

TRAFFIC IMPACT STUDY

FOR

THE VILLAGE AT PINE VALLEY ROAD

Hall County, GA

Prepared For:
Cook Development
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September 10, 2021

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EXECUTIVE SUMMARY

A traffic impact study was conducted by Southeastern Engineering, Inc. for the proposed residential development, The Village at Pine Valley Road in Hall County, GA. The development will be built on approximately 12 acres of undeveloped land, located along Pine Valley Road. The development will include no more than 274 townhomes, and will create a new access driveway along Pine Valley Road. The build-out of the development is planned for 2029. The existing study intersection include SR 284/Clarks Bridge Road at Pine Valley Road and White Sulphur Road at Pine Valley Road.

The ITE Trip Generation Manual, referenced to estimate the trips generated by the land use to calculate the total gross trips expected to be generated from the residential development. The expected trips were added to the expected future volumes to analyze the delay and level of service at the study intersections in build condition and compare to the existing and no-build conditions.

In the existing conditions the intersection of White Sulphur Road at Pine Valley Road operates at an acceptable level of service. In the future no-build scenario both existing, study intersections operate at an unacceptable level of service prior to the development traffic. With the addition of the development traffic the study intersections are expected to continue to operate at an unacceptable level of service, but the new driveway on Pine Valley Road will operate at an acceptable level of service.

The geometry and method of control for the new access driveway intersection on Pine Valley Road was determined utilizing Hall County's auxiliary lane requirements. Improvements at the adjacent study intersections were analyzed based on feasible options and in compliance with GDOT's ICE policy at intersections including a state route. The following roadway network improvements are recommended to accommodate the development traffic:

Pine Valley Road at Access Driveway

- The new driveway should be two lanes, one entry and one exit lane.
- The access driveway should be controlled with stop sign controlled.
- A deceleration lane should be provided on the Pine Valley Road southbound approach.

White Sulphur Road at Pine Valley Road

- Provide a channelized right turn lane on Pine Valley Road southbound at the intersection. The lane is recommended to be have at least 200 feet of storage.

SR 284/Clarks Bridge Road at Pine Valley Road

- Provide a channelized right turn lane on Pine Valley Road northbound at the intersection. The lane is recommended to be have at least 200 feet of storage.



INTRODUCTION

A traffic impact study was conducted by Southeastern Engineering, Inc. for the proposed residential development, The Village at Pine Valley Road in Hall County, GA. The development will be built on approximately 12 acres of undeveloped land, located along Pine Valley Road. The development will be adjacent the existing Smith Creek Subdivision and will include no more than 274 townhomes, and will create a new access driveway along Pine Valley Road. The build-out of the development is planned for 2029. An overall location map showing the area near the site location is shown in **Figure 1**.



Figure 1 Location Map

This study will identify the potential impacts of the proposed residential development traffic on the surrounding roadway network. The study includes the existing and future peak hour traffic operations and capacity analysis for the study intersections. As necessary, operational improvements will be identified and analyzed to mitigate the traffic impacts caused by the development. Based on the results of the analysis for the study intersections, recommendations will be made for intersection geometry and control methods.



PROJECT DESCRIPTION

The Village at Pine Valley Road will include no more than 274 townhomes, and it will be built on approximately 12 acres of undeveloped land in Hall County, GA. The proposed development will create one new access driveway on Pine Valley Road. This study analyzes the traffic impact upon full build-out of the development, which is planned in 2029. The site layout plan is included in **Appendix A**.

Study Network

The traffic study analyzes the current traffic operations for the intersections in the vicinity of the proposed development. Capacity analysis and level of service evaluations of the study intersections were conducted for the existing, future no-build, and future build scenarios. The study intersections and their control type are listed below:

- | | |
|---|--------------------|
| • SR 284 / Clarks Bridge Road at Pine Valley Road | Minor Street Stop |
| • White Sulphur Road at Pine Valley Road | Minor Street Stop |
| • Pine Valley Road at Access Driveway | (New Intersection) |

Roadway Conditions

The roadway network adjacent to the development was examined to evaluate the existing roadway conditions. The existing roadway network is described below. An aerial of the study area is shown in **Figure 2**.

Pine Valley Road

Pine Valley Road is a two-lane roadway. It is classified as a local road, with a posted speed limit of 35 miles per hour. It connects to Clarks Bridge Road in the north and White Sulphur Road in the south. There is no curb and gutter or sidewalk present throughout its length in the study area.

White Sulphur Road

White Sulphur Road is a two-lane roadway. It is classified as a minor arterial, with a posted speed limit of 45 miles per hour. It connects to Howard Road in the north and Beverly Road in the south. There is no curb and gutter or sidewalk present throughout its length in the study area.

SR 284 / Clarks Bridge Road

SR 284 / Clarks Bridge Road is a two-lane roadway. It is classified as a minor arterial, with a posted speed limit of 35 miles per hour. It connects to SR 52 / Brookton Lula Rd in the north and SR 11 / US 129 / Limestone Parkway in the south. There is no curb and gutter or sidewalk present throughout its length in the study area.





Figure 2 Aerial of Study Area

EXISTING TRAFFIC CONDITIONS

This traffic impact study analyzes the current traffic operations in the study network. Capacity analysis and level of service evaluations of the study intersections were conducted for the existing and future no-build conditions without the proposed development.

Existing Traffic Data Collection

Existing traffic volumes were collected on Tuesday, August 24, 2021. Peak hour turning movement counts were collected at the study intersections, and daily traffic volumes were collected on primary roadways near the development. Pine Valley Road had an average daily volume of approximately 4,344 vehicles per day (vpd). The collected traffic counts were used to determine the traffic distribution and analyze existing and future conditions within the study network. Existing traffic counts are attached in **Appendix B**. The existing AM and PM peak hour traffic volumes for the study area are shown in **Figure 3**.



Historical Growth Rate

A growth rate for the study area was calculated using annual volume statistics from GDOT's Traffic Analysis & Data Application and Hall County census data. The growth rate calculated using the GDOT's historical traffic data is summarized in **Table 1**. Historical counts and calculations from the station are attached in **Appendix C**.

Table 1: GDOT Historical Growth Rate

Station	Location	5 Year	10 Year
139-0365	US 284 / Clarks Bridge Rd E/O Cleveland Highway	1.6%	1.6%
139-0767	Limestone Parkway N/O US 284 Clarks Bridge Rd	-4.7%	1.5%
139-0338	Beverley Rd W/o White Sulphur Rd	6.6%	4.9%
139-0536	White Sulphur Rd N/O Ramsey Circle	-1.0%	2.5%
139-0367	US 284 / Clarks Bridge Rd N/O Parks Rd	7.2%	2.9%
Averages		2.0%	2.7%
Weighted Average		2.3%	

Hall County census data obtained from the U.S. Census Bureau and the Georgia Governor's Office of Planning and Budget was used to calculate the growth rate for the study area. County census data and estimated growth rate are shown in **Table 2**.

Table 2: Georgia Governor's Office of Planning and Budget Annual Population Estimates

Geographic Area	Average 5-Year Growth Rate from 2020 to 2050						
	2020-2025	2025-2030	2030-2035	2035-2040	2040-2045	2045-2050	Average
Hall County	1.5%	1.2%	1.1%	1.0%	1.0%	1.0%	1.1%
Average 10-Year Growth Rate from 2020 to 2050							
Hall County	2020-2030		2030-2040		2040-2050		Average
	1.2%		1.2%		1.1%		1.2%

Census data from the U.S. Census Bureau was used to calculate a growth rate for Hall County. Growth rate estimated using the U.S. Census Bureau data is shown in **Table 3**. Census data from both the U.S. Census Bureau and Georgia Governor's Office of Planning and Budget is attached in **Appendix C**.



Table 3: U.S. Census Bureau Annual Estimates of the Resident Population

Geographic Area	2010 Census	2010 Estimate Base	2019 Population Estimate	2010 to 2019 Estimated Growth Rate
Hall County	179,684	179,724	204,441	1.6%
City of Gainesville	33,804	34,035	43,232	3.0%
Weighted Average				2.0%

The overall project growth rate for this project was calculated averaging different sources, and an average growth rate of 2.0% was used for the study.

The effect of COVID-19 was taken into consideration for this project. The traffic volumes for SR 284 and White Sulphur Road collected in August 2021 were compared to historical 2018 and 2019 traffic volumes from GDOT count stations located in the study area. The historical traffic volumes were projected out to the existing year (2021) using the 2.0% project calculated growth rate and were compared to the collected traffic volumes to determine a traffic adjustment factor for the collected data, if needed. The COVID-19 factor of 1.00 was calculated based on the projected versus field collected volumes, so no COVID-19 adjustment factor was applied to volumes for this project. The volume comparison is summarized in **Table 4**.

Table 4: Traffic Volume Comparison

Location (TADA Station ID)	Historical 24-Hr Volume		Projected 24-Hr Volume (2021)	24-Hr Field Volume (2021)
	2019	2018		
White Sulphur Rd N/O Ramsey Circle (139-0536)		4,277	4,542	4,344
SR 284/Clarks Bridge Rd N/O Parks Rd (139-0367)	8,128		8,461	8,827

Level of Service Methodology

Intersection capacity analyses were performed using the methodology outlined in the Highway Capacity Manual, 6th Edition (HCM). This methodology is the industry standard for the evaluation of intersection capacity and delay. To facilitate the analysis, the computer software Synchro was used. This software conforms to the methodology of the HCM.

An analysis of peak hour traffic conditions was performed to determine the level of service (LOS) at the study intersections. LOS for an intersection is based on vehicular delay at the intersection and is a typical measure of effectiveness used to evaluate intersection operations. The HCM provides ranges of delay for each LOS definition, spanning from very minimal delays (LOS A) to high delays (LOS F). LOS F is considered unacceptable for most drivers.

For unsignalized intersections, where a stop signs controls side streets or minor streets, the criterion for evaluating traffic operations is the LOS for the controlled turning movements at the intersection. Methodology from the HCM to determine the delay and LOS for these turning movements is based on the following input data: intersection geometry, lane configuration, and turning movement volumes. **Table 5** indicates the relationship between delay and LOS for unsignalized intersections.



Table 5: Level of Service for Unsignalized Intersections	
Level of Service	Control Delay Per Vehicle (sec)
	Unsignalized Intersection
A	≤10
B	>10 and ≤15
C	>15 and ≤25
D	>25 and ≤35
E	>35 and ≤50
F	>50

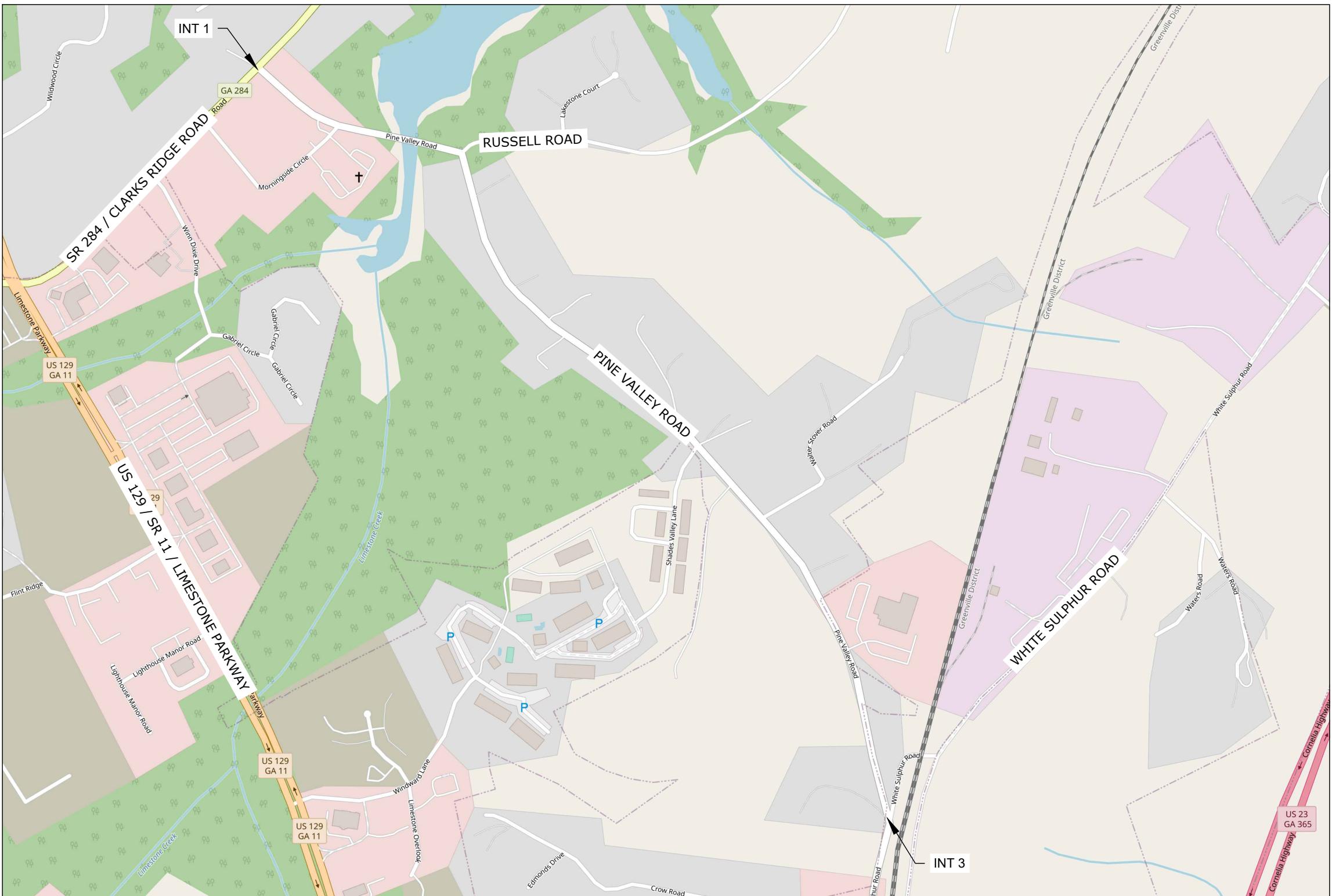
Existing Level of Service

The level of service for the existing conditions was determined using Synchro 10, which follows the HCM methodology. The existing geometric configurations and intersection controls were used for the analysis. Pine Valley Road at White Sulphur Road operates at an unacceptable level of service, LOS F, during the PM peak in the existing conditions. The results of the existing intersection capacity analysis are summarized in **Table 6** and detailed reports are included in **Appendix D**.

Table 6: Level of Service and Delay for Existing Year (2021)			
Intersection	Control Type	Delay (LOS)	
		AM	PM
SR 284/ Clarks Bridge Road at Pine Valley Road	Minor Street Stop	22 (C)	25 (D)
White Sulphur Road at Pine Valley Road	Minor Street Stop	20 (C)	69 (F)



JURISDICTION	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
HALL COUNTY	1193-21-176		



Legend: AM (PM)

PROPERTY AND EX. R/W LINE	R	STORM LINE	E
REQUIRED R/W LINE	- - -	TELEPHONE LINE	T
CONSTRUCTION LIMITS	- - -	OH POWER LINE	O
PERMANENT EASEMENT FOR MAINTENANCE	/ / /	UG POWER LINE	U
TEMPORARY EASEMENT FOR CONSTRUCTION	/ / /	WATER LINE	W
EASEMENT FOR CONSTRUCTION OF DRIVEWAYS	x x x	FIBER OPTIC LINE	F
PERMANENT DRAINAGE EASEMENT	* * *	GAS LINE	G
		SANITARY SEWER LINE	S
		LIGHTING CONDUIT	L
		RETAINING WALL	R
		LIMIT OF DISTURBANCE	D

FIGURE 3



EXISTING (2021) PEAK HOUR VOLUMES

REVISION DATES	

THE VILLAGE
AT
PINE VALLEY ROAD

SHEET NO.

FUTURE CONDITIONS – WITHOUT THE PROPOSED DEVELOPMENT (NO - BUILD)

The impact of the proposed development on the roadway network was analyzed and evaluated in the future year (2029) without the proposed development (No-Build) to compare the future conditions with the proposed fully constructed development (Build).

Future No - Build Traffic Volumes

The future background traffic volumes (2029) were calculated by applying the annual exponential growth rate over eight years to the existing background traffic volumes (2021). Future no-build background traffic volume is shown in **Figure 4**.

Future No - Build Level of Service

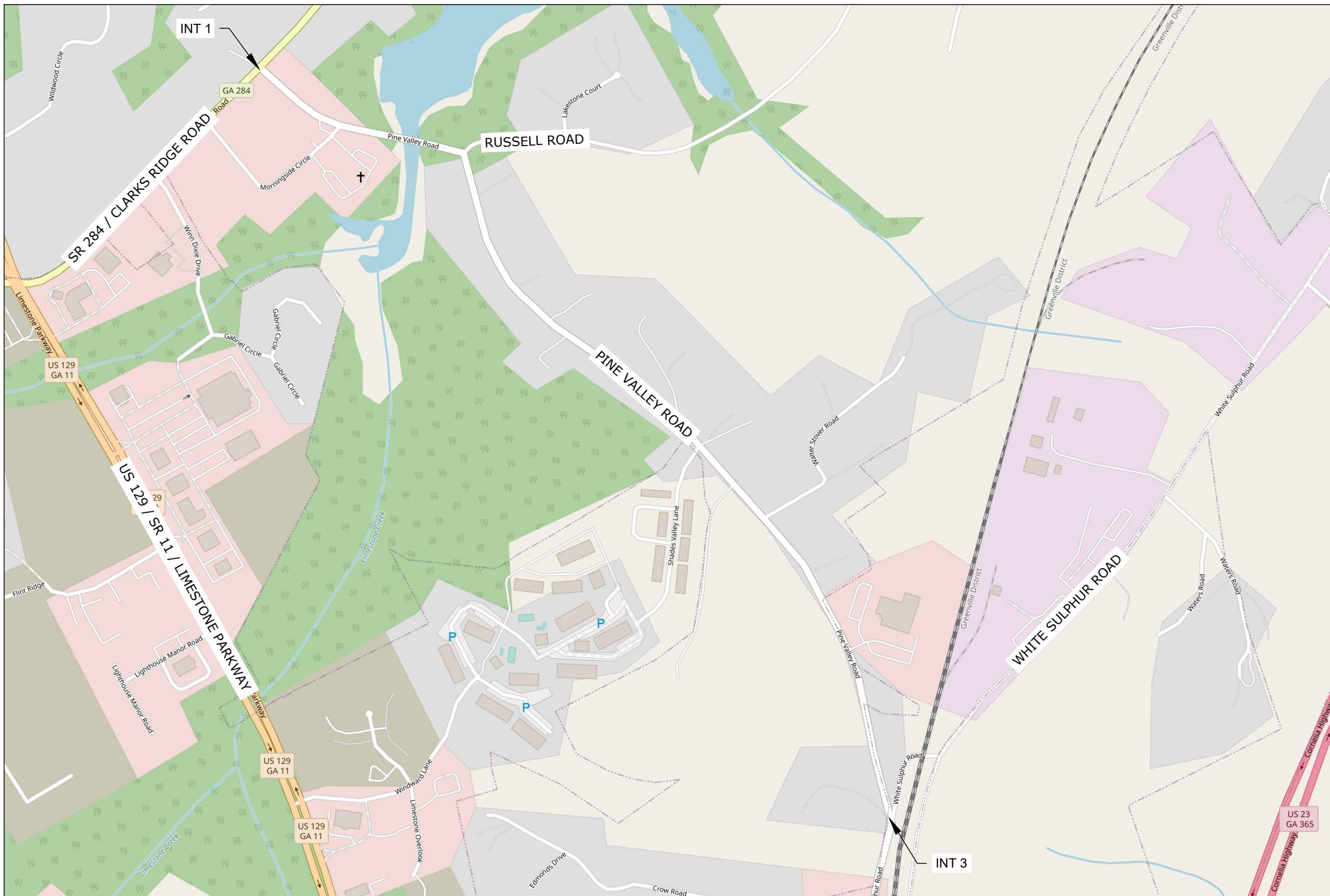
The future 2029 background traffic volumes were used to analyze the future no-build level of service for the study intersections. The same LOS methodology discussed previously was applied to the 2029 background traffic to determine operations at the study intersections. Both study intersections SR 284/Clarks Bridge Road at Pine Valley Road and White Sulphur Road at Pine Valley Road are expected to operate unacceptably in the future no-build scenario. **Table 7** summarizes the results of the intersection capacity analysis for the future no-build year. Detailed results are attached in **Appendix D**.

Table 7: Future No - Build Level of Service

Intersection	Control Type	Delay (LOS)	
		AM	PM
SR 284/ Clarks Bridge Road at Pine Valley Road	Minor Street Stop	36 (E)	53 (F)
White Sulphur Road at Pine Valley Road	Minor Street Stop	21 (C)	252 (F)



JURISDICTION	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
HALL COUNTY	1193-21-176		



Legend: AM (PM)

PROPERTY AND EX. R/W LINE	R	STORM LINE	T
REQUIRED R/W LINE	- - - - -	TELEPHONE LINE	- - - - -
CONSTRUCTION LIMITS	- - - - -	OH POWER LINE	- - - - -
PERMANENT EASEMENT FOR MAINTENANCE	/ / / / /	UG POWER LINE	- - - - -
TEMPORARY EASEMENT FOR CONSTRUCTION	/ / / / /	WATER LINE	- - - - -
EASEMENT FOR CONSTRUCTION OF DRIVEWAYS	XXXXXX	FIBER OPTIC LINE	- - - - -
PERMANENT DRAINAGE EASEMENT	* * * * *	GAS LINE	- - - - -
		SANITARY SEWER LINE	- - - - -
		LIGHTING CONDUIT	- - - - -
		RETAINING WALL	- - - - -
		LIMIT OF DISTURBANCE	- - - - -

FIGURE 4



NO-BUILD (2029) PEAK HOUR VOLUMES

REVISION DATES	

DATE:
**THE VILLAGE
AT
PINE VALLEY ROAD**

SHEET NO.

PROPOSED DEVELOPMENT

The Village at Pine Valley Road will include approximately 274 townhomes and will create one new access driveway on Pine Valley Road.

Trip Generation

The number of trips expected to be generated from the development was estimated based on the method defined in the Institute of Transportation Engineers (ITE) Trip Generation Manual, 10th Edition. Due to land use of the development, it was assumed that there will be no internal trips.

The trip generation for the development is summarized in **Table 8**. The trip generation report is attached in **Appendix E**.

