Statement of Justification<br>Tregoning Property<br>Preliminary Plan Application April 2023

## I. Introduction

ESC Tregoning LC (the "Applicant") is submitting this Preliminary Plan Application ("the Application") for the Tregoning Property ("Property"). The Property is located southwest of the intersection of Kings Valley Road and Preakness Drive in Clarksburg and consists of 2 parcels:

- 17.81-acre parcel zoned RE-1
- 19.80-acre parcel zoned RE-1

The Applicant contracted to purchase the 17.81-acre parcel (the "Development Parcel" or the "Project"). The Tregoning family will retain the 19.80-acre RE-1 parcel (and two development rights from this Application). The Property is the subject of an approved Pre-Preliminary Plan (Tregoning - PrePreliminary Plan No. 72020020).

## II. Background

The 1994 Clarksburg Master Plan considers the Property part of the Ridge Road Transition Area and proposes that the Property be developed for residential use. The zoning and Master Plan recommendation are reinforced by the water and sewer category change approved by the County Council in 2018, which calls for public water and sewer for the Property upon Preliminary Plan approval under the RE-1 Optional MPDU or cluster method.

This Application proposes developing the Property using the MPDU optional method (which allows 1.22 dwelling units per acre) to create a yield of 46 units on 37.6 acres. Per the approved Pre-Preliminary Plan (Resolution attached as Exhibit A), Applicant will cluster 44 units (38 market rate on 9,000 SF lots
and six MPDUs) on the Property. The development rights for the remaining two market rate units will be retained by the Seller for the 19.80-acre portion of the


The Proposed Project (as submitted in the Preliminary Plan)

The Project is currently an active agricultural operation. The topography on the Development Parcel is significant, with at least 34 feet of fall from the east side of the Property to the west side of the Development Parcel, requiring specific grading requirements for public roads and sanitary sewer. Public sewer is available on the east side of the Development Parcel (the "high" side) in Kings Valley Road, and the site is designed to use this sole public sewer connection. The homes to the west on Hoffman Drive are served by septic systems. Public water is also available, and the soils are such that they accommodate environmentally sensitive stormwater management design.

The Development Parcel is bordered by $1 / 2$ acre -1 acre lots to the west on Hoffman Drive, and $1 / 4$ acre to $1 / 3$ acre lots to the north and east on Preakness Drive. The Project completes the gap between these existing neighborhoods and encourages connectivity between the existing neighborhoods and the property through the Hoffman Drive connection. Single family detached lots in the Project are a minimum of 9,000 square feet and a mix of front load garages and alley loaded garages. The six MPDUs are grouped with two triplexes served by rear-load drives and massed to integrate with the single-family lots within the community.

The Application proposes internal recreational facilities for the Project: one multi-age play area for older children central to this project. The Project will also contain seating areas and create connectivity via Hoffman Drive and the associated sidewalks to the existing well-established neighborhood on Hoffman Drive and to nearby Cedar Grove Elementary. All proposed streets in the Project are public with public sidewalks on each side of the street, and the stormwater management will be addressed through micro-bio facilities, micro-bio swales, and on-lot infiltration trenches.

The Applicant filed a Pre-Preliminary Plan heard by the Planning Board in February 2023. The Board reviewed the following items:

1. Hoffman Drive connection (whether it should be vehicular or not)
2. 1500 linear foot path connection to Damascus Regional Park
3. MPDU distribution and location.


Submitted and Board Reviewed Pre-Preliminary Plan (Note the trail connection to Hoffman Drive)

## Pre-Preliminary Plan Item1: /Hoffman Drive Connection (Should it be Vehicular?)

Hoffman Drive is an existing dead-end public road that intersects with Ridge Road. It currently serves approximately 17 homes and was built more than 50 years ago. The extension of this dead-end connection between the Project and existing Hoffman Drive was the subject of several discussions between Staff and the Applicant prior to the Pre-Preliminary Plan. Given the longstanding nature of Hoffman Drive as a dead-end road serving a small number of homes, the

Applicant advocated in their Pre-Preliminary Plan for a trail connection to allow for pedestrian and bike connectivity between existing Hoffman and the Project, but not a through road. Staff advocated for a vehicular connection. As noted in the traffic study, any vehicular connection to Hoffman Drive would create opportunities for cut-through Ridge Road traffic using not only Hoffman Drive to cut through to Kings Valley Road and Preakness Road (roads not designed for cut-through traffic and built more than 40 years ago). During the Pre-Preliminary Plan Board hearing, planning Staff communicated the need for connectivity for "all kinds of" transportation users and encouraged integration between the existing homes and the new neighborhood with a full road connection. On the other hand, members of the community, including residents of Hoffman Drive, opposed a road connection because of concerns about cut through traffic from Ridge Road and the impact to residents on what has been a quiet street, with no through traffic, for more than 50 years. Applicant has worked to accommodate both sides of this issue by designing a less direct vehicular connection from Hoffman Drive, through the Property to Kings Valley Road. This proposed connection is supported in a letter dated January 13, 2023, where DOT expressed agreement with Applicant's proposed Hoffman Drive alignment, stating: "We agree with the overall proposal of Hoffman Drive as shown," and asked for additional information (grades, centerline information, site distance, etc.) to ensure that the road functions as required by DOT. Applicant has studied the issues and is comfortable that the proposed alignment will comply with DOT requirements.

The Board appreciated the connection discussed at the Pre-Preliminary Plan hearing, but before accepting Applicant's proposed alignment, the Board also complied with Staff's request that Applicant study an alternative providing a direct cut-through from Ridge Road through to Kings Valley Road. Applicant has done so (Exhibit B)

After investigating the alternative alignment in Exhibit B, Applicant concludes that the original proposed alignment accommodates the site constraints and required engineering, creates a community connection and discourages cut through traffic, while meeting the goals of the Master Plan and Thrive 2050.

## 2. Pre-Preliminary Plan: Connection to Damascus Park

The Pre-Preliminary Plan application reviewed a potential requirement for Applicant to construct an off-site path, approximately 1,300 feet long, along Kings Valley Road, down to Damascus Regional Park. During the Pre-Preliminary Plan hearing, the Applicant explained that the burden of this connection would be problematic for a project of this size due to current right-of-way constraints and the significant cost of such a connection. Under recent County estimates for such paths, it was determined that the cost could be up to $\$ 45,000$ per dwelling unit, contrary to County housing affordability goals. Damascus Regional Park is located on Kings Valley Road, about one-half mile from the Project, and would require the development of the trail on land that has been actively farmed for almost 100 years. Moreover, Kings Valley Road is a country road with a prescriptive right-of-way of only 22 feet, which accommodates only the existing pavement. It is a narrow and winding country road with hills and limited sight lines, and there are no plans for any improvements. There are no bicycle or pedestrian facilities elsewhere along Kings Valley Road. Neither the Damascus Master Plan, the Clarksburg Master Plan, the Master Plan of Highways nor the Bicycle Master Plan propose changes to Kings Valley Road or a pedestrian or bicycle connection along it, presumably because of the physical constraints and limited demand. Moreover, this connection is not required by the subdivision regulations, and it is not required by LATR. Based on these factors, the Board determined that Applicant should not be required to construct the path.

## 3. Pre-Preliminary Plan Issue: Location and Distribution of the MPDUs

Originally, the Project proposed one stick of rear-load MPDU townhomes that would front the village green. Staff asked the Applicant to review the unit location of MPDUs and try to divide them into smaller buildings that blend better with the single family detached units and disperse these MPDUs into them into more than one location throughout the Project. Applicant reviewed Staff's feedback and modified the mix and location of the townhomes, by incorporating the MPDUs in the Pre-Preliminary Plan into separate buildings, which was generally approved by the Planning Board and now is reflected in the Preliminary Plan.

## Master Plan Conformance

The proposed development conforms with the 1994 approved and adopted Clarksburg Master Plan. The Plan provides for residential development clustered on this tract under the Optional Method of Development, along with protection of the natural environment including forested buffers and stream valleys. As noted above, the proposed roadway and pedestrian system also conforms with the recommendations in the Master Plan as well.

## Zoning Ordinance Conformance

Section 59.4.4.6. allows either large-lot residential use in the RE-1 zone, under the Standard Method, or MPDU development in a cluster format, where properties like this are served by public sewer service or designated for such service in the Master Plan. This application meets those requirements and Applicant seeks Optional Method approval consistent with the Pre-Preliminary Plan approval.

## Development Standards

The data table shows compliance with the requirements under the Optional Method of Development in the RE-1 zone.

| DATA TABLE <br> RE-1 OPTIONAL METHOD MPDU DEVELOPMENT |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Required |  |  | Proposed |  |  |
|  | Detached House | Duplex | Townhouse | Detached House | Duplex | Townhouse |
| Site |  |  |  |  |  |  |
| Dimensions (Min.) Useable Area | 17 AC |  |  | 37.85 AC |  |  |
| Density (Units per Useable AC) | 1.22 (20 units) |  |  | 1.22 (46 units) |  |  |
| Open Space (Min.) | 10\% |  |  | 10\% |  |  |
| Site Coverage (Max.) | N/A | N/A | 40\% | N/A | N/A | 40\% |
| Lot <br> Dimensions (Min.) |  |  |  |  |  |  |
| Lot Area | 9,000 SF | 4,500 SF | 1,200 SF | 9,000 SF (Min.) | 4,500 SF (Min.) | 1,200 SF (Min.) |
| Lot Width at Front Building Line | Determined at Site Plan |  |  | Determined at Site Plan |  |  |
| Lot Width at Front Lot Line | 25 Feet | 25 Feet | 14 Feet | 25 Feet (Min.) | 25 Feet (Min.) | 14 Feet (Min.) |
| Frontage on Street or Open Space | Required |  |  | Required |  |  |
| Coverage | 35\% | 35\% | N/A | 35\% | 35\% | N/A |
| Placement |  |  |  |  |  |  |
| Front Setback from Public Street | 35 Feet | 35 Feet | 35 Feet | 35 Feet | 35 Feet | 35 Feet |
| Front Setback from Private Street or open space | 10 Feet | 10 Feet | 10 Feet | 10 Feet | 10 Feet | 10 Feet |
| Side Street Setback, Abutting Lot fronts on the side street and is in a Residential Detached zone | 35 Feet | 35 Feet | 35 Feet | 35 Feet | 35 Feet | 35 Feet |
| Side Street Setback, Abutting Lot does not front on the side street or is not in a Residential Detached zone | 20 Feet | 20 Feet | 20 Feet | 20 Feet | 20 Feet | 20 Feet |
| Side or rear setback | Determined at Site Plan |  |  | Determined at Site Plan |  |  |
| Side setback, abutting property not included in application | 20 Feet |  |  | 20 Feet |  |  |
| Rear setback, alley | 4 Feet | 4 Feet | 4 Feet | 4 Feet | 4 Feet | 4 Feet |
| Height |  |  |  |  |  |  |
| Principal Building | 40 Feet | 40 Feet | 40 Feet | 40 Feet | 40 Feet | 40 Feet |

## Adequate Public Facilities

A traffic study has been completed for the Project, located in the "green" transportation policy area, showing the adequacy of the transportation system. Other public facilities also will be more than adequate to accommodate the proposed development. This includes police and fire service. The project is located within the "turnover" area for schools and, will be assigned to one of the following school clusters: Rockwell Elementary School, Baker Middle School and Damascus High School, or Cedar Grove Elementary School, Hallie Wells Middle School and Damascus Highschool. Per the current student generation rate calculator for turnover areas, the Property will generate fewer than nine elementary school students, five middle school students, and seven high school students. The school clusters
serving this Project can accommodate the proposed development under the standards of the Growth and Infrastructure Policy.

## Subdivision Standards

As reflected in the Preliminary Plan, the overall layout of the subdivision, including the size, width, shape, orientation and density of lots as well as the location and design of roads, is appropriate given the site's location and the type of development contemplated. The roads, including the connection to Hoffman Drive, are proposed public streets and have been designed referencing complete streets with input from the Montgomery County Department of Transportation. The block design meets the goals of Section 50.4.3.B of the Subdivision Regulations. Consistent with the provisions of Section 50.4.3.D, adequate open space areas are provided for the use of the residents. Water supply and sewage disposal facilities have been deemed appropriate for the project, as outlined in the Clarksburg Master Plan and per the County Council Adopted Resolution on October 30, 2018 that requires a water and sewer category change to $\mathrm{W}-3, \mathrm{~S}-3$ upon the approval of the Preliminary Plan showing a cluster or MPDU option development. Finally, stormwater management reviews and approvals have occurred and the location of utilities meets applicable requirements.

## Forest Conservation

The Property is subject to the requirements of Chapter 22A of the Montgomery County Code (the "Forest Conservation Law"). An NRI/FSD was prepared for the property and approved by MNCPPC on December 15, 2021. The NRI/FSD denotes discrete forest areas on the site. The Applicant has designed the project to protect the existing environmental features to the extent practicable. Applicant has submitted a Preliminary Forest Conservation Plan. The Property contains no protected soils,
endangered species or other natural features not mentioned above that would impact the development.
No streams, stream valley buffers or wetlands or 100-year floodplain areas will be impacted.

## Stormwater Management

The project will comply with the requirements of Chapter 19 of the Montgomery County Code. Because a project will result in more than $5,000 \mathrm{sq}$. ft. of disturbance, the Applicant prepared a Stormwater Management Concept Plan. The Applicant has submitted a stormwater narrative and is filing a Stormwater Management Concept Plan in connection with this application. In accordance with MDE Stormwater Management Regulations, the Property will incorporate bio-retention planters and facilities to implement Environmental Site Design practices to the maximum extent practicable. The Property is not in a Special Protection Area, so no separate water quality monitoring plan is required. A Sediment and Erosion Control Plan will be submitted to DPS for approval prior to commencement of construction.

# Montgomery County Planning Board 

THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION
MCPB No. 23-018
Pre-Preliminary Plan No. 720220020
Tregoning Property
Date of Hearing: February 23, 2023

## RESOLUTION

WHEREAS, under Montgomery County Code Chapter 50, the Montgomery County Planning Board is authorized to review preliminary plan applications; and

WHEREAS, on August 24, 2022, Elm Street Development ("Applicant") filed an application requesting a binding decision by the Planning Board on the issues of the Hoffman Drive connection, the off-site connection to Damascus Recreational Park, and the location and distribution of MPDUs, located on Kings Valley Road, west of Preakness Drive ("Subject Property"), in the Goshen Policy Area and 1994 Clarksburg Master Plan \& Hyattstown Special Study Area ("Master Plan") area; and

WHEREAS, Applicant's application was designated Pre-Preliminary Plan No. 720220020, Tregoning Property ("Pre-Preliminary Plan" or "Application"); and

WHEREAS, following review and analysis of the Application by Planning Board staff ("Staff") and other governmental agencies, Staff issued a memorandum to the Planning Board, dated February 13, 2023, providing its analysis and recommendation for approval of the Application, subject to certain conditions ("Staff Report"); and

WHEREAS, on February 23, 2023, the Planning Board held a public hearing on the Application and voted to approve the Application subject to conditions, on the motion of Commissioner Hill, seconded by Commissioner Branson, with a vote of 5.0 ; Chair Zyontz, Commissioners Branson, Hill, Piñero and Presley voting in favor..

NOW, THEREFORE, BE IT RESOLVED that the Planning Board APPROVES Pre-Preliminary Plan No. 720220020 and supports the submission of preliminary plan and site plan applications that, at a minimum, address the following recommendations on the issues of the Hoffman Drive connection and the location and distribution of MPDUs on the Subject Property. The Planning Board supports the Hoffman Drive connection and the location and distribution of MPDUs. The Planning Board reviewed in detail the issue of a road connection to Hoffman Drive and considered opposition by some area residents and by the Applicant. The Planning Board concluded that an internal road connection is required under the Subdivision Regulations and applicable Master Plan guidelines, but also recognized the community concerns about potential cut through traffic. The Applicant presented an option for connecting Hoffman Drive that

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Approved as to
Legal Sufficiency: /s/ Matthew T. Mills
M-NCPPC Legal Department

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Tregoning Property
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would discourage cut through traffic, but which would also provide a through street connection. Based on the Planning Board's request, the Applicant will evaluate at least one additional alternative alignment that would provide a direct route from Maryland 27 to Kings Valley Road in the Preliminary Plan submission at which time the Planning Board will consider the potential impacts of this alternative design with respect to cut through traffic, site grading, reduction in the number of housing units on the property, forest impact and sewer engineering. The Planning Board supports the location and distribution of MPDUs as duplex and triplex units, which would resemble single family detached units in terms of massing and architecture. The Planning Board did not support the proposed off-site connection, as a shared-use path along Kings Valley Road, to Damascus Recreational Park, but recognizes the limits of any developer obligations to construct or pay for the side path extension based on right-of-way constraints along Kings Valley Road, engineering and construction issues based on topography and farm crops, and the reasonableness and proportionality of the cost based on provisions in the Subdivision Regulations, 2020-2024 Growth and infrastructure Policy, Local Area Transportation Review Guidelines, and recently approved policy guidance on construction and fee-in-lieu for frontage improvements. Staff and the Applicant will review additional options, including a more direct connection to Damascus Park, crossing Kings Valley Road near the southern corner of the Subject Property, subject to the following conditions: ${ }^{1}$

1. Hoffman Drive Connection - The Applicant must provide an extension of existing Hoffman Drive as a public road from the existing terminus point through the Subject Property to Kings Valley Road to accommodate full vehicular and multimodal movement. The Applicant must provide at least one alignment alternative to illustrate a connection directly to Preakness Drive in addition to an alternative to connect to proposed internal Street C.
2. Road Dedication - The Preliminary Plan shall provide adequate right-of-way dedication to support all public roads and facilities as required by the Complete Streets Design Guidelines within the Subject Property.
3. A multimodal transportation study may be required; the subsequent application is subject to the 2022 LATR guidelines.
4. The Planning Board has reviewed and accepts the recommendations of the Montgomery County Department of Transportation ("MCDOT") in its letter dated January 13, 2023, and incorporates them as conditions of the Pre-Preliminary Plan approval. The Applicant must comply with each of the recommendations in
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Pre-Preliminary Plan No. 720220020
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the letter, which may be amended by MCDOT if the amendment does not conflict with any other conditions of the Pre-Preliminary Plan approval.
5. The Applicant shall address layout and design related comments provided by Planning Staff at Preliminary Plan and Site Plan. Sight distance evaluations of proposed public access points for proposed roads on Kings Valley Road will be reviewed and must be addressed as part of the subsequent plan reviews.
6. The Applicant must provide MPDUs as duplex or triplex units that closely resemble single family detached units in terms of massing and architecture, dispersed throughout the Subject Property.

BE IT FURTHER RESOLVED that having considered the recommendations of its Staff as presented at the hearing and as set forth in the Staff Report, the Board hereby adopts and incorporates said Staff Report by reference.

BE IT FURTHER RESOLVED that this Pre-Preliminary Plan binding review will remain valid for 90 days from the date of mailing of the Board resolution for the PrePreliminary Plan. The Applicant must file a Preliminary Plan application within this time period in order for the approval not to expire under Section 50.5.2.C.3.a; and

BE IT FURTHER RESOLVED that this Resolution constitutes the written opinip of the Board in this matter, and the date of this Resolution is MAR 32023 (which is the date that this Resolution is mailed to all parties of record); and

BE IT FURTHER RESOLVED that any party authorized by law to take an administrative appeal must initiate such an appeal within thirty days of the date of this Resolution, consistent with the procedural rules for the judicial review of administrative agency decisions in Circuit Court (Rule 7-203, Maryland Rules).

## CERTIFICATION

This is to certify that the foregoing is a true and correct copy of a resolution adopted by the Montgomery County Planning Board of The Maryland-National Capital Park and Planning Commission on motion of Commissioner Pinero, seconded by Commissioner Branson, with a vote of $5 \mathbf{5 - 0}$; Chair Zyontz, Vice Chair Presley, and Commissioners Branson, Hill, and Pinero, voting in favor of the motion, at its regular meeting held on Thursday, March 2, 2023, in Wheaton, Maryland and via video conference.


Montgomery County Planning Board

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Tregoning Property, Pre-Preliminary Plan No.



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2. Road Dedication - The Preliminary Plan shall provide adequate right-of-way dedication to support all public roads and facilities as required by the Complete Streets Design Guidelines within the Subject Property.
3. A multimodal transportation study may be required; the subsequent application is subject to the 2022 LATR guidelines.
4. The Planning Board has reviewed and accepts the recommendations of the Montgomery County Department of Transportation ("MCDOT") in its letter dated January 13, 2023, and incorporates them as conditions of the Pre-Preliminary Plan approval. The Applicant must comply with each of the recommendations in
[^2]MCPB No. 23-018
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Tregoning Property, Pre-Preliminary Plan No.

DEPARTMENT OF TRANSPORTATION
Marc Elrich
County Executive

Christopher R. Conklin
Director

October 24, 2023

Mr. Jeffrey Server, Planner III
Upcounty Planning Division
The Maryland-National Capital
Park \& Planning Commission (M-NCPPC)
2425 Reedie Drive,
Wheaton, MD 20902
RE: Design Exception, Preliminary Plan, and
Traffic Impact Study (TIS) Letter
Preliminary Plan No. 120230120
Tregoning Property
Dear Mr. Server:

We have completed our review of the Design Exception waiver uploaded to eplans on August 3, 2023, the revised Preliminary Plan uploaded to eplans on August 22, 2023, and the TIS dated May 05, 2023. A previous Preliminary Plan was reviewed by the Development Review Committee at its July 18, 2023, meeting. We recommend approval of the plan subject to the following comments:

## Design Exception Waiver:

1. Applicant's request: The applicant requests that the Planning Board utilize Section 50.4.3.E.2.a of the County Code to allow for 50 -feet right-of-way (ROW) for unnamed streets within the Tregoning Property (specifically Street 'A', Street 'B', and Street 'C'). These 50 -feet ROW would accommodate the following cross section:

- 2-10.5-ft travel lanes (21-ft of paving)
- 2-6-ft grass panels
- 2-6-ft sidewalks (one on each side of the street)
- 2-2-ft maintenance buffers on each side of the street.

MCDOT Response: We recommend the Planning Board approve the reduced ROW request for Street ' $A$ ', Street ' $B$ ', and Street ' $C$ ' as shown on the preliminary plan. These proposed public streets will be classified as Neighborhood Streets and per Montgomery County code 49-32(c), need a minimum of 60 -ft ROW. However, the property is zoned RE-1, which requires a minimum of 9,000 square foot lot and a 35 -foot front yard setback from the public street. A 35 -foot setback is not

## Office of the Director

101 Monroe Street $10^{\text {th }}$ Floor $\cdot$ Rockville Maryland 20850 $\cdot 240-777-7170 \cdot 240-777-7178$ FAX www.montgomerycountymd.gov
standard with most developments. The reduction in ROW width is necessary to maintain an efficient lot layout and reduce the overall footprint of the project while maintaining zoning setback requirements. All roads will continue to operate safely and efficiently for emergency access, vehicle travel, and pedestrian movement. All road features - travel lanes, sidewalks, curbs, gutters, and tree panels will be included and meet current standards. The reduction in ROW space is largely gained through placement of limited stormwater features outside of the ROW in private easement areas, as well as the reduction of most street parking. However, this should not be understood to set future precedent for development applications.

## Significant Preliminary Pan Comments

## 1. Hoffman Drive:

a. The following items shall be revised prior to the certification of the preliminary plan based on the applicant's letter and additional documents dated October 17, 2023:
i. The proposed extension of the roadway is a closed section roadway, and the existing portion is an open section roadway. STA. $10+50+/-$ is the transition area from an open section roadway to closed section roadway. We agree with the concept provided in Sheet 21-RG-120230120 by removing the existing temporary turnaround, extending the proposed curb \& gutter and providing a curb cut for the runoff to drain into the existing swale. At the permit stage the applicant shall work with the Department of Permitting Services (DPS) for the final details.
ii. Provide a roadway cross section for the closed section of Hoffman Drive.
b. At the right-of-way permit stage, the applicant shall work with DPS for the proposed sidewalk connection and termination.
2. Street ' $A$ ', ' $B$ ' and ' $C$ ': We agree with the proposed roadways for the following reasons:
a. If the reduced ROW is approved by the Planning Board, the proposed roadways shall be per the cross section as mentioned above in Design Exception Waiver Section. If the Planning Board does not approve the waiver, then the plans will need to be revised prior to the certification of the preliminary plan.
b. The minimum horizontal centerline radius of $150-\mathrm{ft}$ is provided for all the proposed roadways as per the Montgomery County Code 50(4.3)(E)(2)(g).
c. Per the Grade Establishment Plan Street 'B' has reverse curves (Curves C3 \& C4) without a tangent between them. The Montgomery County Code 50(4.3)(E)(2)(g) allows reverse curves without a tangent for Neighborhood Streets.
d. Sheets- 32-Street A-GEP \& 32-Street B-GEP: Prior to the certification of the preliminary plan, the Grade Establishment plan should show how the proposed grades are tied into the existing grades.
e. The proposed street termination shall meet the Montgomery County standard MC223.02.

## 3. Kings Valley Road:

a. At the right-of-way permit stage, the applicant shall work with DPS for the proposed sidewalk connection and termination.
b. Prior to Certification of the preliminary plan the following shall be addressed:
i. The plans show a proposed sidewalk in the right-of-way and in a Public Improvement Easement (PIE). The letter and the additional documents submitted on October 17, 2023, show the proposed sidewalk in the right-of-way; therefore, a PIE is not needed.
ii. We strongly recommend that the proposed right-of-way /property line should match the AT\&T easement line instead of a $1-\mathrm{ft}+/-$ gap between which is unusable.
iii. Since a Public Utility Easement (PUE) is not provided, please provide a letter from the utility companies that a PUE is not required, and the ROW will not be utilized for the proposed dry utilities. If the applicant can't obtain approval, then they will need to provide a 10 -foot-wide PUE along all street frontages. The PUE would need to be graded out at a maximum 4:1 slope.
iv. The plans should include the cross sections starting at the edge of pavement and going out with a minimum 5 - ft grass shoulder, a swale with a $2-\mathrm{ft}$ flat bottom, a minimum 8 -ft asphalt sidepath and a minimum 1-ft buffer at the following locations:

- North of Street ' C '/Glade Valley Terrace.
- Between Street 'C'/Glade Spring Terrace and Street 'A'/ Preakness Drive.
- South of Street 'A'/ Preakness Drive.

4. Prior to recordation of the plat, the applicant should provide a letter from AT\&T acknowledging that the portion of existing easement in the proposed Hoffman Road extension and along Kings Valley Road at the intersection of proposed Street ' $A$ ' and Street ' $B$ ' are subject to a subordination agreement.

