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September 4, 2026

Megan Barniea
Senior Project Manager
Bayland Consultants and Designers, Inc.
7455 New Ridge Road, Suite T
Hanover, MD 21076

RE: Valentine Creek Water Access Facility
TRAFFIC ANALYSIS
Anne Arundel County, Maryland
Our Job No.: 2026-0411

Dear Ms. Barniea:

The Traffic Group, Inc. has reviewed the proposed Valentine Creek Water Access Facility and is pleased to submit this Traffic Analysis detailing existing conditions along Valentine Creek Drive and projected future conditions associated with the roadway upon completion of Anne Arundel County's project. We will show that Valentine Creek Drive currently carries a minimal volume of traffic and can easily accommodate projected future demand. Sight distance measurements were obtained at the intersection of Old Herald Harbor Road and Valentine Creek Drive to demonstrate existing conditions and show that any additional trips will not impact the current values.

Site Information

Anne Arundel County is proposing to develop a water access facility intended for kayak and canoe launching at the terminus of Valentine Creek Drive and the Crownsville section of Anne Arundel County. More generally, the site is situated to the east of I-97, west of Severn River. A map showing the general area can be found in Figure 1.

Valentine Creek Drive is a two-way undivided roadway extending for a distance of approximately 2,500 ft in the north/south direction from Old Herald Harbor Road to its terminus. There are about 30 single-family homes located on both sides of the roadway.

The roadway has a posted speed limit of 30 MPH with a cross section of 20–22 ft in width. It is open section except for a small portion of curbing on the east side. Overhead roadway lighting is present through the entire section of the roadway. There did not appear to be any parking restrictions through signing along the length of the road. Similarly, there are no dedicated pedestrian or bicycle facilities along the roadway. Figure 2 is a photograph of Valentine Creek Drive taken in the northbound direction at Old Herald Harbor Road, showing the general features of the roadway.

Figure 1. Site Map

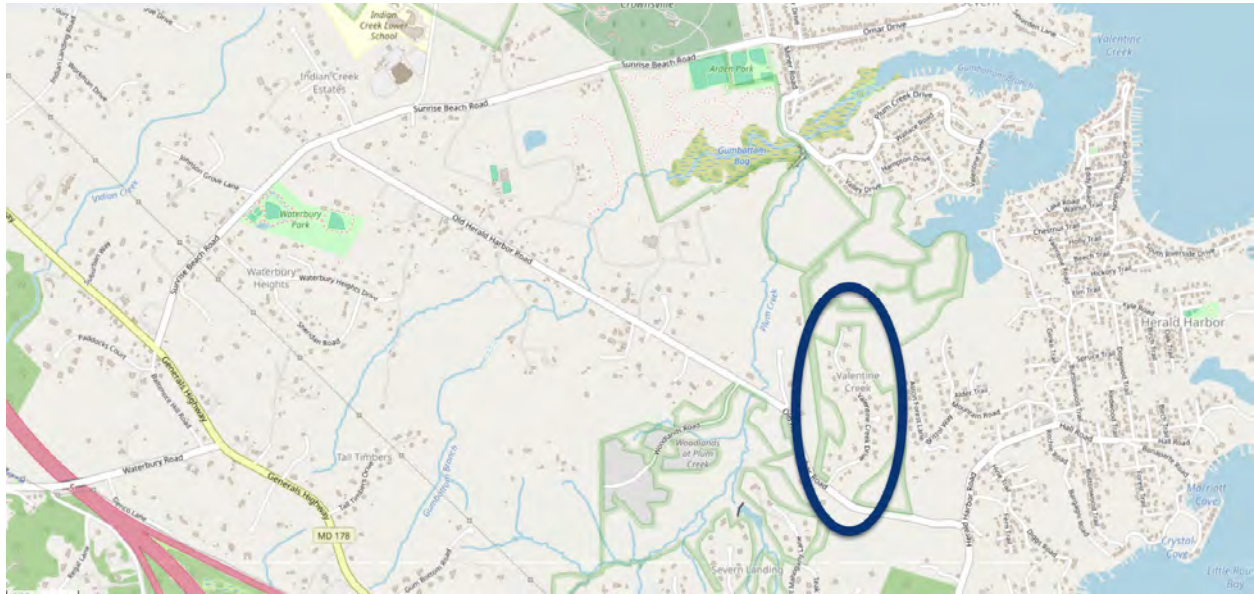


Figure 2. Valentine Creek Drive at Old Herald Harbor Road (Northbound)



Old Herald Harbor Road generally runs in the east/west direction for a distance of approximately 2 miles from Sunrise Beach Road easterly to Herald Harbor Road. Valentine Creek Drive intersects Old Herald Harbor Road approximately 2,000 ft west of Herald Harbor Road. The intersection is controlled by a stop sign for Valentine Creek Drive.

