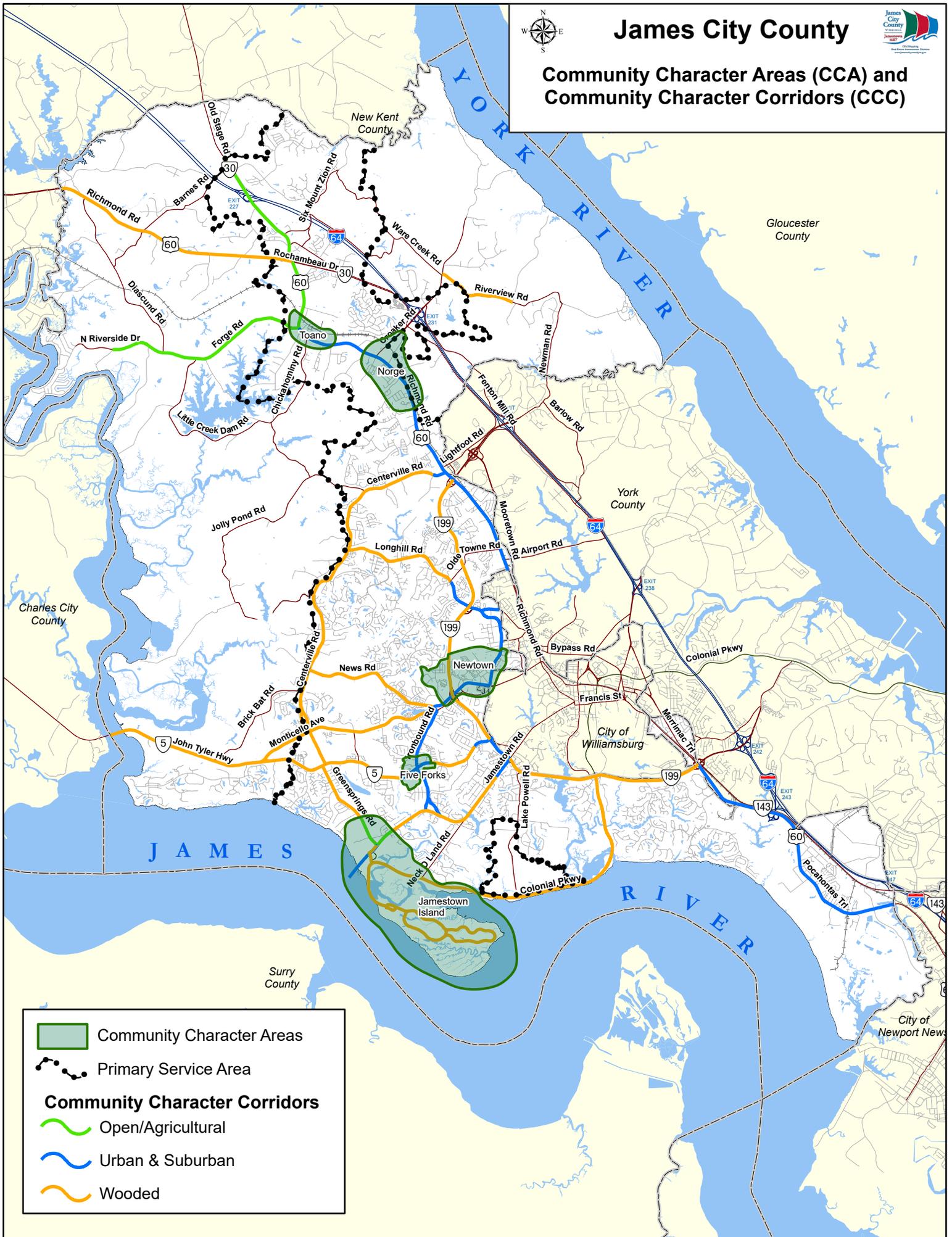




James City County



Community Character Areas (CCA) and Community Character Corridors (CCC)



-  Community Character Areas
-  Primary Service Area
- Community Character Corridors**
-  Open/Agricultural
-  Urban & Suburban
-  Wooded