## 5. Sight Distance:

a. Street 'C' \& Street ' $A$ ': The sight distance of 300 - ft is approved per the $85^{\text {th }}$ percentile speed of 38 mph recorded as part of the TIS. Attached the certified sight distance form with this letter.
b. The line of sight for the proposed driveways and roadways should not be blocked by any proposed obstructions such as trees, street light poles or traffic signs. At the permit
stage, the applicant should work with DPS to make the necessary modifications to the locations of the items mentioned above to meet the sight distance requirements for the proposed driveways and roadways.

## 6. Storm Drain Analysis:

a. Prior to the certification of the preliminary plan, please update the storm drain report to include the distance to the closest public storm drain system for all study points from the edge of the property to which the site drains. If the distance to the public storm drain system is less than 500 -ft the existing system should be analyzed per the Montgomery County Drainage Manual. If the distance is more than $500-\mathrm{ft}$ then the study is approved as long as the SWM is approved by DPS. The applicant will be responsible for any improvement as required by DPS at the permit stage if the existing outfall is found to be inadequate per this condition.

## Standard Plan Review Comments

1. All Planning Board Opinions relating to this plan or any subsequent revision, project plans or site plans should be submitted to the DPS in the package for record plats, storm drain, grading or paving plans, or application for access permit. Include this letter and all other correspondence from this department.
2. The proposed driveways shall meet MC 301.01.
3. The proposed driveways to the proposed houses shall comply with the following construction policy as listed in the link below:
https://www.montgomerycountymd.gov/DPS/Resources/Files/Land Development/Driveway\%20C onstruction\%20Permit\%20Policy\%20Guidelines.pdf
4. Ensure all driveways have a minimum of $20^{\prime}$ in length between the garage door and the nearest edge of the sidewalk.
5. Design all access points and alleys to be at-grade with the sidewalk, dropping down to street level between the sidewalk and roadway. Driveway aprons should be provided for all alleys.
6. We recommend proposed parking within the public streets (if provided) should be 35 feet away from the intersections with proper traffic signs per Montgomery County Code 31-17.
7. Permanent structures such as steps, stoops, walls etc. are not allowed in the public ROW.
8. A 10-PUE is required along all street frontages as shown in the plans (except for Kings Valley Road, see Significant Preliminary Pan Comment \#3b(iii) above).
9. Relocation of utilities along existing roads to accommodate the required roadway improvements shall be the responsibility of the applicant.

Mr. Jeffery Server
Preliminary Plan No. 120230120
October 24, 2023
Page 5
10. The owner will be required to submit a recorded covenant for the operation and maintenance of private streets, storm drain systems, and/or open space areas prior to DPS approval of the record plat. The deed reference for this document is to be provided on the record plat.
11. Trees in the County ROW - spacing and species to be in accordance with the applicable MCDOT standards. Tree planning within the public ROW must be coordinated with DPS ROW Plan Review Section.
12. Erosion and sediment control measures as required by Section $50-35$ (j) and on-site stormwater management where applicable shall be provided by the Developer (at no cost to the County) at such locations deemed necessary by MCDPS and will comply with their specifications. Erosion and sediment control measures are to be built prior to construction of streets, houses and/or site grading and are to remain in operation (including maintenance) as long as deemed necessary by MCDPS.
13. Enclosed storm drainage and/or engineered channel (in accordance with the MCDOT Storm Drain Design Criteria) within the County ROW and all drainage easements.
14. Posting of the ROW permit bond is a prerequisite to DPS approval of the record plat. The ROW permit will include, but not necessarily be limited to, the following improvements:
a. Street grading, paving, curbs and gutters, sidewalks and handicap ramps (if any), storm drainage and appurtenances, street lights and street trees along Street ' $A$ '.
b. Street grading, paving, curbs and gutters, sidewalks and handicap ramps (if any), storm drainage and appurtenances, street lights and street trees along Street 'B'.
c. Street grading, paving, curbs and gutters, sidewalks and handicap ramps (if any), storm drainage and appurtenances, street lights and street trees along Street ' $C$ '.
d. Street grading, paving, curbs and gutters, sidewalks and handicap ramps (if any), storm drainage and appurtenances, street lights and street trees along Hoffman Road Extension.
e. Shared use path and handicap ramps (if any), drainage ditch, storm drainage and appurtenances, street lights and street trees along Kings Valley Road.
f. Permanent monuments and property line markers, as required by Section 50-24(e) of the Subdivision Regulations.

## TIS Comments

1. Figure 3 and Figure 7 show no additional traffic on Hoffman Drive from MD-27, which we believe is not realistic. Future residents of this site coming from I-270 and MD-27 will turn right to get to the site and will turn left from the site onto MD-27 to access I-270. We don't think vehicles will go around and access the site from Kings Valley. Please add vehicle movements to Hoffman Drive.

Mr. Jeffery Server
Preliminary Plan No. 120230120
October 24, 2023
Page 6

We defer to Maryland State Highway Administration (MDSHA) for any improvements to the intersection of MD-27 and Hoffman Drive.
2. The exhibits showing the site layout are not consistent and do not match the current layout with Hoffman Road extended. Please provide new layouts in the revised TIS.
3. There is inadequate width for parking on the new streets; therefore, "No Parking" signs will be posted along all public streets.
4. The applicant should provide a table with each off-site improvement and their costs with recommendations. A written justification shall be provided if the applicant is not installing the offsite improvements. Based on the information provided, M-NCPPC and MCDOT will approve or deny the off-site improvement requirements. If determined that none of the off-site improvements are feasible, the applicant will pay a fee-in-lieu equivalent to the proportionality cap, with the payment indexed to the Federal Highway Administration's National Highway Construction Cost Index from the mailing date of the Planning Board resolution to the date of application for the first above-grade building permit or ROW permit (whichever comes first).
5. Provide Street Lighting for the NW \& SW corners of the following intersections:
a. Kings Valley Road \& Preakness Drive
b. Kings Valley Road \& Glade Valley Terrace

Thank you for the opportunity to review this preliminary plan. If you have any questions or comments regarding this letter, please contact Mr. Deepak Somarajan, our Development Review Engineer for this project at deepak.somarajan@montgomerycountymd.gov or at (240) 777-2194.

Sincerely,


Deepak Somarajan, Engineer III Development Review Team
Office to Transportation Policy

SharePointlteams\DOT\Director's OfficelDevelopment ReviewlDeepak\Preliminary Plan\120230120-Tregoning PropertylLetterl 120230120-Tregoning Property-MCDOT Prelim-Design Exception-TIS Itr

Enclosures: Sight Distance Form
cc: Sharepoint Correspondence Folder FY'24

Mr. Jeffery Server
Preliminary Plan No. 120230120
October 24, 2023
Page 7

| cc-e: | Kate Kubit |
| :--- | :--- | Clarksburg Village Investments

# MONTGOMERY COUNTY, MARYLAND DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION DEPARTMENT OF PERMITTING SERVICES 

## SIGHT DISTANCE EVALUATION



## GUIDELINES



## ENGINEER/ SURVEYOR CERTIFICATE

I hereby certify that this information is accurate and was collected in accordance with these guidelines.


10/11/2023
Signature Haitham Hijazi
Date

Montgomery County Review:
A Approved
$\square$ Disapproved:
By: Decpate Somarajan
Date: $10 / 18 / 2023$

## 19199

PLS/P.E. MD Reg. No.

MONTGOMERY COUNTY, MARYLAND
DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION DEPARTMENT OF PERMITTING SERVICES

## SIGHT DISTANCE EVALUATION ATTACHMENT




KINGS ${ }^{\text {SIGHT DISTANCE PLLAN }}$ VALEY TREGONING PROPERTY DAMASCUS ( 12 th) ELECTION DISTRICT MONTGOMERY
SCALE: HOR.
N $=30^{\circ}$
OUNTY sale: $\begin{aligned} & \text { Hor. } \\ & \text { VERT. } \\ & 10=30 \\ & 10=3\end{aligned}$ Enamerers derficatoon

 and
CP


${ }^{\text {VERTICAL SCALE }}$




Marc Elrich<br>County Executive

Rabbiah Sabbakhan<br>Director

October 30, 2023
Mr. Amir Arabi
Charles P. Johnson \& Associates, Inc.
1751 Elton Road, Suite 300
Silver Spring, MD 20903

| Re: | COMBINED STORMWATER MANAGEMENT |
| :--- | :--- |
|  | CONCEPT/SITE DEVELOPMENT |
|  | STORMWATER MANAGEMENT PLAN for |
|  | Tregoning Property |
|  | Preliminary Plan \#: 120230120 |
| SM File \#: 288354 |  |
| Tract Size: LSC 653,902 sf/15.01 Ac |  |
| GSC 90,543 sf/2.08 Ac. |  |
| Zone: RE-1 |  |
| Total Concept Area: LSC 499,580 sf/11.47 Ac. |  |
| GSC 116,458 sf/2.67 Ac. |  |
| Lots/Block: Lots 1-44 |  |
| Parcel(s): P104 |  |
| Watershed: Little Seneca Creek/IV, Great |  |
| Seneca Creek/III |  |
| Redevelopment (Yes/No): No |  |

Dear Mr. Arabi:

Based on a review by the Department of Permitting Services Review Staff, the stormwater management concept for the above-mentioned site is acceptable. The plan proposes to meet required stormwater management goals via the use of micro-bioretention and a bio-swale.

The following items will need to be addressed during the detailed sediment control/stormwater management plan stage:

1. A detailed review of the stormwater management computations will occur at the time of detailed plan review.
2. An engineered sediment control plan must be submitted for this project.
3. All filtration media for manufactured best management practices, whether for new development or redevelopment, must consist of MDE approved material.
4. At the final design stage, required and provided ESD to the MEP in the public right-of-way, including the Kings Valley Road 8-foot path, must be calculated separately from the private lots. ESD provided in the right-of-way must meet or exceed the target and cannot be compensated for on the lots. The use of a bio-swale in the public right-of-way will be fully evaluated at the final design stage.

2425 Reedie Drive, 7th Floor, Wheaton, Maryland 20902 | 240-777-0311 www.montgomerycountymd.gov/permittingservices

October 30, 2023
Page 2 of 2
5. At the final design stage, investigate moving micro-bioretention \#1, located north of Hoffman Drive, to the open space parcel south of Hoffman Drive.
6. The micro-bioretention devices located along Kings Valley Road must be accessible from Kings Valley Road.

This list may not be all-inclusive and may change based on available information at the time.
Payment of a stormwater management contribution in accordance with Section 2 of the Stormwater Management Regulation 4-90 is not required.

This letter must appear on the sediment control/stormwater management plan at its initial submittal. The concept approval is based on all stormwater management structures being located outside of the Public Utility Easement, the Public Improvement Easement, and the Public Right of Way unless specifically approved on the concept plan. Any divergence from the information provided to this office; or additional information received during the development process; or a change in an applicable Executive Regulation may constitute grounds to rescind or amend any approval actions taken, and to reevaluate the site for additional or amended stormwater management requirements. If there are subsequent additions or modifications to the development, a separate concept request shall be required.

If you have any questions regarding these actions, please feel free to contact Sherry Mitchell at 240-777-5206 or sherryl.mitchell@montgomerycountymd.gov.

## Sincerely,

Mark Theridge
Mark Etheridge, Manager
Water Resources Section
Division of Land Development Services
cc: Neil Braunstein
SM File \# 288354

LSC
ESD: Required/Provided 27,310 cf / 27,618 cf
PE: Target/Achieved: 1.60"/1.62"
STRUCTURAL: N/A cf
WAIVED: N/A cf.
GSC
ESD: Required/Provided 3,261 cf / 3,326 cf
PE: Target/Achieved: 1.20"/1.22"
STRUCTURAL: N/A cf
WAIVED: N/A cf.

October 2, 2023

Mr. Jeffrey M. Server<br>Montgomery County Planning Department<br>2425 Reedie Drive, 13th Floor<br>Wheaton, MD 20902

## Re: Tregoning Property

Preliminary Plan \# 120230120
Dear Mr. Server:
The Montgomery County Department of Housing and Community Affairs (DHCA) has reviewed the above referenced plan and recommends Approval for up to forty-six (46) units including up to six (6) (12.5\%) MPDUs in Clarksburg, Maryland.

An Agreement to Build must be submitted to, reviewed, and executed by DHCA before building permits are obtained from the Department of Permitting Services (DPS). The final MPDU layouts will need to be approved by DHCA at the MPDU Agreement to Build stage.

Sincerely,


Adrian Hopson, Planning Specialist III Affordable Housing Programs Section

|  | Division of Housing |  |
| :---: | :---: | :---: |
| Affordable Housing | Landlord Tenant Affairs | Multifamily Housing |

Mr. Wes Guckert, PTP
The Traffic Group, Inc.
9900 Franklin Square Drive, Suite H
Baltimore, Maryland 21236
Dear Mr. Guckert,
Thank you for the opportunity to review the First (1st) TIA Submittal (dated May 5, 2023) prepared by The Traffic Group, Inc. and submitted for the proposed Tregoning Property development (SHA Project No. 23APMO017XX) located on MD 27 (Ridge Road) at Mile point $\mathbf{3 . 6 6}$ in Montgomery County, Maryland.

The Maryland State Highway Administration (SHA) has reviewed the TIA and are pleased to respond.

- The site is proposed to be developed with 38 single family homes and 6 townhomes.
- Access is proposed from two entrances to Kings Valley Road and a connection to Hoffman Drive.

Based on the information provided, please address the following comments in a point-by-point response:

## Regional and Intermodal Planning Division (RIPD) Comments (Provided by Darren Bean):

Neither the Montgomery County CTP 2023-2028 and HNI have any projects impacting the proposed development. RIPD has no comments.

## District 3's Engineering Systems Team (EST) Comments (Provided by Dorey Uong):

EST has reviewed \#23-AP-MO-017-xx (Tregoning Property) TIS Review and offer the following comments:

1. There are no active or proposed projects within the proposed study limits.
2. The results of the analysis indicate that development will drastically increase pedestrian and vehicular traffic columns. Considering the proposed designed changes will assist in the flow and safety of both pedestrians and motorist. We defer to District Traffic to ensure the changes meet the LOS, lane use and traffic operation.
3. Utility coordination and relocation will be required for overhead utilities.

Wes Guckert, PTP
SHA Tracking No.: 23APMO017XX
Page 2 of 3
September 26, 2023

If you have any questions regarding the above comments, please do not hesitate to contact Dionna Tunstall at: DTunstall@mdot.maryland.gov

## Travel Forecasting \& Analysis Division (TFAD) Comments (Provided by Scott Holcomb):

1. Page 6 of the report notes that the posted speed for MD 27 is 40 mph , however it should be noted that there is a school speed zone and curve warning signs with lower speeds in this vicinity. This information should be added if resubmitting the report.
2. The trip generation formulas/rates and directional distributions used in Tables 1 for the background sites appear to be slightly different from the ITE trip generation manual. This will not significantly impact results and should only be checked and revised if resubmitting the report.

## Traffic Development \& Support Division (TDSD) Comments (Provided by Obianuju Ani):

We have completed our review of the subject project. We have no comments at this time.

## District 3 Traffic Comments (Provided by Alvin Powell):

We have completed a review of the traffic impact study for the Tregoning Property project in Montgomery County. All capacity and queuing concerns have been adequately addressed. We offer no further comments at this time.

If you have any questions, please contact Alvin Powell at apowell@primeeng.com

The SHA concurs with the report findings for this project as currently proposed and will not require the submission of any additional traffic analyses. However, an access permit will be required for all construction within the SHA right of way. Please submit electronically (via our online system https://mdotsha.force.com/accesspermit) the proposed improvement plans (including a set of hydraulic plans and computations) and all supporting documentation to the Access Management Division. Please reference the SHA tracking number on any future submissions. Please keep in mind that you can view the reviewer and project status via SHA Access Management Division web page at https://www.roads.maryland.gov/mdotsha/pages/amd.aspx.

Please note, if this project has not obtained an SHA access permit and begun construction of the required improvements within five (5) years of this approval, extension of the permit shall be subject to the submission of an updated traffic impact analysis in order for SHA to determine whether the proposed improvements remain valid or if additional improvements will be required of the development.

Wes Guckert, PTP
SHA Tracking No.: 23APMO017XX
Page 3 of 3
September 26, 2023

If you have any questions, or require additional information, please contact Mr. Kwesi
Woodroffe at 301-513-7347, by using our toll free number (in Maryland only) at 1-800-749-
0737 (x7347), or via email at kwoodroffe@mdot.maryland.gov or
shaamdpermits@mdot.maryland.gov.
Sincerely,

for Derek Gunn, P.E.
District Engineer, SHA, District 3
DG/eui
cc: Obianuju Ani, SHA - TDSD
Peter Campanides, SHA - District 3 Traffic
Rola Daher, SHA - TFAD
Robert Owolabi, SHA - District 3 Traffic
Darren Bean, SHA - RIPD
Thomasina Saxon, SHA - RIPD
Obianuju Ani, SHA - TDSD
William Stroud, SHA - TDSD
Scott Holcomb, SHA - TFAD
Dorey Uong, SHA - EST
Kwesi Woodroffe, SHA - District 3 Regional Engineer.
Urooj Zafari, SHA - EST

Server, Jeffrey

| From: | Mary Gene Martin [mgkm_39@aol.com](mailto:mgkm_39@aol.com) |
| :--- | :--- |
| Sent: | Friday, June 30, 2023 1:23 PM |
| To: | Server, Jeffrey |
| Cc: | Mary Gene Martin |
| Subject: | Tregoning Property in Damascus |
|  |  |
| Follow Up Flag: | Follow up |
| Flag Status: | Flagged |

[EXTERNAL EMAIL] Exercise caution when opening attachments, clicking links, or responding.
Hello Jeff,
Our Sweepstakes HOA (SHOA) community just received a postcard informing us of a public meeting by Elm Street Development regarding the Tregoning Property on Kings Valley Road on which will be held on July 11, 2023. We also have observed that the proposed development and conservation plans are on the Planning Board's docket possibly on July 18, 2023. I am writing you to inquire what, if any, actions the County has taken regarding this proposal, and what, if any, additional information has been communicated to the Planning Board since the last public hearing.

Also, we would like to invite you to come talk with the community to discuss the proceedings.

As we are the community that is most affected by this proposed development, we wish to keep abreast of the developments.

Thank you in advance for your assistance in this matter.
V/R,
Mary Gene Martin
Vice-President, SHOA
301-518-8499

| From: | David Obenland [dobenland@gmail.com](mailto:dobenland@gmail.com) |
| :--- | :--- |
| Sent: | Friday, September 29, 2023 11:39 AM |
| To: | Server, Jeffrey |
| Cc: | gpierceski@verizon.net |
| Subject: | Fwd: Elm Street Development |
|  |  |
| Follow Up Flag: | Follow up |
| Flag Status: | Flagged |

[EXTERNAL EMAIL] Exercise caution when opening attachments, clicking links, or responding.

Mr. Server,
A resident of the Sweepstakes Community sent me this email asking me to forward it to the county for inclusion in the record concerning the proposed development of the Tregoning Property

Plan Number 120230120
Thank you
---------- Forwarded message
From: gpierceski@verizon.net [gpierceski@verizon.net](mailto:gpierceski@verizon.net)
Date: Sat, Jul 29, 2023 at 4:50 PM
Subject: Elm Street Development
To: dobenland@gmail.com [dobenland@gmail.com](mailto:dobenland@gmail.com)
Cc: Bjssparks [bjssparks@verizon.net](mailto:bjssparks@verizon.net), Mary Gene Martin <mgkm 39@aol.com>, Al Eisel [faddle5444@aim.com](mailto:faddle5444@aim.com)

## Hi Dave,

My wife and I have been analyzing the Tregoning Property Development project this week. I have some important information to share with you. Note that I have a B.S. in Industrial Engineering as well as a M.S. in Industrial Administration, and worked as a draftsman while in college. My wife, Jean, has a BFA (Bachelor of Fine Arts) degree in Interior Design from Syracuse University, graduating top of her Interior Design class, and has worked for a number of Architects both as an Interior Designer and as an Architectural Draftsman.

This week I measured the width of Preakness Drive in front of my house and found out the width of the proposed roads for the Tregoning Property project from the drawing mentioned below. Using my 100 foot measuring tape, I found out that the width of Preakness Drive in front of my house is $24^{\prime}$ 4". Looking at the Tregoning Property Composite Preliminary Plan 120230120 dated May 2022, the new road widths, as printed on the drawing are only 20 ' versus the 24 ' 3 " road width on Preakness Dr. Note that the proposed extension of Hoffman Rd. is also 20' wide. Also note that the original PrePreliminary drawing for the Tregoning Property did not provide dimensions of road widths, etc. so this issue was not visible when we received the earlier drawings. Also the copy of the drawing we originally received had been extremely reduced from the drawing's original size, preventing accurate dimensions from being obtained. It is interesting to note that 5 foot wide sidewalks are being
provided on both sides of Streets A, B, and C, compared with 3' sidewalks that have been used in the past in some locations. I would like to find out if Montgomery County now requires 5 foot wide side walks. Note that sidewalks are not provided on the extension of Hoffman Drive nor on a non named alley nor on a non named road that is found east of the Hoffman Road Extension starting at the intersection of Street C. These sidewalk practices do not appear to be consistent. Note that the five foot sidewalks use up 10 feet of width for these three roads. We need to have Montgomery County provide us the rules Montgomery County has for road and sidewalk widths in new developments, so we can compare these allowed widths to what is being proposed for this new development. If sidewalks were reduced to 3', 4 additional feet could be used for these roads making them safer and hopefully allowing for parking on the roads in this proposed development. Note that the extension of Hoffman Rd. is also 20' wide.

I was struck by a comment that Kate Kubik made at our last "Informative" meeting about parking in the. As you recall, She told us that parking will not be allowed on the streets in this new development. I don't recall her stating the reason for no parking on the streets. I wonder if Montgomery County is preventing parking on the roads of this proposed development because of the narrow width planned for the proposed roads? This issue, to me, is a show stopper. If homeowners or visitors to homeowners in this new development are not allowed to park cars on the streets of this new development, they will surely park on Preakness Drive, especially on the first block at the northern end of Preakness DR. Neighbors on Preakness Drive do not want cars from this new development parking in front of their homes. This is a very upsetting issue for HOA members and residents in the first block of Preakness Dr. This issue needs to be discussed with Jeffrey Server by the highest level officer of our HOA to use the power of our HOA. If you would like, I could take part in a call to Jeffrey Server.

Since the homes in our HOA and the homes of Hoffman Drive are both impacted by the Tregoning Property Development project, I feel that our two neighborhoods should be working together for our common objectives. To that end I would like to talk to our neighbors on Hoffman Drive. A lady from Hoffman Drive has walked up to me after the second and third meetings. I discussed the plight with her that I thought home owners on Hoffman Drive face. She agreed with every point I made. Unfortunately, we did not exchange names, telephone numbers, nor email addresses. I would like to find this lady and continue our discussion of issues involving the Tregoning Property project. My neighbor, Bonnie Sparks, is an expert using the internet. I asked her if she could obtain a copy of the lists of people that have attended the three meetings called by Tregoning Property Development project. She told me she had seen these lists on the internet. Unfortunately when she went to access these documents on the internet, they were gone. Have you or any of your board members captured any of these documents. If so I would appreciate receiving a copy of these asap, so I can try to find the lady mentioned above.

I hope you find the information I have provided helpful. I look forward to receiving an email from you as soon as possible, hopefully providing me with a list of people attending the last two meetings. I also look forward to hearing about a meeting between Jeffrey Server and HOA officers, as mentioned above.

Your neighbor and HOA member,
George Pierce

Obenland Family
(David, Jeanne, Amanda, Jonathan)

| From: | David Obenland [dobenland@gmail.com](mailto:dobenland@gmail.com) |
| :--- | :--- |
| Sent: | Tuesday, October 31, 2023 6:12 PM |
| To: | Server, Jeffrey |
| Subject: | Tregoning Development Plan (120230120) |
| Attachments: | Tregoning Planning Board Letter - Final -bkp.docx |

[EXTERNAL EMAIL] Exercise caution when opening attachments, clicking links, or responding.

## Mr. Server

I would like to enter the attached document into the record regarding the Tregoning Property Development Plan. The document contains information about the development plan after reviewing both the preliminary meeting recording (one issue was not officially voted on and inconsistencies) and documentation submitted for the current review phase.

Once this document is entered into the record, do members of the Planning Board read them or do they get a summary of the content? I'm not sure how the process works.

Thank you for your time.

## --

David Obenland
24000 Jockey Club Terrace
Damascus MD 20872

## Development Density

The current plan is for 44 homes on approximately 17.8 acre lots. Based on what Elm Street states, the lot size will be 9,000 square feet, which they say is comparable to the lots in Sweepstakes HOA. This is not true. In fact, the average lot size in the Sweepstakes Community is 12.657 .85 Square Feet. This figure is supported by the data contained in Appendix A. Reference to this statement can be found at approximately the 6:48 (H:MM) minute mark of February 23, 2023 meeting recording.

## Bike Path

During the Pre-Preliminary meeting, the Interim Planning discussed this and other issues. At the conclusion of the discussion, the board never actually vote voted on this issue. They stated that they agreed with the discussion but never went through the official process of voting on the issue. Reference for this can be found at approximately the 6:52 (H:MM) minute mark of the February 23, 2023 meeting recording.

I would also like to point out some inconsistencies in the Statement of Justification document (https://eplans.montgomeryplanning.org/UFS/34165/109263/01-SOJ-120230120.pdf/01-SOJ120230120.pdf V2/01-SOJ-120230120.pdf).

- On page 3, under Board Review Items, the bike proposed foot path is listed as 1500 linear feet. Whereas on page 6 under the 2. Pre-Preliminary Plan: Connection to Damascus Park section, the foot path is listed as 1300 feet long.
- The applicant states the following. "There are no bicycle or pedestrian facilities elsewhere along Kings Valley Road." This is not true. There is an existing path along Kings Valley Road from Damascus Regional Park to the housing development bordered by Founders Way.

Further Justification to revisit this topic:

- The Planning Board Staff recommended a from the development to one of the entrances to the park after consulting with the Parks Department. As noted in the presentation, the terminus of this path would eventually connect to future pathway to Ovid Hazen Wells Park in Clarksburg when it's built. An attorney for Elm Street stated during the meeting that due to various regulations and codes, the developer was not required to build a path to create a safe walking/biking throughfare to the park. The attorney stated that building the path would cost up to $\$ 46,000$ per unit. Since the new development is slated for 44 units, the total cost of the requesting path would be $\$ 2,024,000$. The attorney also stated that all they would have to do is to "write a check" for $\$ 1,000,000$. Doing this shifts burden and any shortfall to the county. The $\$ 46,000$ figure that was presented was news to everyone in the meeting and no one on the Board asked how that number was determined. The Planning Board Staff was asked to provide justification of their recommendation along with testimony from a representative of the Parks Department stating how they came up with recommendation. The Parks Department representative indicated that they looked at other alternatives and were unable to find a better one than the one requested by the Planning Staff.
- Based Montgomery County's desire to make neighborhoods safer for pedestrians, it makes no sense not to include a way for residents of the new community to get to the park. There also
seems to be a desire develop the other portion of the property, located next to the proposed development, which the applicant states will be farmed for now. This is evidenced in a memorandum from the Montgomery County Executive dated August 27, 2018, (https://www.montgomerycountymd.gov/DEP/Resources/Files/downloads/ws/CR 18-1272transmittal.pdf).