Old Herald Harbor Road features a posted speed limit of 30 MPH, with winding horizontal curves and vertical alignment changes. There is no shoulder along the roadway, with the exception of the approaches at Valentine Creek Drive. In that same area, a short segment of sidewalk extending for a distance of approximately 100 ft is available. There are no other pedestrian facilities or generators along Old Herald Harbor Road.

Traffic Volumes

Twenty-four (24) hour volume counts and speed data were collected along Valentine Creek Drive approximately 250 ft north of Old Herald Harbor Road from Thursday, June 25 through Saturday, June 27, 2026. The selected days would likely be the busiest days associated with the water access facility. The results of the 24-hour data collection are summarized in Table 1.

Table 1. Daily Traffic Volumes

Date	Northbound	Southbound	Total
June 25, 2026	87	89	176
June 26, 2026	91	89	180
June 27, 2026	69	64	133

The average daily traffic volumes correspond to fewer than 200 existing daily trips along Valentine Creek Drive. Full details on the data can be found in Appendix A.

Hourly peak hour traffic volumes were also determined for each direction during the AM and PM peaks for the weekdays and the midday peak for Saturday. The corresponding peak hour traffic volumes are summarized below in Table 2.

As shown within Table 2, there are no more than 12 vehicles in a single direction over the course of an entire hour. This corresponds to approximately one vehicle in each direction every 5 minutes or less.

Table 2. Peak Hour Traffic Volumes

Date	Peak Hour	Northbound	Southbound	Total
Thu, June 25, 2026	AM	3	8	11
	PM	12	7	19
Fri, June 26, 2026	AM	3	9	12
	PM	6	5	11
Sat, June 27, 2026	Saturday	3	10	13

Table 3. 85th Percentile Speeds

Direction	85 th Percentile Speed
Northbound	24 MPH
Southbound	26 MPH

The speed data along Valentine Creek Drive was also reviewed. As shown in Table 3, the 85th percentile for northbound traffic was 24 MPH. The southbound 85th percentile speed was found to be 26 MPH. The 85th percentile speed represents the speed at which 85% of the traffic travels at or below and is typically used for design purposes.

A further review of the speed study found that only 1.6% of northbound vehicles and 1.2 % of southbound vehicles were traveling at a speed greater than 30 MPH.

Sight Distance

Sight distance is necessary to ensure traffic operations can safely occur. In order to minimize vehicular conflicts, it is critical that appropriate sight distance is available for drivers. Below, criteria for both intersection and stopping sight distance (SSD) is discussed.

Intersection Sight Distance

Intersection sight distance (ISD) permits drivers of stopped vehicles on a minor approach to have an adequate view of oncoming traffic and the intersecting roadway to make a safe decision on whether or not to proceed onto the roadway. The speed of mainline traffic, horizontal curvature, vertical geometry, and roadside features could affect ISD. AASHTO provides guidance on sight distance in its publication A Policy on Geometric Design of Highways and Streets (2018). The length of ISD is based on the measured speed of the major roadway and a time gap for the minor road vehicles that access the major road. It is given in the following equation:

$$ISD = 1.47 \times V \times t_g$$

Speed is represented by the variable V in the ISD equation. The time gap (t_g) is defined by AASHTO as the length of gap in which a driver will accept as safe to make an appropriate turning maneuver. Values for time gaps for different vehicles are provided by AASHTO based on previous studies and are independent of the roadway operating speed. In this case, $t_g = 6.5$ for right turns and 7.5 for left turns. It is anticipated that the proposed use will involve passenger vehicles only, and not trailers.

ISD is measured from a driver eye height of 3.5 ft above the road. The driver is situated 10 ft back from the edge of pavement to represent their position within a vehicle. Along the roadway, an object height of 3.5 ft is also utilized to represent a vehicle traveling along the roadway. AASHTO classifies the left-turning movement as Case B1 and the right-turning movement as Case B2. Any obstructions along the roadside such as poles, trees, or other objects that block a driver's view would limit ISD.

