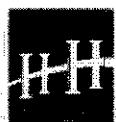


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Hardesty
&Hanover

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TRAFFIC ACCESS AND IMPACT STUDY

Proposed Residential Development Gatto Lane Orangetown, New York



Prepared for:
Brooker Engineering PLLC

May 2021



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May 25, 2021

Mr. Kenneth DeGennaro P.E., C.F.M.
Associate
Brooker Engineering, PLLC
74 Lafayette Avenue
Suite 501
Suffern, New York 10901

Dear Mr. DeGennaro:

As requested, we are pleased to provide this Traffic Report, to be submitted to the Town of Orangetown for the proposed 40-unit senior housing development proposed on a vacant parcel of land. The site has access to Gatto Lane to the east of the North Highland Avenue intersection. This development will also provide an emergency access drive to Grotke Road.

The property is currently zoned for up to 9 single-family, detached homes. A development of this type and size would generate 11 and 10 vehicle trip ends during the weekday morning and weekday afternoon peak hours, respectively. The proposed development, which includes a rezoning of the Subject Property, is for 40 senior attached housing units on the Subject Property. It is estimated a development of this type and size will generate 8 and 12 vehicle trip ends during the weekday morning and weekday afternoon peak hours, respectively. A comparison to the 9 single-family, detached homes shows a net decrease of 3 and increase of 1 vehicle trip ends during the same weekday morning and weekday afternoon peak hours, respectively.

It is estimated that site traffic will split at the Gatto Lane/North Highland Avenue intersection, with 75 percent of the site traffic traveling to the south on North Highland Avenue, with 45 percent traveling to the east on Crooked Hill Road and 30 percent traveling to the west on Crooked Hill Road.

Results of the analyses for nearby intersections included in the designated Study Area indicate that area roads will continue to operate at very acceptable Levels of Service and no measurable change in vehicle delay or any change in Level of Service. A single-family development would generate almost the same level of site traffic and the same impacts.

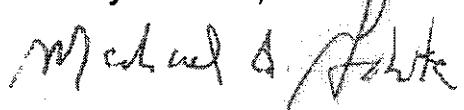
Based on the results of the analysis no off-site road improvements or modifications to traffic control are needed; however, at the proposed access to Gatto Lane it is recommended that a STOP sign and STOP bar are installed for exiting movements from the Subject Property. Area roadways can accommodate the expected site traffic.

Mr. Kenneth DeGennaro P.E., C.F.M.
Page 2
May 25, 2021

Respectfully submitted,



Gregory Del Rio, P.E.
Principal Engineer
Hardesty & Hanover, LLC



Michael A. Galante
Director of Traffic
Hardesty & Hanover, LLC

Enclosure

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SUMMARY

This Traffic Access and Impact Study was prepared to provide the Town of Orangetown with a detailed analysis to determine potential traffic impacts from the proposed residential development to be located on the north side of Gatto Lane between North Highland Avenue and Gatto Lane's loop. The proposal is to build 40 senior adult attached housing units. Site access will be via a new full-movement access driveway to Gatto Lane between North Highland Avenue and Gatto Lane's loop. A second driveway to Grotke Road is proposed for emergency use only. The new housing units are expected to be completed and occupied by the end of 2022.

Traffic conditions for a 2021 existing, 2022 future no-build with anticipated developments and 2022 build conditions during the weekday morning and weekday afternoon peak hours are addressed in this Study. It includes the unsignalized intersections of North Highland Avenue with Gatto Lane and North Highland Avenue with Crooked Hill Road, which are located west and south of the Subject Property, respectively. Manual turning movement counts were conducted in January 2021, at the Study Area intersections, on a day when Schools were open. Traffic volumes were adjusted to pre-pandemic levels.

Future 2022 projected traffic volumes, without the proposed development, employed an annual growth rate of 0.57 percent. Based on discussions with the Town, there are no other developments that would add traffic to the Study Area intersections during the weekday morning and weekday afternoon peak hours. Under the current zoning, the Site could be developed to accommodate up to 9 single family detached housing units. The 2022 no-build traffic volumes include the projected traffic volumes and the traffic volumes that would be generated by the additional 9 single family detached housing units.

The proposed development consists of 40 senior adult attached housing units. Based on trip generation rates provided by the Institute of Transportation Engineers (ITE) and published in "Trip Generation," 10th Edition, 2017, a residential development of this type and size is estimated to generate a total of 8 and 12 vehicle trip ends during the weekday morning and the weekday afternoon peak hours, respectively.

Based on an evaluation of current traffic patterns on area roads, estimates for site traffic distribution were developed for the Subject Property. It is estimated that 100 percent will arrive and depart from/to the west on Gatto Lane, out of which 25 percent will arrive and depart from/to the north on North Highland Avenue and 75

percent will arrive and depart from/to the south on North Highland Avenue. Out of the 75 percent arriving and departing from/to the south on North Highland Avenue, 45 percent will arrive and depart from/to the east on Crooked Hill Road and 30 percent will arrive and depart from/to the west on Crooked Hill Road. The 2022 build traffic volumes were developed by adding the site traffic generation to the 2022 no-build with anticipated development traffic volumes previously described.

SYNCHRO 10/HCM 6th Edition capacity analyses were conducted for the 2021 existing conditions, 2022 no-build with anticipated development conditions and 2022 build conditions. Results of analyses indicate that the Study Area intersections will maintain the same Levels of Service with no increase in vehicle delays during both the weekday morning and weekday afternoon peak hours at both Study area intersections. The site access driveway will operate at acceptable Levels of Service. It is recommended that a STOP sign and STOP bar be provided at the proposed Site access drive.

INTRODUCTION

This Traffic Impact Study has been completed to address the potential impacts related to the traffic from the proposed residential development on area roadways near the site. It addresses existing, no-build and build traffic volumes on the surrounding roadways and nearby intersections for both the weekday morning and weekday afternoon peak hours. An assessment of the results of these analyses indicates whether there are impacts and any need for mitigation. This report provides a description of area roadways, traffic volumes, accident history, site traffic estimates, capacity analysis procedures, site access provisions and the results of these analyses. Based on the results of the analysis, any mitigation necessary is also described.

Project Understanding

The proposal is to build 40 senior adult attached housing units. Site access will be via a new full-movement access driveway to Gatto Lane between North Highland Avenue and Gatto Lane's loop. A second driveway to Grotke Road is proposed for emergency use only. The new housing units are expected to be completed and occupied by the end of 2022.

EXISTING CONDITIONS

In this section of the report there is a description of the existing traffic volumes obtained on area roadways for the weekday morning and weekday afternoon peak hours. It also includes a description of area roads, current traffic control and accident experience.

Roadways

The following is a description of area roads in the immediate vicinity of the Subject Property.

1. Crooked Hill Road – In the Study Area it is generally an east-west, two-lane, two-way, Town-maintained roadway. It begins at Pascack Road to the west and continues east past North Highland Avenue, terminating at the intersection with North Middletown Road (County Road 33). This roadway provides 10-foot travel lanes with 1-foot wide shoulders in each direction, a double yellow centerline, shoulder lines along both sides of the road. There are no sidewalks and no parking restrictions posted within the Study area on Crooked Hill Road. The posted speed limit is 30 miles per hour and land use is residential.
2. North Highland Avenue – This road is generally a north-south, two-lane, two-way, Town-maintained roadway. It begins at the unsignalized intersection with Crooked Hill Road to the south and continues north past Gatto Lane terminating at the unsignalized intersection with Grotke Road. It provides 10-foot travel lanes in each direction, a double yellow centerline, 1-foot wide shoulders and shoulder lines along both sides of the road. There are no parking restrictions posted on both side of the road. The posted speed limit is 30 miles per hour and land use is residential.
3. Gatto Lane – This road is generally an east-west, two-lane, two-way, Town-maintained roadway. It begins at the signalized intersection with North Highland Avenue and continues east forming a loop and terminating at the unsignalized intersection with Gatto Lane. The road width varies from 20 feet to 43 feet and there are no lane markings. In the vicinity of the proposed Site access driveway, Gatto Lane is 20-foot-wide with no curbs nor sidewalks. There are no parking restrictions posted on both sides of the road. Posted speed limit is 30 miles per hour and land use is residential.

Figure 1 provides a graphic illustration of the current street system characteristics, as described above. Photographs of the Study Area intersections are included in the Appendix of this report.

Traffic Volumes

To develop a baseline condition of area roadways and key intersections in the designated Study Area, manual turning movement counts were obtained at the following locations:

- North Highland Avenue at Crooked Hill Road; and,
- North Highland Avenue at Gatto Lane.

Traffic counts were conducted during the following time periods, when Schools were open, on Tuesday, January 12, 2021:

- Weekday morning – 7:00 to 9:00 A.M.; and,
- Weekday afternoon – 4:00 to 6:00 P.M.

Based on the results of the traffic counting program, the following peak hours were identified:

- Weekday morning – 7:45 to 8:45 A.M.; and,
- Weekday afternoon – 4:15 to 5:15 P.M.

These counts were conducted during COVID-19 pandemic conditions. There were 2016 traffic volumes conducted by NYSDOT on North Highland Avenue between Gatto Lane and Grotke Road, and on Gatto Lane, east of North Highland Avenue, which were adjusted to a 2021 baseline condition by an annual growth of 0.57 percent, as per Regional Transportation Plan, Plan 2045, prepared by the New York Metropolitan Transportation Council (NYTMC). A comparison between these volumes and the January 2021 volumes was conducted and an adjustment factor for the January 2021 volumes was determined for the weekday morning and weekday afternoon peak hours.

Table 1 illustrates the traffic data comparison and adjustment factors determined for each peak hour. Figure 2 and Figure 3 graphically illustrate the 2021 existing traffic volumes for the weekday morning and



LEGEND:

- > Traffic Lane
- Stop Sign
- Sidewalk

**CURRENT
STREET SYSTEM CHARACTERISTICS**

**PROPOSED
RESIDENTIAL DEVELOPMENT**
Gatto Lane, Orangetown, NY



 Hardesty & Hanover

Scale in Feet

400 300 200 100 0 400

1

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Table 1
TRAFFIC DATA COMPARISON TABLE – PEAK HOURS
 Residential Development
 Gatto Lane
 Orangetown, New York

LOCATION	WEEKDAY MORNING PEAK HOUR				WEEKDAY AFTERNOON PEAK HOUR			
	NYSDOT T 2016 (1)	Time T 2016 (1)	2021 TMC (2)	Adjustment Factor	NYSDOT T 2016 (1)	Time (1)	2020 ATR (2)	Adjustment Factor
North Highland Avenue, near Gatto Lane	8:00 – 9:00 A.M.	79	7:45 – 8:45 A.M.	80	1.01	6:00 – 7:00 P.M.	106	4:15 – 5:15 P.M.
							96	1.14

Sources:

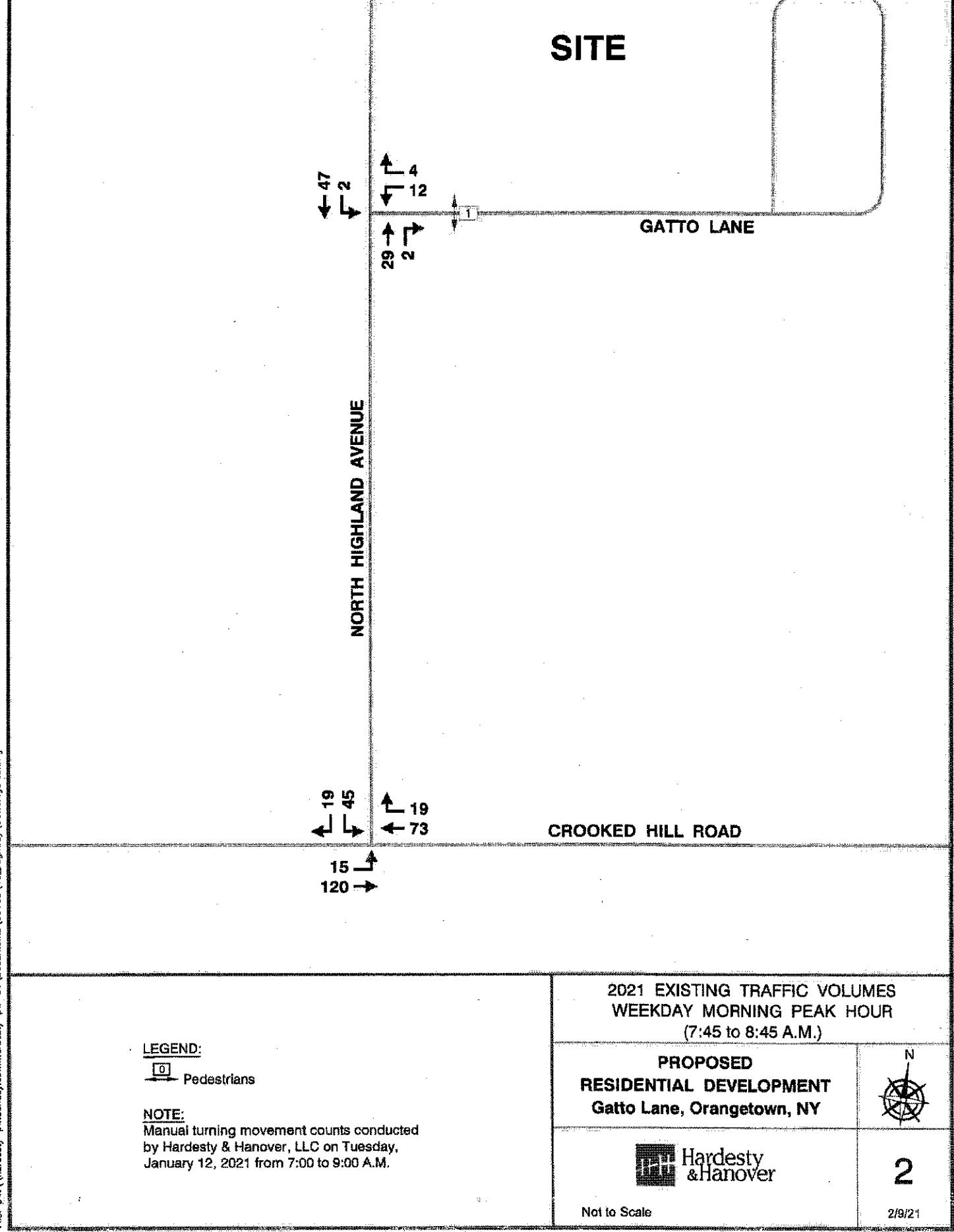
- 1) 2016 traffic volumes from NYSDOT on North Highland Avenue, North of Gatto Lane.
- 2) Turning movement counts conducted by Hardesty & Hanover, Thursday, January 12, 2021.

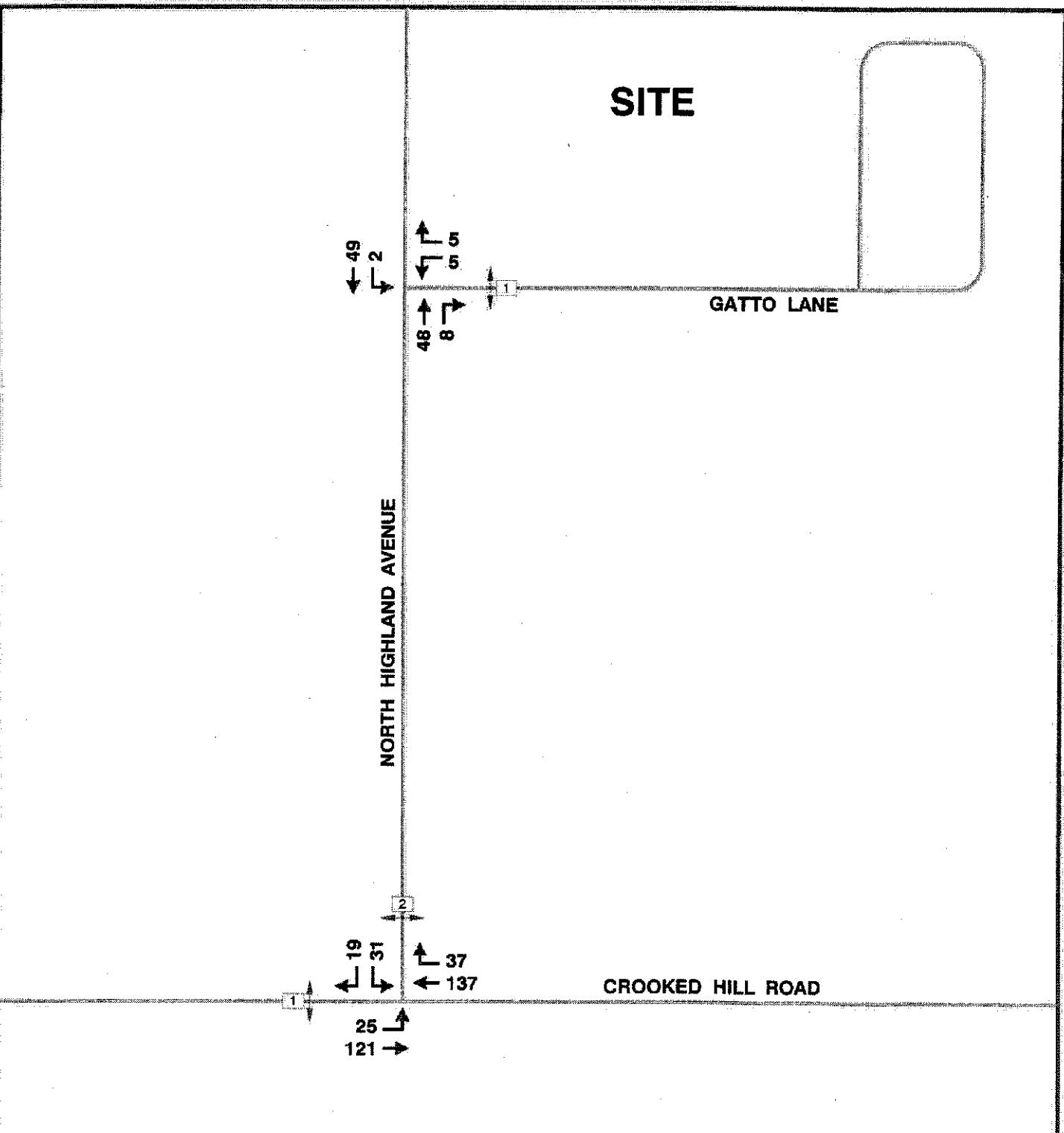
Note:

- 1) Data collected in 2016 was adjusted by an annual growth rate of 0.57 percent to 2021 existing baseline condition, as per New York Transportation Council's Regional Transportation Plan – Plan 2045, Table 2.6.

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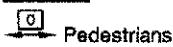
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LEGEND:



NOTE:

Manual turning movement counts conducted by Hardesty & Hanover, LLC on Tuesday, January 12, 2021 from 4:00 to 6:00 P.M.

2021 EXISTING TRAFFIC VOLUMES
WEEKDAY AFTERNOON PEAK HOUR
(4:15 to 5:15 P.M.)

PROPOSED
RESIDENTIAL DEVELOPMENT
Gatto Lane, Orangetown, NY



Not to Scale

3

2/9/21

weekday afternoon peak hours, respectively. Raw and summarized turning movement counts and bi-directional automatic traffic recorder counts collected by Hardesty & Hanover, LLC, for both peak hours can be found in the Appendix of this report.

Based on the results of the traffic counting program, it was determined that Crooked Hill Road, east of North Highland Avenue, had a recorded two-way volume of 257 and 326 vehicles during the weekday morning and weekday afternoon peak hours, respectively. Crooked Hill Road, west of North Highland Avenue, had a two-way volume of 227 and 302 vehicles during the weekday morning and weekday afternoon peak hours, respectively. North Highland Avenue, north of Crooked Hill Road, had a two-way volume of 98 and 112 vehicles during the peak hours noted above.

North Highland Avenue, south of Gatto Lane, had a two-way volume of 90 and 110 vehicles during the weekday morning and weekday afternoon peak hours, respectively. North of Gatto Lane, North Highland Avenue had a two-way volume of 82 and 104 vehicles during the weekday morning and weekday afternoon peak hours, respectively. Gatto Lane, east of North Highland Avenue, had a two-way volume of 20 vehicles during both peak hours noted above. Table 2 provides a summary of the two-way peak hour volumes. The field sheets for the traffic counts are included in the Appendix of this report.

Accident Experience

Accident data was requested and received from the Orangetown Police Department; for a period beginning January 1, 2017 through December 31, 2019, for the intersection of North Highland Avenue at Crooked Hill Road, the segment of North Highland Avenue between Crooked Hill Road and Gatto Lane, the intersection of North Highland Avenue at Gatto Lane and for the entire Gatto Lane segment. This data represents the last three full years of data available.

For the intersection of North Highland Avenue and Crooked Hill Road, there were no accidents recorded during this three-year period. For the segment of North Highland Avenue between Crooked Hill Road and Gatto Lane, there were no accidents recorded during this three-year period. For the intersection of North Highland Avenue and Gatto Lane, there were no accidents recorded during this three-year period. For the segment of Gatto Lane between North Highland Avenue and Gatto Lane's loop, there was one accident recorded during this three-year period. Data indicates this accident resulted in an injury, the collision type was that with a fixed object

Table 2
2021 TWO-WAY TRAFFIC VOLUMES – PEAK HOURS
Residential Development
Gatto Lane
Orangetown, New York

LOCATION	VEHICLES	
	Weekday Morning	Weekday Afternoon
Crooked Hill Road, East of North Highland Avenue	257	326
Crooked Hill Road, West of North Highland Avenue	227	302
North Highland Avenue, North of Crooked Hill Lane	98	112
North Highland Avenue, South of Gatto Lane	90	110
North Highland Avenue, North of Gatto Lane	82	104
Gatto Lane, East of North Highland Avenue	20	20

Sources:

- 1) Turning movement counts conducted by Hardesty & Hanover on Tuesday, January 12, 2021.
- 2) 2016 traffic volumes from NYSDOT on North Highland Avenue, north of Gatto Lane and on Gatto Lane, east of North Highland Avenue. These traffic volumes were adjusted by an annual growth of 0.57 percent to 2021 existing baseline conditions, as per Regional Transportation Plan, Plan 2045, prepared by the New York Metropolitan Transportation Council (NYTMC).

Notes:

Based on a comparison of these traffic volumes, an adjustment factor for the weekday morning and weekday afternoon peak hour were determined and utilized, see Table 1.

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and the contributing factor was improper usage of the lane. This accident occurred during daylight, on a wet surface, during rain. Table 3 provides a more detailed summary of the accident data.

Table 3
 ACCIDENT EXPERIENCE SUMMARY – NORTH HIGHLAND AVENUE, GATTO LANE
 Residential Development
 Gatto Lane
 Orangetown, New York

ACCIDENT CHARACTERISTICS	North Highland Avenue						Gatto Lane	
	At Crooked Hill Road		Between Crooked Hill Road and Gatto Lane		At Gatto Lane		Between North Highland Avenue and Gatto Lane	
	Total	%	Total	%	Total	%	Total	%
Year								
▪ 2017	0	0	0	0	0	0	1	100
▪ 2018	0	0	0	0	0	0	0	0
▪ 2019	0	0	0	0	0	0	0	0
▪ Total	0	0	0	0	0	0	1	100
Accident Severity								
▪ Property Damage	0	0	0	0	0	0	0	0
▪ Injury	0	0	0	0	0	0	1	100
Collision Type								
▪ Fixed Object	0	0	0	0	0	0	1	100
Contributing Factor								
▪ Lane Usage Improper	0	0	0	0	0	0	1	100
Light Condition								
▪ Daylight	0	0	0	0	0	0	1	100
Surface Condition								
▪ Wet	0	0	0	0	0	0	1	100
Weather Conditions								
▪ Rain	0	0	0	0	0	0	1	100

Source: Orangetown Police Department from January 1, 2017 to December 31, 2019.

Notes: January 1, 2017 to December 31, 2019 is the latest three full years of accident data available.