Is this consistent with current effort of the county to became safer for bikers and pedestrians?
The Interim Board went against the recommendation of their staff and the Parks Department. In the future, how is this development going to be connected to the proposed pathway as stated in Clarksburg Master Plan? Without any right-of-way along Kings Valley, there is no place to put a walkway without getting some land from the current farm.

Numerous developments currently under construction in the Damascus area includes sidewalks that appear to go nowhere.

## Traffic Study

The Traffic study was done over a year ago and might not contain valid information since it was performed while some Covid restrictions/policies were still in place.

Reviewing the document, the Traffic Study was performed on or about May 15, 2022 and failed to account for situations causing additional traffic on Kings Valley as a result of activities held at Damascus Regional Park. Activities include private and Baseball events during the summer months and on weekends. The Traffic Study should include information gathered for summer weekends to fully understand the impact of the events. Recently, the Parks Department notified communities that they are plans to improve the park thus potently adding traffic that the original Traffic Study didn't account for. Current plans call for lighting two of the four fields and in the future lighting two of the Soccer field located in the back of the park. Damascus Recreational Park Athletic Field Lighting - Montgomery Parks

The Traffic study doesn't account for the Day Care facility located on the corner of Preakness and Santa Antia.

As noted in the Study, all areas around the proposed development are considered "Uncomfortable" due to the lack of sidewalks. Additionally, the note about "Kings Valley Road" related to the "Uncomfortable" rating (page 22 of the Traffic Study) indicates that some of the area is actively farmed. Although that is true at this time, there are plans in the future to develop the farmed area of the parcel. As referenced in a memorandum from the Montgomery County Executive dated August 27, 2018, (https://www.montgomerycountymd.gov/DEP/Resources/Files/downloads/ws/CR 18-1272transmittal.pdf) there are plans to develop the remaining land along Kings Valley. This should be also be considered when reviewing this plan.

Appendix A
Average Lot Size in Sweepstakes Community


## Data Detail

| Street Number | Street Name | Lot Size In SF |
| :---: | :---: | :---: |
| 24000 | Desert Wine Court | 13,302 |
| 24001 | Desert Wine Court | 14,203 |
| 24004 | Desert Wine Court | 14,919 |
| 24005 | Desert Wine Court | 14,943 |
| 24008 | Desert Wine Court | 13,061 |
| 24009 | Desert Wine Court | 11,702 |
| 24013 | Desert Wine Court | 15,030 |
| 24016 | Desert Wine Court | 15,575 |
| 24017 | Desert Wine Court | 11,012 |
| 24021 | Desert Wine Court | 12,474 |
| 24001 | Glade Valley Terrace | 15,832 |
| 24004 | Glade Valley Terrace | 9,223 |
| 24005 | Glade Valley Terrace | 13,369 |
| 24008 | Glade Valley Terrace | 9,474 |
| 24009 | Glade Valley Terrace | 16,700 |
| 24012 | Glade Valley Terrace | 10,523 |
| 24013 | Glade Valley Terrace | 15,030 |
| 24016 | Glade Valley Terrace | 9,406 |
| 24017 | Glade Valley Terrace | 20,762 |
| 24020 | Glade Valley Terrace | 9,200 |
| 24021 | Glade Valley Terrace | 16,252 |
| 24024 | Glade Valley Terrace | 8,855 |
| 24025 | Glade Valley Terrace | 15,296 |
| 24028 | Glade Valley Terrace | 9,200 |
| 24029 | Glade Valley Terrace | 13,597 |
| 24032 | Glade Valley Terrace | 8,970 |
| 24033 | Glade Valley Terrace | 13,767 |
| 24036 | Glade Valley Terrace | 9,551 |
| 24037 | Glade Valley Terrace | 13,767 |
| 24041 | Glade Valley Terrace | 14,583 |
| 10800 | Gulfstream Court | 10,855 |
| 10801 | Gulfstream Court | 15,697 |
| 10804 | Gulfstream Court | 13,011 |
| 10805 | Gulfstream Court | 10,709 |
| 10808 | Gulfstream Court | 15,192 |
| 10809 | Gulfstream Court | 13,514 |
| 10812 | Gulfstream Court | 21,211 |
| 10813 | Gulfstream Court | 20,111 |
| 10816 | Gulfstream Court | 29,683 |
| 23901 | Jockey Club Terrace | 18,597 |
| 23904 | Jockey Club Terrace | 15,202 |
| 23905 | Jockey Club Terrace | 15,517 |


| 23908 | Jockey Club Terrace | 11,289 |
| :---: | :---: | :---: |
| 23909 | Jockey Club Terrace | 12,708 |
| 23912 | Jockey Club Terrace | 11,436 |
| 23913 | Jockey Club Terrace | 11,967 |
| 23916 | Jockey Club Terrace | 10,031 |
| 23917 | Jockey Club Terrace | 13,804 |
| 23920 | Jockey Club Terrace | 8,898 |
| 23921 | Jockey Club Terrace | 13,418 |
| 23924 | Jockey Club Terrace | 10,777 |
| 23925 | Jockey Club Terrace | 12,185 |
| 23928 | Jockey Club Terrace | 16,346 |
| 23929 | Jockey Club Terrace | 13,773 |
| 23932 | Jockey Club Terrace | 12,339 |
| 24000 | Jockey Club Terrace | 12,275 |
| 24004 | Jockey Club Terrace | 12,037 |
| 24005 | Jockey Club Terrace | 10,257 |
| 24008 | Jockey Club Terrace | 9,771 |
| 24009 | Jockey Club Terrace | 12,395 |
| 24012 | Jockey Club Terrace | 10,462 |
| 24013 | Jockey Club Terrace | 10,789 |
| 24000 | Preakness Drive | 12,743 |
| 24001 | Preakness Drive | 16,021 |
| 24004 | Preakness Drive | 10,838 |
| 24005 | Preakness Drive | 10,140 |
| 24008 | Preakness Drive | 12,819 |
| 24009 | Preakness Drive | 10,031 |
| 24013 | Preakness Drive | 12,015 |
| 24016 | Preakness Drive | 11,873 |
| 24017 | Preakness Drive | 13,117 |
| 24020 | Preakness Drive | 11,042 |
| 24021 | Preakness Drive | 12,657 |
| 24024 | Preakness Drive | 9,375 |
| 24025 | Preakness Drive | 14,275 |
| 24028 | Preakness Drive | 10,625 |
| 24029 | Preakness Drive | 12,665 |
| 24032 | Preakness Drive | 10,000 |
| 24036 | Preakness Drive | 10,000 |
| 24039 | Preakness Drive | 11,716 |
| 24040 | Preakness Drive | 10,125 |
| 24044 | Preakness Drive | 10,072 |
| 24101 | Preakness Drive | 11,634 |
| 24104 | Preakness Drive | 10,421 |
| 24105 | Preakness Drive | 13,404 |
| 24108 | Preakness Drive | 10,167 |
| 24109 | Preakness Drive | 10,657 |
| 24112 | Preakness Drive | 12,735 |


| 24113 | Preakness Drive | 11,700 |
| :---: | :---: | :---: |
| 24117 | Preakness Drive | 11,700 |
| 24121 | Preakness Drive | 11,700 |
| 24125 | Preakness Drive | 11,700 |
| 24129 | Preakness Drive | 11,586 |
| 24133 | Preakness Drive | 11,784 |
| 24137 | Preakness Drive | 11,755 |
| 24141 | Preakness Drive | 11,755 |
| 24145 | Preakness Drive | 11,755 |
| 24149 | Preakness Drive | 11,755 |
| 24000 | Santa Anita Court | 20,038 |
| 24001 | Santa Anita Court | 20,835 |
| 24004 | Santa Anita Court | 14,643 |
| 24008 | Santa Anita Court | 13,503 |
| 24009 | Santa Anita Court | 11,265 |
| 24015 | Santa Anita Court | 10,882 |
| 24016 | Santa Anita Court | 13,712 |
| 24017 | Santa Anita Court | 13,289 |
| 24021 | Santa Anita Court | 13,038 |
| 24025 | Santa Anita Court | 9,104 |
| 10605 | Santa Anita Terrace | 10,322 |
| 10608 | Santa Anita Terrace | 12,602 |
| 10609 | Santa Anita Terrace | 11,127 |
| 10613 | Santa Anita Terrace | 10,830 |
| 10616 | Santa Anita Terrace | 13,042 |
| 10617 | Santa Anita Terrace | 10,844 |
| 10620 | Santa Anita Terrace | 15,760 |
| 10621 | Santa Anita Terrace | 11,239 |
| 10700 | Santa Anita Terrace | 10,303 |
| 10701 | Santa Anita Terrace | 11,310 |
| 10704 | Santa Anita Terrace | 9,737 |
| 10705 | Santa Anita Terrace | 12,793 |
| 10708 | Santa Anita Terrace | 10,858 |
| 10709 | Santa Anita Terrace | 12,846 |
| 10712 | Santa Anita Terrace | 9,902 |
| 10713 | Santa Anita Terrace | 13,500 |
| 10716 | Santa Anita Terrace | 10,077 |
| 10720 | Santa Anita Terrace | 14,649 |
| 10721 | Santa Anita Terrace | 13,269 |
| 10724 | Santa Anita Terrace | 13,475 |
| 10725 | Santa Anita Terrace | 10,374 |
| 10728 | Santa Anita Terrace | 15,291 |
| 10732 | Santa Anita Terrace | 15,965 |
| 10800 | Santa Anita Terrace | 10,476 |
| 10804 | Santa Anita Terrace | 10,351 |
| 10805 | Santa Anita Terrace | 12,180 |


| 10808 | Santa Anita Terrace | 11,128 |
| :---: | :---: | :---: |
| 10809 | Santa Anita Terrace | 12,212 |
| 10812 | Santa Anita Terrace | 10,429 |
| 10813 | Santa Anita Terrace | 11,082 |
| 10816 | Santa Anita Terrace | 10,593 |
| 10817 | Santa Anita Terrace | 10,363 |
| 10820 | Santa Anita Terrace | 11,518 |
| 10821 | Santa Anita Terrace | 10,140 |
| 10825 | Santa Anita Terrace | 11,991 |
| 24101 | Secreteriat Court | 10,738 |
| 24105 | Secreteriat Court | 11,700 |
| 24112 | Secreteriat Court | 21,945 |
| 24113 | Secreteriat Court | 12,030 |
| 24116 | Secreteriat Court | 16,307 |
| 24117 | Secreteriat Court | 12,933 |
| 24120 | Secreteriat Court | 19,666 |
| 24123 | Secreteriat Court | 12,817 |
| 10701 | Show Pony Place | 11,156 |
| 10704 | Show Pony Place | 10,478 |
| 10705 | Show Pony Place | 9,618 |
| 10708 | Show Pony Place | 13,305 |
| 10709 | Show Pony Place | 10,769 |
| 10713 | Show Pony Place | 14,144 |
| 10800 | Show Pony Place | 12,798 |
| 10804 | Show Pony Place | 12,624 |
| 10805 | Show Pony Place | 10,628 |
| 10808 | Show Pony Place | 13,292 |
| 10809 | Show Pony Place | 11,177 |
| 10813 | Show Pony Place | 10,950 |
| 10816 | Show Pony Place | 12,710 |
| 10820 | Show Pony Place | 11,260 |
| 10821 | Show Pony Place | 11,224 |
| 10824 | Show Pony Place | 11,964 |
| 10825 | Show Pony Place | 15,117 |
| 10828 | Show Pony Place | 12,395 |
| 10829 | Show Pony Place | 10,702 |
| 10904 | Show Pony Place | 12,729 |
| 10905 | Show Pony Place | 11,754 |
| 10908 | Show Pony Place | 16,337 |
| 10909 | Show Pony Place | 13,845 |
| 10912 | Show Pony Place | 15,651 |
| 10913 | Show Pony Place | 13,354 |
| 10916 | Show Pony Place | 13,576 |
| 10917 | Show Pony Place | 15,933 |
| 10920 | Show Pony Place | 10,400 |
| 10921 | Show Pony Place | 13,839 |


| 10925 | Show Pony Place | 12,127 |
| :--- | :--- | :--- |
| 10800 | Sir Barton Circle | 2,080 |
| 10801 | Sir Barton Circle | 2,080 |
| 10802 | Sir Barton Circle | 1,600 |
| 10803 | Sir Barton Circle | 1,600 |
| 10804 | Sir Barton Circle | 1,700 |
| 10805 | Sir Barton Circle | 1,500 |
| 10806 | Sir Barton Circle | 1,700 |
| 10807 | Sir Barton Circle | 1,500 |
| 10808 | Sir Barton Circle | 1,700 |
| 10809 | Sir Barton Circle | 2,030 |
| 10810 | Sir Barton Circle | 2,080 |
| 10813 | Sir Barton Circle | 1,900 |
| 10815 | Sir Barton Circle | 1,500 |
| 10817 | Sir Barton Circle | 1,500 |
| 10819 | Sir Barton Circle | 2,080 |
| 10823 | Sir Barton Circle | 2,340 |
| 10825 | Sir Barton Circle | 1,800 |
| 10827 | Sir Barton Circle | 1,800 |
| 10829 | Sir Barton Circle | 1,800 |
| 10830 | Sir Barton Circle | 1,900 |
| 10831 | Sir Barton Circle | 2,340 |
| 10832 | Sir Barton Circle | 1,600 |
| 10834 | Sir Barton Circle | 1,700 |
| 10836 | Sir Barton Circle | 1,700 |
| 10838 | Sir Barton Circle | 1,600 |
| 10840 | Sir Barton Circle | 1,600 |
| 10844 | Sir Barton Circle | 2,080 |
|  |  |  |

## TREGONING PROPERTY PRELIMINARY FOREST CONSERVATION PLAN




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CRELIMINARY COVERSTHENSER CRVATION PLAN TREGONING PROPERTY DAMASCUS (z2th) ELECTION DISTRICT
$\qquad$

Resolution No.: 18-1272
Introduced: $\quad$ September 11, 2018
Adopted: $\quad$ October 30, 2018

COUNTY COUNCIL FOR MONTGOMERY COUNTY, MARYLAND

By: County Council

SUBJECT: Amendments to the Comprehensive Water Supply and Sewerage Systems Plan

## Background

1. Section 9-501 et seq. of the Environmental Article of the Maryland Code requires the governing body of each County to adopt and submit to the State Department of the Environment a comprehensive County Plan, and from time to time amend or revise that Plan for the provision of adequate water supply systems and sewerage systems throughout the County.
2. Section 9-507 of the Environmental Article of the Maryland Code provides that the Maryland Department of the Environment (MDE) has 60 days to review a county governing body's action to amend the County's Water and Sewer Plan. Upon notice to the County, MDE may extend that review period for another 45 days, if necessary. At the conclusion of this review, MDE must either approve or reject the Council's action on each of these amendments, or the action is confirmed by default. Any action approved or taken by this resolution is not final until that action is approved by MDE or the period for final MDE action has expired.
3. In accordance with the State law on December 30, 1969, by Resolution No. 6-2563, the County Council adopted a Comprehensive Ten-Year Water Supply and Sewerage Systems Plan which was approved by the State Department of the Environment.
4. The County Council has from time to time amended the Plan.
5. On August 27, 2018, the County Council received recommendations from the County Executive regarding six Water and Sewer Plan amendments.
6. Recommendations on these amendments were solicited from the Maryland-National Capital Park and Planning Commission, Washington Suburban Sanitary Commission Staff, and affected municipalities.
7. A public hearing was held on September 25, 2018.
8. The Transportation, Infrastructure, Energy \& Environment Committee discussed these amendments on October 23, 2018 and made recommendations to the Council.
9. The Council discussed these amendments on October 30, 2018.

## Action

The County Council for Montgomery County, Maryland approves the following actions on amendments to the Ten-Year Comprehensive Water Supply and Sewerage Systems Plan as shown in the attachments to this resolution.

This is a correct copy of Council action.


## Montgomery County Comprehensive Water Supply and Sewerage Systems Plan August 2018 Amendment Transmittal: Water/Sewer Category Map Amendments

Montgomery County uses water and sewer service area categories, in part, to identify those properties that should use public water and/or sewer service versus those that should use on-site systems, usually wells and/or septic systems. Category 1 identifies properties approved for public service and that have access to public system mains. Category 3 identifies properties approved for public service but need new main extensions in order to receive public service. Categories 4 and 5 identify properties that currently should use on-site systems but are proposed for public service in the future. Category 6 identifies properties that should use on-site systems, where public service is not planned for at least the next ten years. (See page 3 for additional information.)
Property owners file category change map amendment requests seeking to change the service areas for their property from one category to another, often based on anticipated development plans. The following charts present the County Council's actions on water/sewer category map amendment requests filed with DEP and transmitted by the County Executive to the Council for consideration on August 27, 2018.

Request [1] WSCCR 17-GWC-02A: Patricia Tregoning

| Property Information and Location Property Development | Applicant's Request: County Council Action |
| :---: | :---: |
| - 23715 Ridge Rd., Cedar Grove <br> - Parcel P565, Cow Pasture (acct. no. 01726790) <br> - Map tile: WSSC - 233NW11; MD -FW12 <br> - East side of Ridge Rd south of the intersection of | Existing - Requested - Service Area Categories <br> W-5 W-1 <br> S-5 S-5 (No change) * <br> Action  |
| - RE-1 Zone; 2.09 ac. <br> - Goshen - Woodfield - Cedar Grove Planning Area Clarksburg Master Plan (1994) <br> - Little Seneca Creek Watershed (MDE Use IV) <br> - Existing use: single-family house | Change W-5 to W-1. Change S-5 to S-6,* consistent with other nearby RE-1-zoned properties. <br> *Note: Although not contemplated at this time, future subdivision of this property using septic systems will require a revision to the County's existing Septic Tier 1 designation, instead assigning Tier 3 or 4. M-NCPPC is evaluating a revision to the subdivision ordinance to address this issue. |

Request [2] WSCCR 17-GWC-03A: Tregoning Bypass Trust

| Property Information and Location |
| :--- |
| Property Development |
| - 23700 block of Ridge Rd., Germantown |
| - Parcel P600, IMPS Cow Pasture (acct. no. 03599951) |
| - Map tile: WSSC - 233 NW11; MD -FW12 |
| - East side of Ridge Rd south of and opposite Hawkes |
| Rd. |
| West side of Kings Valley Rd. opposite Preakness Rd. |
| - RC \& RE-1 Zones; 119.91 acres |
| - Goshen - Woodfield - Cedar Grove Planning Area |
| Clarksburg Master Plan (1994) |
| - Little Seneca Creek Watershed (MDE Use IV) \& Upper |
| Great Seneca Creek Watershed (MDE Use I) |
| - Existing use: AgricultureNacant |
| Proposed use: 63 Single Family Homes and 120-unit |
| Senior Living Housing |

Applicant's Request:
County Council Action

Existing - Requested Service Area Categories
W-5 W-3
S-5 S-3*
*S-3 request applies only to the areas zoned RE-1, not RC.

## Action

Northern RE-1 Zone (residential): Maintain W-5 and S-5, with final approval of W-3 and S-3 conditioned on Planning Board approval of a preliminary plan that uses either a cluster or MPDU development option under the RE-1 Zone.

Western RE-1 Zone (elder care): Maintain W-5 and S-5, with final approval of W-1 and S-3 conditioned on the Hearing Examiner's approval of a conditional land use under the RE-1 Zone for the elder-care facility.

RC Zone: Maintain W-5, with final approval for W-3 conditioned on Planning Board approval of a preliminary plan that uses the cluster development option under the RC Zone. Change S-5 to S-6, consistent with Water and Sewer Plan general service policies. **
(Continues on page 2)

[^3]
## Montgomery County Comprehensive Water Supply and Sewerage Systems Plan <br> August 2018 Amendment Transmittal: Water/Sewer Category Map Amendments

Request [2] WSCCR 17-GWC-03A: Tregoning Bypass Trust
Sewer main extension: The provision of public sewer service should generally follow the applicant's conceptual sewer extension design, tying into the existing sewerage system across Kings Valley Rd. east of the project site. A gravity outfall sewer main, as proposed by WSSC crossing Ovid Hazen Wells Park, is not allowed by this amendment.

The alignment and construction of the low-pressure sewer main for the elder-care project site, between the southwest corner of the site and the residential development at the northern end, will be evaluated through the development plan review. This alignment will need to minimize impacts to wooded areas and to streams and stream buffers, especially within proposed park dedication areas.
**Note: To allow the applicant's planned subdivision of the RC-zoned area of this property using onsite septic systems, a revision to the existing County's Septic Tier 1 designation will be needed, assigning Tier 3 or 4 instead. M-NCPPC is evaluating a revision to the subdivision ordinance to address this issue.

Request [3] WSCCR 17-OLN-02A: Iglesia De Cristo Mi-El Maryland Inc.

| Property Information and Location <br> Property Development | Applicant's Request <br> County Council Action |
| :--- | :--- |
| - 17521 Old Baltimore Rd., Olney | Existing - Requested - Service Area Categories |
| - Parcel P950, Rockland Farm (acct. no. 00722056) | W-6 $\quad$ W-1 |
| - Map tile: WSSC - 224NW03; MD -HT56 | S-6 |
| - South side of Old Baltimore Rd east of the intersection | Action |
| of Winter Morning Way | Defer action on the request pending consideration of a <br> concept plan for the proposed development by the <br> Development Review Committee. |
| - RNC Zone; 7.21 acres |  |
| - Olney Planning Area |  |
| Olney Master Plan (2006) |  |
| -Northwest Branch (MDE Use IV) and Hawlings River <br> (MDE Use IV) Watersheds |  |
| - Existing use: Single Family Home |  |
| Proposed use: Place of worship of up to 700 seats; |  |
| retain existing house as a parsonage |  |

Request [4] WSCCR 17-TRV-10A: Sami and Siham Ainane*
*Purchased the properties from the original applicant, James Edwards, in Oct. 2017 and agreed to continue with this request.

| Property Information and Location Property Development | Applicant's Request County Council Action |
| :---: | :---: |
| - 12000 \& 12000 block of Piney Meetinghouse Rd., Potomac <br> - Lot 2 and Outlot A, Block D, Piney Glen Farms (acct. no. 03464486 and 03464464) <br> - Map tile: WSSC - 215NW11; MD -FQ12 <br> - West side of Piney Meetinghouse Rd., south of the | Existing - Requested - Service Area Categories <br> W-1 W-1 (no change) <br> S-6 S-1** <br> **One sewer hookup only for Outlot $A$, transferred from Lot 2. <br> Action |
| intersection of Greenbriar Preserve Ln. <br> - RE-2 Zone; Lot 2: 8.63 ac .; Outlot A: 2.51 ac . <br> - Travilah Planning Area Potomac Subregion Master Plan (2002) <br> - Watts Branch Watershed (MDE Use I); Lot 2 partially in Piney Branch subwatershed (Mont. Co, SPA) <br> - Outlot A existing use: Vacant Outlot A proposed use: convert to building lot for one single-family house <br> - Lot 2 existing use: single-family house Lot 2 proposed use: no change, retain existing house using a septic sysiem. | Deny the request for $\mathrm{S}-1$ for Outlot A ; maintain $\mathrm{S}-6$ with no abutting mains sewer hookup allowed. |

[^4]Montgomery County Comprehensive Water Supply and Sewerage Systems Plan August 2018 Amendment Transmittal: Water/Sewer Category Map Amendments

Request [5] WSCCR 18-TRV-02A: David L. \& Nancy S. Scull

| Property Information and Location Property Development | Applicant's Request County Council Action |
| :---: | :---: |
| - 10125 Bevern Ln., Rockviile <br> - Lot 29, Block B, Hollinridge Sec 4 (acct. no. 00894831) <br> - Map tile: WSSC - 216NW10; MD -FQ43 <br> - West side of Bevern Ln., at the cul-de-sac, 1100 ft | Existing - Requested - Service Area Categories <br> W-1 W-1 (No Change) <br> S-6 S-1 <br> Action  |
| - RE-1 Zone; 1.89 acres ( 82,456 sq. ft.) <br> - Travilah Planning Area Potomac Subregion Master Plan (2002) <br> - Watts Branch Watershed (MDE Use I) <br> - Existing use: Existing Single-Family Home Proposed use: Keep Existing Single-Family Home | Change S-6 to S-3 under the Potomac Peripheral Sewer Service Policy recommended by the 2002 Potomac Subregion Master Plan. <br> The sewer main extension needed to serve this property cannot be constructed through the adjacent Watts Branch Stream Valley Park. The expected main alignment will be from the sewer main located on 10124 Bevern Ln. via an existing sewer easement and the Bevern Ln. cul-de-sac. (See Attachment B.) <br> Note: The Peripheral Sewer Service Policy applies to properties in the Glen Hills Study Area by a policy revision adopted for the 2018 Water and Sewer Plan update. The approved 2018 Plan update is currently under review by the Maryland Dept. of the Environment (MDE). |

## Request [6] WSCCR 09A-TRV-02: Ted and Roxanne Smart

| Property Information and Location Property Development | Applicant's Request County Council Action |
| :---: | :---: |
| - 13101 Valley Dr., Rockville <br> - Parcel P592, Discover \& Younger Brothers; acct no. 00047883 * <br> - Map tile - MD: FR51; WSSC: 217NW09 <br> - Southeast corner, intersection of Valley Dr. and Cleveland Dr. <br> - Travilah Planning Area Potomac Subregion Master Plan (2002) <br> - Watts Branch Watershed (MDE Use I) <br> - RE-1 Zone; 1.61 acres <br> - Existing use: unimproved, wooded Proposed use: one new single-family house the existing parcel. <br> *Note: This request originally included both Parcels P592 and P651 (adjacent to the south at 13001 Valley Dr.). The applicants subsequently sold Parcel P651 and it is therefore now excluded from WSCCR 09A-TRV-02. | Existing - Requested - Service Area Categories <br> W-1 W-1 (no change) <br> S-6 S-3 <br>   <br> Action  <br> Change S-6 to S-3 under the Potomac Peripheral Sewer  <br> Service Policy recommended by the 2002 Potomac  <br> Subregion Master Plan.  <br> Note: The Peripheral Sewer Service Policy applies to properties in the <br> Glen Hills Study Area by a policy revision adopted for the 2018 Water <br> and Sewer Plan update. The approved 2018 Plan update is currently <br> under review by the Maryland Dept. of the Environment (MDE).  |
| Prior Actions for WSCCR 09A-TRV-02 |  |
| County Council Action (CR 17-217, 7/19/11): "Defer action the Glen Hills sanitary study." <br> County Council Action (CR 18-647, 10/25/16): "Defer action the abutting main policy as part of the expected Water and | the request for category S-3 pending the results of DEP's work on <br> n the S-3 request pending outcome of the Council's consideration of ewer Plan update in the spring of 2017." |
| Countr Council Decision (CR 18-956, 10/31/17): "Tabled by 2017 Water and Sewer Plan." | T\&E Committee pending further committee discussion of the draft |