While ISD is desirable as it allows minor street vehicles to make a decision, accelerate, and have no impact to mainline traffic, SSD is considered the minimum adequate design value to achieve safe access. If SSD is available, drivers would be able to stop or adjust their speed to avoid a potential collision.

Stopping Sight Distance

SSD is available along roadways so that drivers would be able to safely and comfortably decelerate and stop in the event that a vehicle or object is seen in conflict. Requirements for SSD are less than ISD and are based on a deceleration rate of 11.2 ft per second (a) and a brake reaction time of 2.5 seconds (t). Both of these values are extremely conservative.

Other facts in the SSD equation include the 85th percentile speed of the roadway (V) as described above. Roadway geometry is typically the limiting factor for SSD. A driver eye height of 3.5 ft viewing an object of 2 ft, which represents a typical brake light height, is used. The equation for SSD is as follows:

$$SSD = 1.47 \times V \times t + (1.075 \times V^2 / a)$$

Measured Sight Distance

A site visit was undertaken in July 2026 to measure available sight distance at the existing intersection of Valentine Creek Drive at Old Herald Harbor Road. ISD looking left was found to be 210 ft. The value is controlled primarily by the vertical alignment of the road. Looking to the right, ISD was measured at 295 ft, which is a result of horizontal curves and trees. Figures 3 and 4 show the observed sight distance. This ISD corresponds to a design speed of 22 MPH from the west and 27 MPH from the east. The posted speed limit for Old Herald Harbor Road is 35 MPH. A warning sign, however, is posted to the south of Valentine Creek Drive with a warning speed of 20 MPH.

Figure 3. Observed Sight Distance – Valentine Creek Drive at Old Herald Harbor Road



Figure 4. Observed Sight Distance – Valentine Creek Drive at Old Herald Harbor Road



SSD was also measured and found to be 190 ft for westbound traffic and 345 ft for eastbound traffic. This corresponds to design speeds of approximately 30 MPH and 43 MPH, respectively.

While ISD may result in lower travel speeds than desirable, adequate SSD is indicative that conditions are adequate for turning movements to occur safely and collisions to be avoided. Table 4 summarizes all calculated design speeds. Figure 5 shows a visual summary of the measured sight distance values. It is important to recognize the values to the east are limited by vertical alignment, which is not shown on the diagram.

Table 4. Calculated Design Speeds

Condition	Measured Sight Distance (feet)	Design Speed (MPH)
ISD Left	210	22
ISD Right	295	35
SSD Westbound	190	30
SSD Eastbound	345	43

The county's proposed water access facility will add occasional turning movements at the intersection of Valentine Creek Drive and Old Herald Harbor Road, no additional thru traffic along the roadway will be added. As a result, the existing conditions for sight distance will remain unchanged in the future.