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FUTURE TRAFFIC CONDITIONS

This section of the report describes the future 2022 traffic conditions for the Study area. It includes a description of the 2022 no-build traffic volumes, estimates for site traffic generation, distribution and assignment of site traffic, future build traffic volumes and the results of capacity analyses. The capacity analyses are completed for a no-build and build condition, which provides a basis for determining potential impact, if any, to area roads and the need for mitigation.

No-Build with Anticipated Development Traffic Volumes

To develop the future 2022 no-build traffic volumes, the 2021 existing traffic volumes were projected to the horizon year 2022 by employing an annual growth rate of 0.57 percent. It accounts for general growth in traffic in the vicinity of the Study Area. Figures 4 and 5 graphically illustrate the 2022 projected traffic volumes for the weekday morning and weekday afternoon peak hours, respectively.

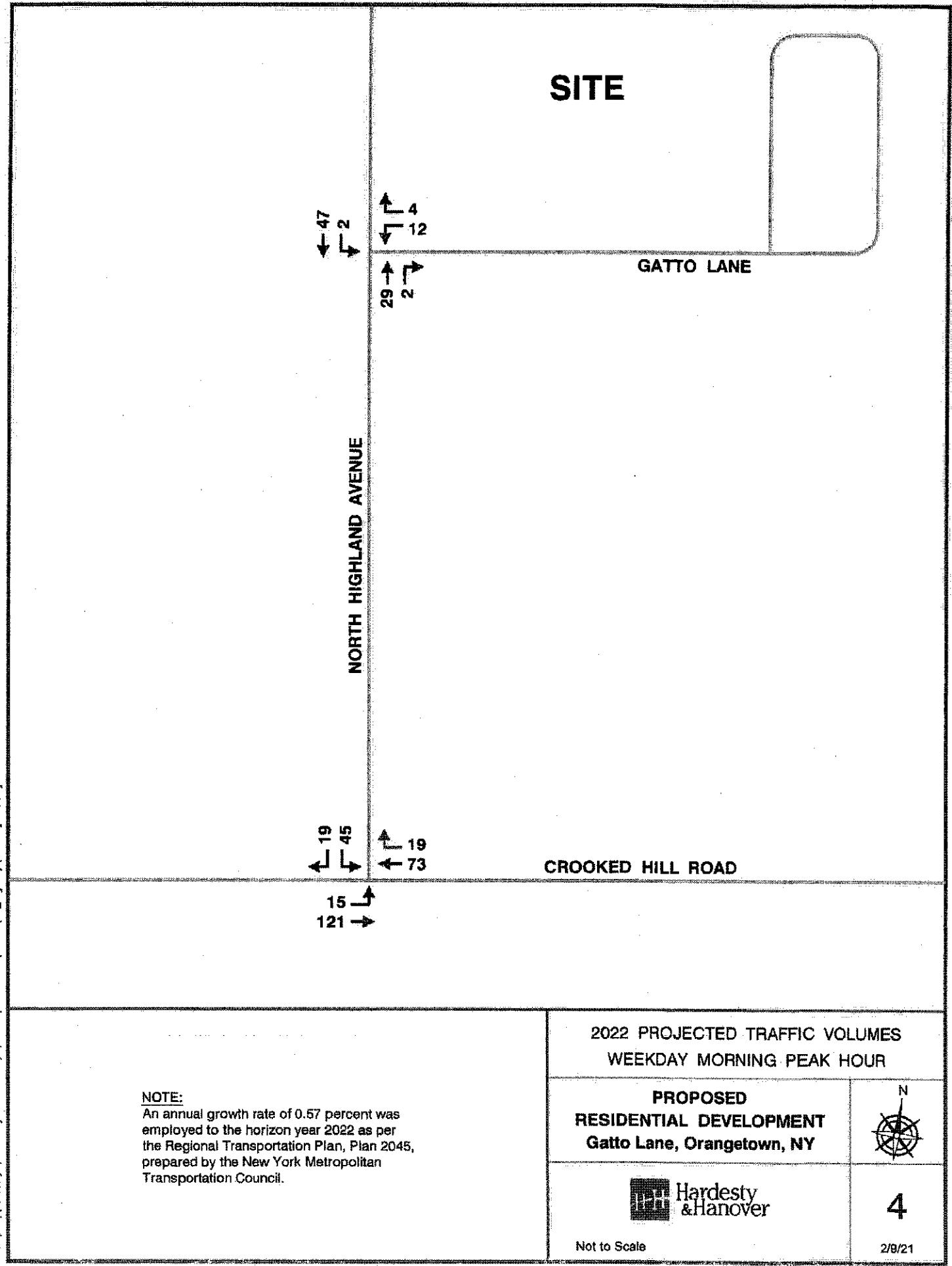
Based on discussions with the Town, there are no other developments that would add traffic to the Study area intersection during the weekday morning and weekday afternoon peak hours.

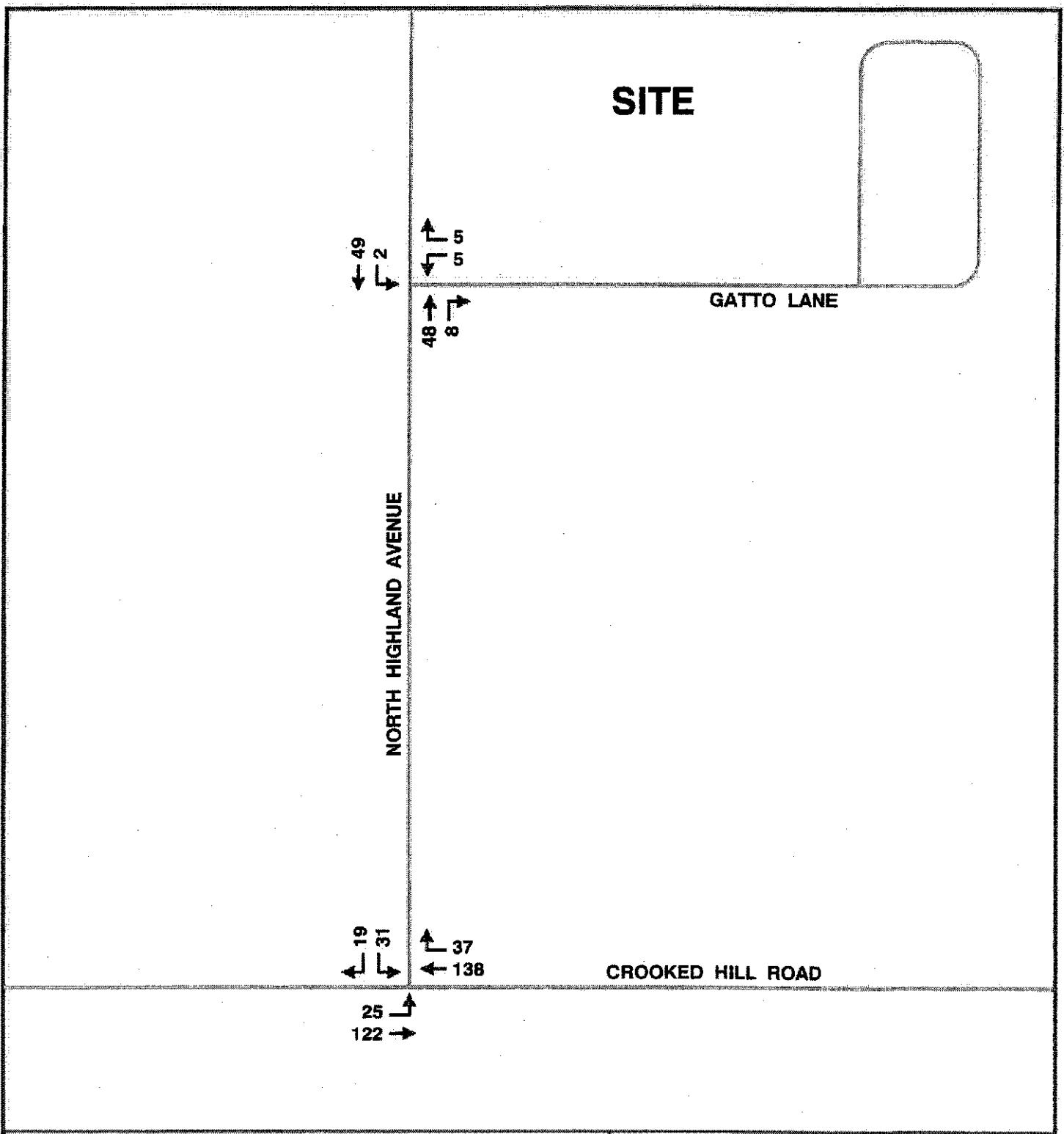
Under the current zoning, the Site could be developed to accommodate up to 9 single family detached housing units. Figures 6 and Figure 7 graphically illustrates the anticipated development traffic volumes for the weekday morning and weekday afternoon peak hours, respectively.

The 2022 no-build traffic volumes include the projected traffic volumes and the traffic volumes that would be generated by the additional 9 single family detached housing units. Figures 8 and Figure 9 graphically illustrates the anticipated development traffic volumes for the weekday morning and weekday afternoon peak hours, respectively.

Estimates of Site Traffic Generation

The proposal is to build 40 senior adult attached housing units. Based on trip generation rates provided by ITE and published in "Trip Generation," 10th Edition, 2017, a residential development of this type and size is estimated to generate a total of 8 and 12 vehicle trip ends during the weekday morning and weekday afternoon peak hours, respectively. Table 4 provides a detailed breakdown of entering and exiting site traffic by peak hour.





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NOTE:

An annual growth rate of 0.57 percent was employed to the horizon year 2022 as per the Regional Transportation Plan, Plan 2045, prepared by the New York Metropolitan Transportation Council.

**2022 PROJECTED TRAFFIC VOLUMES
WEEKDAY AFTERNOON PEAK HOUR**

**PROPOSED
RESIDENTIAL DEVELOPMENT
Gatto Lane, Orangetown, NY**

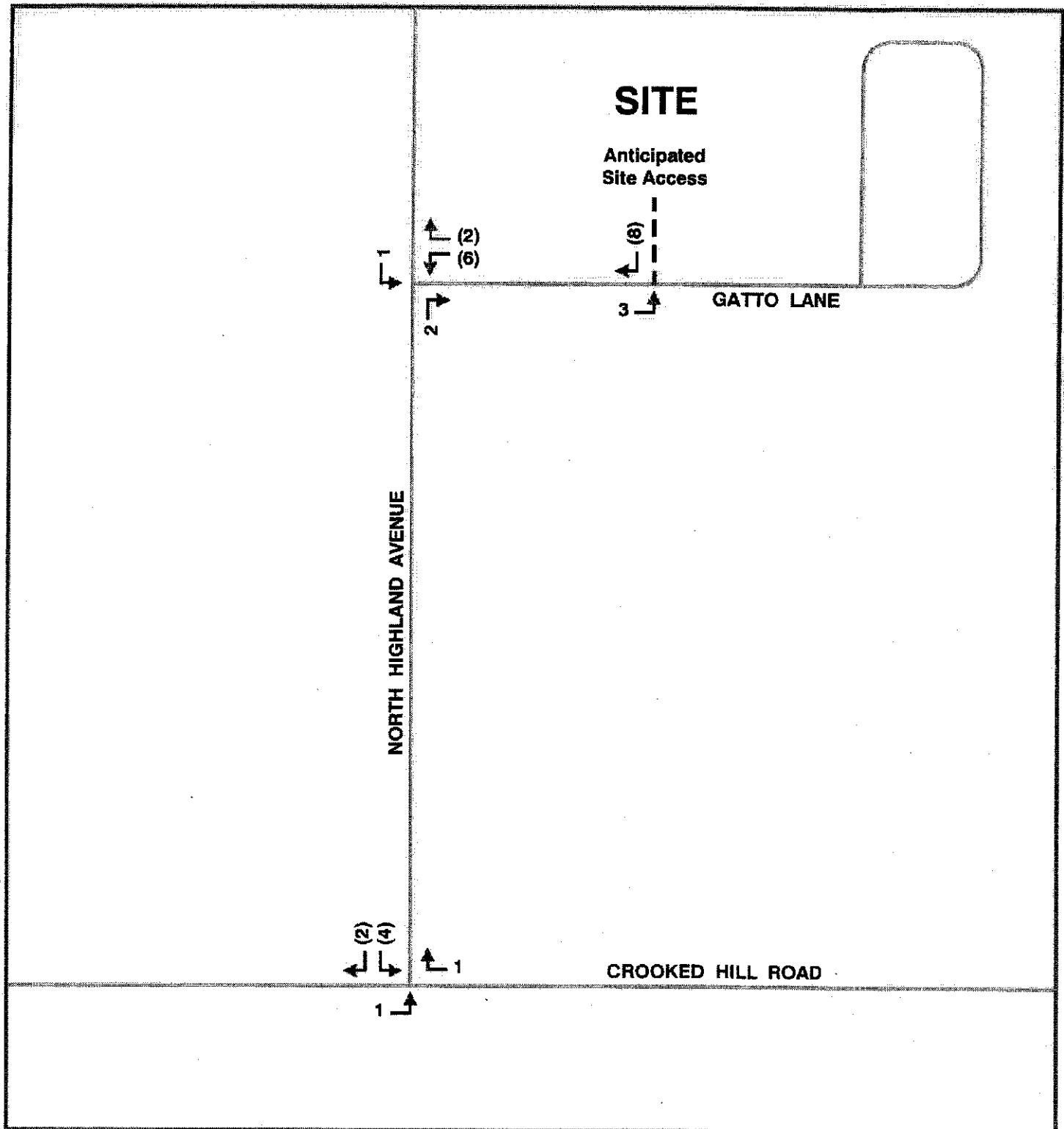


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Not to Scale

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2/9/21



LEGEND:

— Anticipated Access Driveway

SITE TRAFFIC FOR 9 ADDITIONAL SINGLE FAMILY DETACHED HOUSING UNITS:

Enter 3

Exit (8)

Total 11 Vehicle Trip Ends

ANTICIPATED DEVELOPMENT TRAFFIC VOLUMES WEEKDAY MORNING PEAK HOUR

PROPOSED RESIDENTIAL DEVELOPMENT
Gatto Lane, Orangetown, NY

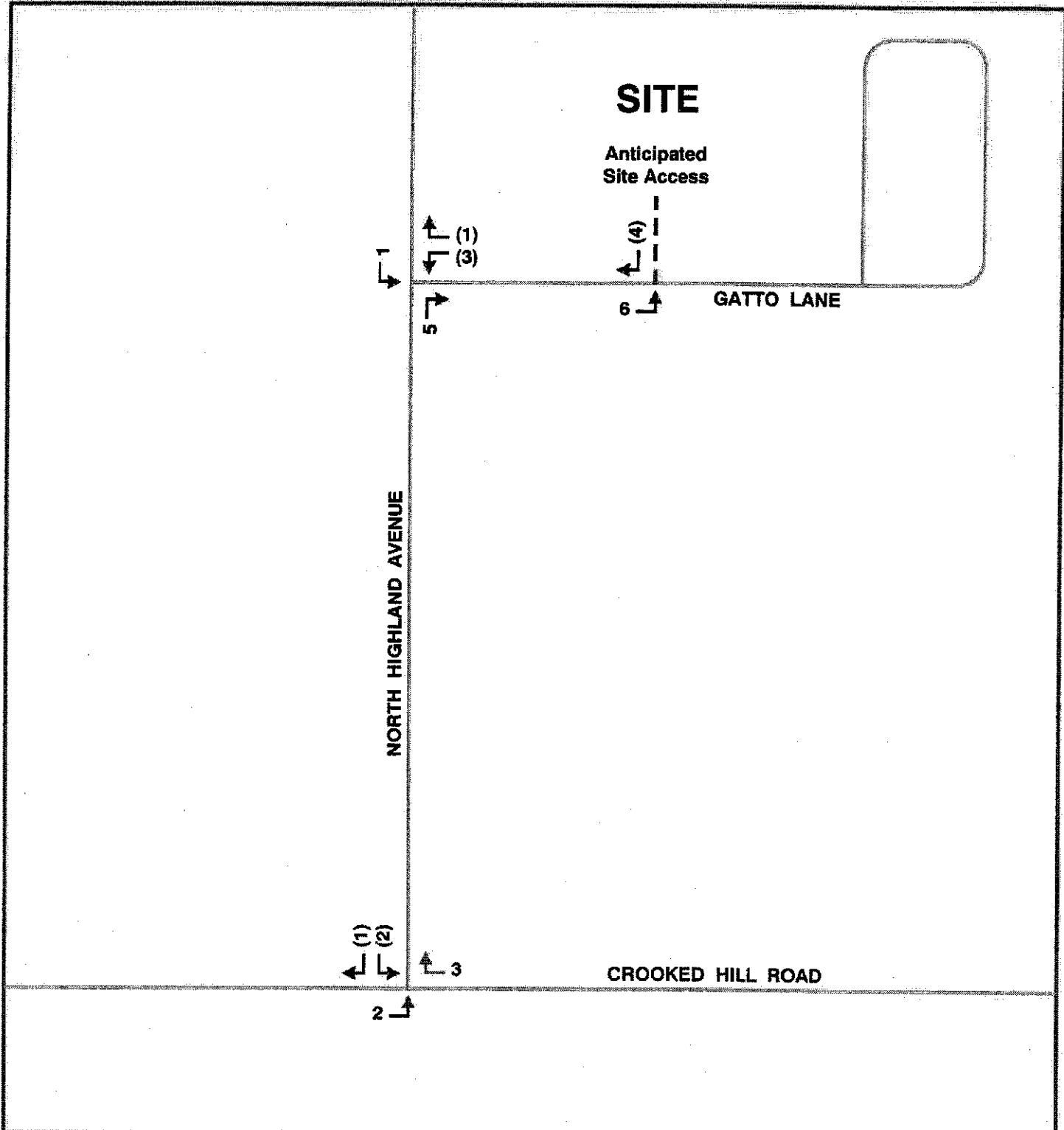


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LEGEND:

Anticipated Access Driveway

SITE TRAFFIC FOR 9 ADDITIONAL SINGLE FAMILY DETACHED HOUSING UNITS:

Enter 6
Exit (4)
Total 10 Vehicle Trip Ends

ANTICIPATED DEVELOPMENT TRAFFIC VOLUMES WEEKDAY AFTERNOON PEAK HOUR

PROPOSED RESIDENTIAL DEVELOPMENT
Gatto Lane, Orangetown, NY

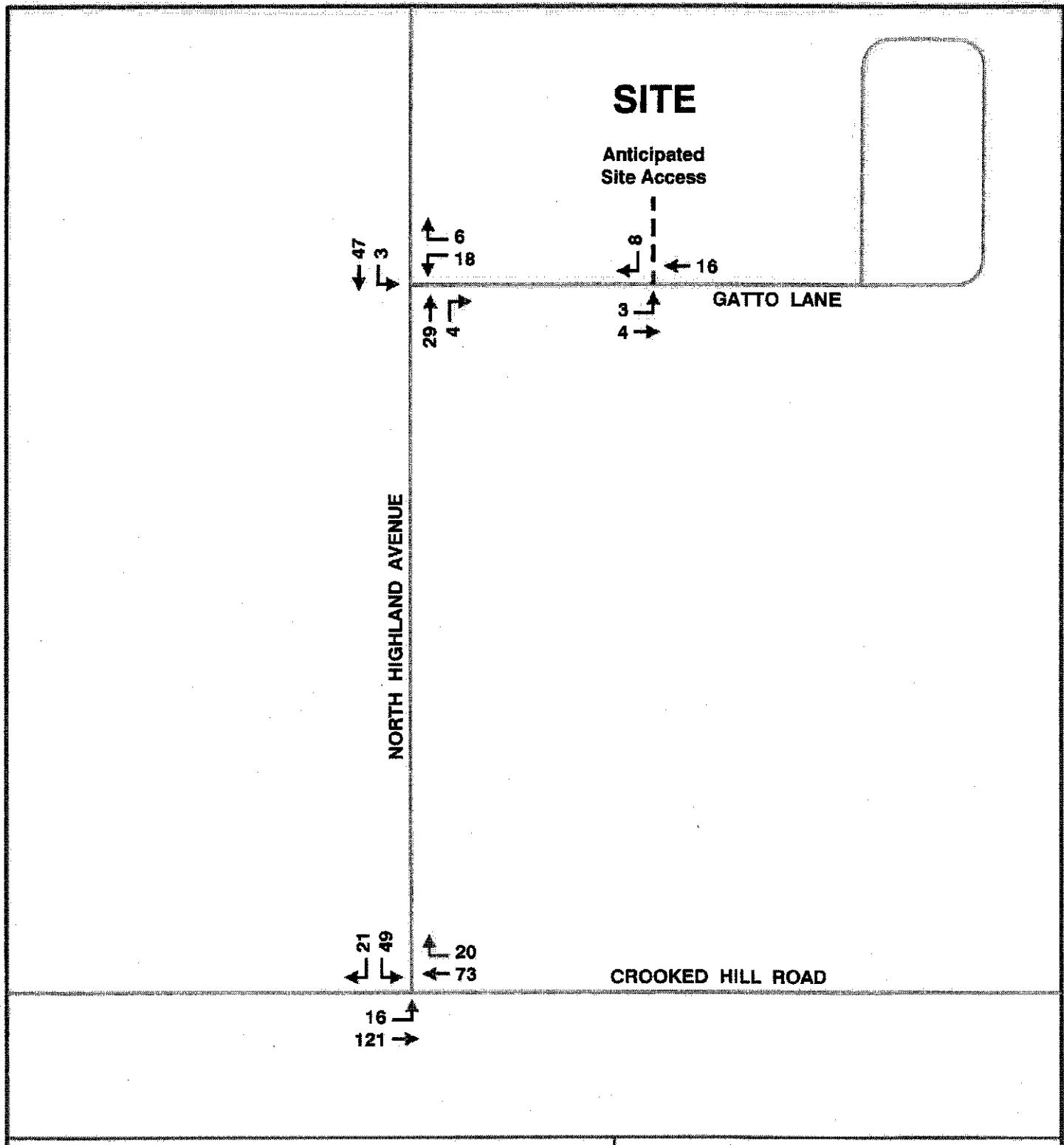


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LEGEND:

— Anticipated Access Driveway

NOTE:

The 2022 No-Build Traffic Volumes include the 2022 Projected Traffic Volumes and the Traffic Volumes from the Anticipated Development of 9 Additional Single Family Detached Housing Units on the Site, following current zoning.