[^5]Montgomery County Comprehensive Water Supply and Sewerage Systems Plan
August 2018 Amendment Transmittal: Water/Sewer Category Map Amendments

## Water \& Sewer Service Area Categories Summary

| Category Definition and General Description | Category Definition and General Description |
| :---: | :---: |
| W-1 andS-1 <br> Properties approved for and generally with existing access to community (public) service. This may include properties which have not yet connected to existing community service. | W-5 and S-5 <br> Properties planned for future public service, but which may use private, on-site systems (wells and septic systems) on a permanent basis. - Areas where improvements to or construction of new community systems are planned for the seven- through ten-year period. |
| W-3 and S-3 <br> Properties planned and approved for community (public) service, but without existing access to public service. - Public service will generally be provided within two years as development and requests for community service are planned and scheduled. | W-6 and S-6 <br> Properties that will use private, on-site systems (wells and septic systems), where community (public) service is not planned. - Category 6 includes areas that are planned or staged for community service beyond the scope of the plan's ten-year planning period, and areas that are not ever expected for community service on the basis of adopted plans. |
| W-4 and S-4 <br> Properties planned for future public service, but which need to use private, on-site systems (wells and septic systems) in the interim. - Areas where improvements to or construction of new community systems will be programmed for the three- through sixyear period. B | Note: Although the majority of properties in the county have the same water category as sewer category (i.e. W-3 and S-3, or W-5 and S-5), this is not always the case. The County does not always assign water and sewer categories in tandem, due to differences in service policies or to actual service availability. For example, a particular property could have service area categories W-1 and S-6. Therefore, it is important to know both the water and sewer service area categories for a property. Montgomery County does not use categories W-2 and S-2 in its Plan. |

[^6]Montgomery County Comprehensive Water Supply and Sewerage Systems Plan August 2018 Amendment Transmittal: Water/Sewer Category Map Amendments


Montgomery County Comprehensive Water Supply and Sewerage Systems Plan August 2018 Amendment Transmittal: Water/Sewer Category Map Amendments


Montgomery County Comprehensive Water Supply and Sewerage Systems Plan August 2018 Amendment Transmittal: Water/Sewer Category Map Amendments


Montgomery County Comprehensive Water Supply and Sewerage Systems Plan August 2018 Amendment Transmittal: Water/Sewer Category Map Amendments


## Montgomery County Comprehensive Water Supply and Sewerage Systems Plan

 August 2018 Amendment Transmittal: Water/Sewer Category Map AmendmentsWSCCR 17-GWC-03A (Tregoning Bypass Trust) Requested Sewer Service Area Category Map Amendment: Water \& Sewer Plan Map


Montgomery County Comprehensive Water Supply and Sewerage Systems Plan August 2018 Amendment Transmittal: Water/Sewer Category Map Amendments


## Montgomery County Comprehensive Water Supply and Sewerage Systems Plan

 August 2018 Amendment Transmittal: Water/Sewer Category Map Amendments

Montgomery County Comprehensive Water Supply and Sewerage Systems Plan August 2018 Amendment Transmittal: Water/Sewer Category Map Amendments


# CDTCharles P. Johnson \& Associates, Inc. Civil and Environmental Engineers • Planners • Landscape Architects • Surveyors <br> Associates <br> Silver Spring, MD • Gaithersburg, MD • College Park, MD • Frederick, MD • Fairfax, VA 

Planning Board<br>Maryland National Capital Park and Planning Commission<br>2425 Reedie Drive<br>$14^{\text {th }}$ Floor<br>Wheaton, MD 20902

Re: Preliminary Forest Conservation Plan \#F20230420 - Tregoning Property
Residential development of Parcels 104 \& 617
Request for Tree Variance

Dear Planning Board:
On behalf of our client, ESC Tregoning LC (the "Applicant"), we hereby request a Tree Variance in connection with Preliminary Forest Conservation Plan No.F20230420 and Preliminary Plan No.120230120, that is being submitted concurrently with the Preliminary Forest Conservation Plan, for the properties identified as Parcels 104 (the "Subject Property") \& 617 pursuant to Section 22A-12 of Chapter 22A of the Montgomery County Code (the "County Code").

## I. Background Information

In order to secure approval of the removal or disturbance of certain identified trees that are considered priority for retention and protection under State law and the Montgomery County Code, Charles P. Johnson \& Associates (CPJ), hereby requests a Tree Variance for the of the property identified as Parcels 104 \& 607.

The Applicant proposes developing on the two parcels using the MPDU optional method to create a yield of 46 units on 37.6 acres. Per the approved Pre-Preliminary Plan No. 72020020, the Applicant will cluster 44 units and six MPDU's on the 17.81 acre Subject Property. The development rights for the remaining two units will be retained by the Tregoning family on the 19.80 acre of Parcel 617.

The development of the 44 units by this subdivision application will require the removal of one (1) tree and the disturbance of the critical root zones of an additional six (6) trees. The individual trees are all depicted on the approved Natural Resources Inventory/ Forest Stand Delineation No. 420220450.

## II. Tree Removal and Critical Root Zone Disturbance

The 46-unit development proposed by this subdivision application requires approval of a Tree Variance pursuant to Section 22A-21 of Chapter 22A of the County Code. Approval of the requested Tree Variance will allow the removal of one (1) tree and the disturbance of the critical root zones of six (6) additional trees. Approval of the Tree Variance Request will enable the Applicant to develop the Subject Property in a manner consistent with the

1994 Clarksburg Master Plan recommendation that this property developed for residential use since the Subject Property is considered part of the Ridge Road Transition Area.

## III. The Variance Requirements

Section 5-1607 of the Natural Resources Article requires a variance for the removal or disturbance of trees having a diameter of 30 inches when measured at 4.5 feet above the ground. Section 5-1611 of the Natural Resources Article authorizes a local jurisdiction to grant a variance:
"where owing to special features of a site or other circumstances, implementation of this subtitle would result in unwarranted hardship to the applicant."

Chapter 22A of the County Code specifies the circumstances when a Tree Variance, a variance from Chapter 22A, is required. Section 22A-21(a) of the County Code establishes the "minimum criteria" for securing a Specimen Tree Variance. Applicants seeking a variance from any Chapter 22A requirement must:
(1) describe the special conditions peculiar to the property which would cause the unwarranted hardship;
(2) describe how enforcement of this Chapter will deprive the landowner of rights commonly enjoyed by others in similar areas;
(3) verify that State water quality standards will not be violated and that a measurable degradation in water quality will not occur as a result of granting the variance; and
(4) provide any other information appropriate to support the request.

A Tree Variance that meets the "minimum criteria" set out in Section 22A-21(a) of the County Code may not be approved if granting the request:
(1) will confer on the applicant a special privilege that would be denied to other applicants;
(2) is based on conditions or circumstances which result from the actions by the applicant;
(3) is based on a condition relating to land or building use, either permitted or nonconforming, on a neighboring property; or
(4) will violate State water quality standards or ca use measurable degradation in water quality The following paragraphs illustrate the factual basis supporting the approval of this Tree Variance by the Planning Board. Technical information for this request has been provided by CPJ.

## A. The special conditions that are peculiar to the Subject Property that would cause the unwarranted hardship are described as follows:

A requirement, as communicated by Staff during the Planning Board Meeting, was to provide a connection from the existing dead-end Hoffman Drive public road. Staff communicated the need for connectivity of "all kinds of" transportation users and encouraged integration between existing homes and the proposed development. The seven (7) total trees that are impacted by development are the only obstacle to a development proposal that meets the requirements for the RE-1 optional MPDU method and the recommendations made by Staff.

The Applicant would suffer unwarranted hardship if the removal and disturbance of the designated trees were not allowed to construct the proposed Hoffman Drive connection and development of the lots in the southwest
portion of the Subject Property. Unwarranted hardship is demonstrated for the purpose of obtaining a Tree Variance when an applicant presents evidence that denial of the Variance would deprive the Applicant of the reasonable and substantial use of the property. The development of 46 -units is clearly within the class of reasonable and substantial uses that justify the approval of a Tree Variance for the Subject Property. If the requested Variance were denied the Applicant would be precluded from developing the Subject Property for a reasonable and significant use commonly enjoyed by virtually all other property owners in the community.

## B. The following paragraphs describe how enforcement of Chapter 22A will deprive the landowner of rights commonly enjoyed by others in similar areas.

If the requested Variance were denied, the Applicant would suffer unwarranted hardship and would be deprived of rights commonly enjoyed by other property owners in the RE-1 zone and adjoining areas similar to the location of the Property. If the requested variance were denied, the Applicant would be denied the right enjoyed by other similarly situated property owners to develop their RE-1 zoned property in a manner permitted by the zoning ordinance that is consistent with the development history of the neighborhood, block and subdivision.

If the variance were not granted for the trees identified on the attached chart, those trees would have to remain and be undisturbed and the Applicant would be unable to develop the property, and construct the Hoffman Drive connection, as required by Staff, and would result in the disparate treatment of the Applicant in comparison the exercise of rights commonly enjoyed by others in the same area and in similar RE-1 zoned areas.

## C. State water quality standards will not be violated and that a measurable degradation in water quality will not occur as a result of granting the variances.

A Stormwater Management Concept Plan has been submitted for the Subject Property using environmental site design techniques to the maximum extent practicable and the proposed development will meet State water quality standards. The approval of the requested Variance will not result in any measurable degradation in water quality standards.

A copy of the approved Stormwater Management Concept Plan is included in the submission of the Preliminary Plan.

## D. Other information that supports the requested variances:

The Approved and Adopted Trees Technical Manual lists several factors for consideration when reviewing applications for clearing that now require the approval of a Tree Variance. Generally, the Technical Manual recognizes that clearing is appropriate for street and driveway construction to provide access to new development and to create a building envelope for development. In order to provide the Hoffman Drive connection, Tree \#10 will need to be removed.

The Technical Manual also acknowledges that well planned clearing balances the public policies of preserving forest and funneling development into appropriate locations. The Technical Manual provides that one factor to be considered.
"The extent to which the actual or intended use of the property, as developed or as proposed to be developed in accordance with the regulations of the Zoning Ordinance and/or area master plans, require clearing of trees."

The proposed Subject Property development of 46 -units, utilizing the RE-1 optional MPDU method, fully complies with the specific regulations of the Zoning Ordinance and the land use recommendations and intentions of the Master Plan.

As further basis for its variance request, the applicant can demonstrate that it meets the Section 22A-21(d) Minimum criteria, which states that a variance must not be granted if granting the request:
(1) Will confer on the applicant a special privilege that would be denied to other applicants;

Response: The development was specifically zoned RE-1, with the option for Optional MPDU method per the zoning ordinance. As such, this is not a special privilege to be conferred on the applicant.
(2) Is based on conditions or circumstances which are the result of the actions by the applicant;

Response: The Property Owner has taken no actions leading to the conditions or circumstances that are the subject of this variance request.
(3) Arises from a condition relating to land or building use, either permitted or nonconforming, on neighboring property; or

Response: The surrounding land uses (residences) do not have any inherent characteristics or conditions that have created or contributed to this particular need for a variance.
(4) Will violate State water quality standards or ca use measurable degradation in water quality.

Response: Granting this variance request will not violate State water quality standards or cause measurable degradation in water quality.

Below is a list of variance trees with a status that indicates impacts, but saved or variance trees to be removed.

VARIANCE TREES TO BE REMOVED

| Tree | Common Name | Tree Species | DBH | Condition | Variance <br> Request |
| :--- | :---: | :---: | :---: | :---: | :---: |
| $\# 10$ | Tree of Heaven | Ailanthus <br> altissima | $26^{\prime \prime}$ | Good | Yes |

(cont.)

| Tree | Comments | \% CRZ Impacts | Disposition |
| :--- | :--- | :--- | :--- |
| $\# 10$ | Severe impact from construction <br> of Hoffman Drive connection. | $100 \%$ | Remove |

CRITICAL ROOT ZONES OF VARIANCE TREES TO BE DISTURBED

| Tree | Common Name | Tree Species | DBH | Condition | Variance <br> Request |
| :---: | :---: | :---: | :---: | :---: | :---: |
| \#9 | Chesnut Oak | Quercus <br> montana | $36^{\prime \prime}$ | Good | Yes |
| \#14 | Tulip Poplar | Liriodentron <br> Tulipifera | $30^{\prime \prime}$ | Good | Yes |
| \#21 | Red Maple | Acer rubrum | $30^{\prime \prime}$ | Good | Yes |
| \#31 | Tulip Poplar | Liriodentron <br> Tulipifera | $36^{\prime \prime}$ | Good - lean | Yes |

(cont.)

| Tree | Comments | \%CRZ <br> Impacts | Disposition |
| :---: | :---: | :---: | :---: |
| \#9 | Minor grading impacts from Hoffman Drive <br> connection. | $10 \%$ | Retain and protect tree |
| \#14 | Minor grading impacts from Hoffman Drive <br> connection. | $1 \%$ | Retain and protect tree |
| \#21 | Minor impacts from grading on Lot 23A. | $9 \%$ | Retain and protect tree |
| \#31 | Minor impacts from grading on Lot 25A. | $12 \%$ | Retain and protect tree |

## Conclusion:

For the above reasons, the applicant respectfully requests that the Planning Board APPROVE its request for a variance from the provisions of Section 22A of the Montgomery County Forest Conservation Ordinance, and thereby, GRANTS permission to impact/remove the variance trees in order to allow the construction of this vital project.

The recommendations in this report are based on tree conditions noted the time the field work was conducted and updated for specific construction measures prior to the submittal of the forest conservation plan. Tree condition can be influenced by many environmental factors, such as wind, ice and heavy snow, drought conditions, heavy rainfall, rapid or prolonged freezing temperatures, and insect/disease infestation. Therefore, tree conditions are subject to change without notice.

The plans and plotting of tree locations were furnished for the purpose of creating a detailed Preliminary Forest Conservation Plan. All information is true and accurate to the best of my knowledge and experience. All conclusions are based on professional opinion and were not influenced by any other party.

Sincerely,

Michael J. Loe, PLA, ASLA

# Tregoning Site 

Montgomery County, Maryland
May 5, 2023

## Local Area Transportation Review

## Prepared for:

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## APPENDICES

APPENDIX A - Correspondence, Intersection Turning Movement Counts, and Aerial Photos
APPENDIX B - Intersection Capacity Analysis Worksheets
APPENDIX C - Trip Assignment for Approved Developments

| Prepared by: | Wes Guckert, PTP <br>  <br>  <br> Qiang Tian, P.E., PTOE |
| :--- | :--- |
| JWG:amr <br> (F:\2021\2021-0537_Tregoning - Clarksburg- <br> Damascus\DOCS\REPORTS\INITIAL\LATR - Revised.docx) |  |

CORPORATE OFFICE

## INTRODUCTION AND SUMMARY OF FINDINGS

## Study Purpose

The primary purpose of this Traffic Impact Analysis is to determine what impact the development of this site will have on the adjacent roadways. The site is planned to be developed with 38 single-family dwelling units and 6 townhouse units.

## Study Criteria/Methodology

This Traffic Impact Analysis has been prepared in accordance with the current requirements of the Subdivision Staging Policy and the Local Area Transportation Review (LATR) Guidelines for the Maryland-National Capital Park and Planning Commission (M-NCPPC). This property is located in the Rural East Policy Area, which is in a Green Policy Area.

The trip generation determinations made as part of this report are based on the Institute of Transportation Engineers (ITE) Trip Generation Manual ( $11^{\text {th }}$ Edition) and the requirements of the LATR guidelines.

A Scoping Agreement was prepared for this proposed development, and a copy of this agreement is contained in Appendix A. This agreement was approved by the Transportation Planning Staff with minor adjustments. These adjustments are also outlined in Appendix A. As a result of the Scoping Agreement and trip generation determination for the project, it was determined that the project would generate 67 new peak hour person trips and therefore requires a Motor Vehicle Adequacy Analysis. In addition, it was determined that the subject site would generate sufficient pedestrian activity to require a Pedestrian and Bicycle System Adequacy Test for the subject site. A Vision Zero statement is also provided. Details on the limits of each of these analyses are described in the respective section of the LATR.

The Tregoning Site is situated within the Rural East Policy Area, which is classified as green. For sites within the Green Policy Areas, the Critical Lane Volume (CLV) level of service applies to study intersections with a CLV of 1,350 or less and the Highway Capacity Manual (HCM) delay-based level of service standard applies to study intersections with a CLV of more than 1,350. Queuing Analyses using Synchro/SimTraffic were also undertaken at each key intersection.

All turning movement counts for this project were collected in May 2022 while public schools in Montgomery County were open for in-person learning.

## Scope of Services

The principal scope of services undertaken as part of this report are as follows:
$>$ Field investigation to collect physical information concerning the nearby road network.
> Include aerial photos of each of the study area intersections.
> Conduct intersection turning movement counts from 6:30-9:30 AM and 4-7 PM at the study area intersections.
> Obtain information from M-NCPPC relative to other approved developments planned in the vicinity of the subject site.
$>$ Conduct a Trip Generation and Trip Distribution Analysis for the other nearby developments.
$>$ Conduct Trip Generation and Trip Distribution Analysis for the proposed development of the subject site.
> Conduct Intersection Capacity Analyses to determine existing and projected levels of service at the study area intersections to address the Motor Vehicle Adequacy requirements for this site.
> Conduct an inventory of the existing pedestrian, bicycle, and transit facilities located in the vicinity of the subject property.
$>$ Conduct analysis to satisfy the Pedestrian Adequacy Test for the subject site.
> Conduct analysis to satisfy the Bicycle System Adequacy Test for the subject site.
> Address Vision Zero requirements to review high injury network segments, assess safety issues, review travel speeds, and describe site access.
> Provide recommendations for any off-site improvements that may be necessary in order to meet the requirements of M-NCPPC for this site.

## Summary of Findings and Recommendations

The results of our analysis have indicated that the development of the property as proposed will not have an adverse effect on the nearby road system and that the study intersections are projected to continue to operate at acceptable levels of service. Since all locations are considered acceptable, improvements are not required to demonstrate vehicular adequacy.

Pedestrian, bicycle, and safety analyses were also conducted within the defined study area. Several items were noted as areas of concern. Given constraints noted in this report on adjacent properties and limited impact of improvements, Applicant should pay into LATR using published proportionality guidelines.

The developer wants to ensure there is a connection through their project from MD 27 to Kings Valley Road. To proceed south on MD 27, it will be safer to use the traffic signal at MD 27/ Kings Valley Road (see Preferred Option on Figure 1A, page 5).

## Cut-Through Traffic is a Safety Issue

Note that we also reviewed the Applicant's proposed alignment of Hoffman Drive through the community. It is important to discourage cut though vehicular traffic using Hoffman Drive at rush hour traffic. Given this, the Applicant has proposed Hoffman Drive to intersect with Street B in the community as a " T " intersection, which provides more traffic calming that a direct connection to Kings Valley Road.

1. Offset " T " intersections are a traffic calming measure.
2. Traffic calming is meant to slow traffic.
3. Slow traffic is a goal of Vision Zero.
4. Faster traffic is a SAFETY issue.

To the southeast of the property, there is active farming up to the edge of Kings Valley Road. Sidewalks in this area are not practical. Interaction of pedestrians and farming equipment seems incompatible.

The methodology used to undertake our analysis is contained in the sections that follow.

## MOTOR VEHICLE ADEQUACY - EXISTING TRAFFIC CONDITIONS

## Site Information

The subject property is located in the southeast quadrant of MD 27 and Kings Valley Road as shown on Figure 1. Figure 1A is a copy of the proposed site plan for the subject site.

Figure 1. Site Location and Study Intersection Map


Figure 1A. Site Plan


## Study Area

Based on M-NCPPC requirements, the following intersections were identified to be included within this study area:
> MD 27 at Kings Valley Road
> MD 27 at Hoffman Drive
> Kings Valley Road at Glade Valley Terrace/Site Access
> Kings Valley Road at Preakness Drive/Site Access

The site is bordered by Kings Valley Road on the east, which is a two-lane north-south roadway in the vicinity of the subject property. The posted speed limit along Kings Valley Road is 25 MPH.

MD 27 is a two-lane north-south roadway. The posted speed limit along MD 27 is 40 MPH . Auxiliary left-turn lanes are provided at the major intersections in the study area.

Figure 2 was prepared to show the existing lane use and traffic control at each of the study intersections.

Figure 2. Existing Lane Use


## Traffic Volumes

The Traffic Group, Inc. conducted intersection turning movement counts from 6:30-9:30 AM and 4-7 PM at the study area intersections.

The total vehicles observed during these counts are shown on the summary sheets contained in Appendix A. The existing peak hour volumes at each of the study area intersections are identified on Figure 3.

Figure 3. Existing Peak Hour Traffic Volumes


## Analysis of Existing Traffic Conditions

Intersection Capacity Analyses were conducted for each of the study area intersections and the results are shown on Table 3 using the CLV methodology. A review of Table 3 indicates that all of the existing intersections are presently operating at acceptable levels.

The $95^{\text {th }}$ percentile queuing output from Synchro/SimTraffic is summarized in Table 4 and indicates that all of queues are adequately accommodated within the existing storage area. Copies of the capacity and queuing worksheets are contained in Appendix B to this report.

# MOTOR VEHICLE ADEQUACY - BACKGROUND TRAFFIC CONDITIONS 

## Proposed Developments

As part of the development of the background information for this study, information was obtained from M-NCPPC relative to other approved developments planned in the vicinity of the subject site. Figure C-1 was prepared to show the location of three developments which are planned in the immediate vicinity of the subject site that would impact the adjacent roadways.

## Trip Generation for Nearby Developments

Table 1 was prepared to show the trip generation rates and the peak hour trips to be generated by the nearby developments. The trip generation information shown on Table 1 is based on the trip generation rates as outlined in the ITE Trip Generation Manual ( $11^{\text {th }}$ Edition) and the requirements of the LATR guidelines.

The peak hour trips projected to be generated by each of the nearby developments were then distributed and assigned to the adjacent road system as shown on the Figures contained in Appendix C. Figure 4 shows the combined trips projected to be generated by all of the nearby developments. Combining these trips with the existing peak hour volumes results in the background peak hour volumes anticipated prior to the development of the subject property, and are shown on Figure 5.

## Analysis of Background Traffic Conditions

Intersection Capacity Analyses were conducted for the study area intersections and the results are shown on Table 3. A review of Table 3 indicates that all of the intersections are projected to continue to operate at acceptable levels.

The $95^{\text {th }}$ percentile queuing output from Synchro/SimTraffic is summarized in Table 4 and indicates that all of queues are adequately accommodated within the existing storage area. Copies of the capacity and queuing worksheets are contained in Appendix B to this report.

Table 1. Trip Generation for Background Developments


Figure 4. Trips Generated by Background Developments


Figure 5. Background Peak Hour Traffic Volumes


## MOTOR VEHICLE ADEQUACY - TOTAL TRAFFIC CONDITIONS

## Site Information

The subject property is located in the southeast quadrant of MD 27 and Kings Valley Road. Accesses to this property are proposed along Kings Valley Road opposite to Glade Valley Terrace and to Preakness Drive. This property is presently planned to be developed with 38 single-family dwelling units and 6 townhouse units.

## Trip Generation/Distribution

In order to determine the amount of traffic projected to be generated by the subject property, we consulted the ITE Trip Generation Manual ( $11^{\text {th }}$ Edition) to prepare Table 2, which shows the trip generation rates and the peak hour trips projected to be generated by the proposed development of the subject property. As required by M-NCPPC, adjustments were made to the vehicular traffic to quantify total person trips, auto passenger trips, transit trips, non-motorized trips, and pedestrian trips. The peak hour trips associated with each of these modes are summarized in Table 2. These trips were then distributed and assigned to the nearby roadway as shown on Figure 6. Combining the trips with the background peak hour volumes results in the total peak hour volumes as shown on Figure 7.

## Analysis of Total Traffic Conditions

Intersection Capacity Analyses were conducted for the total peak hour volumes. The results are shown on Table 3 using the CLV methodology. A review of Table 3 indicates that all of the intersections are projected to continue to operate at acceptable levels with the development of the subject site.

The $95^{\text {th }}$ percentile queuing output from Synchro/SimTraffic is summarized in Table 4 and indicates that all of queues are adequately accommodated within the existing storage area. Copies of the capacity and queuing worksheets are contained in Appendix B to this report.

## Table 2. Trip Generation for Subject Site



Figure 6. Trip Assignment for Subject Site


Figure 7. Total Peak Hour Traffic Volumes


## Table 3. Results of Intersection Capacity Analysis (CLV)

| CLV Analysis |  | Existing Traffic | Background Traffic | Total <br> Traffic |
| :---: | :---: | :---: | :---: | :---: |
| Morning Peak Hour Traffic | CLV Standard | CLV | CLV | CLV |
| 1. MD 27 \& Kings Valley Road <br> 2. MD 27 \& Hoffman Drive <br> 3. Kings Valley Road \& Glade Valley Terrace / Site Access <br> 4. Kings Valley Road \& Preakness Drive / Site Access | $\begin{aligned} & 1350 \\ & 1350 \\ & 1350 \\ & 1350 \end{aligned}$ | $\begin{gathered} 1157 \\ 1113 \\ 112 \\ 134 \end{gathered}$ | $\begin{gathered} 1167 \\ 1123 \\ 112 \\ 134 \end{gathered}$ | $\begin{gathered} 1187 \\ 1143 \\ 137 \\ 146 \end{gathered}$ |
| Evening Peak Hour Traffic |  |  |  |  |
| 1. MD 27 \& Kings Valley Road <br> 2. MD 27 \& Hoffman Drive <br> 3. Kings Valley Road \& Glade Valley Terrace / Site Access <br> 4. Kings Valley Road \& Preakness Drive / Site Access | $\begin{aligned} & 1350 \\ & 1350 \\ & 1350 \\ & 1350 \end{aligned}$ | $\begin{gathered} 1217 \\ 1055 \\ 157 \\ 176 \end{gathered}$ | $\begin{gathered} 1228 \\ 1066 \\ 157 \\ 176 \end{gathered}$ | $\begin{gathered} 1271 \\ 1088 \\ 192 \\ 197 \end{gathered}$ |

Table 4. Results of Intersection Queuing Analysis (SimTraffic)


## PEDESTRIAN SYSTEM ADEQUACY

The Pedestrian System Adequacy Test is required for any site that generates 50 or more peak hour person trips. This test consists of three separate components:
> Pedestrian Level of Comfort
$>$ Street lighting
> ADA compliance
The scope of the Pedestrian System Adequacy Test varies by the number of peak hour person trips generated and the specific policy area. Table 5 shows the requirements based on the site characteristics.

