TRAFFIC IMPACT STUDY

FOR

MEDLOCK SHOPS-NEW RESTAURANT BUILDING

Johns Creek, GA

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EXECUTIVE SUMMARY

The proposed development will include a 3,500 SF fast-casual restaurant with indoor seating and a drive-through window on the northwest corner of the intersection of State Bridge Road and Medlock Corners Driveway within the existing Medlock Corners Shopping Center in Johns Creek, GA. It will be developed by 2024 and accessed using the existing Medlock Corners Driveway intersection on State Bridge Road and a driveway internal the shopping center parking lot.

This study analyzed the impacts the additional development's generated trips are expected to have on the surrounding roadway network and study intersections. The study intersections are listed below:

1. Medlock Corners Driveway at Driveway A/B (Three-Way Stop Control)
2. State Bridge Road at Medlock Corners Driveway/State Bridge Corner Driveway (Traffic Signal)

The ITE Trip Generation Manual was referenced to estimate the trips generated by the development. The expected trips were added to the future background traffic volumes to analyze the delay and level of service at the study intersections in build condition and compare with the no-build conditions. Scooter's coffee shop will be constructed in Medlock Corners Shopping Center by 2023, and will be located on the opposite side of Medlock Corners Driveway from the proposed development. Traffic from the development was included in the analysis.

Based on the operational analysis, the study intersections operate at an acceptable level of service in the existing year (2023). The study intersections are expected to operate at an acceptable level of service in the no-build year (2024), with future background traffic that includes trips from the Scooters Coffee Shop, Driveway B. The study analyzed two alternatives for Fast-Casual Restaurant Driveway A: one shifting the driveway farther into the parking lot to align with Driveway B and another keeping it in its existing location and not aligning the drives. The trips expected from the development were added into future background traffic volumes. The study found that both alternatives operate acceptably. The development has a nominal impact on the signalized intersection operations at State Bridge Road.

Queue analysis indicated that queues are expected to block the existing internal intersection prior to the fast-casual restaurant addition. In alternative #1, Driveway A is moved 60 feet north to align with Scooter's relocated Driveway B, while in alternative #2, Driveway A stays in the same location as in the existing/no-build scenario. The queueing from the signal at Sate Bridge Road is likely to impede the Driveway A if it remains in its existing location. If the driveway is shifted north as proposed in alternative #1 it would improve operations internal the parking lot and the driveway by allowing vehicles accessing the driveway not to be impeded by the queue from the traffic signal.

The following is the recommended configuration at the development driveways:

<u>Medlock Corners Driveway at Driveway A</u>

- Driveway A approach should be stop sign control.
- Driveway A approach is recommended to be a two-lane facility, with one entry and one exit lane.
- Relocate Driveway A to align with Driveway B.

No other roadway improvements are required for this development.

INTRODUCTION

Southeastern Engineering, Inc. conducted a traffic impact study for a proposed restaurant with a drive-through window in the Medlock Corners Shopping Center in Johns Creek, GA. The development will be built on an approximately 0.72 acres located on the northwest corner of the intersection of State Bridge Road and Medlock Corners Driveway within the shopping center. An overall location map showing the area near the site location is shown in **Figure 1**.