2022 NO-BUILD WITH ANTICIPATED DEVELOPMENT TRAFFIC VOLUMES WEEKDAY MORNING PEAK HOUR

**PROPOSED
RESIDENTIAL DEVELOPMENT
Gatto Lane, Orangetown, NY**



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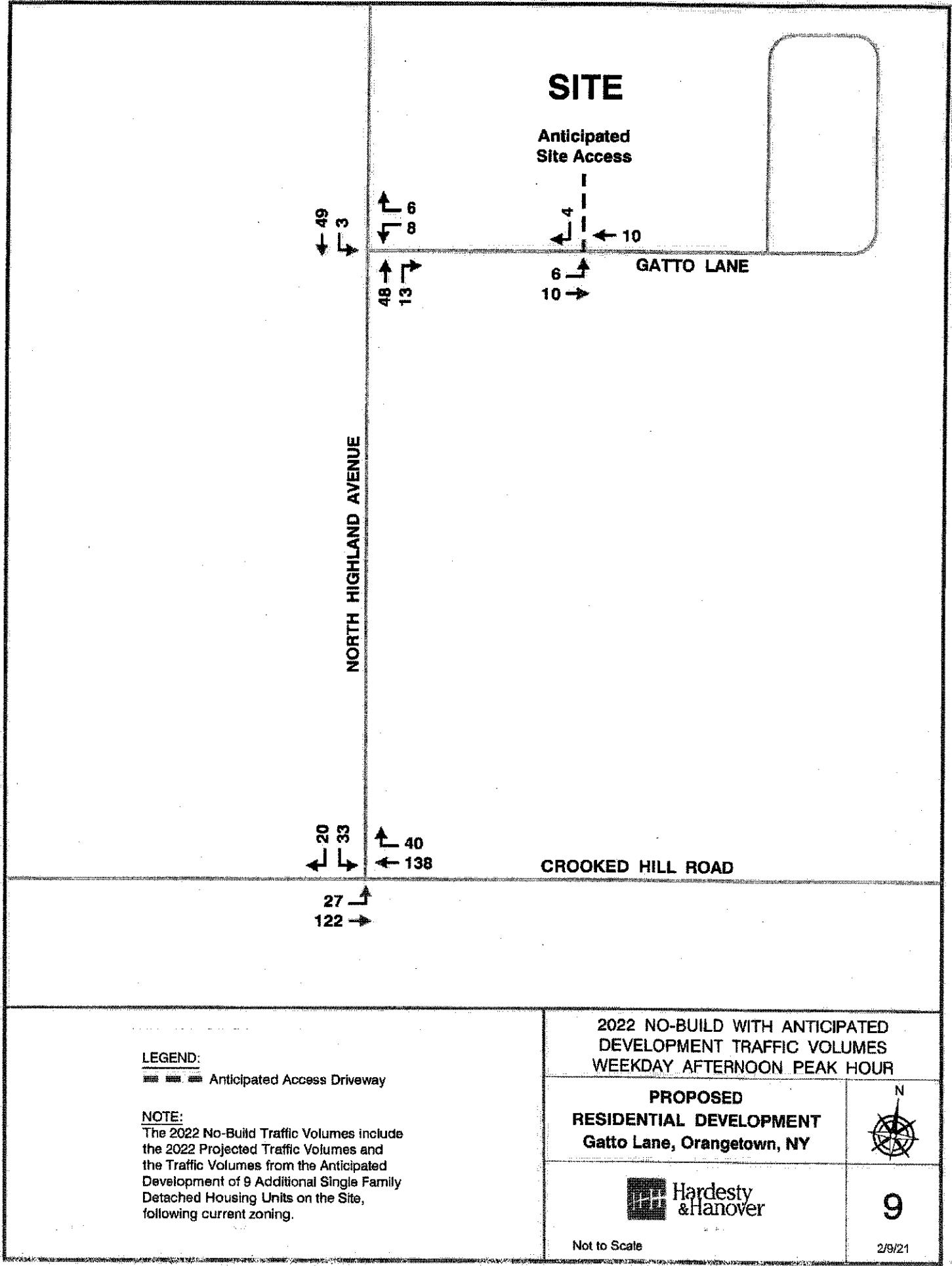


Table 4
SITE TRAFFIC GENERATION COMPARISON– PEAK HOURS
Residential Development
Gatto Lane
Orangetown, New York

LAND USE	INTENSITY	TRAFFIC DIRECTION	VEHICLE TRIP ENDS		
			Weekday Morning	Weekday Afternoon	
1) Existing Single-Family Detached Housing (R-40)	9 Units	Enter	3	6	
		Exit	8	4	
		Total	11	10	
2) Proposed Senior Adult Attached Housing	40 Units	Enter	3	7	
		Exit	5	5	
		Total	8	12	
Net Difference in Vehicle Trip Ends (3-1)		Enter	0	1	
		Exit	-3	1	
		Total	-3	2	

Sources:

- 1) "Trip Generation," 10th Edition, published by the Institute of Transportation Engineers (ITE), 2017 using Single-Family Detached Housing, Code #210 fitted curve equation.
- 2) "Trip Generation," 10th Edition, published by the Institute of Transportation Engineers (ITE), 2017 using Senior Adult Housing - Attached, Code #252 fitted curve equation.

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Distribution and Assignments of Site-Generated Traffic

Based on an evaluation of current traffic patterns on area roads, estimates for site traffic distribution were developed for the Subject Property. It is estimated that 100 percent will arrive and depart from/to the west on Gatto Lane, out of which 25 percent will arrive and depart from/to the north on North Highland Avenue and 75 percent will arrive and depart from/to the south on North Highland Avenue. Out of the 75 percent arriving and departing from/to the south on North Highland Avenue, 45 percent will arrive and depart from/to the east on Crooked Hill Road and 30 percent will arrive and depart from/to the west on Crooked Hill Road. The 2022 build traffic volumes were developed by adding the site traffic generation to the 2022 no-build with anticipated development traffic volumes previously described.

Figure 10 provides a graphic illustration of the site traffic distribution, as described above. Figures 11 and 12 graphically illustrate the site traffic generation assignment for the weekday morning and weekday afternoon peak hours, respectively.

Build Traffic Volumes

Build traffic volumes for the Study Area intersections were developed based on adding the site traffic generation to the no-build traffic volumes, both of which were described above. Figures 13 and 14 graphically illustrate the 2022 build traffic volumes for the weekday morning and weekday afternoon peak hours, respectively.

Capacity Analysis Procedures

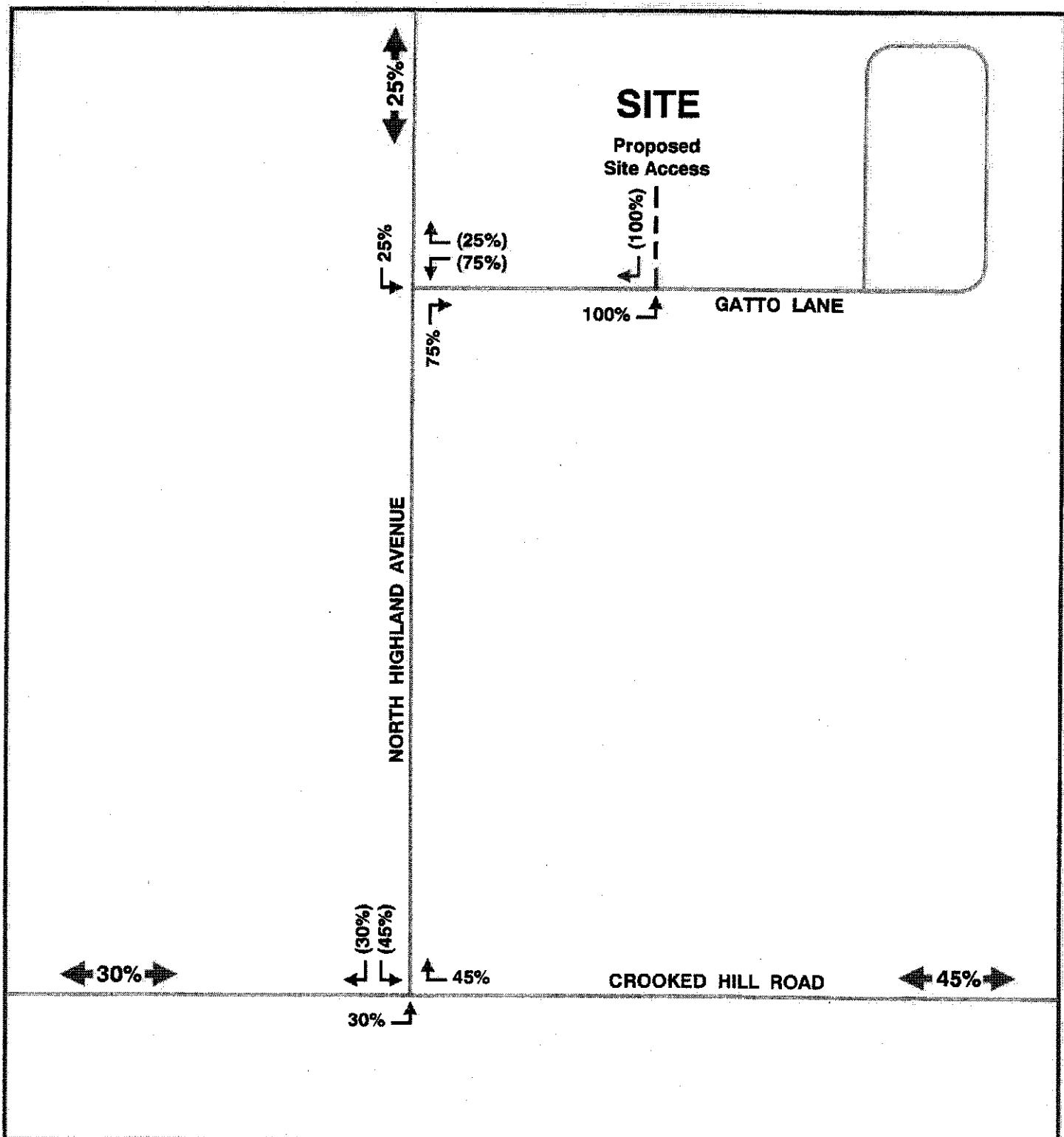
Capacity analysis procedures are provided in the Appendix of this report. The analyses follow a SYNCHRO computer model and information provided by the Transportation Research Board (TRB) and the Highway Capacity Manual (HCM) 6th Edition.

Capacity Analysis Results – Existing, No-Build and Build Conditions

The following is a summary of the results of analyses for the existing, no-build and build conditions at the Study area intersections for each of the time periods included in this analysis.

1. North Highland Avenue at Crooked Hill Road

Existing – Results of the analysis for this condition indicate that this STOP controlled intersection currently operates at a Level of Service “B” or better during both the weekday morning and weekday



SITE TRAFFIC
Enter 00%
Exit (00%)

LEGEND:

- ← → 00% Directional Distribution
- — — — Site Access Driveway

SITE TRAFFIC DISTRIBUTION

PROPOSED RESIDENTIAL DEVELOPMENT
Gatto Lane, Orangetown, NY

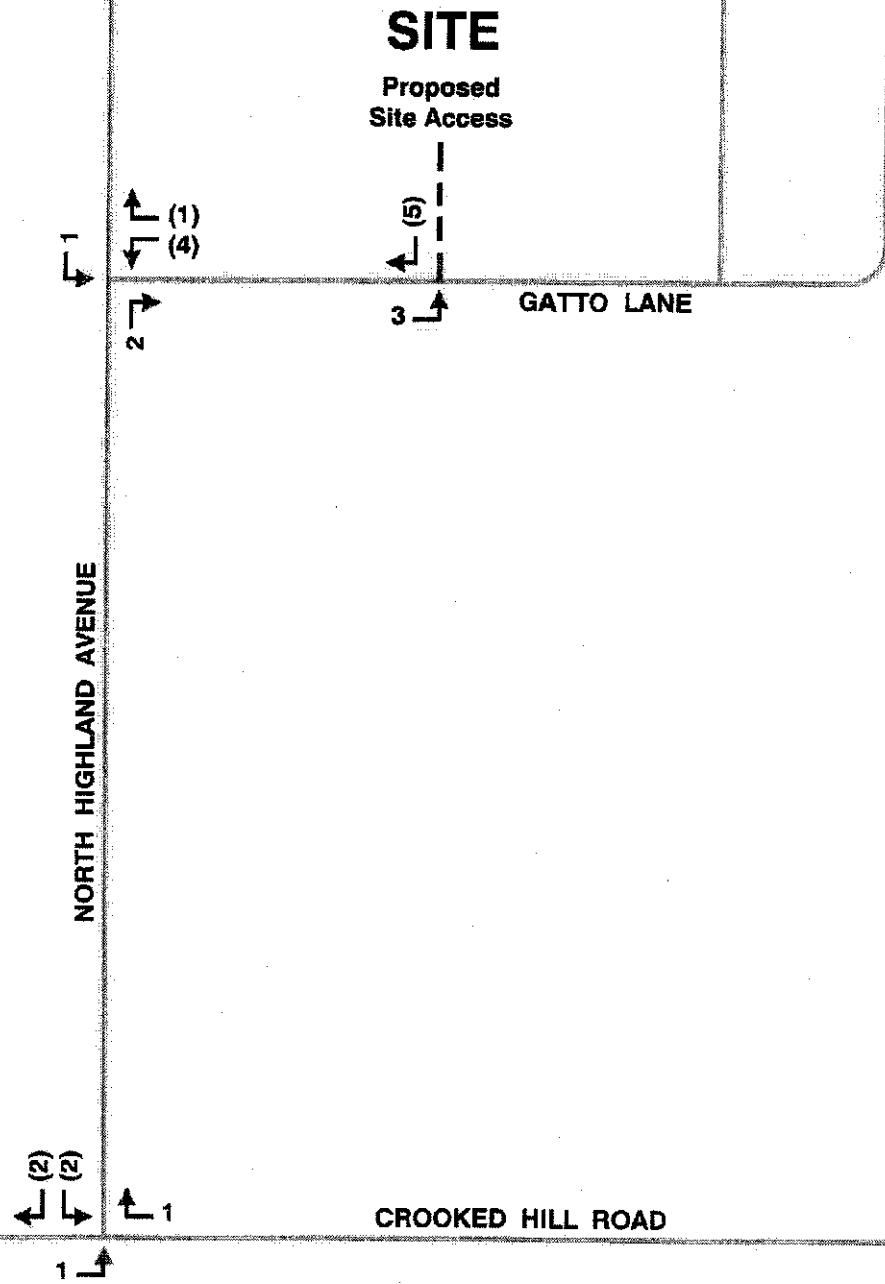


 Hardesty & Hanover

Not to Scale

10

2/9/21



SITE TRAFFIC:

Enter 3
Exit (5)
Total 8 Vehicle Trip Ends

LEGEND:

■ ■ ■ Site Access Driveway

SITE TRAFFIC GENERATION & ASSIGNMENT
WEEKDAY MORNING PEAK HOUR

**PROPOSED
RESIDENTIAL DEVELOPMENT**
Gatto Lane, Orangetown, NY

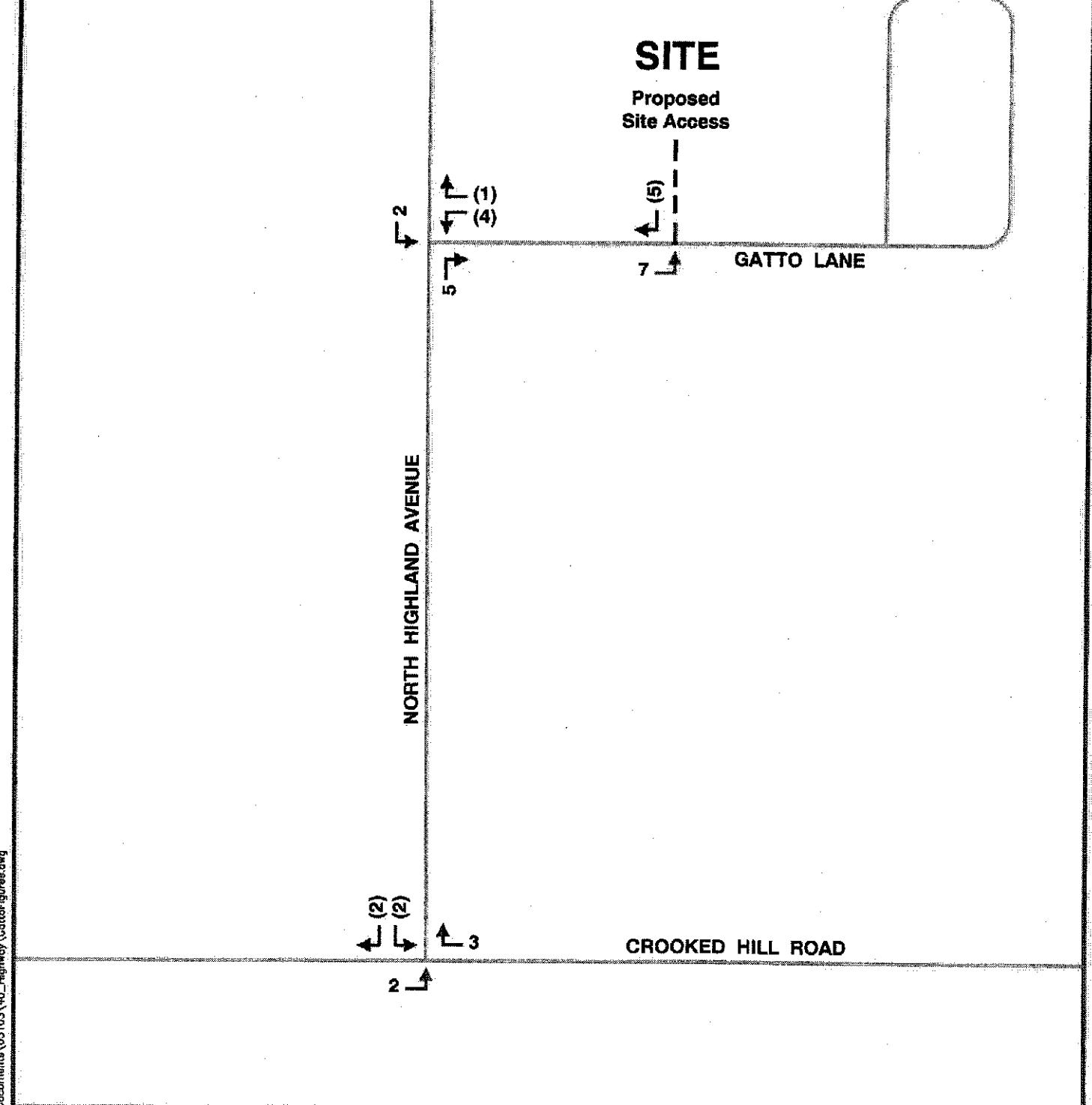


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& Hanover

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SITE TRAFFIC:
 Enter 7
 Exit (5)
 Total 12 Vehicle Trip Ends

LEGEND:
 Site Access Driveway

SITE TRAFFIC GENERATION & ASSIGNMENT
WEEKDAY AFTERNOON PEAK HOUR

PROPOSED
RESIDENTIAL DEVELOPMENT
Gatto Lane, Orangetown, NY

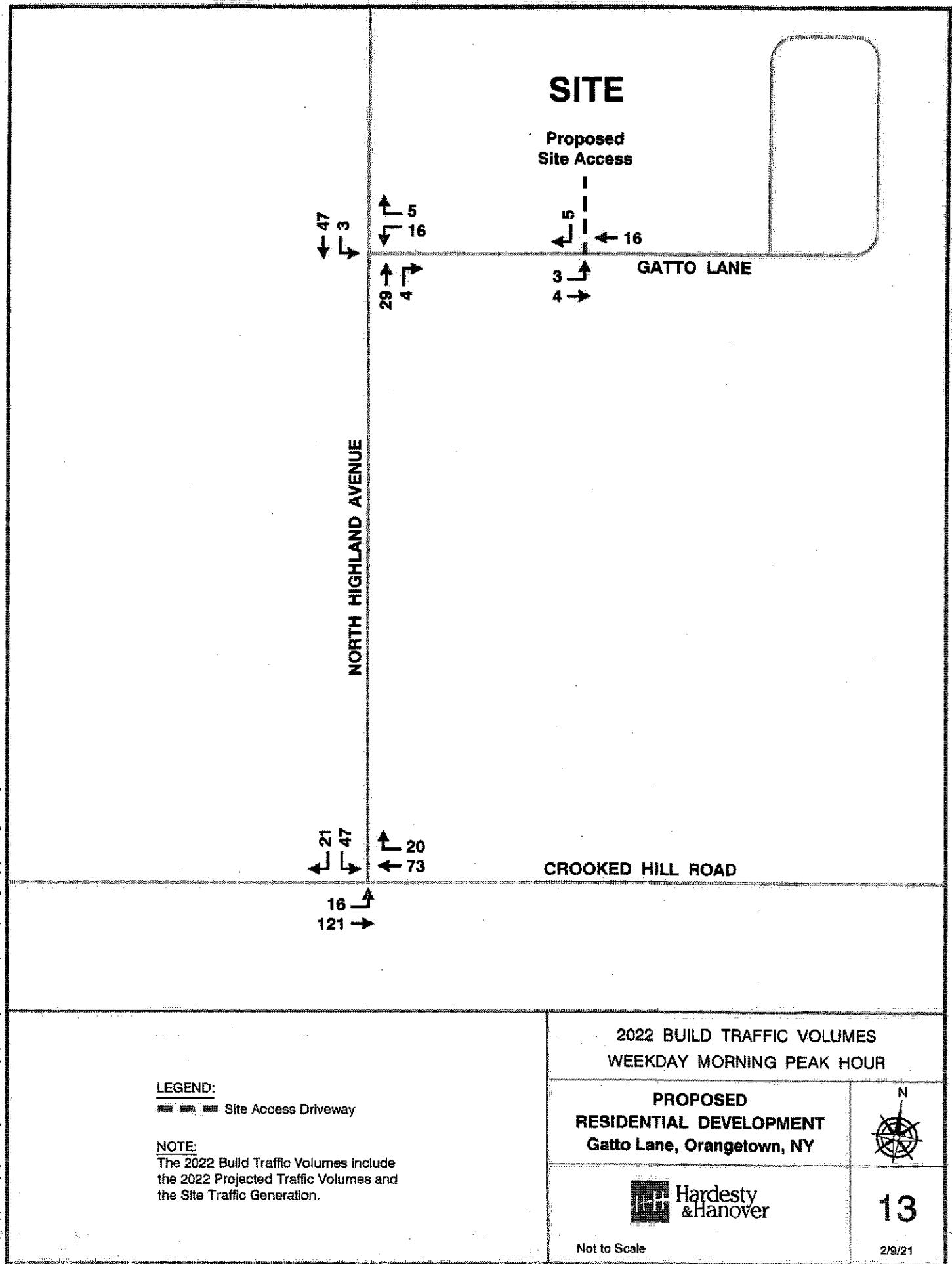


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12

2/9/21

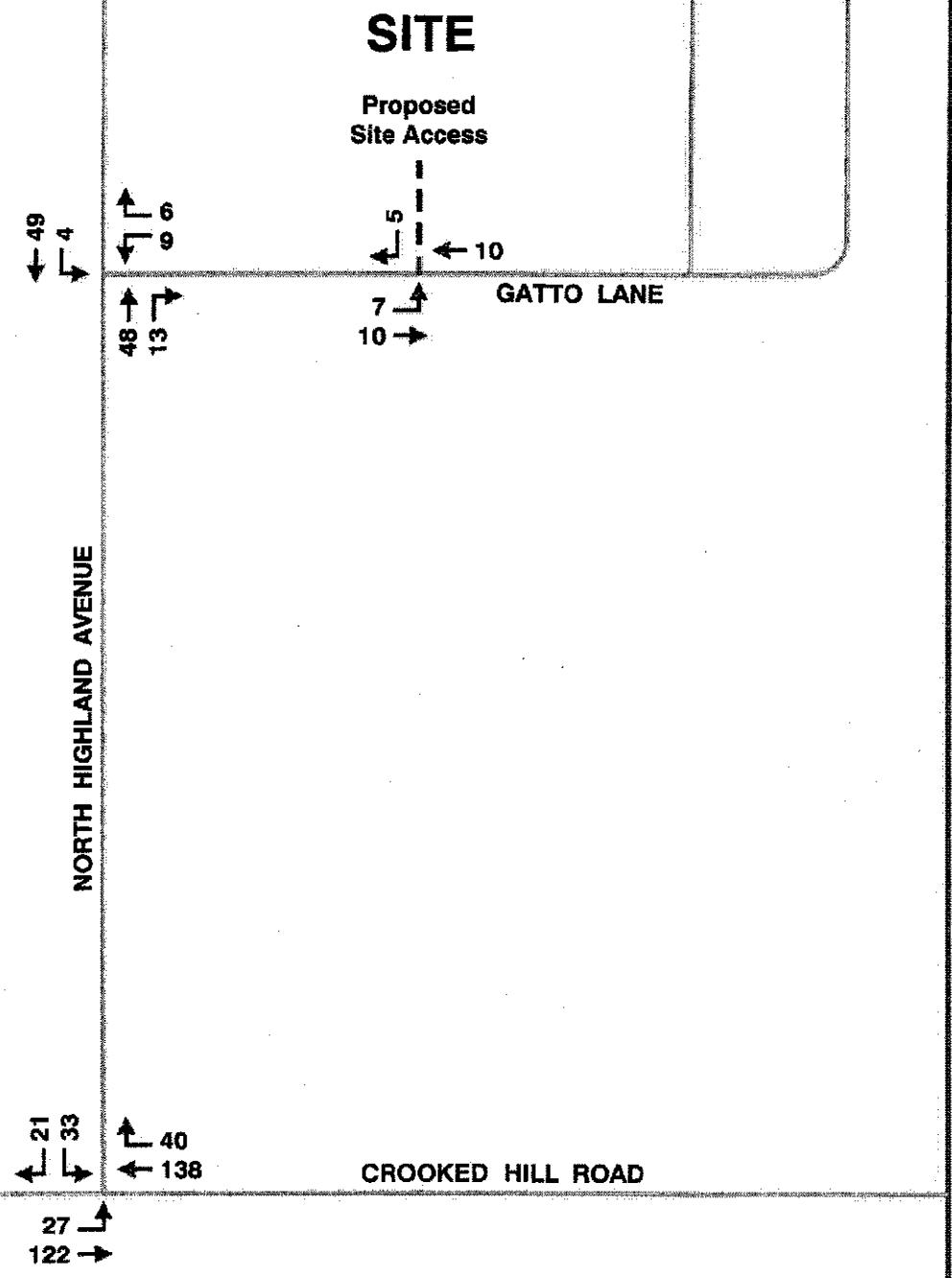


LEGEND:

■ Site Access Driveway

NOTE:

The 2022 Build Traffic Volumes include the 2022 Projected Traffic Volumes and the Site Traffic Generation.