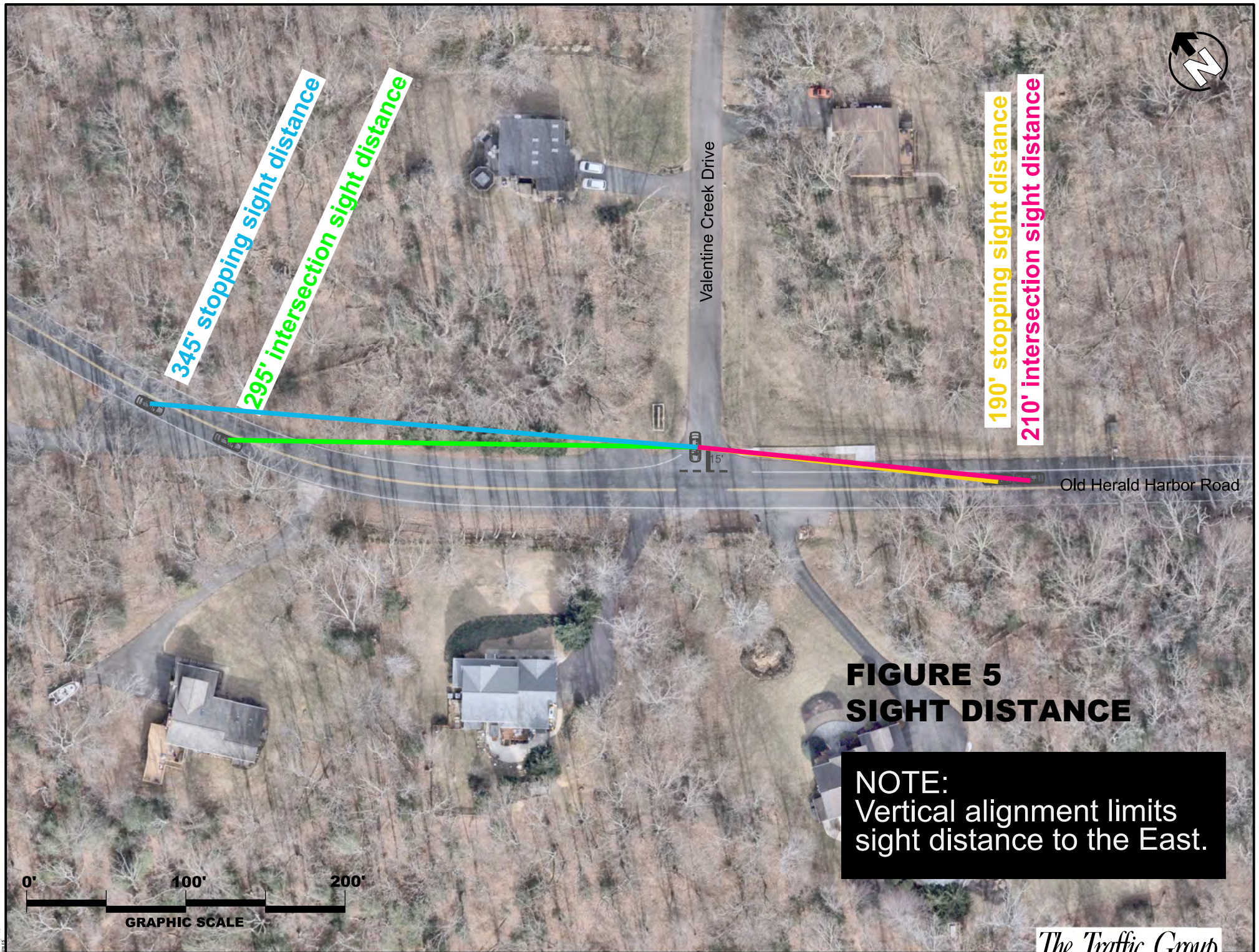


**FIGURE 5
SIGHT DISTANCE**

NOTE:
Vertical alignment limits
sight distance to the East.

GRAPHIC SCALE

Crash Data

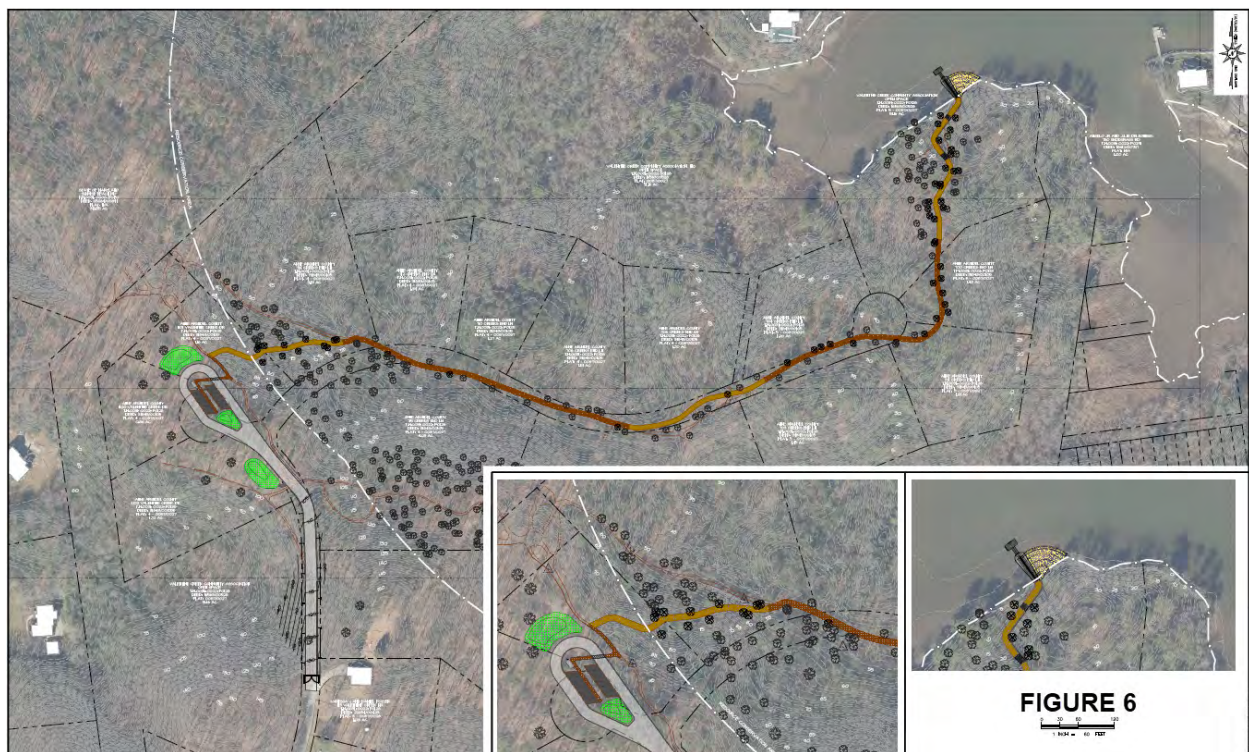
Intersection crash data was reviewed for the study area. Appendix B shows two crashes occurred from 2019 through 2026, and each involved single vehicles. One was at the intersection of Old Herald Harbor Road and Valentine Creek Drive, and one was a non-intersection crash along Old Herald Harbor Road. Details on the crashes can be found in Appendix B.