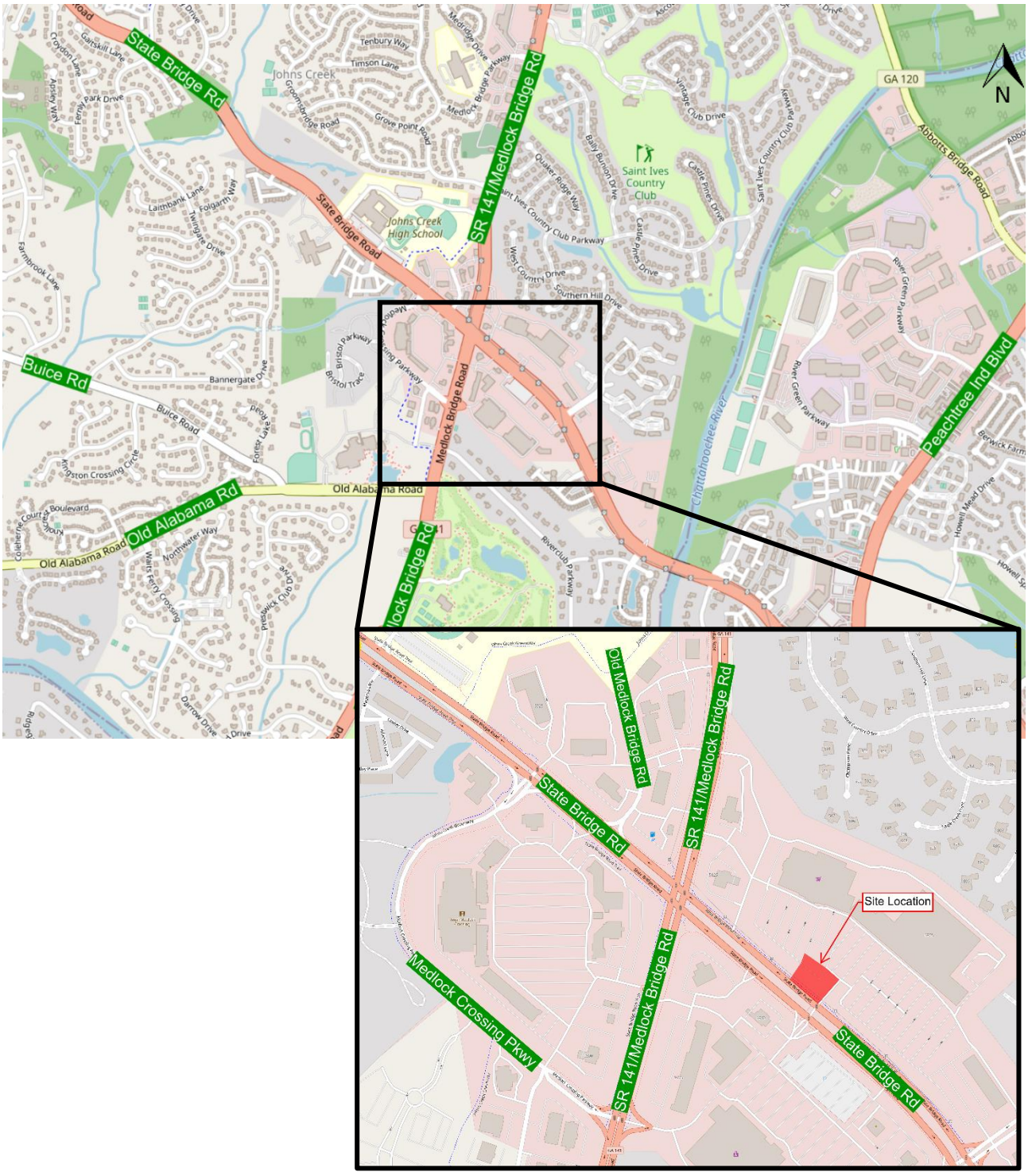

Figure 1 Location Map

This study will identify the potential impacts of the development generated traffic on the surrounding roadway network and internal traffic flow within the shopping center. The study includes the existing and future peak-hour traffic operations and capacity and queue 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 analysis results for the study intersections, recommendations will be made for intersection geometry and control methods.

PROJECT DESCRIPTION

The development will include a 3,500 SF fast-casual restaurant with indoor seating and a drive-through window on the northwest corner of the intersection of State Bridge Road and Medlock Corners Driveway within the existing Medlock Corners Shopping Center in Johns Creek, Georgia. It will be constructed by 2024 and accessed using the existing Medlock Corners Driveway intersection and have a driveway internal the shopping center parking lot. The site layout plan is attached in **Appendix A**. There are two potential locations for the restaurant driveway, Driveway A, which will be reviewed for operations internal to the parking lot. A Scooter's coffee shop will be developed on the other side of the Medlock Corners Driveway, which will be included in the future year analysis.

Study Network

The traffic study analyzes traffic operations for the study intersections in the vicinity of the development. Capacity analysis and level of service evaluations of the study intersections were conducted for the existing, no-build, and build scenarios. The study network consists of two existing intersections. An aerial of the study area can be seen in **Figure 2**:

3. Medlock Corners Driveway at Driveway A/B (Three-Way Stop Control)
4. State Bridge Road at Medlock Corners Driveway (Traffic Signal)

Figure 2 Aerial of Study Area

Roadway Conditions

The roadway network adjacent to the proposed development in the study area was reviewed to evaluate the existing roadway characteristics. The existing roadway facilities in the vicinity of the development are described below.

State Bridge Road

State Bridge Road is a six-lane divided roadway with a posted speed limit of 45 miles per hour. The facility is classified as a principal arterial. Sidewalks, curb and gutter are provided along its length within the study area.

Medlock Corners Driveway

Medlock Corners Driveway is a local roadway facility that serves the Medlock Corners Shopping Center from State Bridge Road. No sidewalk is present along its length.

Driveways A & B

Driveway A and B are roads internal to the Medlock Corners Shopping Center. Driveway A will serve as the site driveway after the full build-out of the proposed restaurant development. Meanwhile, Driveway B will serve as Scooter's Driveway.

EXISTING TRAFFIC CONDITIONS

This traffic impact study analyzes the current traffic operations of the study network. Capacity analysis and level of service evaluations of the study intersections were conducted for the existing and future conditions with and without the proposed development to determine the impacts of the development traffic on the network.

Traffic Data Collection

Existing traffic volumes at the study intersections were collected on Wednesday, May 3, 2023. Turning movement counts were collected at the study intersections through the AM and PM peak hours. Daily traffic volumes were collected on primary roadways near the development. The AM peak hour was from 7:00 AM to 8:00 AM, and the PM peak hour was from 5:00 PM to 6:00 PM. Existing daily traffic volumes collected are summarized in **Table 1**. The existing AM and PM peak-hour turning movement count (TMC) traffic volumes for the study intersections are shown in

. The existing count data are attached in **Appendix B**.

Table 1: Average Daily Volume (ADT)

Location	NB / EB	SB / WB	Total Volume
State Bridge Road west of Medlock Corners Driveway	26,893	26,077	52,970