**2022 BUILD TRAFFIC VOLUMES
WEEKDAY AFTERNOON PEAK HOUR**

**PROPOSED
RESIDENTIAL DEVELOPMENT
Gatto Lane, Orangetown, NY**



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2/9/21

afternoon peak hours. The eastbound left turn operates at a Level of Service "A" during both peak hours. The southbound lane operates at Level of Service "B" during both peak hours.

No-Build with Anticipated Development– The analysis for this condition indicate that this STOP controlled intersection will operate at a Level of Service "B" or better during both the weekday morning and weekday afternoon peak hours. The eastbound left turn operates at a Level of Service "A" during both peak hours. The southbound lane operates at Level of Service "B" during both peak hours.

Build – Results of the analysis indicate that the Levels of Service will remain the same as the no-build with no increase in vehicle delay, during both peak hours.

2. North Highland Avenue at Gatto Lane

Existing – Results of the analysis for this condition indicate that this STOP controlled intersection currently operates at a Level of Service "A" during both the weekday morning and weekday afternoon peak hours. The westbound lane operates at a Level of Service "A" during both peak hours. The southbound left turn operates at Level of Service "A" during both peak hours.

No-Build with Anticipated Development – The analysis for this condition indicate that STOP controlled intersection currently operates at a Level of Service "A" during both the weekday morning and weekday afternoon peak hours. The westbound lane operates at a Level of Service "A" during both peak hours. The southbound left turn operates at Level of Service "A" during both peak hours.

Build – Results of the analysis indicate that the Levels of Service will remain the same as the no-build with no increase in vehicle delay, during both peak hours.

3. Gatto Lane at Site Access Driveway

No-Build with Anticipated Development – The analysis for this condition indicate that STOP controlled intersection currently operates at a Level of Service "A" during both the weekday morning and weekday afternoon peak hours. The eastbound lane operates at a Level of Service "A" during both peak hours. The southbound left turn operates at Level of Service "A" during both peak hours.

Build – Results of the analysis indicate that the Levels of Service will remain the same as the no-build with no increase in vehicle delay, during both peak hours.

Table 5 provides a more detailed summary of the results of the capacity analyses for the Study Area intersections, as described above. This table provides Level of Service, average vehicle delay and volume to

CAPACITY AND STORAGE/QUEUE ANALYSIS RESULTS – MEASURE OF EFFECTIVENESS (MOE) AND IMPACT ASSESSMENT – PEAK HOURS
Residential Development
Gatto Lane
Orangetown, New York

- Notes:
 - Smoother 10.0 HCM 6th Edition results are used for capacity analysis.
 - Level of Service determining parameter is called the service measure.
 - For TWSC Intersections: Level of Service/Average Control delay per vehicle (seconds/vehicle).
 - ITE publication for Traffic Access and Impact Studies for site development "A Recommended Practice" indicated that overall Level of Service ratings of A to D are normally considered acceptable for signalized intersections (Level C or better are considered desirable). Levels of Service E and F are normally undesirable.
 - V/C ratio indicates the amount of congestion for each Movement and Lane. Any V/C ratio greater than or equal to one indicates that the Movement and Lane are operating at above capacity.
 - The Queue Length rows show the 95th percentile maximum queue length in feet.
 - The Queue Length is for each lane. This total queue length is divided by the number of lanes and the lane utilization factor.
 - The 95th percentile queue is the maximum back of the queue with the 95th percentile traffic volumes.

TWO-STATE KERONI

MA = Not Available

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North Carolina East Carolina S. & South Carolina

L = Lane
 R = Right turn
 AFT = Approach

Adams & Hanover, LLC

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capacity ratio for each lane and movement of each intersection during each of the peak hours for the existing, no-build with anticipated development and build conditions. It also provides a more detailed summary of the results of the storage/queue analyses for the Study Area intersections for each lane and movement during each of the peak hours for the existing, no-build with anticipated development and build conditions and a project assessment between the no-build with anticipated development and build conditions, which identifies the potential impact. The capacity worksheets are included in the Appendix of this report.

Site Access Provisions

Site access will be via a new full-movement access driveway to Gatto Lane between North Highland Avenue and the loop on Gatto Lane. Existing movements should be controlled with a STOP sign and STOP bar.

Findings

This Traffic Access and Impact Study was prepared to provide the Town of Orangetown with a detailed analysis to determine potential traffic impacts from the proposed residential development to be located on the north side of Gatto Lane between North Highland Avenue and Gatto Lane's loop. The proposal is to build 40 senior adult attached housing units. Site access will be via a new full-movement access driveway to Gatto Lane between North Highland Avenue and Gatto Lane's loop. A second driveway to Grotke Road is proposed for emergency use only. The new housing units are expected to be completed and occupied by the end of 2022.

Traffic conditions for a 2021 existing, 2022 future no-build with anticipated developments and 2022 build conditions during the weekday morning and weekday afternoon peak hours are addressed in this Study. It includes the unsignalized intersections of North Highland Avenue with Gatto Lane and North Highland Avenue with Crooked Hill Road, which are located west and south of the Subject Property, respectively. Manual turning movement counts were conducted in January 2021, at the Study Area intersections, on a day when Schools were open. Traffic volumes were adjusted to pre-pandemic levels.

Future 2022 projected traffic volumes, without the proposed development, employed an annual growth rate of 0.57 percent. Based on discussions with the Town, there are no other developments that would add traffic to the Study Area intersections during the weekday morning and weekday afternoon peak hours. Under the current zoning, the Site could be developed to accommodate up to 9 single family detached housing units. The

2022 no-build traffic volumes include the projected traffic volumes and the traffic volumes that would be generated by the additional 9 single family detached housing units.

The proposed development consists of 40 senior adult attached housing units. Based on trip generation rates provided by the Institute of Transportation Engineers (ITE) and published in "Trip Generation," 10th Edition, 2017, a residential development of this type and size is estimated to generate a total of 8 and 12 vehicle trip ends during the weekday morning and the weekday afternoon peak hours, respectively.

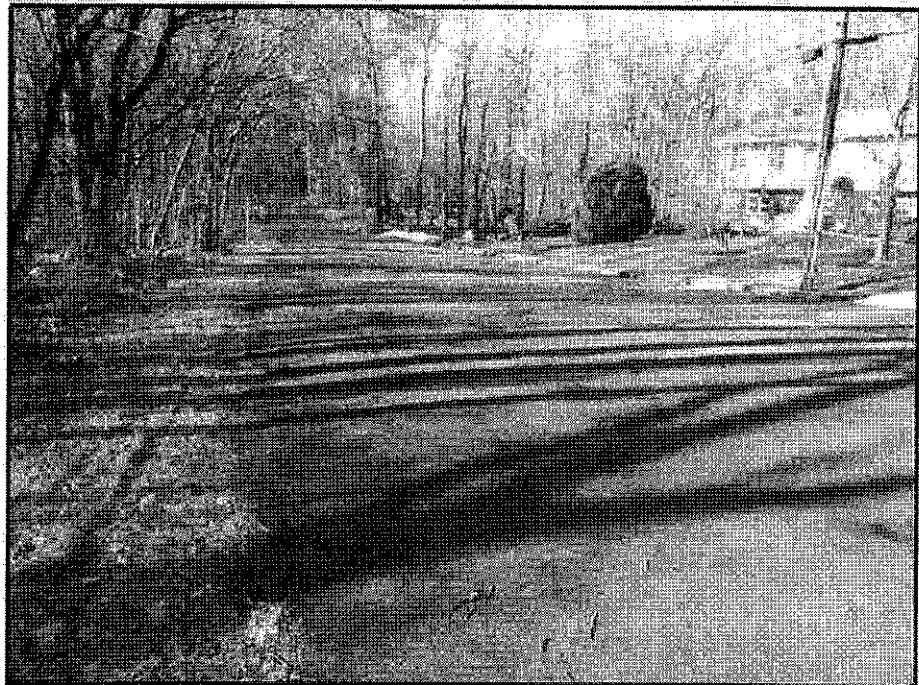
Based on an evaluation of current traffic patterns on area roads, estimates for site traffic distribution were developed for the Subject Property. It is estimated that 100 percent will arrive and depart from/to the west on Gatto Lane, out of which 25 percent will arrive and depart from/to the north on North Highland Avenue and 75 percent will arrive and depart from/to the south on North Highland Avenue. Out of the 75 percent arriving and departing from/to the south on North Highland Avenue, 45 percent will arrive and depart from/to the east on Crooked Hill Road and 30 percent will arrive and depart from/to the west on Crooked Hill Road. The 2022 build traffic volumes were developed by adding the site traffic generation to the 2022 no-build with anticipated development traffic volumes previously described.

SYNCHRO 10/HCM 6th Edition capacity analyses were conducted for the 2021 existing conditions, 2022 no-build with anticipated development conditions and 2022 build conditions. Results of analyses indicate that the Study Area intersections will maintain the same Levels of Service with no increase in vehicle delays during both the weekday morning and weekday afternoon peak hours at both Study area intersections. The site access driveway will operate at acceptable Levels of Service. It is recommended that a STOP sign and STOP bar be provided at the proposed Site access drive.

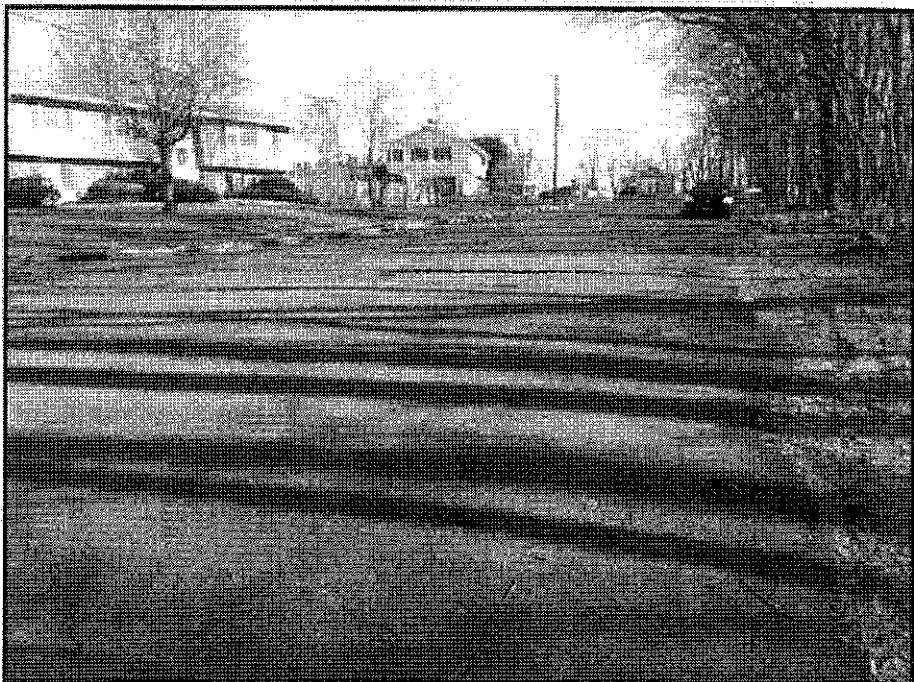
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3/30/2021

APPENDIX

PHOTOGRAPHS



Gatto Lane at Gatto Lane, Looking West



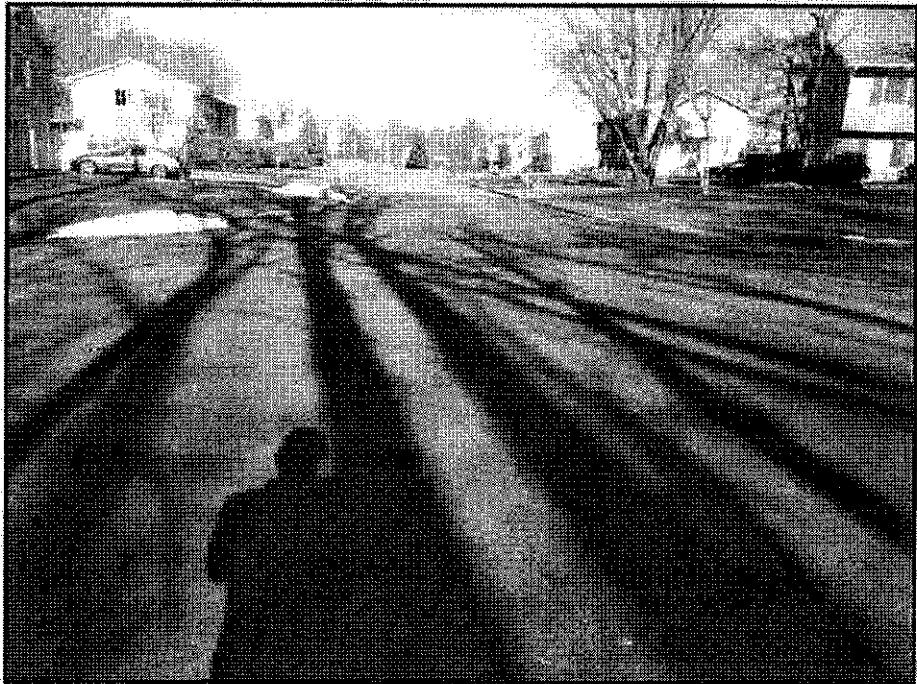
Gatto Lane at Gatto Lane, Looking East

January 25, 2021



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Exhibit 1



Gatto Lane at Gatto Lane, Looking North



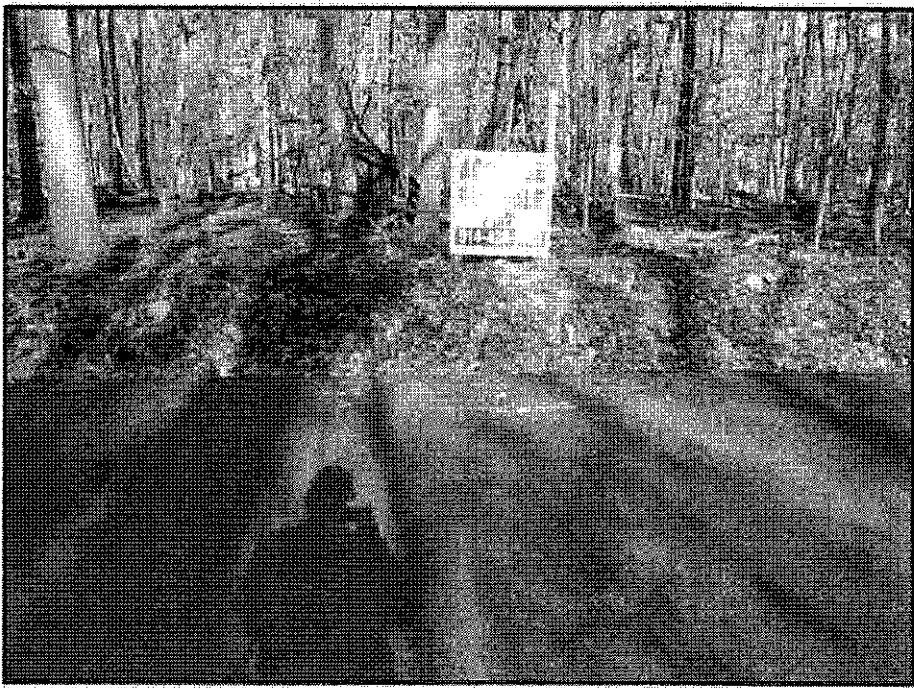
Gatto Lane at Site Access Drive, Looking West

January 25, 2021





Gatto Lane at Site Access Drive, Looking East



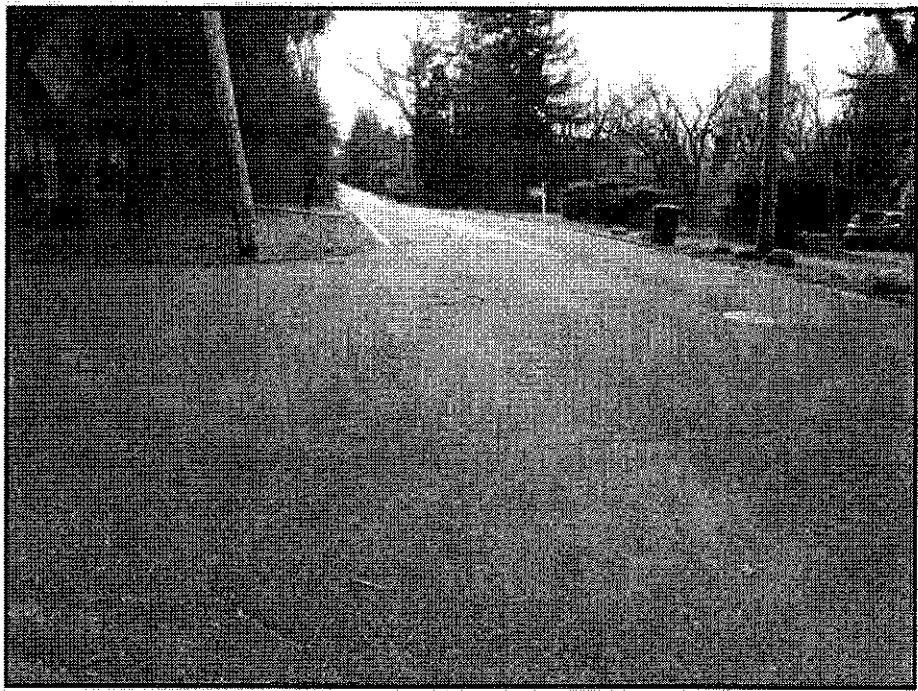
Gatto Lane at Site Access Drive, Looking North

January 25, 2021

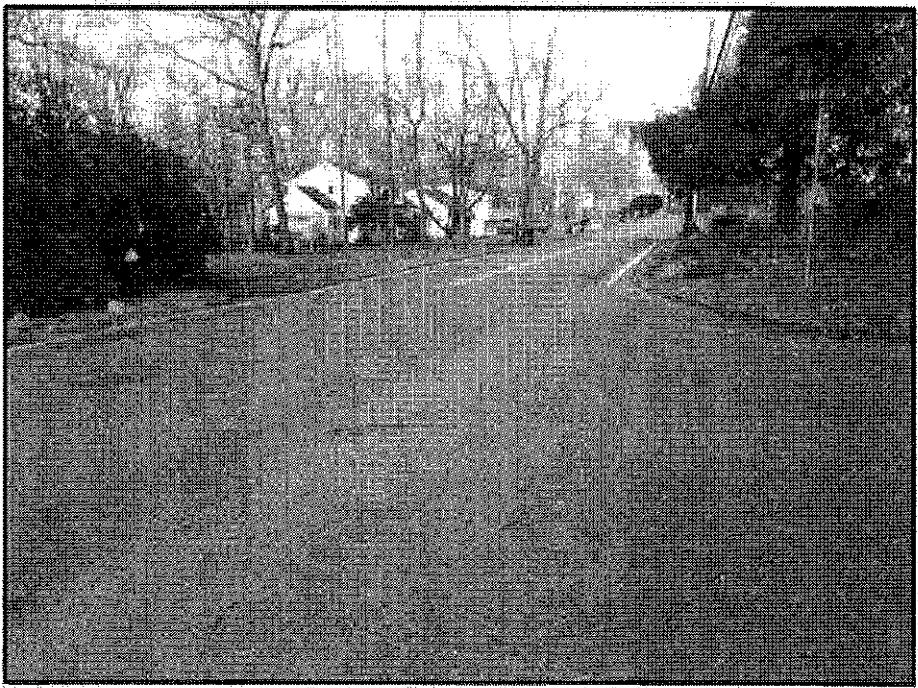


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Exhibit 3



North Highland Avenue at Gatto Lane, Looking South



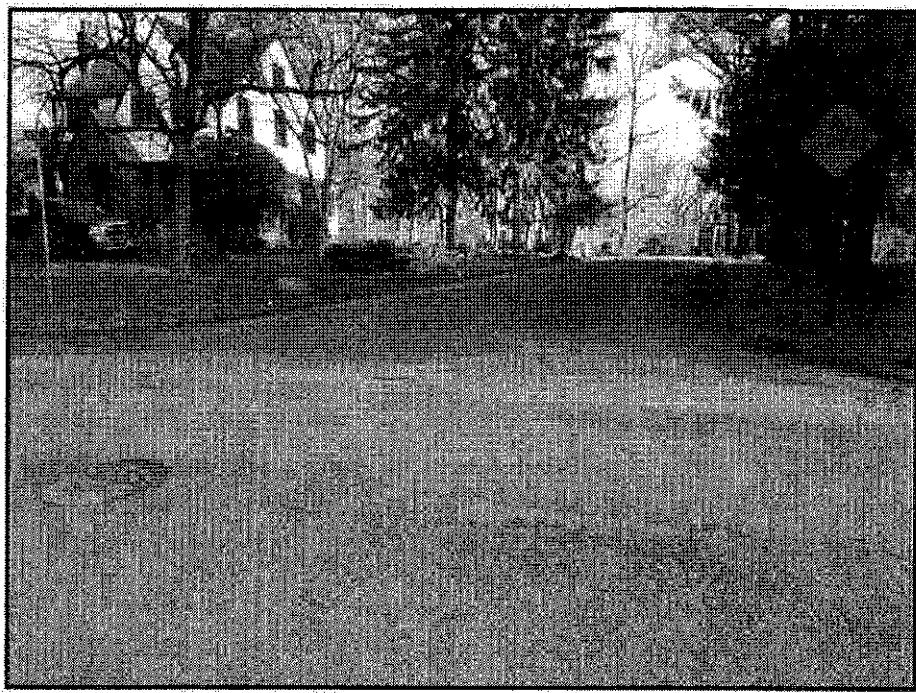
North Highland Avenue at Gatto Lane, Looking North