Neither crash was related to sight distance as each only involved single vehicles. As a result, the existing sight distance is adequate based on our site visit and crash data.

Proposed Development

Anne Arundel County is proposing to develop a 12-vehicle parking space water access facility. Figure 6 shows the concept plan. It is anticipated that primary operations will occur during warm weather months when kayakers and canoers are active in the water. With 12 parking spaces and an average duration on the water of 2–4 hours, it is projected that each parking space could turn over 2 to 2.5 times per day, which would result in an additional 60 trips per day along Valentine Creek Drive. As noted, these trips would occur primarily during warm weather months.

Figure 6. Concept Plan



Given the minimal traffic along the road, it is our opinion that the existing conditions are able to accommodate the projected additional trips. In addition, sight distance was found to be adequate for the noted design speeds and lack of crash history.

Capacity Analysis

Highway Capacity Manual (HCM) analysis was undertaken for a two-lane highway for the existing and future condition. The level of service is reported as the number of followers per mile per lane. Level of Service “A” is representative of minimal impact from any other vehicles on the road. As shown within Table 5, optimal Level of Service “A” is occurring under existing conditions and is projected to remain in the future when considering an additional conservative 12 vehicles per hour. This analysis is based on the PM peak northbound direction, which was observed to have the most vehicles. Details on the HCM analyses are included in Appendix C.

Table 5. HCM Summary

Two-Lane Highway Segment	Existing Traffic	Total Traffic
	LOS / Follower Density (followers/mi/ln)	
Valentine Creek Drive	A / 0.0	A / 0.1

Note: Results represent the worst-case scenario in PM peak northbound direction.

Summary and Conclusions

This traffic analysis has shown that minimal traffic currently uses Valentine Creek Drive on a daily basis. With fewer than 200 daily trips and 12 hourly trips, optimal levels of service are achieved. Sight distance at the intersection of Old Herald Harbor Road and Valentine Creek Drive will not be impacted by the water access facility as no additional thru vehicles are added to the road. Any minor traffic will have the same sight distance as is currently available.

The proposed use will generate a very small increase in trips, which likely would only occur during warmer weather months. As a result, it is our opinion that the existing conditions are adequate to support the proposed use.

If you have any questions regarding this information, please do not hesitate to contact me.

Sincerely,



Professional Certification – I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed Professional Engineer under the laws of the State of Maryland.

License No: 29931 Expiration Date 1/8/2028

Carl R. Wilson, Jr., P.E., PTOE, RSP1
Vice President

CRW:amr

(F:\2026\2026-0411_Valentine Creek Water Access Facility\DOCS\CORRESP\ANALYST\Valentine Creek Water Access Facility_Traffic Analysis Ltr_Barniea.docx)

APPENDIX A

Speed Study



Valentine Creek Drive
250 Feet North of Old Herald Harbor Road
Anne Arundel County, Maryland

The Traffic Group, Inc.