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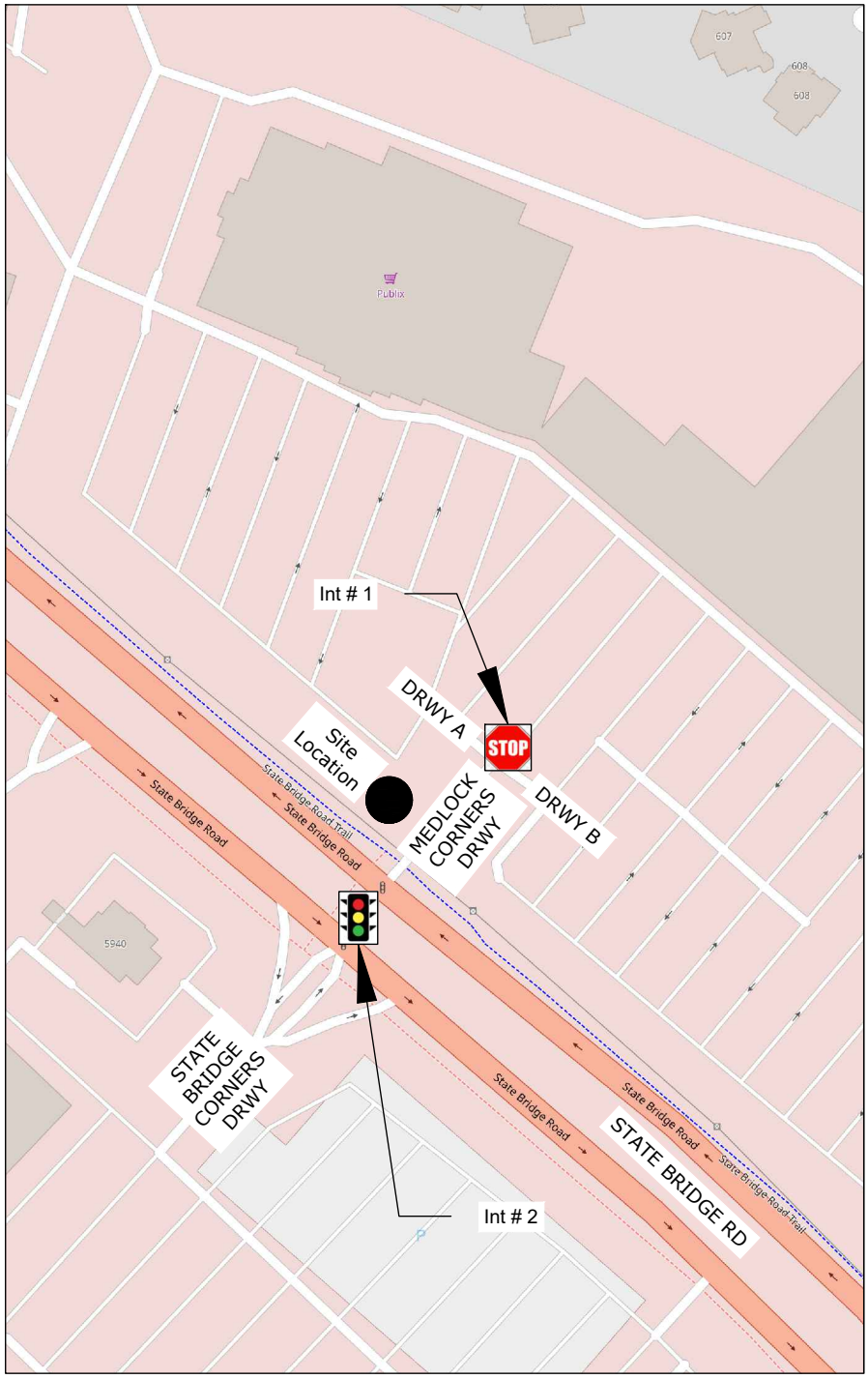
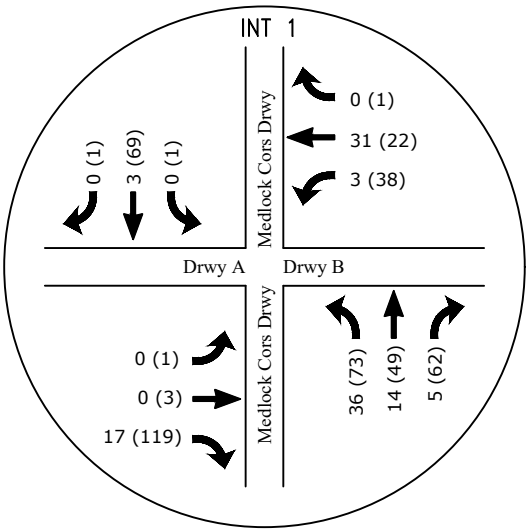
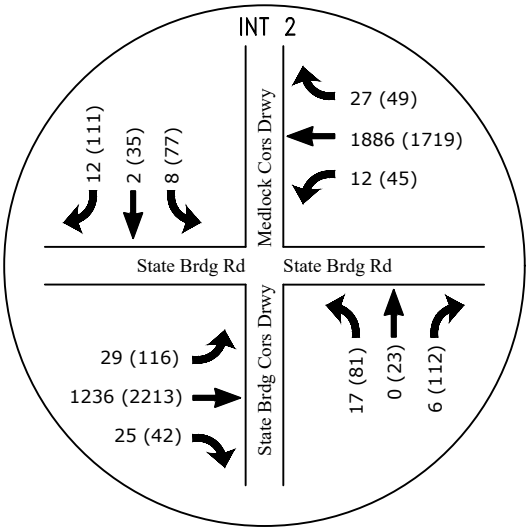
JOHNS CREEK	1257-23-093







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MEDLOCK CORNERS - NEW RESTAURANT BUILDING

EXISTING PEAK HOUR VOLUMES (2023)

FIGURE 3

Growth Rate Determination

As the development is expected to be completed in 2024, a growth rate will be applied to the existing traffic volumes to project future background volumes. The project growth rate was calculated using different sources including GDOT's Traffic Analysis & Data Application for annual volume statistics, Atlanta Regional Commission's (ARC's) Travel Demand Model (TDM) and census data. Growth rate calculations using different sources are summarized and attached in **Appendix C**. Historical data from nearby GDOT count stations was analyzed using all available data over a 10-year period. Average growth rates were calculated based on the 5-year and 10-year available data and are shown in **Table 2**.

Table 2: Growth Rate based on TADA Historical Counts		
Location	**5 - Year**	**10 - Year**
State Bridge Road west of Camden Road	1.5%	0.8%
Medlock Bridge Road south of Old Alabama Road	0.8%	1.2%
Medlock Bridge Road north of Wilson Road	0.6%	0.8%
Peachtree Ind Blvd north of Riverwood Pkwy	-0.2%	-0.4%
5 Year and 10 Year Growth Rate	**0.7%**	**0.6%**
Average Growth Rate	**0.6%**	

An average growth rate was calculated using the Atlanta Regional Commission's (ARC's) Travel Demand Model (TDM). The ARC's TDM included traffic projections for 2020, 2030, and 2040. **Table 3** shows growth rates for data adjacent the development used to calculate an overall TDM growth rate.

Table 3: ARC Travel Demand Model Growth Rate			
Location	**10 Year**	**10 Year**	**20 Year**
	2020 – 2030	**2030 – 2040**	**2020 – 2040**
States Bridge Road west of Medlock Bridge Road	0.0%	0.2%	0.1%
Medlock Bridge Road south of States Bridge Road	0.7%	0.1%	0.4%
Buice Road north of Old Alabama Road	1.3%	0.1%	0.7%
Old Alabama Road west of Medlock Bridge Road	1.1%	0.3%	0.7%
Peachtree Industrial Boulevard north of Pleasant Hill Road	1.0%	1.6%	1.3%
Pleasant Hill Road west of Peachtree Industrial Boulevard	1.6%	0.5%	1.1%
Average	**0.7%**		

Fulton County and City of Johns Creek census data obtained from the U.S. Census Bureau and the Georgia Governor's Office of Planning and Budget was used to calculate a growth rate for the study area. County census data and estimated growth rate is shown in **Table 4**.