January 25, 2021

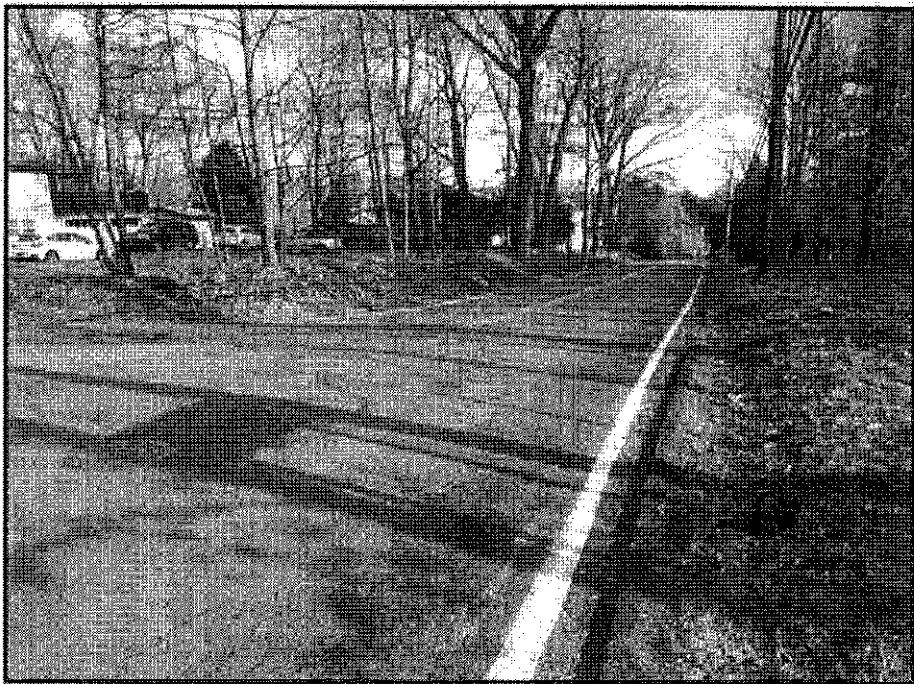


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Exhibit 4



Gatto Lane at North Highland Avenue, Looking East



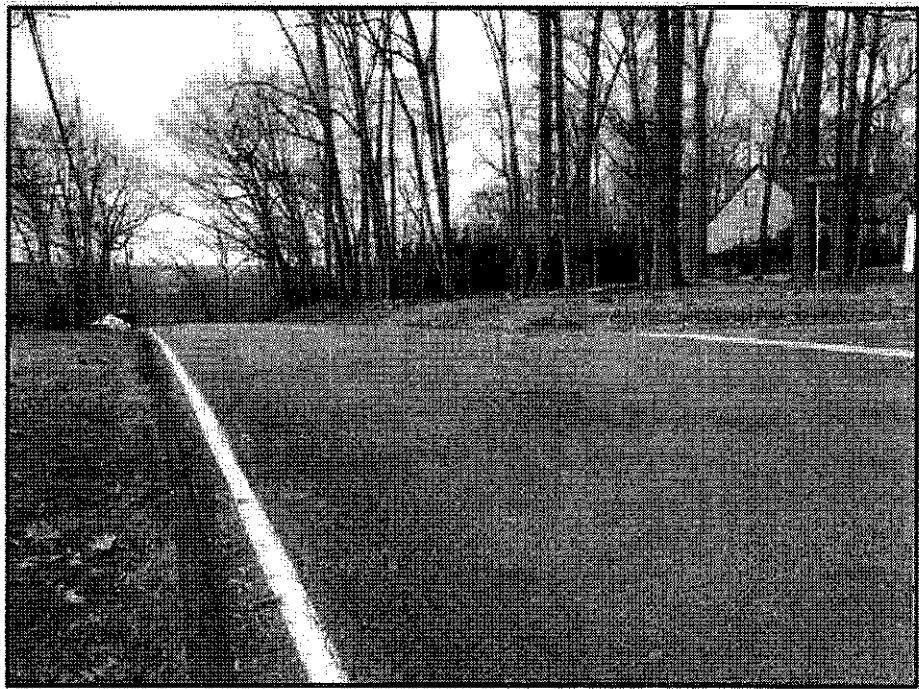
Crooked Hill Road at North Highland Avenue, Looking East

January 25, 2021

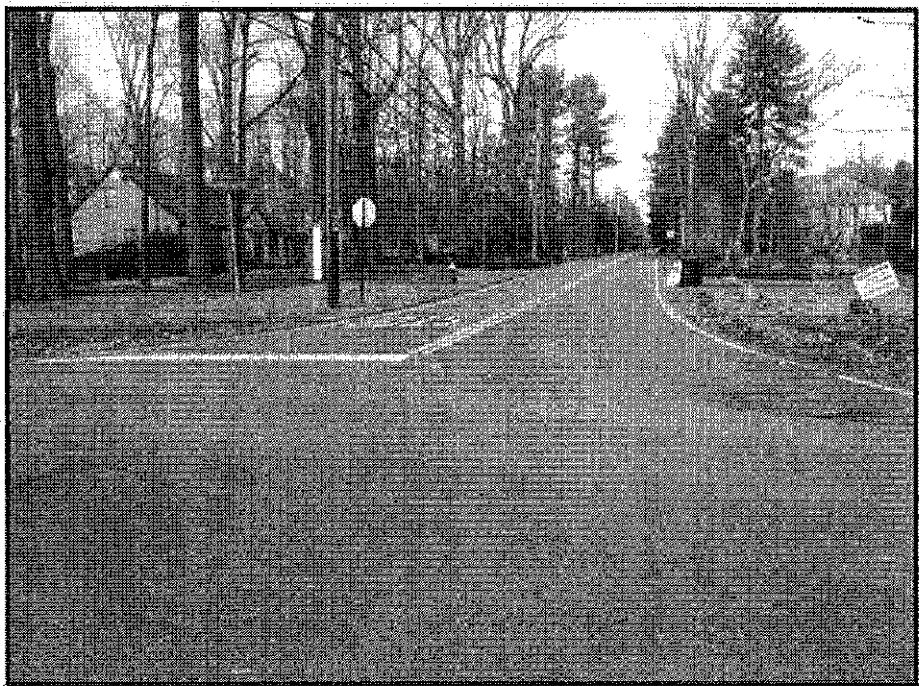


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Exhibit 5



Crooked Hill Road at North Highland Avenue, Looking West



North Highland Avenue at Crooked Hill Road, Looking North

January 25, 2021



TURNING MOVEMENT COUNTS

PROPOSED RESIDENTIAL DEVELOPMENT, GATTO LANE, ORANGETOWN, NEW YORK (#03103)
FIELD DATA SUMMARY - North Highland Avenue at Crooked Hill Road

All Vehicles										Southbound - North Highland Avenue										
Tuesday	Eastbound - Crooked Hill Road					Westbound - Crooked Hill Road					Northbound					Last 4 Quarters				
	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	EB	NB	SB	
7:45 AM	8:00 AM	4	33	0	37	0	21	6	27	0	0	0	0	10	0	4	14	76	0	0
8:00 AM	8:15 AM	5	28	0	34	0	18	7	25	0	0	0	0	16	0	4	20	79	0	0
8:15 AM	8:30 AM	6	26	0	30	0	14	2	16	0	0	0	0	6	0	5	11	53	0	0
8:30 AM	8:45 AM	6	32	0	38	0	20	4	24	0	0	0	0	13	0	6	19	61	251	0
AM Peak Hour Vol.	AM Peak Hour Factor	15	128	0	135	0	73	15	92	0	0	0	0	45	0	3	64	291	0	0
PM Peak Hour Factor	0.88							0.85					#DIV/0!			0.80	0.90			
4:15 PM	4:30 PM	5	32	0	37	0	28	8	33	0	0	0	0	10	0	2	12	82	0	0
4:30 PM	4:45 PM	5	32	0	37	0	30	9	39	0	0	0	0	4	0	6	10	86	0	0
4:45 PM	5:00 PM	6	22	0	28	0	31	13	44	0	0	0	0	4	0	3	7	79	0	0
5:00 PM	5:15 PM	5	21	0	26	0	34	3	37	0	0	0	0	9	0	6	15	78	325	1
PM Peak Hour Vol.	PM Peak Hour Factor	21	107	0	128	0	120	33	153	0	0	0	0	27	0	17	44	325	1	0
PM Peak Hour Factor								0.86					#DIV/0!			0.73	0.94			

PROPOSED RESIDENTIAL DEVELOPMENT, GATTO LANE, ORANGETOWN, NEW YORK (#05103)
 FIELD DATA SUMMARY - North Highland Avenue at Crooked Hill Road

Heavy Vehicles Tuesday 12-Jan-21	Eastbound - Crooked Hill Road			Westbound - Crooked Hill Road			Southbound - North Highland Avenue			Northbound		
	Left	Thru	Total	Left	Right	Total	Left	Thru	Total	Left	Thru	Total
7:45 AM - 8:00 AM	1	2	3	0	1	1	2	0	0	0	0	0
8:00 AM - 8:15 AM	2	0	2	0	1	1	3	0	0	0	1	0
8:15 AM - 8:30 AM	0	1	1	0	1	1	2	0	0	0	0	0
8:30 AM - 8:45 AM	1	3	4	0	3	3	0	0	0	0	0	0
All Peak Hour Vol.	4	6	10	6	6	12	4	10	14	6	2	8
Peak Hour Factor			0.63			0.83			#DIV/0!			0.38
4:15 PM - 4:30 PM	0	0	0	0	0	0	0	0	0	0	1	1
4:30 PM - 4:45 PM	1	0	1	0	2	2	0	0	0	1	0	1
4:45 PM - 5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM - 5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
PM Peak Hour Vol.	1	1	0	2	0	2	0	0	0	1	0	2
Peak Hour Factor			0.25			0.25			#DIV/0!			0.38
												0.29

PROPOSED RESIDENTIAL DEVELOPMENT, GATTO LANE, ORANGETOWN, NEW YORK (#05103)
FIELD DATA SUMMARY - North Highland Avenue at Gatto Lane

All Vehicles	Tuesday	Westbound • Gatto Lane						Northbound • North Highland Avenue						Southbound • North Highland Avenue						List 4						Quarters						EB			WB			NB			\$B		
		Eastbound			Left			Right			Total			Left			Right			Total			Left			Right			Total			Total			2B								
	12-Jan-21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0								
	7:45 AM	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0								
	8:00 AM	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0								
	8:15 AM	8:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0								
	8:30 AM	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0								
	AM Peak Hour Vol.	0	0	0	0	0	0	0	12	0	4	16	0	0	0	0	0	0	0	29	0	2	31	0	0	47	0	0	49	0	0	96	0	0	1	0	0						
	Peak Hour Factor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
	4:15 PM	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0								
	4:30 PM	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0								
	4:45 PM	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0								
	5:00 PM	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0								
	PM Peak Hour Vol.	0	0	0	0	0	0	0	4	0	0	5	0	0	0	0	0	0	0	43	0	0	51	0	0	43	0	0	45	0	0	105	0	0	1	0	0						
	Peak Hour Factor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							

PROPOSED RESIDENTIAL DEVELOPMENT, GATTO LANE, ORANGETOWN, NEW YORK (#05103)
FIELD DATA SUMMARY - North Highland Avenue at Gatto Lane

Heavy Vehicles

	Tuesday	Eastbound			Westbound • Gatto Lane			Northbound • North Highland Avenue			Southbound • North Highland Avenue			Last 4 Quarters	
		Left	Thru	Right	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	
7:45 AM	8:00 AM	0	0	0	0	0	0	0	0	2	0	2	0	0	0
8:00 AM	8:15 AM	0	0	0	0	1	0	1	0	2	1	3	0	0	0
8:15 AM	8:30 AM	0	0	0	0	0	0	0	0	2	0	2	0	0	0
8:30 AM	8:45 AM	0	0	1	0	1	0	1	0	1	0	1	0	0	0
AM Peak Hour Vol.	8:45 AM	0	0	0	0	2	0	2	0	7	1	8	1	0	2
Peak Hour Factor					#DNV0!		0.50		0.50	0.50	0.50	0.50	0.50	0.50	0.50
4:15 PM	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0.25
4:30 PM	4:45 PM	0	0	0	0	1	0	1	0	0	0	0	2	0	0.25
4:45 PM	5:00 PM	0	0	0	0	0	0	0	0	2	0	2	0	0	0.25
5:00 PM	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM Peak Hour Vol.	5:15 PM	0	0	0	0	1	0	1	0	2	0	2	1	3	0.25
Peak Hour Factor					#DNV0!		0.25		0.25	0.25	0.25	0.25	0.25	0.25	0.25

Study Name 2-N HIGHLAND AVE AT W CROOKED HILL RD**Start Date 01-12-2021****Start Time 7:45 AM****Site Code****Vehicle Type Lights**

Start Time	N HIGHLAND AVE Southbound			W CROOKED HILL RD Westbound			W CROOKED HILL RD Eastbound		
	Left	Right	U-Turn	Thru	Right	U-Turn	Left	Thru	U-Turn
7:45 AM	10	4	0	20	5	0	3	31	0
8:00 AM	15	4	0	17	5	0	3	29	0
8:15 AM	6	5	0	13	1	0	0	25	0
8:30 AM	12	5	0	17	4	0	5	29	0
4:15 PM	10	1	0	25	8	0	5	32	0
4:30 PM	3	5	0	28	9	0	4	31	0
4:45 PM	4	3	0	31	13	0	6	22	0
5:00 PM	9	6	0	34	3	0	5	21	0

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3/31/2021

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Study Name 2-N HIGHLAND AVE AT W CROOKED HILL RD**Start Date 01-12-2021****Start Time 7:45 AM****Site Code****Vehicle Type Buses**

Start Time	N HIGHLAND AVE Southbound			W CROOKED HILL RD Westbound			W CROOKED HILL RD Eastbound		
	Left	Right	U-Turn	Thru	Right	U-Turn	Left	Thru	U-Turn
7:45 AM	0	0	0	1	1	0	1	2	0
8:00 AM	1	0	0	1	2	0	2	0	0
8:15 AM	0	0	0	0	1	0	0	1	0
8:30 AM	1	1	0	3	0	0	1	3	0
4:15 PM	0	1	0	0	0	0	0	0	0
4:30 PM	1	1	0	0	0	0	1	1	0
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0

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3/31/2021

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Study Name 2-N HIGHLAND AVE AT W CROOKED HILL RD**Start Date 01-12-2021****Start Time 7:45 AM****Site Code****Vehicle Type Trucks**

Star Time	N HIGHLAND AVE Southbound			W CROOKED HILL RD Westbound			W CROOKED HILL RD Eastbound		
	Left	Right	U-Turn	Thru	Right	U-Tum	Left	Thru	U-Turn
7:45 AM	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	1	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	2	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0

Hardesty Hanover

3/31/2021

Y:\Shared\Projects\05103-Toll Brothers Gatto Residential\500-Technical\50X-Traffic Study\Counts\TMC\2-N_HIGHLAND_AVE_AT_W_CROOKED_HILL_RD_809109_01-12-2021.xls

Study Name 2-N HIGHLAND AVE AT W CROOKED HILL RD**Start Date 01-12-2021****Start Time 7:45 AM****Site Code****Vehicle Type Pedestrians**

Start Time	N HIGHLAND AVE Southbound		W CROOKED HILL RD Westbound		W CROOKED HILL RD Eastbound	
	Peds CCW	Peds CW	Peds CCW	Peds CW	Peds CCW	Peds CW
7:45 AM	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0
4:30 PM	2	0	0	0	0	0
4:45 PM	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	1

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3/31/2021

Y:\Shared\Projects\05103-Toll Brothers Gatto Residential\500-Technical\50X-Traffic Study\Counts\TMC\2-N_HIGHLAND_AVE_AT_W_CROOKED_HILL_RD_809109_01-12-2021.xls

Study Name 2-N HIGHLAND AVE AT W CROOKED HILL RD**Start Date 01-12-2021****Start Time 7:45 AM****Site Code****Vehicle Type Total**

Start Time	N HIGHLAND AVE Southbound			W CROOKED HILL RD Westbound			W CROOKED HILL RD Eastbound		
	Left	Right	U-Turn	Thru	Right	U-Turn	Left	Thru	U-Turn
7:45 AM	10	4	0	21	6	0	4	33	0
8:00 AM	16	4	0	18	7	0	5	29	0
8:15 AM	6	5	0	14	2	0	0	26	0
8:30 AM	13	6	0	20	4	0	6	32	0
4:15 PM	10	2	0	25	8	0	5	32	0
4:30 PM	4	6	0	30	9	0	5	32	0
4:45 PM	4	3	0	31	13	0	6	22	0
5:00 PM	9	6	0	34	3	0	5	21	0

Hardesty Hanover

3/31/2021

Y:\Shared\Projects\05103-Toll Brothers Gatto Residential\500-Technical\50X-Traffic Study\Counts\TMC\2-N_HIGHLAND_AVE_AT_W_CROOKED_HILL_RD_809109_01-12-2021.xls

Study Name 1-N HIGHLAND AVE AT GATTO LN**Start Date 01-12-2021****Start Time 7:45 AM****Site Code****Vehicle Type Lights**

Start Time	N HIGHLAND AVE Southbound			GATTO LN Westbound			N HIGHLAND AVE Northbound		
	Left	Thru	U-Turn	Left	Right	U-Turn	Thru	Right	U-Turn
7:45 AM	1	13	0	3	0	0	9	0	0
8:00 AM	0	12	0	2	0	0	5	0	1
8:15 AM	0	10	0	1	1	0	0	0	0
8:30 AM	0	11	0	4	3	0	7	1	0
4:15 PM	0	12	0	0	3	0	10	2	0
4:30 PM	0	8	0	3	0	0	9	1	0
4:45 PM	1	8	0	0	0	0	15	2	0
5:00 PM	0	12	0	0	2	0	7	3	0

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3/31/2021

Y:\Shared\Projects\05103-Toll Brothers Gatto Residential\500-Technical\50X-Traffic Study\Counts\TMC\1-N_HIGHLAND_AVE_AT_GATTO_LN_809107_01-12-2021.xls

Study Name 1-N HIGHLAND AVE AT GATTO LN**Start Date 01-12-2021****Start Time 7:45 AM****Site Code****Vehicle Type Buses**

Start Time	N HIGHLAND AVE Southbound			GATTO LN Westbound			N HIGHLAND AVE Northbound		
	Left	Thru	U-Turn	Left	Right	U-Turn	Thru	Right	U-Turn
7:45 AM	0	0	0	0	0	0	2	0	0
8:00 AM	0	0	0	1	0	0	2	1	0
8:15 AM	0	0	0	0	0	0	2	0	0
8:30 AM	1	1	0	1	0	0	1	0	0
4:15 PM	0	1	0	0	0	0	0	0	0
4:30 PM	0	2	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	1	0	0
5:00 PM	0	0	0	0	0	0	0	0	0

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Y:\Shared\Projects\05103-Toll Brothers Gatto Residential\500-Technical\50X-Traffic Study\Counts\TMC\1-N_HIGHLAND_AVE_AT_GATTO_LN_809107_01-12-2021.xls

Study Name 1-N HIGHLAND AVE AT GATTO LN**Start Date 01-12-2021****Start Time 7:45 AM****Site Code****Vehicle Type Trucks**

Start Time	N HIGHLAND AVE Southbound			GATTO LN Westbound			N HIGHLAND AVE Northbound		
	Left	Thru	U-Turn	Left	Right	U-Turn	Thru	Right	U-Turn
7:45 AM	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0
4:15 PM	1	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	1	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	1	0
5:00 PM	0	0	0	0	0	0	0	0	0

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3/31/2021

Y:\Shared\Projects\05103-Toll Brothers Gatto Residential\500-Technical\50X-Traffic Study\Counts\TMC\1-N_HIGHLAND_AVE_AT_GATTO_LN_809107_01-12-2021.xls

Study Name 1-N HIGHLAND AVE AT GATTO LN**Start Date 01-12-2021****Start Time 7:45 AM****Site Code****Vehicle Type Pedestrians**

Start Time	N HIGHLAND AVE Southbound		GATTO LN Westbound		N HIGHLAND AVE Northbound	
	Peds CCW	Peds CW	Peds CCW	Peds CW	Peds CCW	Peds CW
7:45 AM	0	0	0	0	0	0
8:00 AM	0	0	1	0	0	0
8:15 AM	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0
4:30 PM	0	0	0	1	0	0
4:45 PM	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0

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Study Name 1-N HIGHLAND AVE AT GATTO LN**Start Date 01-12-2021****Start Time 7:45 AM****Site Code****Vehicle Type Totals**

Start Time	N HIGHLAND AVE Southbound			GATTO LN Westbound			N HIGHLAND AVE Northbound		
	Left	Thru	U-Turn	Left	Right	U-Turn	Thru	Right	U-Turn
7:45 AM	1	13	0	3	0	0	11	0	0
8:00 AM	0	12	0	3	0	0	7	1	1
8:15 AM	0	10	0	1	1	0	2	0	0
8:30 AM	1	12	0	5	3	0	8	1	0
4:15 PM	1	13	0	0	3	0	10	2	0
4:30 PM	0	10	0	4	0	0	9	1	0
4:45 PM	1	8	0	0	0	0	17	2	0
5:00 PM	0	12	0	0	2	0	7	3	0

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3/31/2021

Y:\Shared\Projects\05103-Toll Brothers Gatto Residential\500-Technical\50X-Traffic Study\Counts\TMC\1-N_HIGHLAND_AVE_AT_GATTO_LN_809107_01-12-2021.xls

AUTOMATIC TRAFFIC RECORDER

PROPOSED RESIDENTIAL DEVELOPMENT, GATTO LANE, ORANGETOWN, NEW YORK (#05103)
 FIELD DATA SUMMARY - Gatto Lane, East of North Highland Avenue

TIME	Friday, January 8, 2021			Saturday, January 9, 2021			Sunday, January 10, 2021			Monday, January 11, 2021		
	EB	WB	TOTAL	EB	WB	TOTAL	EB	WB	TOTAL	EB	WB	TOTAL
12:00 AM		0	2	0	0	2	4	3	7	0	1	1
1:00 AM		0	3	3	3	6	3	2	5	0	0	0
2:00 AM		0	0	0	0	0	0	1	1	0	0	0
3:00 AM		0	0	0	0	0	1	1	2	1	1	2
4:00 AM		0	0	1	1	1	1	1	2	0	2	2
5:00 AM		0	1	2	3	3	0	1	1	1	3	4
6:00 AM		0	1	0	1	1	0	0	0	1	5	6
7:00 AM		0	0	5	5	3	7	10	4	10	14	
8:00 AM		0	2	5	7	5	7	12	8	16	24	
9:00 AM		0	4	9	13	2	3	5	5	7	12	
10:00 AM		0	6	7	13	4	4	8	8	7	15	
11:00 AM		0	11	12	23	5	6	11	10	8	18	
12:00 PM		0	9	8	17	22	13	35	8	11	19	
1:00 PM		0	8	5	13	14	17	31	8	6	14	
2:00 PM		0	8	8	16	11	9	20	8	10	18	
3:00 PM		0	11	7	18	14	10	24	17	9	26	
4:00 PM		0	16	11	27	12	11	23	11	11	22	
5:00 PM		0	16	12	28	9	7	16	18	8	26	
6:00 PM		0	13	12	25	5	6	11	12	13	25	
7:00 PM		0	7	5	12	7	2	9	5	6	11	
8:00 PM		0	6	4	10	5	2	7	5	2	7	
9:00 PM		0	3	1	4	1	3	4	4	0	4	
10:00 PM		0	1	2	3	4	4	8	2	3	5	
11:00 PM	1	2	3	3	2	5	1	2	3	2	2	4
TOTAL	1	2	3	131	121	252	133	122	255	138	141	279

TIME	Tuesday, January 12, 2021			Wednesday, January 13, 2021			Thursday, January 14, 2021			Friday, January 15, 2021		
	EB	WB	TOTAL	EB	WB	TOTAL	EB	WB	TOTAL	EB	WB	TOTAL
12:00 AM	0	0	0	0	0	0	0	0	0	1	2	3
1:00 AM	0	0	0	0	1	1	0	0	0	0	0	0
2:00 AM	1	0	1	0	0	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0	0	0	0	1	1
4:00 AM	2	4	6	1	4	5	0	1	1	0	0	0
5:00 AM	0	1	1	0	3	3	2	4	6	1	3	4
6:00 AM	2	3	5	1	4	5	2	5	7	3	3	6
7:00 AM	2	9	11	4	7	11	4	10	14	6	11	17
8:00 AM	4	13	17	4	12	16	6	11	17	5	13	18
9:00 AM	4	6	10	4	5	9	8	7	15	6	9	15
10:00 AM	9	10	19	6	7	13	8	8	16	8	4	12
11:00 AM	14	15	29	7	7	14	14	9	23	8	9	17
12:00 PM	14	9	23	7	8	15	8	8	16	9	12	21
1:00 PM	9	10	19	13	6	19	6	10	16	9	5	14
2:00 PM	9	4	13	12	15	27	14	10	24	10	9	19
3:00 PM	12	9	21	9	5	14	20	13	33	12	7	19
4:00 PM	13	10	23	16	12	28	8	7	15	11	9	20
5:00 PM	9	9	18	17	7	24	14	8	22	13	10	23
6:00 PM	10	3	13	10	6	16	9	8	17	16	9	25
7:00 PM	10	5	15	10	6	16	8	4	12	11	8	19
8:00 PM	5	0	5	2	3	5	7	3	10	7	7	14
9:00 PM	3	2	5	3	2	5	3	3	6	4	0	4
10:00 PM	1	1	2	1	2	3	3	5	8	3	2	5
11:00 PM	5	1	6	4	2	6	4	2	6	2	2	4
TOTAL	138	124	262	131	124	255	148	136	284	145	135	280