Community Character Corridors

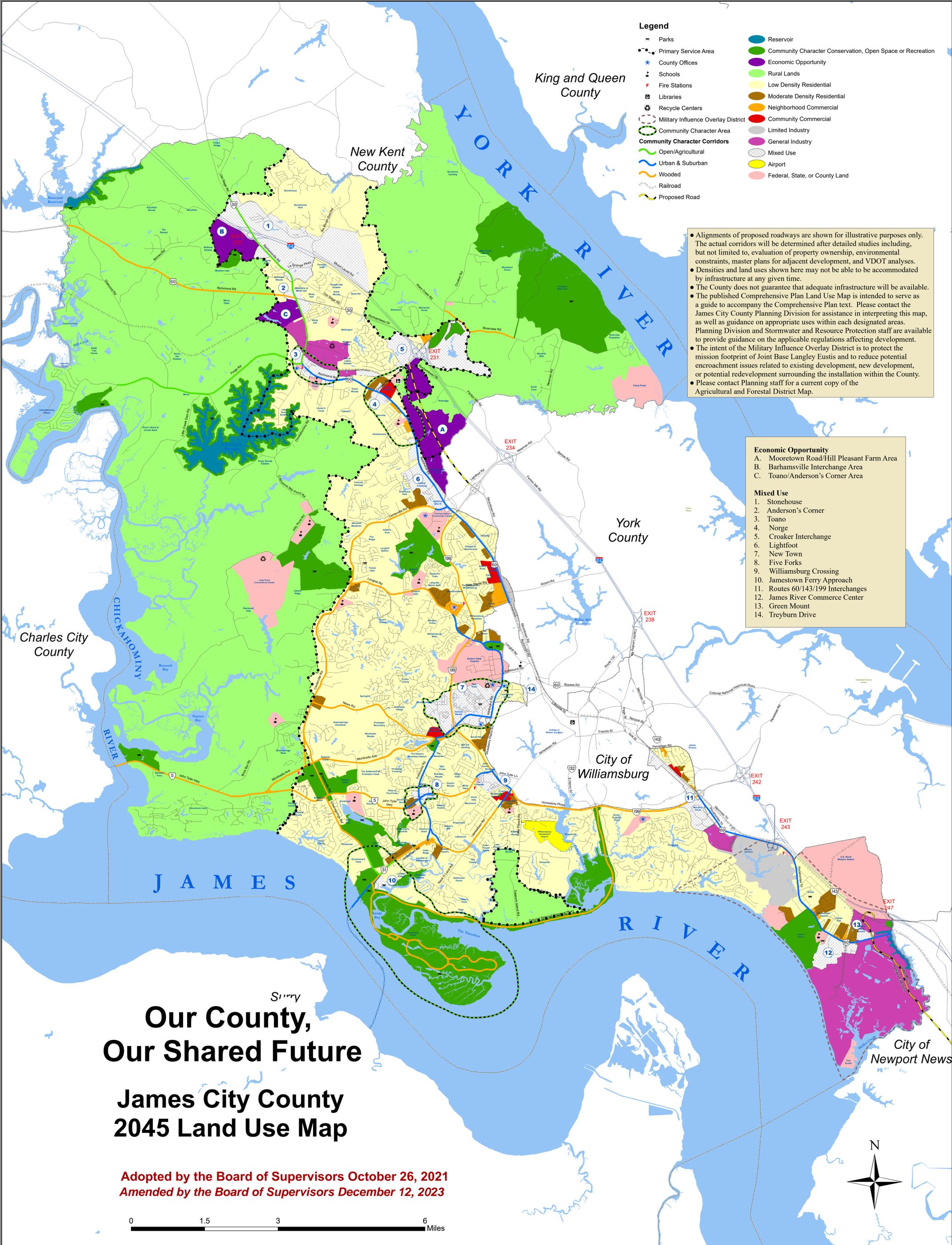
Community Character Corridors (CCCs) are roads in the County that were previously designated as greenbelt roads, described in the 1991 Comprehensive Plan as entrance corridors and roads which promoted the rural, natural, or historic character of the County. In 1997 they were adopted as CCCs and have played an instrumental role in helping to preserve the original character of these roads. More attention has been given to the roads which are considered to be entrance corridors, or gateways, because they set the important first impression that many visitors have of the area.

Since the 1997 Comprehensive Plan, each plan has identified the following three types of CCCs and their corresponding goals: Open/Agricultural, Wooded, and Urban/Suburban. Some roads have more than one designation depending on the location within the County.

Table CC-1. County CCC Designations (Revised December 12, 2023)

| Road | Open/ Agricultural | Wooded | Urban/ Suburban |
|--|-----------------------|--------|--------------------|
| Centerville Road | | X | X |
| Colonial Parkway | | X | |
| DePue Road | | | X |
| Forge Road | X | | |
| Greensprings Road | X | X | |
| Humelsine Parkway (Route 199) | | X | X |
| Ironbound Road from Jamestown Road to News Road | | | X |
| Ironbound Road from Strawberry Plains Road to City of Williamsburg border | | | X |
| Jamestown Road | | X | X |
| John Tyler Highway | | X | X |
| Longhill Road | | X | X |
| Monticello Avenue | | X | X |
| News Road | | X | |
| Old Stage Road and Barhamsville Road from Anderson's Corner (intersection of Routes 30 and 60) to the intersection of Barnes Road and Route 30 | X | | |
| Pocahontas Trail south of Humelsine Parkway to Newport News border | | | X |
| Richmond Road from Anderson's Corner to New Kent County border | | X | |
| Richmond Road from Anderson's Corner to City of Williamsburg border | X | | X |
| Riverview Road from Croaker Road to the entrance of York River State Park | | X | |
| Sandy Bay Road from Ironbound Road to Jamestown Road | | | X |

The County has created standards and guidelines for how CCC buffers are to be treated during development and how to preserve the unique community character along these key corridors throughout the County. To give better guidance regarding landscape treatments along the different Community Character Corridors, in January 2011, the Board of Supervisors adopted buffer treatment guidelines and a map showing the location of the corridors and their buffer type designations.



