Lenhart Traffic Consulting, Inc.

Transportation Planning & Traffic Engineering

Memorandum: *Date:* **September 28, 2021**

TO: Department of Parks and Recreation
1275 First St NE
Washington, DC 20002

FROM: Nick Driban

RE: Traffic Statement for Duke Ellington Track Field

Introduction

The purpose of this report is to provide a Traffic Statement for the Duke Ellington Track and Athletic Field renovation as required in the District Department of Transportation (DDOT) Guidance for Comprehensive Transportation Review (CTR) for developments that will not generate more than 100 new person trips or 25 new vehicular trips. The Duke Ellington Track Field is located in Washington, DC, at 1600 38th Street NW (Reservoir Rd & 38th Street NW). The site is currently developed with an athletic field and ancillary buildings.

The site will continue to operate in the same manner as under existing conditions with the proposed renovation. The proposed renovation will replace the existing natural grass athletic field, renovate the existing field houses, and replace the existing track with a larger track. The renovation will also include the addition of a dog park, erosion controls, and new lighting.

Included in this Traffic Statement are the following:

1. Site Review: A review of the existing transportation facilities surrounding the site. These include vehicular, pedestrian, bicycle, and transit facilities.

2. Design Review: A review of the proposed redevelopment plan.

3. Impact Review: An analysis of the trip generation for the redevelopment of the site and an analysis of the existing conditions of key nearby intersections.

Site Review

The Duke Ellington Tack and Athletic Field is located at 1600 38th Street NW (Reservoir Rd & 38th St NW), in Washington, DC. The field is bounded by 38th and 39th Street on the east and west, respectively, and S Street and Reservoir Road on the north and south, respectively.

The site can be accessed through several public transportation sources. The available bus routes include the Georgetown-Union Station DC Circulator Line and several local Metrobus routes. These bus lines can be used to access the DC Metro.

There are minimal bicycle facilities within the vicinity of the site as the streets surrounding the site are small local roadways largely serving residential communities, except for Reservoir Road. A Capital Bikeshare station is provided at the intersection of Reservoir Road & 38th Street. A shared lane is provided along 37th Street from Reservoir Road to Tunlaw Road, which connects to other bicycle facilities north of the site. It should be noted that DDOT is pursuing protected bicycle lanes on the entire length of 37th Street between Reservoir Road and Tunlaw Road.

A review of the pedestrian facilities found that sidewalks and crosswalks exist at most intersections in the vicinity of the site including APS/CPS along Reservoir Road signalized intersections. There is sidewalk connectivity from site to MetroBus Route D6 bus stop in the SE corner of the site. Sidewalk is not provided along the south side of S Street, closest to the site or along the south side of R St, between 36th St and 37th St. There are also several intersections lacking ADA compliant ramps for the crosswalks. Exhibit A-1, in Appendix A, shows the existing pedestrian facilities within the vicinity of the site.

On-street parking is available along the four roads that bound the site. Many other nearby roadways provide on-street parking as well. A parking garage is available at the Medstar Georgetown University Hospital on the south side of Reservoir Road. The garage is within a short walking distance to the site.

Design Review

The proposed renovation of the site will replace the existing natural grass athletic field, renovate the existing field houses, and replace the existing track with a larger track. The renovation will also include the addition of a dog park, erosion controls, and new lighting. All aspects of the renovation must adhere to DDOT standards and includes bringing all public space elements up to DDOT standards.

Site Access

The site is currently accessed along 38th Street at the intersection with R Street and along 39th Street. The access along 38th Street includes a curb cut that is utilized exclusively by maintenance vehicles. The access along 39th Street provides site access for pedestrians and/or bicycle trips.

The curb cut for the access along 38th Street is proposed to be repaired along with the renovation of the site. The repair of the curb cut requires a permit and conformance to DDOT's Design and Engineering Manual, which specifies that all curb cuts shall be a minimum of 10 feet for one-way traffic with a maximum radius for the drive-way apron of 6 feet.

Loading

The existing curb cut at the main entrance along 38th Street will be used for loading at the site. It is expected that there will be minimal loading/delivery requirements after the renovation of the site. The site will not need to accommodate large trucks, as the site is not expected to require large deliveries and there will be no on-site dumpsters. Any delivery vehicles are anticipated to arrive to the site via Reservoir Road to 38th Street. 38th Street has relatively low vehicular volume, so delivery vehicles should be able to back into the loading area at the main entrance with minimal disruption to traffic.

Vehicle Parking

The existing parking conditions are described in the Site Review section, above. As discussed, off-site street parking is provided at the four encompassing roadways (38th Street, Reservoir Road, 39th Street, and S. Street). There is also a parking garage located at the Medstar Georgetown University Hospital that can be used to access the site. Additional on-site parking will not be provided as part of the renovation.

Bicycle Facilities

The existing bicycle facilities are described in the Site Review section, above. The redevelopment of the site will provide additional bicycle parking in accordance with the DDOT Bike Parking Guide. Table 1 of the DDOT Bike Parking Guide provides the minimum number of bicycle parking spaces required. Parks and recreation facilities are required to provide 1 short term bicycle parking space per 10,000 square feet, but no less than 6 spaces. The entirety of the Duke Ellington Track and Field facility is approximately 200,000 square feet. As such, 20 bicycle parking

spaces are required. The most recent concept design shows that the renovation will include 21 bicycle rack parking spaces, therefore meeting the number of required short term bicycle parking spaces.

Streetscape and Public Realm

As shown on Exhibit A-1, there are several streetscape deficiencies in the vicinity of the site. This includes a lack of sidewalk along S Street between 38th Street and 39th Street and along R Street between 36th Street and 37th Street. A portion of sidewalk along 39th Street between Hillandale Drive and Reservoir Road is not constructed to DDOT Public Realm Design Manual Standards, as a 4-foot tree box is not provided. These deficiencies should be addressed with the renovation of the site.

Additionally, several intersections do not meet ADA standards for curb ramps and crosswalks, specifically the intersection of R Street and 38th Street which serves as the primary site access point for the site. The intersections are expected to be upgraded to include two curb ramps on each corner with tactile strips and high-visibility crosswalks.

There are several large trees nearby the site that classify as Heritage and/or Special Tress. The applicant will continue coordinating with DDOT's Urban Forestry Division (UFD) on the best methods to protect the Heritage and/or Special Trees with the renovation of the site.

Impact Review

Trip Generation Analysis

As discussed previously, the operation of the site will not be impacted with the redevelopment of the site. The proposed renovation will replace the existing natural grass athletic field, renovate the existing field houses, and replace the existing track with a larger track. The renovation will also include the addition of a dog park, erosion controls, and new lighting.

These renovations will not result in an increase in the vehicular peak hour trips. The renovation will include replacing the existing athletic field and track with a larger athletic field and track. While it is possible that the larger athletic field will result in an increase of use by organizations such as DC Soccer or public schools, these increases will occur during the evenings and weekends, outside of typical vehicular peak hours. The additional facilities to be provided in the renovation, including the dog park, pickleball, and volleyball courts, are expected to be used by the local community and would feature primarily pedestrian walking trips, not vehicular peak hour trips. As such, the renovation of the site will not increase the vehicular peak hour traffic. These findings have been supported by DDOT and DPR Staff.

The ITE Trip Generation Manual, 10th Edition, supports the findings that the renovations will not increase the vehicular peak hour trips to the site. ITE Land Use Code 488 provides empirical trip generation data for soccer complexes similar to the Duke Ellington Track and Field. ITE defines a soccer complex as an outdoor facility that is used for non-professional soccer games. These facilities may include ancillary amenities such as stadium seating, a fitness trail, an activities shelter, aquatic center, picnic grounds, basketball and tennis courts, and a playground. The data in the ITE Trip Generation Manual shows that the quantity of weekday peak hour trips generated are dependent on the number of fields in the complex. The data suggests that ancillary facilities, like those proposed as part of the renovation, do not impact the number of vehicular trips generated at soccer complex facilities. Since the renovation does not include additional soccer fields, the number of trips to and from the site will remain the same during the vehicular peak hours. The ancillary facilities will not generate additional vehicular trips.

The community has specifically requested that no improvements to the existing goalposts on the athletic field be included as part of the proposed renovation. There is concern that improved goalposts would facilitate football games at the field, potentially attracting large crowds. The goalposts are proposed to be removed with the renovation of the site. As such, no additional vehicular trips should be expected due to football games.

In summary, the renovation of the site will not increase the number of vehicular peak hour trips to and from the site. Any additional vehicular trips are expected to occur during the evenings and weekends, outside of typical vehicular peak hours. Trips associated with the additional ancillary facilities being provided as part of the renovation, such as the proposed dog park, are anticipated to consist of community pedestrian trips.

Existing Conditions Analysis

As discussed above, the renovation will not increase vehicular peak hour trips. Developments that generate fewer than 25 vehicular peak hour trips are not required to complete a full traffic impact analysis under the CTR Guidelines. However, it was agreed during the scoping process that an evaluation of the existing conditions at six key intersections surrounding the site would be provided with this traffic statement. The analysis of the existing conditions is included in Appendix B. The following exhibits are provided in Appendix B:

Exhibit B-1 shows the location of the six study intersections.

Exhibit B-2 details the existing lane use and traffic control devices at the study intersections. Eastbound left turns from Reservoir Road to 38th and 39th Street are restricted during the morning peak hour, from 7:00 AM to 9:30 AM. Street parking is restricted along Reservoir Road during the morning and evening peak hours between 38th Street and 39th Street.

Exhibit B-3 summarizes the existing peak hour volumes at each of the study intersections. Peak hour traffic counts were conducted on Tuesday, September 14, 2021. As noted above, left turns are restricted from Reservoir Road to 38th and 39th Street during the morning peak hour. Numerous illegal left turns were observed at these locations during the morning peak hour. The turning movement count sheets for each intersection have been included with Appendix B.

Exhibit B-4 summarizes the findings of the level of service (LOS) analyses for the existing conditions. DDOT CTR Guidelines require Highway Capacity Manual (HCM) methodology to used to determine the LOS and v/c ratio for each approach at each intersection. As shown on Exhibit B-4, all approaches operate with an LOS "D" or better during both peak hours. Additionally, all v/c ratios are well below 1.0.

Exhibit B-5 summarizes the findings of the queuing analyses for the existing conditions. SimTraffic simulation software was used to determine the average and 95th percentile queuing along each approach of each study intersection. The results of the queuing analysis show that adequate spacing and storage is provided for each approach of the study intersections.

Based on the results of the above analyses, each study intersection was found to operate acceptably during the morning and evening peak hours based on the DDOT CTR Guidelines. As discussed above, the site will not generate any additional vehicular traffic with the renovation. The study intersections can therefore be assumed to continue to operate acceptably after the renovation of the site.