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3/31/2021

Y:\Shared\Projects\05103-Toll Brothers Gatto Residential\500-Technical\50X-Traffic Study\Excel\21-002_ATR.xlsx

PROPOSED RESIDENTIAL DEVELOPMENT, GATTO LANE, ORANGETOWN, NEW YORK (#05103)

FIELD DATA SUMMARY - North Highland Avenue, South of Gatto Lane

TIME	Friday, January 8, 2021			Saturday, January 9, 2021			Sunday, January 10, 2021			Monday, January 11, 2021		
	NB	SB	TOTAL	NB	SB	TOTAL	NB	SB	TOTAL	NB	SB	TOTAL
12:00 AM		0	6	3	9		4	6	10	0	3	3
1:00 AM		0	6	5	11		4	4	8	3	0	3
2:00 AM		0	1	0	1		2	3	5	0	0	0
3:00 AM		0	0	0	0		3	1	4	0	2	2
4:00 AM		0	1	4	5		1	2	3	2	4	6
5:00 AM		0	2	2	4		2	2	4	2	4	6
6:00 AM		0	1	9	10		3	10	13	7	19	26
7:00 AM		0	13	20	33		7	10	17	23	43	66
8:00 AM		0	11	20	31		16	25	41	29	47	76
9:00 AM		0	12	29	41		18	23	41	23	44	67
10:00 AM		0	28	31	59		17	35	52	26	24	50
11:00 AM		0	30	50	80		26	40	66	36	53	89
12:00 PM		0	53	39	92		49	47	96	34	57	91
1:00 PM		0	28	48	76		41	59	100	36	37	73
2:00 PM		0	35	50	85		42	47	89	45	46	91
3:00 PM		0	39	36	75		45	40	85	55	60	115
4:00 PM		0	38	44	82		39	45	84	47	43	90
5:00 PM		0	41	38	79		36	30	65	46	40	86
6:00 PM		0	29	25	54		24	27	51	32	35	67
7:00 PM		0	32	32	64		20	18	38	26	27	53
8:00 PM		0	20	14	34		18	11	29	18	13	31
9:00 PM		0	16	20	36		11	13	24	10	9	19
10:00 PM		0	12	15	27		8	8	16	5	16	21
11:00 PM	19	10	29	6	8	14	5	2	7	6	4	10
TOTAL	19	10	29	460	542	1,002	440	508	948	511	630	1,141

TIME	Tuesday, January 12, 2021			Wednesday, January 13, 2021			Thursday, January 14, 2021			Friday, January 15, 2021		
	NB	SB	TOTAL	NB	SB	TOTAL	NB	SB	TOTAL	NB	SB	TOTAL
12:00 AM	3	2	5	2	1	3	5	3	8	8	6	14
1:00 AM	1	0	1	1	1	2	0	1	1	3	4	7
2:00 AM	1	1	2	1	1	2	1	0	1	0	0	0
3:00 AM	0	0	0	0	0	0	1	0	1	0	0	0
4:00 AM	3	2	5	1	4	5	0	1	1	0	2	2
5:00 AM	3	7	10	4	7	11	4	7	11	2	8	10
6:00 AM	10	18	28	5	17	22	5	17	22	8	12	20
7:00 AM	23	40	63	25	37	62	24	42	66	25	48	73
8:00 AM	31	61	92	38	63	101	26	61	87	26	57	83
9:00 AM	33	38	71	20	39	59	26	31	57	21	33	54
10:00 AM	20	44	64	28	36	64	21	39	60	27	39	66
11:00 AM	36	56	92	33	37	70	41	43	84	32	48	80
12:00 PM	62	57	109	41	55	96	28	44	72	39	46	85
1:00 PM	34	41	75	44	41	85	35	48	83	38	40	78
2:00 PM	66	44	100	47	56	103	37	54	91	45	54	99
3:00 PM	56	39	95	50	43	93	72	45	117	51	45	96
4:00 PM	53	45	98	52	49	101	49	55	104	50	54	104
5:00 PM	41	45	86	56	38	94	59	36	95	59	43	102
6:00 PM	43	33	76	32	29	61	37	29	66	42	41	83
7:00 PM	36	22	58	30	27	57	30	18	48	22	24	46
8:00 PM	13	21	34	21	13	34	20	18	38	19	15	34
9:00 PM	8	10	18	13	18	31	11	16	27	12	13	25
10:00 PM	8	10	18	10	8	18	11	19	30	15	11	26
11:00 PM	12	6	18	7	2	9	9	5	14	13	7	20
TOTAL	576	642	1,218	561	622	1,183	552	632	1,184	557	650	1,207

PROPOSED RESIDENTIAL DEVELOPMENT, GATTO LANE, ORANGETOWN, NEW YORK (#05103)
NYSDOT DATA SUMMARY - North Highland Avenue, North of Gatto Lane

TIME	Tuesday, May 3, 2016		
	NB	SB	TOTAL
12:00 AM	4	3	7
1:00 AM	1	2	3
2:00 AM	0	1	1
3:00 AM	0	0	0
4:00 AM	1	1	2
5:00 AM	4	5	9
6:00 AM	10	28	38
7:00 AM	20	46	66
8:00 AM	28	51	79
9:00 AM	27	47	74
10:00 AM	36	38	74
11:00 AM	31	39	70
12:00 PM	34	37	71
1:00 PM	30	36	66
2:00 PM	39	35	74
3:00 PM	46	42	88
4:00 PM	52	46	98
5:00 PM	53	46	99
6:00 PM	58	48	106
7:00 PM	47	34	81
8:00 PM	31	29	60
9:00 PM	22	16	38
10:00 PM	12	9	21
11:00 PM	9	9	18
TOTAL	595	648	1,243

PROPOSED RESIDENTIAL DEVELOPMENT, GATTO LANE, ORANGETOWN, NEW YORK (#05103)
NYS DOT DATA SUMMARY - Gatto Lane, East of North Highland Avenue

TIME	Tuesday, May 17, 2016		
	EB	WB	TOTAL
12:00 AM	0	1	1
1:00 AM	1	1	2
2:00 AM	0	0	0
3:00 AM	0	0	0
4:00 AM	0	0	0
5:00 AM	1	3	4
6:00 AM	2	10	12
7:00 AM	7	17	24
8:00 AM	9	20	29
9:00 AM	11	12	23
10:00 AM	7	13	20
11:00 AM	9	14	23
12:00 PM	14	10	24
1:00 PM	13	13	26
2:00 PM	19	12	31
3:00 PM	13	9	22
4:00 PM	17	16	33
5:00 PM	16	14	30
6:00 PM	14	14	28
7:00 PM	16	10	26
8:00 PM	14	6	20
9:00 PM	11	3	14
10:00 PM	5	1	6
11:00 PM	5	2	7
TOTAL	204	201	405

TRAFFIC DATABANK LLC
7116 SOUTH SIXTH AVE
MT VERNON NY 10550

716 SOUTH SIXTH AVE
MT VERNON NY 10550

Page 2

Site Code: Station ID: N HIGHLAND AVE S OF GATTO LN PEARL RIVER, NY Latitude: 0.00000 Undefined

11-Jan-21											
Start Time	NB	SB	NB								
12:00 AM	0	3	2	1	1	0	1	0	1	0	1
01:00	3	0	1	1	1	1	1	1	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0
03:00	0	2	0	0	1	1	1	1	0	0	0
04:00	2	4	3	2	1	4	0	1	0	2	3
05:00	2	4	3	7	4	7	4	7	2	8	7
06:00	7	19	10	18	5	17	5	17	8	12	17
07:00	23	43	23	40	25	37	24	42	25	48	42
08:00	29	47	31	61	36	63	26	61	26	57	58
09:00	23	44	33	38	20	39	26	31	21	33	37
10:00	26	24	20	44	28	36	21	39	27	39	36
11:00	36	53	36	56	33	37	41	43	32	48	47
12:00 PM	34	57	52	57	41	55	28	44	39	46	52
01:00	36	37	34	41	44	41	35	48	38	40	41
02:00	45	46	36	44	47	56	37	54	45	54	51
03:00	55	60	56	39	50	43	72	45	51	45	46
04:00	47	43	63	45	52	49	49	55	50	54	49
05:00	46	40	41	45	56	38	59	36	59	43	52
06:00	32	35	43	33	32	29	37	29	42	41	33
07:00	26	27	36	22	30	27	30	18	22	24	24
08:00	18	13	13	21	13	21	13	20	18	19	18
09:00	10	9	8	10	10	8	11	13	16	12	13
10:00	5	16	8	10	10	8	11	19	15	11	10
11:00	6	4	12	6	7	2	9	5	13	7	5
Lane	51	630	576	642	561	622	552	632	557	650	0
Day	1141	1218	1183	1184	1184	1207	1207	1207	1207	1207	1186
AM Peak Vol.	11:00	11:00	11:00	08:00	08:00	08:00	11:00	08:00	11:00	08:00	-
PM Peak Vol.	15:00	15:00	14:00	14:00	12:00	17:00	14:00	15:00	16:00	17:00	14:00

omb.	1141	1218
Total		
ADT	ADT 1,126	AADT 1,126

1183 1184 1236 1002

2165

TRAFFIC DATABASE LLC
 716 SOUTH SIXTH AVE
 MT VERNON, NY, 10550

Page 1

Site Code:
 Station ID:
GATTO LINE OF HIGHLAND AVE
PEARL RIVER, NY
 Latitude: 0° 0' 0.0000 Undefined

EB	Start Time	Pace												Number in Pace
		15	16	17	18	19	20	21	22	23	24	25	26	
01/08/21	*	*	*	*	*	*	*	*	*	*	*	*	*	*
01:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*
02:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*
03:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*
04:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*
05:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*
06:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*
07:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*
08:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*
09:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*
12 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*
14:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*
15:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*
16:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*
17:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*
18:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*
21:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*
22:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Percent	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
AM Peak Vol.														
PM Peak Vol.														

23:00 1
 23:00 1
 23:00 1
 23:00 1

TRAFFIC DATABANK LLC
716 SOUTH SIXTH AVE
MT VERNON, NY 10550

EFIC DATABASE
7716 SOUTH SIXTH AVE
MT VERNON NY 10550

Page 2

Site Code: Station ID:
GATTO LNE OF HIGHLAND AVE PEARL RIVER, NY
Latitude: 0' 0.0000 Undefined

EB	Start Time	Number in Page												Page Speed
		1	16	21	26	31	36	41	46	51	56	61	66	
01/09/21	01:00	0	1	0	1	0	1	0	0	0	0	0	0	9:18
	02:00	0	0	0	1	2	0	0	0	0	0	0	0	20:29
	03:00	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	*
	05:00	0	0	0	0	0	0	0	0	0	0	0	0	19:28
	06:00	0	0	0	0	0	0	0	0	0	0	0	0	19:28
	07:00	0	0	0	0	0	0	0	0	0	0	0	0	*
	08:00	0	0	0	0	0	0	0	0	0	0	0	0	14:23
	09:00	0	0	0	0	0	0	0	0	0	0	0	0	4
	10:00	0	0	0	0	0	0	0	0	0	0	0	0	24:33
	11:00	0	0	0	0	0	0	0	0	0	0	0	0	5
	12:PM	0	0	0	0	1	2	3	0	0	0	0	0	31:40
	13:00	0	0	0	0	0	2	5	0	0	0	0	0	9
	14:00	0	0	0	0	0	4	2	1	0	0	0	0	8
	15:00	1	0	0	2	0	7	1	0	0	0	0	0	8
	16:00	0	0	0	1	4	6	4	1	0	0	0	0	10:30
	17:00	0	0	0	4	7	5	0	0	0	0	0	0	16
	18:00	0	0	1	2	5	4	0	1	0	0	0	0	12
	19:00	0	0	0	3	2	1	1	0	0	0	0	0	9
	20:00	0	0	0	0	0	2	2	1	0	0	0	0	6
	21:00	0	0	0	0	0	1	0	0	0	0	0	0	4
	22:00	0	0	0	0	0	0	0	0	0	0	0	0	3
	23:00	0	0	0	0	0	0	2	0	0	0	0	0	1
Total	1	2	16	45	47	12	7	1	0	0	0	0	0	20:29
Percent	0.8%	1.5%	12.2%	34.4%	35.9%	9.2%	5.3%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	11:00
AM Peak Vol.		0:00	0:00	0:00	11:00	10:00	10:00	10:00	10:00	10:00	10:00	10:00	10:00	11
PM Peak Vol.	15:00	18:00	17:00	17:00	15:00	4	7	7	1	1	1	1	1	16:00

TRAFFIC DATABANK LLC
716 SOUTH SIXTH AVE
MT VERNON, NY, 10550

FIG DATABANK
716 SOUTH SIXTH AVE
MT VERNON, NY 10550

Page 3

Site Code: GATTO LNE OF HIGHLAND AVE
Station ID: PEARL RIVER, NY
Latitude: 0' 0,0000 Undefined

TRAFFIC DATABANK LLC
 716 SOUTH SIXTH AVE
 MT VERNON, NY, 10550

Page 4

Site Code:
 Station ID:
GATTO LINE OF HIGHLAND AVE
 PEARL RIVER, NY
 Latitude: 0° 0' 0.0000 Undefined

EB	Start Time	Pace Number											
		51	56	61	66	71	76	79	999	Total	Pace Speed	Pace Number	
	01/11/21 15:00	0	0	0	0	0	0	0	0	0	*	*	
	01:00 00:00	0	0	0	0	0	0	0	0	0	*	*	
	02:00 00:00	0	0	0	0	0	0	0	0	0	*	*	
	03:00 00:00	0	0	1	0	0	0	0	0	0	*	*	
	04:00 00:00	0	0	0	0	0	0	0	0	0	14-23	1	
	05:00 00:00	0	0	0	0	0	0	0	0	0	19-28	1	
	06:00 00:00	0	0	0	0	0	0	0	0	0	19-28	1	
	07:00 00:00	0	0	0	0	0	0	0	0	0	4	19-28	
	08:00 00:00	0	0	0	0	0	0	0	0	0	8	26-35	
	09:00 00:00	0	0	0	0	0	0	0	0	0	5	26-34	
	10:00 00:00	0	0	0	0	0	0	0	0	0	8	26-35	
	11:00 00:00	0	0	1	0	0	0	0	0	0	10	26-35	
	12 PM 00:00	0	0	0	0	0	0	0	0	0	8	31-40	
	13:00 00:00	0	0	0	0	0	0	0	0	0	8	26-35	
	14:00 00:00	0	0	1	0	0	0	0	0	0	8	26-35	
	15:00 00:00	0	0	2	0	0	0	0	0	0	17	26-35	
	16:00 00:00	0	0	3	0	0	0	0	0	0	11	26-35	
	17:00 00:00	0	0	6	5	1	0	0	0	0	18	21-30	
	18:00 00:00	0	0	0	7	5	0	0	0	0	12	26-35	
	19:00 00:00	0	0	0	2	3	0	0	0	0	8	26-35	
	20:00 00:00	0	0	0	0	3	0	0	0	0	5	31-40	
	21:00 00:00	0	0	0	1	0	0	0	0	0	4	20-29	
	22:00 00:00	0	0	0	1	0	0	0	0	0	2	24-33	
	23:00 00:00	0	0	0	0	2	0	0	0	0	2	20-29	
Total	00:00	0	4	14	52	53	12	3	0	0	0	0	
Percent	0.0%	0.0%	2.9%	10.1%	37.7%	38.4%	8.7%	2.2%	0.0%	0.0%	0.0%	0.0%	
AM Peak Vol.	08:00	0	0	0	0	0	0	0	0	0	0	0	
PM Peak Vol.	12:00	1	1	1	4	5	1	1	1	1	10	11:00	
	1	1	6	8	7	3	1	1	1	1	18	17:00	

TRAFFIC DATABANK LLC
7116 SOUTH SIXTH AVE
MT VERNON, NY 10550

FIC DATABANK
7716 SOUTH SIXTH AVE
MT VERNON NY 10550

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Site Code: Station ID: GATTO LN E OF HIGHLAND AVE PEARL RIVER, NY Latitude: 40.900000 Undefined

TRAFFIC DATABANK LLC
716 SOUTH SIXTH AVE
MT VERNON, NY 10550

FIGIC DATABASE
716 SOUTH SIXTH AVE
VT VERNON NY 10550

Site Code: Station ID:
GATTO LN E OF HIGHLAND AVE PEARL RIVER, NY
Latitude: 0' 0.0000 Undefined

TRAFFIC DATABANK LLC
716 SOUTH SIXTH AVE
MT. VERNON, NY 10550

716 SOUTH SIXTH AVE
MT VERNON, NY 10550

Page 7

Site Code: Station ID: GATTO LNE OF HIGHLAND AVE PEARL RIVER, NY Latitude: 0' 0.0000 Undefined

EB	Start Time	End Time	Duration	Number in Pace										Pace Speed	Total	
				66	61	56	51	46	41	36	31	26	21	16		
01/14/21	15:00	15:25	25:00	0	0	0	0	0	0	0	0	0	0	0	20-29	2
01:00	00:00	00:00	00:00	0	0	0	0	0	0	0	0	0	0	0	0	*
02:00	00:00	00:00	00:00	0	0	0	0	0	0	0	0	0	0	0	0	*
03:00	00:00	00:00	00:00	0	0	0	0	0	0	0	0	0	0	0	0	*
04:00	00:00	00:00	00:00	0	0	0	0	0	0	0	0	0	0	0	0	*
05:00	00:00	00:00	00:00	0	0	0	0	0	0	0	0	0	0	0	0	2
06:00	00:00	00:00	00:00	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00	00:00	00:00	00:00	0	0	0	0	2	1	1	0	0	0	0	4	24-33
08:00	01:00	00:00	01:00	0	0	0	0	4	1	0	0	0	0	0	0	3
09:00	00:00	01:00	01:00	0	0	0	0	4	0	0	0	0	0	0	0	6
10:00	00:00	00:00	00:00	0	0	0	0	2	0	0	0	0	0	0	0	0
11:00	00:00	00:00	00:00	0	0	0	0	3	5	2	1	0	0	0	0	0
12 PM	00:00	00:00	00:00	0	0	0	0	1	4	2	0	0	0	0	0	0
13:00	00:00	00:00	00:00	0	0	0	0	1	2	1	2	0	0	0	0	0
14:00	00:00	00:00	00:00	0	0	0	0	1	6	4	2	1	0	0	0	0
15:00	01:00	00:00	01:00	0	0	0	0	4	12	2	1	0	0	0	0	0
16:00	00:00	00:00	00:00	0	0	0	0	2	3	2	1	0	0	0	0	0
17:00	00:00	01:00	01:00	0	0	0	0	1	3	0	0	0	0	0	0	0
18:00	00:00	00:00	00:00	0	0	0	0	1	5	2	1	0	0	0	0	0
19:00	00:00	00:00	00:00	0	0	0	0	2	2	3	1	0	0	0	0	0
20:00	00:00	00:00	00:00	0	0	0	0	1	1	1	0	0	0	0	0	0
21:00	00:00	00:00	00:00	0	0	0	0	1	0	0	2	0	0	0	0	0
22:00	00:00	00:00	00:00	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	00:00	00:00	00:00	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	2:00	3:18	18:45	50	50	36	31	26	21	16	12	10	8	0	0	148
Percent	1.4%	2.0%	12.2%	30.4%	33.8%	17.6%	2.0%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	11.00
AM Peak Vol.	08:00	05:00	09:00	08:00	11:00	10:00	10:00	11:00	10:00	10:00	10:00	10:00	10:00	10:00	10:00	14:00
PM Peak Vol.	15:00	17:00	16:00	14:00	15:00	17:00	14:00	15:00	17:00	14:00	15:00	17:00	14:00	15:00	14:00	15:00

TRAFFIC DATABANK LLC
7116 SOUTH SIXTH AVE
MT VERNON, NY 10550

716 SOUTH SIXTH AVE
MT VERNON, NY 10550

Site Code: Station ID: GATTO LNE OF HIGHLAND AVE PEARL RIVER, NY Latitude: 0' 0.0000 Undefined

Stats	10 MPH Pace Speed :	26-35 MPH
15th Percentile :	Number in Pace :	689
50th Percentile :	Percent in Pace :	71.4%
85th Percentile :	Number of Vehicles > 55 MPH :	0
95th Percentile :	Percent of Vehicles > 55 MPH :	0.0%
	Mean Speed(Average) :	31 MPH

TRAFFIC DATABANK LLC
716 SOUTH SIXTH AVE
MT VERNON, NY, 10550

Page 9

Site Code: Station ID:
GATTO LN E OF HIGHLAND AVE PEARL RIVER, NY
Latitude: 0' 0.00000 Undefined

TRAFFIC DATABANK LLC
7116 SOUTH SIXTH AVE
MT VERNON NY 10550

Page 10

Site Code: GATTO LN E OF HIGHLAND AVE
Station ID: PEARL RIVER, NY
Latitude: 0.00000
Longitude: Undefined

TRAFFIC DATABANK LLC
 716 SOUTH SIXTH AVE
 MT VERNON, NY, 10550

Page 11

Site Code:
 Station ID:
GATTO LINE OF HIGHLAND AVE
 PEARL RIVER, NY
 Latitude: 0.00000 Undefined

WB	Start Time	1	16	21	25	30	31	36	41	46	51	56	61	66	71	76	Total	Pace Number
		01/10/21	15	20	25	30	35	40	45	50	55	60	65	70	75	999	15-24	
	01:00	0	0	2	0	0	1	0	0	0	0	0	0	0	0	0	3	2
	02:00	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	2	2
	03:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1
	04:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1
	05:00	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	1	1
	07:00	0	0	0	0	2	5	0	0	0	0	0	0	0	0	0	7	7
	08:00	0	0	1	1	1	1	3	1	0	0	0	0	0	0	0	7	7
	09:00	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	3	3
	10:00	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	4	4
	11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	6
	12 PM	0	0	0	0	1	8	2	2	2	1	0	0	0	0	0	13	10
	13:00	0	0	0	5	9	2	1	1	0	0	0	0	0	0	0	17	14
	14:00	0	1	2	4	2	0	0	0	0	0	0	0	0	0	0	9	6
	15:00	0	1	2	4	3	0	0	0	0	0	0	0	0	0	0	10	7
	16:00	0	2	2	6	0	1	0	0	0	0	0	0	0	0	0	11	8
	17:00	0	1	2	3	0	1	0	0	0	0	0	0	0	0	0	7	6
	18:00	0	1	0	4	1	0	0	0	0	0	0	0	0	0	0	6	5
	19:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2	1
	20:00	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	2	2
	21:00	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	3	3
	22:00	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	4	3
	23:00	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	2	1
Total		0	8	25	65	17	7	0	0	0	0	0	0	0	0	0	122	
Percent		0.0%	6.6%	20.5%	53.3%	13.9%	5.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak Vol.		1	0	0	11:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	07:00	7
PM Peak Vol.		1	2	2	6	3	1	0	0	0	0	0	0	0	0	0	13:00	17

TRAFFIC DATABANK LLC
 716 SOUTH SIXTH AVE
 MT VERNON,NY,10550

Page 12

Site Code:
 Station ID:
GATTO LINE OF HIGHLAND AVE
PEARL RIVER,NY
 Latitude: 0.0000 Undefined