(800) 583-8411

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Northbound

Start Time	0 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 250	Total
06/25/26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	3
08:00	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	2
09:00	0	0	0	1	3	1	0	0	0	0	0	0	0	0	0	5
10:00	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	2
11:00	0	0	3	2	0	0	0	0	0	0	0	0	0	0	0	5
12 PM	0	0	1	0	4	1	0	0	0	0	0	0	0	0	0	6
13:00	0	0	0	0	3	1	0	0	0	0	0	0	0	0	0	4
14:00	0	0	0	2	5	1	0	0	0	0	0	0	0	0	0	8
15:00	0	0	0	1	0	1	0	1	0	0	0	0	0	0	0	3
16:00	0	0	0	6	5	0	0	0	0	0	0	0	0	0	0	11
17:00	0	0	0	2	3	0	0	0	0	0	0	0	0	0	0	5
18:00	0	0	1	4	7	0	0	0	0	0	0	0	0	0	0	12
19:00	0	0	0	4	3	0	0	0	0	0	0	0	0	0	0	7
20:00	0	0	1	1	5	0	1	0	0	0	0	0	0	0	0	8
21:00	0	0	0	1	3	0	0	0	0	0	0	0	0	0	0	4
22:00	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	6	31	43	5	1	1	0	0	0	0	0	0	0	87

Valentine Creek Drive
250 Feet North of Old Herald Harbor Road
Anne Arundel County, Maryland

The Traffic Group, Inc.

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Northbound

Start Time	05	610	1115	1620	2125	2630	3135	3640	4145	4650	5155	5660	6165	6670	71250	Total
06/27/26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	2
02:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
09:00	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	2
10:00	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
11:00	0	0	0	5	1	2	0	0	0	0	0	0	0	0	0	8
12 PM	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	3
13:00	0	0	1	3	4	0	0	0	0	0	0	0	0	0	0	8
14:00	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	3
15:00	0	0	1	2	1	1	0	0	0	0	0	0	0	0	0	5
16:00	0	0	3	2	1	1	0	0	0	0	0	0	0	0	0	7
17:00	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
18:00	0	0	1	4	3	0	0	0	0	0	0	0	0	0	0	8
19:00	0	0	0	3	1	1	0	0	0	0	0	0	0	0	0	5
20:00	0	0	0	1	5	1	0	0	0	0	0	0	0	0	0	7
21:00	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2
22:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
23:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	6	30	24	8	1	0	0	0	0	0	0	0	0	69
Grand Total	0	0	20	86	111	26	3	1	0	0	0	0	0	0	0	247

Stats

15th Percentile : 15 MPH
50th Percentile : 20 MPH
85th Percentile : 24 MPH
95th Percentile : 28 MPH

Mean Speed(Average) : 21 MPH
10 MPH Pace Speed : 16-25 MPH
Number in Pace : 197
Percent in Pace : 79.8%
Number of Vehicles > 30 MPH : 4
Percent of Vehicles > 30 MPH : 1.6%

Valentine Creek Drive
250 Feet North of Old Herald Harbor Road
Anne Arundel County, Maryland

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Southbound

Start Time	05	610	1115	1620	2125	2630	3135	3640	4145	4650	5155	5660	6165	6670	71250	Total
06/25/26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	0	0	2	1	3	0	0	0	0	0	0	0	0	0	0	6
07:00	0	0	0	3	5	0	0	0	0	0	0	0	0	0	0	8
08:00	0	0	1	4	0	1	0	0	0	0	0	0	0	0	0	6
09:00	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	3
10:00	0	0	1	1	5	1	0	0	0	0	0	0	0	0	0	8
11:00	0	0	0	1	3	2	0	0	0	0	0	0	0	0	0	6
12 PM	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	4
13:00	0	0	0	2	1	1	0	0	0	0	0	0	0	0	0	4
14:00	0	0	1	0	4	2	0	0	0	0	0	0	0	0	0	7
15:00	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	2
16:00	0	0	0	1	1	2	0	0	0	0	0	0	0	0	0	4
17:00	0	0	0	1	2	1	0	0	0	0	0	0	0	0	0	4
18:00	0	0	0	4	1	2	0	0	0	0	0	0	0	0	0	7
19:00	0	0	0	1	4	0	0	0	0	0	0	0	0	0	0	5
20:00	0	0	0	1	3	2	0	0	0	0	0	0	0	0	0	6
21:00	0	0	0	6	1	0	0	0	0	0	0	0	0	0	0	7
22:00	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	2
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	7	29	38	14	0	1	0	0	0	0	0	0	0	89