Conclusion

The Duke Ellington Track Field is located in Washington, DC, at 1600 38th Street NW (Reservoir Rd & 38th Street NW). The site is currently developed with an athletic field and ancillary buildings. The site is proposed to be renovated to replace the existing natural grass athletic field, renovate the existing field houses, and replace the existing track with a larger track. The renovation will include the addition of a dog park, erosion controls, and new lighting.

The findings of this traffic statement are as follows:

- The site can be accessed through a variety of public and private transportation modes.

- Adequate parking is provided via on-street parking surrounding the site. Additionally, a parking garage is available at the Medstar Georgetown University Hospital that can be used to access the site.
- There are several streetscape deficiencies that need to be addressed with the renovation of the site. These deficiencies are identified on Exhibit A-1 in Appendix A.
- The site will not generate any additional vehicular peak hour trips with the renovation of the site. Any additional trips that will be generated are expected to be pedestrian/bicycle trips from the local community or vehicular trips that occur outside of the morning and evening peak hours.
- The results of the existing conditions analyses indicate that the six study intersections surrounding the site operate acceptably based on DDOT CTR Guidelines. It can be assumed that since the renovation of the site will not result in any additional vehicular peak hour trips, the study intersections will continue to operate acceptably with the renovation of the site.

Thanks,

C. Nicholas Driban, P.E., PTOE

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Appendix A

Supplemental Information

Traffic Impact Analysis

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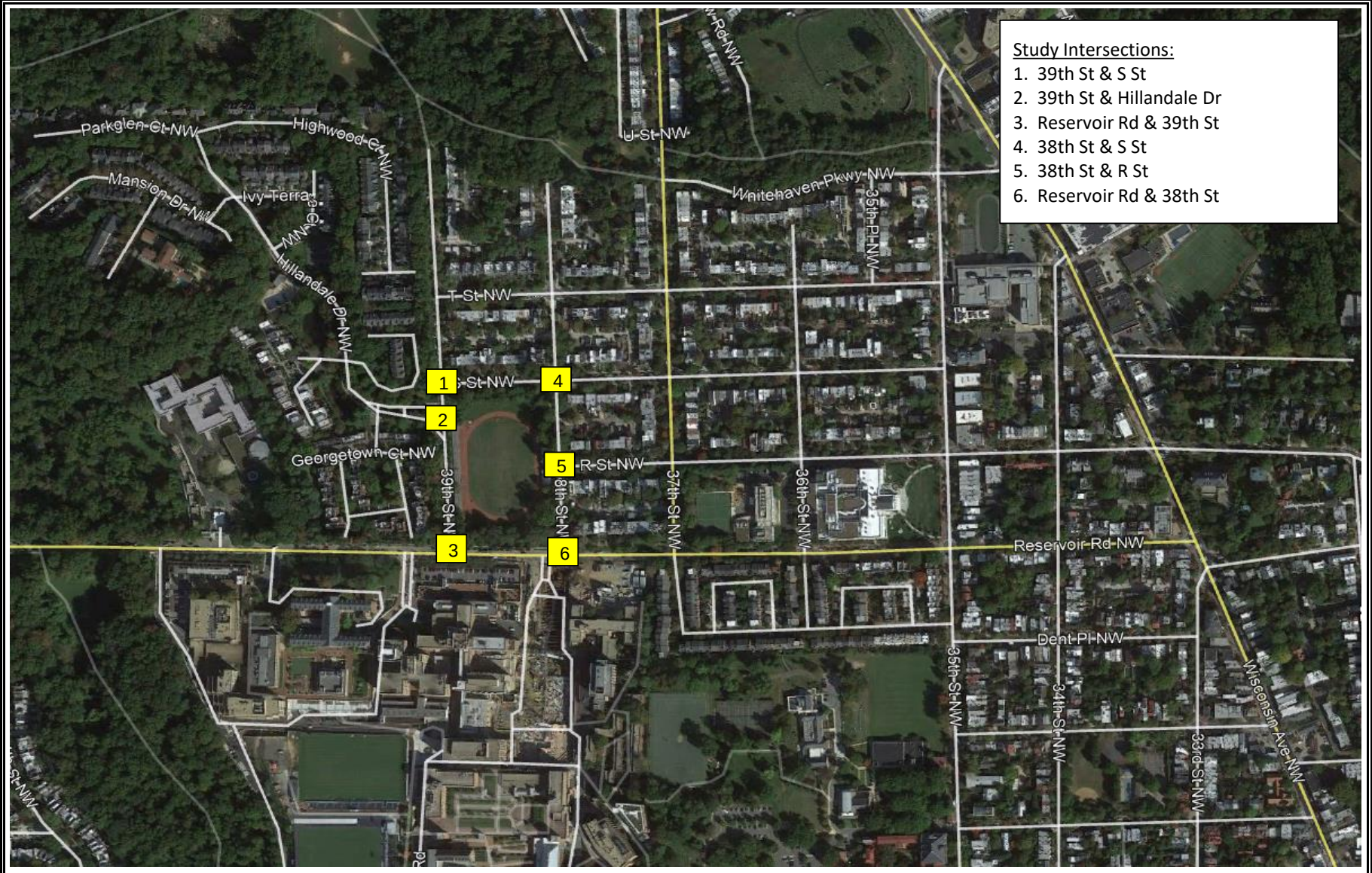
Pedestrian Facilities Deficiencies Map

Exhibit A-1

Appendix B

Existing Conditions Analysis

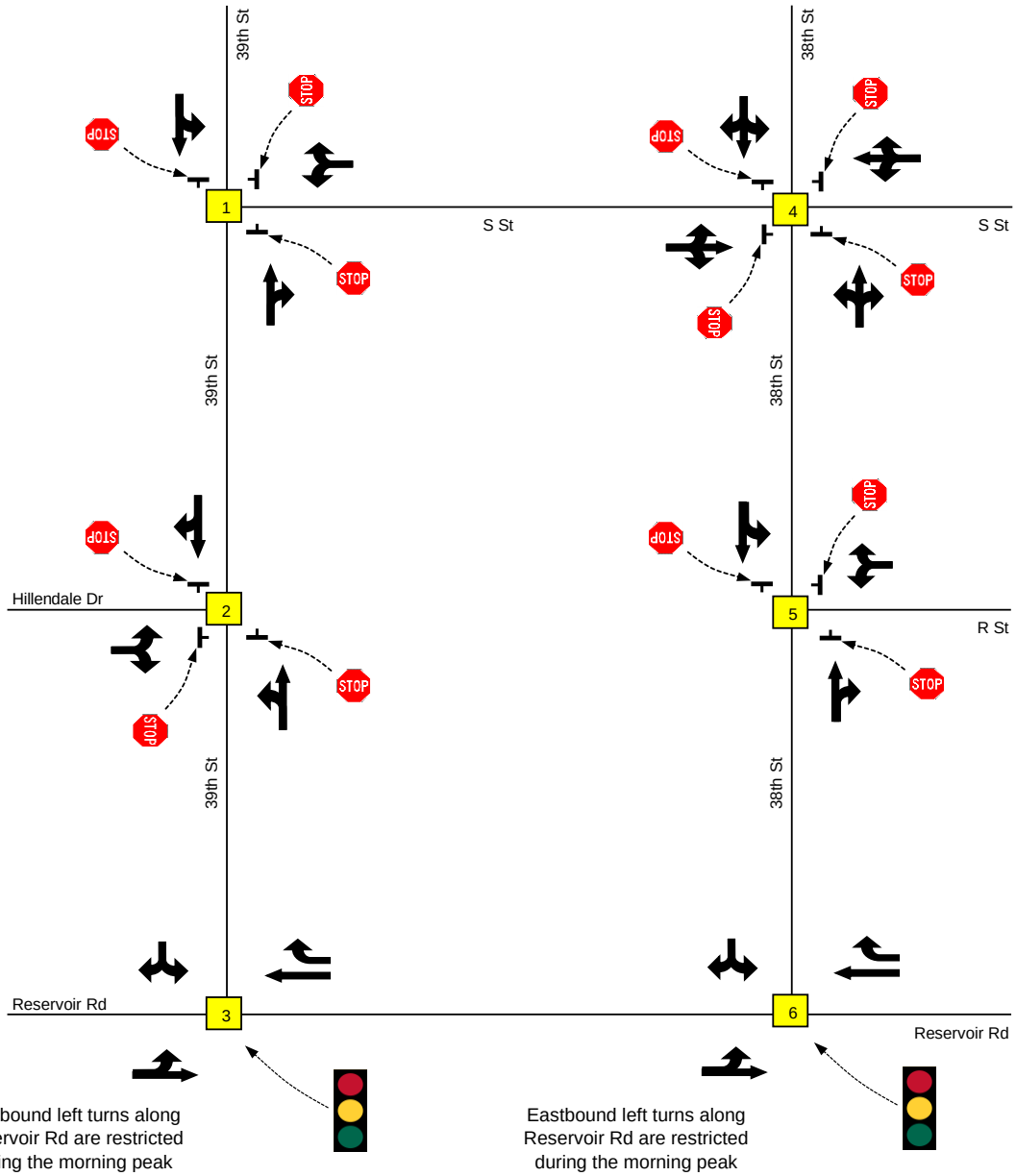


Traffic Statement

LENHART TRAFFIC CONSULTING, INC.
645 BALTIMORE ANNAPOLIS BLVD, SUITE 214
SEVERNA PARK, MD 21146
www.lenharttraffic.com