Table 5. Pedestrian Adequacy

| Peak-Hour Person Trips <br> Generated | Red and Orange Policy <br> Area Walkshed* | Yellow and Green <br> Policy Area Walkshed* |
| :---: | :---: | :---: |
| $50-99$ | $400^{\prime}$ | $250^{\prime}$ |
| $100-199$ | $750^{\prime}$ | $400^{\prime}$ |
| $200-349$ | $900^{\prime}$ | $500^{\prime}$ |
| 350 or more | $1,000^{\prime}$ | $600^{\prime}$ |

* The maximum required length of sidewalk and streetlighting improvements beyond the frontage is 4 times the appropriate value in this column. The maximum span required for ADA improvements beyond the frontage is equal to the appropriate value in this column.

Since the Tregoning site is located within a Green Policy Area and will generate between 50 and 99 peak hour person trips, the Pedestrian System Adequacy Test is limited to 250 ft . Figure 8 provides an overview showing the 250 -ft distance from the site.

## Pedestrian Level of Comfort (PLOC)

In order for a site to achieve adequacy, either "somewhat comfortable" (PLOC-2) or "very comfortable" (PLOC-1) scores must be achieved at streets and intersections for roads classified as Primary Residential or higher within the 250-ft defined walk shed. M-NCPPC has developed a databased of PLOC which is available through MC Atlas. Output from this database serves at the base map for this analysis. Figure 9 contains a summary of the PLOC within the walk shed.



All of the adjacent roadways are below the threshold. They include:

## Uncomfortable

> Kings Valley Road - No sidewalk or shoulder on either side of this segment. The addition of a sidewalk or shoulder in this location would likely not be feasible because of limited right-of-way and an active farming operation that grows crops right up to the edge of the roadbed.
> Hoffman Drive - No sidewalk or shoulder on either side of this segment. It's within a residential neighborhood. The addition of a sidewalk or shoulder in this location would likely not be feasible because of limited right-of-way.
> Glade Valley Terrace - No sidewalk or shoulder on either side of this segment. It's within a residential neighborhood. The addition of a sidewalk or shoulder in this location would likely not be feasible because of limited right-of-way.
> Preakness Drive - No sidewalk or shoulder on either side of this segment. It's within a residential neighborhood. The addition of a sidewalk or shoulder in this location would likely not be feasible because of limited right-of-way.

## Street Lighting

As shown within the MCDOT Street Light Index, there are approximately five streetlights within the study area. Figure 10 details the locations of all street lighting. The lighting is noted as functional with no service calls placed for any existing installations.

## ADA Compliance

There is no existing sidewalk or shoulder within the walk shed, so ADA compliance was not reviewed within the study area. Figure 11 shows no ADA treatments within the study area.



## BICYCLE SYSTEM ADEQUACY

A low Level of Traffic Stress (LTS-2) is required to achieve bicycle system adequacy. The bicycle test is required for any site generating more than 50 peak hour person trips and considers different elements of the road network and adjacent features, including traffic volumes, speeds, road classification, presence of side paths, separated bike lanes, and other components.

The Tregoning site will generate between 50 and 99 peak hour trips and is situated within a Green Policy Area. Therefore, the 250 -ft distance is applicable. M-NCPPC has developed a database of bicycle stress which is available through MC Atlas. The output from the database is used as the base map for this analysis.

As shown within Figure 12, Kings Valley Road features low Level of Traffic Stress and all remaining road segments are within the very low threshold.


## VISION ZERO STATEMENT

This section of the LATR assesses the High Injury Network (HIN) and overall safety issues. In addition, traffic speeds are reviewed on the key roadways within the study area. The site access is also discussed in the sections below.

## High Injury Network

M-NCPPC maintains a database of corridors that are considered part of the HIN. Roadways meet this threshold if there are five or more serious or fatal crashes and one or more collisions per mile per year. The HIN database was reviewed and there are no segments within the study area that are included. Figure 13 shows the HIN mapping.

## Crash Data

Within the study area, a total of two crashes were reported since 2018. Figure 13 also shows the relative location within the study area. Both crashes were vehicle only, minor/no injury.

## Speed Data

A total of 24 -hour speed studies were undertaken within the study area along Kings Valley Road. Table 6 details the measured $85^{\text {th }}$ percentile speeds and the posted speed limits. As shown within the table, the measured $85^{\text {th }}$ percentile speed was above the posted speed limit. Complete speed study data can be found in Appendix A.

Table 6. Speed Data Summary

| Location | Posted Speed | Measured $85^{\text {th }}$ Percentile Speed |
| :--- | :---: | :---: |
| Kings Valley Road | 25 mph | 38 mph northbound, 38 mph southbound |

## Site Access

Vehicular access to the Tregoning site will be provided at Kings Valley Road opposite to Glade Valley Terrace and to Preakness Drive.


## RESULTS, RECOMMENDATIONS, AND CONCLUSIONS

## Study Purpose

The primary purpose of this LATR is to determine what impact the development of this site will have on the adjacent roadways.

## Study Criteria/Methodology

This Traffic Impact Analysis has been prepared in accordance with the current requirements of the Subdivision Staging Policy and the LATR Guidelines for the M-NCPPC. This property is located in the Rural East Policy Area, which is in a Green Policy Area.

The trip generation determinations made as part of this report are based on the ITE Trip Generation Manual ( $11^{\text {th }}$ Edition) and the requirements of the LATR guidelines.

A Scoping Agreement was prepared for this proposed development, and a copy of this agreement is contained in Appendix A. This agreement was approved by the Transportation Planning Staff with minor adjustments. These adjustments are also outlined in Appendix A. As a result of the Scoping Agreement and trip generation determination for the project, it was determined that the project would generate 67 new peak hour person trips and therefore requires a Motor Vehicle Adequacy Analysis. In addition, it was determined that the subject site would generate sufficient pedestrian activity to require a Pedestrian and Bicycle System Adequacy Test for the subject site. A Vision Zero statement is also provided. Details on the limits of each of these analyses are described in the respective section of the LATR.

The Tregoning Site is situated within the Rural East Policy Area, which is classified as green. For sites within the Green Policy Areas, the CLV level of service applies to study intersections with a CLV of 1,350 or less and the HCM delay-based level of service standard applies to study intersections with a CLV of more than 1,350 .

## Summary of Findings and Recommendations

The results of our analysis have indicated that the development of the property as proposed will not have an adverse effect on the nearby road system and that the study intersections are projected to continue to operate at acceptable levels of service.

Pedestrian, bicycle, and safety analyses were also conducted within the defined study area. Several items were noted as areas of improvement. Given constraints noted in this report on adjacent properties and limited impact of improvements, Applicant should pay into LATR using published proportionality guidelines.

Figure 14 shows the recommended future lane use.

Figure 14. Recommended Future Lane Use


Due to the active farming operation and limited (or no) right-of-way availability, it is suggested that the applicant pay the required amount into the LATR fund for off-site improvements.

## APPENDIX A

Correspondence,
Intersection Turning Movement Counts,
and Aerial Photos

## Montgomery County Planning Department

# Local Area Transportation Review <br> TRANSPORTATION IMPACT STUDY SCOPE OF WORK AGREEMENT 

September2021


#### Abstract

Scoping Approval - Prior to initiating a Local Area Transportation Review study or supplemental traffic study, scoping must be approved by relevant agencies, including the Planning Department, the Montgomery County Department of Transportation, and the State Highway Administration (where relevant). It is the responsibility of the Applicant to obtain approval, which is demonstrated below via signature or electronic signature of the relevant agency representatives. Generally, the Applicant should anticipate a turnaround time of ten (10) business days for form review. Substantially large projects may require additional time and/or may warrant a scoping meeting.


Montgomery County Planning Department
 $\qquad$ Date: $\qquad$
Montgomery County Department of Transportation Name (print):

Signature: $\qquad$ Date: $\qquad$
State Highway Administration (where relevant)
 $\qquad$ Date: $\qquad$

## Applicant Contact I nformation

Transportation Consultant
(company, contact name, email, and phone number)
Name of Applicant / Developer

The Traffic Group, Inc.

## Elm Street Development, LLC

## Project Information

Project Name
(include plan no. if known)

Project Location
(include address if known)

## Policy Area(s)

(See Growth \& Infrastructure Policy Area map T1 ${ }^{1}$ )

Include Tables/ Graphics, As Needed
Tregoning - Clarksburg/Damascus
South of Kings Valley Road, East of Ridge Road
Rural East

Master Plan(s) /
Sector Plan Area(s)

[^7]


|  | Vehicle Trips* (PM) <br> (Auto Driver) | Total Person Trips* (PM) |
| :--- | :--- | :--- |
|  | 43 |  |

12. Pipeline Developments to be considered as background traffic
(include name, plan \#, land uses, and sizes for approved but unbuilt developments or concurrently pending applications; info can be obtained from the M-NCPPC Pipeline website: - website is updated quarterly)
13.Pipeline Transportation Projects to be considered as background condition
(fully funded for construction in County Capital Improvement Program, State Consolidated Transportation Program, developer projects, etc. within the next 6 years)
13. Plan Number: 120200040

Resurvey on Locust Level, 29-student daycare center
2. Plan Number: 120200030

Addition to Ray's Adventure, 3 single family detached units
3. Plan Number: 120180230

St. Anne's Episcopal Church Senior Apartments, 76 senior apartment units

None

- Trigger: All LATR studies for a site that generates 50 or more weekday peakhour person trips must develop a Vision Zero Statement.
- Requirements: The Vision Zero Statement consists of four components:

1. Review High Injury Network segments: Document any segments on the High Injury Network (HIN) that are within a certain distance of the site frontage.
2. Assess proximate safety issues: Review the crash history for all segments and
3. Vision Zero Statement
(Include maps depicting the scope of the various Vision Zero Statement scoping requirements.)
crossings within a certain distance of the site frontage.
4. Review traffic speeds: Conduct speed studies within a certain distance from the site frontage.
5. Describe site access: Address the safety issues identified in steps 1 through 3 and describe how site circulation promotes safety, outlining how safe access will be provided to the site.

The applicant should refer to the LATR Guidelines to determine the applicable scoping distance pertaining to steps 1 through 3 and requirements pertaining to steps 1 through 4 above.

Maps are attached.

| 15. Vehicular Analysis <br> (I nclude a map depicting the location of the study area intersections.) | Vehicular <br> Analysis <br> Anticipated (Vehicular mitigation to be determined after study) <br> A map is attached | - TEST: The motor vehicle adequacy test will not be applied in "Red" policy areas and these areas will not be subject to LATR motor vehicle mitigation requirements. If the plan generates 50 or more net new weekday peak-hour person trips, HCM Analysis is required to be provided for all intersections analyzed in studies for: 1) "Orange" policy areas, and 2) intersections with a CLV of more than 1,350 in "Yellow" \& "Green" policy areas. 3) With the exception of intersections located within "Red" policy areas, CLV analysis required for all intersections regardless of policy area. CLV assessment and signal timing worksheets are to be included in the study appendix. <br> - MITIGATION: The applicant must mitigate its impact on vehicle delay or down to the applicable policy area standard, whichever is less. |
| :---: | :---: | :---: |
| 16.Pedestrian Analysis <br> (I nclude a map depicting the scope of the applicable walkshed distance requirement.) | Pedestrian Mitigation Anticipated <br> A map is attached | - TEST: If the plan generates 50 or more net new weekday peak hour person trips, mitigation of surrounding pedestrian conditions is required. <br> MITIGATION: Mitigation consists of three components: <br> (1) Pedestrian Level of Comfort (PLOC). Pedestrian system adequacy is defined by providing a "Somewhat Comfortable" or "Very Comfortable PLOC score on streets and intersections for roads classified as Primary Residential or higher within a certain walkshed from the site. <br> (2) Street Lighting. The applicant must evaluate existing street lighting based on MCDOT standards along roadways and paths from the development within a certain walkshed from the site frontage. Where standards are not met, the applicant must upgrade the street lighting to meet the applicable standard. <br> (3) ADA Compliance. The applicant must fix ADA noncompliance issues within a certain walkshed from the site frontage equivalent to half the walkshed specified in the required scoping distance. <br> The applicant should refer to the LATR Guidelines to determine the applicable scoping walkshed distance requirement for each component described above. <br> Record walkshed distance here 250 feet |
| 17.Bicycle Analysis <br> (I nclude a map depicting the scope of the applicable bicycle scoping requirement.) | Bicycle Mitigation Anticipated <br> A map is attached | - TEST: If the plan generates 50 or more net new peak hour weekday person trips, mitigation of surrounding bicycle conditions is required <br> - MITIGATION: Required to ensure a low Level of Traffic Stress (LTS-2) on all existing transportation rights-of-way within a certain distance of the site frontage; Alternatively, the project may provide a master planned improvement that provides an equivalent improvement in the level of traffic stress for cyclists within a certain distance of the site frontage. <br> The applicant should refer to the LATR Guidelines to determine the applicable scoping distance requirement. <br> Record scoping distance here 250 feet |


| 18. Bus Transit Analysis <br> (I nclude a map depicting the scope of the bus transit scoping requirement.) | - TEST: If the plan generates 50 or more net new peak hour person trips, mitigation of surrounding transit conditions is <br> Transit Mitigation Anticipated $\square$ A map is attached required. Projects located within "Green" policy areas are <br> exempt from the bus transit adequacy test. <br> - MITIGATION: Required to ensure that there are bus shelters outfitted with realtime traveler information displays and other standard amenities, along with a safe, efficient, and accessible path between the site and a bus stop, at a certain number of bus stops within a certain distance from the site. <br> The applicant should refer to the LATR Guidelines to determine the applicable scoping distance requirement and the applicable number of bus shelters. <br> Record scoping distance here $\qquad$ feet <br> Record the applicable number of bus shelters here $\qquad$ |  |  |
| :---: | :---: | :---: | :---: |
| Additional Analysis or Software Required | $\begin{aligned} & \square \text { Queuing Analysis } \\ & \square \text { Signal Warrant Analysis } \\ & \square \text { Weaving/Merge Analysis } \end{aligned}$ | $\begin{aligned} & \square \text { Crash Analysis } \\ & \text { - Synchro } \\ & \square \text { SIDRA } \end{aligned}$ | ```\squareVISSIM \square CORSIM \square Other``` |
| M-NCPPC Clarifications |  | Additional A Special Circu | tions \& nces for Discussion |
| - Transportation impact study will comply with all other requirements of the LATR Guidelines not listed on this form. <br> - If physical improvements are proposed as mitigation, the transportation impact study will demonstrate feasibility with regards to right-of-way and utility relocation (at a minimum). <br> - If the development proposal significantly changes after this transportation impact study scope has been agreed to, the Applicant will work with M-NCPPC staff to amend the scope to accurately reflect the new proposal. <br> - A receipt from MCDOT showing that the transportation impact study review fee has been paid will be provided to M-NCPPC IRC Division at the time the development application is submitted. <br> - An electronic copy of the transportation impact study and appendices will be provided to Planning Department and MCDOT in electronic format.* <br> * At the time of this document's publication, the Planning Department is accepting plan applications electronically using the E-Plans platform: <br> (https://montgomeryplanning.org/resources/eplans-applicant-userguide/) |  |  |  |

## Trip Generation Rates - ITE 11th Edition

$\left.\begin{array}{ccccc}\begin{array}{c}\text { Land Use } \\ \text { (Source) }\end{array} & \text { Formula/Rate } & \text { Directional Distribution } \\ \text { PM Peak Hour } \\ \text { Out }\end{array}\right)$

Trip Generation for Subject Site

| Land Use Size | AM Peak Hour |  |  | PM Peak Hour |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | In | Out | Total | In | Out | Total |
| Single-Family Detached 37 units | 8 | 22 | 30 | 25 | 14 | 39 |
| Townhouse 7 units | 1 | 2 | 3 | 2 | 2 | 4 |
| Total Trips | 9 | 24 | 33 | 27 | 16 | 43 |
| Adjusted Vehicle Trips by Policy Area (99\%) | 9 | 24 | 33 | 27 | 16 | 43 |
| Calculations for Multimodal Trips |  |  |  |  |  |  |
| Total Person Trips (Vehicle Trips / 64\%) |  |  | 52 |  |  | 67 |
| Auto Passenger Trips (Person Trips x 28.2\%) |  |  | 15 |  |  | 19 |
| Transit Trips (Person Trips x 2.6\%) |  |  | 2 |  |  | 2 |
| Non-Motorized Trips (Person Trips x 5.3\%) |  |  | 3 |  |  | 4 |
| Pedestrian Trips (Transit + Non-Motorized Trips) |  |  | 5 |  |  | 6 |

Notes:

1. Trip adjustment factors and mode split percentages for Rural East Area were obtained from M-NCPPC 2022 LATR Guidelines Appendix Tables 1a \& 1b.


20\%

Spring Garden Estates

1 ights 3 Highview

80\%
1 Study Intersections
20\% Site Trip Distribution





## CARS TURNING MOVEMENT COUNT - SUMMARY



MEDIUMS TURNING MOVEMENT COUNT - SUMMARY

| MEDIUMS TURNING MOVEMENT COUNT - SUMMARY |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Intersec | tion of: and: cation: | MD 27 Kings Montg | alley R | oad | Marylan |  |  |  | Count | ted by: Date: eather: red by: | vcu <br> May 25, <br> Sunny/ <br> SN | $\begin{aligned} & 2022 \\ & \text { Warm } \end{aligned}$ |  |  |  | Wedne Star R | day ting: 4 |  | niffic |  |
| TIME | on:TRAFFIC <br> MD 27 |  |  |  |  | on: | TRAFFIC FROM SOUTH MD 27 |  |  |  | on: | TRAFFIC FROM EAST Kings Valley Road |  |  |  | on: | TRAFFIC FROM WEST Kings Valley Road |  |  |  | $\begin{gathered} \text { TOTAL } \\ \mathbf{N}+\mathbf{S} \\ + \\ \mathrm{E}+\mathrm{W} \end{gathered}$ |
|  | RIGHT | thru | LEFT | U-TN | total | RIGHT | thru | LEFT | U-tn | total | RIGHT | thru | LEFT | U-TN | total | RIGHt | THRU | Left | U-TN | total |  |
| AM |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6:30-6:45 | 0 | 7 | 0 | 0 | 7 | 0 | 7 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 |
| 6:45-7:00 | 0 | 13 | 0 | 0 | 13 | 0 | 5 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 19 |
| 7:00-7:15 | 0 | 7 | 0 | 0 | 7 | 0 | 14 | 0 | 0 | 14 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 23 |
| 7:15-7:30 | 0 | 11 | 1 | 0 | 12 | 0 | 9 | 0 | 0 | 9 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 23 |
| 7:30-7:45 | 1 | 12 | 2 | 0 | 15 | 1 | 7 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23 |
| 7:45-8:00 | 0 | 3 | 1 | 0 | 4 | 0 | 11 | 0 | 0 | 11 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 17 |
| 8:00-8:15 | 0 | 11 | 2 | 0 | 13 | 2 | 12 | 0 | 0 | 14 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 28 |
| 8:15-8:30 | 1 | 9 | 0 | 0 | 10 | 1 | 10 | 0 | 0 | 11 | 2 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 23 |
| 8:30-8:45 | 0 | 10 | 0 | 0 | 10 | 1 | 7 | 0 | 0 | 8 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 19 |
| 8:45-9:00 | 0 | 15 | 0 | 0 | 15 | 0 | 6 | 0 | 0 | 6 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 23 |
| 9:00-9:15 | 0 | 12 | 0 | 0 | 12 | 0 | 5 | 1 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 |
| 9:15-9:30 | 0 | 19 | 0 | 0 | 19 | 1 | 5 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 26 |
| 3 Hr Totals | 2 | 129 | 6 | 0 | 137 | 6 | 98 | 1 | 0 | 105 | 7 | 0 | 1 | 0 | 8 | 2 | 1 | 3 | 0 | 6 | 256 |
| 1 Hr Totals |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6:30-7:30 | 0 | 38 | 1 | 0 | 39 | 0 | 35 | 0 | 0 | 35 | 2 | 0 | 0 | 0 | 2 | 1 | 1 | 1 | 0 | 3 | 79 |
| 6:45-7:45 | 1 | 43 | 3 | 0 | 47 | 1 | 35 | 0 | 0 | 36 | 2 | 0 | 0 | 0 | 2 | 1 | 1 | 1 | 0 | 3 | 88 |
| 7:00-8:00 | 1 | 33 | 4 | 0 | 38 | 1 | 41 | 0 | 0 | 42 | 3 | 0 | 0 | 0 | 3 | 0 | 1 | 2 | 0 | 3 | 86 |
| 7:15-8:15 | 1 | 37 | 6 | 0 | 44 | 3 | 39 | 0 | 0 | 42 | 2 | 0 | 1 | 0 | 3 | 0 | 0 | 2 | 0 | 2 | 91 |
| 7:30-8:30 | 2 | 35 | 5 | 0 | 42 | 4 | 40 | 0 | 0 | 44 | 3 | 0 | 1 | 0 | 4 | 0 | 0 | 1 | 0 | 1 | 91 |
| 7:45-8:45 | 1 | 33 | 3 | 0 | 37 | 4 | 40 | 0 | 0 | 44 | 4 | 0 | 1 | 0 | 5 | 0 | 0 | 1 | 0 | 1 | 87 |
| 8:00-9:00 | 1 | 45 | 2 | 0 | 48 | 4 | 35 | 0 | 0 | 39 | 4 | 0 | 1 | 0 | 5 | 1 | 0 | 0 | 0 | 1 | 93 |
| 8:15-9:15 | 1 | 46 | 0 | 0 | 47 | 2 | 28 | 1 | 0 | 31 | 4 | 0 | 0 | 0 | 4 | 1 | 0 | 0 | 0 | 1 | 83 |
| 8:30-9:30 PEAK HOUR | 0 | 56 | 0 | 0 | 56 | 2 | 23 | 1 | 0 | 26 | 2 | 0 | 0 | 0 | 2 | 1 | 0 | 1 | 0 | 2 | 86 |
| 7:00-8:00 | 1 | 33 | 4 | 0 | 38 | 1 | 41 | 0 | 0 | 42 | 3 | 0 | 0 | 0 | 3 | 0 | 1 | 2 | 0 | 3 | 86 |
| PM |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4:00-4:15 | 0 | 10 | 0 | 0 | 10 | 0 | 7 | 0 | 0 | 7 | 0 | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 19 |
| 4:15-4:30 | 0 | 9 | 0 | 0 | 9 | 0 | 4 | 1 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 |
| 4:30-4:45 | 1 | 6 | 0 | 0 | 7 | 0 | 6 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 14 |
| 4:45-5:00 | 0 | 4 | 0 | 0 | 4 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 9 |
| 5:00-5:15 | 0 | 3 | 0 | 0 | 3 | 1 | 5 | 1 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 2 | 12 |
| 5:15-5:30 | 0 | 2 | 0 | 0 | 2 | 0 | 5 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| 5:30-5:45 | 1 | 3 | 0 | 0 | 4 | 0 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 5:45-6:00 | 0 | 3 | 0 | 0 | 3 | 0 | 3 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 6:00-6:15 | 0 | 1 | 1 | 0 | 2 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 4 |
| 6:15-6:30 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 6:30-6:45 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 6:45-7:00 | 0 | 1 | 0 | 0 | 1 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 3 Hr Totals | 2 | 42 | 1 | 0 | 45 | 1 | 46 | 2 | 0 | 49 | 0 | 0 | 3 | 0 | 3 | 2 | 1 | 1 | 0 | 4 | 101 |
| 1 Hr Totals |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4:00-5:00 | 1 | 29 | 0 | 0 | 30 | 0 | 21 | 1 | 0 | 22 | 0 | 0 | 2 | 0 | 2 | 1 | 0 | 1 | 0 | 2 | 56 |
| 4:15-5:15 | 1 | 22 | 0 | 0 | 23 | 1 | 19 | 2 | 0 | 22 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 1 | 0 | 4 | 49 |
| 4:30-5:30 | 1 | 15 | 0 | 0 | 16 | 1 | 20 | 1 | 0 | 22 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 1 | 0 | 4 | 42 |
| 4:45-5:45 | 1 | 12 | 0 | 0 | 13 | 1 | 16 | 1 | 0 | 18 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 3 | 34 |
| 5:00-6:00 | 1 | 11 | 0 | 0 | 12 | 1 | 15 | 1 | 0 | 17 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 2 | 31 |
| 5:15-6:15 | 1 | 9 | 1 | 0 | 11 | 0 | 11 | 0 | 0 | 11 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 23 |
| 5:30-6:30 | 1 | 7 | 1 | 0 | 9 | 0 | 8 | 0 | 0 | 8 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 18 |
| 5:45-6:45 | 0 | 4 | 1 | 0 | 5 | 0 | 9 | 0 | 0 | 9 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 15 |
| 6:00-7:00 PEAK HOUR | 0 | 2 | 1 | 0 | 3 | 0 | 10 | 0 | 0 | 10 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 14 |
| 5:00-6:00 | 1 | 11 | 0 | 0 | 12 | 1 | 15 | 1 | 0 | 17 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 2 | 31 |