WB	Start Time	Number														Page	Spaced	In Page
		61	60	55	51	46	41	36	31	26	21	20	16	15				
	01/11/21 01:00	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	24-33	1
	02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*
	03:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	19-28	1
	04:00	0	0	0	1	1	0	0	0	0	0	0	0	0	0	2	24-33	2
	05:00	0	0	0	2	1	0	0	0	0	0	0	0	0	0	3	24-33	3
	06:00	0	0	0	5	0	0	0	0	0	0	0	0	0	0	5	26-35	5
	07:00	0	1	2	3	4	0	0	0	0	0	0	0	0	0	10	25-34	7
	08:00	0	1	3	6	5	1	0	0	0	0	0	0	0	0	16	26-35	11
	09:00	0	0	1	3	2	1	0	0	0	0	0	0	0	0	7	26-35	5
	10:00	0	0	0	4	2	1	0	0	0	0	0	0	0	0	7	26-35	6
	11:00	1	0	2	1	1	2	1	0	0	0	0	0	0	0	8	36-45	3
	12 PM	0	1	1	3	4	2	0	0	0	0	0	0	0	0	11	26-35	7
	13:00	0	0	0	5	1	0	0	0	0	0	0	0	0	0	6	24-33	6
	14:00	0	1	1	7	0	0	1	0	0	0	0	0	0	0	10	21-30	8
	15:00	0	0	4	5	0	0	0	0	0	0	0	0	0	0	9	26-35	9
	16:00	0	0	10	1	0	0	0	0	0	0	0	0	0	0	11	24-33	11
	17:00	0	1	2	4	1	0	0	0	0	0	0	0	0	0	8	21-30	6
	18:00	0	1	4	5	1	2	0	0	0	0	0	0	0	0	13	21-30	9
	19:00	0	0	0	2	4	0	0	0	0	0	0	0	0	0	6	26-35	6
	20:00	0	0	1	0	1	0	0	0	0	0	0	0	0	0	2	14-23	1
	21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*	*
	22:00	0	0	0	3	0	0	0	0	0	0	0	0	0	0	3	21-30	3
	23:00	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2	20-29	2
Total	1	6	17	66	40	9	2	0	0	0	0	0	0	0	0	141		
Percent	0.7%	4.3%	12.1%	46.8%	28.4%	6.4%	1.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak Vol.	11:00	07:00	08:00	08:00	06:00	11:00	11:00									08:00	16	
PM Peak Vol.	12:00	12:00	18:00	16:00	15:00	12:00	14:00									18:00	13	

TRAFFIC DATABANK LLC
7116 SOUTH SIXTH AVE
MT VERNON, NY 10550

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Site Code:
Station ID:
GATTO LINE OF HIGHLAND AVE
PEARL RIVER, NY
Latitude: 0° 0.0000 Undefined

TRAFFIC DATABANK LLC
716 SOUTH SIXTH AVE
MT VERNON, NY, 10550

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Site Code: Station ID:
GATTO LN E OF HIGHLAND AVE
PEARL RIVER, NY
Latitude: 0° 0.0000 Undefined

TRAFFIC DATABANK LLC
7116 SOUTH SIXTH AVE
MT. VERNON, NY 10550

716 SOUTH SIXTH AVE
MT VERNON NY 10550

Page 15

Site Code: GATTO LNE OF HIGHLAND AVE
Station ID: PEARL RIVER, NY
Latitude: 0° 0.0000 **Longitude:** Undefined

TRAFFIC DATABANK LLC
716 SOUTH SIXTH AVE
MT VERNON, NY, 10550

FIC DATABASE
716 SOUTH SIXTH AVE
NT VERNON, NY 10550

Site Code: Station ID:
GATTO LNE OF HIGHLAND AVE
PEARL RIVER, NY
Latitude: 0' 0.0000 Undefined

TRAFFIC DATABANK LLC
716 SOUTH SIXTH AVE
MT VERNON, NY, 10550

Page

Site Code: Station ID: N HIGHLAND AVE S OF GATTO LN PEARL RIVER, NY Latitude: 0' 0.0000 Undefined

TRAFFIC DATABANK LLC
716 SOUTH SIXTH AVE
MT VERNON, NY 10550

7716 SOUTH SIXTH AVE
MT VERNON, NY 10550

Page 2

Site Code: Station ID: N HIGHLAND AVE S OF GATTO LN PEARL RIVER, NY Latitude: 0° 0.00000 Undefined

NB	Start Time	End Time	Pace	Speed	Number in Pace		Total
					71	76	
01/09/21	15:00	16:00	21:25	26:30	31:35	36:40	41:45
01:00	00:00	00:00	00:00	00:00	00:00	00:00	00:00
02:00	00:00	00:00	00:00	00:00	00:00	00:00	00:00
03:00	00:00	00:00	00:00	00:00	00:00	00:00	00:00
04:00	00:00	00:00	00:00	00:00	00:00	00:00	00:00
05:00	00:00	00:00	00:00	00:00	00:00	00:00	00:00
06:00	00:00	00:00	00:00	00:00	00:00	00:00	00:00
07:00	00:00	00:00	00:00	00:00	00:00	00:00	00:00
08:00	00:00	00:00	00:00	00:00	00:00	00:00	00:00
09:00	00:00	00:00	00:00	00:00	00:00	00:00	00:00
10:00	00:00	00:00	00:00	00:00	00:00	00:00	00:00
11:00	00:00	00:00	00:00	00:00	00:00	00:00	00:00
12 PM	00:00	00:00	00:00	00:00	00:00	00:00	00:00
13:00	00:00	00:00	00:00	00:00	00:00	00:00	00:00
14:00	00:00	00:00	00:00	00:00	00:00	00:00	00:00
15:00	00:00	00:00	00:00	00:00	00:00	00:00	00:00
16:00	00:00	00:00	00:00	00:00	00:00	00:00	00:00
17:00	00:00	00:00	00:00	00:00	00:00	00:00	00:00
18:00	00:00	00:00	00:00	00:00	00:00	00:00	00:00
19:00	00:00	00:00	00:00	00:00	00:00	00:00	00:00
20:00	00:00	00:00	00:00	00:00	00:00	00:00	00:00
21:00	00:00	00:00	00:00	00:00	00:00	00:00	00:00
22:00	00:00	00:00	00:00	00:00	00:00	00:00	00:00
23:00	00:00	00:00	00:00	00:00	00:00	00:00	00:00
Total	1:10	1:10	2:21	2:21	3:84	3:216	3:96
Percent	0.2%	0.2%	4.6%	4.6%	18.3%	41.0%	20.9%
AM Peak Vol.	0.00	0.00	0.00	0.00	11.00	11.00	10.00
PM Peak Vol.	2	2	4	4	14	29	15

TRAFFIC DATABANK LLC
716 SOUTH SIXTH AVE
MT VERNON, NY 10560

FIGIC DATABANK
716 SOUTH SIXTH AVE
MT VERNON, NY 10550

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Site Code: Station ID: N HIGHLAND AVE S OF GATTO LN PEARL RIVER, NY Latitude: 0° 0.0000 Undefined

NB	Start Time	End Time	Number in Page										Page Speed	Total		
			56	61	66	71	76	999	75	70	65	51				
	01/10/21	01:00	16	21	26	31	36	41	46	51	56	61	66	25:34	3	
	01:15	02:00	20	25	30	35	40	45	50	55	60	65	70	19:28	1	
	02:00	03:00	00	00	00	01	02	01	01	00	00	00	00	19:28	1	
	03:00	04:00	00	00	00	01	01	01	01	00	00	00	00	24:33	2	
	04:00	05:00	00	00	00	01	00	00	01	01	00	00	00	14:23	1	
	05:00	06:00	00	00	00	00	00	00	00	00	00	00	00	34:43	2	
	06:00	07:00	00	00	00	01	01	01	01	00	00	00	00	19:28	2	
	07:00	08:00	00	00	00	00	04	04	02	02	00	00	00	31:40	6	
	08:00	09:00	00	00	00	00	03	11	2	0	0	0	0	26:35	14	
	09:00	10:00	00	01	00	00	08	9	0	0	0	0	0	31:40	17	
	10:00	11:00	01	02	02	03	4	3	0	2	0	0	0	17	7	
	11:00	12:00	02	01	01	06	10	4	0	0	0	0	0	25:34	7	
	12:00	13:00	00	02	01	10	24	10	2	0	0	0	0	26:35	18	
	13:00	14:00	01	01	02	12	19	5	1	0	0	0	0	49	34	
	14:00	15:00	00	00	00	04	27	8	3	0	0	0	0	26:35	31	
	15:00	16:00	00	02	03	9	20	7	4	0	0	0	0	31:40	31	
	16:00	17:00	01	00	01	6	19	10	1	1	0	0	0	45	31	
	17:00	18:00	00	00	00	02	20	9	3	1	0	0	0	39	29	
	18:00	19:00	00	00	00	04	16	4	0	0	0	0	0	35	29	
	19:00	20:00	00	00	00	02	4	11	3	0	0	0	0	24	20	
	20:00	21:00	00	00	00	00	2	10	6	0	0	0	0	26:35	15	
	21:00	22:00	00	00	01	00	1	3	6	1	0	0	0	31:40	16	
	22:00	23:00	00	00	01	2	1	3	0	0	0	0	0	31:40	9	
	23:00	Total	00	00	00	00	0	0	1	2	2	0	0	8	4	
			5	10	15	15	74	213	97	21	4	0	0	5	440	
			Percent	1.4%	2.3%	3.4%	16.8%	48.4%	22.0%	4.8%	0.9%	0.0%	0.2%	0.0%	11:00	11:00
			AM Peak Vol.	11:30	10:00	10:00	11:00	08:00	09:00	09:00	00:00	10:00	01:00	01:00	26	26
			PM Peak Vol.	13:00	12:00	15:00	13:00	14:00	12:00	15:00	15:00	16:00	1	1	12:00	12:00

TRAFFIC DATABANK LLC
716 SOUTH SIXTH AVE
MT VERNON, NY 10550

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Site Code: Station ID:
N HIGHLAND AVE S OF GATTO LN
PEARL RIVER, NY
Latitude: 0° 0.0000 Undefined

NB	Laudate: U (U) (U) (U) (U) (U) (U)												Number Pace Speed																																			
	Start Time	15	20	25	30	35	40	45	50	55	60	65	70	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	Total									
01/11/21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																
09:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																
10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																
11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																
12 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																
13:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																
14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																
15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																
18:00	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1																
19:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																
20:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																
Total	1	6	19	108	223	123	26	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																
Percent	0.2%	1.2%	3.7%	21.1%	43.6%	24.1%	5.1%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%													
AM Peak Vol.	06:00	08:00	10:00	11:00	08:00	09:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	25:00	26:00	27:00	28:00	29:00	30:00	31:00	32:00	33:00	34:00	35:00	36:00	37:00	38:00	39:00	40:00	41:00	42:00	43:00	44:00	45:00	46:00	47:00	48:00	49:00	50:00	51:00
PM Peak Vol.	16:00	17:00	18:00	19:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	25:00	26:00	27:00	28:00	29:00	30:00	31:00	32:00	33:00	34:00	35:00	36:00	37:00	38:00	39:00	40:00	41:00	42:00	43:00	44:00	45:00	46:00	47:00	48:00	49:00	50:00	51:00				

TRAFFIC DATABANK LLC
 716 SOUTH SIXTH AVE
 MT VERNON, NY, 10550

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Site Code:
 Station ID:
N HIGHLAND AVE S OF GATTO LN
PEARL RIVER, NY
 Latitude: 0' 0.0000 Undefined

NB	Start Time	15	21	26	31	36	41	46	51	56	61	66	71	76	79	85	99	Total	Pace Number	Speed in Pace	
			20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	3	31:40	3	
	01/12/21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	19:28	1
	01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	24:33	1
	02:00	0	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	0	0	0	0
	04:00	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3	19:28	2
	05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	39:48	2
	06:00	0	2	1	5	2	0	0	0	0	0	0	0	0	0	0	0	0	10	26:35	7
	07:00	0	0	1	5	9	7	1	0	0	0	0	0	0	0	0	0	0	23	30:39	16
	08:00	0	0	2	5	14	6	2	0	0	0	0	0	0	0	0	0	0	31	31:40	22
	09:00	0	0	2	2	3	14	9	2	1	0	0	0	0	0	0	0	0	33	31:40	23
	10:00	0	0	0	0	4	13	3	0	0	0	0	0	0	0	0	0	0	20	26:35	17
	11:00	0	1	2	9	19	3	0	0	2	0	0	0	0	0	0	0	0	36	26:35	28
	12 PM	0	3	2	0	10	28	8	1	0	0	0	0	0	0	0	0	52	26:35	38	
	13:00	0	0	1	6	19	6	2	0	0	0	0	0	0	0	0	0	34	26:35	25	
	14:00	1	1	8	12	23	7	3	0	1	0	0	0	0	0	0	0	56	26:35	35	
	15:00	0	1	1	8	33	12	1	0	0	0	0	0	0	0	0	0	56	31:40	45	
	16:00	0	0	3	7	30	11	2	0	0	0	0	0	0	0	0	0	53	31:40	41	
	17:00	1	0	4	18	14	4	0	0	0	0	0	0	0	0	0	0	41	26:35	32	
	18:00	0	0	2	6	27	4	2	0	0	0	0	0	0	0	0	0	43	26:35	33	
	19:00	0	0	2	6	11	12	4	0	1	0	0	0	0	0	0	0	36	31:40	23	
	20:00	0	0	1	1	5	3	2	0	1	0	0	0	0	0	0	0	13	30:39	8	
	21:00	0	0	0	0	2	0	5	1	0	0	0	0	0	0	0	0	8	34:43	6	
	22:00	0	0	1	0	3	3	1	0	0	0	0	0	0	0	0	0	8	31:40	6	
	23:00	0	0	0	0	2	8	2	0	0	0	0	0	0	0	0	0	12	28:37	10	
	Total	3	10	34	111	274	110	25	6	3	0	0	0	0	0	0	0	0	0	576	
	Percent	0.5%	1.7%	5.9%	19.3%	47.6%	19.1%	4.3%	1.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	11:00	
	AM Peak Vol.	1	2	2	9	19	9	2	2	2	0	0	0	0	0	0	0	0	36	14:00	
	PM Peak Vol.	14:00	1	3	8	17	18	33	12	4	2	2	1	1	2	2	2	2	56	14:00	

TRAFFIC DATABANK LLC
716 SOUTH SIXTH AVE
MT VERNON, NY, 10550

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MT VERNON, NY 10550

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Site Code: Station ID:
N HIGHLAND AVE S OF GATTO LN
PEARL RIVER, NY
Latitude: 0° 0.00000 Undefined

TRAFFIC DATABANK LLC
 716 SOUTH SIXTH AVE
 MT VERNON,NY,10550

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NB	Start Time	15	16	21	26	31	36	41	46	51	56	61	66	71	76	999	Total	Pace Number	Pace Speed in Pace	31-40	4
	01:00	0	0	0	0	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	0	0	0	0
	03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	24-33	1
	04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	24-33	1
	05:00	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	06:00	0	0	0	0	0	3	2	0	0	0	0	0	0	0	0	0	0	5	25-34	5
	07:00	0	0	0	2	5	13	3	1	0	0	0	0	0	0	0	0	0	24	26-35	18
	08:00	0	1	3	3	14	5	0	0	0	0	0	0	0	0	0	0	0	26	31-40	19
	09:00	0	0	3	8	10	2	3	0	0	0	0	0	0	0	0	0	0	26	26-35	18
	10:00	0	0	0	0	0	5	9	7	0	0	0	0	0	0	0	0	0	21	30-39	16
	11:00	0	3	4	9	15	8	1	1	0	0	0	0	0	0	0	0	0	41	26-35	24
	12 PM	0	0	2	2	13	9	2	0	0	0	0	0	0	0	0	0	0	28	31-40	22
	13:00	0	0	0	0	8	22	4	1	0	0	0	0	0	0	0	0	0	35	26-35	30
	14:00	0	0	0	1	7	17	10	1	1	0	0	0	0	0	0	0	0	37	31-40	27
	15:00	0	3	6	15	38	7	3	0	0	0	0	0	0	0	0	0	0	72	26-35	53
	16:00	0	0	2	17	23	6	1	0	0	0	0	0	0	0	0	0	0	49	26-35	40
	17:00	0	1	3	10	34	10	1	0	0	0	0	0	0	0	0	0	0	59	26-35	44
	18:00	0	0	0	9	17	9	2	0	0	0	0	0	0	0	0	0	0	37	26-35	26
	19:00	0	0	2	9	12	6	1	0	0	0	0	0	0	0	0	0	0	30	26-35	21
	20:00	0	1	2	4	10	1	2	0	0	0	0	0	0	0	0	0	0	20	26-35	14
	21:00	0	0	1	1	4	5	1	0	0	0	0	0	0	0	0	0	0	11	31-40	9
	22:00	0	1	0	0	3	7	0	0	0	0	0	0	0	0	0	0	0	11	31-40	10
	23:00	0	0	0	0	2	4	1	2	0	0	0	0	0	0	0	0	0	0	26-35	6
	Total	0	10	31	119	265	103	22	2	0	0	0	0	0	0	0	0	0	0	0	552
	Percent	0.0%	1.8%	5.6%	21.6%	48.0%	18.7%	4.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	11:00
	AM Peak Vol.	11:00	1:00	11:00	11:00	11:00	11:00	09:00	11:00	09:00	11:00	09:00	11:00	09:00	11:00	09:00	11:00	11:00	11:00	41	
	PM Peak Vol.	16:00	15:00	16:00	15:00	15:00	15:00	14:00	15:00	14:00	15:00	14:00	15:00	14:00	15:00	14:00	15:00	15:00	15:00	72	

TRAFFIC DATABANK LLC
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MT VERNON, NY, 10550

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MT VERNON, NY 10550

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Site Code: Station ID: N HIGHLAND AVE S OF GATTO LN PEARL RIVER, NY Latitude: 0° 0.0000 Undefined

10 MPH Pace Speed	31-40 MPH
Number in Pace	2471
Percent in Pace	67.2%
Number of Vehicles > 55 MPH	2
Percent of Vehicles > 55 MPH	0.1%
Mean Speed(Average)	33 MPH

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TRAFFIC DATABANK LLC
7116 SOUTH SIXTH AVE
MT VERNON NY 10550

FIC DATABANK
7116 SOUTH SIXTH AVE
MT VERNON NY 10550

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TRAFFIC DATABANK LLC
716 SOUTH SIXTH AVE
MT VERNON, NY, 10550

FFIC DATABASE
7716 SOUTH SIXTH AVE
MT VERNON, NY 10550

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Site Code: Station ID: N HIGHLAND AVE S OF GATTO LN PEARL RIVER, NY Latitude: 0° 0.0000 Undefined

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Site Code: Station ID:
N HIGHLAND AVE S OF GATTO LN
PEARL RIVER,NY
Latitude: 0° 0.0000 Undefined

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Site Code:
 Station ID:
N HIGHLAND AVE S OF GATTO LN
PEARL RIVER, NY
 Latitude: 0.00000 Undefined

SB	Start Time	15	16	21	26	31	36	41	46	51	56	61	66	71	76	79	85	99	Total	Pace Speed	Number In Pace
	01/12/21	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	2	28-38	2
	01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
	02:00	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	19-28	1
	03:00	0	0	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	0	0	2	19-28	1
	05:00	0	0	0	0	1	2	3	0	1	0	0	0	0	0	0	0	0	7	31-40	5
	06:00	1	0	0	1	8	5	2	0	0	0	0	0	0	0	0	0	0	18	31-40	13
	07:00	0	1	1	7	13	15	0	2	0	1	0	0	0	0	0	0	0	40	31-40	28
	08:00	0	1	2	4	21	22	10	1	0	0	0	0	0	0	0	0	0	61	31-40	43
	09:00	0	1	1	5	9	13	5	4	0	0	0	0	0	0	0	0	0	38	31-40	22
	10:00	0	0	2	4	23	11	4	0	0	0	0	0	0	0	0	0	0	44	31-40	34
	11:00	3	4	10	14	17	5	0	0	0	0	0	0	0	0	0	0	0	56	31-40	31
	12 PM	0	0	0	9	24	19	4	0	0	0	0	0	0	0	0	0	0	57	31-40	31
	13:00	1	2	3	10	10	3	2	0	0	0	0	0	0	0	0	0	0	41	26-35	20
	14:00	0	1	1	9	22	10	1	0	0	0	0	0	0	0	0	0	0	44	28-38	32
	15:00	0	0	0	4	16	14	4	1	0	0	0	0	0	0	0	0	0	39	31-40	30
	16:00	0	2	3	6	17	16	1	0	0	0	0	0	0	0	0	0	0	45	31-40	33
	17:00	0	0	2	4	23	11	4	1	0	0	0	0	0	0	0	0	0	45	31-40	34
	18:00	0	1	3	11	8	9	0	1	0	0	0	0	0	0	0	0	0	33	26-35	19
	19:00	0	0	0	1	5	12	2	1	0	0	0	0	0	0	0	0	0	22	31-40	17
	20:00	0	0	1	0	3	7	10	0	0	0	0	0	0	0	0	0	0	21	31-40	17
	21:00	0	0	0	0	2	5	2	1	0	0	0	0	0	0	0	0	0	10	31-40	7
	22:00	0	0	0	1	4	4	0	0	0	0	0	0	0	0	0	0	0	10	31-40	8
	23:00	0	0	0	1	0	1	4	1	0	0	0	0	0	0	0	0	0	6	28-37	5
	Total	5	14	23	95	236	206	46	14	1	2	0	0	0	0	0	0	0	642		
	Percent	0.8%	2.2%	3.6%	14.8%	36.8%	32.1%	7.2%	2.2%	0.2%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
	AM Peak	11:00	11:00	11:00	11:00	11:00	10:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00			
	Vol.	3	3	3	4	10	23	22	10	4	1	0	0	0	0	0	0	0	61		
	PM Peak Vol.	13:00	13:00	13:00	13:00	18:00	12:00	12:00	12:00	13:00	13:00	13:00	13:00	13:00	13:00	13:00	13:00	13:00	12:00		
		1	2	3	11	24	19	4	2	1	1	1	1	1	1	1	1	1	57		

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CAPACITY ANALYSIS PROCEDURES

CAPACITY ANALYSIS PROCEDURES

Intersections – Four methods of analysis are needed to evaluate different kinds of intersections. These methods are based on procedures found in the Sixth Edition of the Highway Capacity Manual 2016 and are described below.

Two-Way STOP-Controlled Intersections (TWSC)

One typical configuration is a four-leg intersection, where the major street is uncontrolled, while the minor street is controlled by STOP signs. The other typical configuration is a three-leg intersection, where the single minor-street approach is controlled by a STOP sign.

Theoretical Basic – Gap-acceptance models begin with the recognition that TWSC intersections give no positive indication or control to the driver on the minor street as to when it is appropriate to leave the stop line and enter the major street. The driver must determine when a gap on the major street is large enough to permit entry and when to enter, on the basis of the relative priority of the competing movements. This decision-making process has been formalized analytically into what is commonly known as gap-acceptance theory. Gap-acceptance theory includes three basic elements: the size and distribution (availability) of gaps on the major street, the usefulness of these gaps to the minor-street drivers, and the relative priority of the various movements at the intersection.

Critical Headway and Follow-Up Headway – The *critical headway* is defined as the minimum interval in the major street traffic stream that allows intersection entry for one minor-street vehicle. Thus, the driver's critical headway is the minimum headway that would be acceptable. Critical headway can be estimated on the basis of observations of the largest rejected and smallest accepted headway for a given intersection. The *follow-up headway* is defined as the time between the departure of one vehicle from the minor street and the departure of the next vehicle using the same major-street headway, under a condition of continuous queuing on the minor street.