Table 4: Georgia Governor's Office of Planning and Budget Annual Population Estimates							
Geographic Area	**Average 5-Year Growth Rate from 2020 to 2050**						
Fulton County	2020-2025	2025-2030	2030-2035	2035-2040	2040-2045	2045-2050	**Average**
	1.6%	1.1%	0.9%	0.8%	0.8%	0.7%	**1.0%**
Geographic Area	**Average 10-Year Growth Rate from 2020 to 2050**						
Fulton County	2020-2030		2030-2040		2040-2050		**Average**
	1.2%		1.0%		0.7%		**1.0%**

Census data from the U.S. Census Bureau was used to calculate a growth rate for the Johns Creek City and Fulton County. Growth rate estimated using the U.S. Census Bureau data is shown in **Table 5**. Census data from both the U.S. Census Bureau and Georgia Governor's Office of Planning and Budget is attached in **Appendix C**.

Table 5: U.S. Census Bureau Annual Estimates of the Resident Population			
Geographic Area	**2010 Census**	**2020 Census**	**2010 to 2020 Growth Rate**
Fulton County	920,581	1,066,710	1.48%
City of Johns Creek	76,728	82,453	0.72%

For the study, a growth rate of 1.0% was determined by averaging the rates calculated from various sources and using engineering judgment.

Level of Service Methodology

Intersection capacity analyses for the study intersections were performed using the methodology outlined in the Highway Capacity Manual, 6th Edition (HCM). This methodology is the industry standard for evaluating intersection capacity and delay. To facilitate the analysis, the computer software Synchro 11 was used. This software conforms to the HCM methodology.

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 sign 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
- Turning movement volumes

For the signalized intersections, LOS is based on the following input data:

- Intersection geometry
- Lane configuration
- Turning movement volumes
- Existing traffic signal timing

Table 6 below indicates the relationship between delay and LOS for signalized and unsignalized intersections.

Table 6: Level of Service for Signalized and Unsignalized Intersections

Level of Service	Control Delay Per Vehicle (sec)	
	Signalized Intersection	Unsignalized Intersection
A	≤10	≤10
B	>10 and ≤20	>10 and ≤15
C	>20 and ≤35	>15 and ≤25
D	>35 and ≤55	>25 and ≤35
E	>55 and ≤80	>35 and ≤50
F	>80	>50

Existing Conditions Level of Service

The level of service for the existing conditions was determined using Synchro 11, which follows the HCM methodology. The study intersection of Medlock Corners Driveway at Driveway A/B was analyzed as a minor street-stop. This is because HCM doesn't have a way to measure the delay at three-way stops, which is the current control method at the intersection. Traffic signal control for State Bridge Road and Medlock Corners Driveway/State Bridge Corner Driveway intersection was modeled with a cycle length of 120 seconds. All study intersections are expected operate acceptably in the existing year (2023). The existing intersection capacity analysis results are summarized in **Table 7** and detailed results are attached in **Appendix D**.

Table 7: Existing Level of Service - 2023

Intersection	Intersection Control	Approach	AM-Peak Delay (LOS)	PM-Peak Delay (LOS)
Medlock Corners Driveway at Driveway A/B	Minor-Street Stop-Control	Eastbound	8 (A)	9 (A)
		Westbound	10 (A)	13 (B)
State Bridge Road at Medlock Corners Driveway/State Bridge Corners Driveway	Traffic Signal	Northbound	45 (D)	48 (D)
		Southbound	44 (D)	48 (D)
		Eastbound	4 (A)	9 (A)
		Westbound	4 (A)	7 (A)
		Overall	4 (A)	10 (A)

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

The impact of the development on the study network was analyzed and evaluated in the future year (2024) without the proposed development (No-Build) to compare the future conditions with the proposed fully constructed development (Build).

Programmed Projects

No programmed GDOT projects were identified in the study area that would impact the operations of the study intersections. So existing intersection geometry conditions were used as the base future conditions for analysis.

Adjacent Projects

Scooter's coffee shop will be constructed in Medlock Corners Shopping Center, featuring a drive-through window and no indoor seating. It will be located on the opposite side of Medlock Corners Driveway from the proposed development and accessible through Driveway B, which will be moved 60 feet north with construction of the coffee shop. The coffee shop is slated to be completed by 2023, and any traffic it generates will be added to the no-build traffic volumes. Trips expected to be generated from the coffee shop were calculated using Trip Generation Manual, 11th Edition and the reports are attached in **Appendix E**.

Future No Build Traffic Volumes (2024)

The future 2024 background traffic volumes were calculated by applying the exponential growth rate over a year to the existing 2023 background traffic volumes and adding the trips generated from Scooter's development. Future 2024 background traffic volumes (no-build) are shown in **Figure 4**.