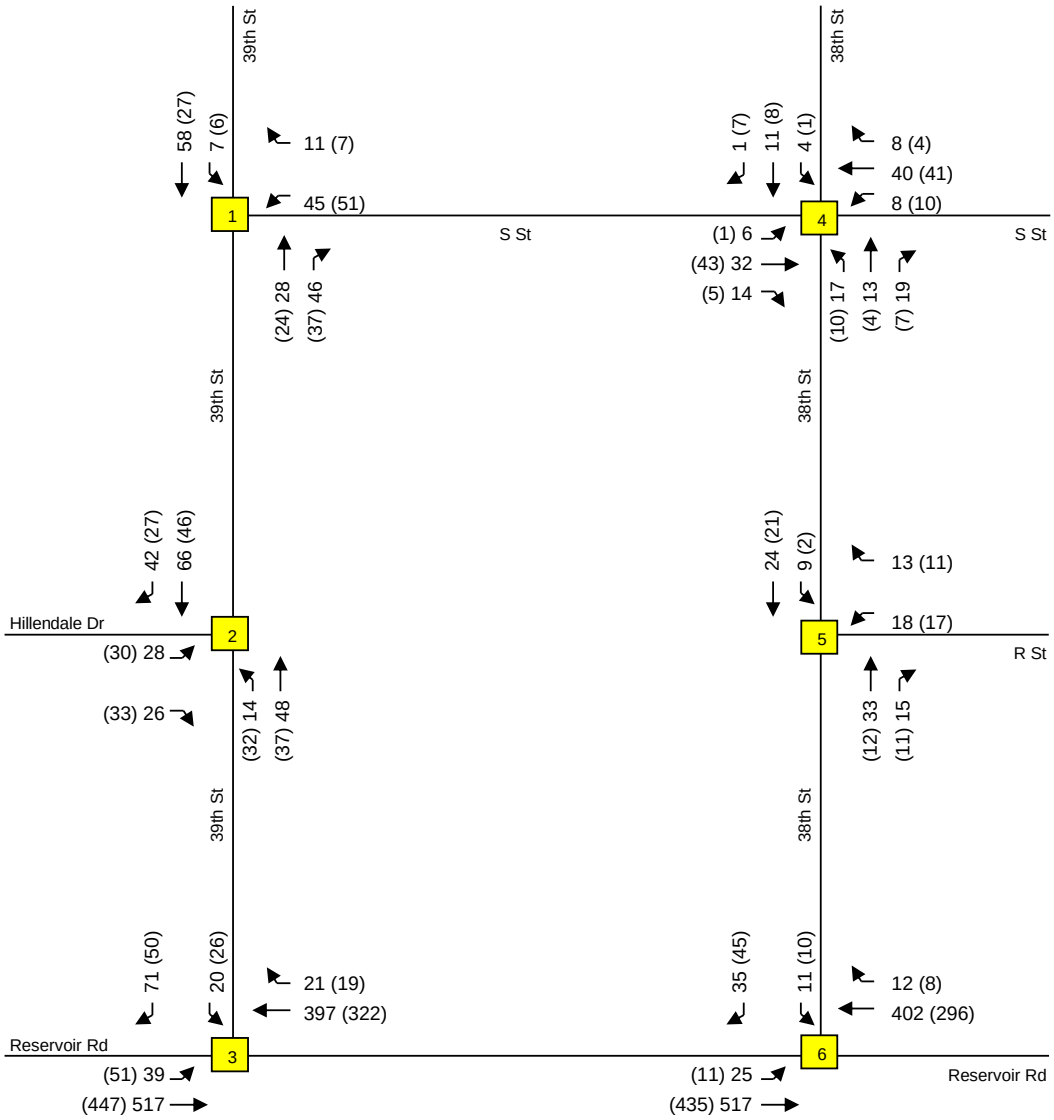
Site
Location Map

Exhibit B-1



Note: Parking is restricted along Reservoir Road during the peak hours.

Traffic Statement	Existing Lane Use and Traffic Control Devices	**Exhibit B-2**
LENHART TRAFFIC CONSULTING, INC. 645 BALTIMORE ANNAPOLIS BLVD, SUITE 214 SEVERNA PARK, MD 21146 www.lenharttraffic.com	Key: xx = AM Peak Vol's (xx) = PM Peak Vol's	



Traffic Statement	Existing Peak Hour Volumes	**Exhibit B-3**
LENHART TRAFFIC CONSULTING, INC. 645 BALTIMORE ANNAPOLIS BLVD, SUITE 214 SEVERNA PARK, MD 21146 www.lenharttraffic.com	Key: xx = AM Peak Vol's (xx) = PM Peak Vol's	

Level-of-Service Results

Morning Peak Hour		Existing HCM LOS	Existing V/C
1). 39th St & S St	*(Unsignalized)*	A / 7.4	
Westbound Approach		A / 7.6	18.9%
Northbound Approach		A / 7.1	
Southbound Approach		A / 7.5	
2). 39th St & Hillandale Dr	*(Unsignalized)*	A / 7.3	
Eastbound Approach		A / 7.0	20.0%
Northbound Approach		A / 7.5	
Southbound Approach		A / 7.4	
3). Reservoir Rd & 39th St	*(Signalized)*	A / 7.3	
Eastbound Approach		A / 5.7	0.45
Westbound Approach		A / 2.8	0.32
Southbound Approach		D / 37.5	0.13
4). 38th St & S St	*(Unsignalized)*	A / 7.3	
Eastbound Approach		A / 7.3	
Westbound Approach		A / 7.4	15.2%
Northbound Approach		A / 7.3	
Southbound Approach		A / 7.3	
5). 38th St & R St	*(Unsignalized)*	A / 7.2	
Westbound Approach		A / 7.1	18.4%
Northbound Approach		A / 7.1	
Southbound Approach		A / 7.3	
6). Reservoir Rd & 38th St	*(Signalized)*	B / 10.8	
Eastbound Approach		A / 9.2	0.54
Westbound Approach		B / 11.4	0.40
Southbound Approach		C / 24.7	0.05

Evening Peak Hour		Existing HCM LOS	Existing V/C
1). 39th St & S St	*(Unsignalized)*	A / 7.3	
Westbound Approach		A / 7.6	16.6%
Northbound Approach		A / 7.0	
Southbound Approach		A / 7.4	
2). 39th St & Hillandale Dr	*(Unsignalized)*	A / 7.3	
Eastbound Approach		A / 6.9	20.4%
Northbound Approach		A / 7.6	
Southbound Approach		A / 7.2	
3). Reservoir Rd & 39th St	*(Signalized)*	A / 8.1	
Eastbound Approach		A / 7.5	0.44
Westbound Approach		A / 3.6	0.28
Southbound Approach		C / 33.0	0.11
4). 38th St & S St	*(Unsignalized)*	A / 7.3	
Eastbound Approach		A / 7.3	
Westbound Approach		A / 7.4	19.5%
Northbound Approach		A / 7.2	
Southbound Approach		A / 7.0	
5). 38th St & R St	*(Unsignalized)*	A / 7.0	
Westbound Approach		A / 7.0	13.3%
Northbound Approach		A / 6.8	
Southbound Approach		A / 7.2	
6). Reservoir Rd & 38th St	*(Signalized)*	A / 9.0	
Eastbound Approach		A / 6.2	0.43
Westbound Approach		B / 10.2	0.29
Southbound Approach		C / 24.7	0.05

NOTES:

1. All intersections and approaches satisfy DDOT CTR Guidelines of LOS "E" or better and a v/c ratio of less than 1.0.
2. The HCM methodology does not provide v/c ratio for all way stop controlled intersections. The Intersection Capacity Utilization (ICU) percentage is reported for Intersections 1, 2, 4, and 5.

Level-of-Service Results

Morning Peak Hour	Average Queue (ft)	95th Percentile Queue (ft)
1). 39th St & S St *(Unsignalized)*		
Westbound Approach	27	44
Northbound Approach	30	50
Southbound Approach	30	52
2). 39th St & Hillandale Dr *(Unsignalized)*		
Eastbound Approach	18	41
Northbound Approach	29	50
Southbound Approach	33	44
3). Reservoir Rd & 39th St *(Signalized)*		
Eastbound Approach	97	182
Westbound Approach	46	93
Southbound Approach	43	84
4). 38th St & S St *(Unsignalized)*		
Eastbound Approach	26	48
Westbound Approach	27	48
Northbound Approach	25	45
Southbound Approach	13	37
5). 38th St & R St *(Unsignalized)*		
Westbound Approach	20	45
Northbound Approach	27	49
Southbound Approach	23	45
6). Reservoir Rd & 38th St *(Signalized)*		
Eastbound Approach	126	254
Westbound Approach	121	211
Southbound Approach	25	59

Evening Peak Hour	Average Queue (ft)	95th Percentile Queue (ft)
1). 39th St & S St *(Unsignalized)*		
Westbound Approach	27	50
Northbound Approach	28	44
Southbound Approach	22	48
2). 39th St & Hillandale Dr *(Unsignalized)*		
Eastbound Approach	16	38
Northbound Approach	30	50
Southbound Approach	31	50
3). Reservoir Rd & 39th St *(Signalized)*		
Eastbound Approach	104	193
Westbound Approach	37	77
Southbound Approach	38	80
4). 38th St & S St *(Unsignalized)*		
Eastbound Approach	25	46
Westbound Approach	26	51
Northbound Approach	16	42
Southbound Approach	15	41
5). 38th St & R St *(Unsignalized)*		
Westbound Approach	18	43
Northbound Approach	15	41
Southbound Approach	16	42
6). Reservoir Rd & 38th St *(Signalized)*		
Eastbound Approach	62	130
Westbound Approach	84	158
Southbound Approach	26	53

Weekday Morning Peak Hour (6:30 am - 9:30 am)

	39th ST Northbound					39th St Southbound					N/A Eastbound					S St Westbound					
Time:	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds	Total
6:30-6:45	0		5	2	0	0	1	3		0					1	0	3		1	10	15
6:45-7:00	0		3	15	1	0	0	4		0					1	0	7		0	10	29
7:00-7:15	0		6	11	1	0	0	4		0					1	1	2		0	9	24
7:15-7:30	0		2	10	0	0	1	7		0					0	0	5		1	12	26
7:30-7:45	0		5	10	2	0	1	3		0					0	0	4		0	10	23
7:45-8:00	0		5	19	0	1	2	14		0					1	0	4		3	7	48
8:00-8:15	1		8	17	1	0	2	16		0					1	1	10		3	25	58
8:15-8:30	0		5	11	0	0	2	13		0					2	0	12		1	18	44
8:30-8:45	0		9	8	3	0	2	13		0					2	0	14		4	32	50
8:45-9:00	1		6	10	0	0	1	16		0					2	0	8		3	32	45
9:00-9:15	0		5	10	1	0	0	8		0					0	1	13		3	27	40
9:15-9:30	0		5	11	0	0	0	7		0					2	0	17		2	14	42

Hourly Totals																					
6:30-7:30	0	0	16	38	2	0	2	18	0	0	0	0	0	0	3	1	17	0	2	41	140
6:45-7:45	0	0	16	46	4	0	2	18	0	0	0	0	0	0	2	1	18	0	1	41	149
7:00-8:00	0	0	18	50	3	1	4	28	0	0	0	0	0	0	2	1	15	0	4	38	164
7:15-8:15	1	0	20	56	3	1	6	40	0	0	0	0	0	0	2	1	23	0	7	54	214
7:30-8:30	1	0	23	57	3	1	7	46	0	0	0	0	0	0	4	1	30	0	7	60	240
7:45-8:45	1	0	27	55	4	1	8	56	0	0	0	0	0	0	6	1	40	0	11	82	292
8:00-9:00	2	0	28	46	4	0	7	58	0	0	0	0	0	0	7	1	44	0	11	107	315
8:15-9:15	1	0	25	39	4	0	5	50	0	0	0	0	0	0	6	1	47	0	11	109	298
8:30-9:30	1	0	25	39	4	0	3	44	0	0	0	0	0	0	6	1	52	0	12	105	292