HEAVY TRUCKS TURNING MOVEMENT COUNT - SUMMARY

| Intersection of: MD 27 <br> and: Kings Valley Road <br> Location: Montgomery County, Maryland |  |  |  |  |  |  |  |  |  | Counted by: VCU <br> Date: May 25, 2022 <br> Weather: Sunny/Warm <br> Entered by: SN |  |  |  |  |  |  | Wednesday <br> Star Rating: 4 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TIME | on: <br> RIGHT | TRAFF MD 27 <br> THRU | FROM <br> LEFT | NORTH <br> U-TN | TOTAL | on: RIGHT | TRAFF MD 27 <br> THRU | FROM <br> LEFT | SOUTH <br> U-TN | TOTAL | on: RIGHT | TRAFF Kings V THRU | FRO lley Ro <br> LEFT | $\begin{aligned} & \text { EAST } \\ & \text { d } \\ & \text { U-TN } \end{aligned}$ | TOTAL | on: RIGHT | TRAFF Kings <br> THRU | FROI lley Ro <br> LEFT | WEST d <br> U-TN | TOTAL | $\begin{gathered} \text { TOTAL } \\ \mathrm{N}+\mathrm{S} \\ + \\ \mathrm{E}+\mathrm{W} \end{gathered}$ |
| AM |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6:30-6:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| 6:45-7:00 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 7:00-7:15 | 1 | 1 | 0 | 0 | 2 | 0 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 5 |
| 7:15-7:30 | 0 | 5 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 7:30-7:45 | 0 | 7 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| 7:45-8:00 | 0 | 2 | 0 | 0 | 2 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 8:00-8:15 | 0 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 8:15-8:30 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 8:30-8:45 | 0 | 2 | 0 | 0 | 2 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 8:45-9:00 | 0 | 1 | 0 | 0 | 1 | 0 | 3 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 9:00-9:15 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 9:15-9:30 | 0 | 3 | 0 | 0 | 3 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| 3 Hr Totals | 1 | 32 | 0 | 0 | 33 | 0 | 12 | 0 | 0 | 12 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 47 |
| 1 Hr Totals |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6:30-7:30 | 1 | 10 | 0 | 0 | 11 | 0 | 2 | 0 | 0 | 2 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 15 |
| 6:45-7:45 | 1 | 17 | 0 | 0 | 18 | 0 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 21 |
| 7:00-8:00 | 1 | 15 | 0 | 0 | 16 | 0 | 3 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 20 |
| 7:15-8:15 | 0 | 16 | 0 | 0 | 16 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 |
| 7:30-8:30 | 0 | 12 | 0 | 0 | 12 | 0 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 |
| 7:45-8:45 | 0 | 7 | 0 | 0 | 7 | 0 | 3 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| 8:00-9:00 | 0 | 6 | 0 | 0 | 6 | 0 | 5 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 |
| 8:15-9:15 | 0 | 8 | 0 | 0 | 8 | 0 | 5 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 |
| $\begin{gathered} 8: 30-9: 30 \\ \text { PEAK HOUR } \end{gathered}$ | 0 | 10 | 0 | 0 | 10 | 0 | 8 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 |
| 7:00-8:00 | 1 | 15 | 0 | 0 | 16 | 0 | 3 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 20 |
| PM |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4:00-4:15 | 0 | 1 | 0 | 0 | 1 | 0 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 4:15-4:30 | 0 | 2 | 0 | 0 | 2 | 0 | 2 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 5 |
| 4:30-4:45 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 4:45-5:00 | 0 | 3 | 0 | 0 | 3 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 5:00-5:15 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 5:15-5:30 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 5:30-5:45 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 5:45-6:00 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 6:00-6:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6:15-6:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6:30-6:45 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 6:45-7:00 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 3 Hr Totals | 1 | 10 | 0 | 0 | 11 | 0 | 9 | 0 | 0 | 9 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 21 |
| 1 Hr Totals |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4:00-5:00 | 1 | 6 | 0 | 0 | 7 | 0 | 5 | 0 | 0 | 5 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 13 |
| 4:15-5:15 | 1 | 6 | 0 | 0 | 7 | 0 | 3 | 0 | 0 | 3 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 11 |
| 4:30-5:30 | 1 | 5 | 0 | 0 | 6 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| 4:45-5:45 | 0 | 6 | 0 | 0 | 6 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| 5:00-6:00 | 0 | 3 | 0 | 0 | 3 | 0 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 5:15-6:15 | 0 | 2 | 0 | 0 | 2 | 0 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 5:30-6:30 | 0 | 1 | 0 | 0 | 1 | 0 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 5:45-6:45 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| $\begin{gathered} \text { 6:00-7:00 } \\ \text { PEAK HOUR } \end{gathered}$ | 0 | 1 | 0 | 0 | 1 | 0 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 5:00-6:00 | 0 | 3 | 0 | 0 | 3 | 0 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |

BICYCLES TURNING MOVEMENT COUNT - SUMMARY

| Intersection of: MD 27 <br> and: Kings Valley Road <br> Location: Montgomery County, Maryland |  |  |  |  |  |  |  |  |  | Counted by: VCU <br> Date: May 25, 2022 <br> Weather: Sunny/Warm <br> Entered by: SN |  |  |  |  |  |  | Wednesday <br> Star Rating: 4 |  |  | $\begin{aligned} & \text { Thu } \\ & \text { Thiffic } \\ & \text { Ghoup } \end{aligned}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TIME | on: <br> RIGHT | TRAFF MD 27 <br> THRU | FROM LEFT | NORTH <br> U-TN | TOTAL | on: RIGHT | TRAFF MD 27 <br> THRU | FROM <br> LEFT | OUTH U-TN | TOTAL | on: RIGHT | TRAFF Kings V <br> THRU | C FROM ley Ro <br> LEFT | EAST U-TN | TOTAL | on: <br> RIGHT | TRAFF Kings <br> THRU | FROI ley R <br> LEFT | WEST d U-TN | TOTAL | $\begin{gathered} \text { TOTAL } \\ \text { N + S } \\ + \\ \text { E + W } \end{gathered}$ |
| AM |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6:30-6:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6:45-7:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7:00-7:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7:15-7:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7:30-7:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7:45-8:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| 8:00-8:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:15-8:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:30-8:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:45-9:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9:00-9:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9:15-9:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3 Hr Totals | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| 1 Hr Totals |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6:30-7:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6:45-7:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7:00-8:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| 7:15-8:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| 7:30-8:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| 7:45-8:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| 8:00-9:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:15-9:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| $\begin{gathered} \text { 8:30-9:30 } \\ \text { PEAK HOUR } \end{gathered}$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7:00-8:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| PM |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4:00-4:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4:15-4:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4:30-4:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4:45-5:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5:00-5:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5:15-5:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5:30-5:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5:45-6:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6:00-6:15 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 6:15-6:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6:30-6:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6:45-7:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3 Hr Totals | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 1 Hr Totals |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4:00-5:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4:15-5:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4:30-5:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4:45-5:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5:00-6:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5:15-6:15 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 5:30-6:30 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 5:45-6:45 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| $\begin{aligned} & \text { 6:00-7:00 } \\ & \text { PEAK HOUR } \\ & \hline \end{aligned}$ | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 5:00-6:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |


| Intersection of: MD 27 <br> and: Kings Valley Road <br> Location: Montgomery County, Maryland |  |  | Counted by: VCU <br> Date: May 25, 2022 <br> Weather: Sunny/Warm <br> Entered by: SN | Wednesday <br> Star Rating: 4 | The Tinffic Goup |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| TIME | Pedestrians | Bicycles | Pedestrians | Bicycles |  |
| AM |  |  |  |  |  |
| 6:30-6:45 | 0 | 0 | 0 | 0 |  |
| 6:45-7:00 | 0 | 0 | 0 | 0 |  |
| 7:00-7:15 | 0 | 0 | 0 | 0 |  |
| 7:15-7:30 | 0 | 0 | 0 | 0 |  |
| 7:30-7:45 | 0 | 0 | 0 | 0 |  |
| 7:45-8:00 | 0 | 0 | 0 | 0 |  |
| 8:00-8:15 | 0 | 0 | 0 | 0 |  |
| 8:15-8:30 | 0 | 0 | 0 | 0 |  |
| 8:30-8:45 | 0 | 0 | 0 | 0 |  |
| 8:45-9:00 | 0 | 0 | 0 | 0 |  |
| 9:00-9:15 | 0 | 0 | 0 | 0 |  |
| 9:15-9:30 | 0 | 0 | 0 | 0 |  |
| TOTALS | 0 | 0 | 0 | 0 |  |
| PM |  |  |  |  |  |
| 4:00-4:15 | 0 | 0 | 0 | 0 |  |
| 4:15-4:30 | 0 | 0 | 0 | 0 |  |
| 4:30-4:45 | 0 | 0 | 0 | 0 |  |
| 4:45-5:00 | 0 | 0 | 0 | 0 |  |
| 5:00-5:15 | 0 | 0 | 0 | 0 |  |
| 5:15-5:30 | 0 | 0 | 0 | 0 |  |
| 5:30-5:45 | 0 | 0 | 0 | 0 |  |
| 5:45-6:00 | 0 | 0 | 0 | 0 |  |
| 6:00-6:15 | 0 | 0 | 1 | 0 |  |
| 6:15-6:30 | 0 | 0 | 0 | 0 |  |
| 6:30-6:45 | 0 | 0 | 0 | 0 |  |
| 6:45-7:00 | 0 | 0 | 0 | 0 |  |
| TOTALS | 0 | 0 | 0 | 0 |  |


|  | EAST LEG Kings Valley Road |  | WEST LEG Kings Valley Road |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Pedestrians | Bicycles | Pedestrians | Bicycles |
| AM |  |  |  |  |
| 6:30-6:45 | 0 | 0 | 0 | 0 |
| 6:45-7:00 | 0 | 0 | 0 | 0 |
| 7:00-7:15 | 0 | 0 | 0 | 0 |
| 7:15-7:30 | 0 | 0 | 0 | 0 |
| 7:30-7:45 | 0 | 0 | 0 | 0 |
| 7:45-8:00 | 0 | 0 | 0 | 0 |
| 8:00-8:15 | 0 | 0 | 0 | 0 |
| 8:15-8:30 | 0 | 0 | 0 | 0 |
| 8:30-8:45 | 0 | 0 | 0 | 0 |
| 8:45-9:00 | 0 | 0 | 0 | 0 |
| 9:00-9:15 | 0 | 0 | 0 | 0 |
| 9:15-9:30 | 0 | 0 | 0 | 0 |
| TOTALS | 0 | 0 | 0 | 0 |
| PM |  |  |  |  |
| 4:00-4:15 | 0 | 0 | 0 | 0 |
| 4:15-4:30 | 0 | 0 | 0 | 0 |
| 4:30-4:45 | 0 | 0 | 0 | 0 |
| 4:45-5:00 | 0 | 0 | 0 | 0 |
| 5:00-5:15 | 0 | 0 | 0 | 0 |
| 5:15-5:30 | 0 | 0 | 0 | 0 |
| 5:30-5:45 | 0 | 0 | 0 | 0 |
| 5:45-6:00 | 0 | 0 | 0 | 0 |
| 6:00-6:15 | 0 | 0 | 0 | 0 |
| 6:15-6:30 | 0 | 0 | 0 | 0 |
| 6:30-6:45 | 0 | 0 | 0 | 0 |
| 6:45-7:00 | 0 | 0 | 0 | 0 |
| TOTALS | 0 | 0 | 0 | 0 |



## CARS TURNING MOVEMENT COUNT - SUMMARY



MEDIUMS TURNING MOVEMENT COUNT - SUMMARY

| Intersection of: MD 27 <br> and: Hoffman Drive <br> Location: Montgomery County, Maryland |  |  |  |  |  |  |  |  |  | Counted by: VCU <br> Date: May 25, 2022 <br> Weather: Sunny/Warm <br> Entered by: SN |  |  |  |  |  |  | Wednesday Tinffic <br> Star Rating: 4 Ginlf |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TIME | on: RIGHT | TRAFF MD 27 <br> THRU | FROM <br> LEFT |  | total | on: RIGHT | TRAFFI MD 27 THRU | FROM <br> Left | SOUTH <br> u-TN | total | on: <br> RIGHT | TRAFF Hoffman THRU | C FRON Drive LEFT | EAST U-TN | total | on: <br> RIGHT | TRAFF THRU | FROM LEFT | WEST U-TN | total | $\begin{gathered} \text { TOTAL } \\ \mathbf{N}+\mathbf{S} \\ + \\ \mathrm{E}+\mathrm{w} \end{gathered}$ |
| AM |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6:30-6:45 |  | 7 | 0 | 0 | 7 | 0 | 7 |  | 0 | 7 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 14 |
| 6:45-7:00 |  | 13 | 0 | 0 | 13 | 0 | 7 |  | 0 | 7 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 20 |
| 7:00-7:15 |  | 6 | 0 | 0 | 6 | 0 | 13 |  | 0 | 13 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 19 |
| 7:15-7:30 |  | 15 | 0 | 0 | 15 | 0 | 8 |  | 0 | 8 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 23 |
| 7:30-7:45 |  | 9 | 0 | 0 | 9 | 0 | 8 |  | 0 | 8 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 17 |
| 7:45-8:00 |  | 5 | 0 | 0 | 5 | 0 | 14 |  | 0 | 14 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 19 |
| 8:00-8:15 |  | 12 | 0 | 0 | 12 | 0 | 10 |  | 0 | 10 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 22 |
| 8:15-8:30 |  | 7 | 0 | 0 | 7 | 0 | 11 |  | 0 | 11 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 18 |
| 8:30-8:45 |  | 11 | 0 | 0 | 11 | 0 | 8 |  | 0 | 8 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 19 |
| 8:45-9:00 |  | 16 | 0 | 0 | 16 | 0 | 4 |  | 0 | 4 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 20 |
| 9:00-9:15 |  | 12 | 0 | 0 | 12 | 0 | 7 |  | 0 | 7 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 19 |
| 9:15-9:30 |  | 18 | 0 | 0 | 18 | 0 | 8 |  | 0 | 8 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 26 |
| 3 Hr Totals | 0 | 131 | 0 | 0 | 131 | 0 | 105 | 0 | 0 | 105 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 236 |
| 1 Hr Totals |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6:30-7:30 | 0 | 41 | 0 | 0 | 41 | 0 | 35 | 0 | 0 | 35 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 76 |
| 6:45-7:45 | 0 | 43 | 0 | 0 | 43 | 0 | 36 | 0 | 0 | 36 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 79 |
| 7:00-8:00 | 0 | 35 | 0 | 0 | 35 | 0 | 43 | 0 | 0 | 43 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 78 |
| 7:15-8:15 | 0 | 41 | 0 | 0 | 41 | 0 | 40 | 0 | 0 | 40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 81 |
| 7:30-8:30 | 0 | 33 | 0 | 0 | 33 | 0 | 43 | 0 | 0 | 43 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 76 |
| 7:45-8:45 | 0 | 35 | 0 | 0 | 35 | 0 | 43 | 0 | 0 | 43 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 78 |
| 8:00-9:00 | 0 | 46 | 0 | 0 | 46 | 0 | 33 | 0 | 0 | 33 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 79 |
| 8:15-9:15 | 0 | 46 | 0 | 0 | 46 | 0 | 30 | 0 | 0 | 30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 76 |
| $\begin{aligned} & \text { 8:30-9:30 } \\ & \text { PEAK HOUR } \end{aligned}$ | 0 | 57 | 0 | 0 | 57 | 0 | 27 | 0 | 0 | 27 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 84 |
| 7:00-8:00 | 0 | 35 | 0 | 0 | 35 | 0 | 43 | 0 | 0 | 43 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 78 |
| PM |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4:00-4:15 |  | 10 | 0 | 0 | 10 | 0 | 9 |  | 0 | 9 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 19 |
| 4:15-4:30 |  | 9 | 0 | 0 | 9 | 0 | 6 |  | 0 | 6 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 15 |
| 4:30-4:45 |  | 8 | 0 | 0 | 8 | 0 | 6 |  | 0 | 6 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 14 |
| 4:45-5:00 |  | 6 | 0 | 0 | 6 | 0 | 3 |  | 0 | 3 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 9 |
| 5:00-5:15 |  | 4 | 0 | 0 | 4 | 0 | 2 |  | 0 | 2 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 6 |
| 5:15-5:30 |  | 1 | 0 | 0 | 1 | 0 | 4 |  | 0 | 4 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 5 |
| 5:30-5:45 |  | 1 | 0 | 0 | 1 | 0 | 2 |  | 0 | 2 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 3 |
| 5:45-6:00 |  | 3 | 0 | 0 | 3 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 3 |
| 6:00-6:15 |  | 2 | 0 | 0 | 2 | 0 | 2 |  | 0 | 2 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 4 |
| 6:15-6:30 |  | 0 | 0 | 0 | 0 | 0 | 3 |  | 0 | 3 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 3 |
| 6:30-6:45 |  | 0 | 0 | 0 | 0 | 0 | 1 |  | 0 | 1 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 1 |
| 6:45-7:00 |  | 1 | 0 | 0 | 1 | 0 | 4 |  | 0 | 4 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 5 |
| 3 Hr Totals | 0 | 45 | 0 | 0 | 45 | 0 | 42 | 0 | 0 | 42 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 87 |
| 1 Hr Totals |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4:00-5:00 | 0 | 33 | 0 | 0 | 33 | 0 | 24 | 0 | 0 | 24 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 57 |
| 4:15-5:15 | 0 | 27 | 0 | 0 | 27 | 0 | 17 | 0 | 0 | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 44 |
| 4:30-5:30 | 0 | 19 | 0 | 0 | 19 | 0 | 15 | 0 | 0 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 34 |
| 4:45-5:45 | 0 | 12 | 0 | 0 | 12 | 0 | 11 | 0 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23 |
| 5:00-6:00 | 0 | 9 | 0 | 0 | 9 | 0 | 8 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 |
| 5:15-6:15 | 0 | 7 | 0 | 0 | 7 | 0 | 8 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 |
| 5:30-6:30 | 0 | 6 | 0 | 0 | 6 | 0 | 7 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 |
| 5:45-6:45 | 0 | 5 | 0 | 0 | 5 | 0 | 6 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 |
| $6: 00-7: 00$ <br> PEAK HOUR | 0 | 3 | 0 | 0 | 3 | 0 | 10 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 |
| 4:45-5:45 | 0 | 12 | 0 | 0 | 12 | 0 | 11 | 0 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23 |

HEAVY TRUCKS TURNING MOVEMENT COUNT - SUMMARY

| Intersection of: MD 27 <br> and: Hoffman Drive <br> Location: Montgomery County, Maryland |  |  |  |  |  |  |  |  |  | Counted by: VCU <br> Date: May 25, 2022 <br> Weather: Sunny/Warm <br> Entered by: SN |  |  |  |  |  |  | Wednesday <br> Star Rating: 4 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TIME | on: <br> RIGHT | TRAFF MD 27 <br> THRU | FROM <br> LEFT | NORTH <br> U-TN | TOTAL | on: <br> RIGHT | TRAFF MD 27 <br> THRU | FROM <br> LEFT | OUTH <br> U-TN | TOTAL | on: RIGHT | TRAFF Hoffman | FROM Drive <br> LEFT | EAST <br> U-TN | TOTAL | on: <br> RIGHT | TRAFF THRU | FROM LEFT | WEST U-TN | TOTAL | $\begin{gathered} \hline \text { TOTAL } \\ \mathbf{N}+\mathrm{S} \\ + \\ \mathrm{E}+\mathrm{W} \\ \hline \end{gathered}$ |
| AM |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6:30-6:45 |  | 2 | 0 | 0 | 2 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 2 |
| 6:45-7:00 |  | 4 | 0 | 0 | 4 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 4 |
| 7:00-7:15 |  | 3 | 0 | 0 | 3 | 0 | 2 |  | 0 | 2 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 5 |
| 7:15-7:30 |  | 6 | 0 | 0 | 6 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 6 |
| 7:30-7:45 |  | 4 | 0 | 0 | 4 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 4 |
| 7:45-8:00 |  | 3 | 0 | 0 | 3 | 0 | 1 |  | 0 | 1 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 4 |
| 8:00-8:15 |  | 1 | 0 | 0 | 1 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 1 |
| 8:15-8:30 |  | 1 | 0 | 0 | 1 | 0 | 1 |  | 0 | 1 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 2 |
| 8:30-8:45 |  | 3 | 0 | 0 | 3 | 0 | 1 |  | 0 | 1 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 4 |
| 8:45-9:00 |  | 0 | 0 | 0 | 0 | 0 | 2 |  | 0 | 2 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 2 |
| 9:00-9:15 |  | 3 | 0 | 0 | 3 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 3 |
| 9:15-9:30 |  | 3 | 0 | 0 | 3 | 0 | 4 |  | 0 | 4 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 7 |
| 3 Hr Totals | 0 | 33 | 0 | 0 | 33 | 0 | 11 | 0 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 44 |
| 1 Hr Totals |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6:30-7:30 | 0 | 15 | 0 | 0 | 15 | 0 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 |
| 6:45-7:45 | 0 | 17 | 0 | 0 | 17 | 0 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19 |
| 7:00-8:00 | 0 | 16 | 0 | 0 | 16 | 0 | 3 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19 |
| 7:15-8:15 | 0 | 14 | 0 | 0 | 14 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 |
| 7:30-8:30 | 0 | 9 | 0 | 0 | 9 | 0 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 |
| 7:45-8:45 | 0 | 8 | 0 | 0 | 8 | 0 | 3 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 |
| 8:00-9:00 | 0 | 5 | 0 | 0 | 5 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| 8:15-9:15 | 0 | 7 | 0 | 0 | 7 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 |
| $\begin{gathered} 8: 30-9: 30 \\ \text { PEAK HOUR } \end{gathered}$ | 0 | 9 | 0 | 0 | 9 | 0 | 7 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16 |
| 7:00-8:00 | 0 | 16 | 0 | 0 | 16 | 0 | 3 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19 |
| PM |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4:00-4:15 |  | 1 | 0 | 0 | 1 | 0 | 1 |  | 0 | 1 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 2 |
| 4:15-4:30 |  | 2 | 0 | 0 | 2 | 0 | 1 |  | 0 | 1 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 3 |
| 4:30-4:45 |  | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 0 |
| 4:45-5:00 |  | 3 | 0 | 0 | 3 | 0 | 2 |  | 0 | 2 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 5 |
| 5:00-5:15 |  | 0 | 0 | 0 | 0 | 0 | 1 |  | 0 | 1 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 1 |
| 5:15-5:30 |  | 1 | 0 | 0 | 1 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 1 |
| 5:30-5:45 |  | 1 | 0 | 0 | 1 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 1 |
| 5:45-6:00 |  | 0 | 0 | 0 | 0 | 0 | 1 |  | 0 | 1 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 1 |
| 6:00-6:15 |  | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 0 |
| 6:15-6:30 |  | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 0 |
| 6:30-6:45 |  | 0 | 0 | 0 | 0 | 0 | 1 |  | 0 | 1 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 1 |
| 6:45-7:00 |  | 0 | 0 | 0 | 0 | 0 | 1 |  | 0 | 1 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 1 |
| 3 Hr Totals | 0 | 8 | 0 | 0 | 8 | 0 | 8 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16 |
| 1 Hr Totals |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4:00-5:00 | 0 | 6 | 0 | 0 | 6 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| 4:15-5:15 | 0 | 5 | 0 | 0 | 5 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| 4:30-5:30 | 0 | 4 | 0 | 0 | 4 | 0 | 3 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| 4:45-5:45 | 0 | 5 | 0 | 0 | 5 | 0 | 3 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| 5:00-6:00 | 0 | 2 | 0 | 0 | 2 | 0 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 5:15-6:15 | 0 | 2 | 0 | 0 | 2 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 5:30-6:30 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 5:45-6:45 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| $\begin{aligned} & 6: 00-7: 00 \\ & \text { PEAK HOUR } \end{aligned}$ | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 4:45-5:45 | 0 | 5 | 0 | 0 | 5 | 0 | 3 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |

BICYCLES TURNING MOVEMENT COUNT - SUMMARY

| Intersection of: MD 27 <br> and: Hoffman Drive <br> Location: Montgomery County, Maryland |  |  |  |  |  |  |  |  |  | Counted by: VCU <br> Date: May 25, 2022 <br> Weather: Sunny/Warm <br> Entered by: SN |  |  |  |  |  |  | Wednesday <br> Star Rating: 4 |  |  | $\begin{aligned} & \text { The } \\ & \text { Thiffic } \\ & \text { Gioup } \end{aligned}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TIME | on: <br> RIGHT | TRAFF MD 27 <br> THRU | FROM LEFT | NORTH U-TN | TOTAL | on: <br> RIGHT | TRAFF MD 27 <br> THRU | FROM <br> LEFT | OUTH U-TN | TOTAL | on: RIGHT | TRAFF Hoffman <br> THRU | FROM Drive <br> LEFT | EAST U-TN | TOTAL | on: RIGHT | TRAFF THRU | FROM LEFT | WEST U-TN | TOTAL | $\begin{gathered} \text { TOTAL } \\ \text { N + S } \\ + \\ \text { E + W } \end{gathered}$ |
| AM |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6:30-6:45 |  | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 0 |
| 6:45-7:00 |  | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 0 |
| 7:00-7:15 |  | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 0 |
| 7:15-7:30 |  | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 0 |
| 7:30-7:45 |  | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 0 |
| 7:45-8:00 |  | 1 | 0 | 0 | 1 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 1 |
| 8:00-8:15 |  | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 0 |
| 8:15-8:30 |  | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 0 |
| 8:30-8:45 |  | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 0 |
| 8:45-9:00 |  | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 0 |
| 9:00-9:15 |  | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 0 |
| 9:15-9:30 |  | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 0 |
| 3 Hr Totals | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 1 Hr Totals |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6:30-7:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6:45-7:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7:00-8:00 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 7:15-8:15 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 7:30-8:30 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 7:45-8:45 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 8:00-9:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:15-9:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| $\begin{gathered} \text { 8:30-9:30 } \\ \text { PEAK HOUR } \end{gathered}$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7:00-8:00 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| PM |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4:00-4:15 |  | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 0 |
| 4:15-4:30 |  | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 0 |
| 4:30-4:45 |  | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 0 |
| 4:45-5:00 |  | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 0 |
| 5:00-5:15 |  | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 0 |
| 5:15-5:30 |  | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 0 |
| 5:30-5:45 |  | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 0 |
| 5:45-6:00 |  | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 0 |
| 6:00-6:15 |  | 0 | 0 | 0 | 0 | 0 | 1 |  | 0 | 1 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 1 |
| 6:15-6:30 |  | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 0 |
| 6:30-6:45 |  | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 0 |
| 6:45-7:00 |  | 1 | 0 | 0 | 1 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 1 |
| 3 Hr Totals | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 1 Hr Totals |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4:00-5:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4:15-5:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4:30-5:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4:45-5:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5:00-6:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5:15-6:15 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 5:30-6:30 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 5:45-6:45 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| $\begin{aligned} & \text { 6:00-7:00 } \\ & \text { PEAK HOUR } \end{aligned}$ | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 4:45-5:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |


| Intersection of: MD 27 <br> and: Hoffman Drive <br> Location: Montgomery County, Maryland |  |  | Counted by: VCU <br> Date: May 25, 2022 <br> Weather: Sunny/Warm <br> Entered by: SN | Wednesday <br> Star Rating: 4 | 77he Triffic Grup |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| TIME | Pedestrians | Bicycles | Pedestrians | Bicycles |  |
| AM |  |  |  |  |  |
| 6:30-6:45 | 0 | 0 | 0 | 0 |  |
| 6:45-7:00 | 0 | 0 | 0 | 0 |  |
| 7:00-7:15 | 0 | 0 | 0 | 0 |  |
| 7:15-7:30 | 0 | 0 | 0 | 0 |  |
| 7:30-7:45 | 0 | 0 | 0 | 0 |  |
| 7:45-8:00 | 0 | 0 | 0 | 0 |  |
| 8:00-8:15 | 0 | 0 | 0 | 0 |  |
| 8:15-8:30 | 0 | 0 | 0 | 0 |  |
| 8:30-8:45 | 0 | 0 | 0 | 0 |  |
| 8:45-9:00 | 0 | 0 | 0 | 0 |  |
| 9:00-9:15 | 0 | 0 | 0 | 0 |  |
| 9:15-9:30 | 0 | 0 | 0 | 0 |  |
| TOTALS | 0 | 0 | 0 | 0 |  |
| PM |  |  |  |  |  |
| 4:00-4:15 | 0 | 0 | 0 | 0 |  |
| 4:15-4:30 | 0 | 0 | 0 | 0 |  |
| 4:30-4:45 | 0 | 0 | 0 | 0 |  |
| 4:45-5:00 | 0 | 0 | 0 | 0 |  |
| 5:00-5:15 | 0 | 0 | 0 | 0 |  |
| 5:15-5:30 | 0 | 0 | 0 | 0 |  |
| 5:30-5:45 | 0 | 0 | 0 | 0 |  |
| 5:45-6:00 | 0 | 0 | 0 | 0 |  |
| 6:00-6:15 | 0 | 0 | 0 | 0 |  |
| 6:15-6:30 | 0 | 0 | 0 | 0 |  |
| 6:30-6:45 | 0 | 0 | 0 | 0 |  |
| 6:45-7:00 | 0 | 0 | 0 | 0 |  |
| TOTALS | 0 | 0 | 0 | 0 |  |


|  | EAST LEG Hoffman Drive |  | WEST LEG |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Pedestrians | Bicycles | Pedestrians | Bicycles |
| AM |  |  |  |  |
| 6:30-6:45 | 0 | 0 |  |  |
| 6:45-7:00 | 0 | 0 |  |  |
| 7:00-7:15 | 0 | 0 |  |  |
| 7:15-7:30 | 0 | 0 |  |  |
| 7:30-7:45 | 0 | 0 |  |  |
| 7:45-8:00 | 0 | 0 |  |  |
| 8:00-8:15 | 0 | 0 |  |  |
| 8:15-8:30 | 0 | 0 |  |  |
| 8:30-8:45 | 0 | 0 |  |  |
| 8:45-9:00 | 0 | 0 |  |  |
| 9:00-9:15 | 0 | 0 |  |  |
| 9:15-9:30 | 0 | 0 |  |  |
| TOTALS | 0 | 0 | 0 | 0 |
| PM |  |  |  |  |
| 4:00-4:15 | 0 | 0 |  |  |
| 4:15-4:30 | 0 | 0 |  |  |
| 4:30-4:45 | 0 | 0 |  |  |
| 4:45-5:00 | 0 | 0 |  |  |
| 5:00-5:15 | 0 | 0 |  |  |
| 5:15-5:30 | 0 | 0 |  |  |
| 5:30-5:45 | 0 | 0 |  |  |
| 5:45-6:00 | 0 | 0 |  |  |
| 6:00-6:15 | 0 | 0 |  |  |
| 6:15-6:30 | 0 | 0 |  |  |
| 6:30-6:45 | 0 | 0 |  |  |
| 6:45-7:00 | 0 | 0 |  |  |
| TOTALS | 0 | 0 | 0 | 0 |