Future No-Build Conditions Level of Service

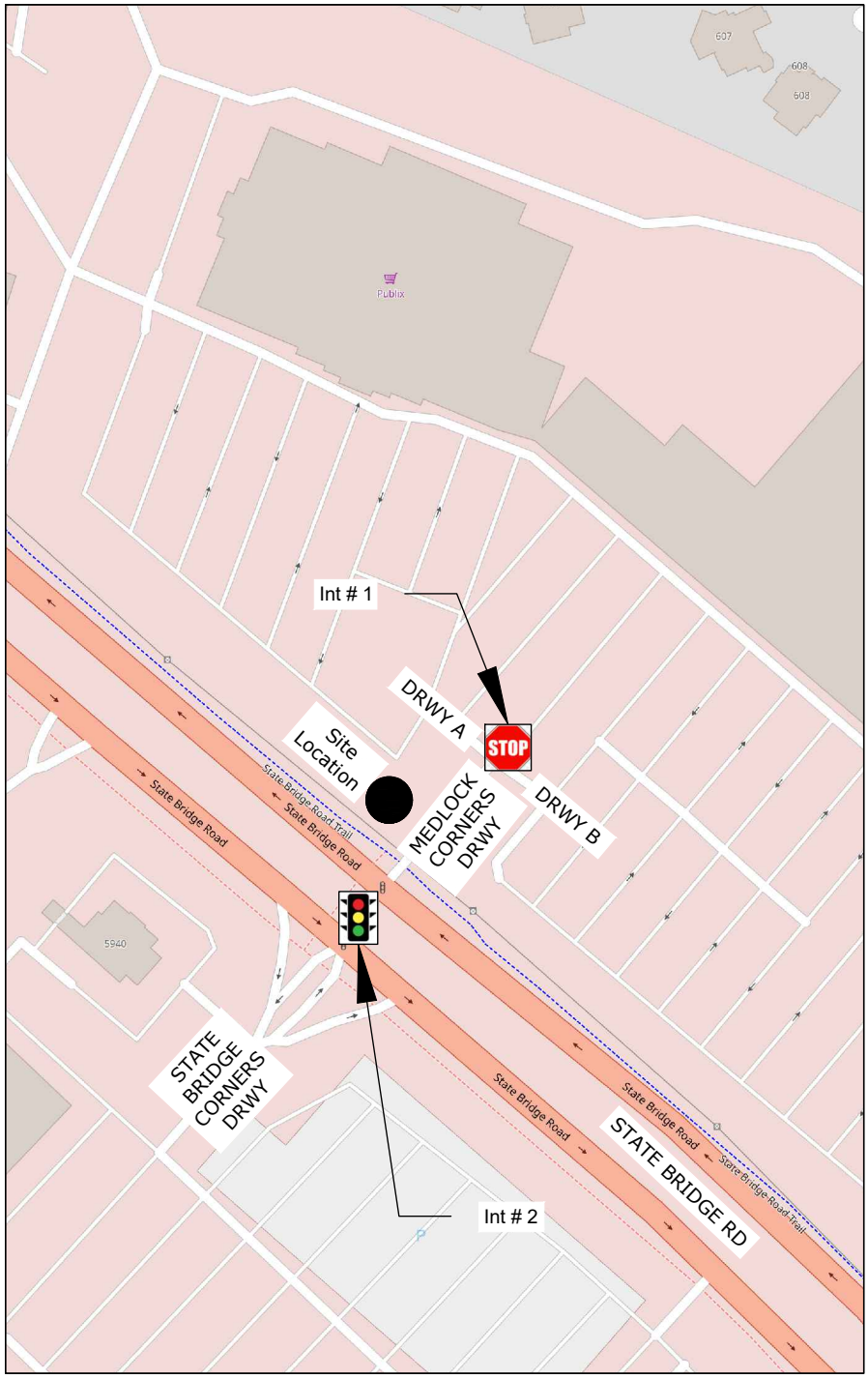
The same methodology discussed previously was used to determine the level of service for the study intersections using the future 2024 background traffic volumes to determine operations at the study intersection. The intersection capacity analysis results for the future no-build year (2024) are summarized in **Table 8** and detailed reports are attached in **Appendix D**.

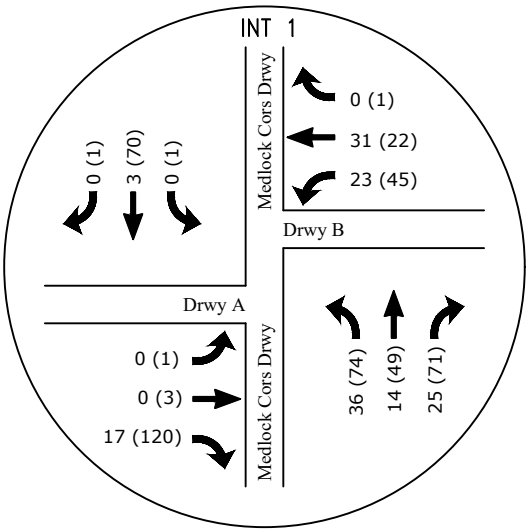
Table 8: Level of Service and Delay for No-Build Condition (2024)

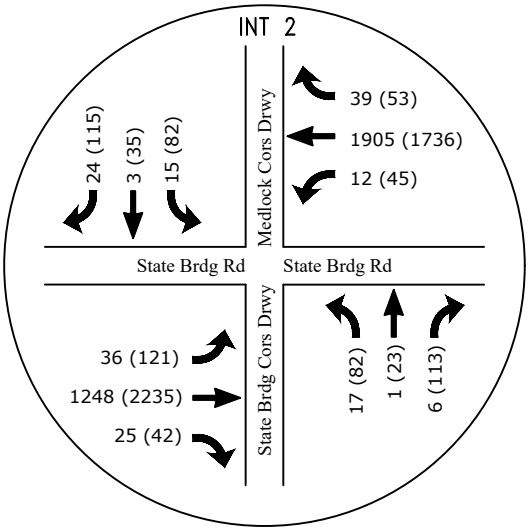
Intersection	Control Type	Approach	Delay (LOS)	
			AM	PM
Medlock Corners Driveway at Driveway A	Minor-Street Stop-Control	Eastbound	9 (A)	10 (A)
Medlock Corners Driveway at Driveway B	Minor-Street Stop-Control	Westbound	9 (A)	10 (A)
State Bridge Road at Medlock Corners Driveway/State Bridge Corners Driveway	Traffic Signal	Northbound	45 (D)	48 (D)
		Southbound	45 (D)	49 (D)
		Eastbound	4 (A)	9 (A)
		Westbound	5 (A)	7 (A)
		Overall	5 (A)	10 (A)

It is anticipated that the intersections will function at similar levels of service as they do in 2023. However, there may be some delay increases due to the growth in the study area. The intersection of Medlock Corners Driveway and Driveway B, which has been relocated 60 feet north to serve as Scooter's Driveway, is expected to operate with lower delay than existing year which is expected with the added traffic from the coffee shop.