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[illegible]

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Southbound

Start Time	05	610	1115	1620	2125	2630	3135	3640	4145	4650	5155	5660	6165	6670	71250	Total
06/27/26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
06:00	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	4
07:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
08:00	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	3
09:00	0	0	1	2	2	1	0	0	0	0	0	0	0	0	0	6
10:00	0	0	0	1	0	1	1	0	0	0	0	0	0	0	0	3
11:00	0	0	1	0	2	0	0	0	0	0	0	0	0	0	0	3
12 PM	0	0	0	5	3	2	0	0	0	0	0	0	0	0	0	10
13:00	0	0	0	0	3	2	0	0	0	0	0	0	0	0	0	5
14:00	0	0	0	3	5	1	0	0	0	0	0	0	0	0	0	9
15:00	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	3
16:00	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	4
17:00	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2
18:00	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
19:00	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2
20:00	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2
21:00	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	2
22:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	3	20	27	12	2	0	0	0	0	0	0	0	0	64
Grand Total	0	0	14	77	102	46	2	1	0	0	0	0	0	0	0	242

Stats

15th Percentile : 16 MPH
50th Percentile : 21 MPH
85th Percentile : 26 MPH
95th Percentile : 29 MPH

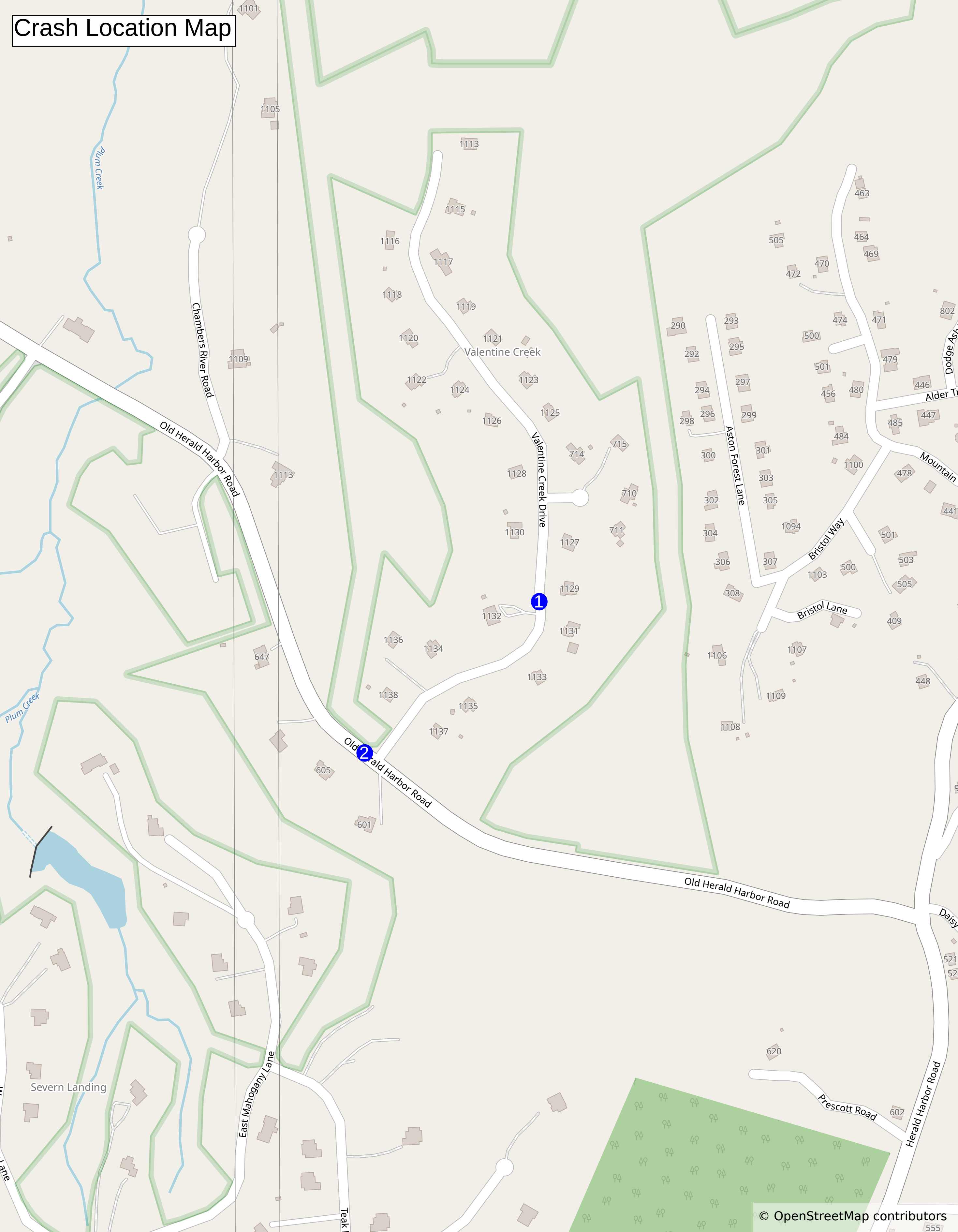
Mean Speed(Average) : 22 MPH
10 MPH Pace Speed : 16-25 MPH
Number in Pace : 179
Percent in Pace : 74.0%
Number of Vehicles > 30 MPH : 3
Percent of Vehicles > 30 MPH : 1.2%