## CARS TURNING MOVEMENT COUNT - SUMMARY



MEDIUMS TURNING MOVEMENT COUNT - SUMMARY


HEAVY TRUCKS TURNING MOVEMENT COUNT - SUMMARY

| Intersection of: Kings Valley Road <br> and: Preakness Drive <br> Location: Montgomery County, Maryland |  |  |  |  |  |  |  |  |  | Counted by: VCU <br> Date: May 25, 2022 <br> Weather: Sunny/Warm <br> Entered by: SN |  |  |  |  |  |  | Wednesday <br> Star Rating: 4 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TIME | on:TRAFFIC FROM NORTH <br> Kings Valley Road |  |  |  |  | on: $\quad$TRAFFIC FROM SOUTH <br> Kings Valley Road |  |  |  |  | TRAFFIC FROM EAST on: Preakness Drive |  |  |  |  | on: RIGHT | TRAFF THRU | FROM LEFT | WEST U-TN | TOTAL | TOTAL $\mathrm{N}+\mathrm{S}$ + $\mathrm{E}+\mathrm{W}$ |
| AM |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6:30-6:45 |  | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 0 |
| 6:45-7:00 |  | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 0 |
| 7:00-7:15 |  | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 0 |
| 7:15-7:30 |  | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 0 |
| 7:30-7:45 |  | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 0 |
| 7:45-8:00 |  | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 0 |
| 8:00-8:15 |  | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 0 |
| 8:15-8:30 |  | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 0 |
| 8:30-8:45 |  | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 0 |
| 8:45-9:00 |  | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 0 |
| 9:00-9:15 |  | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 0 |
| 9:15-9:30 |  | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 0 |
| 3 Hr Totals | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 Hr Totals |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6:30-7:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6:45-7:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7:00-8:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7:15-8:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7:30-8:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7:45-8:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:00-9:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:15-9:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| $\begin{gathered} 8: 30-9: 30 \\ \text { PEAK HOUR } \end{gathered}$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7:15-8:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PM |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4:00-4:15 |  | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 0 |
| 4:15-4:30 |  | 0 | 0 | 0 | 0 | 0 | 1 |  | 0 | 1 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 1 |
| 4:30-4:45 |  | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 0 |
| 4:45-5:00 |  | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 0 |
| 5:00-5:15 |  | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 0 |
| 5:15-5:30 |  | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 0 |
| 5:30-5:45 |  | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 0 |
| 5:45-6:00 |  | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 0 |
| 6:00-6:15 |  | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 0 |
| 6:15-6:30 |  | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 0 |
| 6:30-6:45 |  | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 0 |
| 6:45-7:00 |  | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 0 |
| 3 Hr Totals | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 1 Hr Totals |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4:00-5:00 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 4:15-5:15 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 4:30-5:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4:45-5:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5:00-6:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5:15-6:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5:30-6:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5:45-6:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6:00-7:00 PEAK HOUR | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4:45-5:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

BICYCLES TURNING MOVEMENT COUNT - SUMMARY

| Intersection of: Kings Valley Road <br> and: Preakness Drive <br> Location: Montgomery County, Maryland |  |  |  |  |  |  |  |  |  | Counted by: VCU <br> Date: May 25, 2022 <br> Weather: Sunny/Warm <br> Entered by: SN |  |  |  |  |  |  | Wednesday <br> Star Rating: 4 |  |  | $\begin{aligned} & \text { The } \\ & \text { Thiffic } \\ & \text { Gmoup } \end{aligned}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TIME | on: <br> RIGHT | TRAFF Kings V <br> THRU | FROM LeFT | ORTH U-TN | TOTAL | on: <br> RIGHT | TRAFFI Kings V THRU | FROM ley Ro <br> LEFT | SOUTH U-TN | TOTAL | on: RIGHT | TRAFF Preakne <br> THRU | CROM s Drive <br> LEFT | EAST U-TN | TOTAL | on: <br> RIGHT | TRAFF THRU | FROM LEFT | WEST U-TN | TOTAL | $\begin{gathered} \text { TOTAL } \\ \mathrm{N}+\mathrm{S} \\ + \\ \mathrm{E}+\mathrm{W} \end{gathered}$ |
| AM |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6:30-6:45 |  | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 0 |
| 6:45-7:00 |  | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 0 |
| 7:00-7:15 |  | 1 | 0 | 0 | 1 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 1 |
| 7:15-7:30 |  | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 0 |
| 7:30-7:45 |  | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 0 |
| 7:45-8:00 |  | 0 | 0 | 0 | 0 | 0 | 1 |  | 0 | 1 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 1 |
| 8:00-8:15 |  | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 0 |
| 8:15-8:30 |  | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 0 |
| 8:30-8:45 |  | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 0 |
| 8:45-9:00 |  | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 0 |
| 9:00-9:15 |  | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 0 |
| 9:15-9:30 |  | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 0 |
| 3 Hr Totals | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 1 Hr Totals |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6:30-7:30 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 6:45-7:45 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 7:00-8:00 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 7:15-8:15 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 7:30-8:30 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 7:45-8:45 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 8:00-9:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:15-9:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| $\begin{aligned} & \text { 8:30-9:30 } \\ & \text { PEAK HOUR } \end{aligned}$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7:15-8:15 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| PM |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4:00-4:15 |  | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 0 |
| 4:15-4:30 |  | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 0 |
| 4:30-4:45 |  | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 0 |
| 4:45-5:00 |  | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 0 |
| 5:00-5:15 |  | 0 | 0 | 0 | 0 | 0 | 1 |  | 0 | 1 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 1 |
| 5:15-5:30 |  | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 0 |
| 5:30-5:45 |  | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 0 |
| 5:45-6:00 |  | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 0 |
| 6:00-6:15 |  | 1 | 0 | 0 | 1 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 1 |
| 6:15-6:30 |  | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 0 |
| 6:30-6:45 |  | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 0 |
| 6:45-7:00 |  | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 0 | 0 |  |  |  |  | 0 | 0 |
| 3 Hr Totals | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 1 Hr Totals |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4:00-5:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4:15-5:15 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 4:30-5:30 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 4:45-5:45 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 5:00-6:00 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 5:15-6:15 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 5:30-6:30 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 5:45-6:45 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| $\begin{aligned} & \text { 6:00-7:00 } \\ & \text { PEAK HOUR } \end{aligned}$ | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 4:45-5:45 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |

PEDESTRIAN AND BICYCLE OBSERVATIONS - SUMMARY


|  | EAST LEG Preakness Drive |  | WEST LEG |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Pedestrians | Bicycles | Pedestrians | Bicycles |
| AM |  |  |  |  |
| 6:30-6:45 | 1 | 0 |  |  |
| 6:45-7:00 | 0 | 0 |  |  |
| 7:00-7:15 | 0 | 0 |  |  |
| 7:15-7:30 | 0 | 0 |  |  |
| 7:30-7:45 | 0 | 0 |  |  |
| 7:45-8:00 | 0 | 0 |  |  |
| 8:00-8:15 | 0 | 0 |  |  |
| 8:15-8:30 | 0 | 0 |  |  |
| 8:30-8:45 | 0 | 0 |  |  |
| 8:45-9:00 | 0 | 0 |  |  |
| 9:00-9:15 | 0 | 0 |  |  |
| 9:15-9:30 | 0 | 0 |  |  |
| TOTALS | 1 | 0 | 0 | 0 |
| PM |  |  |  |  |
| 4:00-4:15 | 0 | 0 |  |  |
| 4:15-4:30 | 0 | 0 |  |  |
| 4:30-4:45 | 0 | 0 |  |  |
| 4:45-5:00 | 1 | 0 |  |  |
| 5:00-5:15 | 0 | 0 |  |  |
| 5:15-5:30 | 0 | 0 |  |  |
| 5:30-5:45 | 0 | 0 |  |  |
| 5:45-6:00 | 0 | 0 |  |  |
| 6:00-6:15 | 0 | 0 |  |  |
| 6:15-6:30 | 0 | 0 |  |  |
| 6:30-6:45 | 0 | 0 |  |  |
| 6:45-7:00 | 0 | 0 |  |  |
| TOTALS | 1 | 0 | 0 | 0 |



The Traffic Group, Inc.

Kings Valley Road
North of Preakness Drive
Montgomery County, Maryland
(800) 583-8411
www.trafficgroup.com
Merging Innovation and Excellence

| Northbound |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start | 0 | 6 | 11 | 16 | 21 | 26 | 31 | 36 | 41 | 46 | 51 | 56 | 61 | 66 | 71 |  |
| Time | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 250 | Total |
| 05/25/22 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 01:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 02:00 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 3 |
| 03:00 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 04:00 | 0 | 0 | 1 | 2 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 05:00 | 0 | 0 | 2 | 10 | 2 | 1 | 1 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 21 |
| 06:00 | 0 | 0 | 5 | 18 | 3 | 1 | 5 | 10 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 46 |
| 07:00 | 0 | 0 | 3 | 31 | 8 | 5 | 16 | 19 | 8 | 5 | 0 | 0 | 0 | 0 | 0 | 95 |
| 08:00 | 0 | 0 | 6 | 28 | 5 | 5 | 7 | 15 | 5 | 3 | 1 | 0 | 0 | 0 | 0 | 75 |
| 09:00 | 0 | 0 | 4 | 25 | 0 | 1 | 6 | 9 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 46 |
| 10:00 | 0 | 0 | 4 | 14 | 3 | 3 | 5 | 6 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 38 |
| 11:00 | 0 | 0 | 1 | 16 | 4 | 4 | 8 | 14 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 50 |
| 12 PM | 0 | 0 | 6 | 19 | 2 | 3 | 9 | 4 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 47 |
| 13:00 | 0 | 0 | 2 | 14 | 2 | 7 | 10 | 9 | 6 | 0 | 0 | 1 | 0 | 0 | 0 | 51 |
| 14:00 | 0 | 0 | 6 | 8 | 4 | 6 | 8 | 7 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 44 |
| 15:00 | 0 | 2 | 2 | 14 | 4 | 9 | 19 | 12 | 7 | 1 | 0 | 0 | 0 | 0 | 0 | 70 |
| 16:00 | 0 | 0 | 4 | 26 | 7 | 13 | 11 | 11 | 7 | 3 | 0 | 0 | 0 | 0 | 0 | 82 |
| 17:00 | 0 | 1 | 0 | 17 | 6 | 5 | 22 | 21 | 6 | 4 | 0 | 0 | 0 | 0 | 0 | 82 |
| 18:00 | 0 | 0 | 3 | 15 | 5 | 12 | 19 | 16 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 80 |
| 19:00 | 0 | 0 | 4 | 6 | 6 | 25 | 22 | 13 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 80 |
| 20:00 | 0 | 0 | 0 | 5 | 4 | 34 | 48 | 21 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 117 |
| 21:00 | 0 | 0 | 1 | 2 | 3 | 8 | 7 | 7 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 32 |
| 22:00 | 0 | 0 | 0 | 0 | 1 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 23:00 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| Total | 0 | 3 | 54 | 273 | 72 | 143 | 228 | 201 | 78 | 21 | 3 | 1 | 1 | 0 | 0 | 1078 |
| Grand Total | 0 | 3 | 54 | 273 | 72 | 143 | 228 | 201 | 78 | 21 | 3 | 1 | 1 | 0 | 0 | 1078 |

Stats
50th Percentile : 85th Percentile 95th Percentile

Mean Speed(Average) 10 MPH Pace Speed

Number in Pace
Percent in Pace
Number of Vehicles > 25 MPH
Percent of Vehicles > 25 MPH

16 MPH
29 MPH
38 MPH
38 MPH
43 MPH
29 MPH
31-40 MPH
429
$39.8 \%$
676
676

The Traffic Group, Inc.

Kings Valley Road
North of Preakness Drive
Montgomery County, Maryland
(800) 583-8411
www.trafficgroup.com
Merging Innovation and Excellence

| Southbound |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start | 0 | 6 | 11 | 16 | 21 | 26 | 31 | 36 | 41 | 46 | 51 | 56 | 61 | 66 | 71 |  |
| Time | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 250 | Total |
| 05/25/22 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 01:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 02:00 | 0 | 0 | 0 | 1 | 1 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 03:00 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 04:00 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 05:00 | 0 | 0 | 1 | 3 | 0 | 3 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| 06:00 | 0 | 0 | 0 | 2 | 1 | 0 | 2 | 3 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 12 |
| 07:00 | 0 | 1 | 1 | 3 | 5 | 1 | 4 | 10 | 4 | 1 | 0 | 1 | 0 | 0 | 0 | 31 |
| 08:00 | 0 | 0 | 1 | 9 | 14 | 2 | 5 | 10 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 42 |
| 09:00 | 0 | 0 | 0 | 8 | 7 | 4 | 19 | 5 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 45 |
| 10:00 | 0 | 0 | 1 | 8 | 4 | 2 | 6 | 5 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 31 |
| 11:00 | 0 | 0 | 3 | 12 | 14 | 3 | 4 | 7 | 5 | 2 | 0 | 0 | 0 | 0 | 0 | 50 |
| 12 PM | 0 | 0 | 0 | 13 | 12 | 1 | 5 | 9 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 43 |
| 13:00 | 0 | 0 | 0 | 15 | 6 | 7 | 12 | 10 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 52 |
| 14:00 | 0 | 0 | 0 | 15 | 12 | 9 | 10 | 8 | 3 | 1 | 1 | 0 | 0 | 0 | 0 | 59 |
| 15:00 | 0 | 0 | 3 | 29 | 11 | 6 | 12 | 13 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 79 |
| 16:00 | 0 | 0 | 1 | 33 | 19 | 6 | 20 | 19 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 101 |
| 17:00 | 0 | 0 | 1 | 19 | 20 | 10 | 30 | 36 | 24 | 1 | 0 | 0 | 0 | 0 | 0 | 141 |
| 18:00 | 0 | 0 | 3 | 23 | 18 | 12 | 35 | 22 | 4 | 2 | 1 | 1 | 0 | 0 | 0 | 121 |
| 19:00 | 0 | 0 | 1 | 20 | 18 | 11 | 20 | 15 | 1 | 1 | 2 | 0 | 0 | 0 | 0 | 89 |
| 20:00 | 0 | 0 | 5 | 18 | 3 | 5 | 6 | 11 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 51 |
| 21:00 | 0 | 0 | 0 | 11 | 3 | 9 | 6 | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 35 |
| 22:00 | 0 | 0 | 2 | 9 | 0 | 1 | 2 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 18 |
| 23:00 | 0 | 0 | 1 | 4 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 8 |
| Total | 0 | 1 | 24 | 256 | 172 | 94 | 199 | 194 | 67 | 15 | 5 | 2 | 0 | 0 | 0 | 1029 |
| Grand Total | 0 | 1 | 24 | 256 | 172 | 94 | 199 | 194 | 67 | 15 | 5 | 2 | 0 | 0 | 0 | 1029 |

Stats

17 MPH
28 MPH
38 MPH
42 MPH
29 MPH
-25 MPH
428
41.6\%

576

## APPENDIX B

Intersection Capacity Analysis Worksheets

CRITICAL LANE VOLUME (CLV) METHODOLOGY for Montgomery County
E/W Road: Kings Valley Road N/S Road: MD 27
Conditions: Existing Traffic
Date of Count: 5/25/2022
Day of Count: Wednesday
Analyst: Qiang Tian



| PM | AM |  |
| :---: | :---: | :---: |
| 20 | 15 | L |
| 20 | 10 | T |
| 24 | 76 | R |



Capacity Analysis

| Morning Peak Hour |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Thru Volumes |  |  | + Opposing Lefts |  | AM |  |  |
| Dir | VOL | $\times$ LUF | $=$ Total | VOL | $\times$ LUF | $=$ Total | CLV |  |
| NB | 499 | 1.00 | 499 | 15 | 1.00 | 15 |  |  |
|  |  |  |  |  |  |  | 978 |  |
| SB | 970 | 1.00 | 970 | 8 | 1.00 | 8 |  |  |
| EB | 101 | 1.00 | 101 | 78 | 1.00 | 78 |  |  |
|  |  |  |  |  |  |  | 179 |  |
| WB | 128 | 1.00 | 128 | 15 | 1.00 | 15 |  |  |
| CLV TOTAL= |  |  |  |  |  |  |  |  |


| Evening Peak Hour |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Thru Volumes |  |  | + Opposing Lefts |  |  | PM |
| Dir | VOL | $x$ LUF | $=$ Total | VOL | $x$ LUF | $=$ Total | CLV |
| NB | 1015 | 1.00 | 1015 | 76 | 1.00 | 76 |  |
|  |  |  |  |  |  |  | 1091 |
| SB | 635 | 1.00 | 635 | 44 | 1.00 | 44 |  |
| EB | 64 | 1.00 | 64 | 52 | 1.00 | 52 |  |
|  |  |  |  |  |  |  | 126 |
| WB | 106 | 1.00 | 106 | 20 | 1.00 | 20 |  |
| CLV TOTAL= $=1,217$ |  |  |  |  |  |  |  |

CRITICAL LANE VOLUME (CLV) METHODOLOGY for Montgomery County
E/W Road: Kings Valley Road N/S Road: MD 27

Conditions: Background Traffic
Date of Count: 5/25/2022
Day of Count: Wednesday
Analyst: Qiang Tian



| PM | AM |  |
| :---: | :---: | :---: |
|  |  |  |
| 20 | 15 | L |
| 20 | 10 | T |
| 24 | 76 | R |



Capacity Analysis



CRITICAL LANE VOLUME (CLV) METHODOLOGY for Montgomery County
E/W Road: Kings Valley Road N/S Road: MD 27
Conditions: Total Traffic
Date of Count: 5/25/2022
Day of Count: Wednesday
Analyst: Qiang Tian


| —LTR | R | 45 | 43 |
| :---: | :---: | :---: | :---: |
|  | T | 10 | 14 |
|  | L | 98 | 65 |
|  |  | AM | PM |
|  |  |  |  |


| PM | AM |  |
| :---: | :---: | :---: |
| 20 | 15 | L |
| 20 | 10 | T |



Capacity Analysis

| Morning Peak Hour |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Thru Volumes |  |  | + Opposing Lefts |  | AM |  |
| Dir | VOL | $\times$ LUF | $=$ Total | VOL | $\times$ LUF $=$ Total | CLV |  |
| NB | 513 | 1.00 | 513 | 17 | 1.00 | 17 |  |
|  |  |  |  |  |  |  | 988 |
| SB | 980 | 1.00 | 980 | 8 | 1.00 | 8 |  |
| EB | 101 | 1.00 | 101 | 98 | 1.00 | 98 |  |
|  |  |  |  |  |  |  | 199 |
| WB | 153 | 1.00 | 153 | 15 | 1.00 | 15 |  |
| CLV TOTAL= |  |  |  |  |  |  |  |


| Evening Peak Hour |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dir | Thru Volumes |  |  | + Opposing Lefts |  |  | $\begin{aligned} & \text { PM } \\ & \text { CLV } \end{aligned}$ |
|  | VOL | x LUF | = Total | VOL | x LUF | = Total |  |
| NB | 1048 | 1.00 | 1048 | 81 | 1.00 | 81 |  |
| SB | 642 | 1.00 | 642 | 44 | 1.00 | 44 |  |
| EB | 64 | 1.00 | 64 | 65 | 1.00 | 65 |  |
|  |  |  |  |  |  |  | 142 |
| WB | 122 | 1.00 | 122 |  | 1.00 | 20 |  |
|  |  |  |  |  | LV TOT |  | 271 |

CRITICAL LANE VOLUME (CLV) METHODOLOGY for Montgomery County

E/W Road: Hoffman Drive N/S Road: MD 27
Conditions: Existing Traffic

Date of Count: 5/25/2022
Day of Count: Wednesday
Analyst: Qiang Tian


Capacity Analysis

| Morning Peak Hour |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dir | Thru Volumes |  |  | + Opposing Lefts |  |  | $\begin{aligned} & \text { AM } \\ & \text { CLV } \end{aligned}$ |
|  | VOL | x LUF | = Total | VOL | x LUF | = Total |  |
| WB | 8 | 1.00 | 8 |  |  |  | 8 |
| NB | 518 | 1.00 | 518 | 2 | 1.00 | 2 |  |
| SB | 1105 | 1.00 | 1105 |  |  |  |  |
|  |  |  |  |  | CLV TO | TAL= | ,113 |


| Evening Peak Hour |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dir | Thru Volumes |  |  | + Opposing Lefts |  |  | $\begin{aligned} & \text { PM } \\ & \text { CLV } \end{aligned}$ |
|  | VOL | x LUF | = Total | VOL | x LUF | = Total |  |
| WB | 2 | 1.00 | 2 |  |  |  | 2 |
| NB | 1052 | 1.00 | 1052 | 1 | 1.00 | 1 |  |
| SB | 695 | 1.00 | 695 |  |  |  |  |
|  |  |  |  |  | CLV TO | TAL= | 055 |

CRITICAL LANE VOLUME (CLV) METHODOLOGY for Montgomery County

E/W Road: Hoffman Drive N/S Road: MD 27
Conditions: Background Traffic

Date of Count: 5/25/2022
Day of Count: Wednesday Analyst: Qiang Tian


Capacity Analysis

| Morning Peak Hour |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dir | Thru Volumes |  |  | + Opposing Lefts |  |  | $\begin{aligned} & \text { AM } \\ & \text { CLV } \end{aligned}$ |
|  | VOL | x LUF | = Total | VOL | x LUF | = Total |  |
| WB | 8 | 1.00 | 8 |  |  |  | 8 |
| NB | 525 | 1.00 | 525 | 2 | 1.00 | 2 |  |
| SB | 1115 | 1.00 | 1115 |  |  |  |  |
|  |  |  |  |  | CLV TO | TAL= | ,123 |


| Evening Peak Hour |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dir | Thru Volumes |  |  | + Opposing Lefts |  |  | $\begin{aligned} & \text { PM } \\ & \text { CLV } \end{aligned}$ |
|  | VOL | x LUF | = Total | VOL | x LUF | = Total |  |
| WB | 2 | 1.00 | 2 |  |  |  | 2 |
|  | 1063 | 1.00 | 1063 | 1 | 1.00 | 1 |  |
| SB | 702 | 1.00 | 702 |  |  |  |  |
|  |  |  |  |  | CLV TO | TAL= | 066 |

CRITICAL LANE VOLUME (CLV) METHODOLOGY for Montgomery County

E/W Road: Hoffman Drive N/S Road: MD 27

Conditions: Total Traffic

Date of Count: 5/25/2022
Day of Count: Wednesday Analyst: Qiang Tian

Peak: 7:00-8:00
Peak: 4:45-5:45



Capacity Analysis

| Morning Peak Hour |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dir | Thru Volumes |  |  | + Opposing Lefts |  |  | $\begin{aligned} & \text { AM } \\ & \text { CLV } \end{aligned}$ |
|  | VOL | x LUF | = Total | VOL | x LUF | = Total |  |
| WB | 8 | 1.00 | 8 |  |  |  | 8 |
| NB | 532 | 1.00 | 532 | 2 | 1.00 | 2 | 1135 |
| SB | 1135 | 1.00 | 1135 |  |  |  |  |
| CLV TOTAL= |  |  |  |  |  |  | 1,143 |


| Evening Peak Hour |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dir | Thru Volumes |  |  | + Opposing Lefts |  |  | $\begin{aligned} & \text { PM } \\ & \text { CLV } \end{aligned}$ |
|  | VOL | x LUF | = Total | VOL | x LUF | = Total |  |
| WB | 2 | 1.00 | 2 |  |  |  | 2 |
| NB | 1085 | 1.00 | 1085 | 1 | 1.00 | 1 |  |
| SB | 715 | 1.00 | 715 |  |  |  |  |
|  |  |  |  |  | CLV TO | TAL= | 088 |


| PM | AM |  |
| :---: | :---: | :---: |
| 10 | 3 | L |
| 139 | 40 | T |

LT -
KINGS VALLEY ROAD

Capacity Analysis

| Morning Peak Hour |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dir | Thru Volumes |  |  | + Opposing Lefts |  |  | $\begin{aligned} & \text { AM } \\ & \text { CLV } \end{aligned}$ |
|  | VOL | x LUF | = Total | VOL | x LUF | $=$ Total |  |
| SB | 13 | 1.00 | 13 |  |  |  | 13 |
| EB | 43 | 1.00 | 43 |  |  |  |  |
| WB | 96 | 1.00 | 96 | 3 | 1.00 | 3 |  |
|  |  |  |  |  | CLV TO | AL= | 112 |


| Evening Peak Hour |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dir | Thru Volumes |  |  | + Opposing Lefts |  |  | $\begin{aligned} & \text { PM } \\ & \text { CLV } \end{aligned}$ |
|  | VOL | x LUF | = Total | VOL | x LUF | = Total |  |
| SB | 8 | 1.00 | 8 |  |  |  | 8 |
| EB | 149 | 1.00 | 149 |  |  |  |  |
| WB | 89 | 1.00 | 89 |  | 1.00 | 10 |  |
|  |  |  |  |  | CLV TOT | AL= | 157 |