JURISDICTION	PROJECT NUMBER
JOHNS CREEK	1257-23-093







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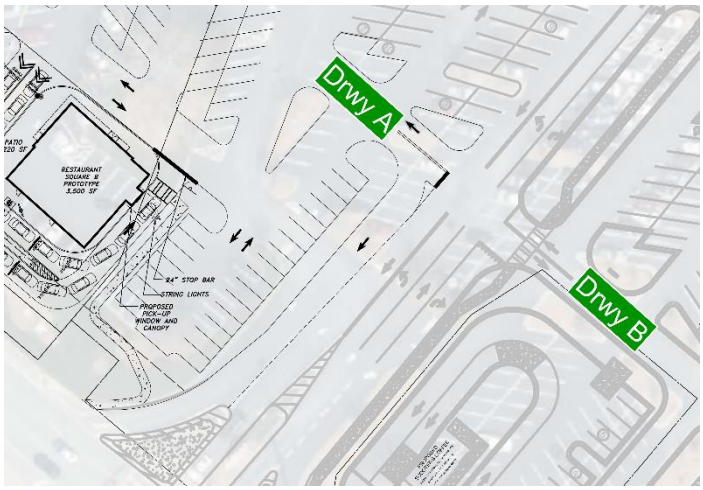
NO-BUILD PEAK HOUR VOLUMES (2024)

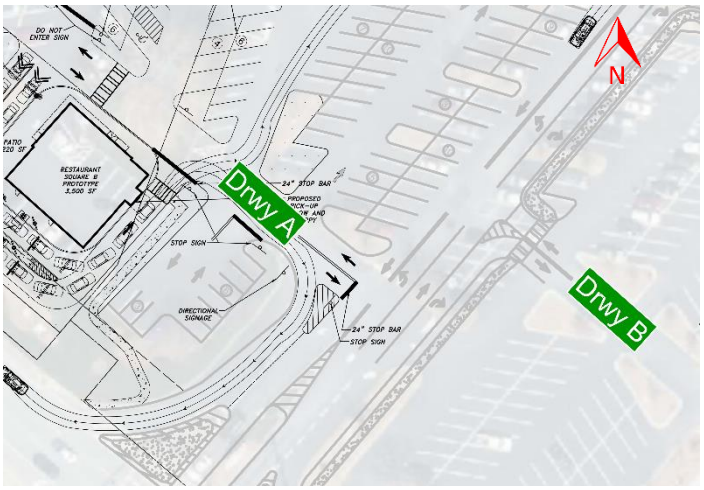
FIGURE 4

PROPOSED DEVELOPMENT

The development will include a 3,500 SF fast-casual restaurant with a drive-through window and will be located in the northwest corner of the intersection of State Bridge Road and Medlock Corners Driveway within the existing Medlock Corners shopping center in the City of Johns Creek, Fulton County, Georgia. The development is expected to be completed by the year 2024. Access to the development will primarily be through Driveway A, and its location will be recommended based on the operations analysis of the two alternatives as described below and shown in **Figure 5**.

- Alternative #1 (Aligned): Driveway A is displaced to be aligned with Driveway B/Scooter's Driveway in the north.
- Alternative #2 (Not Aligned): This alternative will keep Driveway A unchanged as in existing conditions. This alternative will result in the creation of two intersections, similar to the no-build condition.





Alternative#1 **Alternative #2**

Figure 5 Driveway A Location Alternatives

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, 11th Edition. In order to determine the maximum potential impacts from the development trips, no pass-by trips and internal trip capture trips were anticipated from the development. The trip generation for the proposed development is summarized in **Table 9**. The trip generation report is attached in **Appendix F**.

Table 9: 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
Fast-Casual Restaurant with Drive-Through Window (934)	3,500 SF	818	818	1636	80	76	156	60	56	116

Trip Distribution and Assignment

The trips expected to be generated from the development were distributed on the roadway network in the study area. The proposed distribution is based on historical counts and observed traffic patterns at the existing entrances. Generated trips assigned to the adjacent street network are shown in **Figure 6**.

JURISDICTION	PROJECT NUMBER
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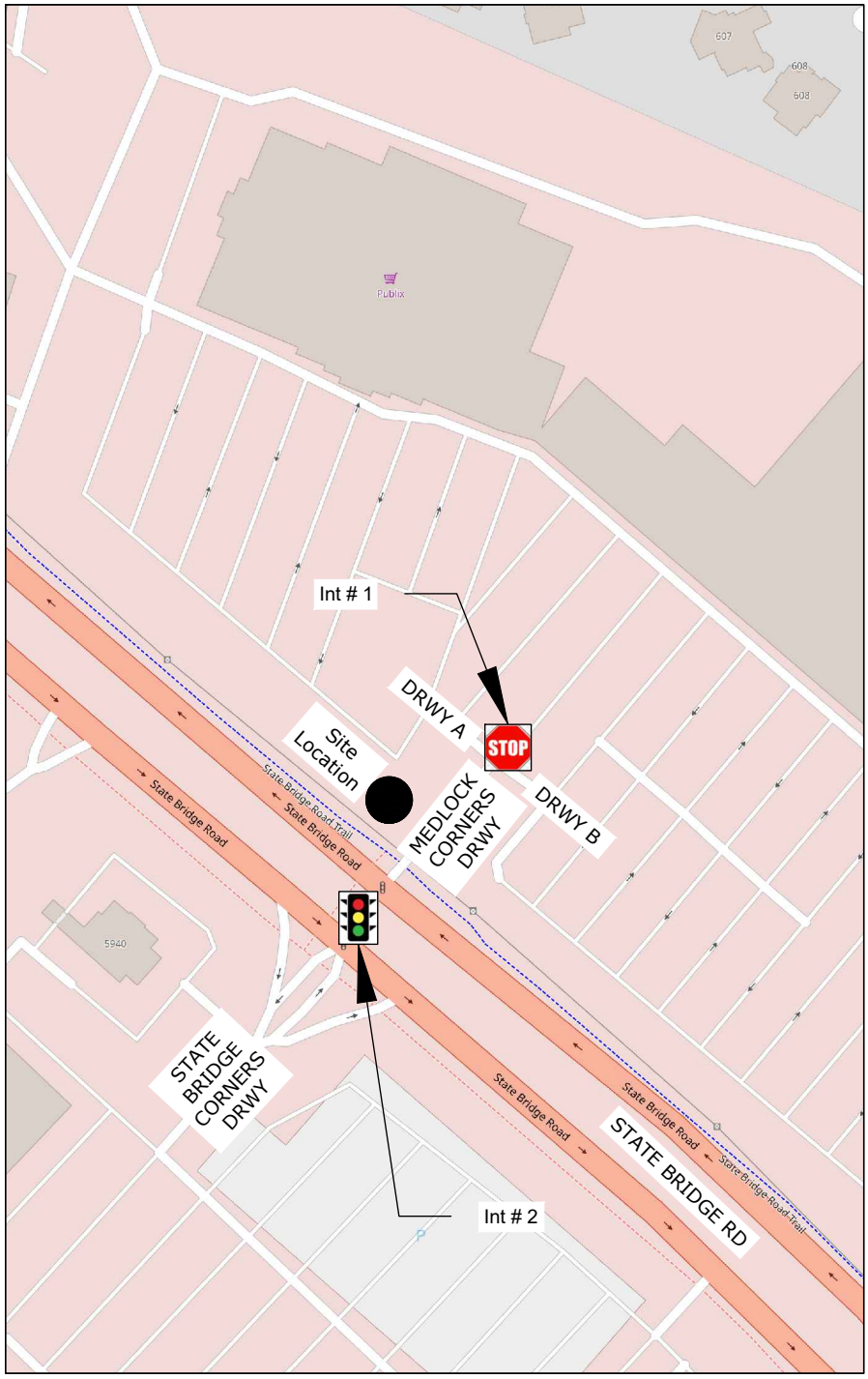