AM	Northbound					Southbound					Eastbound					Westbound					
Peak Hour	**U-Turn**	**Left**	**Thru**	**Right**	**Peds**	**U-Turn**	**Left**	**Thru**	**Right**	**Peds**	**U-Turn**	**Left**	**Thru**	**Right**	**Peds**	**U-Turn**	**Left**	**Thru**	**Right**	**Peds**	**Total**
8:00-9:00	**2**	**0**	**28**	**46**	**4**	**0**	**7**	**58**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	**1**	**44**	**0**	**11**	**107**	**315**

Weekday Evening Peak Hour (4 pm - 7 pm)

	39th ST Northbound					39th St Southbound					N/A Eastbound					S St Westbound					
Time:	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds	Total
4:00-4:15	2		2	11	0	0	2	9		0					1	0	11		2	25	39
4:15-4:30	0		6	14	0	0	2	8		0					1	0	11		0	20	41
4:30-4:45	0		6	8	1	1	2	11		0					1	0	3		0	14	31
4:45-5:00	0		5	13	3	0	0	5		0					0	0	12		3	8	38
5:00-5:15	1		8	10	3	0	3	10		0					3	1	13		2	10	48
5:15-5:30	0		4	8	3	0	2	7		0					0	0	15		2	20	38
5:30-5:45	0		7	6	3	0	1	5		0					1	0	10		0	22	29
5:45-6:00	0		6	4	5	0	0	9		0					0	0	7		1	16	27
6:00-6:15	0		7	12	0	0	1	10		0					2	1	6		0	19	37
6:15-6:30	0		4	4	1	0	1	8		0					0	0	9		0	12	26
6:30-6:45	0		5	14	0	0	0	6		0					2	0	7		0	22	32
6:45-7:00	0		3	13	0	0	0	7		0					1	1	8		1	11	33

Hourly Totals																					
4:00-5:00	2	0	19	46	4	1	6	33	0	0	0	0	0	0	3	0	37	0	5	67	223
4:15-5:15	1	0	25	45	7	1	7	34	0	0	0	0	0	0	5	1	39	0	5	52	222
4:30-5:30	1	0	23	39	10	1	7	33	0	0	0	0	0	0	4	1	43	0	7	52	221
4:45-5:45	1	0	24	37	12	0	6	27	0	0	0	0	0	0	4	1	50	0	7	60	229
5:00-6:00	1	0	25	28	14	0	6	31	0	0	0	0	0	0	4	1	45	0	5	68	228
5:15-6:15	0	0	24	30	11	0	4	31	0	0	0	0	0	0	3	1	38	0	3	77	222
5:30-6:30	0	0	24	26	9	0	3	32	0	0	0	0	0	0	3	1	32	0	1	69	200
5:45-6:45	0	0	22	34	6	0	2	33	0	0	0	0	0	0	4	1	29	0	1	69	201
6:00-7:00	0	0	19	43	1	0	2	31	0	0	0	0	0	0	5	2	30	0	1	64	198

PM	Northbound					Southbound					Eastbound					Westbound					
Peak Hour	**U-Turn**	**Left**	**Thru**	**Right**	**Peds**	**U-Turn**	**Left**	**Thru**	**Right**	**Peds**	**U-Turn**	**Left**	**Thru**	**Right**	**Peds**	**U-Turn**	**Left**	**Thru**	**Right**	**Peds**	**Total**
4:45-5:45	**1**	**0**	**24**	**37**	**12**	**0**	**6**	**27**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**1**	**50**	**0**	**7**	**60**	**229**

Peak Hour
Turning Movement Count

LENHART TRAFFIC CONSULTING, INC.
645 BALTIMORE ANNAPOLIS BLVD, SUITE 214
SEVERNA PARK, MD 21146
www.lenharttraffic.com

Intersection: 39th St & S St
Weather: Clear
Count by: Count Cam DSS
Count Day/Date: Tuesday, September 14, 2021
Location: Washington, DC

Weekday Morning Peak Hour (6:30 am - 9:30 am)

	39th Northbound					39th Southbound					Hillandale Dr Eastbound					N/A Westbound					
Time:	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds	Total
6:30-6:45	0	1	8		1	0		4	1	1	0	0		1	1					11	15
6:45-7:00	0	4	15		1	0		8	3	1	0	3		3	3					15	36
7:00-7:15	0	2	14		1	0		5	4	1	0	2		6	2					9	33
7:15-7:30	0	0	10		0	0		7	5	1	0	5		3	0					12	30
7:30-7:45	0	2	6		3	0		3	4	2	0	7		8	1					11	30
7:45-8:00	0	1	9		2	0		13	4	2	0	15		7	3					8	49
8:00-8:15	0	4	18		20	0		18	11	21	0	8		5	5					12	64
8:15-8:30	1	4	7		7	1		14	10	11	0	8		10	3					11	55
8:30-8:45	0	2	11		9	0		20	10	10	0	7		5	9					20	55
8:45-9:00	0	3	12		5	0		14	11	6	0	5		6	2					35	51
9:00-9:15	0	6	8		2	0		15	3	2	0	7		8	3					30	47
9:15-9:30	0	5	9		0	0		15	9	0	0	7		6	1					14	51
Hourly Totals																					
6:30-7:30	0	7	47	0	3	0	0	24	13	4	0	10	0	13	6	0	0	0	0	47	174
6:45-7:45	0	8	45	0	5	0	0	23	16	5	0	17	0	20	6	0	0	0	0	47	192
7:00-8:00	0	5	39	0	6	0	0	28	17	6	0	29	0	24	6	0	0	0	0	40	200
7:15-8:15	0	7	43	0	25	0	0	41	24	26	0	35	0	23	9	0	0	0	0	43	276
7:30-8:30	1	11	40	0	32	1	0	48	29	36	0	38	0	30	12	0	0	0	0	42	320
7:45-8:45	1	11	45	0	38	1	0	65	35	44	0	38	0	27	20	0	0	0	0	51	376
8:00-9:00	1	13	48	0	41	1	0	66	42	48	0	28	0	26	19	0	0	0	0	78	411
8:15-9:15	1	15	38	0	23	1	0	63	34	29	0	27	0	29	17	0	0	0	0	96	373
8:30-9:30	0	16	40	0	16	0	0	64	33	18	0	26	0	25	15	0	0	0	0	99	352

AM	**Northbound**					**Southbound**					**Eastbound**					**Westbound**					
Peak Hour	**U-Turn**	**Left**	**Thru**	**Right**	**Peds**	**U-Turn**	**Left**	**Thru**	**Right**	**Peds**	**U-Turn**	**Left**	**Thru**	**Right**	**Peds**	**U-Turn**	**Left**	**Thru**	**Right**	**Peds**	**Total**
8:00-9:00	**1**	**13**	**48**	**0**	**41**	**1**	**0**	**66**	**42**	**48**	**0**	**28**	**0**	**26**	**19**	**0**	**0**	**0**	**0**	**78**	**411**

Weekday Evening Peak Hour (4 pm - 7 pm)

	39th Northbound					39th Southbound					Hillandale Dr Eastbound					N/A Westbound					
Time:	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds	Total
4:00-4:15	2	9	7		0	0		15	8	0	0	8		10	0					16	59
4:15-4:30	1	7	10		6	0		11	8	6	0	10		11	0					19	58
4:30-4:45	0	3	10		1	0		10	4	2	0	4		3	1					15	34
4:45-5:00	0	10	10		1	0		10	7	1	0	8		9	0					10	54
5:00-5:15	0	6	9		2	0		11	11	1	0	9		3	3					16	49
5:15-5:30	1	3	5		3	0		11	12	2	0	8		1	1					21	41
5:30-5:45	0	5	8		1	0		10	6	2	0	5		7	2					20	41
5:45-6:00	0	5	8		2	0		7	9	2	0	2		4	1					18	35
6:00-6:15	1	6	8		2	0		10	6	2	0	10		12	2					25	53
6:15-6:30	0	7	6		2	0		9	8	3	0	2		2	2					12	34
6:30-6:45	0	3	11		1	0		5	8	2	0	8		4	0					20	39
6:45-7:00	0	9	9		2	0		6	10	2	0	7		9	2					13	50
Hourly Totals																					
4:00-5:00	3	29	37	0	8	0	0	46	27	9	0	30	0	33	1	0	0	0	0	60	283
4:15-5:15	1	26	39	0	10	0	0	42	30	10	0	31	0	26	4	0	0	0	0	60	279
4:30-5:30	1	22	34	0	7	0	0	42	34	6	0	29	0	16	5	0	0	0	0	62	258
4:45-5:45	1	24	32	0	7	0	0	42	36	6	0	30	0	20	6	0	0	0	0	67	271
5:00-6:00	1	19	30	0	8	0	0	39	38	7	0	24	0	15	7	0	0	0	0	75	263
5:15-6:15	2	19	29	0	8	0	0	38	33	8	0	25	0	24	6	0	0	0	0	84	276
5:30-6:30	1	23	30	0	7	0	0	36	29	9	0	19	0	25	7	0	0	0	0	75	261
5:45-6:45	1	21	33	0	7	0	0	31	31	9	0	22	0	22	5	0	0	0	0	75	257
6:00-7:00	1	25	34	0	7	0	0	30	32	9	0	27	0	27	6	0	0	0	0	70	268

PM	**Northbound**					**Southbound**					**Eastbound**					**Westbound**					
Peak Hour	**U-Turn**	**Left**	**Thru**	**Right**	**Peds**	**U-Turn**	**Left**	**Thru**	**Right**	**Peds**	**U-Turn**	**Left**	**Thru**	**Right**	**Peds**	**U-Turn**	**Left**	**Thru**	**Right**	**Peds**	**Total**
4:00-5:00	**3**	**29**	**37**	**0**	**8**	**0**	**0**	**46**	**27**	**9**	**0**	**30**	**0**	**33**	**1**	**0**	**0**	**0**	**0**	**60**	**283**

Peak Hour
Turning Movement Count

LENHART TRAFFIC CONSULTING, INC.
645 BALTIMORE ANNAPOLIS BLVD, SUITE 214
SEVERNA PARK, MD 21146
www.lenharttraffic.com

Intersection: 39th St & Hillandale Dr
Weather: Clear
Count by: Count Cam DSS
Count Day/Date: Tuesday, September 14, 2021
Location: Washington, DC

Weekday Morning Peak Hour (6:30 am - 9:30 am)