Table 8: Proposed Site Trip Generation

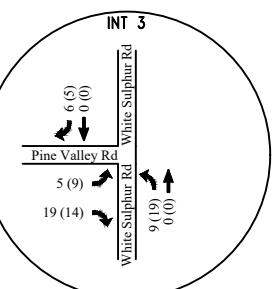
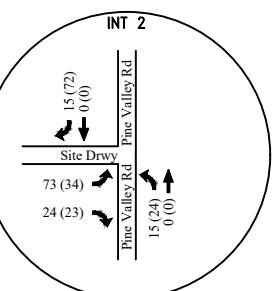
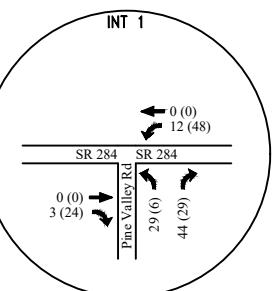
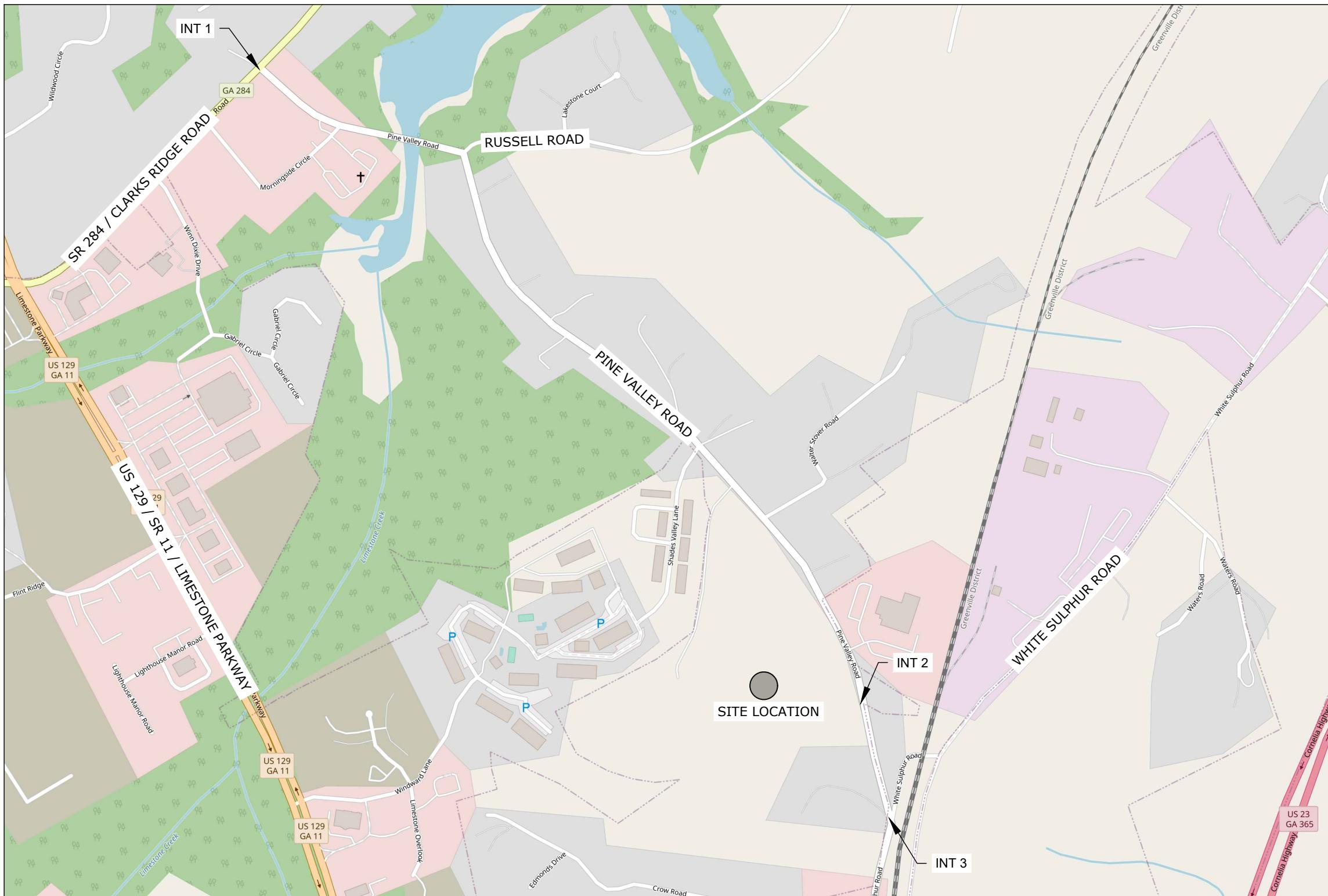
Land Use (ITE Code)	Unit of Measure	Daily Traffic			AM Peak Hour			PM Peak Hour		
		Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total
Multifamily Housing (Low-Rise) (220)	274 Units	1003	1003	2006	29	97	126	96	57	153
Unadjusted Volume	-	1003	1003	2006	29	97	126	96	57	153
Pass-By Trips	-	0	0	0	0	0	0	0	0	0
Total new trips	-	1003	1003	2006	29	97	126	96	57	153

Trip Distribution and Assignment

The trips expected to be generated from the proposed development were distributed on the roadway network in the study area. The proposed distribution is based on historical counts and observed traffic patterns in the area. Trip assignment for the trips generated from the proposed development is shown in **Figure 5**.



JURISDICTION	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
HALL COUNTY	1193-21-176		



Legend: AM (PM)

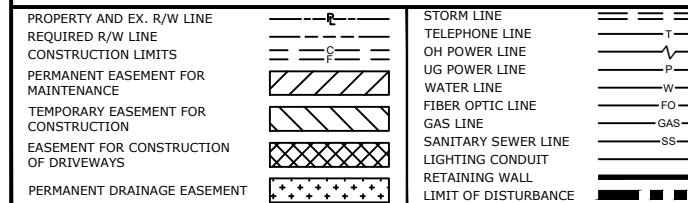


FIGURE 5



SITE GENERATED PEAK HOUR TRIPS

REVISION DATES	

THE VILLAGE
AT
PINE VALLEY ROAD

SHEET NO.

Auxiliary Lane Analysis

Hall County requirements for auxiliary lanes were reviewed to determine if a deceleration lane and/or a left turn lane should be provided at the development's new access driveway. Future build traffic volume with the development traffic is shown in **Figure 6**.

Hall County requires subdivisions with greater than 24 lots have a deceleration lane constructed in accordance with current Hall County Engineering and Traffic Engineering specifications. The Village at Pine Valley Road will include approximately 274 townhome residential units, which is above the County's 24 lot threshold, so a deceleration lane will be required at the new access driveway on Pine Valley Road.

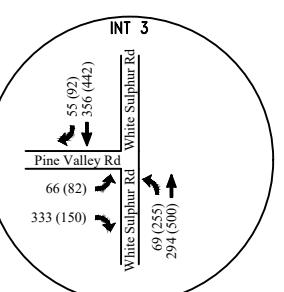
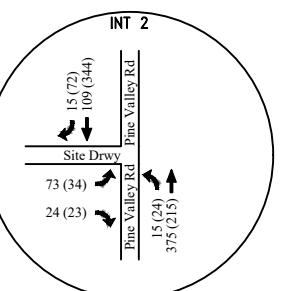
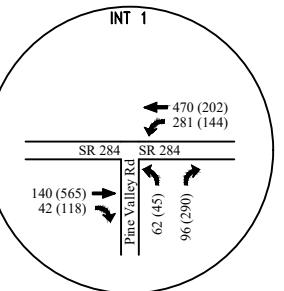
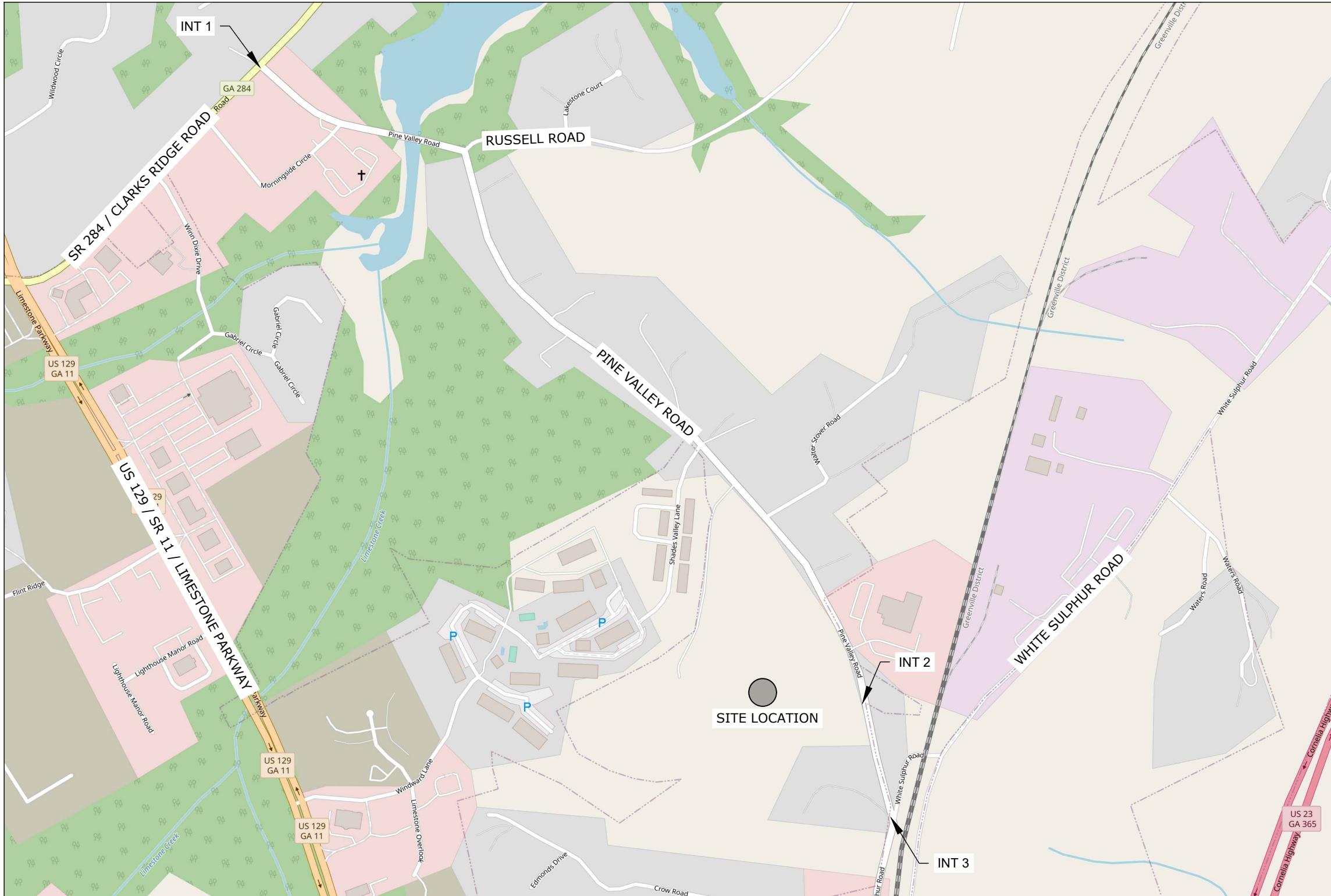
Hall County requires left-turn lanes be constructed in accordance with current Hall County Engineering and Traffic Engineering specifications when warranted by the following **Table 9**. Pine Valley Road with the new development traffic will have an ADT of greater than 6,000 vehicles per day, setting the threshold for a left turn lane at 100 lots in the development. The Village at Pine Valley Road will include approximately 274 townhome residential units, which is above the County's 100 lot threshold. Due to the peak hour traffic volumes on Pine Valley and the left turning traffic volumes turning into the development excessive delay or queueing is not expected to be created by the movement so no left turn lane is recommended on Pine Valley Road at the new access driveway. Delay and queue analysis will be conducted for the left turn movement at the new access driveway in the build scenario operational analysis to determine if the left turn lane should be recommended.

Table 9: Left-Turn Lane Requirements

Average Daily Traffic (ADT)	Number of Lots
>6,000	100
4,001—6,000	125
2,001—4,000	150
1,000—2,000	175
<1,000	200



JURISDICTION	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
HALL COUNTY	1193-21-176		



Legend: AM (PM)

PROPERTY AND EX. R/W LINE	R	STORM LINE	T
REQUIRED R/W LINE	- - -	TELEPHONE LINE	- - -
CONSTRUCTION LIMITS	- - -	OH POWER LINE	- - -
PERMANENT EASEMENT FOR MAINTENANCE	/ / / /	UG POWER LINE	- - -
TEMPORARY EASEMENT FOR CONSTRUCTION	/ / / /	WATER LINE	- - -
EASEMENT FOR CONSTRUCTION OF DRIVEWAYS	XXXXXX	FIBER OPTIC LINE	- - -
PERMANENT DRAINAGE EASEMENT	*****	GAS LINE	- - -
		SANITARY SEWER LINE	- - -
		LIGHTING CONDUIT	- - -
		RETAINING WALL	- - -
		LIMIT OF DISTURBANCE	- - -

FIGURE 6



BUILD (2029) PEAK HOUR VOLUMES

REVISION DATES

DATE:
THE VILLAGE
AT
PINE VALLEY ROAD

SHEET NO.

FUTURE CONDITIONS- WITH THE PROPOSED DEVELOPMENT (BUILD)

To assess the traffic impact of the development, the site-generated trips were added to the future background traffic, and the combined volumes were analyzed.

Future Build Traffic Volumes

The level of service criteria discussed in the prior sections was applied to the study intersections to determine the impacts of 2029 background traffic volumes plus total site-generated volumes. The new access drive geometry was based on the Hall County auxiliary lane recommendations and the driveway as stop sign controlled.

The new access driveway will operate at an acceptable level of service, while the intersection of SR 284/Clarks Bridge Road at Pine Valley Road and White Sulphur Road at Pine Valley Road will continue to operate unacceptably as is the case in the future no-build scenario. The additional development traffic does increase the delay at the existing study intersections compared to the no-build scenario. The results of the intersection capacity analysis for the future year with the development are summarized in **Table 10**.

Table 10: Future Build Level of Service			
Intersection	Control Type	Delay (LOS)	
		AM	PM
SR 284/ Clarks Bridge Road at Pine Valley Road	Minor Street Stop	97 (F)	110 (F)
Pine Valley Road at Proposed Driveway	Minor Street Stop	13 (B)	13 (B)
White Sulphur Road at Pine Valley Road	Minor Street Stop	44 (E)	384 (F)

The northbound left turn movement on Pine Valley Road at the new driveway is expected to operate at LOS A for both AM and PM peak periods and is not anticipated to create any queueing for the movement. Therefore, no left turn lane is recommended on Pine Valley Road at the new access driveway. Detailed Synchro results are attached in **Appendix D**.

Roadway Improvement Analysis

To offset the impacts of the development generated traffic on the surrounding roadway network improvements to the study intersections were analyzed at the intersections of SR 284/Clarks Bridge Road at Pine Valley Road and White Sulphur Road at Pine Valley Road. The addition of right turn lanes on Pine Valley Road at the intersections was analyzed and the results are shown in **Table 11**. Detailed Synchro results are attached in **Appendix D**.

Table 11: Future Build Level of Service			
Intersection	Control Type	Delay (LOS)	
		AM	PM
SR 284/ Clarks Bridge Road at Pine Valley Road	Minor Street Stop	57 (F)	35 (D)
White Sulphur Road at Pine Valley Road	Minor Street Stop	20 (C)	131 (F)



The addition of right turn lanes on Pine Valley Road will reduce the delays experienced at the intersections of SR 284/Clarks Bridge Road at Pine Valley Road and White Sulphur Road at Pine Valley Road similar to or better than the delays experienced in the future no-build scenarios at the study intersections. The right turn lanes on Pine Valley Road at White Sulphur Road and Pine Valley Road at SR 284/Clarks Bridge Road should be at least 200 feet long to accommodate expected queueing.

Volumes at White Sulphur Road at Pine Valley Road do not warrant all-way stop control, so it was not analyzed as a potential improvement. Other improvements are not feasible due to the location of the House of Refuge and the railroad tracks adjacent the intersection.

As the intersection of SR 284/Clarks Bridge Road at Pine Valley Road is owned by the Georgia Department of Transportation (GDOT) and Intersection Control Evaluation (ICE) was performed on the intersection to identify the feasible alternatives per GDOT Policy 4A-5. The ICE report is attached in **Appendix F**.

CONCLUSION AND RECOMMENDATIONS

A traffic impact study was conducted by Southeastern Engineering, Inc. for the proposed residential development, The Village at Pine Valley Road in Hall County, GA. The development will be built on approximately 12 acres of undeveloped land, located along Pine Valley Road. The development will be adjacent the existing Smith Creek Subdivision and will include no more than 274 townhomes, and will create a new access driveway along Pine Valley Road. The build-out of the development is planned for 2029. The existing study intersection include SR 284/Clarks Bridge Road at Pine Valley Road and White Sulphur Road at Pine Valley Road.

The ITE Trip Generation Manual, referenced to estimate the trips generated by the land use to calculate the total gross trips expected to be generated from the residential development. The expected trips were added to the future no-build traffic volumes to analyze the delay and level of service at the study intersections in build condition and compare to the existing and no-build conditions.

In the existing conditions the intersection of White Sulphur Road at Pine Valley Road operates at an acceptable level of service. In the future no-build scenario both existing, study intersections operate at an unacceptable level of service prior to the development traffic. With the addition of the development traffic the study intersections are expected to continue to operate at an unacceptable level of service, but the new driveway on Pine Valley Road will operate at an acceptable level of service.

The geometry and method of control for the new access driveway intersection on Pine Valley Road was determined utilizing Hall County's auxiliary lane requirements. Improvements at the adjacent study intersections were analyzed based on feasible options and in compliance with GDOT's ICE policy at intersections including a state route. The following roadway network improvements are recommended to accommodate the development traffic:

Pine Valley Road at Access Driveway

- The new driveway should be two lanes, one entry and one exit lane.
- The access driveway should be controlled with stop sign controlled.
- A deceleration lane should be provided on the Pine Valley Road southbound approach.



White Sulphur Road at Pine Valley Road

- Provide a channelized right turn lane on Pine Valley Road southbound at the intersection. The lane is recommended to be have at least 200 feet of storage.

SR 284/Clarks Bridge Road at Pine Valley Road

- Provide a channelized right turn lane on Pine Valley Road northbound at the intersection. The lane is recommended to be have at least 200 feet of storage.



APPENDICES

- **Appendix A**
 - Site Plan and Intersection Improvement Plan
- **Appendix B**
 - Traffic Counts Summary Sheets
- **Appendix C**
 - Growth Rate Summary
- **Appendix D**
 - Synchro Reports
- **Appendix E**
 - Trip Generation Report
- **Appendix F**
 - ICE Report



Appendix A

Site Plan and Intersection Improvement Plan



PO Box 1074
Grayson, Georgia 30017
770.527.3450
www.acuminisconsulting.com



LEVEL I CERTIFIED DESIGN
PROFESSIONAL NO. 00000000000000000000000000000000

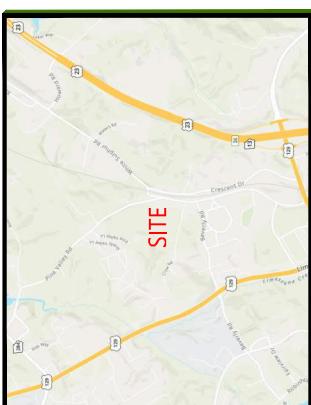
8	
7	
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4	
3	
2	
1	

COOK COMMUNITIES	3120 FRONTAGE ROAD GANIEVILLE, GEORGIA 30504
LUKE PRESSLEY	24-HOUR CONTACT 678.267.7153
GAINESVILLE, GEORGIA 30504	PINE VALLEY ROAD AT THE VILLAGE
3120 FRONTAGE ROAD GANIEVILLE, GEORGIA 30504	PINE VALLEY ROAD HAL COUNTY, GEORGIA
LUKE PRESSLEY	PINE VALLEY ROAD AT THE VILLAGE

PROJECT NAME:	PINE VALLEY ROAD
PREPARED FOR:	THE VILLAGE
REVISION No.:	DATE

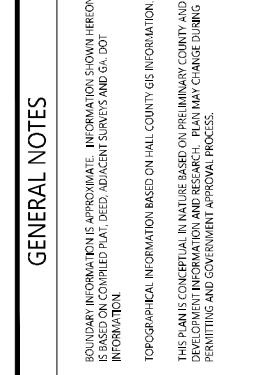
SITE PLAN

CAN DESIGN	AS SHOWN
CAN DRAWN	SCALE
CAN CHECKED	SHEET
08/28/21	1 of 1 21-050 PROJECT No.



LOCATION MAP

GRID NORTH
GA WEST ZONE



Graphic Scale: 1" = 80 FEET
40 0 80 160 240 320

Appendix B

Traffic Counts Summary Sheets

**Turning Movement Counts
SR 284/ Clarks Ridge Road**



[Click here for Map](#)

Peak Hour Turning Movement Count

Gainesville, GA



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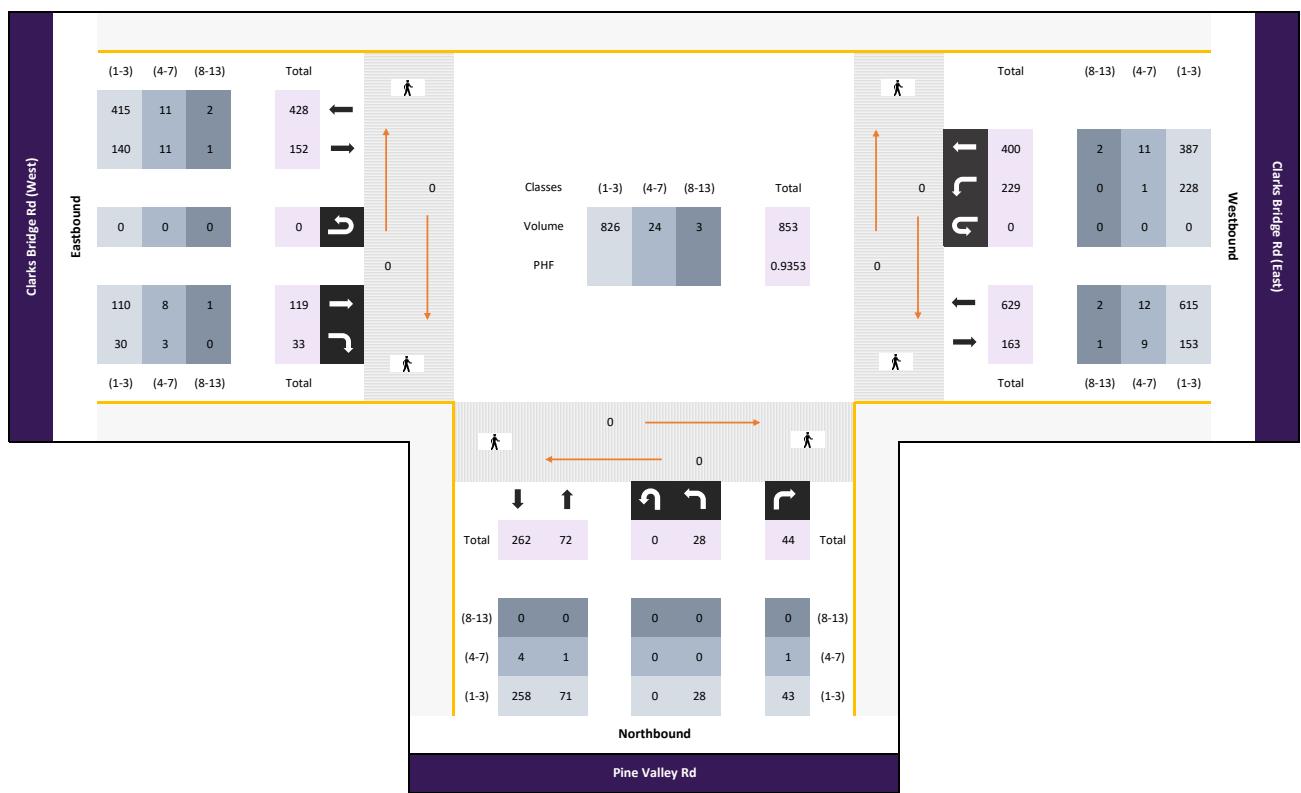
Tuesday, August 24, 2021		
Period	0700 - 0900	
Peak Hour	0715 - 0815	

Session Parameters

(Drop Down Menu)

Peak Hour

Volume





[Click here for Map](#)