Base Critical Headways for TWSC Intersections

VEHICLE MOVEMENT	BASE CRITICAL HEADWAY		
	Two Lanes	Four Lanes	Six Lanes
Left turn from major	4.1	4.1	5.3
U-turn from major	N/A	6.4 (wide) 6.9 (narrow)	5.6
Right turn from minor	6.2	6.9	7.1
Through traffic On major	1-stage:6.5 2-stage, stage I: 5.5 2-stage, Stage II: 5.5	1-stage:6.5 2-stage, stage I: 5.5 2-stage, Stage II: 5.5	1-stage:6.5* 2-stage, stage I: 5.5* 2-stage, Stage II: 5.5*
Left turn from minor	1-stage:7.1 2-stage, stage I: 6.1 2-stage, Stage II: 6.1	1-stage:7.5 2-stage, stage I: 6.5 2-stage, Stage II: 6.5	1-stage:6.4 2-stage, stage I: 7.3 2-stage, Stage II: 6.7

*Use caution; values estimated

Base Follow-up Headways for TWSC Intersections

VEHICLE MOVEMENT	BASE FOLLOW-UP HEADWAY		
	Two Lanes	Four Lanes	Six Lanes
Left turn from major	2.2	2.2	3.1
U-turn from major	N/A	2.5 (wide) 3.1 (narrow)	2.3
Right turn from minor	3.3	3.3	3.9
Through traffic on major	4.0	4.0	4.0
Left turn from minor	3.5	3.5	3.8

Level Of Service Criteria – LOS for a TWSC intersection is determined by the computed or measured control delay. For motor vehicles, LOS is determined for each minor-street movement (or shared movement) as well as major-street left turn. LOS is not defined for the intersection as a whole or for major-street approaches. LOS F is assigned to the movement if the volume-to-capacity ratio for the movement exceeds 1.0, regardless of the control delay.

Automobile Mode – The methodology applies to TWSC intersections with up to three lanes (either shared or exclusive) on the major-street approaches and up to three lanes on the minor-street

approaches (with no more than one exclusive lane for each movement on the minor-street approach). Effects from other intersections are accounted for only in situations in which a TWSC intersection is located on an urban street segment between coordinated signalized intersections. In this situation, the intersection can be analyzed by using the procedures in urban street segment.

Level-of Service Criteria for Automobile Mode

CONTROL DELAY (SECONDS PER VEHICLE)	LOS BY VOLUME-TO-CAPACITY RATIO	
	1.0	>1.0
0- 10	A	F
>10 to 15	B	F
>15 to 25	C	F
>25 to 35	D	F
>35 to 50	E	F
>50	F	F

Note: The LOS criteria apply to each lane on a given approach and to each approach on the minor street. LOS is not calculated for major-street approaches or for the intersection as a whole.

CAPACITY ANALYSIS WORKSHEETS

CAPACITY ANALYSIS WORKSHEETS

Existing Conditions

Intersection

Int Delay, s/veh	2.6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	4	3	4	4	4	4
Traffic Vol, veh/h	15	120	73	19	45	19
Future Vol, veh/h	15	120	73	19	45	19
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	27	5	8	21	4	5
Mvmt Flow	17	133	81	21	50	21

Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	102	0	-	0	259	92
Stage 1	-	-	-	-	92	-
Stage 2	-	-	-	-	167	-
Critical Hdwy	4.37	-	-	-	6.44	6.25
Critical Hdwy Stg 1	-	-	-	-	5.44	-
Critical Hdwy Stg 2	-	-	-	-	5.44	-
Follow-up Hdwy	2.443	-	-	-	3.536	3.345
Pot Cap-1 Maneuver	1348	-	-	-	726	957
Stage 1	-	-	-	-	927	-
Stage 2	-	-	-	-	858	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	1348	-	-	-	716	957
Mov Cap-2 Maneuver	-	-	-	-	716	-
Stage 1	-	-	-	-	914	-
Stage 2	-	-	-	-	858	-

Approach	EB	WB	SB			
HCM Control Delay, s	0.9	0	10.1			
HCM LOS			B			

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1348	-	-	-	774	
HCM Lane V/C Ratio	0.012	-	-	-	0.092	
HCM Control Delay (s)	7.7	0	-	-	10.1	
HCM Lane LOS	A	A	-	-	B	
HCM 95th %tile Q(veh)	0	-	-	-	0.3	

Intersection

Int Delay, s/Veh 1.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	Y		B		A	
Traffic Vol, veh/h	12	4	29	2	2	47
Future Vol, veh/h	12	4	29	2	2	47
Conflicting Peds, #/hr	0	0	0	1	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	17	2	24	50	50	2
Mvmt Flow	15	5	36	3	3	59

Major/Minor	Minor1	Major1	Major2	
Conflicting Flow All	104	39	0	40
Stage 1	39	-	-	-
Stage 2	65	-	-	-
Critical Hdwy	6.57	6.22	-	4.6
Critical Hdwy Stg 1	5.57	-	-	-
Critical Hdwy Stg 2	5.57	-	-	-
Follow-up Hdwy	3.653	3.318	-	2.65
Pot Cap-1 Maneuver	859	1033	-	1310
Stage 1	946	-	-	-
Stage 2	921	-	-	-
Platoon blocked, %				
Mov Cap-1 Maneuver	856	1032	-	1309
Mov Cap-2 Maneuver	856	-	-	-
Stage 1	945	-	-	-
Stage 2	919	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.1	0	0.3
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	894	1309	-
HCM Lane V/C Ratio	-	-	0.022	0.002	-
HCM Control Delay (s)	-	-	9.1	7.8	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection

Int Delay, s/veh	0					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	4	1	1	1	1	1
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	0

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	1	0	-
Stage 1	-	-	1
Stage 2	-	-	0
Critical Hdwy	4.12	-	-
Critical Hdwy Stg 1	-	-	5.42
Critical Hdwy Stg 2	-	-	5.42
Follow-up Hdwy	2.218	-	-
Pot Cap-1 Maneuver	1622	-	-
Stage 1	-	-	1022
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1622	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	1022
Stage 2	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1622	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	-	0
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-

Lanes, Volumes, Timings
3: Crooked Hill Road & North Highland Avenue

RESIDENTIAL DEVELOPMENT, ORANGETOWN NY
2021 EXISTING CONDITIONS, WEEKDAY P.M. PEAK HOUR

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	25	121	137	37	31	19
Future Volume (vph)	25	121	137	37	31	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	10	9	9	10	10
Grade (%)		0%	0%		0%	
Storage Length (ft)	0			0	0	0
Storage Lanes	0			0	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt			0.972		0.949	
Frt Protected		0.991			0.970	
Satd. Flow (prot)	0	1615	1501	0	1564	0
Frt Permitted		0.991			0.970	
Satd. Flow (perm)	0	1615	1501	0	1564	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		137	277		1932	
Travel Time (s)		3.1	6.3		43.9	
Confli. Peds. (#/hr)	2			2		1
Confli. Bikes (#/hr)						
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	27%	5%	8%	21%	4%	5%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)		0%	0%		0%	
Adj. Flow (vph)	27	129	146	39	33	20
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	156	185	0	53	0
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 31.2%
Analysis Period (min) 15

ICU Level of Service A

Lanes, Volumes, Timings
5: North Highland Avenue & Gatto Lane

RESIDENTIAL DEVELOPMENT, ORANGETOWN NY
2021 EXISTING CONDITIONS. WEEKDAY P.M. PEAK HOUR

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W	B	B			
Traffic Volume (vph)	5	5	48	8	2	49
Future Volume (vph)	5	5	48	8	2	49
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	9	9	10	10
Grade (%)	0%		0%			0%
Storage Length (ft)	0	0		0	0	
Storage Lanes	1	0		0	0	
Taper Length (ft)					25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt	0.932		0.980			
Frt Protected	0.976					0.998
Satd. Flow (prot)	1505	0	1616	0	0	1645
Frt Permitted	0.976					0.998
Satd. Flow (perm)	1505	0	1616	0	0	1645
Link Speed (mph)	30		30			30
Link Distance (ft)	498		1932			437
Travel Time (s)	11.3		43.9			9.9
Confl. Peds. (#/hr)				1	1	
Confl. Bikes (#/hr)						
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	20%	2%	4%	2%	50%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%		0%			0%
Adj. Flow (vph)	5	5	53	9	2	54
Shared Lane Traffic (%)						
Lane Group Flow (vph)	10	0	62	0	0	56
Sign Control	Stop		Free			Free

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 14.2%
Analysis Period (min) 15

ICU Level of Service A

Lanes, Volumes, Timings
7: Gallo Lane

RESIDENTIAL DEVELOPMENT, ORANGETOWN NY
2021 EXISTING CONDITIONS, WEEKDAY P.M. PEAK HOUR

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	0	0	0
Future Volume (vph)	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	10	10	10	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	0			0	0	0
Storage Lanes	0			0	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor						
Frt						
Flt Protected						
Satd. Flow (prot)	0	1739	1739	0	1863	0
Flt Permitted						
Satd. Flow (perm)	0	1739	1739	0	1863	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		256	374		298	
Travel Time (s)		5.8	8.5		6.8	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)		0%	0%		0%	
Adj. Flow (vph)	0	0	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 0.0%
Analysis Period (min) 15

ICU Level of Service A

CAPACITY ANALYSIS WORKSHEETS

No-Build Conditions
With Anticipated
Development

Intersection

Int Delay, s/veh	2.8					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	4	1			4	
Traffic Vol, veh/h	16	121	73	20	49	21
Future Vol, veh/h	16	121	73	20	49	21
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	27	5	8	21	4	5
Mvmt Flow	18	134	81	22	54	23

Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	103	0	-	0	262	92
Stage 1	-	-	-	-	92	-
Stage 2	-	-	-	-	170	-
Critical Hdwy	4.37	-	-	-	6.44	6.25
Critical Hdwy Stg 1	-	-	-	-	5.44	-
Critical Hdwy Stg 2	-	-	-	-	5.44	-
Follow-up Hdwy	2.443	-	-	-	3.536	3.345
Pot Cap-1 Maneuver	1346	-	-	-	723	957
Stage 1	-	-	-	-	927	-
Stage 2	-	-	-	-	855	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	1346	-	-	-	713	957
Mov Cap-2 Maneuver	-	-	-	-	713	-
Stage 1	-	-	-	-	914	-
Stage 2	-	-	-	-	855	-

Approach	EB	WB	SB			
HCM Control Delay, s	0.9	0	10.2			
HCM LOS			B			

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1346	-	-	-	772	
HCM Lane V/C Ratio	0.013	-	-	-	0.101	
HCM Control Delay (s)	7.7	0	-	-	10.2	
HCM Lane LOS	A	A	-	-	B	
HCM 95th %tile Q(veh)	0	-	-	-	0.3	

Intersection

Int Delay, s/veh 2.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	7	1	1	1	1	1
Traffic Vol, veh/h	18	6	29	4	3	47
Future Vol, veh/h	18	6	29	4	3	47
Conflicting Peds, #/hr	0	0	0	1	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	17	2	24	50	50	2
Mvmt Flow	23	8	36	5	4	59

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	107	40	0
Stage 1	40	-	-
Stage 2	67	-	-
Critical Hdwy	6.57	6.22	-
Critical Hdwy Stg 1	5.57	-	-
Critical Hdwy Stg 2	5.57	-	-
Follow-up Hdwy	3.653	3.318	-
Pot Cap-1 Maneuver	855	1031	-
Stage 1	945	-	-
Stage 2	919	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	852	1030	-
Mov Cap-2 Maneuver	852	-	-
Stage 1	944	-	-
Stage 2	916	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.2	0	0.5
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	890	1307
HCM Lane V/C Ratio	-	-	0.034	0.003
HCM Control Delay (s)	-	-	9.2	7.8
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0

Intersection

Int Delay, s/veh 2.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	3	4	16	0	0	8
Future Vol, veh/h	3	4	16	0	0	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	4	17	0	0	9

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	17	0	-	0	27
Stage 1	-	-	-	-	17
Stage 2	-	-	-	-	10
Critical Hdwy	4.12	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	3.518	3.318
Pot Cap-1 Maneuver	1600	-	-	986	1062
Stage 1	-	-	-	1006	-
Stage 2	-	-	-	1013	-
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	1600	-	-	986	1062
Mov Cap-2 Maneuver	-	-	-	986	-
Stage 1	-	-	-	1004	-
Stage 2	-	-	-	1013	-

Approach	EB	WB	SB
HCM Control Delay, s	3.1	0	8.4
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1600	-	-	-	1062
HCM Lane V/C Ratio	0.002	-	-	-	0.008
HCM Control Delay (s)	7.3	0	-	-	8.4
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection**Int Delay, s/veh****2**

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	27	122	138	40	33	20
Future Vol, veh/h	27	122	138	40	33	20
Conflicting Peds, #/hr	2	0	0	2	0	1
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	27	5	8	21	4	5
Mvmt Flow	29	130	147	43	35	21

Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	192	0	-	0	359	172
Stage 1	-	-	-	-	171	-
Stage 2	-	-	-	-	188	-
Critical Hdwy	4.37	-	-	-	6.44	6.25
Critical Hdwy Stg 1	-	-	-	-	5.44	-
Critical Hdwy Stg 2	-	-	-	-	5.44	-
Follow-up Hdwy	2.443	-	-	-	3.536	3.345
Pot Cap-1 Maneuver	1245	-	-	-	636	864
Stage 1	-	-	-	-	854	-
Stage 2	-	-	-	-	839	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	1243	-	-	-	618	862
Mov Cap-2 Maneuver	-	-	-	-	618	-
Stage 1	-	-	-	-	831	-
Stage 2	-	-	-	-	837	-

Approach	EB	WB	SB
HCM Control Delay, s	1.4	0	10.7
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1243	-	-	-	692
HCM Lane V/C Ratio	0.023	-	-	-	0.081
HCM Control Delay (s)	8	0	-	-	10.7
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.3

HCM 6th TWSC

5: North Highland Avenue & Gatto Lane

RESIDENTIAL DEVELOPMENT, ORANGETOWN NY

2022 NO-BUILD W/ANTICIPATED DEVELOPMENTS, WEEKDAY P.M. PEAK HOUR

Intersection

Int Delay, s/veh 1.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		1		4	
Traffic Vol, veh/h	8	6	48	13	3	49
Future Vol, veh/h	8	6	48	13	3	49
Conflicting Peds, #/hr	0	0	0	1	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	20	2	4	2	50	6
Mvmt Flow	9	7	53	14	3	54

Major/Minor	Minor1	Major1	Major2	
Conflicting Flow All	121	61	0	0
Stage 1	61	-	-	-
Stage 2	60	-	-	-
Critical Hdwy	6.6	6.22	-	4.6
Critical Hdwy Stg 1	5.6	-	-	-
Critical Hdwy Stg 2	5.6	-	-	-
Follow-up Hdwy	3.68	3.318	-	2.65
Pot Cap-1 Maneuver	833	1004	-	1277
Stage 1	918	-	-	-
Stage 2	919	-	-	-
Platoon blocked, %	-	-	-	-
Mov Cap-1 Maneuver	831	1003	-	1276
Mov Cap-2 Maneuver	831	-	-	-
Stage 1	917	-	-	-
Stage 2	917	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.1	0	0.5
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	897	1276	-
HCM Lane V/C Ratio	-	0.017	0.003	-
HCM Control Delay (s)	-	9.1	7.8	0
HCM Lane LOS	-	A	A	A
HCM 95th %tile Q(veh)	-	0.1	0	-

Intersection

Int Delay, s/veh	2.6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	6	10	10	0	0	4
Future Vol, veh/h	6	10	10	0	0	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	11	11	0	0	4

Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	11	0	-	0	36	11
Stage 1	-	-	-	-	11	-
Stage 2	-	-	-	-	25	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1608	-	-	-	977	1070
Stage 1	-	-	-	-	1012	-
Stage 2	-	-	-	-	998	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	1608	-	-	-	973	1070
Mov Cap-2 Maneuver	-	-	-	-	973	-
Stage 1	-	-	-	-	1008	-
Stage 2	-	-	-	-	998	-

Approach	EB	WB	SB			
HCM Control Delay, s	2.7	0	8.4			
HCM LOS			A			

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1608	-	-	-	1070	
HCM Lane V/C Ratio	0.004	-	-	-	0.004	
HCM Control Delay (s)	7.2	0	-	-	8.4	
HCM Lane LOS	A	A	-	-	A	
HCM 95th %tile Q(veh)	0	-	-	-	0	

CAPACITY ANALYSIS WORKSHEETS

Build Conditions

Intersection

Int Delay, s/veh 2.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	4	1	1	1	1	1
Traffic Vol, veh/h	16	121	73	20	47	21
Future Vol, veh/h	16	121	73	20	47	21
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	27	5	8	21	4	5
Mvmt Flow	18	134	81	22	52	23

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	103	0	-	0	262
Stage 1	-	-	-	-	92
Stage 2	-	-	-	-	170
Critical Hdwy	4.37	-	-	6.44	6.25
Critical Hdwy Stg 1	-	-	-	5.44	-
Critical Hdwy Stg 2	-	-	-	5.44	-
Follow-up Hdwy	2.443	-	-	3.536	3.345
Pot Cap-1 Maneuver	1346	-	-	723	957
Stage 1	-	-	-	927	-
Stage 2	-	-	-	855	-
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	1346	-	-	713	957
Mov Cap-2 Maneuver	-	-	-	713	-
Stage 1	-	-	-	914	-
Stage 2	-	-	-	855	-

Approach	EB	WB	SB
HCM Control Delay, s	0.9	0	10.2
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1346	-	-	-	774
HCM Lane V/C Ratio	0.013	-	-	-	0.098
HCM Control Delay (s)	7.7	0	-	-	10.2
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.3

Intersection

Int Delay, s/veh 2.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	1	1	2	1	1	1
Traffic Vol, veh/h	16	5	29	4	3	47
Future Vol, veh/h	16	5	29	4	3	47
Conflicting Peds, #/hr	0	0	0	1	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	17	2	24	50	50	2
Mvmt Flow	20	6	36	5	4	59

Major/Minor	Minor1	Major1	Major2	
Conflicting Flow All	107	40	0	0 42 0
Stage 1	40	-	-	- - -
Stage 2	67	-	-	- - -
Critical Hdwy	6.57	6.22	-	4.6 -
Critical Hdwy Stg 1	5.57	-	-	- -
Critical Hdwy Stg 2	5.57	-	-	- -
Follow-up Hdwy	3.653	3.318	-	2.65 -
Pot Cap-1 Maneuver	855	1031	-	1308 -
Stage 1	945	-	-	- - -
Stage 2	919	-	-	- - -
Platoon blocked, %		-	-	-
Mov Cap-1 Maneuver	852	1030	-	1307 -
Mov Cap-2 Maneuver	852	-	-	- -
Stage 1	944	-	-	- - -
Stage 2	916	-	-	- - -

Approach	WB	NB	SB
HCM Control Delay, s	9.2	0	0.5
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBL	N1	SBL	SBT
Capacity (veh/h)	-	-	889	1307	-	-
HCM Lane V/C Ratio	-	-	0.03	0.003	-	-
HCM Control Delay (s)	-	-	9.2	7.8	0	-
HCM Lane LOS	-	-	A	A	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0	-	-

Intersection

Int Delay, s/veh 2.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	4	3	4	4	4	4
Traffic Vol, veh/h	3	4	16	0	0	5
Future Vol, veh/h	3	4	16	0	0	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	4	17	0	0	5

Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	17	0	-	0	27	17
Stage 1	-	-	-	-	17	-
Stage 2	-	-	-	-	10	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1600	-	-	-	988	1062
Stage 1	-	-	-	-	1006	-
Stage 2	-	-	-	-	1013	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	1600	-	-	-	986	1062
Mov Cap-2 Maneuver	-	-	-	-	986	-
Stage 1	-	-	-	-	1004	-
Stage 2	-	-	-	-	1013	-

Approach	EB	WB	SB			
HCM Control Delay, s	3.1	0	8.4			
HCM LOS			A			

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBR
Capacity (veh/h)	1600	-	-	-	1062	-
HCM Lane V/C Ratio	0.002	-	-	-	0.005	-
HCM Control Delay (s)	7.3	0	-	-	8.4	-
HCM Lane LOS	A	A	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	-	0	-

Intersection

Int Delay, s/veh 2.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↖ ↗			↘ ↗	
Traffic Vol, veh/h	27	122	138	40	33	21
Future Vol, veh/h	27	122	138	40	33	21
Conflicting Peds, #/hr	2	0	0	2	0	1
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	27	5	8	21	4	5
Mvmt Flow	29	130	147	43	35	22

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	192	0	-
Stage 1	-	-	171
Stage 2	-	-	188
Critical Hdwy	4.37	-	-
6.44			6.25
Critical Hdwy Stg 1	-	-	5.44
Critical Hdwy Stg 2	-	-	5.44
Follow-up Hdwy	2,443	-	-
3,536			3,345
Pot Cap-1 Maneuver	1245	-	-
Stage 1	-	-	854
Stage 2	-	-	839
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1243	-	-
618			862
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	831
Stage 2	-	-	837

Approach	EB	WB	SB
HCM Control Delay, s	1.4	0	10.7
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1243	-	-	-	694
HCM Lane V/C Ratio	0.023	-	-	-	0.083
HCM Control Delay (s)	8	0	-	-	10.7
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.3

HCM 6th TWSC
5: North Highland Avenue & Gatto Lane

RESIDENTIAL DEVELOPMENT, ORANGETOWN NY
2022 BUILD CONDITIONS, WEEKDAY P.M. PEAK HOUR

Intersection

Int Delay, s/veh 1.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	Y		Y		Y	
Traffic Vol, veh/h	9	6	48	13	4	49
Future Vol, veh/h	9	6	48	13	4	49
Conflicting Peds, #/hr	0	0	0	1	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	20	2	4	2	50	6
Mvmt Flow	10	7	53	14	4	54

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	123	61	0
Stage 1	61	-	-
Stage 2	62	-	-
Critical Hdwy	6.6	6.22	-
Critical Hdwy Stg 1	5.6	-	-
Critical Hdwy Stg 2	5.6	-	-
Follow-up Hdwy	3.68	3.318	-
Pot Cap-1 Maneuver	831	1004	-
Stage 1	918	-	-
Stage 2	917	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	828	1003	-
Mov Cap-2 Maneuver	828	-	-
Stage 1	917	-	-
Stage 2	914	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.1	0	0.6
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	890	1276	-
HCM Lane V/C Ratio	-	-	0.019	0.003	-
HCM Control Delay (s)	-	-	9.1	7.8	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection

Int Delay, s/veh 2.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	4	3	1	1	1	1
Traffic Vol, veh/h	7	10	10	0	0	5
Future Vol, veh/h	7	10	10	0	0	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	11	11	0	0	5

Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	11	0	-	0	38	11
Stage 1	-	-	-	-	11	-
Stage 2	-	-	-	-	27	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1608	-	-	-	974	1070
Stage 1	-	-	-	-	1012	-
Stage 2	-	-	-	-	996	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	1608	-	-	-	969	1070
Mov Cap-2 Maneuver	-	-	-	-	969	-
Stage 1	-	-	-	-	1007	-
Stage 2	-	-	-	-	996	-

Approach	EB	WB	SB
HCM Control Delay, s	3	0	8.4
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1608	-	-	-	1070
HCM Lane V/C Ratio	0.005	-	-	-	0.005
HCM Control Delay (s)	7.2	0	-	-	8.4
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

Cheryl Coopersmith

From: Cheryl Coopersmith
Sent: Wednesday, June 16, 2021 8:54 AM
To: 'Marissa Tarallo'
Cc: Jane Slavin
Subject: Toll Brothers Site, Town of Orangetown
Attachments: F5103.00 - Gatto Lane, Orangetown - Final 5-2021.pdf; April 27, 2021 Town Board Resolution #173.pdf; 68.07-2-1 Toll Bro. signed AKRF contract.pdf

Marissa,

Attached please find a Traffic Report for the Toll Brothers site, prepared by the applicant's consultant, Hardesty & Hanover. In accordance with Town Board Resolution #173 (see pages 2 and 3 of attachment #2), the Town Board requested "the Planning Board for its comment on the proposed zone change and PAC Designation, including review by a professional planner for their review and comment, and..."

At this time, please initiate the review on the Toll Brothers site in accordance with the Town Board Resolution and the signed AKRF contract, attached.

Any questions or comments, please feel free to contact either Jane Slavin or myself.

Thank you,
Cheryl