	N/A Northbound					39th St Southbound					Reservoir Rd Eastbound					Reservoir Rd Westbound					
Time:	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds	Total
6:30-6:45					25	0	0		5	12	0	7	52		8	0		58	2	5	124
6:45-7:00					40	0	3		8	21	0	11	48		18	0		69	7	12	146
7:00-7:15					31	0	2		8	9	0	11	57		14	0		55	6	9	139
7:15-7:30					33	0	2		9	16	1	5	68		9	0		66	7	14	158
7:30-7:45					39	0	5		9	15	0	4	102		17	1		91	5	10	217
7:45-8:00					40	0	3		16	22	0	7	120		13	0		107	6	13	259
8:00-8:15					49	0	4		18	31	0	14	133		6	0		92	9	13	270
8:15-8:30					43	0	7		20	24	0	6	139		10	0		113	7	11	292
8:30-8:45					45	0	4		19	20	0	8	131		8	0		101	3	15	266
8:45-9:00					54	0	5		14	30	0	11	114		13	0		91	2	20	237
9:00-9:15					45	0	6		17	15	0	10	82		8	0		77	5	12	197
9:15-9:30					53	0	3		18	19	0	11	94		15	0		55	2	10	183

Hourly Totals

6:30-7:30	0	0	0	0	129	0	7	0	30	58	1	34	225	0	49	0	0	248	22	40	843
6:45-7:45	0	0	0	0	143	0	12	0	34	61	1	31	275	0	58	1	0	281	25	45	967
7:00-8:00	0	0	0	0	143	0	12	0	42	62	1	27	347	0	53	1	0	319	24	46	1077
7:15-8:15	0	0	0	0	161	0	14	0	52	84	1	30	423	0	45	1	0	356	27	50	1244
7:30-8:30	0	0	0	0	171	0	19	0	63	92	0	31	494	0	46	1	0	403	27	47	1394
7:45-8:45	0	0	0	0	177	0	18	0	73	97	0	35	523	0	37	0	0	413	25	52	1450
8:00-9:00	0	0	0	0	191	0	20	0	71	105	0	39	517	0	37	0	0	397	21	59	1457
8:15-9:15	0	0	0	0	187	0	22	0	70	89	0	35	466	0	39	0	0	382	17	58	1365
8:30-9:30	0	0	0	0	197	0	18	0	68	84	0	40	421	0	44	0	0	324	12	57	1265

AM	Northbound					Southbound					Eastbound					Westbound					
Peak Hour	**U-Turn**	**Left**	**Thru**	**Right**	**Peds**	**U-Turn**	**Left**	**Thru**	**Right**	**Peds**	**U-Turn**	**Left**	**Thru**	**Right**	**Peds**	**U-Turn**	**Left**	**Thru**	**Right**	**Peds**	**Total**
8:00-9:00	**0**	**0**	**0**	**0**	**191**	**0**	**20**	**0**	**71**	**105**	**0**	**39**	**517**	**0**	**37**	**0**	**0**	**397**	**21**	**59**	**1457**

Weekday Evening Peak Hour (4 pm - 7 pm)

	N/A Northbound					39th St Southbound					Reservoir Rd Eastbound					Reservoir Rd Westbound					
Time:	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds	Total
4:00-4:15					57	0	8		13	15	0	11	108		3	1		95	6	14	242
4:15-4:30					45	0	15		13	18	0	14	114		16	0		76	5	12	237
4:30-4:45					64	0	2		12	19	0	11	120		13	0		83	2	10	230
4:45-5:00					42	0	7		13	5	1	13	105		4	0		81	9	12	229
5:00-5:15					103	0	2		12	13	0	12	108		13	0		82	3	13	219
5:15-5:30					64	0	1		13	15	0	7	98		8	0		92	2	8	213
5:30-5:45					41	0	6		15	9	1	10	118		11	0		70	2	16	222
5:45-6:00					49	0	2		11	16	0	12	108		11	0		91	4	13	228
6:00-6:15					40	0	6		17	23	0	12	94		10	0		83	3	7	215
6:15-6:30					43	0	3		10	18	0	7	96		7	1		80	6	7	203
6:30-6:45					45	0	2		8	12	0	12	93		5	0		91	3	13	209
6:45-7:00					35	0	4		11	11	0	11	80		10	0		67	9	9	182

Hourly Totals

4:00-5:00	0	0	0	0	208	0	32	0	51	57	1	49	447	0	36	1	0	335	22	48	1287
4:15-5:15	0	0	0	0	254	0	26	0	50	55	1	50	447	0	46	0	0	322	19	47	1317
4:30-5:30	0	0	0	0	273	0	12	0	50	52	1	43	431	0	38	0	0	338	16	43	1297
4:45-5:45	0	0	0	0	250	0	16	0	53	42	2	42	429	0	36	0	0	325	16	49	1260
5:00-6:00	0	0	0	0	257	0	11	0	51	53	1	41	432	0	43	0	0	335	11	50	1285
5:15-6:15	0	0	0	0	194	0	15	0	56	63	1	41	418	0	40	0	0	336	11	44	1219
5:30-6:30	0	0	0	0	173	0	17	0	53	66	1	41	416	0	39	1	0	324	15	43	1189
5:45-6:45	0	0	0	0	177	0	13	0	46	69	0	43	391	0	33	1	0	345	16	40	1174
6:00-7:00	0	0	0	0	163	0	15	0	46	64	0	42	363	0	32	1	0	321	21	36	1104

PM	Northbound					Southbound					Eastbound					Westbound					
Peak Hour	**U-Turn**	**Left**	**Thru**	**Right**	**Peds**	**U-Turn**	**Left**	**Thru**	**Right**	**Peds**	**U-Turn**	**Left**	**Thru**	**Right**	**Peds**	**U-Turn**	**Left**	**Thru**	**Right**	**Peds**	**Total**
4:15-5:15	**0**	**0**	**0**	**0**	**254**	**0**	**26**	**0**	**50**	**55**	**1**	**50**	**447**	**0**	**46**	**0**	**0**	**322**	**19**	**47**	**1317**

Peak Hour
Turning Movement Count

LENHART TRAFFIC CONSULTING, INC.
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Count by: Count Cam DSS
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Location: Washington, DC

Weekday Morning Peak Hour (6:30 am - 9:30 am)

	38th ST Northbound					38th St Southbound					S St Eastbound					S St Westbound					
Time:	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds	Total
6:30-6:45	0	4	1	2	1	0	0	2	0	1	0	0	1	1	5	0	1	2	0	4	14
6:45-7:00	0	1	3	2	0	0	1	1	0	3	0	0	5	7	5	0	1	5	0	1	26
7:00-7:15	0	2	4	0	0	0	1	1	0	1	0	0	3	6	3	1	0	6	0	1	24
7:15-7:30	0	1	3	2	1	0	0	1	1	5	2	0	4	5	3	0	0	5	0	2	24
7:30-7:45	0	1	2	0	1	0	0	1	0	5	0	0	8	5	8	0	3	5	0	4	25
7:45-8:00	0	2	3	2	1	0	0	3	0	5	1	1	15	4	7	0	0	8	0	4	39
8:00-8:15	0	2	5	4	3	0	2	5	0	20	0	0	10	9	13	0	1	11	0	6	49
8:15-8:30	0	4	1	3	4	0	1	3	0	23	1	1	9	1	12	0	1	11	4	5	40
8:30-8:45	0	6	3	6	4	0	0	3	1	13	0	2	7	2	7	0	3	10	2	10	45
8:45-9:00	0	5	4	6	3	0	1	0	0	10	0	2	6	2	6	1	2	8	2	10	39
9:00-9:15	0	3	5	7	3	0	0	1	1	10	0	0	8	4	18	1	0	9	0	8	39
9:15-9:30	0	6	3	2	3	0	2	2	1	3	0	0	10	1	10	0	2	12	0	3	41
Hourly Totals																					
6:30-7:30	0	8	11	6	2	0	2	5	1	10	2	0	13	19	16	1	2	18	0	8	124
6:45-7:45	0	5	12	4	2	0	2	4	1	14	2	0	20	23	19	1	4	21	0	8	142
7:00-8:00	0	6	12	4	3	0	1	6	1	16	3	1	30	20	21	1	3	24	0	11	163
7:15-8:15	0	6	13	8	6	0	2	10	1	35	3	1	37	23	31	0	4	29	0	16	225
7:30-8:30	0	9	11	9	9	0	3	12	0	53	2	2	42	19	40	0	5	35	4	19	274
7:45-8:45	0	14	12	15	12	0	3	14	1	61	2	4	41	16	39	0	5	40	6	25	310
8:00-9:00	0	17	13	19	14	0	4	11	1	66	1	5	32	14	38	1	7	40	8	31	322
8:15-9:15	0	18	13	22	14	0	2	7	2	56	1	5	30	9	43	2	6	38	8	33	309
8:30-9:30	0	20	15	21	13	0	3	6	3	36	0	4	31	9	41	2	7	39	4	31	285
AM	**Northbound**					**Southbound**					**Eastbound**					**Westbound**					
Peak Hour	**U-Turn**	**Left**	**Thru**	**Right**	**Peds**	**U-Turn**	**Left**	**Thru**	**Right**	**Peds**	**U-Turn**	**Left**	**Thru**	**Right**	**Peds**	**U-Turn**	**Left**	**Thru**	**Right**	**Peds**	**Total**
8:00-9:00	**0**	**17**	**13**	**19**	**14**	**0**	**4**	**11**	**1**	**66**	**1**	**5**	**32**	**14**	**38**	**1**	**7**	**40**	**8**	**31**	**322**

Weekday Evening Peak Hour (4 pm - 7 pm)