Peak Hour Turning Movement Count

Gainesville, GA



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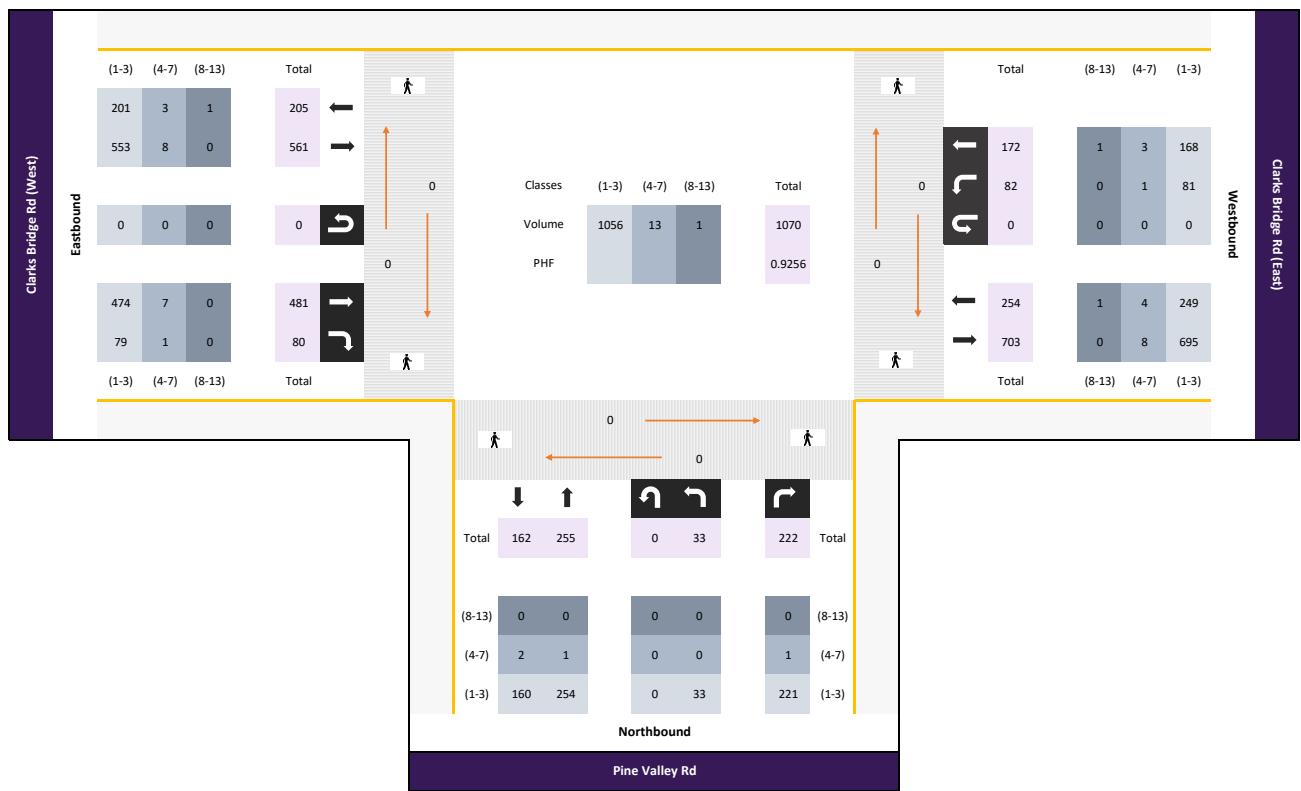
Tuesday, August 24, 2021			
Period	1600 - 1800		
Peak Hour	1700 - 1800		

Session Parameters

(Drop Down Menu)

Peak Hour

Volume



All vehicles

Time	Northbound								Eastbound								Westbound							
	Pine Valley Rd								Clarks Bridge Rd (West)				Clarks Bridge Rd (East)											
	Left	Right	U-Turn	App Total				App Total	Thru	Right	U-Turn	App Total	Left	Thru	U-Turn	App Total	Int Total							
1700 - 1715	9	-	59	0	68	-	-	-	0	-	112	19	0	131	15	38	-	0	53	252				
1715 - 1730	10	-	58	0	68	-	-	-	0	-	137	23	0	160	21	40	-	0	61	289				
1730 - 1745	5	-	54	0	59	-	-	-	0	-	121	24	0	145	23	45	-	0	68	272				
1745 - 1800	9	-	51	0	60	-	-	-	0	-	111	14	0	125	23	49	-	0	72	257				
Total	33	0	222	0	255	0	0	0	0	0	481	80	0	561	82	172	0	0	254	1070				
Approach %	12.94	0.00	87.06	0.00	-	0.00	0.00	0.00	-	0.00	85.74	14.26	0.00	-	32.28	67.72	0.00	0.00	-					
PHF	0.83	0.00	0.94	0.00	0.94	0.00	0.00	0.00	0.00	0.00	0.88	0.83	0.00	0.88	0.89	0.88	0.00	0.00	0.88	0.93				

Bikes

Time	Northbound								Eastbound								Westbound							
	Pine Valley Rd								Clarks Bridge Rd (West)				Clarks Bridge Rd (East)											
	Left	Right	U-Turn	App Total				App Total	Thru	Right	U-Turn	App Total	Left	Thru	U-Turn	App Total	Int Total							
1700 - 1715	0	-	0	0	-	-	-	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1715 - 1730	0	-	0	0	-	-	-	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1730 - 1745	0	-	0	0	-	-	-	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1745 - 1800	0	-	0	0	-	-	-	0	-	0	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	0	0	0	0	0	0	0	0	0	0
Approach %	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	-	0.00	85.71	14.29	0.00	-	32.28	67.72	0.00	0.00	-					
PHF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.88	0.86	0.00	0.87	0.88	0.89	0.00	0.00	0.88	0.92				

Passenger Vehicles (I-3)

Time	Northbound								Eastbound								Westbound							
	Pine Valley Rd								Clarks Bridge Rd (West)				Clarks Bridge Rd (East)											
	Left	Right	U-Turn	App Total				App Total	Thru	Right	U-Turn	App Total	Left	Thru	U-Turn	App Total	Int Total							
1700 - 1715	9	-	59	0	68	-	-	0	-	108	19	0	127	15	38	-	0	53	248					
1715 - 1730	10	-	58	0	68	-	-	0	-	136	23	0	159	21	39	-	0	60	287					
1730 - 1745	5	-	53	0	58	-	-	0	-	119	23	0	142	22	44	-	0	66	266					
1745 - 1800	9	-	51	0	60	-	-	0	-	111	14	0	125	23	47	-	0	70	255					
Total	33	0	221	0	254	0	0	0	0	0	474	79	0	553	81	168	0	0	249	1056				
Approach %	12.99	0.00	87.01	0.00	-	0.00	0.00	0.00	-	0.00	85.71	14.29	0.00	-	32.28	67.74	0.00	0.00	-					
PHF	0.83	0.00	0.94	0.00	0.93	0.00	0.00	0.00	0.00	0.00	0.87	0.86	0.00	0.87	0.88	0.89	0.00	0.00	0.88	0.92				

Single Unit Trucks (4-7)

Time	Northbound								Eastbound								Westbound							
	Pine Valley Rd								Clarks Bridge Rd (West)				Clarks Bridge Rd (East)											
	Left	Right	U-Turn	App Total				App Total	Thru	Right	U-Turn	App Total	Left	Thru	U-Turn	App Total	Int Total							
1700 - 1715	0	-	0	0	-	-	-	0	-	4	0	0	4	0	0	0	4	0	0	4	0	0	0	4
1715 - 1730	0	-	0	0	-	-	-	0	-	1	0	0	1	0	1	0	1	0	0	1	0	0	0	2
1730 - 1745	0	-	1	0	1	-	-	0	-	2	1	0	3	1	0	-	0	1	0	5	0	0	1	5
1745 - 1800	0	-	0	0	-	-	-	0	-	0	0	0	0	0	0	-	0	2	-	0	0	0	0	2
Total	0	0	1	0	1	0	0	0	0	7	1	0	8	1	3	0	0	4	13					
Approach %	0.00	0.00	100.00	0.00	-	0.00	0.00	0.00	-	0.00	87.50	12.50	0.00	-	25.00	75.00	0.00	0.00	-					
PHF	0.00	0.00	0.25	0.00	0.25	0.00	0.00	0.00	0.00	0.44	0.25	0.00	0.50	0.25	0.38	0.00	0.00	0.50	0.65					

Combination Trucks (8-13)

Time	Northbound								Eastbound								Westbound							
	Pine Valley Rd								Clarks Bridge Rd (West)				Clarks Bridge Rd (East)											
	Left	Right	U-Turn	App Total				App Total	Thru	Right	U-Turn	App Total	Left	Thru	U-Turn	App Total	Int Total							
1700 - 1715	0	-	0	0	-	-	-	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1715 - 1730	0	-	0	0	-	-	-	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1730 - 1745	0	-	0	0	-	-	-	0	-	0	0	0	0	0	0	0	0	1	-	0	1	0	1	1
1745 - 1800	0	-	0	0	-	-	-	0	-	0	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	0	0	0	1	0	0	1	0	0	1
Approach %	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	-	0.00														

Classified Turn Movement Count | All vehicles

Gainesville, GA



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Site 2 of 2
Pine Valley Rd

Date
Tuesday, August 24, 2021

Weather
Fair
85°F

Clarks Bridge Rd (West)
Clarks Bridge Rd (East)

Lat/Long
34.335254°, -83.804693°

0700 - 0900 (Weekday 2h Session) (08-24-2021)

All vehicles

Northbound				
Pine Valley Rd				
TIME	Left	Right	U-Turn	App Total
0700 - 0715	12	11	0	23
0715 - 0730	5	12	0	17
0730 - 0745	3	10	0	13
0745 - 0800	11	8	0	19
Hourly Total	31	41	0	72
0800 - 0815	9	14	0	23
0815 - 0830	3	13	0	16
0830 - 0845	6	7	0	13
0845 - 0900	5	13	0	18
Hourly Total	23	47	0	70
Grand Total	54	88	0	142
Approach %	38.03	61.97	0.00	-
Intersection %	3.73	6.09	0.00	9.82
PHF	0.64	0.79	0.00	0.78

Eastbound					Westbound				
Clarks Bridge Rd (West)					Clarks Bridge Rd (East)				
Thru	Right	U-Turn	App	Total	Left	Thru	U-Turn	App	Int Total
2.4	2.5	2.6	App	Total	2.7	2.8	2.9	App	Int Total
15	8	0	23	23	41	84	0	125	171
30	8	0	38	38	50	110	0	160	215
40	8	0	48	48	70	97	0	167	228
21	12	0	33	33	59	101	0	160	212
106	36	0	142	142	220	392	0	612	826
28	5	0	33	33	50	92	0	142	198
38	2	0	40	40	40	64	0	104	160
19	12	0	31	31	28	64	0	92	136
25	7	0	32	32	19	57	0	76	126
110	26	0	136	136	137	277	0	414	620
216	62	0	278	278	357	669	0	1026	1446
77.70	22.30	0.00	-	-	34.80	65.20	0.00	-	-
14.94	4.29	0.00	19.23	19.23	24.69	46.27	0.00	70.95	-
0.74	0.69	0.00	0.79	0.79	0.82	0.91	0.00	0.94	0.94

1600 - 1800 (Weekday 2h Session) (08-24-2021)

All vehicles

Northbound				
Pine Valley Rd				
TIME	Left	Right	U-Turn	App Total
1600 - 1615	6	38	0	44
1615 - 1630	7	39	0	46
1630 - 1645	6	40	0	46
1645 - 1700	7	39	0	46
Hourly Total	26	156	0	182
1700 - 1715	9	59	0	68
1715 - 1730	10	58	0	68
1730 - 1745	5	54	0	59
1745 - 1800	9	51	0	60
Hourly Total	33	222	0	255
Grand Total	59	378	0	437
Approach %	13.50	86.50	0.00	-
Intersection %	3.12	20.00	0.00	23.12
PHF	0.83	0.94	0.00	0.94

Eastbound					Westbound				
Clarks Bridge Rd (West)					Clarks Bridge Rd (East)				
Thru	Right	U-Turn	App	Total	Left	Thru	U-Turn	App	Int Total
2.4	2.5	2.6	App	Total	2.7	2.8	2.9	App	Int Total
85	14	0	99	99	25	28	0	53	196
77	16	0	93	93	14	34	0	48	187
109	9	0	118	118	21	35	0	56	220
87	18	0	105	105	21	45	0	66	217
358	57	0	415	415	81	142	0	223	820
112	19	0	131	131	15	38	0	53	252
137	23	0	160	160	21	40	0	61	289
121	24	0	145	145	23	45	0	68	272
111	14	0	125	125	23	49	0	72	257
481	80	0	561	561	82	172	0	254	1070
839	137	0	976	976	163	314	0	477	1890
85.96	14.04	0.00	-	-	34.17	65.83	0.00	-	-
44.39	7.25	0.00	51.64	51.64	8.62	16.61	0.00	25.24	-
0.88	0.83	0.00	0.88	0.88	0.89	0.88	0.00	0.88	0.93

**Turning Movement Counts
Pine Valley Road**

Turning Movement Counts
White Sulphur Road



[Click here for Map](#)

Peak Hour Turning Movement Count

Gainesville, GA



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All vehicles		Northbound				Southbound				Eastbound									
		White Sulphur Rd (South)		White Sulphur Rd (North)		Pine Valley Rd													
Time	Left	Thru	Right	U-Turn	App Total	Thru	Right	U-Turn	App Total	Left	Right	U-Turn	App Total				App Total	Int Total	
	0715 - 0730	12	95	-	0	107	-	73	8	0	81	16	-	62	0	78	-	-	0
0730 - 0745	15	58	-	0	73	-	81	9	0	90	14	-	80	0	94	-	-	0	257
0745 - 0800	10	50	-	0	60	-	78	13	0	91	9	-	74	0	83	-	-	0	234
0800 - 0815	14	47	-	0	61	-	71	12	0	83	13	-	51	0	64	-	-	0	208
Total	51	250	0	0	301	0	303	42	0	345	52	0	267	0	319	0	0	0	965
Approach %	16.94	83.06	0.00	0.00	-	0.00	87.83	12.17	0.00	-	16.30	0.00	83.70	0.00	-	0.00	0.00	0.00	-
PHF	0.85	0.66	0.00	0.00	0.70	0.00	0.94	0.81	0.00	0.95	0.81	0.00	0.83	0.00	0.85	0.00	0.00	0.00	0.91

Passenger Vehicles (1-3)	Northbound					Southbound					Eastbound								
	White Sulphur Rd (South)					White Sulphur Rd (North)					Pine Valley Rd								
	Left 1.1	Thru 1.2		U-Turn 1.3	App Total		Thru 1.4	Right 1.5	U-Turn 1.6	App Total		Left 1.7	Right 1.8	U-Turn 1.9	App Total			App Total	Int Total
Time																			
0715 - 0730	12	95	-	0	107	-	72	8	0	80	16	-	60	0	76	-	-	0	263
0730 - 0745	15	56	-	0	71	-	78	9	0	87	14	-	78	0	92	-	-	0	250
0745 - 0800	10	49	-	0	59	-	77	12	0	89	9	-	73	0	82	-	-	0	230
0800 - 0815	14	47	-	0	61	-	69	12	0	81	13	-	49	0	62	-	-	0	204
Total	51	247	0	0	298	0	296	41	0	337	52	0	260	0	312	0	0	0	947
Approach %	17.11	82.89	0.00	0.00	-	0.00	87.83	12.17	0.00	-	16.67	0.00	83.33	0.00	-	0.00	0.00	0.00	-
PHF	0.85	0.65	0.00	0.00	0.70	0.00	0.95	0.85	0.00	0.95	0.81	0.00	0.83	0.00	0.85	0.00	0.00	0.00	0.90

Single Unit Trucks (4-7)	Northbound					Southbound					Eastbound						
	White Sulphur Rd (South)					White Sulphur Rd (North)					Pine Valley Rd						
	Left	Thru		U-Turn	App Total	Thru	Right	U-Turn	App Total	Left	Right	U-Turn	App Total	App Total	Int Total		
Time	1.1	1.2		1.3	App Total	1.4	1.5	1.6	App Total	1.7	1.8	1.9	App Total				
0715 - 0730	0	0	-	0	0	-	1	0	0	1	0	-	2	0	2	-	
0730 - 0745	0	1	-	0	1	-	2	0	0	2	0	-	2	0	2	-	
0745 - 0800	0	1	-	0	1	-	0	1	0	1	0	-	1	0	1	-	
0800 - 0815	0	0	-	0	0	-	0	0	0	0	0	-	2	0	2	-	
Total	0	2	0	0	2	0	3	1	0	4	0	0	7	0	7	0	
Approach %	0.00	100.00	0.00	0.00	0.00	-	0.00	75.00	25.00	0.00	-	0.00	100.00	0.00	-	0.00	
PHF	0.00	0.50	0.00	0.00	0.50	0.00	0.38	0.25	0.00	0.50	0.00	0.00	0.88	0.00	0.88	0.00	

Combination Trucks (8-13)		Northbound				Southbound				Eastbound							
		White Sulphur Rd (South)		White Sulphur Rd (North)		Pine Valley Rd											
Time	Left	Thru	U-Turn	App Total	Thru	Right	U-Turn	App Total	Left	Right	U-Turn	App Total	App Total	Int Total			
	0715 - 0730	0	0	-	0	0	-	0	0	0	0	0	-	-	-	0	0
0730 - 0745	0	1	-	0	1	-	1	0	0	1	0	-	0	0	0	-	2
0745 - 0800	0	0	-	0	0	-	1	0	0	1	0	-	0	0	-	0	1
0800 - 0815	0	0	-	0	0	-	2	0	0	2	0	-	0	0	-	0	2
Total	0	1	0	0	1	0	4	0	0	4	0	0	0	0	0	0	5
Approach %	0.00	100.00	0.00	0.00	-	0.00	100.00	0.00	0.00	-	0.00	0.00	0.00	0.00	-	0.00	
PHF	0.00	0.25	0.00	0.00	0.25	0.00	0.50	0.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.63	



[Click here for Map](#)

Peak Hour Turning Movement Count

Gainesville, GA



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All vehicles	Northbound				Southbound				Eastbound										
	White Sulphur Rd (South)		White Sulphur Rd (North)		Pine Valley Rd														
Time	Left 1.1	Thru 1.2	U-Turn 1.3	App Total	Thru 1.4	Right 1.5	U-Turn 1.6	App Total	Left 1.7	Right 1.8	U-Turn 1.9	App Total				App Total	Int Total		
1645 - 1700	32	106	-	0	138	-	88	22	0	110	10	-	31	0	41	-	-	0	289
1700 - 1715	53	111	-	0	164	-	115	16	0	131	12	-	23	0	35	-	-	0	330
1715 - 1730	64	115	-	0	179	-	87	15	0	102	21	-	21	0	42	-	-	0	323
1730 - 1745	52	94	-	0	146	-	86	21	0	107	19	-	41	0	60	-	-	0	313
Total	201	426	0	0	627	0	376	74	0	450	62	0	116	0	178	0	0	0	1255
Approach %	32.06	67.94	0.00	0.00	-	0.00	83.56	16.44	0.00	-	34.83	0.00	65.17	0.00	-	0.00	0.00	0.00	-
PHF	0.79	0.93	0.00	0.00	0.88	0.00	0.82	0.84	0.00	0.86	0.74	0.00	0.71	0.00	0.74	0.00	0.00	0.00	0.95

Single Unit Trucks (4-7)	Northbound										Southbound										Eastbound									
	White Sulphur Rd (South)					White Sulphur Rd (North)					Pine Valley Rd																			
	Left 1.1	Thru 1.2		U-Turn 1.3	App Total	Thru 1.4	Right 1.5	U-Turn 1.6	App Total	Left 1.7	Right 1.8	U-Turn 1.9	App Total					App Total	Int Total											
Time	1645 - 1700	0	2	-	0	2	-	0	0	0	1	-	1	0	2	-	-	-	0	4										
	1700 - 1715	0	2	-	0	2	-	3	0	0	3	0	-	0	0	0	-	-	0	5										
	1715 - 1730	1	0	-	0	1	-	2	0	0	2	0	-	0	0	0	-	-	0	3										
	1730 - 1745	1	2	-	0	3	-	0	0	0	0	2	-	0	0	2	-	-	0	5										
Total		2	6	0	0	8	0	5	0	0	5	3	0	1	0	4	0	0	0	17										
Approach %		25.00	75.00	0.00	0.00	-	0.00	100.00	0.00	0.00	-	75.00	0.00	25.00	0.00	-	0.00	0.00	0.00	-										
PHF		0.50	0.75	0.00	0.00	0.67	0.00	0.42	0.00	0.00	0.42	0.38	0.00	0.25	0.00	0.50	0.00	0.00	0.00	0.85										

Classified Turn Movement Count || All vehicles

Gainesville, GA



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Site 1 of 2

White Sulphur Rd (South)
White Sulphur Rd (North)
Pine Valley Rd

Date

Tuesday, August 24, 2021

Weather

Fair
85°F

Lat/Long

34.324523°, -83.793766°

0700 - 0900 (Weekday 2h Session) (08-24-2021)

All vehicles

TIME	Northbound				Southbound				Eastbound				Int Total	
	White Sulphur Rd (South)				White Sulphur Rd (North)				Pine Valley Rd					
	Left	Thru	U-Turn	App Total	Thru	Right	U-Turn	App Total	Left	Right	U-Turn	App Total		
0700 - 0715	14	51	0	65	55	11	0	66	8	42	0	50	181	
0715 - 0730	12	95	0	107	73	8	0	81	16	62	0	78	266	
0730 - 0745	15	58	0	73	81	9	0	90	14	80	0	94	257	
0745 - 0800	10	50	0	60	78	13	0	91	9	74	0	83	234	
Hourly Total	51	254	0	305	287	41	0	328	47	258	0	305	938	
0800 - 0815	14	47	0	61	71	12	0	83	13	51	0	64	208	
0815 - 0830	13	44	0	57	53	7	0	60	7	41	0	48	165	
0830 - 0845	12	33	0	45	39	5	0	44	4	39	2	45	134	
0845 - 0900	15	34	0	49	41	4	0	45	9	33	1	43	137	
Hourly Total	54	158	0	212	204	28	0	232	33	164	3	200	644	
Grand Total	105	412	0	517	491	69	0	560	80	422	3	505	1582	
Approach %	20.31	79.69	0.00	-	87.68	12.32	0.00	-	15.84	83.56	0.59	-		
Intersection %	6.64	26.04	0.00	32.68	31.04	4.36	0.00	35.40	5.06	26.68	0.19	31.92		
PHF	0.85	0.66	0.00	0.70	0.94	0.81	0.00	0.95	0.81	0.83	0.00	0.85	0.91	

1600 - 1800 (Weekday 2h Session) (08-24-2021)

All vehicles

TIME	Northbound				Southbound				Eastbound				Int Total	
	White Sulphur Rd (South)				White Sulphur Rd (North)				Pine Valley Rd					
	Left	Thru	U-Turn	App Total	Thru	Right	U-Turn	App Total	Left	Right	U-Turn	App Total		
1600 - 1615	38	59	0	97	65	11	0	76	11	32	0	43	216	
1615 - 1630	31	81	0	112	60	21	0	81	11	25	1	37	230	
1630 - 1645	47	85	0	132	86	12	0	98	7	28	0	35	265	
1645 - 1700	32	106	0	138	88	22	0	110	10	31	0	41	289	
Hourly Total	148	331	0	479	299	66	0	365	39	116	1	156	1000	
1700 - 1715	53	111	0	164	115	16	0	131	12	23	0	35	330	
1715 - 1730	64	115	0	179	87	15	0	102	21	21	0	42	323	
1730 - 1745	52	94	0	146	86	21	0	107	19	41	0	60	313	
1745 - 1800	55	85	0	140	81	17	0	98	13	33	0	46	284	
Hourly Total	224	405	0	629	369	69	0	438	65	118	0	183	1250	
Grand Total	372	736	0	1108	668	135	0	803	104	234	1	339	2250	
Approach %	33.57	66.43	0.00	-	83.19	16.81	0.00	-	30.68	69.03	0.29	-		
Intersection %	16.53	32.71	0.00	49.24	29.69	6.00	0.00	35.69	4.62	10.40	0.04	15.07		
PHF	0.79	0.93	0.00	0.88	0.82	0.84	0.00	0.86	0.74	0.71	0.00	0.74	0.95	

**24-Hour Classification Count
Clarks Bridge Road at Pine Valley Road**

Bi-Directional Class Count || NB EB 15min

Gainesville, GA



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Site 5
 Clarks Bridge Rd (East),
 east of Pine Valley Rd

Date
 Tuesday, August 24, 2021

Weather
 Fair
 85°F

Lat/Long
 34.335552°, -83.804332°
[Click here for Map](#)

0000 - 2400 (Weekday 24h Session) [08-24-2021]