- Legend**
- ✖ Parks
 - Primary Service Area
 - ★ County Offices
 - 🏫 Schools
 - 🚒 Fire Stations
 - 📖 Libraries
 - ♻️ Recycle Centers
 - 🛡️ Military Influence Overlay District
 - 🌿 Community Character Area
 - 📏 Community Character Corridors
 - 🌱 Open/Agricultural
 - 🏘️ Urban & Suburban
 - 🌳 Wooded
 - 🚂 Railroad
 - 🛣️ Proposed Road
 - 🌊 Reservoir
 - 🌳 Community Character Conservation, Open Space or Recreation
 - 🏡 Economic Opportunity
 - 🌾 Rural Lands
 - 🏠 Low Density Residential
 - 🏡 Moderate Density Residential
 - 🏪 Neighborhood Commercial
 - 🏢 Community Commercial
 - 🏭 Limited Industry
 - 🏢 General Industry
 - 🏘️ Mixed Use
 - ✈️ Airport
 - 🇺🇸 Federal, State, or County Land

• Alignments of proposed roadways are shown for illustrative purposes only. The actual corridors will be determined after detailed studies including, but not limited to, evaluation of property ownership, environmental constraints, master plans for adjacent development, and VDOT analyses.

• Densities and land uses shown here may not be able to be accommodated by infrastructure at any given time.

• The County does not guarantee that adequate infrastructure will be available.

• The published Comprehensive Plan Land Use Map is intended to serve as a guide to accompany the Comprehensive Plan text. Please contact the James City County Planning Division for assistance in interpreting this map, as well as guidance on appropriate uses within each designated areas. Planning Division and Stormwater and Resource Protection staff are available to provide guidance on the applicable regulations affecting development.

• The intent of the Military Influence Overlay District is to protect the mission footprint of Joint Base Langley Eustis and to reduce potential encroachment issues related to existing development, new development, or potential redevelopment surrounding the installation within the County.

• Please contact Planning staff for a current copy of the Agricultural and Forestal District Map.

- Economic Opportunity**
- A. Mooretown Road/Hill Pleasant Farm Area
 - B. Barhamsville Interchange Area
 - C. Toano/Anderson's Corner Area
- Mixed Use**
- 1. Stonehouse
 - 2. Anderson's Corner
 - 3. Toano
 - 4. Norge
 - 5. Croaker Interchange
 - 6. Lightfoot
 - 7. New Town
 - 8. Five Forks
 - 9. Williamsburg Crossing
 - 10. Jamestown Ferry Approach
 - 11. Routes 60/143/199 Interchanges
 - 12. James River Commerce Center
 - 13. Green Mount
 - 14. Treyburn Drive

**Our County,
Our Shared Future**

**James City County
2045 Land Use Map**

**Adopted by the Board of Supervisors October 26, 2021
Amended by the Board of Supervisors December 12, 2023**



Short-Term Rentals (*Revised December 12, 2023*)

The short-term rental of private residential property facilitated through companies such as Airbnb has emerged as an alternative to traditional short-term rentals such as hotels or timeshares. As of 2020, James City County does not have a specific definition for short-term rentals in the Zoning Ordinance, but historically has permitted “tourist homes” and “rental of rooms” within certain districts, either by-right or with a special use permit. In districts where an SUP is required for short-term rentals, conditions are stipulated that are intended to protect the residential nature of the surrounding area and ensure that updated Certificates of Occupancy are issued within a certain time period.

The Zoning Ordinance currently defines “tourist home” as a dwelling where lodging or lodging and meals are provided for compensation for up to five rooms which are open to transients. Historically, the “tourist home” use has applied to traditional bed and breakfast-style businesses, where a proprietor rents out rooms for short-term stays, and provides services such as meals and basic housekeeping. The current ordinance allows up to five rooms to be rented within a tourist home, and the definition has been interpreted to allow the proprietor to live on- or off-site. “Rental of rooms” is not specifically defined in the Zoning Ordinance, but has typically applied to situations where a homeowner rents a specific number of rooms (usually to a maximum of three) on a short-term basis. Unlike tourist homes, “rental of rooms” does not allow the owner/proprietor to live off-site. The long term rental of a dwelling or room under a traditional lease does not fall under the short-term rental category.

Many, but not all, residential districts require a special use permit for either tourist homes or rental of rooms, which allows for a legislative review process and conditions to be stipulated which protect the character of the surrounding area. Certain commercial districts allow tourist homes by-right, but rental of rooms is not permitted at all. It is important to note that even if a tourist home or rental of rooms is permitted by-right in a particular location through the Zoning Ordinance, business licensure and an updated Certificate of Occupancy to ensure compliance with commercial fire and building codes would still be required.