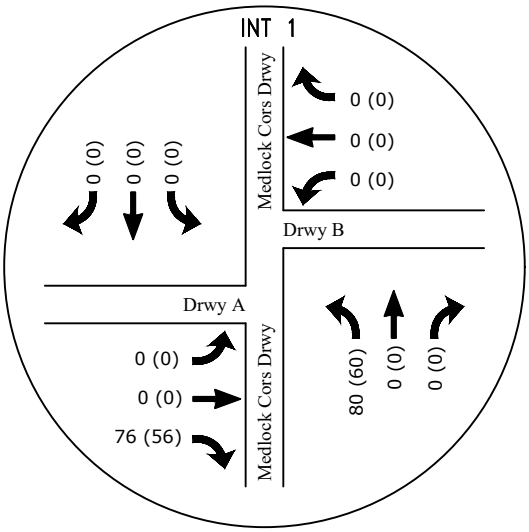

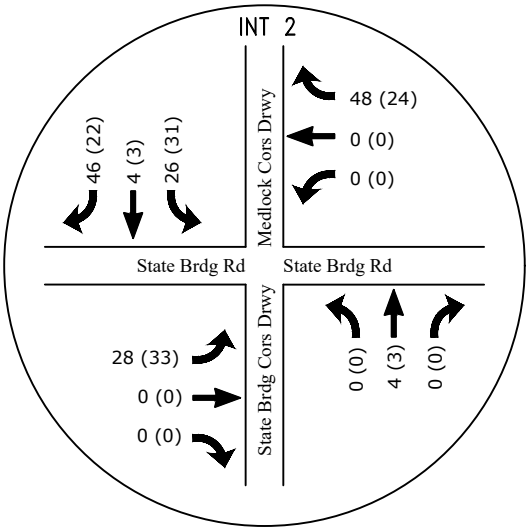

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SITE GENERATED PEAK HOUR VOLUME

FIGURE 6

FUTURE CONDITIONS - WITH THE PROPOSED DEVELOPMENT (BUILD)

The site-generated trips were added to the future no-build background traffic, and the combined volumes were analyzed to assess the impact of the development. Alternative #1 and 2 will be analyzed to recommend the location of Driveway A after the full build-out of the development.

Build Traffic Volumes

Build analysis was conducted to determine any impacts to the study intersections resulting from traffic from the full build-out of the proposed development. The generated trips assigned to the roadway network were added to the background traffic volumes and are shown in **Figure 7**.

Delay Analysis for Build Conditions

The level of service criteria discussed in the prior sections was applied to the study intersections to determine the impacts of 2024 background traffic volumes plus total site-generated volumes. The intersection of State Bridge Road at Medlock Corners Driveway/State Bridge Corners Driveway was analyzed with existing control, geometric configuration, and signal timing. The placement of Driveway A does not affect the operations at State Bridge Road study intersection. Driveway A was analyzed as a single-lane stop-controlled approach without a channelized right-turn lane as in the existing conditions. Driveway B was also analyzed as a single-lane stop-controlled approach as in the existing conditions. The results for both alternatives are summarized in **Table 10**. Detailed reports are attached in **Appendix D**.

Table 10: Level of Service and Delay for Build Condition (2024)

Intersection	Control Type	Approach	Delay (LOS)	
			AM	PM
State Bridge Road at Medlock Corners Driveway/State Bridge Corners Driveway	Traffic Signal	Northbound	45 (D)	46 (D)
		Southbound	47 (D)	49 (D)
		Eastbound	4 (A)	11 (B)
		Westbound	6 (A)	8 (A)
		Overall	6 (A)	12 (B)
Alternative #1 – Aligned				
Medlock Corners Driveway at Driveway A/B	Minor-Street Stop-Control	Eastbound	9 (A)	10 (A)
		Westbound	12 (B)	16 (C)
Alternative #2 – Not Aligned				
Medlock Corners Driveway at Driveway A	Minor-Street Stop-Control	Eastbound	9 (A)	11 (B)
Medlock Corners Driveway at Driveway B	Minor-Street Stop-Control	Westbound	9 (A)	10 (A)

The signalized intersection of State Bridge Road at Medlock Corners Driveway/State Bridge Corners Driveway is expected to continue to operate at an acceptable level of service with a slightly higher delay due to the traffic generated from the development. Driveways A and B operate acceptably under both alternatives, but alternative #2 showed lower delays when driveways were not aligned.