NB EB 15min

Time	Eastbound (Movement 5.1)													15min Total	60min Total
	Class 1	Class 2	Class 3	Class 4	Class 5	Class 6	Class 7	Class 8	Class 9	Class 10	Class 11	Class 12	Class 13		
0000 - 0015	0	11	0	0	0	0	0	0	0	0	0	0	0	11	
0015 - 0030	1	4	1	0	0	0	0	0	0	0	0	0	0	6	
0030 - 0045	0	10	1	0	0	0	0	0	0	0	0	0	0	11	
0045 - 0100	0	6	1	0	0	0	0	0	0	0	0	0	0	7	35
0100 - 0115	0	1	1	0	0	0	0	0	0	0	0	0	0	2	
0115 - 0130	0	3	1	0	0	0	0	0	0	0	0	0	0	4	
0130 - 0145	0	4	1	0	0	0	0	0	0	0	0	0	0	5	
0145 - 0200	0	2	1	0	0	0	0	0	0	0	0	0	0	3	14
0200 - 0215	0	4	3	0	0	0	0	0	0	0	0	0	0	7	
0215 - 0230	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0230 - 0245	0	0	1	0	0	0	0	0	0	0	0	0	0	1	
0245 - 0300	0	3	1	0	0	0	0	0	0	0	0	0	0	4	12
0300 - 0315	0	1	0	0	1	0	0	0	0	0	0	0	0	2	
0315 - 0330	0	2	0	0	0	0	0	0	0	0	0	0	0	4	
0330 - 0345	0	1	0	0	0	0	0	0	0	0	0	0	0	1	
0345 - 0400	0	2	1	0	0	0	0	0	0	0	0	0	0	3	10
0400 - 0415	0	1	0	0	0	0	0	0	0	0	0	0	0	1	
0415 - 0430	0	3	0	0	0	0	0	0	0	0	0	0	0	3	
0430 - 0445	0	1	0	0	0	0	0	0	0	0	0	0	0	1	
0445 - 0500	0	2	2	0	0	0	0	0	0	0	0	0	0	4	9
0500 - 0515	0	2	1	0	0	0	0	0	0	0	0	0	0	3	
0515 - 0530	0	1	1	0	0	1	0	0	0	0	0	0	0	3	
0530 - 0545	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0545 - 0600	0	7	2	0	0	0	1	0	0	0	0	0	0	10	16
0600 - 0615	0	3	1	0	0	0	0	0	0	0	0	0	0	4	
0615 - 0630	0	12	3	0	0	1	0	0	0	0	0	0	0	16	
0630 - 0645	0	9	3	0	0	1	0	0	0	0	0	0	0	13	
0645 - 0700	0	12	4	0	0	0	0	0	0	0	0	0	0	16	49
0700 - 0715	0	17	6	0	2	0	0	0	1	0	0	0	0	26	
0715 - 0730	0	29	11	2	0	0	0	0	0	0	0	0	0	42	
0730 - 0745	0	37	11	1	1	0	0	0	0	0	0	0	0	50	
0745 - 0800	0	23	6	0	0	0	0	0	0	0	0	0	0	29	147
0800 - 0815	0	17	19	0	4	1	0	1	0	0	0	0	0	42	
0815 - 0830	0	29	19	1	1	0	0	1	0	0	0	0	0	51	
0830 - 0845	0	18	6	0	0	0	0	2	0	0	0	0	0	26	
0845 - 0900	0	22	16	0	0	0	0	0	0	0	0	0	0	38	157
0900 - 0915	0	28	15	0	2	3	0	2	0	0	0	0	0	50	
0915 - 0930	0	27	19	1	1	1	0	0	0	0	0	0	0	49	
0930 - 0945	0	37	22	0	1	0	0	0	0	0	0	0	0	60	
0945 - 1000	1	23	9	0	1	0	0	0	0	0	0	0	0	34	193
1000 - 1015	0	29	12	0	1	0	0	0	0	0	0	0	0	42	
1015 - 1030	0	35	15	0	4	0	0	0	0	0	0	0	0	54	
1030 - 1045	0	29	11	0	3	0	0	0	0	0	0	0	0	43	
1045 - 1100	0	38	24	0	0	0	0	0	0	0	0	0	0	62	201
1100 - 1115	0	27	13	0	6	1	0	0	0	0	0	0	0	47	
1115 - 1130	0	42	18	0	1	0	0	0	0	0	0	0	0	61	
1130 - 1145	2	53	19	0	1	0	0	0	0	0	0	0	0	75	
1145 - 1200	0	32	15	0	2	0	0	0	0	0	0	0	0	49	232
1200 - 1215	0	44	21	0	1	0	0	0	0	0	0	0	0	66	
1215 - 1230	0	44	16	0	0	0	0	0	0	0	0	0	0	60	
1230 - 1245	0	46	18	1	1	0	0	0	0	0	0	0	0	67	
1245 - 1300	1	37	14	0	0	0	0	0	0	0	0	0	0	52	245
1300 - 1315	1	46	13	0	1	0	0	0	0	0	0	0	0	61	
1315 - 1330	0	62	17	0	1	0	0	0	0	0	0	0	0	80	
1330 - 1345	0	35	13	0	1	0	0	0	0	0	0	0	0	49	
1345 - 1400	0	48	18	0	1	0	0	0	1	0	0	0	0	68	258
1400 - 1415	0	44	13	0	1	0	0	1	0	0	0	0	0	59	
1415 - 1430	0	54	13	0	0	0	0	0	0	0	0	0	0	67	
1430 - 1445	0	73	16	2	0	1	0	0	0	0	0	0	0	92	
1445 - 1500	3	49	21	0	3	0	0	0	0	0	0	0	0	76	294
1500 - 1515	2	52	28	2	0	1	0	0	0	0	0	0	0	85	
1515 - 1530	0	65	19	0	1	1	0	0	0	0	0	0	0	86	
1530 - 1545	0	67	26	0	1	0	0	0	0	0	0	0	0	94	
1545 - 1600	1	63	25	0	3	0	0	0	0	0	0	0	0	92	357
1600 - 1615	0	87	31	2	1	2	0	0	0	0	0	0	0	123	
1615 - 1630	0	88	26	0	1	0	0	0	1	0	0	0	0	116	
1630 - 1645	1	112	34	1	1	0	0	0	0	0	0	0	0	149	
1645 - 1700	1	93	32	0	0	0	0	0	0	0	0	0	0	126	514
1700 - 1715	0	123	44	0	2	2	0	0	0	0	0	0	0	171	
1715 - 1730	2	146	46	0	2	0	0	0	0	0	0	0	0	196	
1730 - 1745	1	129	42	0	2	0	0	0	0	0	0	0	0	174	
1745 - 1800	0	109	53	0	0	0	0	0	0	0	0	0	0	162	703
1800 - 1815	0	82	31	0	0	0	0	0	0	0	0	0	0	113	
1815 - 1830	0	65	43	0	1	1	0	0	0	0	0	0	0	110	
1830 - 1845	2	58	32	0	1	0	0	0	0	0	0	0	0	93	
1845 - 1900	0	61	21	0	0	0	0	0	0	0	0	0	0	82	398
1900 - 1915	0	51	23	0	3	0	0	0	0	0	0	0	0	77	
1915 - 1930	0	56	32	0	0	0	0	0	0	0	0	0	0	88	
1930 - 1945	2	42	25	0	1	0	0	0	0	0	0	0	0	70	
1945 - 2000	1	48	15	0	0	0	0	0	0	0	0	0	0	64	299
2000 - 2015	1	37	18	0	1	0	0	0	0	0	0	0	0	57	
2015 - 2030	1	27	23	0	1	0	0	0	0	0	0	0	0	52	
2030 - 2045	2	24	22	0	1	0	0	0	0	0	0	0	0	49	
2045 - 2100	0	19	14	0	0	0	0	0	0	0	0	0	0	33	191
2100 - 2115	0	19	17	0	1	0	0	0	0	0	0	0	0	37	
2115 - 2130	0	37	8	0	0	0	0	0	0	0	0	0	0	45	
2130 - 2145	0	17	6	0	0	0	0	0	0	0	0	0	0	23	
2145 - 2200	0	19	9	0	0	0	0	0	0	0	0	0	0	28	133
2200 - 2215	0	15	5	0	0	0	0	0	0	0	0	0	0	20	
2215 - 2230	0	12	4	0	0	0	0	0	0	0	0	0	0	16	
2230 - 2245	0	12</td													

Bi-Directional Class Count | SB WB 15min

Gainesville, GA



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Site 5
 Clarks Bridge Rd (East),
 east of Pine Valley Rd

Date
 Tuesday, August 24, 2021

Weather
 Fair
 85°F

Lat/Long
 34.335552°, -83.804332°
[Click here for Map](#)**0000 - 2400 (Weekday 24h Session) [08-24-2021]**

SB WB 15min

Time	Westbound (Movement 5.2)													15min Total	60min Total
	Class 1	Class 2	Class 3	Class 4	Class 5	Class 6	Class 7	Class 8	Class 9	Class 10	Class 11	Class 12	Class 13		
0000 - 0015	0	1	0	0	0	0	0	0	0	0	0	0	0	1	
0015 - 0030	0	3	1	0	0	0	0	0	0	0	0	0	0	4	
0030 - 0045	0	2	0	0	0	0	0	0	0	0	0	0	0	2	
0045 - 0100	0	2	0	0	0	0	0	0	0	0	0	0	0	2	9
0100 - 0115	0	1	0	0	0	0	0	0	0	0	0	0	0	1	
0115 - 0130	0	1	0	0	0	0	0	0	0	0	0	0	0	1	
0130 - 0145	0	2	0	0	0	0	0	0	0	0	0	0	0	2	
0145 - 0200	0	2	0	0	0	0	0	0	0	0	0	0	0	2	6
0200 - 0215	0	2	0	0	0	0	0	0	0	0	0	0	0	2	
0215 - 0230	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0230 - 0245	0	1	0	0	0	0	0	0	0	0	0	0	0	1	
0245 - 0300	0	1	0	0	0	0	0	0	0	0	0	0	0	1	
0300 - 0315	0	1	0	0	0	0	0	0	0	0	0	0	0	1	
0315 - 0330	0	4	0	0	1	0	0	0	0	0	0	0	0	5	
0330 - 0345	0	4	0	0	0	0	0	0	0	0	0	0	0	4	
0345 - 0400	0	6	0	0	0	0	0	0	0	0	0	0	0	6	16
0400 - 0415	0	4	0	0	0	0	0	0	0	0	0	0	0	4	
0415 - 0430	0	11	0	0	0	0	0	0	0	0	0	0	0	11	
0430 - 0445	0	24	1	0	0	0	0	0	0	0	0	0	0	25	
0445 - 0500	0	6	4	0	0	0	0	0	0	0	0	0	0	10	50
0500 - 0515	0	15	3	0	0	0	0	0	0	0	0	0	0	18	
0515 - 0530	0	33	3	0	0	0	0	0	0	0	0	0	0	36	
0530 - 0545	0	32	11	0	0	0	0	0	0	0	0	0	0	43	
0545 - 0600	0	35	12	0	0	0	0	0	0	0	0	0	0	47	144
0600 - 0615	0	46	15	0	1	0	0	0	0	0	0	0	0	62	
0615 - 0630	0	24	21	0	0	1	0	0	0	0	0	0	0	46	
0630 - 0645	0	66	29	0	0	1	0	0	0	0	0	0	0	96	
0645 - 0700	2	60	21	3	0	1	0	0	0	0	0	0	0	87	291
0700 - 0715	0	83	40	0	0	0	0	0	0	1	0	0	0	124	
0715 - 0730	1	118	39	1	0	2	0	0	0	0	0	0	0	161	
0730 - 0745	0	126	35	1	4	0	0	0	0	0	0	0	0	166	
0745 - 0800	1	115	42	0	0	1	0	0	1	1	0	0	0	161	612
0800 - 0815	0	102	36	0	3	0	0	0	0	0	0	0	0	141	
0815 - 0830	0	70	29	1	1	2	0	0	0	0	0	0	0	103	
0830 - 0845	1	72	19	0	2	0	0	0	0	0	0	0	0	94	
0845 - 0900	0	58	17	0	1	0	0	0	0	0	0	0	0	76	414
0900 - 0915	1	44	16	0	1	1	0	2	0	0	0	0	0	65	
0915 - 0930	1	37	16	0	1	0	0	0	0	0	0	0	0	55	
0930 - 0945	1	34	15	0	0	0	0	0	0	0	0	0	0	50	
0945 - 1000	0	57	20	0	1	1	0	0	0	0	0	0	0	79	249
1000 - 1015	0	41	11	0	1	0	0	0	0	0	0	0	0	53	
1015 - 1030	0	47	10	0	1	0	0	0	0	0	0	0	0	58	
1030 - 1045	0	42	19	0	1	0	0	0	0	0	0	0	0	62	
1045 - 1100	1	39	12	0	0	0	0	0	0	0	0	0	0	52	225
1100 - 1115	1	30	11	0	3	0	0	0	0	0	0	0	0	45	
1115 - 1130	0	41	16	0	2	0	0	1	0	0	0	0	0	60	
1130 - 1145	1	35	17	0	1	0	0	0	0	0	0	0	0	54	
1145 - 1200	0	48	10	0	0	0	0	0	0	0	0	0	0	58	217
1200 - 1215	0	37	9	0	0	0	0	0	0	0	0	0	0	46	
1215 - 1230	0	43	10	0	2	0	0	0	0	0	0	0	0	55	
1230 - 1245	0	42	15	0	0	0	0	0	0	0	0	0	0	57	
1245 - 1300	0	52	16	0	0	0	0	0	0	0	0	0	0	68	226
1300 - 1315	0	44	14	1	0	0	0	0	0	0	0	0	0	59	
1315 - 1330	0	42	17	0	0	0	0	0	0	0	0	0	0	59	
1330 - 1345	0	43	10	0	2	1	0	0	0	0	0	0	0	56	
1345 - 1400	0	51	18	1	0	0	0	0	0	0	0	0	0	70	244
1400 - 1415	1	57	12	1	1	0	0	0	0	0	0	0	0	72	
1415 - 1430	0	45	11	0	0	0	0	0	0	0	0	0	0	56	
1430 - 1445	0	38	12	0	0	0	0	0	0	0	0	0	0	50	
1445 - 1500	0	42	19	1	1	0	0	0	0	0	0	0	0	63	241
1500 - 1515	0	45	14	0	4	0	0	0	0	0	0	0	0	63	
1515 - 1530	3	33	15	0	0	0	0	0	0	0	0	0	0	51	
1530 - 1545	0	39	11	0	2	0	0	0	0	0	0	0	0	52	
1545 - 1600	0	43	13	0	0	2	0	0	0	0	0	0	0	58	224
1600 - 1615	0	28	23	1	0	0	0	0	0	0	0	0	0	52	
1615 - 1630	0	28	16	1	2	1	0	0	0	0	0	0	0	48	
1630 - 1645	1	42	13	0	0	0	0	0	0	0	0	0	0	56	
1645 - 1700	1	46	19	0	1	0	0	0	0	0	0	0	0	67	223
1700 - 1715	0	37	16	0	0	0	0	0	0	0	0	0	0	53	
1715 - 1730	0	40	20	0	1	0	0	0	0	0	0	0	0	61	
1730 - 1745	0	48	18	0	1	0	0	1	0	0	0	0	0	68	
1745 - 1800	1	47	22	0	1	1	0	0	0	0	0	0	0	72	254
1800 - 1815	0	45	20	0	0	0	0	0	0	0	0	0	0	65	
1815 - 1830	1	46	15	0	1	0	0	0	0	0	0	0	0	63	
1830 - 1845	1	35	13	0	1	0	0	0	0	0	0	0	0	50	
1845 - 1900	0	48	9	0	1	0	0	0	0	0	0	0	0	58	236
1900 - 1915	2	31	21	0	2	0	0	0	0	0	0	0	0	56	
1915 - 1930	0	30	4	0	0	0	0	0	0	0	0	0	0	34	
1930 - 1945	0	28	4	0	1	0	0	0	0	0	0	0	0	33	
1945 - 2000	0	14	0	0	0	0	0	0	0	0	0	0	0	14	137
2000 - 2015	0	23	10	0	1	0	0	0	0	0	0	0	0	34	
2015 - 2030	0	24	7	0	0	0	0	0	0	0	0	0	0	31	
2030 - 2045	0	16	11	0	0	0	0	0	0	0	0	0	0	27	
2045 - 2100	0	13	6	0	0	0	0	0	0	0	0	0	0	19	111
2100 - 2115	0	10	8	0	0	0	0	1	0	0	0	0	0	19	
2115 - 2130	0	6	1	0	0	0	0	0	0	0	0	0	0	7	
2130 - 2145	0	7	2	0	0	0	0	0	0	0	0	0	0	9	
2145 - 2200	0	14	5	0	0	0	0	0	0	0	0	0	0	19	54
2200 - 2215	0	14	2	0	0	0	0	0	0	0	0	0	0	16	
2215 - 2230	0	6	1	0	0	0	0	0	0	0	0	0	0	7	
2230 - 2245	0														

Bi-Directional Class Count || Bi-Directional 15min

Gainesville, GA



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Site 5
Clarks Bridge Rd (East),
east of Pine Valley Rd

Date
Tuesday, August 24, 2021
Lat/Long
34.335552°, -83.804332°

Weather
Fair
85°F

0000 - 2400 (Weekday 24h Session) [08-24-2021]

Bi-Directional 15min

Time	Bi-Directional 15min													15min Total	60min Total
	Class 1	Class 2	Class 3	Class 4	Class 5	Class 6	Class 7	Class 8	Class 9	Class 10	Class 11	Class 12	Class 13		
0000 - 0015	0	12	0	0	0	0	0	0	0	0	0	0	0	12	
0015 - 0030	1	7	2	0	0	0	0	0	0	0	0	0	0	10	
0030 - 0045	0	12	1	0	0	0	0	0	0	0	0	0	0	13	
0045 - 0100	0	8	1	0	0	0	0	0	0	0	0	0	0	9	44
0100 - 0115	0	2	1	0	0	0	0	0	0	0	0	0	0	3	
0115 - 0130	0	4	1	0	0	0	0	0	0	0	0	0	0	5	
0130 - 0145	0	6	1	0	0	0	0	0	0	0	0	0	0	7	
0145 - 0200	0	4	1	0	0	0	0	0	0	0	0	0	0	5	20
0200 - 0215	0	6	3	0	0	0	0	0	0	0	0	0	0	9	
0215 - 0230	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0230 - 0245	0	1	1	0	0	0	0	0	0	0	0	0	0	2	
0245 - 0300	0	4	1	0	0	0	0	0	0	0	0	0	0	5	16
0300 - 0315	0	2	0	0	1	0	0	0	0	0	0	0	0	3	
0315 - 0330	0	6	2	0	1	0	0	0	0	0	0	0	0	9	
0330 - 0345	0	5	0	0	0	0	0	0	0	0	0	0	0	5	
0345 - 0400	0	8	1	0	0	0	0	0	0	0	0	0	0	9	26
0400 - 0415	0	5	0	0	0	0	0	0	0	0	0	0	0	5	
0415 - 0430	0	14	0	0	0	0	0	0	0	0	0	0	0	14	
0430 - 0445	0	25	1	0	0	0	0	0	0	0	0	0	0	26	
0445 - 0500	0	8	6	0	0	0	0	0	0	0	0	0	0	14	59
0500 - 0515	0	17	4	0	0	0	0	0	0	0	0	0	0	21	
0515 - 0530	0	34	4	0	0	1	0	0	0	0	0	0	0	39	
0530 - 0545	0	32	11	0	0	0	0	0	0	0	0	0	0	43	
0545 - 0600	0	42	14	0	0	1	0	0	0	0	0	0	0	57	160
0600 - 0615	0	49	16	0	1	0	0	0	0	0	0	0	0	66	
0615 - 0630	0	36	24	0	0	2	0	0	0	0	0	0	0	62	
0630 - 0645	0	75	32	0	0	2	0	0	0	0	0	0	0	109	
0645 - 0700	2	72	25	3	0	1	0	0	0	0	0	0	0	103	340
0700 - 0715	0	100	46	0	2	0	0	0	2	0	0	0	0	150	
0715 - 0730	1	147	50	3	0	2	0	0	0	0	0	0	0	203	
0730 - 0745	0	163	46	2	5	0	0	0	0	0	0	0	0	216	
0745 - 0800	1	138	48	0	0	1	0	0	1	1	0	0	0	190	759
0800 - 0815	0	119	55	0	7	1	0	1	0	0	0	0	0	183	
0815 - 0830	0	99	48	2	2	2	0	1	0	0	0	0	0	154	
0830 - 0845	1	90	25	0	2	0	0	2	0	0	0	0	0	120	
0845 - 0900	0	80	33	0	1	0	0	0	0	0	0	0	0	114	571
0900 - 0915	1	72	31	0	3	4	0	4	0	0	0	0	0	115	
0915 - 0930	1	64	35	1	2	1	0	0	0	0	0	0	0	104	
0930 - 0945	1	71	37	0	1	0	0	0	0	0	0	0	0	110	
0945 - 1000	1	80	29	0	2	1	0	0	0	0	0	0	0	113	442
1000 - 1015	0	70	23	0	2	0	0	0	0	0	0	0	0	95	
1015 - 1030	0	82	25	0	5	0	0	0	0	0	0	0	0	112	
1030 - 1045	0	71	30	0	4	0	0	0	0	0	0	0	0	105	
1045 - 1100	1	77	36	0	0	0	0	0	0	0	0	0	0	114	426
1100 - 1115	1	57	24	0	9	1	0	0	0	0	0	0	0	92	
1115 - 1130	0	83	34	0	3	0	0	1	0	0	0	0	0	121	
1130 - 1145	3	88	36	0	2	0	0	0	0	0	0	0	0	129	
1145 - 1200	0	80	25	0	2	0	0	0	0	0	0	0	0	107	449
1200 - 1215	0	81	30	0	1	0	0	0	0	0	0	0	0	112	
1215 - 1230	0	87	26	0	2	0	0	0	0	0	0	0	0	115	
1230 - 1245	0	88	33	1	1	0	0	0	0	0	0	0	0	124	
1245 - 1300	1	89	30	0	0	0	0	0	0	0	0	0	0	120	471
1300 - 1315	1	90	27	1	1	0	0	0	0	0	0	0	0	120	
1315 - 1330	0	104	34	0	1	0	0	0	0	0	0	0	0	139	
1330 - 1345	0	78	23	0	3	1	0	0	0	0	0	0	0	105	
1345 - 1400	0	99	36	1	1	0	0	0	1	0	0	0	0	138	502
1400 - 1415	1	101	25	1	2	0	0	1	0	0	0	0	0	131	
1415 - 1430	0	99	24	0	0	0	0	0	0	0	0	0	0	123	
1430 - 1445	0	111	28	2	0	1	0	0	0	0	0	0	0	142	
1445 - 1500	3	91	40	1	4	0	0	0	0	0	0	0	0	139	535
1500 - 1515	2	97	42	2	4	1	0	0	0	0	0	0	0	148	
1515 - 1530	3	98	34	0	1	1	0	0	0	0	0	0	0	137	
1530 - 1545	0	106	37	0	3	0	0	0	0	0	0	0	0	146	
1545 - 1600	1	106	38	0	3	2	0	0	0	0	0	0	0	150	581
1600 - 1615	0	115	54	3	1	2	0	0	0	0	0	0	0	175	
1615 - 1630	0	116	42	1	3	1	0	0	0	1	0	0	0	164	
1630 - 1645	2	154	47	1	1	0	0	0	0	0	0	0	0	205	
1645 - 1700	2	139	51	0	1	0	0	0	0	0	0	0	0	193	737
1700 - 1715	0	160	60	0	2	2	0	0	0	0	0	0	0	224	
1715 - 1730	2	186	66	0	3	0	0	0	0	0	0	0	0	257	
1730 - 1745	1	177	60	0	3	0	0	1	0	0	0	0	0	242	
1745 - 1800	1	156	75	0	1	1	0	0	0	0	0	0	0	234	957
1800 - 1815	0	127	51	0	0	0	0	0	0	0	0	0	0	178	
1815 - 1830	1	111	58	0	2	1	0	0	0	0	0	0	0	173	
1830 - 1845	3	93	45	0	2	0	0	0	0	0	0	0	0	143	
1845 - 1900	0	109	30	0	1	0	0	0	0	0	0	0	0	140	634
1900 - 1915	2	82	44	0	5	0	0	0	0	0	0	0	0	133	
1915 - 1930	0	86	36	0	0	0	0	0	0	0	0	0	0	122	
1930 - 1945	2	70	29	0	2	0	0	0	0	0	0	0	0	103	
1945 - 2000	1	62	15	0	0	0	0	0	0	0	0	0	0	78	436
2000 - 2015	1	60	28	0	2	0	0	0	0	0	0	0	0	91	
2015 - 2030	1	51	30	0	1	0	0	0	0	0	0	0	0	83	
2030 - 2045	2	40	33	0	1	0	0	0	0	0	0	0	0	76	
2045 - 2100	0	32	20	0	0	0	0	0	0	0	0	0	0	52	302
2100 - 2115	0	29	25	0	1	0	0	1	0	0	0	0	0	56	
2115 - 2130	0	43	9	0	0	0	0	0	0	0	0	0	0	52	
2130 - 2145	0	24	8	0	0	0	0	0	0	0	0	0	0	32	
2145 - 2200	0	33	14	0	0	0	0	0	0	0	0	0	0	47	187
2200 - 2215	0	29	7	0	0	0	0	0	0	0	0	0	0	36	
2215 - 2230	0	18	5	0	0	0	0	0	0	0	0	0	0	23	
2230 - 2245	0	19	4												