	38th ST Northbound					38th St Southbound					S St Eastbound					S St Westbound					
Time:	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds	Total
4:00-4:15	0	2	0	4	1	0	2	1	1	5	0	0	9	4	5	1	4	7	1	4	36
4:15-4:30	0	4	3	0	1	0	4	2	0	5	0	0	16	4	2	0	1	6	1	2	41
4:30-4:45	0	0	0	2	3	0	0	5	0	7	0	1	9	2	3	0	1	3	1	5	24
4:45-5:00	1	3	0	0	2	0	0	2	4	4	0	0	9	3	7	0	2	7	3	2	34
5:00-5:15	0	2	4	0	5	0	1	2	1	11	0	1	14	1	8	0	1	13	0	7	40
5:15-5:30	0	3	0	6	0	0	0	3	1	7	0	0	11	1	9	0	4	12	1	3	42
5:30-5:45	0	1	0	1	1	0	0	1	1	7	0	0	9	0	4	0	3	9	0	6	25
5:45-6:00	0	1	4	0	4	0	0	2	0	1	0	0	3	1	11	1	0	8	0	6	20
6:00-6:15	0	0	0	4	4	0	2	3	2	6	0	0	14	1	11	1	0	6	1	6	34
6:15-6:30	0	1	2	4	3	0	0	2	0	4	0	1	3	1	7	0	0	7	4	7	25
6:30-6:45	0	2	1	3	0	0	0	2	0	6	0	0	11	0	5	0	0	5	0	2	24
6:45-7:00	0	2	1	2	2	0	1	2	0	11	0	0	10	2	3	0	0	7	0	5	27
Hourly Totals																					
4:00-5:00	1	9	3	6	7	0	6	10	5	21	0	1	43	13	17	1	8	23	6	13	193
4:15-5:15	1	9	7	2	11	0	5	11	5	27	0	2	48	10	20	0	5	29	5	16	213
4:30-5:30	1	8	4	8	10	0	1	12	6	29	0	2	43	7	27	0	8	35	5	17	223
4:45-5:45	1	9	4	7	8	0	1	8	7	29	0	1	43	5	28	0	10	41	4	18	224
5:00-6:00	0	7	8	7	10	0	1	8	3	26	0	1	37	3	32	1	8	42	1	22	217
5:15-6:15	0	5	4	11	9	0	2	9	4	21	0	0	37	3	35	2	7	35	2	21	207
5:30-6:30	0	3	6	9	12	0	2	8	3	18	0	1	29	3	33	2	3	30	5	25	192
5:45-6:45	0	4	7	11	11	0	2	9	2	17	0	1	31	3	34	2	0	26	5	21	186
6:00-7:00	0	5	4	13	9	0	3	9	2	27	0	1	38	4	26	1	0	25	5	20	192
PM	**Northbound**					**Southbound**					**Eastbound**					**Westbound**					
Peak Hour	**U-Turn**	**Left**	**Thru**	**Right**	**Peds**	**U-Turn**	**Left**	**Thru**	**Right**	**Peds**	**U-Turn**	**Left**	**Thru**	**Right**	**Peds**	**U-Turn**	**Left**	**Thru**	**Right**	**Peds**	**Total**
4:45-5:45	**1**	**9**	**4**	**7**	**8**	**0**	**1**	**8**	**7**	**29**	**0**	**1**	**43**	**5**	**28**	**0**	**10**	**41**	**4**	**18**	**224**

Peak Hour
Turning Movement Count

LENHART TRAFFIC CONSULTING, INC.
645 BALTIMORE ANNAPOLIS BLVD, SUITE 214
SEVERNA PARK, MD 21146
www.lenharttraffic.com

Intersection: 38th St & S St
Weather: Clear
Count by: Count Cam DSS
Count Day/Date: Tuesday, September 14, 2021
Location: Washington, DC

Weekday Morning Peak Hour (6:30 am - 9:30 am)

	38th ST Northbound					38th St Southbound					N/A Eastbound					R St Westbound					
Time:	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds	Total
6:30-6:45	0		8	3	7	0	0	2		1					6	0	6		0	4	19
6:45-7:00	0		8	3	1	0	1	7		5					8	0	10		1	5	30
7:00-7:15	0		2	2	6	0	2	5		6					4	0	6		4	1	21
7:15-7:30	0		4	1	0	0	0	6		6					5	0	5		1	1	17
7:30-7:45	0		2	3	3	0	0	8		10					10	0	8		3	3	24
7:45-8:00	0		4	2	2	1	1	6		3					9	0	6		3	6	23
8:00-8:15	0		6	5	6	0	5	11		22					14	0	3		4	5	34
8:15-8:30	0		6	1	1	0	0	5		11					11	0	4		2	6	18
8:30-8:45	0		12	3	2	0	2	6		5					12	1	5		3	8	32
8:45-9:00	0		9	6	6	0	2	2		3					13	0	5		4	14	28
9:00-9:15	0		7	5	0	0	1	4		7					25	2	3		5	10	27
9:15-9:30	2		10	1	7	0	0	5		6					15	0	2		3	8	23

Hourly Totals																					
6:30-7:30			22	9	14	0	3	20		18					23	0	27		6	11	153
6:45-7:45			16	9	10	0	3	26		27					27	0	29		9	10	166
7:00-8:00			12	8	11	1	3	25		25					28	0	25		11	11	160
7:15-8:15			16	11	11	1	6	31		41					38	0	22		11	15	203
7:30-8:30			18	11	12	1	6	30		46					44	0	21		12	20	221
7:45-8:45			28	11	11	1	8	28		41					46	1	18		12	25	230
8:00-9:00			33	15	15	0	9	24		41					50	1	17		13	33	251
8:15-9:15			34	15	9	0	5	17		26					61	3	17		14	38	239
8:30-9:30			38	15	15	0	5	17		21					65	3	15		15	40	251

AM	Northbound					Southbound					Eastbound					Westbound					
Peak Hour	**U-Turn**	**Left**	**Thru**	**Right**	**Peds**	**U-Turn**	**Left**	**Thru**	**Right**	**Peds**	**U-Turn**	**Left**	**Thru**	**Right**	**Peds**	**U-Turn**	**Left**	**Thru**	**Right**	**Peds**	**Total**
8:00-9:00	**0**	**0**	**33**	**15**	**15**	**0**	**9**	**24**	**0**	**41**	**0**	**0**	**0**	**0**	**50**	**1**	**17**	**0**	**13**	**33**	**251**

Weekday Evening Peak Hour (4 pm - 7 pm)

	38th ST Northbound					38th St Southbound					N/A Eastbound					R St Westbound					
Time:	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds	Total
4:00-4:15	0		4	3	2	0	2	8		4					8	0	6		1	7	24
4:15-4:30	0		5	3	0	0	3	4		3					9	0	7		3	6	25
4:30-4:45	0		0	1	5	0	0	11		3					9	0	9		1	6	22
4:45-5:00	0		1	5	42	0	0	7		5					10	0	6		3	10	22
5:00-5:15	0		5	1	2	0	0	4		35					10	0	4		3	9	17
5:15-5:30	0		4	3	8	0	1	7		12					14	0	4		5	8	24
5:30-5:45	0		2	2	47	0	1	3		7					5	0	3		0	6	11
5:45-6:00	0		3	2	6	0	0	2		4					17	0	5		1	6	13
6:00-6:15	0		3	6	5	0	1	4		7					12	0	9		1	6	24
6:15-6:30	0		4	3	2	0	4	4		26					12	0	6		1	3	22
6:30-6:45	0		6	3	4	0	0	3		7					7	0	7		2	3	21
6:45-7:00	1		2	0	2	0	2	3		11					5	0	4		1	2	13

Hourly Totals																					
4:00-5:00			10	12	49	0	5	30		15					36	0	28		8	29	222
4:15-5:15			11	10	49	0	3	26		46					38	0	26		10	31	250
4:30-5:30			10	10	57	0	1	29		55					43	0	23		12	33	273
4:45-5:45			12	11	99	0	2	21		59					39	0	17		11	33	304
5:00-6:00			14	8	63	0	2	16		58					46	0	16		9	29	261
5:15-6:15			12	13	66	0	3	16		30					48	0	21		7	26	242
5:30-6:30			12	13	60	0	6	13		44					46	0	23		3	21	241
5:45-6:45			16	14	17	0	5	13		44					48	0	27		5	18	207
6:00-7:00			15	12	13	0	7	14		51					36	0	26		5	14	194

PM	Northbound					Southbound					Eastbound					Westbound					
Peak Hour	**U-Turn**	**Left**	**Thru**	**Right**	**Peds**	**U-Turn**	**Left**	**Thru**	**Right**	**Peds**	**U-Turn**	**Left**	**Thru**	**Right**	**Peds**	**U-Turn**	**Left**	**Thru**	**Right**	**Peds**	**Total**
4:45-5:45	**0**	**0**	**12**	**11**	**99**	**0**	**2**	**21**	**0**	**59**	**0**	**0**	**0**	**0**	**39**	**0**	**17**	**0**	**11**	**33**	**304**

Peak Hour
Turning Movement Count

LENHART TRAFFIC CONSULTING, INC.
645 BALTIMORE ANNAPOLIS BLVD, SUITE 214
SEVERNA PARK, MD 21146
www.lenharttraffic.com

Intersection: 38th St & R St
Weather: Clear
Count by: Count Cam DSS
Count Day/Date: Tuesday, September 14, 2021
Location: Washington, DC

Weekday Morning Peak Hour (6:30 am - 9:30 am)

	N/A Northbound					38th St Southbound					Reservoir Rd Eastbound					Reservoir Rd Westbound					
Time:	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds	Total
6:30-6:45					11	0	2		6	12	2	6	48		7	0		58	5	5	127
6:45-7:00					39	0	4		11	14	0	8	41		13	0		64	2	3	130
7:00-7:15					25	0	5		6	6	1	4	50		10	0		51	0	2	117
7:15-7:30					14	0	2		10	12	1	5	61		5	0		66	3	1	148
7:30-7:45					26	1	3		11	15	0	0	109		9	0		80	3	1	207
7:45-8:00					35	0	1		12	24	0	6	118		6	0		104	0	3	241
8:00-8:15					36	0	4		8	24	0	5	129		8	0		92	5	3	243
8:15-8:30					35	0	2		8	22	1	6	141		7	0		110	2	4	270
8:30-8:45					29	0	4		7	21	0	7	129		10	0		96	5	1	248
8:45-9:00					30	0	0		4	29	0	8	112		13	0		85	10	6	219
9:00-9:15					26	0	3		4	24	0	5	75		11	0		77	3	5	167
9:15-9:30					43	0	2		4	17	0	9	89		9	0		55	3	7	162

Hourly Totals																					
6:30-7:30	0	0	0	0	89	0	13	0	33	44	4	23	200	0	35	0	0	239	10	11	701
6:45-7:45	0	0	0	0	104	1	14	0	38	47	2	17	261	0	37	0	0	261	8	7	797
7:00-8:00	0	0	0	0	100	1	11	0	39	57	2	15	338	0	30	0	0	301	6	7	907
7:15-8:15	0	0	0	0	111	1	10	0	41	75	1	16	417	0	28	0	0	342	11	8	1061
7:30-8:30	0	0	0	0	132	1	10	0	39	85	1	17	497	0	30	0	0	386	10	11	1219
7:45-8:45	0	0	0	0	135	0	11	0	35	91	1	24	517	0	31	0	0	402	12	11	1270
8:00-9:00	0	0	0	0	130	0	10	0	27	96	1	26	511	0	38	0	0	383	22	14	1258
8:15-9:15	0	0	0	0	120	0	9	0	23	96	1	26	457	0	41	0	0	368	20	16	1177
8:30-9:30	0	0	0	0	128	0	9	0	19	91	0	29	405	0	43	0	0	313	21	19	1077