Due to the unique impacts that can arise from transient residents in short-term rentals, the County should continue to carefully consider the impacts these uses can have on a community’s quality of life. The thriving rural character of James City County continues to offer a variety of agri-tourism opportunities, for which short-term rentals may provide a truly unique opportunity and experience; one that provides economic benefits to rural property owners but does not directly compete with more conventional tourism-based opportunities inside the PSA. If located within a residential context, short-term rentals should serve to complement the residential character of the area rather than altering its nature. Therefore, while every location can be considered uniquely, short-term rentals are most appropriately located subject to the following development standards:

- Be located on lands designated Rural Lands, Neighborhood Commercial, Community Commercial, Mixed Use or Economic Opportunity;
- Be located on the edge or corner of an existing platted subdivision, rather than internal to it; *and*
- Be located on a major road; ~~and~~
- ~~Be operated in a manner such that the property owner will continue to live and reside on the property during the rental.~~

Short-Term Rentals (Revised December 12, 2023)

The short-term rental of private residential property facilitated through companies such as Airbnb has emerged as an alternative to traditional short-term rentals such as hotels or timeshares. As of 2020, James City County does not have a specific definition for short-term rentals in the Zoning Ordinance, but historically has permitted “tourist homes” and “rental of rooms” within certain districts, either by-right or with a special use permit. In districts where an SUP is required for short-term rentals, conditions are stipulated that are intended to protect the residential nature of the surrounding area and ensure that updated Certificates of Occupancy are issued within a certain time period.

The Zoning Ordinance currently defines “tourist home” as a dwelling where lodging or lodging and meals are provided for compensation for up to five rooms which are open to transients. Historically, the “tourist home” use has applied to traditional bed and breakfast-style businesses, where a proprietor rents out rooms for short-term stays, and provides services such as meals and basic housekeeping. The current ordinance allows up to five rooms to be rented within a tourist home, and the definition has been interpreted to allow the proprietor to live on- or off-site. “Rental of rooms” is not specifically defined in the Zoning Ordinance, but has typically applied to situations where a homeowner rents a specific number of rooms (usually to a maximum of three) on a short-term basis. Unlike tourist homes, “rental of rooms” does not allow the owner/proprietor to live off-site. The long term rental of a dwelling or room under a traditional lease does not fall under the short-term rental category.

Many, but not all, residential districts require a special use permit for either tourist homes or rental of rooms, which allows for a legislative review process and conditions to be stipulated which protect the character of the surrounding area. Certain commercial districts allow tourist homes by-right, but rental of rooms is not permitted at all. It is important to note that even if a tourist home or rental of rooms is permitted by-right in a particular location through the Zoning Ordinance, business licensure and an updated Certificate of Occupancy to ensure compliance with commercial fire and building codes would still be required.

Due to the unique impacts that can arise from transient residents in short-term rentals, the County should continue to carefully consider the impacts these uses can have on a community’s quality of life. The thriving rural character of James City County continues to offer a variety of agri-tourism opportunities, for which short-term rentals may provide a truly unique opportunity and experience; one that provides economic benefits to rural property owners but does not directly compete with more conventional tourism-based opportunities inside the PSA. If located within a residential context, short-term rentals should serve to complement the residential character of the area rather than altering its nature. Therefore, while every location can be considered uniquely, short-term rentals are most appropriately located subject to the following development standards:

- Be located on lands designated Rural Lands, Neighborhood Commercial, Community Commercial, Mixed Use or Economic Opportunity;
- Be located on the edge or corner of an existing platted subdivision, rather than internal to it; and
- Be located on a major road.



Yarmouth Creek Watershed Management Plan

Planning Commission Meeting

November 1, 2023

Agenda

Watershed Assessment

Key Findings

Recommendations

Public Engagement

Questions

Watershed Assessment

Water Quality Impairments & Local TMDLs

Water Quality Monitoring Data Review

Stream Habitat Field Assessment

Stormwater Field Assessment

Conservation Area Review

Impervious Cover Study (Long-Term Trends)

Watershed Treatment Model (Water Quality Modeling)

Existing & Future Flood Risk Review

Review of Past
Information

Field-Level
Reconnaissance

Desktop-Level
Analysis

Key Findings

• Monitoring Data

- Yarmouth Creek is designated as impaired due to bacteria levels.
- Limited monitoring data is available.