Bi-Directional Class Count || Volume Summary 15min

Gainesville, GA



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Site 5

Clarks Bridge Rd (East),
east of Pine Valley Rd

Date

Tuesday, August 24, 2021

Weather

Fair
85°F

Lat/Long

34.335552°, -83.804332°

0000 - 2400 (Weekday 24h Session) (08-24-2021)

Volume Summary 15min

TIME	Volume Summary 15min		15min Total	60min Total
	EB	WB		
0000 - 0015	11	1	12	
0015 - 0030	6	4	10	
0030 - 0045	11	2	13	
0045 - 0100	7	2	9	44
0100 - 0115	2	1	3	
0115 - 0130	4	1	5	
0130 - 0145	5	2	7	
0145 - 0200	3	2	5	20
0200 - 0215	7	2	9	
0215 - 0230	0	0	0	
0230 - 0245	1	1	2	
0245 - 0300	4	1	5	16
0300 - 0315	2	1	3	
0315 - 0330	4	5	9	
0330 - 0345	1	4	5	
0345 - 0400	3	6	9	26
0400 - 0415	1	4	5	
0415 - 0430	3	11	14	
0430 - 0445	1	25	26	
0445 - 0500	4	10	14	59
0500 - 0515	3	18	21	
0515 - 0530	3	36	39	
0530 - 0545	0	43	43	
0545 - 0600	10	47	57	160
0600 - 0615	4	62	66	
0615 - 0630	16	46	62	
0630 - 0645	13	96	109	
0645 - 0700	16	87	103	340
0700 - 0715	26	124	150	
0715 - 0730	42	161	203	
0730 - 0745	50	166	216	
0745 - 0800	29	161	190	759
0800 - 0815	42	141	183	
0815 - 0830	51	103	154	
0830 - 0845	26	94	120	
0845 - 0900	38	76	114	571
0900 - 0915	50	65	115	
0915 - 0930	49	55	104	
0930 - 0945	60	50	110	
0945 - 1000	34	79	113	442
1000 - 1015	42	53	95	
1015 - 1030	54	58	112	
1030 - 1045	43	62	105	
1045 - 1100	62	52	114	426
1100 - 1115	47	45	92	
1115 - 1130	61	60	121	
1130 - 1145	75	54	129	
1145 - 1200	49	58	107	449

Time	Volume Summary 15min		15min Total	60min Total
	EB	WB		
1200 - 1215	66	46	112	
1215 - 1230	60	55	115	
1230 - 1245	67	57	124	
1245 - 1300	52	68	120	471
1300 - 1315	61	59	120	
1315 - 1330	80	59	139	
1330 - 1345	49	56	105	
1345 - 1400	68	70	138	502
1400 - 1415	59	72	131	
1415 - 1430	67	56	123	
1430 - 1445	92	50	142	
1445 - 1500	76	63	139	535
1500 - 1515	85	63	148	
1515 - 1530	86	51	137	
1530 - 1545	94	52	146	
1545 - 1600	92	58	150	581
1600 - 1615	123	52	175	
1615 - 1630	116	48	164	
1630 - 1645	149	56	205	
1645 - 1700	126	67	193	737
1700 - 1715	171	53	224	
1715 - 1730	196	61	257	
1730 - 1745	174	68	242	
1745 - 1800	162	72	234	957
1800 - 1815	113	65	178	
1815 - 1830	110	63	173	
1830 - 1845	93	50	143	
1845 - 1900	82	58	140	634
1900 - 1915	77	56	133	
1915 - 1930	88	34	122	
1930 - 1945	70	33	103	
1945 - 2000	64	14	78	436
2000 - 2015	57	34	91	
2015 - 2030	52	31	83	
2030 - 2045	49	27	76	
2045 - 2100	33	19	52	302
2100 - 2115	37	19	56	
2115 - 2130	45	7	52	
2130 - 2145	23	9	32	
2145 - 2200	28	19	47	187
2200 - 2215	20	16	36	
2215 - 2230	16	7	23	
2230 - 2245	15	8	23	
2245 - 2300	13	11	24	106
2300 - 2315	6	6	12	
2315 - 2330	16	7	23	
2330 - 2345	14	7	21	
2345 - 0000	10	1	11	67

Session Total	4577	4250	8827
Session Average	47.68	44.27	91.95
Session Percentage	51.85	48.15	

**24-Hour Classification Count
Pine Valley at Driveway #1**

Bi-Directional Class Count || NB EB 15min

Gainesville, GA



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Site 3
Pine Valley Rd,
west of White Sulphur Rd (North)

Date
Tuesday, August 24, 2021

Fair

85°F

Lat/Long

34.325091°, -83.793962°

[Click here for Map](#)

0000 - 2400 (Weekday 24h Session) [08-24-2021]

NB EB 15min

Time	Eastbound (Movement 3.1)													15min Total	60min Total
	Class 1	Class 2	Class 3	Class 4	Class 5	Class 6	Class 7	Class 8	Class 9	Class 10	Class 11	Class 12	Class 13		
0000 - 0015	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0015 - 0030	0	3	1	0	0	0	0	0	0	0	0	0	0	4	
0030 - 0045	0	2	0	0	0	0	0	0	0	0	0	0	0	2	
0045 - 0100	0	2	0	0	0	0	0	0	0	0	0	0	0	2	8
0100 - 0115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0115 - 0130	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0130 - 0145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0145 - 0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0200 - 0215	0	1	0	0	0	0	0	0	0	0	0	0	0	1	
0215 - 0230	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0230 - 0245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0245 - 0300	0	2	0	0	0	0	0	0	0	0	0	0	0	2	3
0300 - 0315	0	1	0	0	0	0	0	0	0	0	0	0	0	1	
0315 - 0330	0	3	0	0	0	0	0	0	0	0	0	0	0	3	
0330 - 0345	0	2	0	0	0	0	0	0	0	0	0	0	0	2	
0345 - 0400	0	2	0	0	0	0	0	0	0	0	0	0	0	2	8
0400 - 0415	0	4	1	0	0	0	0	0	0	0	0	0	0	5	
0415 - 0430	0	5	1	0	0	0	0	0	0	0	0	0	0	6	
0430 - 0445	0	23	1	0	0	0	0	0	0	0	0	0	0	24	
0445 - 0500	0	10	0	0	0	0	0	0	0	0	0	0	0	10	45
0500 - 0515	0	11	1	0	0	0	0	0	0	0	0	0	0	12	
0515 - 0530	0	17	3	0	0	0	0	0	0	0	0	0	0	20	
0530 - 0545	0	27	3	0	0	0	0	0	0	0	0	0	0	30	
0545 - 0600	0	23	3	0	1	0	0	0	0	0	0	0	0	27	89
0600 - 0615	0	24	8	0	0	0	0	0	0	0	0	0	0	32	
0615 - 0630	0	32	8	0	0	0	0	0	0	0	0	0	0	40	
0630 - 0645	0	33	8	1	0	0	0	0	0	0	0	0	0	42	
0645 - 0700	1	41	8	3	0	2	0	0	0	0	0	0	0	55	169
0700 - 0715	0	38	12	0	0	0	0	0	0	0	0	0	0	50	
0715 - 0730	0	55	21	2	0	0	0	0	0	0	0	0	0	78	
0730 - 0745	0	79	13	0	2	0	0	0	0	0	0	0	0	94	
0745 - 0800	0	60	22	1	0	0	0	0	0	0	0	0	0	83	305
0800 - 0815	0	49	13	0	2	0	0	0	0	0	0	0	0	64	
0815 - 0830	1	28	19	0	0	0	0	0	0	0	0	0	0	48	
0830 - 0845	0	38	7	0	0	0	0	0	0	0	0	0	0	45	
0845 - 0900	0	31	11	0	1	0	0	0	0	0	0	0	0	43	200
0900 - 0915	0	29	9	0	0	0	0	0	0	0	0	0	0	38	
0915 - 0930	1	23	10	0	1	0	0	0	0	0	0	0	0	35	
0930 - 0945	0	17	6	0	0	0	0	0	0	0	0	0	0	23	
0945 - 1000	0	23	12	0	0	1	0	0	0	0	0	0	0	36	132
1000 - 1015	0	20	6	0	1	0	0	0	0	0	0	0	0	27	
1015 - 1030	0	22	4	0	0	0	0	0	0	0	0	0	0	26	
1030 - 1045	0	15	8	0	0	0	0	0	0	0	0	0	0	23	
1045 - 1100	0	15	7	0	0	0	0	0	0	0	0	0	0	22	98
1100 - 1115	0	20	7	0	0	0	0	0	0	0	0	0	0	27	
1115 - 1130	0	19	9	0	0	0	0	0	1	0	0	0	0	29	
1130 - 1145	1	14	9	0	2	0	0	0	0	0	0	0	0	26	
1145 - 1200	0	32	3	0	0	0	0	0	0	0	0	0	0	35	117
1200 - 1215	0	27	9	0	0	0	0	0	0	0	0	0	0	36	
1215 - 1230	0	17	7	0	0	0	0	0	0	0	0	0	0	24	
1230 - 1245	0	21	7	0	0	0	0	0	0	0	0	0	0	28	
1245 - 1300	1	23	9	0	0	0	0	0	0	0	0	0	0	33	121
1300 - 1315	0	22	8	0	0	0	0	0	0	0	0	0	0	30	
1315 - 1330	0	15	12	0	0	0	0	0	0	0	0	0	0	27	
1330 - 1345	0	19	9	0	0	0	0	0	0	0	0	0	0	28	
1345 - 1400	1	25	8	0	1	0	0	0	0	0	0	0	0	35	120
1400 - 1415	0	20	8	0	1	0	0	0	0	0	0	0	0	29	
1415 - 1430	0	28	6	0	1	0	0	0	0	0	0	0	0	35	
1430 - 1445	1	24	6	0	0	0	0	0	0	0	0	0	0	31	
1445 - 1500	0	37	6	1	2	0	0	0	0	0	0	0	0	46	141
1500 - 1515	0	31	5	0	1	0	0	0	0	0	0	0	0	37	
1515 - 1530	1	29	12	2	0	0	0	0	0	0	0	0	0	44	
1530 - 1545	0	21	7	0	1	0	0	0	0	0	0	0	0	29	
1545 - 1600	2	17	7	0	0	1	0	0	0	0	0	0	0	27	137
1600 - 1615	0	27	15	1	0	0	0	0	0	0	0	0	0	43	
1615 - 1630	0	24	11	1	1	0	0	0	0	0	0	0	0	37	
1630 - 1645	1	30	3	0	1	0	0	0	0	0	0	0	0	35	
1645 - 1700	0	26	13	1	0	1	0	0	0	0	0	0	0	41	156
1700 - 1715	0	29	6	0	0	0	0	0	0	0	0	0	0	35	
1715 - 1730	0	32	10	0	0	0	0	0	0	0	0	0	0	42	
1730 - 1745	0	39	19	0	2	0	0	0	0	0	0	0	0	60	
1745 - 1800	0	31	15	0	0	0	0	0	0	0	0	0	0	46	183
1800 - 1815	0	21	7	0	0	0	0	0	0	0	0	0	0	28	
1815 - 1830	0	22	13	0	0	0	0	0	0	0	0	0	0	35	
1830 - 1845	1	25	5	0	0	0	0	0	0	0	0	0	0	31	
1845 - 1900	0	25	6	0	0	0	0	0	0	0	0	0	0	31	125
1900 - 1915	0	21	4	0	3	0	0	0	0	0	0	0	0	28	
1915 - 1930	1	19	3	0	0	0	0	0	0	0	0	0	0	23	
1930 - 1945	0	24	5	0	0	1	0	0	0	0	0	0	0	30	
1945 - 2000	0	7	3	0	0	0	0	0	0	0	0	0	0	10	91
2000 - 2015	0	20	4	0	0	0	0	0	0	0	0	0	0	24	
2015 - 2030	0	16	6	0	0	0	0	0	0	0	0	0	0	22	
2030 - 2045	0	13	1	0	0	0	0	0	0	0	0	0	0	14	
2045 - 2100	0	7	2	0	0	0	0	0	0	0	0	0	0	9	69
2100 - 2115	0	10	1	0	0	0	0	0	0	0	0	0	0	11	
2115 - 2130	0	5	1	0	0	0	0	0	0	0	0	0	0	6	
2130 - 2145	0	6	0	0	0	0	0	0	0	0	0	0	0	6	
2145 - 2200	0	12	5	0	0	0	0	0	0	0	0	0	0	17	40
2200 - 2215	0	8	0	0	0	0	0	0	0	0	0	0	0	8	
2215 - 2230	0	3	0	0	0	0	0	0	0	0	0	0	0	3	
2230 - 2245	0	5	0	0	0										

Bi-Directional Class Count | SB WB 15min

Gainesville, GA



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Site 3
 Pine Valley Rd,
 west of White Sulphur Rd (North)

Date
 Tuesday, August 24, 2021

Tuesday, August 24, 2021

Weather
 Fair
 85°F

Lat/Long
 34.325091°, -83.793962°
[Click here for Map](#)**0000 - 2400 (Weekday 24h Session) [08-24-2021]**

SB WB 15min

Time	Westbound (Movement 3.2)													15min Total	60min Total
	Class 1	Class 2	Class 3	Class 4	Class 5	Class 6	Class 7	Class 8	Class 9	Class 10	Class 11	Class 12	Class 13		
0000 - 0015	0	7	0	0	0	0	0	0	0	0	0	0	0	7	
0015 - 0030	1	1	0	0	0	0	0	0	0	0	0	0	0	3	
0030 - 0045	0	6	1	0	0	0	0	0	0	0	0	0	0	7	
0045 - 0100	0	3	0	0	0	0	0	0	0	0	0	0	0	3	20
0100 - 0115	0	2	0	0	0	0	0	0	0	0	0	0	0	2	
0115 - 0130	0	4	0	0	0	0	0	0	0	0	0	0	0	4	
0130 - 0145	0	2	0	0	0	0	0	0	0	0	0	0	0	2	
0145 - 0200	0	2	0	0	0	0	0	0	0	0	0	0	0	2	10
0200 - 0215	0	5	0	0	0	0	0	0	1	0	0	0	0	6	
0215 - 0230	0	1	0	0	0	0	0	0	0	0	0	0	0	1	
0230 - 0245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0245 - 0300	0	7	0	0	0	0	0	0	0	0	0	0	0	7	14
0300 - 0315	0	2	0	0	0	0	0	0	0	0	0	0	0	2	
0315 - 0330	0	1	0	0	0	0	0	0	0	0	0	0	0	1	
0330 - 0345	0	2	0	0	0	0	0	0	0	0	0	0	0	2	
0345 - 0400	0	1	0	0	0	0	0	0	0	0	0	0	0	1	6
0400 - 0415	0	1	0	0	0	0	0	1	0	0	0	0	0	2	
0415 - 0430	0	1	0	0	0	0	0	0	0	0	0	0	0	1	
0430 - 0445	0	1	0	0	0	0	0	0	0	0	0	0	0	1	
0445 - 0500	0	3	2	0	0	0	0	0	0	0	0	0	0	5	9
0500 - 0515	0	1	0	0	0	0	0	0	0	0	0	0	0	1	
0515 - 0530	0	1	1	0	0	1	0	0	0	0	0	0	0	3	
0530 - 0545	0	1	0	0	0	0	0	0	0	0	0	0	0	1	
0545 - 0600	0	2	1	0	0	0	0	0	0	0	0	0	0	3	8
0600 - 0615	0	4	1	0	0	0	0	0	0	0	0	0	0	5	
0615 - 0630	0	4	1	1	0	0	0	0	0	0	0	0	0	6	
0630 - 0645	0	6	2	0	0	0	0	0	0	0	0	0	0	8	
0645 - 0700	0	9	2	0	0	0	0	0	0	0	0	0	0	11	30
0700 - 0715	0	21	2	0	1	0	0	0	1	0	0	0	0	25	
0715 - 0730	0	18	2	0	0	0	0	0	0	0	0	0	0	20	
0730 - 0745	0	15	9	0	0	0	0	0	0	0	0	0	0	24	
0745 - 0800	0	21	1	0	1	0	0	0	0	0	0	0	0	23	92
0800 - 0815	0	13	13	0	0	0	0	0	0	0	0	0	0	26	
0815 - 0830	0	17	3	0	0	0	0	0	0	0	0	0	0	20	
0830 - 0845	0	13	5	0	1	0	0	0	0	0	0	0	0	19	
0845 - 0900	0	13	6	0	1	0	0	0	0	0	0	0	0	20	85
0900 - 0915	0	21	3	0	1	1	0	1	0	0	0	0	0	27	
0915 - 0930	0	11	4	0	1	0	0	0	0	0	0	0	0	16	
0930 - 0945	1	18	4	0	0	0	0	0	0	0	0	0	0	23	
0945 - 1000	0	13	6	0	0	0	0	0	0	0	0	0	0	19	85
1000 - 1015	0	12	4	0	1	0	0	0	0	0	0	0	0	17	
1015 - 1030	0	5	7	0	1	0	0	0	0	0	0	0	0	13	
1030 - 1045	0	7	5	0	0	0	0	0	0	0	0	0	0	12	
1045 - 1100	0	13	13	0	2	0	0	0	0	0	0	0	0	28	70
1100 - 1115	0	16	4	0	0	0	0	0	0	0	0	0	0	20	
1115 - 1130	0	15	4	0	0	0	0	0	0	0	0	0	0	19	
1130 - 1145	0	18	6	0	0	0	0	0	0	0	0	0	0	24	
1145 - 1200	0	14	6	0	0	0	0	0	0	0	0	0	0	20	83
1200 - 1215	0	11	4	0	0	0	0	0	0	0	0	0	0	15	
1215 - 1230	0	14	10	0	0	0	0	0	0	0	0	0	0	24	
1230 - 1245	0	17	4	0	0	0	0	0	0	0	0	0	0	21	
1245 - 1300	1	18	10	0	0	0	0	0	0	0	0	0	0	29	89
1300 - 1315	0	15	7	0	0	0	0	0	0	0	0	0	0	22	
1315 - 1330	1	18	5	0	0	0	0	0	0	0	0	0	0	24	
1330 - 1345	0	13	7	0	0	0	0	0	0	0	0	0	0	20	
1345 - 1400	0	17	5	0	0	0	0	0	0	0	0	0	0	22	88
1400 - 1415	0	18	3	0	0	0	0	0	0	0	0	0	0	21	
1415 - 1430	0	21	4	0	0	0	0	0	0	0	0	0	0	25	
1430 - 1445	0	27	14	0	0	0	0	0	0	0	0	0	0	41	
1445 - 1500	0	28	8	0	0	0	0	0	0	0	0	0	0	36	123
1500 - 1515	1	22	11	2	0	0	0	0	0	0	0	0	0	36	
1515 - 1530	0	28	10	1	0	0	0	0	0	0	0	0	0	39	
1530 - 1545	0	29	9	0	0	0	0	0	0	0	0	0	0	38	
1545 - 1600	0	32	10	0	1	0	0	0	0	0	0	0	0	43	156
1600 - 1615	0	38	9	0	0	2	0	0	0	0	0	0	0	49	
1615 - 1630	0	37	13	0	3	0	0	0	0	0	0	0	0	53	
1630 - 1645	0	43	15	1	0	0	0	0	0	0	0	0	0	59	
1645 - 1700	0	39	15	0	0	0	0	0	0	0	0	0	0	54	215
1700 - 1715	1	45	23	0	0	0	0	0	0	0	0	0	0	69	
1715 - 1730	0	52	26	0	1	0	0	0	0	0	0	0	0	79	
1730 - 1745	0	54	18	0	1	0	0	0	0	0	0	0	0	73	
1745 - 1800	0	53	19	0	0	0	0	0	0	0	0	0	0	72	293
1800 - 1815	0	39	7	0	0	0	0	0	0	0	0	0	0	46	
1815 - 1830	0	30	12	0	1	0	0	0	0	0	0	0	0	43	
1830 - 1845	1	26	13	0	1	0	0	0	0	0	0	0	0	41	
1845 - 1900	0	32	13	0	0	0	0	0	0	0	0	0	0	45	175
1900 - 1915	0	25	6	0	1	0	0	0	0	0	0	0	0	32	
1915 - 1930	0	22	7	0	0	0	0	0	0	0	0	0	0	29	
1930 - 1945	1	12	10	0	0	0	0	0	0	0	0	0	0	23	
1945 - 2000	0	21	7	0	0	0	0	0	0	0	0	0	0	28	112
2000 - 2015	0	20	6	0	0	0	0	0	0	0	0	0	0	26	
2015 - 2030	0	19	6	0	1	0	0	0	0	0	0	0	0	26	
2030 - 2045	0	13	1	0	0	0	0	0	0	0	0	0	0	14	
2045 - 2100	0	11	0	0	0	0	0	0	0	0	0	0	0	11	77
2100 - 2115	0	16	2	0	0	0	0	0	0	0	0	0	0	18	
2115 - 2130	0	19	2	0	0	0	0	0	0	0	0	0	0	21	
2130 - 2145	0	11	0	0	1	0	0	0	0	0	0	0	0	12	
2145 - 2200	0	9	1	0	0	0	0	0	0	0	0	0	0	10	61
2200 - 2215	0	7	0	0	0	0	0	0	0	0	0	0	0	7	
2215 - 2230	0	8	1	0	0	0	0	0	0	0	0	0	0	9	
2230 - 2245	0	5	0	0	0	0	0								

Bi-Directional Class Count || Bi-Directional 15min

Gainesville, GA



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Site 3
Pine Valley Rd,
west of White Sulphur Rd (North)

Date
Tuesday, August 24, 2021

Tuesday, August 24, 2021

Weather
Fair
85°F

Lat/Long
34.325091°, -83.793962°

0000 - 2400 (Weekday 24h Session) [08-24-2021]