AM	Northbound					Southbound					Eastbound					Westbound					
Peak Hour	**U-Turn**	**Left**	**Thru**	**Right**	**Peds**	**U-Turn**	**Left**	**Thru**	**Right**	**Peds**	**U-Turn**	**Left**	**Thru**	**Right**	**Peds**	**U-Turn**	**Left**	**Thru**	**Right**	**Peds**	**Total**
7:45-8:45	**0**	**0**	**0**	**0**	**135**	**0**	**11**	**0**	**35**	**91**	**1**	**24**	**517**	**0**	**31**	**0**	**0**	**402**	**12**	**11**	**1270**

Weekday Evening Peak Hour (4 pm - 7 pm)

	N/A Northbound					38th St Southbound					Reservoir Rd Eastbound					Reservoir Rd Westbound					
Time:	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds	U-Turn	Left	Thru	Right	Peds	Total
4:00-4:15					43	0	6		8	14	0	9	106		8	0		84	1	3	214
4:15-4:30					21	0	7		7	11	0	7	121		2	0		70	1	2	213
4:30-4:45					81	0	4		17	21	0	0	126		14	0		68	0	4	215
4:45-5:00					27	0	4		12	9	0	2	108		9	0		73	4	2	203
5:00-5:15					88	0	1		6	12	0	4	105		9	0		75	2	1	193
5:15-5:30					43	0	1		10	15	0	5	96		10	0		80	2	3	194
5:30-5:45					21	0	3		5	14	1	4	119		3	0		70	0	2	202
5:45-6:00					34	0	3		8	25	0	5	108		12	0		86	0	4	210
6:00-6:15					33	0	4		9	23	0	7	95		6	0		78	0	5	193
6:15-6:30					32	0	2		7	16	0	4	97		6	0		81	1	4	192
6:30-6:45					22	0	1		7	19	0	7	87		18	0		85	1	4	188
6:45-7:00					20	0	1		7	12	1	3	84		5	0		70	1	1	167

Hourly Totals																					
4:00-5:00	0	0	0	0	172	0	21	0	44	55	0	18	461	0	33	0	0	295	6	11	1116
4:15-5:15	0	0	0	0	217	0	16	0	42	53	0	13	460	0	34	0	0	286	7	9	1137
4:30-5:30	0	0	0	0	239	0	10	0	45	57	0	11	435	0	42	0	0	296	8	10	1153
4:45-5:45	0	0	0	0	179	0	9	0	33	50	1	15	428	0	31	0	0	298	8	8	1060
5:00-6:00	0	0	0	0	186	0	8	0	29	66	1	18	428	0	34	0	0	311	4	10	1095
5:15-6:15	0	0	0	0	131	0	11	0	32	77	1	21	418	0	31	0	0	314	2	14	1052
5:30-6:30	0	0	0	0	120	0	12	0	29	78	1	20	419	0	27	0	0	315	1	15	1037
5:45-6:45	0	0	0	0	121	0	10	0	31	83	0	23	387	0	42	0	0	330	2	17	1046
6:00-7:00	0	0	0	0	107	0	8	0	30	70	1	21	363	0	35	0	0	314	3	14	966

PM	Northbound					Southbound					Eastbound					Westbound					
Peak Hour	**U-Turn**	**Left**	**Thru**	**Right**	**Peds**	**U-Turn**	**Left**	**Thru**	**Right**	**Peds**	**U-Turn**	**Left**	**Thru**	**Right**	**Peds**	**U-Turn**	**Left**	**Thru**	**Right**	**Peds**	**Total**
4:30-5:30	**0**	**0**	**0**	**0**	**239**	**0**	**10**	**0**	**45**	**57**	**0**	**11**	**435**	**0**	**42**	**0**	**0**	**296**	**8**	**10**	**1153**

Peak Hour
Turning Movement Count

LENHART TRAFFIC CONSULTING, INC.
645 BALTIMORE ANNAPOLIS BLVD, SUITE 214
SEVERNA PARK, MD 21146
www.lenharttraffic.com

Intersection: Reservoir Rd & 38th St
Weather: Clear
Count by: Count Cam DSS
Count Day/Date: Tuesday, September 14, 2021
Location: Washington, DC

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Stop			Stop
Traffic Volume (vph)	45	11	28	46	7	58
Future Volume (vph)	45	11	28	46	7	58
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	49	12	30	50	8	63

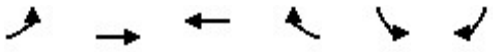
Direction, Lane #	WB 1	NB 1	SB 1
Volume Total (vph)	61	80	71
Volume Left (vph)	49	0	8
Volume Right (vph)	12	50	0
Hadj (s)	0.08	-0.34	0.06
Departure Headway (s)	4.3	3.8	4.2
Degree Utilization, x	0.07	0.08	0.08
Capacity (veh/h)	808	926	844
Control Delay (s)	7.6	7.1	7.5
Approach Delay (s)	7.6	7.1	7.5
Approach LOS	A	A	A

Intersection Summary			
Delay	7.4		
Level of Service	A		
Intersection Capacity Utilization	18.9%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Traffic Volume (vph)	28	26	14	48	66	42
Future Volume (vph)	28	26	14	48	66	42
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	30	28	15	52	72	46

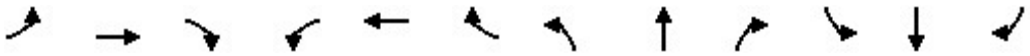
Direction, Lane #	EB 1	EB 2	NB 1	SB 1
Volume Total (vph)	30	28	67	118
Volume Left (vph)	30	0	15	0
Volume Right (vph)	0	28	0	46
Hadj (s)	0.23	-0.57	0.08	-0.20
Departure Headway (s)	4.5	3.2	4.2	3.8
Degree Utilization, x	0.04	0.02	0.08	0.13
Capacity (veh/h)	762	1121	844	924
Control Delay (s)	7.7	6.3	7.5	7.4
Approach Delay (s)	7.0		7.5	7.4
Approach LOS	A		A	A

Intersection Summary			
Delay	7.3		
Level of Service	A		
Intersection Capacity Utilization	20.0%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	39	517	397	21	20	71
Future Volume (vph)	39	517	397	21	20	71
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5	4.5		4.5	
Lane Util. Factor		1.00	1.00		1.00	
Frt		1.00	0.99		0.90	
Flt Protected		1.00	1.00		0.99	
Satd. Flow (prot)		1856	1850		1649	
Flt Permitted		0.95	1.00		0.99	
Satd. Flow (perm)		1766	1850		1649	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	42	562	432	23	22	77
RTOR Reduction (vph)	0	0	2	0	65	0
Lane Group Flow (vph)	0	604	453	0	34	0
Turn Type	Perm	NA	NA		Prot	
Protected Phases		4	8		6	
Permitted Phases	4					
Actuated Green, G (s)		75.5	75.5		15.5	
Effective Green, g (s)		75.5	75.5		15.5	
Actuated g/C Ratio		0.76	0.76		0.16	
Clearance Time (s)		4.5	4.5		4.5	
Lane Grp Cap (vph)		1333	1396		255	
v/s Ratio Prot			0.24		c0.02	
v/s Ratio Perm		c0.34				
v/c Ratio		0.45	0.32		0.13	
Uniform Delay, d1		4.6	4.0		36.5	
Progression Factor		1.00	0.55		1.00	
Incremental Delay, d2		1.1	0.6		1.1	
Delay (s)		5.7	2.8		37.5	
Level of Service		A	A		D	
Approach Delay (s)		5.7	2.8		37.5	
Approach LOS		A	A		D	

Intersection Summary			
HCM 2000 Control Delay	7.3	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.40		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	68.3%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	6	32	14	8	40	8	17	13	19	4	11	1
Future Volume (vph)	6	32	14	8	40	8	17	13	19	4	11	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	7	35	15	9	43	9	18	14	21	4	12	1

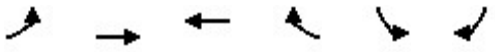
Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	57	61	53	17
Volume Left (vph)	7	9	18	4
Volume Right (vph)	15	9	21	1
Hadj (s)	-0.10	-0.03	-0.14	0.05
Departure Headway (s)	4.0	4.1	4.0	4.2
Degree Utilization, x	0.06	0.07	0.06	0.02
Capacity (veh/h)	874	861	858	818
Control Delay (s)	7.3	7.4	7.3	7.3
Approach Delay (s)	7.3	7.4	7.3	7.3
Approach LOS	A	A	A	A

Intersection Summary				
Delay			7.3	
Level of Service			A	
Intersection Capacity Utilization			15.2%	ICU Level of Service
Analysis Period (min)			15	

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Stop			Stop
Traffic Volume (vph)	18	13	33	15	9	24
Future Volume (vph)	18	13	33	15	9	24
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	20	14	36	16	10	26

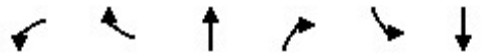
Direction, Lane #	WB 1	NB 1	SB 1
Volume Total (vph)	34	52	36
Volume Left (vph)	20	0	10
Volume Right (vph)	14	16	0
Hadj (s)	-0.10	-0.15	0.09
Departure Headway (s)	4.0	3.9	4.1
Degree Utilization, x	0.04	0.06	0.04
Capacity (veh/h)	878	911	862
Control Delay (s)	7.1	7.1	7.3
Approach Delay (s)	7.1	7.1	7.3
Approach LOS	A	A	A

Intersection Summary			
Delay		7.2	
Level of Service		A	
Intersection Capacity Utilization		18.4%	ICU Level of Service
Analysis Period (min)		15	



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	25	517	402	12	11	35
Future Volume (vph)	25	517	402	12	11	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5	4.5		4.5	
Lane Util. Factor		1.00	1.00		1.00	
Frt		1.00	1.00		0.90	
Flt Protected		1.00	1.00		0.99	
Satd. Flow (prot)		1858	1855		1652	
Flt Permitted		0.97	1.00		0.99	
Satd. Flow (perm)		1806	1855		1652	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	27	562	437	13	12	38
RTOR Reduction (vph)	0	0	1	0	26	0
Lane Group Flow (vph)	0	589	449	0	24	0
Turn Type	Perm	NA	NA		Prot	
Protected Phases		4	8		6	
Permitted Phases	4					
Actuated Green, G (s)		60.5	60.5		30.5	
Effective Green, g (s)		60.5	60.5		30.5	
Actuated g/C Ratio		0.60	0.60		0.30	
Clearance Time (s)		4.5	4.5		4.5	
Lane Grp Cap (vph)		1092	1122		503	
v/s Ratio Prot			0.24		c0.01	
v/s Ratio Perm		c0.33				
v/c Ratio		0.54	0.40		0.05	
Uniform Delay, d1		11.6	10.3		24.5	
Progression Factor		0.65	1.00		1.00	
Incremental Delay, d2		1.7	1.1		0.2	
Delay (s)		9.2	11.4		24.7	
Level of Service		A	B		C	
Approach Delay (s)		9.2	11.4		24.7	
Approach LOS		A	B		C	