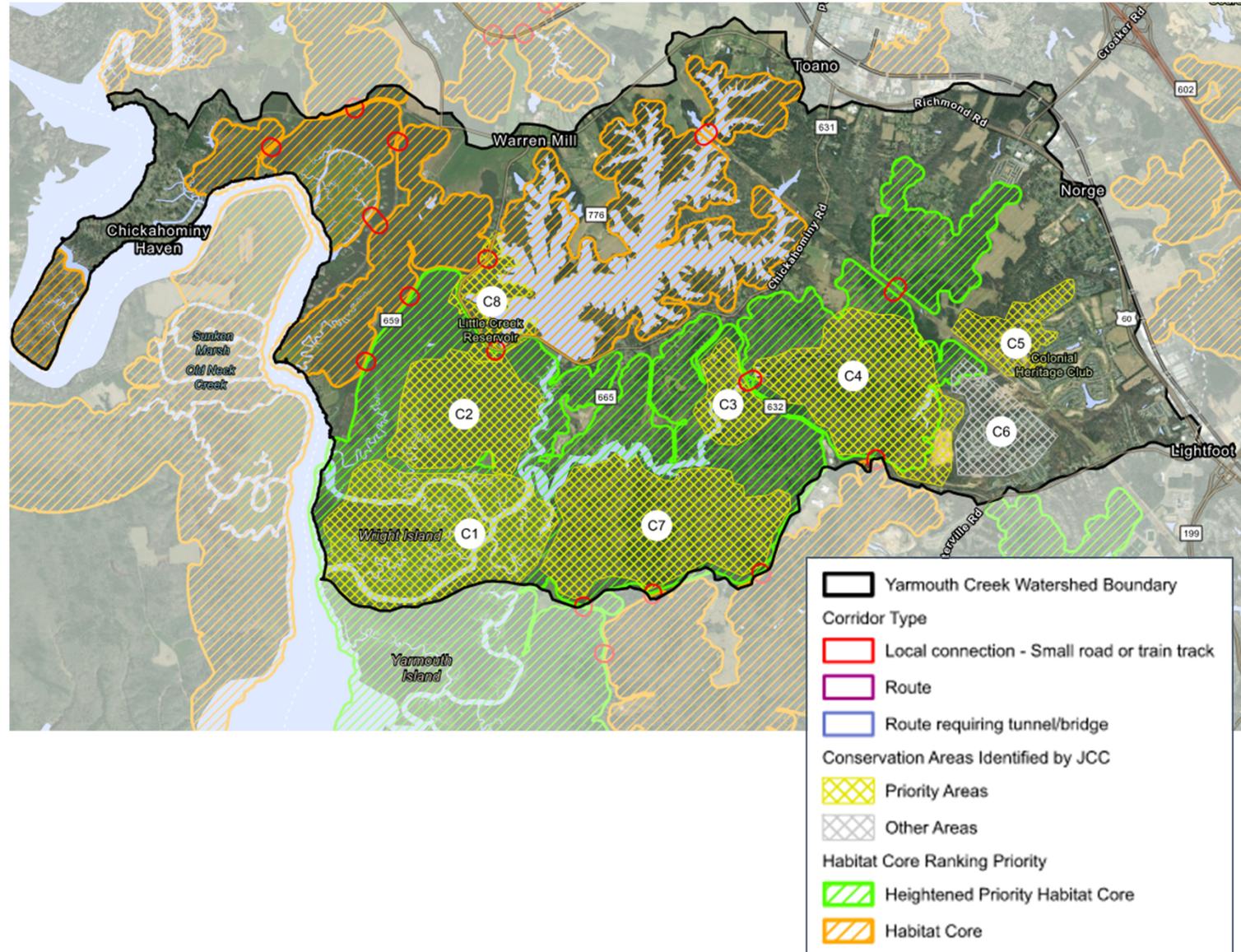
• Impervious Cover Trends

- 2000: All subwatersheds Sensitive
- 2008: 1 subwatershed Impacted
- 2022: 2 subwatersheds Impacted
- Future: 3 subwatersheds Impacted & 1 Non-Supporting

• Conservation Area Review

- Numerous rare, threatened, and endangered species present.
- Notable past conservation efforts.
- Significant areas for additional high-value land conservation.

4



Key Findings

• Water Quality Modeling

- Highest pollutant loading rates per acre in developed areas along Route 60.
- Some increased pollution to downstream channels.
- Largely balanced by undeveloped portions of the Watershed & Cranston's Mill Pond.

• Field Assessments

- 30% of stream channels are in poor or marginal conditions.
- 70% in good or optimal conditions.

• Flood Risk Review

- Over 300 homes in existing floodplain; predominately Chickahominy Haven.
- Potential 50% increase in number of at-risk homes with future sea level rise projections