Bi-Directional 15min

Time	Bi-Directional 15min													15min Total	60min Total
	Class 1	Class 2	Class 3	Class 4	Class 5	Class 6	Class 7	Class 8	Class 9	Class 10	Class 11	Class 12	Class 13		
0000 - 0015	0	7	0	0	0	0	0	0	0	0	0	0	0	7	
0015 - 0030	1	4	2	0	0	0	0	0	0	0	0	0	0	7	
0030 - 0045	0	8	1	0	0	0	0	0	0	0	0	0	0	9	
0045 - 0100	0	5	0	0	0	0	0	0	0	0	0	0	0	5	
0100 - 0115	0	2	0	0	0	0	0	0	0	0	0	0	0	2	
0115 - 0130	0	4	0	0	0	0	0	0	0	0	0	0	0	4	
0130 - 0145	0	2	0	0	0	0	0	0	0	0	0	0	0	2	
0145 - 0200	0	2	0	0	0	0	0	0	0	0	0	0	0	2	
0200 - 0215	0	6	0	0	0	0	0	0	1	0	0	0	0	7	
0215 - 0230	0	1	0	0	0	0	0	0	0	0	0	0	0	1	
0230 - 0245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0245 - 0300	0	9	0	0	0	0	0	0	0	0	0	0	0	9	
0300 - 0315	0	3	0	0	0	0	0	0	0	0	0	0	0	3	
0315 - 0330	0	4	0	0	0	0	0	0	0	0	0	0	0	4	
0330 - 0345	0	4	0	0	0	0	0	0	0	0	0	0	0	4	
0345 - 0400	0	3	0	0	0	0	0	0	0	0	0	0	0	3	
0400 - 0415	0	5	1	0	0	0	0	0	1	0	0	0	0	7	
0415 - 0430	0	6	1	0	0	0	0	0	0	0	0	0	0	7	
0430 - 0445	0	24	1	0	0	0	0	0	0	0	0	0	0	25	
0445 - 0500	0	13	2	0	0	0	0	0	0	0	0	0	0	15	
0500 - 0515	0	12	1	0	0	0	0	0	0	0	0	0	0	13	
0515 - 0530	0	18	4	0	0	1	0	0	0	0	0	0	0	23	
0530 - 0545	0	28	3	0	0	0	0	0	0	0	0	0	0	31	
0545 - 0600	0	25	4	0	1	0	0	0	0	0	0	0	0	30	
0600 - 0615	0	28	9	0	0	0	0	0	0	0	0	0	0	37	
0615 - 0630	0	36	9	1	0	0	0	0	0	0	0	0	0	46	
0630 - 0645	0	39	10	1	0	0	0	0	0	0	0	0	0	50	
0645 - 0700	1	50	10	3	0	2	0	0	0	0	0	0	0	66	
0700 - 0715	0	59	14	0	1	0	0	0	1	0	0	0	0	75	
0715 - 0730	0	73	23	2	0	0	0	0	0	0	0	0	0	98	
0730 - 0745	0	94	22	0	2	0	0	0	0	0	0	0	0	118	
0745 - 0800	0	81	23	1	1	0	0	0	0	0	0	0	0	106	
0800 - 0815	0	62	26	0	2	0	0	0	0	0	0	0	0	90	
0815 - 0830	1	45	22	0	0	0	0	0	0	0	0	0	0	68	
0830 - 0845	0	51	12	0	1	0	0	0	0	0	0	0	0	64	
0845 - 0900	0	44	17	0	2	0	0	0	0	0	0	0	0	63	
0900 - 0915	0	50	12	0	1	1	0	1	0	0	0	0	0	65	
0915 - 0930	1	34	14	0	2	0	0	0	0	0	0	0	0	51	
0930 - 0945	1	35	10	0	0	0	0	0	0	0	0	0	0	46	
0945 - 1000	0	36	18	0	0	1	0	0	0	0	0	0	0	55	
1000 - 1015	0	32	10	0	2	0	0	0	0	0	0	0	0	44	
1015 - 1030	0	27	11	0	1	0	0	0	0	0	0	0	0	39	
1030 - 1045	0	22	13	0	0	0	0	0	0	0	0	0	0	35	
1045 - 1100	0	28	20	0	2	0	0	0	0	0	0	0	0	50	
1100 - 1115	0	36	11	0	0	0	0	0	0	0	0	0	0	47	
1115 - 1130	0	34	13	0	0	0	0	1	0	0	0	0	0	48	
1130 - 1145	1	32	15	0	2	0	0	0	0	0	0	0	0	50	
1145 - 1200	0	46	9	0	0	0	0	0	0	0	0	0	0	55	
1200 - 1215	0	38	13	0	0	0	0	0	0	0	0	0	0	51	
1215 - 1230	0	31	17	0	0	0	0	0	0	0	0	0	0	48	
1230 - 1245	0	38	11	0	0	0	0	0	0	0	0	0	0	49	
1245 - 1300	2	41	19	0	0	0	0	0	0	0	0	0	0	62	
1300 - 1315	0	37	15	0	0	0	0	0	0	0	0	0	0	52	
1315 - 1330	1	33	17	0	0	0	0	0	0	0	0	0	0	51	
1330 - 1345	0	32	16	0	0	0	0	0	0	0	0	0	0	48	
1345 - 1400	1	42	13	0	1	0	0	0	0	0	0	0	0	57	
1400 - 1415	0	38	11	0	1	0	0	0	0	0	0	0	0	50	
1415 - 1430	0	49	10	0	1	0	0	0	0	0	0	0	0	60	
1430 - 1445	1	51	20	0	0	0	0	0	0	0	0	0	0	72	
1445 - 1500	0	65	14	1	2	0	0	0	0	0	0	0	0	82	
1500 - 1515	1	53	16	2	1	0	0	0	0	0	0	0	0	73	
1515 - 1530	1	57	22	3	0	0	0	0	0	0	0	0	0	83	
1530 - 1545	0	50	16	0	1	0	0	0	0	0	0	0	0	67	
1545 - 1600	2	49	17	0	1	1	0	0	0	0	0	0	0	70	
1600 - 1615	0	65	24	1	0	2	0	0	0	0	0	0	0	92	
1615 - 1630	0	61	24	1	4	0	0	0	0	0	0	0	0	90	
1630 - 1645	1	73	18	1	1	0	0	0	0	0	0	0	0	94	
1645 - 1700	0	65	28	1	0	1	0	0	0	0	0	0	0	95	
1700 - 1715	1	74	29	0	0	0	0	0	0	0	0	0	0	104	
1715 - 1730	0	84	36	0	1	0	0	0	0	0	0	0	0	121	
1730 - 1745	0	93	37	0	3	0	0	0	0	0	0	0	0	133	
1745 - 1800	0	84	34	0	0	0	0	0	0	0	0	0	0	118	
1800 - 1815	0	60	14	0	0	0	0	0	0	0	0	0	0	74	
1815 - 1830	0	52	25	0	1	0	0	0	0	0	0	0	0	78	
1830 - 1845	2	51	18	0	1	0	0	0	0	0	0	0	0	72	
1845 - 1900	0	57	19	0	0	0	0	0	0	0	0	0	0	76	
1900 - 1915	0	46	10	0	4	0	0	0	0	0	0	0	0	60	
1915 - 1930	1	41	10	0	0	0	0	0	0	0	0	0	0	52	
1930 - 1945	1	36	15	0	1	0	0	0	0	0	0	0	0	53	
1945 - 2000	0	28	10	0	1	0	0	0	0	0	0	0	0	38	
2000 - 2015	0	40	10	0	0	0	0	0	0	0	0	0	0	50	
2015 - 2030	0	35	12	0	1	0	0	0	0	0	0	0	0	48	
2030 - 2045	0	26	2	0	0	0	0	0	0	0	0	0	0	28	
2045 - 2100	0	18	2	0	0	0	0	0	0	0	0	0	0	20	
2100 - 2115	0	26	3	0	0	0	0	0	0	0	0	0	0	29	
2115 - 2130	0	24	3	0	0	0	0	0	0	0	0	0	0	27	
2130 - 2145	0	17	0	0	1	0	0	0	0	0	0	0	0	18	
2145 - 2200	0	21	6	0	0	0	0	0	0	0	0	0	0	27	
2200 - 2215	0	15	0	0	0	0	0	0	0	0	0	0	0	15	
2215 - 2230	0	11	1	0	0	0	0	0	0	0	0	0	0	12	
2230 - 2245	0	10	0	0	0	0	0	0	0	0	0	0	0	10	
2245 - 2300	0	10													

Bi-Directional Class Count || Volume Summary 15min

Gainesville, GA



www.marrtraffic.com

Site 3

Pine Valley Rd,
west of White Sulphur Rd (North)

Date

Tuesday, August 24, 2021

Weather

Fair
85°F

Lat/Long

34.325091°, -83.793962°

0000 - 2400 (Weekday 24h Session) (08-24-2021)

Volume Summary 15min

TIME	Volume Summary 15min		15min Total	60min Total
	EB	WB		
0000 - 0015	0	7	7	
0015 - 0030	4	3	7	
0030 - 0045	2	7	9	
0045 - 0100	2	3	5	28
0100 - 0115	0	2	2	
0115 - 0130	0	4	4	
0130 - 0145	0	2	2	
0145 - 0200	0	2	2	10
0200 - 0215	1	6	7	
0215 - 0230	0	1	1	
0230 - 0245	0	0	0	
0245 - 0300	2	7	9	17
0300 - 0315	1	2	3	
0315 - 0330	3	1	4	
0330 - 0345	2	2	4	
0345 - 0400	2	1	3	14
0400 - 0415	5	2	7	
0415 - 0430	6	1	7	
0430 - 0445	24	1	25	
0445 - 0500	10	5	15	54
0500 - 0515	12	1	13	
0515 - 0530	20	3	23	
0530 - 0545	30	1	31	
0545 - 0600	27	3	30	97
0600 - 0615	32	5	37	
0615 - 0630	40	6	46	
0630 - 0645	42	8	50	
0645 - 0700	55	11	66	199
0700 - 0715	50	25	75	
0715 - 0730	78	20	98	
0730 - 0745	94	24	118	
0745 - 0800	83	23	106	397
0800 - 0815	64	26	90	
0815 - 0830	48	20	68	
0830 - 0845	45	19	64	
0845 - 0900	43	20	63	285
0900 - 0915	38	27	65	
0915 - 0930	35	16	51	
0930 - 0945	23	23	46	
0945 - 1000	36	19	55	217
1000 - 1015	27	17	44	
1015 - 1030	26	13	39	
1030 - 1045	23	12	35	
1045 - 1100	22	28	50	168
1100 - 1115	27	20	47	
1115 - 1130	29	19	48	
1130 - 1145	26	24	50	
1145 - 1200	35	20	55	200

Time	Volume Summary 15min		15min Total	60min Total
	Time	EB		
1200 - 1215	36	15	51	
1215 - 1230	24	24	48	
1230 - 1245	28	21	49	
1245 - 1300	33	29	62	210
1300 - 1315	30	22	52	
1315 - 1330	27	24	51	
1330 - 1345	28	20	48	
1345 - 1400	35	22	57	208
1400 - 1415	29	21	50	
1415 - 1430	35	25	60	
1430 - 1445	31	41	72	
1445 - 1500	46	36	82	264
1500 - 1515	37	36	73	
1515 - 1530	44	39	83	
1530 - 1545	29	38	67	
1545 - 1600	27	43	70	293
1600 - 1615	43	49	92	
1615 - 1630	37	53	90	
1630 - 1645	35	59	94	
1645 - 1700	41	54	95	371
1700 - 1715	35	69	104	
1715 - 1730	42	79	121	
1730 - 1745	60	73	133	
1745 - 1800	46	72	118	476
1800 - 1815	28	46	74	
1815 - 1830	35	43	78	
1830 - 1845	31	41	72	
1845 - 1900	31	45	76	300
1900 - 1915	28	32	60	
1915 - 1930	23	29	52	
1930 - 1945	30	23	53	
1945 - 2000	10	28	38	203
2000 - 2015	24	26	50	
2015 - 2030	22	26	48	
2030 - 2045	14	14	28	
2045 - 2100	9	11	20	146
2100 - 2115	11	18	29	
2115 - 2130	6	21	27	
2130 - 2145	6	12	18	
2145 - 2200	17	10	27	101
2200 - 2215	8	7	15	
2215 - 2230	3	9	12	
2230 - 2245	5	5	10	
2245 - 2300	3	8	11	48
2300 - 2315	3	5	8	
2315 - 2330	2	13	15	
2330 - 2345	3	6	9	
2345 - 0000	3	3	6	38

Session Total	2387	1957	4344
Session Average	24.86	20.39	45.25
Session Percentage	54.95	45.05	

**24-Hour Classification Count
White Sulphur at Pine Valley Road**

Bi-Directional Class Count | Bi-Directional 15min

Gainesville, GA



www.marrtraffic.com

Site 4	Date	Weather
White Sulphur Rd (South), south of Pine Valley Rd	Tuesday, August 24, 2021	Fair 85°F
	Lat/Long	34.324132°, -83.793831°

0000 - 2400 (Weekday 24h Session) (08-24-2021)

Bi-Directional 15mir

Session Total	41	7551	2050	32	112	23	0	9	46	0	0	0	0	9864
Session Average	0.43	78.66	21.35	0.33	1.17	0.24	0.00	0.09	0.48	0.00	0.00	0.00	0.00	102.75
Session Percentage	0.42	76.55	20.78	0.32	1.14	0.23	0.00	0.09	0.47	0.00	0.00	0.00	0.00	

AM Peak Hour	0500 - 0600	0715 - 0815	0730 - 0830	0600 - 0700	0515 - 0615	0815 - 0915	-	0715 - 0815	0915 - 1015	-	-	-	-	0715 - 0815
AM Peak Volume	3	674	186	9	10	4	0	2	6	0	0	0	0	871

Noon Peak Hour	1345 - 1445	1115 - 1215	1215 - 1315	1340 - 1530	1430 - 1530	1300 - 1400	-	1315 - 1415	1345 - 1445	-	-	-	-	1115 - 1215
Noon Peak Volume	7	485	151	6	13	4	0	2	6	0	0	0	0	642

PM Peak Hour 1630 - 1730 1645 - 1745 1715 - 1815 1600 - 1700 1500 - 1600 1515 - 1615 - 1515 1615 1530 - 1630 - - - - 1645 - 1745

Bi-Directional Class Count || Volume Summary 15min

Gainesville, GA



www.marrtraffic.com

Site 4

White Sulphur Rd (South),
south of Pine Valley Rd

Date

Tuesday, August 24, 2021

Weather

Fair
85°F

Lat/Long

34.324132°, -83.793831°

0000 - 2400 (Weekday 24h Session) (08-24-2021)

Volume Summary 15min

TIME	Volume Summary 15min		15min Total	60min Total
	NB	SB		
0000 - 0015	20	4	24	
0015 - 0030	12	5	17	
0030 - 0045	8	2	10	
0045 - 0100	8	4	12	63
0100 - 0115	4	5	9	
0115 - 0130	10	4	14	
0130 - 0145	5	7	12	
0145 - 0200	3	7	10	45
0200 - 0215	9	6	15	
0215 - 0230	2	6	8	
0230 - 0245	1	1	2	
0245 - 0300	9	9	18	43
0300 - 0315	5	13	18	
0315 - 0330	2	3	5	
0330 - 0345	3	3	6	
0345 - 0400	1	7	8	37
0400 - 0415	6	5	11	
0415 - 0430	3	7	10	
0430 - 0445	7	30	37	
0445 - 0500	14	15	29	87
0500 - 0515	6	19	25	
0515 - 0530	24	22	46	
0530 - 0545	32	39	71	
0545 - 0600	33	38	71	213
0600 - 0615	44	37	81	
0615 - 0630	80	51	131	
0630 - 0645	113	72	185	
0645 - 0700	121	84	205	602
0700 - 0715	65	97	162	
0715 - 0730	107	135	242	
0730 - 0745	73	161	234	
0745 - 0800	60	152	212	850
0800 - 0815	61	122	183	
0815 - 0830	57	94	151	
0830 - 0845	45	78	123	
0845 - 0900	49	74	123	580
0900 - 0915	47	57	104	
0915 - 0930	40	73	113	
0930 - 0945	52	45	97	
0945 - 1000	56	63	119	433
1000 - 1015	40	57	97	
1015 - 1030	37	52	89	
1030 - 1045	41	44	85	
1045 - 1100	45	53	98	369
1100 - 1115	46	58	104	
1115 - 1130	62	103	165	
1130 - 1145	65	111	176	
1145 - 1200	69	74	143	588

Time	Volume Summary 15min		15min Total	60min Total
	NB	SB		
1200 - 1215	78	80	158	
1215 - 1230	81	65	146	
1230 - 1245	87	76	163	
1245 - 1300	68	69	137	604
1300 - 1315	78	72	150	
1315 - 1330	68	65	133	
1330 - 1345	72	52	124	
1345 - 1400	68	62	130	537
1400 - 1415	54	60	114	
1415 - 1430	64	57	121	
1430 - 1445	62	50	112	
1445 - 1500	79	77	156	503
1500 - 1515	81	63	144	
1515 - 1530	89	79	168	
1530 - 1545	81	74	155	
1545 - 1600	80	66	146	613
1600 - 1615	97	97	194	
1615 - 1630	112	85	197	
1630 - 1645	132	114	246	
1645 - 1700	138	119	257	894
1700 - 1715	164	138	302	
1715 - 1730	179	108	287	
1730 - 1745	146	127	273	
1745 - 1800	140	114	254	1116
1800 - 1815	90	118	208	
1815 - 1830	91	94	185	
1830 - 1845	70	95	165	
1845 - 1900	72	69	141	699
1900 - 1915	54	52	106	
1915 - 1930	49	58	107	
1930 - 1945	58	46	104	
1945 - 2000	45	32	77	394
2000 - 2015	40	36	76	
2015 - 2030	44	38	82	
2030 - 2045	31	25	56	
2045 - 2100	16	17	33	247
2100 - 2115	30	14	44	
2115 - 2130	29	8	37	
2130 - 2145	25	10	35	
2145 - 2200	18	21	39	155
2200 - 2215	17	11	28	
2215 - 2230	20	5	25	
2230 - 2245	16	5	21	
2245 - 2300	12	6	18	92
2300 - 2315	10	14	24	
2315 - 2330	21	11	32	
2330 - 2345	12	16	28	
2345 - 0000	10	6	16	100

Session Total	4880	4984	9864
Session Average	50.83	51.92	102.75
Session Percentage	49.47	50.53	

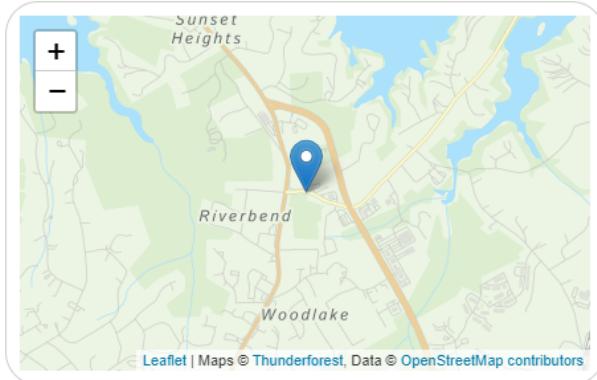
Appendix C

Growth Rate Summary

Growth Rate Based on Georgia Governor's Office of Planning and Budget Annual Population Projections						
Hall County	Average 5-Year Growth Rate From 2020-2050					
	2020-2025	2025-2030	2030-2035	2035-2040	2040-2045	2045-2050
	1.5%	1.2%	1.1%	1.0%	1.0%	1.0%
	Average		1.1%			
	Average 10-Year Growth Rate From 2020-2050					
	2020-2030	2030-2040	2040-2050			
	1.2%	1.2%	1.1%			
	Average		1.2%			

Growth Rate Based on U.S Census Bureau				
Geographic Area	2010	2010	2019	From 2010 to 2019
	Census	Estimate Base	Population Estimate	Population % Change
Hall County	179,684	179,724	204,441	1.6%

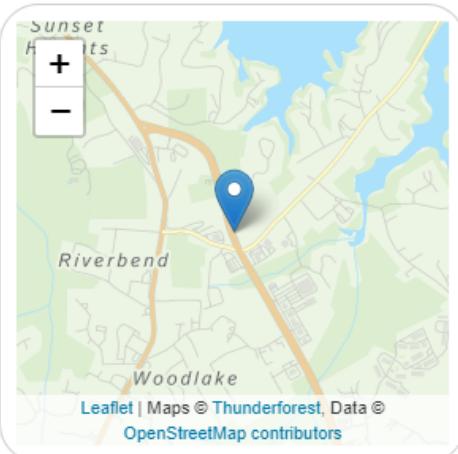
GDOT Historical Growth Rate														
Location	Station ID	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	5 year	10 year
US 284- Clarks Bridge Rd E/O Cleveland Highway	139-0365		6290	6130		6003		6429		5982		5436	2%	2%
Limestone Parkway N/O US 284 Clarks Bridge Rd	139-0767		9688				13778				8956		3%	1%
Beverly Rd W/o White Sulphur Rd	139-0338		4120			3400				2948			7%	5%
#REF!	#REF!	3916									50		n/a	62%
White Sulphur Rd N/O Ramsey Circle	139-0536			4277			4405				3592		-1%	3%
US 284 / Clarks Bridge Rd N/O Parks Rd	139-0367		8128				6150		6722		6470		7%	3%
5 & 10 - Year Average													2.0%	2.7%
Weighted Average													2.3%	

0000139_0365 - 139-0365**Description:** SR 0011BU BEG AT**County:** Hall**Route number:** 00028400**LRS section:** 1391028400**Functional class:** 4U - Minor Arterial (Urban)**Coordinates:** 34.33295197, -83.81178666**Site Data****Count History**

Year	Month	Count type	Duration	Count
2019	December	Volume	48 hours	6290
2018	May	Class	48 hours	6130
2016	July	Volume	48 hours	6003
2014	April	Volume	48 hours	6429
2012	February	Volume	48 hours	5982
2010	January	Class	48 hours	5436

Annual Statistics

Data Item	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Statistics type	-	-	-	-	Estimated	Actual	Estimated	Actual	Estimated	Actual
AADT	5190	5100	5070	5440	5620	5430	5470	5740	5790	5300
K-Factor	-	-	-	0.127	0.127	0.109	-	0.094	0.094	0.112
D-Factor	-	-	-	0.500	0.500	0.500	-	0.510	0.510	0.570
Future AADT	-	-	-	-	-	5630	6890	7230	7290	7290

0000139_0767 - 139-0767**Description:** SRX 028400**County:** Hall**Route number:** 00001100**LRS section:** 1391001100**Functional class:** 3U - Principal Arterial - Other (Urban)**Coordinates:** 34.3329551507272, -83.8092047041787**Site Data****Count History**

Year	Month	Count type	Duration	Count
2021	April	Class	48 hours	10345
2019	February	Class	48 hours	9688
2015	June	Class	36 hours	13778
2011	September	Class	48 hours	8956

i

Annual Statistics

Data Item	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Statistics type	-	-	-	-	Estimated	Estimated	Estimated	Estimated	Actual	Estimated
AADT	8460	8350	8320	8320	8590	8840	8900	8830	8800	7960
K-Factor	-	-	-	-	-	-	-	-	0.097	0.097
D-Factor	-	-	-	-	-	-	-	-	0.770	0.770
Future AADT	-	-	-	-	-	10900	12300	11500	11200	11200

0000139_0338 - 139-0338

Description:

County: Hall

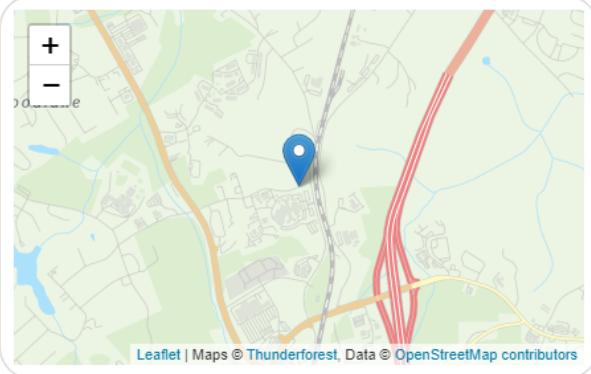
Route number: 00120900

LRS section: 1392120900

Functional class: 4R - Minor Arterial (Rural)