Intersection Summary			
HCM 2000 Control Delay	10.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	59.2%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Stop			Stop
Traffic Volume (vph)	51	7	24	37	6	27
Future Volume (vph)	51	7	24	37	6	27
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	55	8	26	40	7	29

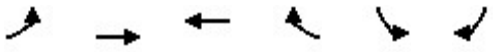
Direction, Lane #	WB 1	NB 1	SB 1
Volume Total (vph)	63	66	36
Volume Left (vph)	55	0	7
Volume Right (vph)	8	40	0
Hadj (s)	0.13	-0.33	0.07
Departure Headway (s)	4.2	3.7	4.2
Degree Utilization, x	0.07	0.07	0.04
Capacity (veh/h)	825	931	842
Control Delay (s)	7.6	7.0	7.4
Approach Delay (s)	7.6	7.0	7.4
Approach LOS	A	A	A

Intersection Summary			
Delay	7.3		
Level of Service	A		
Intersection Capacity Utilization	16.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Traffic Volume (vph)	30	33	32	37	46	27
Future Volume (vph)	30	33	32	37	46	27
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	33	36	35	40	50	29

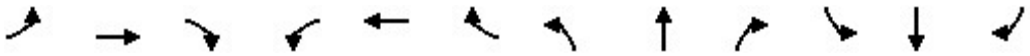
Direction, Lane #	EB 1	EB 2	NB 1	SB 1
Volume Total (vph)	33	36	75	79
Volume Left (vph)	33	0	35	0
Volume Right (vph)	0	36	0	29
Hadj (s)	0.23	-0.57	0.13	-0.19
Departure Headway (s)	4.5	3.2	4.2	3.9
Degree Utilization, x	0.04	0.03	0.09	0.08
Capacity (veh/h)	777	1121	841	916
Control Delay (s)	7.6	6.3	7.6	7.2
Approach Delay (s)	6.9		7.6	7.2
Approach LOS	A		A	A

Intersection Summary			
Delay	7.3		
Level of Service	A		
Intersection Capacity Utilization	20.4%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	51	447	322	19	26	50
Future Volume (vph)	51	447	322	19	26	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5	4.5		4.5	
Lane Util. Factor		1.00	1.00		1.00	
Frt		1.00	0.99		0.91	
Flt Protected		0.99	1.00		0.98	
Satd. Flow (prot)		1853	1849		1669	
Flt Permitted		0.93	1.00		0.98	
Satd. Flow (perm)		1733	1849		1669	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	55	486	350	21	28	54
RTOR Reduction (vph)	0	0	2	0	43	0
Lane Group Flow (vph)	0	541	369	0	39	0
Turn Type	Perm	NA	NA		Prot	
Protected Phases		4	8		6	
Permitted Phases	4					
Actuated Green, G (s)		70.5	70.5		20.5	
Effective Green, g (s)		70.5	70.5		20.5	
Actuated g/C Ratio		0.70	0.70		0.20	
Clearance Time (s)		4.5	4.5		4.5	
Lane Grp Cap (vph)		1221	1303		342	
v/s Ratio Prot			0.20		c0.02	
v/s Ratio Perm		c0.31				
v/c Ratio		0.44	0.28		0.11	
Uniform Delay, d1		6.3	5.4		32.4	
Progression Factor		1.00	0.56		1.00	
Incremental Delay, d2		1.2	0.5		0.7	
Delay (s)		7.5	3.6		33.0	
Level of Service		A	A		C	
Approach Delay (s)		7.5	3.6		33.0	
Approach LOS		A	A		C	

Intersection Summary			
HCM 2000 Control Delay	8.1	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	60.2%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	1	43	5	10	41	4	10	4	7	1	8	7
Future Volume (vph)	1	43	5	10	41	4	10	4	7	1	8	7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1	47	5	11	45	4	11	4	8	1	9	8

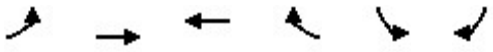
Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	53	60	23	18
Volume Left (vph)	1	11	11	1
Volume Right (vph)	5	4	8	8
Hadj (s)	-0.02	0.03	-0.08	-0.22
Departure Headway (s)	4.0	4.1	4.1	3.9
Degree Utilization, x	0.06	0.07	0.03	0.02
Capacity (veh/h)	877	870	848	883
Control Delay (s)	7.3	7.4	7.2	7.0
Approach Delay (s)	7.3	7.4	7.2	7.0
Approach LOS	A	A	A	A

Intersection Summary				
Delay			7.3	
Level of Service			A	
Intersection Capacity Utilization			19.5%	ICU Level of Service
Analysis Period (min)			15	

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Stop			Stop
Traffic Volume (vph)	17	11	12	11	2	21
Future Volume (vph)	17	11	12	11	2	21
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	18	12	13	12	2	23

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total (vph)	30	25	25
Volume Left (vph)	18	0	2
Volume Right (vph)	12	12	0
Hadj (s)	-0.09	-0.25	0.05
Departure Headway (s)	3.9	3.7	4.0
Degree Utilization, x	0.03	0.03	0.03
Capacity (veh/h)	902	952	880
Control Delay (s)	7.0	6.8	7.2
Approach Delay (s)	7.0	6.8	7.2
Approach LOS	A	A	A

Intersection Summary			
Delay	7.0		
Level of Service	A		
Intersection Capacity Utilization	13.3%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	11	435	296	8	10	45
Future Volume (vph)	11	435	296	8	10	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5	4.5		4.5	
Lane Util. Factor		1.00	1.00		1.00	
Frt		1.00	1.00		0.89	
Flt Protected		1.00	1.00		0.99	
Satd. Flow (prot)		1860	1856		1642	
Flt Permitted		0.99	1.00		0.99	
Satd. Flow (perm)		1845	1856		1642	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	12	473	322	9	11	49
RTOR Reduction (vph)	0	0	1	0	34	0
Lane Group Flow (vph)	0	485	330	0	26	0
Turn Type	Perm	NA	NA		Prot	
Protected Phases		4	8		6	
Permitted Phases	4					
Actuated Green, G (s)		60.5	60.5		30.5	
Effective Green, g (s)		60.5	60.5		30.5	
Actuated g/C Ratio		0.60	0.60		0.30	
Clearance Time (s)		4.5	4.5		4.5	
Lane Grp Cap (vph)		1116	1122		500	
v/s Ratio Prot			0.18		c0.02	
v/s Ratio Perm		c0.26				
v/c Ratio		0.43	0.29		0.05	
Uniform Delay, d1		10.6	9.5		24.5	
Progression Factor		0.48	1.00		1.00	
Incremental Delay, d2		1.1	0.7		0.2	
Delay (s)		6.2	10.2		24.7	
Level of Service		A	B		C	
Approach Delay (s)		6.2	10.2		24.7	
Approach LOS		A	B		C	

Intersection Summary			
HCM 2000 Control Delay	9.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.31		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	43.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Intersection: 1: 39th St & S St

Movement	WB	NB	SB
Directions Served	LR	TR	LT
Maximum Queue (ft)	35	60	59
Average Queue (ft)	27	30	30
95th Queue (ft)	44	50	52
Link Distance (ft)	341	59	479
Upstream Blk Time (%)		0	
Queuing Penalty (veh)		0	
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 2: 39th St & Hillandale Dr

Movement	EB	NB	SB
Directions Served	L	LT	TR
Maximum Queue (ft)	47	58	55
Average Queue (ft)	18	29	33
95th Queue (ft)	41	50	44
Link Distance (ft)		476	59
Upstream Blk Time (%)			0
Queuing Penalty (veh)			0
Storage Bay Dist (ft)	250		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: Reservoir Rd & 39th St

Movement	EB	WB	SB
Directions Served	LT	TR	LR
Maximum Queue (ft)	213	102	103
Average Queue (ft)	97	46	43
95th Queue (ft)	182	93	84
Link Distance (ft)	366	357	476
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 4: 38th St & S St

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	52	54	39	31
Average Queue (ft)	26	27	25	13
95th Queue (ft)	48	48	45	37
Link Distance (ft)	341	486	270	198
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 5: 38th St & R St

Movement	WB	NB	SB
Directions Served	LR	TR	LT
Maximum Queue (ft)	44	55	31
Average Queue (ft)	20	27	23
95th Queue (ft)	45	49	45
Link Distance (ft)	513	294	270
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 6: Reservoir Rd & 38th St

Movement	EB	WB	SB
Directions Served	LT	TR	LR
Maximum Queue (ft)	326	237	69
Average Queue (ft)	126	121	25
95th Queue (ft)	254	211	59
Link Distance (ft)	357	751	294
Upstream Blk Time (%)	0		
Queuing Penalty (veh)	1		
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 1

Intersection: 1: 39th St & S St

Movement	WB	NB	SB
Directions Served	LR	TR	LT
Maximum Queue (ft)	52	37	49
Average Queue (ft)	27	28	22
95th Queue (ft)	50	44	48
Link Distance (ft)	341	59	479
Upstream Blk Time (%)		0	
Queuing Penalty (veh)		0	
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 2: 39th St & Hillandale Dr

Movement	EB	NB	SB
Directions Served	L	LT	TR
Maximum Queue (ft)	28	57	59
Average Queue (ft)	16	30	31
95th Queue (ft)	38	50	50
Link Distance (ft)		476	59
Upstream Blk Time (%)			0
Queuing Penalty (veh)			0
Storage Bay Dist (ft)	250		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: Reservoir Rd & 39th St

Movement	EB	WB	SB
Directions Served	LT	TR	LR
Maximum Queue (ft)	227	85	112
Average Queue (ft)	104	37	38
95th Queue (ft)	193	77	80
Link Distance (ft)	366	357	476
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 4: 38th St & S St

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	40	61	35	35
Average Queue (ft)	25	26	16	15
95th Queue (ft)	46	51	42	41
Link Distance (ft)	341	486	270	198
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 5: 38th St & R St

Movement	WB	NB	SB
Directions Served	LR	TR	LT
Maximum Queue (ft)	39	31	31
Average Queue (ft)	18	15	16
95th Queue (ft)	43	41	42
Link Distance (ft)	513	294	270
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 6: Reservoir Rd & 38th St

Movement	EB	WB	SB
Directions Served	LT	TR	LR
Maximum Queue (ft)	181	193	58
Average Queue (ft)	62	84	26
95th Queue (ft)	130	158	53
Link Distance (ft)	357	751	294
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 0