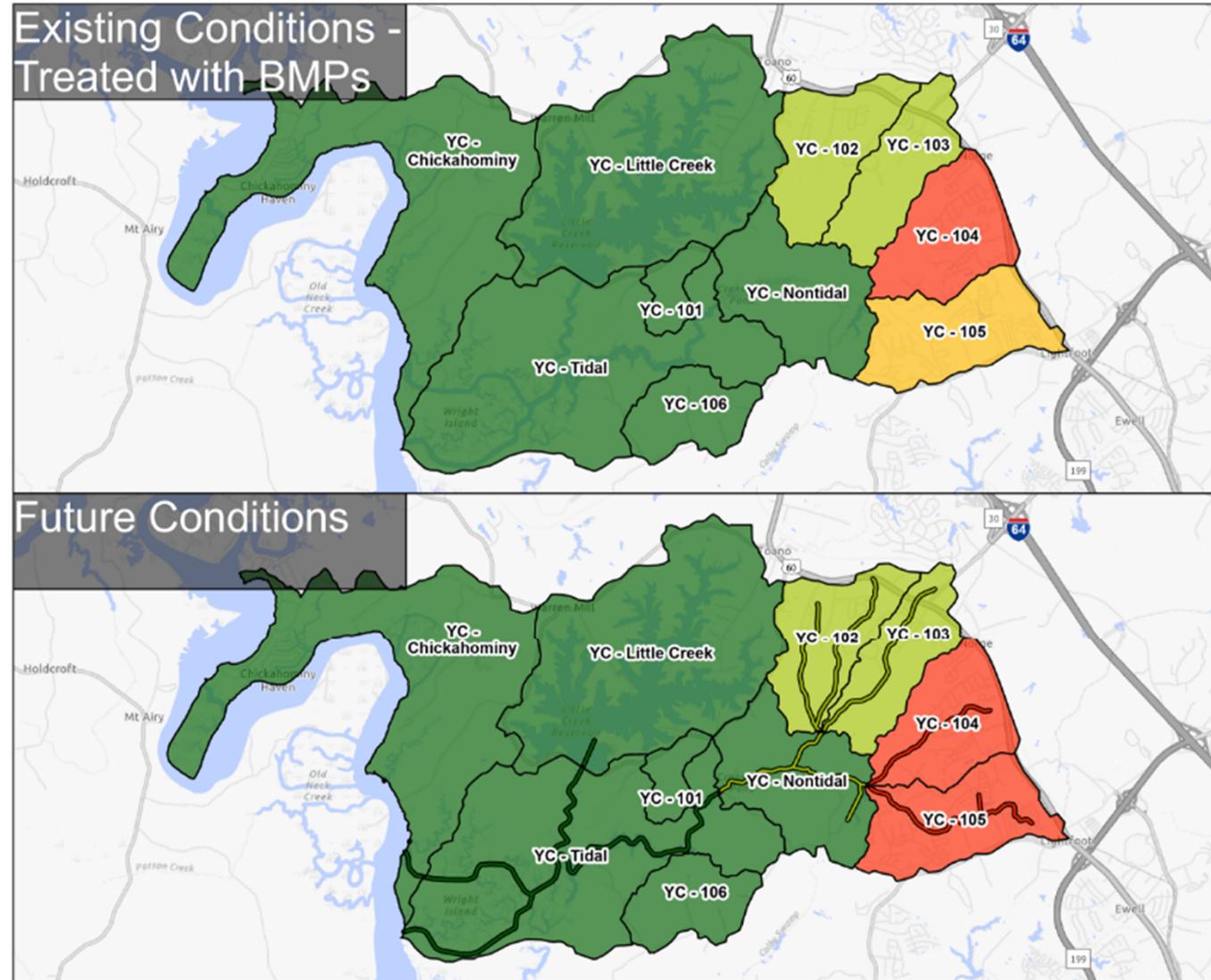
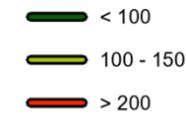
Total Bacterial (Fecal Coliform) Areal Loading Rates

(billions / acre / year)



Downstream Bacterial (Fecal Coliform) Areal Loading Rates

(billions / acre / year)



Key Findings



Main Takeaways:

Much of the watershed is very healthy, despite some impairments.

Development along Rt. 60 corridor could affect watershed health if unmitigated.

Types of Recommendations



Stormwater
Treatment
Practices



Programmatic



Regulatory/
Enforcement



Floodplain
Management



Education/
Awareness

Examples of Recommendations

- **Regulatory/Enforcement**

- Update/Improve the Special Stormwater Criteria (SSC) to better mitigate effects of new development and redevelopment.

- **Programmatic**

- Expand land conservation efforts.
- Continued septic system inspections, clean-out, and repairs.

- **Stormwater Treatment Practices**

- Targeted stream and stormwater improvements in areas where some issues are present.

- **Education/Awareness**

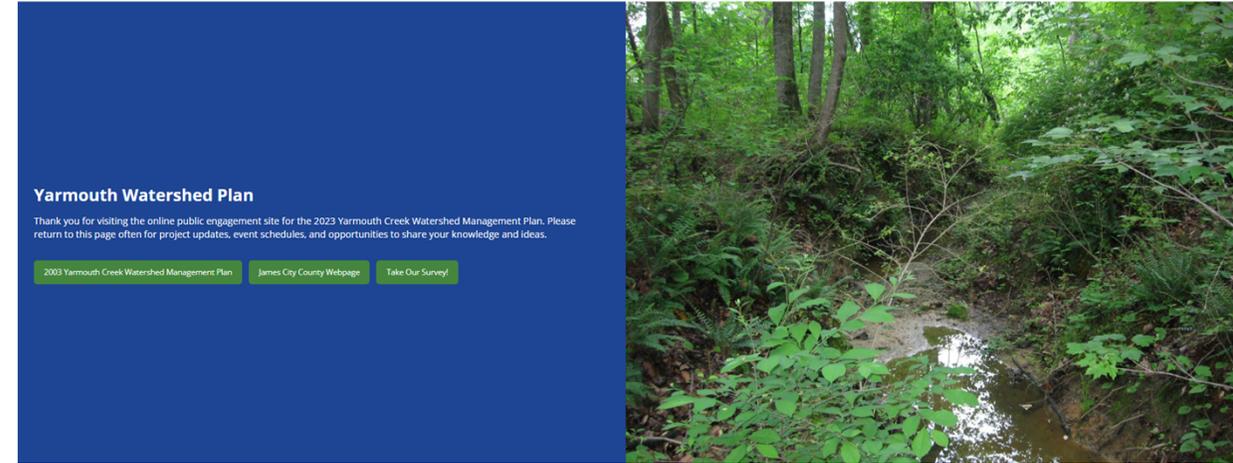
- Additional opportunities to target pet waste reduction.
- Public education on the presence and protection of rare, threatened, and endangered species.