Coordinates: 34.3219166976887, -83.7948637465496

Site Data



Count History

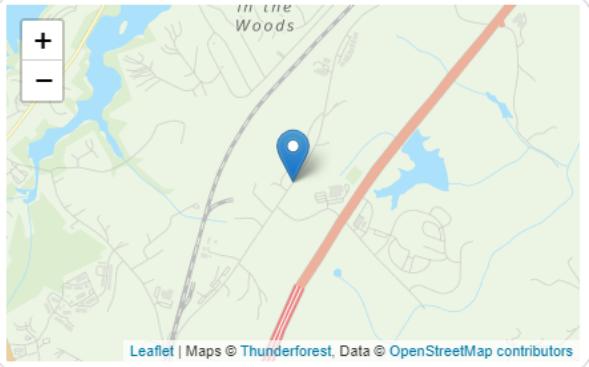
Year	Month	Count type	Duration	Count
2019	July	Volume	48 hours	4120
2016	July	Volume	48 hours	3400
2012	February	Volume	48 hours	2948

Annual Statistics

Data Item	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Statistics type	-	-	-	-	Estimated	Actual	Estimated	Estimated	Actual	Estimated
AADT	3450	2510	2490	2490	2620	2800	2890	2900	3470	3290
K-Factor	-	-	-	-	-	0.112	-	-	0.116	0.116
D-Factor	-	-	-	-	-	0.500	-	-	0.630	0.630
Future AADT	-	-	-	-	-	3140	3640	3660	4370	4370

0000139_0536 - 139-0536

Description: CS 129807/White Sulphur Rd N of SR369
City: Gainesville **County:** Hall
Route number: 00129807
LRS section: 1393129807
Functional class: 4U - Minor Arterial (Urban)
Coordinates: 34.33343966, -83.78557946

Site Data**Count History**

Year	Month	Count type	Duration	Count
2018	May	Volume	48 hours	4277
2015	June	Volume	48 hours	4405
2011	September	Volume	48 hours	3592

Annual Statistics

Data Item	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Statistics type	-	-	-	-	Actual	Estimated	Estimated	Actual	Estimated	Estimated
AADT	3260	3200	3180	3180	4040	4160	4190	3780	3810	3440
K-Factor	-	-	-	-	0.127	0.127	-	0.123	0.123	0.123
D-Factor	-	-	-	-	0.500	0.500	-	0.780	0.780	0.780
Future AADT	-	-	-	-	-	4220	5360	6760	6480	6480

0000139_0367 - 139-0367

County: Hall

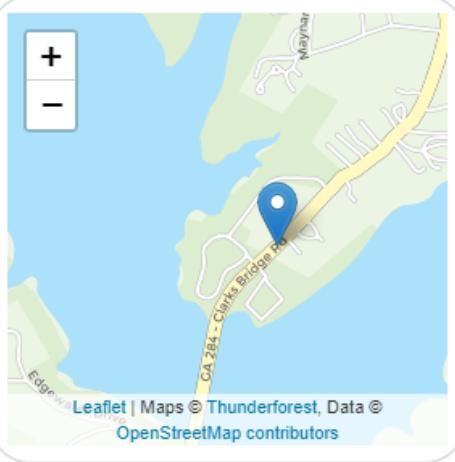
Route number: 00028400

LRS section: 1391028400

Functional class: 4U - Minor Arterial (Urban)

Coordinates: 34.353711013498, -83.7924936737647

Site Data



Count History

Year	Month	Count type	Duration	Count
2021	April	Class	48 hours	8613
2019	February	Class	48 hours	8128
2015	June	Class	48 hours	6150
2013	June	Volume	48 hours	6722
2011	September	Class	48 hours	6470



Annual Statistics

Data Item	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Statistics type	-	-	-	-	Actual	Estimated	Estimated	Estimated	Actual	Estimated
AADT	6140	6050	6230	6230	5760	5930	5970	5920	7560	6830
K-Factor	-	-	0.100	0.100	0.119	0.119	-	-	0.122	0.122
D-Factor	-	-	-	-	0.800	0.800	-	-	0.800	0.800
Future AADT	-	-	-	-	-	6720	7520	7460	9520	9520

QuickFacts**Hall County, Georgia; Gainesville city, Georgia**

QuickFacts provides statistics for all states and counties, and for cities and towns with a **population of 5,000 or more**.

Table

All Topics	Hall County, Georgia	Gainesville city, Georgia
Population estimates, July 1, 2019, (V2019)	204,441	43,232
PEOPLE		
Population		
Population estimates, July 1, 2019, (V2019)	204,441	43,232
Population estimates base, April 1, 2010, (V2019)	179,724	34,035
Population, percent change - April 1, 2010 (estimates base) to July 1, 2019, (V2019)	13.8%	27.0%
Population, Census, April 1, 2020	203,136	42,296
Population, Census, April 1, 2010	179,684	33,804
Age and Sex		
Persons under 5 years, percent	▲ 6.5%	▲ 7.4%
Persons under 18 years, percent	▲ 24.8%	▲ 27.6%
Persons 65 years and over, percent	▲ 15.4%	▲ 14.1%
Female persons, percent	▲ 50.3%	▲ 54.0%
Race and Hispanic Origin		
White alone, percent	▲ 87.0%	▲ 74.8%
Black or African American alone, percent (a)	▲ 8.1%	▲ 15.5%
American Indian and Alaska Native alone, percent (a)	▲ 0.8%	▲ 0.3%
Asian alone, percent (a)	▲ 2.1%	▲ 2.2%
Native Hawaiian and Other Pacific Islander alone, percent (a)	▲ 0.2%	▲ 0.0%
Two or More Races, percent	▲ 1.7%	▲ 3.0%
Hispanic or Latino, percent (b)	▲ 29.1%	▲ 40.7%
White alone, not Hispanic or Latino, percent	▲ 60.1%	▲ 39.3%
Population Characteristics		
Veterans, 2015-2019	10,459	1,827
Foreign born persons, percent, 2015-2019	16.3%	23.4%
Housing		
Housing units, July 1, 2019, (V2019)	76,167	X
Owner-occupied housing unit rate, 2015-2019	69.5%	41.8%
Median value of owner-occupied housing units, 2015-2019	\$201,300	\$219,300
Median selected monthly owner costs -with a mortgage, 2015-2019	\$1,390	\$1,437
Median selected monthly owner costs -without a mortgage, 2015-2019	\$440	\$486
Median gross rent, 2015-2019	\$963	\$941
Building permits, 2020	1,706	X
Families & Living Arrangements		
Households, 2015-2019	64,352	13,314
Persons per household, 2015-2019	3.06	2.92
Living in same house 1 year ago, percent of persons age 1 year+, 2015-2019	86.8%	82.3%
Language other than English spoken at home, percent of persons age 5 years+, 2015-2019	28.7%	40.9%
Computer and Internet Use		
Households with a computer, percent, 2015-2019	91.4%	89.6%
Households with a broadband Internet subscription, percent, 2015-2019	85.8%	82.1%
Education		
High school graduate or higher, percent of persons age 25 years+, 2015-2019	79.1%	75.2%
Bachelor's degree or higher, percent of persons age 25 years+, 2015-2019	24.5%	27.0%
Health		
With a disability, under age 65 years, percent, 2015-2019	7.9%	7.3%
Persons without health insurance, under age 65 years, percent	▲ 21.6%	▲ 23.0%
Economy		
In civilian labor force, total, percent of population age 16 years+, 2015-2019	63.0%	62.4%
In civilian labor force, female, percent of population age 16 years+, 2015-2019	55.4%	56.9%

Total accommodation and food services sales, 2012 (\$1,000) (c)	298,330	162,982
Total health care and social assistance receipts/revenue, 2012 (\$1,000) (c)	1,297,825	D
Total manufacturers shipments, 2012 (\$1,000) (c)	7,629,172	4,539,216
Total retail sales, 2012 (\$1,000) (c)	2,231,905	1,007,758
Total retail sales per capita, 2012 (c)	\$12,037	\$28,970

Transportation

Mean travel time to work (minutes), workers age 16 years+, 2015-2019	27.3	22.9
--	------	------

Income & Poverty

Median household income (in 2019 dollars), 2015-2019	\$62,984	\$51,520
Per capita income in past 12 months (in 2019 dollars), 2015-2019	\$29,680	\$26,411
Persons in poverty, percent	▲ 13.5%	▲ 21.0%

BUSINESSES

Businesses

Total employer establishments, 2019	4,569	X
Total employment, 2019	83,924	X
Total annual payroll, 2019 (\$1,000)	3,960,944	X
Total employment, percent change, 2018-2019	Z	X
Total nonemployer establishments, 2018	16,827	X
All firms, 2012	15,712	4,480
Men-owned firms, 2012	8,921	2,555
Women-owned firms, 2012	5,383	1,420
Minority-owned firms, 2012	3,640	1,164
Nonminority-owned firms, 2012	11,466	2,970
Veteran-owned firms, 2012	1,502	499
Nonveteran-owned firms, 2012	13,327	3,575

GEOGRAPHY

Geography

Population per square mile, 2010	457.5	1,058.9
Land area in square miles, 2010	392.78	31.93
FIPS Code	13139	1331908

About datasets used in this table

Value Notes

⚠ Estimates are not comparable to other geographic levels due to methodology differences that may exist between different data sources.

Some estimates presented here come from sample data, and thus have sampling errors that may render some apparent differences between geographies statistically indistinguishable. Click the Quick Info ⓘ icon to the right in TABLE view to learn about sampling error.

The vintage year (e.g., V2019) refers to the final year of the series (2010 thru 2019). *Different vintage years of estimates are not comparable.*

Fact Notes

- (a) Includes persons reporting only one race
- (b) Hispanics may be of any race, so also are included in applicable race categories
- (c) Economic Census - Puerto Rico data are not comparable to U.S. Economic Census data

Value Flags

- D** Suppressed to avoid disclosure of confidential information
F Fewer than 25 firms
FN Footnote on this item in place of data
NA Not available
S Suppressed; does not meet publication standards
X Not applicable
Z Value greater than zero but less than half unit of measure shown
 - Either no or too few sample observations were available to compute an estimate, or a ratio of medians cannot be calculated because one or both of the median estimates falls in the lowest or upper in open ended distribution.**N** Data for this geographic area cannot be displayed because the number of sample cases is too small.

QuickFacts data are derived from: Population Estimates, American Community Survey, Census of Population and Housing, Current Population Survey, Small Area Health Insurance Estimates, Small Area Income and Poverty Estimates, State and County Housing Unit Estimates, County Business Patterns, Nonemployer Statistics, Economic Census, Survey of Business Owners, Building Permits.

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Appendix D

Synchro Reports

Synchro Reports
Existing Year (2021)

Intersection

Int Delay, s/veh 4

Movement	WBL	WBR	NET	NER	SWL	SWT
Lane Configurations	W	B		A		
Traffic Vol, veh/h	28	44	119	33	229	400
Future Vol, veh/h	28	44	119	33	229	400
Conflicting Peds, #/hr	0	0	0	0	0	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	87	87	82	82	82	82
Heavy Vehicles, %	2	2	3	3	3	3
Mvmt Flow	32	51	145	40	279	488

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1211	165	0	0	185
Stage 1	165	-	-	-	-
Stage 2	1046	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.13
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.227
Pot Cap-1 Maneuver	201	879	-	-	1384
Stage 1	864	-	-	-	-
Stage 2	338	-	-	-	-
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	145	879	-	-	1384
Mov Cap-2 Maneuver	145	-	-	-	-
Stage 1	864	-	-	-	-
Stage 2	244	-	-	-	-

Approach	WB	NE	SW
HCM Control Delay, s	21.8	0	3
HCM LOS	C		

Minor Lane/Major Mvmt	NET	NER	WBLn1	SWL	SWT
Capacity (veh/h)	-	-	296	1384	-
HCM Lane V/C Ratio	-	-	0.28	0.202	-
HCM Control Delay (s)	-	-	21.8	8.3	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	1.1	0.8	-

Intersection

Int Delay, s/veh 7.3

Movement	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Vol, veh/h	51	250	303	42	52	267
Future Vol, veh/h	51	250	303	42	52	267
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	87	87
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	57	278	337	47	60	307

Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	384	0	-	0	753	361
Stage 1	-	-	-	-	361	-
Stage 2	-	-	-	-	392	-
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	1174	-	-	-	377	684
Stage 1	-	-	-	-	705	-
Stage 2	-	-	-	-	683	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	1174	-	-	-	356	684
Mov Cap-2 Maneuver	-	-	-	-	356	-
Stage 1	-	-	-	-	665	-
Stage 2	-	-	-	-	683	-

Approach	NB	SB	SE	
HCM Control Delay, s	1.4	0	20.3	
HCM LOS			C	

Minor Lane/Major Mvmt	NBL	NBT	SELn1	SBT	SBR	
Capacity (veh/h)	1174	-	595	-	-	
HCM Lane V/C Ratio	0.048	-	0.616	-	-	
HCM Control Delay (s)	8.2	0	20.3	-	-	
HCM Lane LOS	A	A	C	-	-	
HCM 95th %tile Q(veh)	0.2	-	4.2	-	-	

Intersection

Int Delay, s/veh 6.8

Movement	WBL	WBR	NET	NER	SWL	SWT
Lane Configurations	W	B	A			
Traffic Vol, veh/h	33	222	481	80	82	172
Future Vol, veh/h	33	222	481	80	82	172
Conflicting Peds, #/hr	0	0	0	0	0	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	89	89	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	37	249	534	89	91	191

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	952	579	0	0	623
Stage 1	579	-	-	-	-
Stage 2	373	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	288	515	-	-	958
Stage 1	560	-	-	-	-
Stage 2	696	-	-	-	-
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	257	515	-	-	958
Mov Cap-2 Maneuver	257	-	-	-	-
Stage 1	560	-	-	-	-
Stage 2	622	-	-	-	-

Approach	WB	NE	SW
HCM Control Delay, s	25.3	0	3
HCM LOS	D		

Minor Lane/Major Mvmt	NET	NER	WBLn1	SWL	SWT
Capacity (veh/h)	-	-	456	958	-
HCM Lane V/C Ratio	-	-	0.628	0.095	-
HCM Control Delay (s)	-	-	25.3	9.2	0
HCM Lane LOS	-	-	D	A	A
HCM 95th %tile Q(veh)	-	-	4.2	0.3	-

Intersection

Int Delay, s/veh 5.5

Movement	NBL	NBT	SBT	SBR	SEL	SER
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Lane Configurations						
Traffic Vol, veh/h	201	426	376	74	62	116
Future Vol, veh/h	201	426	376	74	62	116
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Free
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	218	463	409	80	70	130

Major/Minor	Major1	Major2	Minor2
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Conflicting Flow All	489	0	-	0	1348	-
Stage 1	-	-	-	-	449	-
Stage 2	-	-	-	-	899	-
Critical Hdwy	4.12	-	-	-	6.42	-
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	-
Pot Cap-1 Maneuver	1074	-	-	-	166	0
Stage 1	-	-	-	-	643	0
Stage 2	-	-	-	-	397	0
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	1074	-	-	-	121	-
Mov Cap-2 Maneuver	-	-	-	-	121	-
Stage 1	-	-	-	-	467	-
Stage 2	-	-	-	-	397	-

Approach	NB	SB	SE
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HCM Control Delay, s	3	0	69
HCM LOS			F

Minor Lane/Major Mvmt	NBL	NBT	SELn1	SBT	SBR
Capacity (veh/h)	1074	-	121	-	-
HCM Lane V/C Ratio	0.203	-	0.576	-	-
HCM Control Delay (s)	9.2	0	69	-	-
HCM Lane LOS	A	A	F	-	-
HCM 95th %tile Q(veh)	0.8	-	2.8	-	-

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Intersection

Int Delay, s/veh 5.2

Movement	WBL	WBR	NET	NER	SWL	SWT
Lane Configurations	W	B		A		
Traffic Vol, veh/h	33	52	140	39	269	470
Future Vol, veh/h	33	52	140	39	269	470
Conflicting Peds, #/hr	0	0	0	0	0	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	87	87	82	82	82	82
Heavy Vehicles, %	2	2	3	3	3	3
Mvmt Flow	38	60	171	48	328	573

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1424	195	0	0	219
Stage 1	195	-	-	-	-
Stage 2	1229	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.13
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.227
Pot Cap-1 Maneuver	150	846	-	-	1344
Stage 1	838	-	-	-	-
Stage 2	276	-	-	-	-
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	96	846	-	-	1344
Mov Cap-2 Maneuver	96	-	-	-	-
Stage 1	838	-	-	-	-
Stage 2	177	-	-	-	-

Approach	WB	NE	SW
HCM Control Delay, s	36.2	0	3.1
HCM LOS	E		

Minor Lane/Major Mvmt	NET	NER	WBLn1	SWL	SWT
Capacity (veh/h)	-	-	210	1344	-
HCM Lane V/C Ratio	-	-	0.465	0.244	-
HCM Control Delay (s)	-	-	36.2	8.5	0
HCM Lane LOS	-	-	E	A	A
HCM 95th %tile Q(veh)	-	-	2.2	1	-

Intersection						
Int Delay, s/veh	2.2					
Movement	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Vol, veh/h	60	294	356	49	61	314
Future Vol, veh/h	60	294	356	49	61	314
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Free
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	87	87
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	67	327	396	54	70	361
Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	450	0	-	0	884	-
Stage 1	-	-	-	-	423	-
Stage 2	-	-	-	-	461	-
Critical Hdwy	4.12	-	-	-	6.42	-
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	-
Pot Cap-1 Maneuver	1110	-	-	-	316	0
Stage 1	-	-	-	-	661	0
Stage 2	-	-	-	-	635	0
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	1110	-	-	-	293	-
Mov Cap-2 Maneuver	-	-	-	-	293	-
Stage 1	-	-	-	-	612	-
Stage 2	-	-	-	-	635	-
Approach	NB	SB	SE			
HCM Control Delay, s	1.4	0	21.1			
HCM LOS			C			
Minor Lane/Major Mvmt	NBL	NBT	SELn1	SBT	SBR	
Capacity (veh/h)	1110	-	293	-	-	
HCM Lane V/C Ratio	0.06	-	0.239	-	-	
HCM Control Delay (s)	8.4	0	21.1	-	-	
HCM Lane LOS	A	A	C	-	-	
HCM 95th %tile Q(veh)	0.2	-	0.9	-	-	

Intersection

Int Delay, s/veh 13.4

Movement	WBL	WBR	NET	NER	SWL	SWT
Lane Configurations	W	B	A			
Traffic Vol, veh/h	39	261	565	94	96	202
Future Vol, veh/h	39	261	565	94	96	202
Conflicting Peds, #/hr	0	0	0	0	0	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	89	89	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	44	293	628	104	107	224

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1118	680	0	0	732
Stage 1	680	-	-	-	-
Stage 2	438	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	229	451	-	-	873
Stage 1	503	-	-	-	-
Stage 2	651	-	-	-	-
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	197	451	-	-	873
Mov Cap-2 Maneuver	197	-	-	-	-
Stage 1	503	-	-	-	-
Stage 2	560	-	-	-	-

Approach	WB	NE	SW
HCM Control Delay, s	52.7	0	3.1
HCM LOS	F		

Minor Lane/Major Mvmt	NET	NER	WBLn1	SWL	SWT
Capacity (veh/h)	-	-	386	873	-
HCM Lane V/C Ratio	-	-	0.873	0.122	-
HCM Control Delay (s)	-	-	52.7	9.7	0
HCM Lane LOS	-	-	F	A	A
HCM 95th %tile Q(veh)	-	-	8.6	0.4	-

Intersection

Int Delay, s/veh 38.3

Movement	NBL	NBT	SBT	SBR	SEL	SER
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Lane Configurations						
Traffic Vol, veh/h	236	500	442	87	73	136
Future Vol, veh/h	236	500	442	87	73	136
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	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	257	543	480	95	82	153

Major/Minor	Major1	Major2	Minor2
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Conflicting Flow All	575	0	-	0	1585	528
Stage 1	-	-	-	-	528	-
Stage 2	-	-	-	-	1057	-
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	998	-	-	-	119	550
Stage 1	-	-	-	-	592	-
Stage 2	-	-	-	-	334	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	998	-	-	-	~ 75	550
Mov Cap-2 Maneuver	-	-	-	-	~ 75	-
Stage 1	-	-	-	-	374	-
Stage 2	-	-	-	-	334	-

Approach	NB	SB	SE
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HCM Control Delay, s	3.2	0	251.7
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HCM LOS	F
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Minor Lane/Major Mvmt	NBL	NBT	SELn1	SBT	SBR
Capacity (veh/h)	998	-	171	-	-
HCM Lane V/C Ratio	0.257	-	1.373	-	-
HCM Control Delay (s)	9.9	0	251.7	-	-
HCM Lane LOS	A	A	F	-	-
HCM 95th %tile Q(veh)	1	-	14.2	-	-

Notes

~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

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Intersection

Int Delay, s/veh 15.6

Movement	WBL	WBR	NET	NER	SWL	SWT
Lane Configurations	W	B		A		
Traffic Vol, veh/h	62	96	140	42	281	470
Future Vol, veh/h	62	96	140	42	281	470
Conflicting Peds, #/hr	0	0	0	0	0	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	87	87	82	82	82	82
Heavy Vehicles, %	2	2	3	3	3	3
Mvmt Flow	71	110	171	51	343	573

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1456	197	0	0	222
Stage 1	197	-	-	-	-
Stage 2	1259	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.13
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.227
Pot Cap-1 Maneuver	143	844	-	-	1341
Stage 1	836	-	-	-	-
Stage 2	267	-	-	-	-
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	89	844	-	-	1341
Mov Cap-2 Maneuver	89	-	-	-	-
Stage 1	836	-	-	-	-
Stage 2	167	-	-	-	-

Approach	WB	NE	SW
HCM Control Delay, s	97.3	0	3.2
HCM LOS	F		

Minor Lane/Major Mvmt	NET	NER	WBLn1	SWL	SWT
Capacity (veh/h)	-	-	195	1341	-
HCM Lane V/C Ratio	-	-	0.931	0.256	-
HCM Control Delay (s)	-	-	97.3	8.6	0
HCM Lane LOS	-	-	F	A	A
HCM 95th %tile Q(veh)	-	-	7.5	1	-

Intersection

Int Delay, s/veh 2.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W			↑	↑	↗
Traffic Vol, veh/h	73	24	15	375	109	15
Future Vol, veh/h	73	24	15	375	109	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	150
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	79	26	16	408	118	16

Major/Minor	Minor2	Major1	Major2		
Conflicting Flow All	558	118	134	0	-
Stage 1	118	-	-	-	-
Stage 2	440	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-
Pot Cap-1 Maneuver	491	934	1451	-	-
Stage 1	907	-	-	-	-
Stage 2	649	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	484	934	1451	-	-
Mov Cap-2 Maneuver	484	-	-	-	-
Stage 1	894	-	-	-	-
Stage 2	649	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13.1	0.3	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1451	-	550	-	-
HCM Lane V/C Ratio	0.011	-	0.192	-	-
HCM Control Delay (s)	7.5	-	13.1	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0.7	-	-

Intersection

Int Delay, s/veh 15.7

Movement	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Vol, veh/h	69	294	356	55	66	333
Future Vol, veh/h	69	294	356	55	66	333
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Free	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	87	87
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	77	327	396	61	76	383

Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	457	0	-	0	908	427
Stage 1	-	-	-	-	427	-
Stage 2	-	-	-	-	481	-
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	1104	-	-	-	306	628
Stage 1	-	-	-	-	658	-
Stage 2	-	-	-	-	622	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	1104	-	-	-	280	628
Mov Cap-2 Maneuver	-	-	-	-	280	-
Stage 1	-	-	-	-	602	-
Stage 2	-	-	-	-	622	-

Approach	NB	SB	SE
HCM Control Delay, s	1.6	0	43.8
HCM LOS			E

Minor Lane/Major Mvmt	NBL	NBT	SELn1	SBT	SBR
Capacity (veh/h)	1104	-	521	-	-
HCM Lane V/C Ratio	0.069	-	0.88	-	-
HCM Control Delay (s)	8.5	0	43.8	-	-
HCM Lane LOS	A	A	E	-	-
HCM 95th %tile Q(veh)	0.2	-	9.8	-	-

Intersection

Int Delay, s/veh 28.9

Movement WBL WBR NET NER SWL SWT

Lane Configurations						
Traffic Vol, veh/h	45	290	565	118	144	202
Future Vol, veh/h	45	290	565	118	144	202
Conflicting Peds, #/hr	0	0	0	0	0	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	87	87	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	52	333	628	131	160	224