APPENDIX B

Crash Data



Crash Location Map



Valentine Creek Rd (1/1/2019 - 7/10/2026)

No.	Crash Date	Crash Time	Route Type	Route Number	Road Name	Intersecting Road Name	Junction Description	Crash Severity Description	Collision Impact Description	Report Number
1	09/18/20	23:49			VALENTINE CREEK RD	OLD HERALD HARBOR RD	Non-Intersection	Property Damage Crash	Single Vehicle	AC24660009
2	06/05/22	20:15	County Road	1262	OLD HERALD HARBOR RD	VALENTINE CREEK DR	N/A	Injury Crash	Single Vehicle	AC2463001Z

APPENDIX C

HCM Worksheets



HCS Two Lane Highway Report

Project Information

Analyst	MYC	Date	08/18/26
Agency	The Traffic Group, Inc.	Analysis Year	2026
Jurisdiction	Anne Arundel County, MD	Time Analyzed	Existing PM Peak Hour
Project Description	Northbound Valentine Creek Drive	Units	U.S. Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	2543
Lane Width, ft	10	Shoulder Width, ft	0
Speed Limit, mi/h	30	Access Point Density, pts/mi	0.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	13	Opposing Demand Flow Rate, veh/h	7
Peak Hour Factor	0.94	Total Trucks, %	3.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.01

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	28.7
Speed Slope Coefficient (m)	1.71104	Speed Power Coefficient (p)	0.64566
PF Slope Coefficient (m)	-1.10925	PF Power Coefficient (p)	0.71641
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.0
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2543	-	-	28.7

Vehicle Results

Average Speed, mi/h	28.7	Percent Followers, %	4.8
Segment Travel Time, minutes	1.01	Adj. Follower Density, followers/mi/ln	0.0
Vehicle LOS	A		

HCS Two Lane Highway Report

Project Information

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Jurisdiction	Anne Arundel County, MD	Time Analyzed	Total PM Peak Hour
Project Description	Northbound Valentine Creek Drive	Units	U.S. Customary

Segment 1

Vehicle Inputs

Segment Type	Passing Zone	Length, ft	2543
Lane Width, ft	10	Shoulder Width, ft	0
Speed Limit, mi/h	30	Access Point Density, pts/mi	0.0

Demand and Capacity

Directional Demand Flow Rate, veh/h	26	Opposing Demand Flow Rate, veh/h	20
Peak Hour Factor	0.94	Total Trucks, %	3.00
Segment Capacity, veh/h	1700	Demand/Capacity (D/C)	0.02

Intermediate Results

Segment Vertical Class	1	Free-Flow Speed, mi/h	28.7
Speed Slope Coefficient (m)	1.72936	Speed Power Coefficient (p)	0.62713
PF Slope Coefficient (m)	-1.12548	PF Power Coefficient (p)	0.71121
In Passing Lane Effective Length?	No	Follower Density, followers/mi/ln	0.1
%Improvement to Percent Followers	0.0	%Improvement to Speed	0.0

Subsegment Data

#	Segment Type	Length, ft	Radius, ft	Superelevation, %	Average Speed, mi/h
1	Tangent	2543	-	-	28.7

Vehicle Results

Average Speed, mi/h	28.7	Percent Followers, %	8.0
Segment Travel Time, minutes	1.01	Adj. Follower Density, followers/mi/ln	0.1
Vehicle LOS	A		