- **Floodplain Management**

- Increased communication with major dam owners regarding downstream hazards and emergency action planning.
- Explore opportunities to help residents understand the need for elevating or floodproofing at-risk properties, and how to seek outside funding.

Public Engagement

- Project Webpage
 - Mapping Tool (*active*)
 - Survey (*closed 8/15/23*)
 - Announcements
- Public Meetings
 - Mtg 1 (5/24/23) – Feedback on Findings
 - Mtg 2 (7/31/23) – Feedback on Recommendations
- **30-Day Public Comment Period**
 - **October 9 – November 9**



Access the Draft 2023 Yarmouth Creek Watershed Management Plan



Share your knowledge and ideas!



Watershed Mapper

Drop a pin to show problem areas or share your ideas for projects.

See Project Map



Leave a Comment on the Watershed Plan

Survey will be open until November 9th.

Leave a Comment

<https://engagestantec.mysocialpinpoint.com/yarmouth>

Questions?

PLANNING DIRECTOR'S REPORT November 2023

This report summarizes the status of selected Department of Community Development activities during the past month.

➤ **Planning**

- **Monthly Case Report:** For a list of all cases received in the last month, please see the attached document.

- **Board Action Results:**
 - SUP-20-0010. Hertzler Clearing and Grading
(Approved 3-2)
 - SUP-23-0012. 8659 Richmond Road Solar Project
(Approved 5-0)

➤ **Community Development**

Tammy Rosario, Assistant Director of Community Development and Vaughn Poller, Director of Neighborhood Development, addressed the Rotary Club of the Historic Triangle on October 4 on the services provided by Building Safety and Permits, Neighborhood Development, Planning and Zoning.



Spreadsheet Listing New Cases Received - November 2023

| Plan Type | Plan Number | Case Title | Address | Plan District | Plan Description | Plan Assigned To |
|------------------|--------------------|--|---|----------------------|--|-------------------------|
| Conceptual Plan | C-23-0059 | 8582 Pocahontas Trail- Creative Kids Child Development Center 2- Temporary Classroom Trailer | 8582 POCAHONTAS TRL Williamsburg, VA 23185 | Roberts | Creative Kids Child Development Center 2- Temporary Classroom Trailer. | Terry Costello |
| | C-23-0060 | 141 Indigo Dam Road Short Term Rental | 141 INDIGO DAM RD Williamsburg, VA 23188 | Jamestown | 141 Indigo Dam Road Short Term Rental. | Suzanne Yeats |
| Subdivision Plat | S-23-0039 | Colonial Heritage 5-2C Plat | 499 JOLLY POND RD Williamsburg, VA 23188 | Stonehouse | Colonial Heritage 5-2C Plat | Jose Ribeiro |
| | S-23-0040 | 6429 Centerville Road & 4645 Revolutionary Way Boundary Line Adjustment | 6429 CENTERVILLE RD Williamsburg, VA 23188 | Stonehouse | Boundary Line Adjustment. | Tess Lynch |
| | S-23-0041 | James River Commerce Center Parcel 7 Subdivision (1725 Endeavor Drive) | 1725 ENDEAVOR DR Williamsburg, VA 23185 | Roberts | James River Commerce Center Parcel 7 Subdivision (1725 Endeavor Drive) | John Risinger |
| | S-23-0042 | 3900 & 3918 Thorngate Drive Boundary Line Adjustment | 3918 THORNGATE DR Williamsburg, VA 23188 | Berkeley | Boundary Line Adjustment. | Ben Loppacker |
| | S-23-0043 | 3045 & 3047 N Riverside Drive Boundary Line Extinguishment | 3045 N RIVERSIDE DR Lanexa, VA 23089 | Powhatan | Boundary Line Extinguishment. | Tess Lynch |
| Site Plan | SP-23-0082 | Bowelro Williamsburg (AMF Lanes) Lighting Site Plan Amendment | 5544 OLDE TOWNE RD Williamsburg, VA 23188 | Jamestown | Lighting Site Plan Amendment. | John Risinger |
| | SP-23-0083 | N/A | 296 OXFORD RD Williamsburg, VA 23185 | Berkeley | Collington Court Stream Restoration. | VOID |
| | SP-23-0084 | Jamestown Event Beach Park Sidewalk Addition | 2205 JAMESTOWN RD Williamsburg, VA 23185 | Berkeley | Jamestown Event Beach Park Sidewalk Addition. | Ben Loppacker |
| | SP-23-0085 | 501 Galley Existing Covered Seating Area | 7201 RICHMOND RD Williamsburg, VA 23188 | Stonehouse | 501 Galley Existing Covered Seating Area. | Paxton Condon |
| | SP-23-0086 | N/A | 900 KINGSMILL RD Williamsburg, VA 23185 | Roberts | Plan showing the addition of a patio and retaining wall at the Kingsmill Resort Fitness Center. | VOID |
| | SP-23-0087 | Lovett 64 Commerce Center | 275 OLD STAGE RD Toano, VA 23168 | Powhatan | Phase 1 industrial development of Lovett 64 Commerce Center (formerly known as Hazelwood Farms Enterprise Center). | Thomas Wysong |
| | SP-23-0088 | 7354 Richmond Road Office Conversion Site Plan | 7354 RICHMOND RD Williamsburg, VA 23188 | Stonehouse | 7354 Richmond Rd Office conversion Site Plan | Paxton Condon |
| | SP-23-0089 | Veterans Park Lighting Plan Amendment | 3793 IRONBOUND RD Williamsburg, VA 23188 | Berkeley | Veterans Park Lighting Plan Amendment - Sports Lighting | TBD |
| | SP-23-0090 | Busch Gardens Festa Italia Expansion | 7851 POCAHONTAS TRL Williamsburg, VA 23185 | Roberts | Busch Gardens Festa Italia Expansion (Pantheon) Site Plan Amendment | John Risinger |
| | SP-23-0091 | Ford's Colony Townhomes | 185 FORDS COLONY DR Williamsburg, VA 23188 | Powhatan | This plan proposes 25 townhouse units within Ford's Colony. | TBD |
| | SP-23-0092 | Kingsmill Resort Fitness Center Patio Addition | 1020 KINGSMILL RD Williamsburg, VA 23185 | Roberts | Kingsmill Resort Fitness Center Patio Addition Site Plan Amendment. | John Risinger |
| | SP-23-0093 | 7297 Richmond Road Shed | 7297 RICHMOND RD Williamsburg, VA 23188 | Stonehouse | 12 X15 Shed. | TBD |