Major/Minor Minor1 Major1 Major2

Conflicting Flow All	1238	694	0	0	759	0
Stage 1	694	-	-	-	-	-
Stage 2	544	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	194	443	-	-	852	-
Stage 1	496	-	-	-	-	-
Stage 2	582	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	152	443	-	-	852	-
Mov Cap-2 Maneuver	152	-	-	-	-	-
Stage 1	496	-	-	-	-	-
Stage 2	457	-	-	-	-	-

Approach WB NE SW

HCM Control Delay, s	110.4	0	4.2
HCM LOS	F		

Minor Lane/Major Mvmt	NET	NER	WBLn1	SWL	SWT
Capacity (veh/h)	-	-	352	852	-
HCM Lane V/C Ratio	-	-	1.094	0.188	-
HCM Control Delay (s)	-	-	110.4	10.2	0
HCM Lane LOS	-	-	F	B	A
HCM 95th %tile Q(veh)	-	-	14.3	0.7	-

Intersection

Int Delay, s/veh 1.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W		A	↑	↑	R
Traffic Vol, veh/h	34	23	24	215	344	72
Future Vol, veh/h	34	23	24	215	344	72
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	150
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	37	25	26	234	374	78

Major/Minor	Minor2	Major1	Major2		
Conflicting Flow All	660	374	452	0	-
Stage 1	374	-	-	-	-
Stage 2	286	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-
Pot Cap-1 Maneuver	428	672	1109	-	-
Stage 1	696	-	-	-	-
Stage 2	763	-	-	-	-
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	416	672	1109	-	-
Mov Cap-2 Maneuver	416	-	-	-	-
Stage 1	677	-	-	-	-
Stage 2	763	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13.4	0.8	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1109	-	492	-	-
HCM Lane V/C Ratio	0.024	-	0.126	-	-
HCM Control Delay (s)	8.3	0	13.4	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.4	-	-

Intersection

Int Delay, s/veh 62

Movement	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Vol, veh/h	255	500	442	92	82	150
Future Vol, veh/h	255	500	442	92	82	150
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	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	277	543	480	100	92	169

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	580	0	-
Stage 1	-	-	530
Stage 2	-	-	1097
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	994	-	-
Stage 1	-	-	590
Stage 2	-	-	320
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	994	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	355
Stage 2	-	-	320

Approach	NB	SB	SE
HCM Control Delay, s	3.4	0	\$ 384.4
HCM LOS		F	

Minor Lane/Major Mvmt	NBL	NBT	SELn1	SBT	SBR
Capacity (veh/h)	994	-	155	-	-
HCM Lane V/C Ratio	0.279	-	1.682	-	-
HCM Control Delay (s)	10	0	\$ 384.4	-	-
HCM Lane LOS	B	A	F	-	-
HCM 95th %tile Q(veh)	1.1	-	18.5	-	-

Notes

~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Synchro Reports
Build Year Improvements (2029)

Intersection

Int Delay, s/veh 10

Movement	WBL	WBR	NET	NER	SWL	SWT
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Lane Configurations						
Traffic Vol, veh/h	62	96	140	42	281	470
Future Vol, veh/h	62	96	140	42	281	470
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	150	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	87	87	82	82	82	82
Heavy Vehicles, %	2	2	6	6	6	6
Mvmt Flow	71	110	171	51	343	573

Major/Minor	Minor1	Major1	Major2
-------------	--------	--------	--------

Conflicting Flow All	1456	197	0	0	222	0
Stage 1	197	-	-	-	-	-
Stage 2	1259	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.16	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.254	-
Pot Cap-1 Maneuver	143	844	-	-	1324	-
Stage 1	836	-	-	-	-	-
Stage 2	267	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	89	844	-	-	1324	-
Mov Cap-2 Maneuver	89	-	-	-	-	-
Stage 1	836	-	-	-	-	-
Stage 2	166	-	-	-	-	-

Approach	WB	NE	SW
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HCM Control Delay, s	56.8	0	3.2
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HCM LOS	F
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Minor Lane/Major Mvmt	NET	NER	WBLn1	WBLn2	SWL	SWT
-----------------------	-----	-----	-------	-------	-----	-----

Capacity (veh/h)	-	-	89	844	1324	-
HCM Lane V/C Ratio	-	-	0.801	0.131	0.259	-
HCM Control Delay (s)	-	-	129.4	9.9	8.7	0
HCM Lane LOS	-	-	F	A	A	A
HCM 95th %tile Q(veh)	-	-	4.2	0.4	1	-

Intersection

Int Delay, s/veh 7.4

Movement	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Vol, veh/h	69	294	356	55	66	333
Future Vol, veh/h	69	294	356	55	66	333
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Free	-	None	-	Yield
Storage Length	-	-	-	-	0	175
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	87	87
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	77	327	396	61	76	383

Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	457	0	-	0	908	427
Stage 1	-	-	-	-	427	-
Stage 2	-	-	-	-	481	-
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	1104	-	-	-	306	628
Stage 1	-	-	-	-	658	-
Stage 2	-	-	-	-	622	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	1104	-	-	-	280	628
Mov Cap-2 Maneuver	-	-	-	-	280	-
Stage 1	-	-	-	-	602	-
Stage 2	-	-	-	-	622	-

Approach	NB	SB	SE			
HCM Control Delay, s	1.6	0	19.8			
HCM LOS			C			

Minor Lane/Major Mvmt	NBL	NBT	SELn1	SELn2	SBT	SBR
Capacity (veh/h)	1104	-	280	628	-	-
HCM Lane V/C Ratio	0.069	-	0.271	0.609	-	-
HCM Control Delay (s)	8.5	0	22.6	19.3	-	-
HCM Lane LOS	A	A	C	C	-	-
HCM 95th %tile Q(veh)	0.2	-	1.1	4.1	-	-

Intersection

Int Delay, s/veh 9.8

Movement	WBL	WBR	NET	NER	SWL	SWT
Lane Configurations	↖ ↗ ↘ ↙					
Traffic Vol, veh/h	45	290	565	118	144	202
Future Vol, veh/h	45	290	565	118	144	202
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	150	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	87	87	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	52	333	628	131	160	224

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1238	694	0	0	759
Stage 1	694	-	-	-	-
Stage 2	544	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	194	443	-	-	852
Stage 1	496	-	-	-	-
Stage 2	582	-	-	-	-
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	152	443	-	-	852
Mov Cap-2 Maneuver	152	-	-	-	-
Stage 1	496	-	-	-	-
Stage 2	457	-	-	-	-

Approach	WB	NE	SW
HCM Control Delay, s	34.8	0	4.2
HCM LOS	D		

Minor Lane/Major Mvmt	NET	NER	WBLn1	WBLn2	SWL	SWT
Capacity (veh/h)	-	-	152	443	852	-
HCM Lane V/C Ratio	-	-	0.34	0.752	0.188	-
HCM Control Delay (s)	-	-	40.4	33.9	10.2	0
HCM Lane LOS	-	-	E	D	B	A
HCM 95th %tile Q(veh)	-	-	1.4	6.3	0.7	-

Intersection

Int Delay, s/veh 22.2

Movement	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Vol, veh/h	255	500	442	92	82	150
Future Vol, veh/h	255	500	442	92	82	150
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Yield
Storage Length	-	-	-	-	0	175
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	277	543	480	100	92	169

Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	580	0	-	0	1627	530
Stage 1	-	-	-	-	530	-
Stage 2	-	-	-	-	1097	-
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	994	-	-	-	112	549
Stage 1	-	-	-	-	590	-
Stage 2	-	-	-	-	320	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	994	-	-	-	~ 67	549
Mov Cap-2 Maneuver	-	-	-	-	~ 67	-
Stage 1	-	-	-	-	355	-
Stage 2	-	-	-	-	320	-

Approach NB SB SE

HCM Control Delay, s	3.4	0	130.9
HCM LOS		F	

Minor Lane/Major Mvmt	NBL	NBT	SELn1	SELn2	SBT	SBR
Capacity (veh/h)	994	-	67	549	-	-
HCM Lane V/C Ratio	0.279	-	1.375	0.307	-	-
HCM Control Delay (s)	10	0\$	344.1	14.4	-	-
HCM Lane LOS	B	A	F	B	-	-
HCM 95th %tile Q(veh)	1.1	-	7.7	1.3	-	-

Notes

~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Appendix E

Trip Generation Report

Trip Generation Summary

Alternative: Alternative 1

Phase:

Project: The Village at Pine Valley Road

Open Date: 8/23/2021

Analysis Date: 8/23/2021

ITE	Land Use	Weekday Average Daily Trips			Weekday AM Peak Hour of Adjacent Street Traffic			Weekday PM Peak Hour of Adjacent Street Traffic					
		*	Enter	Exit	Total	*	Enter	Exit	Total	*	Enter	Exit	Total
220	LOW-RISE 1 274 Dwelling Units		1003	1003	2006		29	97	126		96	57	153
	Unadjusted Volume		1003	1003	2006		29	97	126		96	57	153
	Internal Capture Trips		0	0	0		0	0	0		0	0	0
	Pass-By Trips		0	0	0		0	0	0		0	0	0
	Volume Added to Adjacent Streets		1003	1003	2006		29	97	126		96	57	153

Total Weekday Average Daily Trips Internal Capture = 0 Percent

Total Weekday AM Peak Hour of Adjacent Street Traffic Internal Capture = 0 Percent

Total Weekday PM Peak Hour of Adjacent Street Traffic Internal Capture = 0 Percent

* - Custom rate used for selected time period.

Source: Institute of Transportation Engineers, Trip Generation Manual 10th Edition

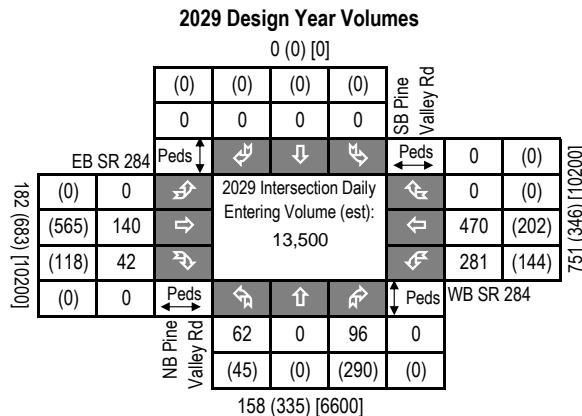
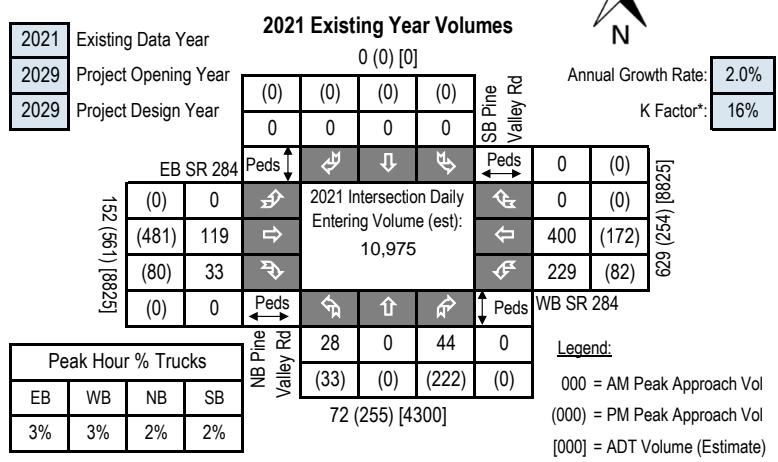
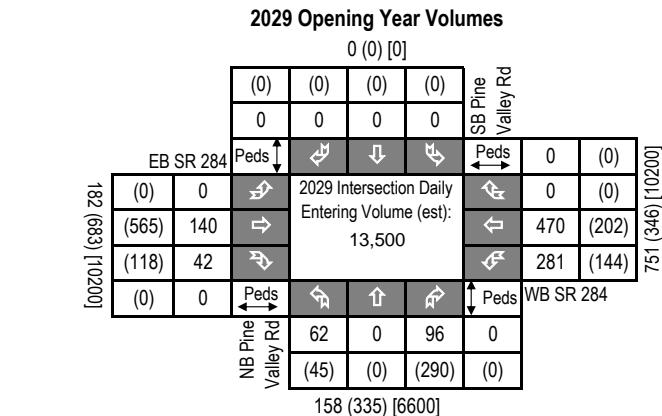
TRIP GENERATION 10, TRAFFICWARE, LLC

P. 1

Appendix F

Intersection Control Evaluation

GDOT PI # (or N/A):	N/A	Request By:	
County:	Hall	GDOT District: 1 - Gainesville	
Major (State) Road:	SR 284	Speed Limit:	35 mph
Minor (Crossing) ST:	Pine Valley Rd	Speed Limit:	35 mph
Major ST Direction:	East/West	Area Type:	Urban
Intersection Control:	Conventional (Minor Stop)		
Prepared By:	SEI	Analyst:	JPS
Date:	9/8/2021	Project ID:	
Project Purpose:	Add a Right turn lane to existing intersection		



Introduction: In 2005, SAFETEA-LU established the Highway Safety Improvement Program (HSIP) and mandated that each state prepare a Strategic Highway Safety Plan (SHSP) to prioritize safety funding investments. Intersections quickly became a common component of most states' SHSP emphasis areas and HSIP project lists, including Georgia's SHSP. Intersection Control Evaluation (ICE) policies and procedures represent a traceable and transparent procedure to streamline the evaluation of intersection control alternatives, and further leverage safety advancements for intersection improvements beyond just the safety program. Approximately one-third of all traffic fatalities and roughly seventy five percent of all traffic crashes in Georgia occur at or adjacent to intersections. Accordingly, the Georgia SHSP includes an emphasis on enhancing intersection safety to advance the *Toward Zero Deaths* vision embraced by the Georgia Governor's Office of Highway Safety (GOHS). This ICE tool was developed to support the ICE policy, developed and adopted to help ensure that intersection investments across the entire Georgia highway system are selected, prioritized and implemented with defensible benefits for safety towards those ends.

Tool Goal: The goal of this ICE tool is to provide a simplified and consistent way of importing traffic, safety, cost, environmental impact and stakeholder posture data to assess and quantify intersection control improvement benefits. The tool supports the ICE policy and procedures to provide traceability, transparency, consistency and accountability when identifying and selecting an intersection control solution that both meets project purpose and reflects overall best value in terms of specific performance-based criteria.

Requirements: An ICE is required for any intersection improvement (e.g. new or modified intersection, widening/reconstruction or corridor project, or work accomplished through a driveway or encroachment permit that affects an intersection) where: 1) the intersection includes at least one roadway designated as a State Route (State Highway System) or as part of the National Highway System; or 2) the intersection will be designed or constructed using State or Federal funding. In certain circumstances where an ICE would otherwise be required, the requirement may be waived based on appropriate evidence presented with a written request. (See the "Waiver" tab to review criteria that may make a project waiver eligible and for instructions to submit a waiver request to the Department). An ICE is not required when the proposed work does not include any changes to the intersection design, involves only routine traffic signal timing and equipment maintenance, or for driveway permits where the driveway is not a new leg to an already existing intersection on either 1) a divided, multi-lane highway with a closed median and only right-in/right-out access or 2) an undivided roadway where the development is not required to construct left and/or right turn lanes (as per the Driveway Manual and District Traffic Engineer).

Two-Stage Process: A complete ICE process consists of two (2) distinct stages, and it is expected that the respective level of effort for completing both stages of ICE will correspond to the magnitude and complexity of the intersection. Prior to starting an ICE, the District Traffic Engineer and/or State Traffic Engineer should be consulted for advice on an appropriate level of effort. The Stage 1 and Stage 2 ICE forms are designed minimize required data inputs using drop-down menu choices and limiting text entry. All fields shaded grey include drop down menu choices and all fields shaded blue require data entry. All other cells in the worksheet are locked.

Stage 1: Stage 1 should be conducted early in the project development process and is intended to inform which alternatives are worthy of further evaluation in Stage 2. Stage 1 serves as a screening effort meant to eliminate non-competitive options and identify which alternatives merit further considerations based on their practical feasibility. Users should use good engineering judgement in responding to the seven policy questions by selecting "Yes" or "No" in the drop-down boxes. Alternatives should not be summarily Record eliminated without due consideration, and reasons for eliminating or advancing an alternative should be documented in the "Screening Decision Justification" column.

Stage 2: Stage 2 involves a more detailed and familiar evaluation of the alternatives identified in Stage 1 in order to support the selection of a preferred alternative that may be advanced Alternative to detailed design. Stage 2 data entry may require the use of external analysis tools to determine costs, operations and/or safety data that, combined with environmental and Selection stakeholder posture data, form the basis of the ICE evaluation. A separate "CostEst" worksheet tab helps users develop pre-planning-level cost estimates for each Stage 2 Decision alternative evaluated, and a separate Users Guide has been prepared to give guidance on Stage 1 and Stage 2 data entry. Once all data is entered, each alternative is scored Record and ranked, with the results reported at the bottom of the Stage 2 worksheet to inform on the best of the intersection controls evaluated for project recommendation.

Documentation: A complete ICE document consists of the combination of the outputs from either a completed and signed waiver form or both Stage 1 and Stage 2 worksheets (along with supporting costing and/or environmental documentation), to be included in the approved project Concept Report (or equivalent) or as a stand-alone document.

GDOT PI #	N/A															
Project Location:	SR 284 @ Pine Valley Rd															
Existing Control:	Conventional (Minor Stop)															
Prepared by:	SEI															
Date:	9/8/2021															
Answer "Yes" or "No" to each policy question for each control type to identify which alternatives should be evaluated in the Stage 2 Decision Record; enter justification in the rightmost column																
Intersection Alternative (see "Intersections" tab for detailed description of intersection/interchange type)																
Note: Up to 5 alternatives may be selected and evaluated; Use this ICE Stage 1 to screen 5 or fewer alternatives to evaluate in Stage 2																
1. Does alternative address the project need in a balanced manner and in scale with the project? 2. Does alternative improve safety performance in terms of reducing severe crashes? 3. Does alternative incorporate safety, convenience and accessibility for pedestrians and/or bicyclists? 4. Does alternative improve (or preserve) traffic operations (congestion, delay, reliability, etc.)? 5. Does alternative appear feasible given the site characteristics, constraints & location context? 6. Does alternative appear feasible with respect to other project factors? 7. Overall feasible alternative (select alternative for further evaluation in Stage 2)?																
Screening Decision Justification:																
Unsigned Intersections	Conventional (Minor Stop)	No	No	No	No	Yes	Yes	No	Existing Condition							
	Conventional (All-Way Stop)	No	Yes	Yes	No	No	No	No	Does not meet warrants							
	Mini Roundabout	No	Yes	No	No	No	No	No	N/A - ADT too high							
	Single Lane Roundabout	No	Yes	No	No	No	No	No	Not sufficient ROW/Utility Conflicts							
	Multilane Roundabout	No	Yes	No	No	No	No	No	N/A - Single Lane Roadway							
	RCUT (stop control)	No	Yes	No	Yes	No	No	No	Not sufficient ROW							
	RIRO w/down stream U-Turn	No	Yes	No	Yes	No	No	No	Not sufficient ROW							
	High-T (unsignalized)	No	Yes	No	No	No	No	No	Not sufficient ROW							
	Offset-T Intersections	No	Only three legs at intersection													
	Diamond Interch (Stop Control)	No	Not an interchange													
	Diamond Interch (RAB Control)	No	Not an interchange													
	No LT Lane Improvements	Yes	No	No	Yes	Yes	Yes	Yes	Feasible Alternative							
Signalized Intersections	Add one RT Lane on Pine Valley Rd															
	Other unsignalized (provide description):	No	N/A													
	Traffic Signal	No	Does not meet warrants													
	Median U-Turn (Indirect Left)	No	Does not meet warrants													
	RCUT (signalized)	No	Does not meet warrants													
	Displaced Left Turn (CFI)	No	Does not meet warrants													
	Continuous Green-T	No	Does not meet warrants													
	Jughandle	No	Does not meet warrants													
	Quadrant Roadway	No	Does not meet warrants													
	Diamond Interch (Signal Control)	No	Not an interchange													
	Diverging Diamond	No	Not an interchange													
	Single Point Interchange	No	Not an interchange													
	No LT Lane Improvements	No	Warrants not met													
	No RT Lane Improvements															
	Other Signalized (provide description):	No	Warrants not met													

= Intersection type selected for more detailed analysis in Stage 2 Alternative Selection Decision Record

Waiver Request - Level 2 / 3

In certain circumstances where an ICE would otherwise be required, an ICE may be waived based on appropriate evidence presented with a written request. Scenarios in which an ICE waiver request may be considered include:

1. Proposed improvements do not substantially alter the character of the intersection, and are considered minor in nature, such as extending existing turn lane(s) or modifying signal phasing at an existing traffic signal
2. The intersection consists of a public roadway intersecting a divided, multilane roadway where the access will be limited to a closed median with only right-in/right-out access that will operate acceptably; or
3. The intersection is along an undivided, two-lane roadway that will not be widened and meets the following criteria:
 - Low risk in terms of exposure (total intersection entering volume less than 1,000 vehicles /day)
 - Latest 5 years of crash history is not indicative of a crash problem (no discernible crash patterns coupled with low crash frequency and severity)
 - Layout has no unusual or undesirable geometric features (such as restricted sight distance)
 - The proposed changes are not expected to adversely affect safety

If only one alternative is determined to be feasible from the ICE Stage 1, then a waiver may be submitted in lieu of completing ICE Stage 2. The waiver must clearly explain why there is no other feasible alternative. A Waiver Form should also be submitted to document an agreed upon decision to select a preferred alternative other than the highest scoring alternative in Stage 2.

ICE waiver forms with supporting documentation should be submitted for approval to the Office of Traffic Operations or District Engineer (depending on Waiver level). Questions regarding the waiver process should be routed to the State Traffic Engineer.

Project Information: Location: SR 284 @ Pine Valley Rd
 County: Hall
 GDOT District: 1 - Gainesville
 Area Type: Urban
 Existing Intersection Control: Conventional (Minor Stop)

GDOT PI # (or N/A): N/A

Requested By: 0

Prepared By: SEI

Analyst: JPS

Date: 9/8/2021

Waiver Request Type: Add/Extend Turn Lane

Traffic and Operations Data:¹

Intersection meets signal/AWS warrants?	None	
Traffic Analysis Type:	Intersection Delay	
Existing Avg Daily Traffic (Major Street):	8,825	
Existing Avg Daily Traffic (Minor Street):	4,300	
Analysis Period:	AM Peak	PM Peak
2029 Opening Yr Peak Hour Intersection Delay:	56.8 sec	34.8 sec
2029 Opening Yr Peak Hour Intersection V/C:	0.80	0.75
2029 Design Yr Peak Hour Intersection Delay:	56.8 sec	34.8 sec
2029 Design Yr Peak Hour Intersection V/C:	0.80	0.75

¹Crash data required for all existing intersections. ADT's required if available (from data collected or nearest GDOT count station site). Capacity data is optional unless needed to justify basis of the waiver request.

Crash Data (Required): ¹			
Crash Type	Crash Severity		
	PDO	Injury Crash*	Fatal Crash*
Angle	1	0	0
Head-On	0	0	0
Rear End	7	2	0
Sideswipe - same	1	0	0
Sideswipe - opposite	0	0	0
Not Collision w/Motor Veh	1	0	0
TOTALS:	10	2	0

* Number of crashes resulting in injuries / fatalities, not number of persons

Description of Work / Justification for Waiver (Required):	Based on stage 1 screening decisions, adding a right turn lane on the side street of the three-legged conventional (minor stop) control intersection is the only feasible control due to existing geometric, utility, and ROW constraints. This improvement will not substantially alter the character of the intersection. The crash history of the intersection and the intersection layout show the intersection is low in risk.
---	---

Proposed Intersection Control: --- select one ---

REQUESTED BY: _____ Date: _____

Title: _____

Traffic Engineer

Date: 9/10/2021

APPROVED BY: _____ Date: _____

Name: _____

District Engineer or (Approved Delegate)