Capacity Analysis

| Morning Peak Hour |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dir | Thru Volumes |  |  | + Opposing Lefts |  |  | $\begin{aligned} & \text { AM } \\ & \text { CLV } \end{aligned}$ |
|  | VOL | x LUF | = Total | VOL | x LUF | = Total |  |
| SB | 13 | 1.00 | 13 |  |  |  | 13 |
| EB | 43 | 1.00 | 43 |  |  |  |  |
| WB | 96 | 1.00 | 96 | 3 | 1.00 | 3 |  |
|  |  |  |  |  | CLV TO | TAL= | 112 |



CRITICAL LANE VOLUME (CLV) METHODOLOGY
for Montgomery County

E/W Road: Kings Valley Road
N/S Road: Glade Valley Terrace
Conditions: Total Traffic

Date of Count:
Day of Count:
Analyst: Qiang Tian


Capacity Analysis

| Morning Peak Hour |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Thru Volumes |  |  | + Opposing Lefts |  | AM |  |
| Dir | VOL | x LUF | $=$ Total | VOL | $\times$ LUF $=$ Total | CLV |  |
| NB | 13 | 1.00 | 13 | 4 | 1.00 | 4 |  |
|  |  |  |  |  |  |  | 26 |
| SB | 13 | 1.00 | 13 | 13 | 1.00 | 13 |  |
| EB | 52 | 1.00 | 52 | 0 | 1.00 | 0 |  |
|  |  |  |  |  |  |  | 111 |
| WB | 108 | 1.00 | 108 | 3 | 1.00 | 3 |  |
| CLV TOTAL= |  |  |  |  |  |  | 137 |


| Evening Peak Hour |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dir | Thru Volumes |  |  | + Opposing Lefts |  |  | $\begin{aligned} & \text { PM } \\ & \text { CLV } \end{aligned}$ |
|  | VOL | x LUF | = Total | VOL | x LUF | = Total |  |
| NB | 8 | 1.00 | 8 | 2 | 1.00 | 2 |  |
| SB | 8 | 1.00 | 8 | 8 | 1.00 | 8 |  |
| EB | 176 | 1.00 | 176 | 0 | 1.00 | 0 |  |
|  |  |  |  |  |  |  | 176 |
| WB | 97 | 1.00 | 97 | 10 | 1.00 | 10 |  |
|  |  |  |  |  | LV TOT | AL= | 92 |

CRITICAL LANE VOLUME (CLV) METHODOLOGY for Montgomery County

E/W Road: Preakness Drive N/S Road: Kings Valley Road Conditions: Existing Traffic

Date of Count: 5/25/2022
Day of Count: Wednesday
Analyst: Qiang Tian

Peak: 7:15-8:15
Peak: 4:45-5:45


Capacity Analysis

| Morning Peak Hour |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dir | Thru Volumes |  |  | + Opposing Lefts |  |  | $\begin{aligned} & \text { AM } \\ & \text { CLV } \end{aligned}$ |
|  | VOL | x LUF | = Total | VOL | x LUF | = Total |  |
| WB | 63 | 1.00 | 63 |  |  |  | 63 |
| NB | 58 | 1.00 | 58 | 13 | 1.00 | 13 |  |
| SB | 44 | 1.00 | 44 |  |  |  |  |
|  |  |  |  |  | CLV TO | TAL= | 34 |


| Evening Peak Hour |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dir | Thru Volumes |  |  | + Opposing Lefts |  |  | $\begin{aligned} & \text { PM } \\ & \text { CLV } \end{aligned}$ |
|  | VOL | x LUF | = Total | VOL | x LUF | = Total |  |
| WB | 35 | 1.00 | 35 |  |  |  | 35 |
| NB | 86 | 1.00 | 86 | 36 | 1.00 | 36 |  |
| SB | 141 | 1.00 | 141 |  |  |  |  |
|  |  |  |  |  | CLV TO | TAL= | 76 |

CRITICAL LANE VOLUME (CLV) METHODOLOGY for Montgomery County

E/W Road: Preakness Drive N/S Road: Kings Valley Road Conditions: Background Traffic

Date of Count: 5/25/2022
Day of Count: Wednesday
Analyst: Qiang Tian

Peak: 7:15-8:15
Peak: 4:45-5:45


Capacity Analysis

| Morning Peak Hour |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dir | Thru Volumes |  |  | + Opposing Lefts |  |  | $\begin{aligned} & \text { AM } \\ & \text { CLV } \end{aligned}$ |
|  | VOL | x LUF | = Total | VOL | x LUF | = Total |  |
| WB | 63 | 1.00 | 63 |  |  |  | 63 |
| NB | 58 | 1.00 | 58 | 13 | 1.00 | 13 |  |
| SB | 44 | 1.00 | 44 |  |  |  |  |
|  |  |  |  |  | CLV TO | TAL= | 34 |



CRITICAL LANE VOLUME (CLV) METHODOLOGY for Montgomery County

E/W Road: Preakness Drive
N/S Road: Kings Valley Road
Conditions: Total Traffic

Date of Count: 5/25/2022
Day of Count: Wednesday
Analyst: Qiang Tian

Peak: 7:15-8:15
~ Peak: 4:45-5:45


Capacity Analysis

| Morning Peak Hour |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dir | Thru Volumes |  |  | + Opposing Lefts |  |  | AMCLV |
|  | VOL | x LUF | = Total | VOL | x LUF | = Total |  |
| NB | 58 | 1.00 | 58 | 13 | 1.00 | 13 |  |
| SB | 48 | 1.00 | 48 | 0 | 1.00 | 0 |  |
| EB | 12 | 1.00 | 12 | 20 | 1.00 | 20 |  |
| WB | 63 | 1.00 | 63 | 12 | 1.00 | 12 |  |
|  |  |  |  |  | LV TOT | AL= | 146 |


| Evening Peak Hour |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Thru Volumes |  |  | + Opposing Lefts |  | PM |  |
| Dir | VOL | $x$ LUF | $=$ Total | VOL | $x$ LUF | $=$ Total | CLV |
| NB | 86 | 1.00 | 86 | 36 | 1.00 | 36 |  |
|  |  |  |  |  |  |  | 154 |
| SB | 154 | 1.00 | 154 | 0 | 1.00 | 0 |  |
| EB | 8 | 1.00 | 8 | 12 | 1.00 | 12 |  |
|  |  |  |  |  |  |  | 43 |
| WB | 35 | 1.00 | 35 | 8 | 1.00 | 8 |  |
| CLV TOTAL= |  |  |  |  |  |  | 197 |

Intersection: 1: MD 27 \& Kings Valley Road

| Movement | SE | NW | NE | NE | SW | SW |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Directions Served | LTR | LTR | L | TR | L | TR |
| Maximum Queue (ft) | 120 | 150 | 23 | 179 | 52 | 298 |
| Average Queue (ft) | 51 | 66 | 4 | 65 | 7 | 133 |
| 95th Queue (ft) | 94 | 127 | 18 | 137 | 36 | 252 |
| Link Distance (ft) | 917 | 651 |  | 1034 |  | 914 |
| Upstream Blk Time (\%) |  |  |  |  |  |  |
| Queuing Penalty (veh) |  |  |  |  |  |  |
| Storage Bay Dist (ft) |  |  | 125 |  | 150 |  |
| Storage Blk Time (\%) |  |  |  | 1 |  | 4 |
| Queuing Penalty (veh) |  |  |  | 0 | 1 |  |

Intersection: 2: MD 27 \& Hoffman Drive

| Movement | WB | SB |
| :--- | ---: | ---: |
| Directions Served | LR | LT |
| Maximum Queue (ft) | 26 | 11 |
| Average Queue (ft) | 5 | 1 |
| 95th Queue (ft) | 21 | 9 |
| Link Distance (ft) | 375 | 1034 |
| Upstream Blk Time (\%) |  |  |
| Queuing Penalty (veh) |  |  |
| Storage Bay Dist (ft) |  |  |
| Storage Blk Time (\%) |  |  |
| Queuing Penalty (veh) |  |  |

## Intersection: 3: Kings Valley Road \& Glade Valley Terrace

| Movement | SE | SW |
| :--- | ---: | ---: |
| Directions Served | LT | LR |
| Maximum Queue (ft) | 6 | 31 |
| Average Queue (ft) | 0 | 11 |
| 95th Queue (ft) | 4 | 35 |
| Link Distance (ft) | 651 | 532 |
| Upstream Blk Time (\%) |  |  |
| Queuing Penalty (veh) |  |  |
| Storage Bay Dist (ft) |  |  |
| Storage Blk Time (\%) |  |  |
| Queuing Penalty (veh) |  |  |

Intersection: 4: Kings Valley Road \& Preakness Drive

| Movement | WB | SB |
| :--- | :---: | :---: |
| Directions Served | LR | LT |
| Maximum Queue (ft) | 62 | 18 |
| Average Queue (ft) | 29 | 1 |
| 95th Queue (ft) | 49 | 11 |
| Link Distance (ft) | 326 | 518 |
| Upstream Blk Time (\%) |  |  |
| Queuing Penalty (veh) |  |  |
| Storage Bay Dist (ft) |  |  |
| Storage Bk Time (\%) |  |  |
| Queuing Penalty (veh) |  |  |
| Network Summary |  |  |
| Network wide Queuing Penalty: 1 |  |  |

Intersection: 1: MD 27 \& Kings Valley Road

| Movement | SE | NW | NE | NE | SW | SW |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Directions Served | LTR | LTR | L | TR | L | TR |
| Maximum Queue (ft) | 97 | 138 | 157 | 456 | 126 | 261 |
| Average Queue (ft) | 37 | 60 | 26 | 183 | 39 | 81 |
| 95th Queue (ft) | 77 | 114 | 95 | 361 | 91 | 200 |
| Link Distance (ft) | 917 | 651 |  | 1034 |  | 914 |
| Upstream Blk Time (\%) |  |  |  |  |  |  |
| Queuing Penalty (veh) |  |  | 125 |  | 150 |  |
| Storage Bay Dist (ft) |  |  |  | 10 |  | 2 |
| Storage Blk Time (\%) |  |  |  | 4 |  | 1 |

Intersection: 2: MD 27 \& Hoffman Drive

| Movement | WB | SB |
| :--- | ---: | ---: |
| Directions Served | LR | LT |
| Maximum Queue (ft) | 22 | 39 |
| Average Queue (ft) | 1 | 2 |
| 95th Queue (ft) | 10 | 23 |
| Link Distance (ft) | 375 | 1034 |
| Upstream Blk Time (\%) |  |  |
| Queuing Penalty (veh) |  |  |
| Storage Bay Dist (ft) |  |  |
| Storage Blk Time (\%) |  |  |
| Queuing Penalty (veh) |  |  |

## Intersection: 3: Kings Valley Road \& Glade Valley Terrace

| Movement | SE | SW |
| :--- | ---: | ---: |
| Directions Served | LT | LR |
| Maximum Queue (ft) | 21 | 31 |
| Average Queue (ft) | 1 | 9 |
| 95th Queue (ft) | 12 | 31 |
| Link Distance (ft) | 651 | 532 |
| Upstream Blk Time (\%) |  |  |
| Queuing Penalty (veh) |  |  |
| Storage Bay Dist (ft) |  |  |
| Storage Blk Time (\%) |  |  |
| Queuing Penalty (veh) |  |  |

Intersection: 4: Kings Valley Road \& Preakness Drive

| Movement | WB | SB |
| :--- | ---: | ---: |
| Directions Served | LR | LT |
| Maximum Queue (ft) | 41 | 42 |
| Average Queue (ft) | 20 | 4 |
| 95th Queue (ft) | 44 | 22 |
| Link Distance (ft) | 326 | 518 |
| Upstream Blk Time (\%) |  |  |
| Queuing Penalty (veh) |  |  |
| Storage Bay Dist (ft) |  |  |
| Storage Blk Time (\%) |  |  |
| Queuing Penalty (veh) |  |  |

Network Summary
Network wide Queuing Penalty: 5

Intersection: 1: MD 27 \& Kings Valley Road

| Movement | SE | NW | NE | NE | SW | SW |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Directions Served | LTR | LTR | L | TR | L | TR |
| Maximum Queue (ft) | 122 | 148 | 43 | 232 | 52 | 315 |
| Average Queue (ft) | 55 | 67 | 5 | 70 | 7 | 142 |
| 95th Queue (ft) | 103 | 126 | 30 | 163 | 35 | 263 |
| Link Distance (ft) | 917 | 651 |  | 1034 |  | 914 |
| Upstream Blk Time (\%) |  |  |  |  |  |  |
| Queuing Penalty (veh) |  |  |  |  |  |  |
| Storage Bay Dist (ft) |  |  | 125 |  | 150 |  |
| Storage Blk Time (\%) |  |  |  | 1 |  | 5 |
| Queuing Penalty (veh) |  |  |  | 0 | 1 |  |

Intersection: 2: MD 27 \& Hoffman Drive

| Movement | WB | SB |
| :--- | ---: | ---: |
| Directions Served | LR | LT |
| Maximum Queue (ft) | 23 | 26 |
| Average Queue (ft) | 5 | 1 |
| 95th Queue (ft) | 20 | 15 |
| Link Distance (ft) | 375 | 1034 |
| Upstream Blk Time (\%) |  |  |
| Queuing Penalty (veh) |  |  |
| Storage Bay Dist (ft) |  |  |
| Storage Blk Time (\%) |  |  |
| Queuing Penalty (veh) |  |  |

## Intersection: 3: Kings Valley Road \& Glade Valley Terrace

| Movement | SE | SW |
| :--- | ---: | ---: |
| Directions Served | LT | LR |
| Maximum Queue (ft) | 3 | 31 |
| Average Queue (ft) | 0 | 11 |
| 95th Queue (ft) | 3 | 36 |
| Link Distance (ft) | 651 | 532 |
| Upstream Blk Time (\%) |  |  |
| Queuing Penalty (veh) |  |  |
| Storage Bay Dist (ft) |  |  |
| Storage Blk Time (\%) |  |  |
| Queuing Penalty (veh) |  |  |

Intersection: 4: Kings Valley Road \& Preakness Drive

| Movement | WB | SB |
| :--- | :---: | ---: |
| Directions Served | LR | LT |
| Maximum Queue (ft) | 62 | 21 |
| Average Queue (ft) | 29 | 1 |
| 95th Queue (ft) | 50 | 11 |
| Link Distance (ft) | 326 | 518 |
| Upstream Blk Time (\%) |  |  |
| Queuing Penalty (veh) |  |  |
| Storage Bay Dist (ft) |  |  |
| Storage Blk Time (\%) |  |  |
| Queuing Penalty (veh) |  |  |

Network Summary
Network wide Queuing Penalty: 1

Intersection: 1: MD 27 \& Kings Valley Road

| Movement | SE | NW | NE | NE | SW | SW |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Directions Served | LTR | LTR | L | TR | L | TR |
| Maximum Queue (ft) | 93 | 140 | 135 | 492 | 120 | 282 |
| Average Queue (ft) | 36 | 60 | 23 | 200 | 40 | 82 |
| 95th Queue (ft) | 75 | 114 | 88 | 399 | 86 | 208 |
| Link Distance (ft) | 917 | 651 |  | 1034 |  | 914 |
| Upstream Blk Time (\%) |  |  |  |  |  |  |
| Queuing Penalty (veh) |  |  | 125 |  | 150 |  |
| Storage Bay Dist (ft) |  |  |  | 11 |  | 2 |
| Storage Blk Time (\%) |  |  |  | 5 |  | 1 |

Intersection: 2: MD 27 \& Hoffman Drive

| Movement | WB | SB |
| :--- | ---: | ---: |
| Directions Served | LR | LT |
| Maximum Queue (ft) | 22 | 53 |
| Average Queue (ft) | 2 | 2 |
| 95th Queue (ft) | 11 | 27 |
| Link Distance (ft) | 375 | 1034 |
| Upstream Blk Time (\%) |  |  |
| Queuing Penalty (veh) |  |  |
| Storage Bay Dist (ft) |  |  |
| Storage Blk Time (\%) |  |  |
| Queuing Penalty (veh) |  |  |

## Intersection: 3: Kings Valley Road \& Glade Valley Terrace

| Movement | SE | SW |
| :--- | ---: | ---: |
| Directions Served | LT | LR |
| Maximum Queue (ft) | 12 | 31 |
| Average Queue (ft) | 1 | 8 |
| 95th Queue (ft) | 7 | 31 |
| Link Distance (ft) | 651 | 532 |
| Upstream Blk Time (\%) |  |  |
| Queuing Penalty (veh) |  |  |
| Storage Bay Dist (ft) |  |  |
| Storage Blk Time (\%) |  |  |
| Queuing Penalty (veh) |  |  |

Intersection: 4: Kings Valley Road \& Preakness Drive

| Movement | WB | SB |
| :--- | ---: | ---: |
| Directions Served | LR | LT |
| Maximum Queue (ft) | 37 | 37 |
| Average Queue (ft) | 21 | 3 |
| 95th Queue (ft) | 45 | 20 |
| Link Distance (ft) | 326 | 518 |
| Upstream Blk Time (\%) |  |  |
| Queuing Penalty (veh) |  |  |
| Storage Bay Dist (ft) |  |  |
| Storage Blk Time (\%) |  |  |
| Queuing Penalty (veh) |  |  |

Network Summary
Network wide Queuing Penalty: 6

Intersection: 1: MD 27 \& Kings Valley Road

| Movement | SE | NW | NE | NE | SW | SW |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Directions Served | LTR | LTR | L | TR | L | TR |
| Maximum Queue (ft) | 108 | 190 | 23 | 224 | 31 | 311 |
| Average Queue (ft) | 50 | 81 | 4 | 78 | 8 | 142 |
| 95th Queue (ft) | 95 | 153 | 17 | 172 | 26 | 263 |
| Link Distance (ft) | 917 | 644 |  | 1034 |  | 914 |
| Upstream Blk Time (\%) |  |  |  |  |  |  |
| Queuing Penalty (veh) |  |  |  |  |  |  |
| Storage Bay Dist (ft) |  |  | 125 |  | 150 |  |
| Storage Blk Time (\%) |  |  |  | 2 |  | 4 |
| Queuing Penalty (veh) |  |  |  | 0 | 1 |  |

Intersection: 2: MD 27 \& Hoffman Drive

| Movement | WB | SB |
| :--- | ---: | ---: |
| Directions Served | LR | LT |
| Maximum Queue (ft) | 31 | 25 |
| Average Queue (ft) | 6 | 1 |
| 95th Queue (ft) | 24 | 13 |
| Link Distance (ft) | 375 | 1034 |
| Upstream Blk Time (\%) |  |  |
| Queuing Penalty (veh) |  |  |
| Storage Bay Dist (ft) |  |  |
| Storage Blk Time (\%) |  |  |
| Queuing Penalty (veh) |  |  |

## Intersection: 3: Site Access/Glade Valley Terrace \& Kings Valley Road

| Movement | SE | NE | SW |
| :--- | ---: | ---: | ---: |
| Directions Served | LTR | LTR | LTR |
| Maximum Queue (ft) | 12 | 36 | 36 |
| Average Queue (ft) | 0 | 10 | 11 |
| 95th Queue (ft) | 6 | 34 | 36 |
| Link Distance (ft) | 644 | 284 | 533 |
| Upstream Blk Time (\%) |  |  |  |
| Queuing Penalty (veh) |  |  |  |
| Storage Bay Dist (ft) |  |  |  |
| Storage Blk Time (\%) |  |  |  |

Intersection: 4: Kings Valley Road \& Site Access/Preakness Drive

| Movement | EB | WB | SB |
| :--- | ---: | ---: | ---: |
| Directions Served | LTR | LTR | LTR |
| Maximum Queue (ft) | 31 | 54 | 5 |
| Average Queue $(\mathrm{ft})$ | 9 | 28 | 0 |
| 95th Queue $(\mathrm{ft})$ | 32 | 49 | 4 |
| Link Distance $(\mathrm{ft})$ | 206 | 326 | 514 |
| Upstream Blk Time (\%) |  |  |  |
| Queuing Penalty (veh) |  |  |  |
| Storage Bay Dist (ft) |  |  |  |
| Storage Blk Time (\%) |  |  |  |
| Queuing Penalty (veh) |  |  |  |

Network Summary
Network wide Queuing Penalty: 1

Intersection: 1: MD 27 \& Kings Valley Road

| Movement | SE | NW | NE | NE | SW | SW |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Directions Served | LTR | LTR | L | TR | L | TR |
| Maximum Queue (ft) | 100 | 162 | 155 | 535 | 108 | 290 |
| Average Queue (ft) | 41 | 84 | 24 | 236 | 42 | 89 |
| 95th Queue (ft) | 84 | 148 | 84 | 438 | 84 | 207 |
| Link Distance (ft) | 917 | 644 |  | 1034 |  | 914 |
| Upstream Blk Time (\%) |  |  |  |  |  |  |
| Queuing Penalty (veh) |  |  |  |  |  |  |
| Storage Bay Dist (ft) |  |  | 125 |  | 150 |  |
| Storage Blk Time (\%) |  |  |  | 14 |  | 2 |
| Queuing Penalty (veh) |  |  |  | 6 | 2 |  |

Intersection: 2: MD 27 \& Hoffman Drive

| Movement | WB | SB |
| :--- | ---: | ---: |
| Directions Served | LR | LT |
| Maximum Queue (ft) | 22 | 6 |
| Average Queue (ft) | 2 | 0 |
| 95th Queue (ft) | 11 | 4 |
| Link Distance (ft) | 375 | 1034 |
| Upstream Blk Time (\%) |  |  |
| Queuing Penalty (veh) |  |  |
| Storage Bay Dist (ft) |  |  |
| Storage Blk Time (\%) |  |  |
| Queuing Penalty (veh) |  |  |

## Intersection: 3: Site Access/Glade Valley Terrace \& Kings Valley Road

| Movement | SE | NE | SW |
| :--- | ---: | ---: | ---: |
| Directions Served | LTR | LTR | LTR |
| Maximum Queue (ft) | 18 | 31 | 36 |
| Average Queue (ft) | 1 | 8 | 8 |
| 95th Queue (ft) | 10 | 30 | 31 |
| Link Distance (ft) | 644 | 284 | 533 |
| Upstream Blk Time (\%) |  |  |  |
| Queuing Penalty (veh) |  |  |  |
| Storage Bay Dist (ft) |  |  |  |
| Storage Blk Time (\%) |  |  |  |

Intersection: 4: Kings Valley Road \& Site Access/Preakness Drive

| Movement | EB | WB | SB |
| :--- | ---: | ---: | ---: |
| Directions Served | LTR | LTR | LTR |
| Maximum Queue (ft) | 30 | 49 | 31 |
| Average Queue $(\mathrm{ft})$ | 5 | 21 | 3 |
| 95th Queue $(\mathrm{ft})$ | 22 | 45 | 18 |
| Link Distance $(\mathrm{ft})$ | 206 | 326 | 514 |
| Upstream Blk Time (\%) |  |  |  |
| Queuing Penalty (veh) |  |  |  |
| Storage Bay Dist (ft) |  |  |  |
| Storage Blk Time (\%) |  |  |  |
| Queuing Penalty (veh) |  |  |  |

Network Summary
Network wide Queuing Penalty: 8

## APPENDIX C

Trip Assignment for
Approved Developments

1
$N$
Figure C-1. Background Development Location Map

Background Developments:

1. Resurvey on Locust Level
2. Addition to Ray's Adventure
3. St. Anne's Episcopal Church Senior Apartments



FIGURE C-2. TRIP ASSIGNMENT FOR BACKGROUND DEVELOPMENT \#1


FIGURE C-3. TRIP ASSIGNMENT FOR BACKGROUND DEVELOPMENTS \#2 \& 3



[^0]:    2425 Reedie Drive, Floor 14, Wheaton, MD 20902 | Phone: 301-495-4605 | Fax: 301-495-1320

[^1]:    ${ }^{1}$ For the purpose of these conditions, the term "Applicant" shall also mean the developer, the owner or any successor(s) in interest to the terms of this approval.

[^2]:    ${ }^{1}$ For the purpose of these conditions, the term "Applicant" shall also mean the developer, the owner or any successor(s) in interest to the terms of this approval.

[^3]:    - The Maryland Dept. of the Environment (MDE) will review this resolution. Applicants may proceed with development plans and water/sewer service applications at their own risk pending MDE's concurrence with these actions by the County Council.
    - Applicants receiving a denial under this resolution may not apply again until October 30, 2019, unless specifically allowed by DEP.
    - See Attachment B for mapping of approved, conditionally approved, and deferred category change amendments.

[^4]:    - The Maryland Dept. of the Environment (MDE) will review this resolution. Applicants may proceed with development plans and water/sewer service applications at their own risk pending MDE's concurrence with these actions by the County Council.
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[^5]:    - The Maryland Dept. of the Environment (MDE) will review this resolution. Applicants may proceed with development plans and water/sewer service applications at their own risk pending MDE's concurrence with these actions by the County Council.
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[^6]:    - The Maryland Dept. of the Environment (MDE) will review this resolution. Applicants may proceed with development plans and water/sewer service applications at their own risk pending MDE's concurrence with these actions by the County Council.
    - Applicants receiving a denial under this resolution may not apply again until October 30, 2019, unless specifically allowed by DEP.
    - See Attachment B for mapping of approved, conditionally approved, and deferred category change amendments.

[^7]:    ${ }^{1}$ https://montgomeryplanning.org/wp-content/uploads/2020/11/20210101-Text-of-the-2020-2024-Growth-and-Infrastructure-Policy-withMaps.pdf