Spreadsheet Listing New Cases Received - November 2023

| Plan Type | Plan Number | Case Title | Address | Plan District | Plan Description | Plan Assigned To |
|----------------------------|--------------------|--|---|----------------------|--|-------------------------|
| Special Use Permit | SUP-23-0024 | 724 Arlington Island Road Short Term Rental | 724 ARLINGTON ISLAND RD Lanexa, VA 23089 | Powhatan | 724 Arlington Island Road Short Term Rental. | Tess Lynch |
| | SUP-23-0025 | Brickyard Landing Park | 990 BRICKYARD RD Lanexa, VA 23089 | Powhatan | Brickyard Landing Park. | Ben Loppacker |
| | SUP-23-0026 | Detached Accessory Apartment | 206 THE MAINE Williamsburg, VA 23185 | Berkeley | Detached 3 stall garage with roughed in kitchen and bathroom above | Josh Crump |
| | SUP-23-0027 | 118 Winston Drive Short Term Rental | 118 WINSTON DR Williamsburg, VA 23185 | Berkeley | 118 Winston Drive Short Term Rental. | Tess Lynch |
| | SUP-23-0028 | 9273 Richmond Road Contractors Office & Warehouse | 9273 RICHMOND RD Lanexa, VA 23089 | Powhatan | 9273 Richmond Road Contractors Office & Warehouse | Suzanne Yeats |
| Rezoning | Z-23-0006 | Brickyard Landing Park Rezoning | 1006 BRICKYARD RD 1920100018 Lanexa, VA 23089 | Powhatan | Brickyard Landing Park Rezoning (A-1 to PL). | Ben Loppacker |
| | Z-23-0007 | 1821 Jamestown Road Rezoning | 1821 JAMESTOWN RD Williamsburg, VA 23185 | Berkeley | Rezoning property from R-8 to R-2 Cluster. | TBD |
| Zoning Verification Letter | ZVL-23-0023 | 3800 Treyburn Drive Zoning Verification Letter | 3800 TREYBURN DR Williamsburg, VA 23185 | Jamestown | 3800 Treyburn Drive Zoning Verification Letter. | John Rogerson |
| | ZVL-23-0024 | Zoning Administrator Determination Request | 1051 ST ANDREWS DR Williamsburg, VA 23188 | Powhatan | Zoning Administrator Determination Request. | Christy Parrish |
| | ZVL-23-0025 | 8012 Hankins Industrial Park Road Zoning verification Letter | 8012 HANKINS INDUSTRIAL PARK RD Toano, VA 23168 | Stonehouse | 8012 Hankins Industrial Park Road ZVL (Smithfield Foods Building). | Taylor Orne |