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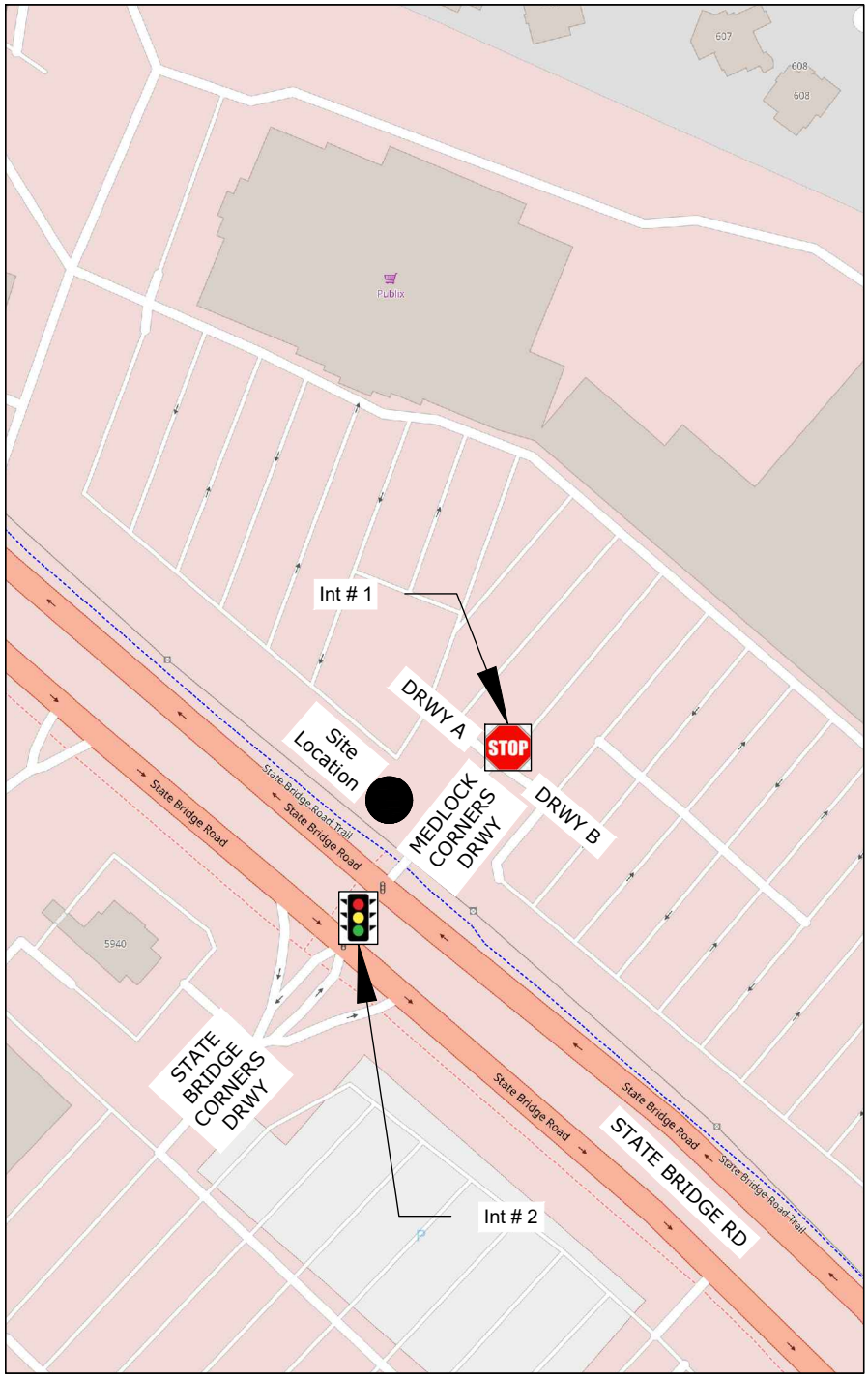

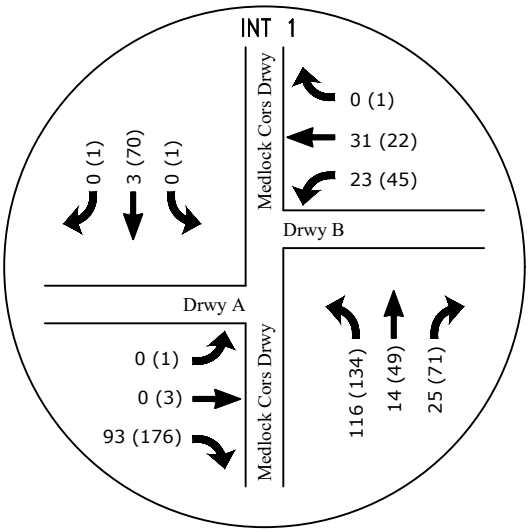

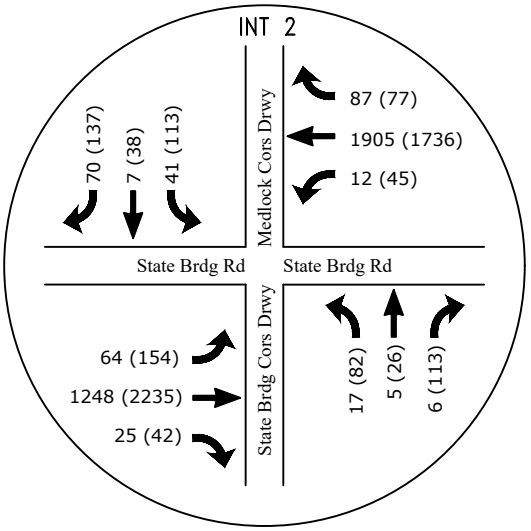

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BUILD PEAK HOUR VOLUMES (2024)

FIGURE 7

Queue Analysis

Synchro modelling was utilized to analyze expected queue lengths. Synchro provides 50th and 95th percentile queue length for the turning movements at the study intersection. Queue lengths for Medlock Corners Driveway were checked to anticipated queue lengths at the traffic signal internal the shopping center with the addition of the new development traffic and Scooter's traffic. A comparison of queue lengths and distance to the internal intersections is shown in **Table 11**.

Table 11: 50th and 95th Percentile Queue Lengths at Medlock Corners Driveway

Movement	50th Percentile Queue Length (ft)		95th Percentile Queue Length (ft)		Distance to Internal Intersection (ft)
	AM	PM	AM	PM	
No-Build Conditions					
SWL+T	0	50	25	150	125
SWR	0	0	0	50	125
Build Conditions – Alternative #1					
SWL+T	25	75	50	200	200
SWR	0	0	50	50	200
Build Conditions – Alternative #2					
SWL+T	25	75	50	200	125
SWR	0	0	50	50	125

After the full build-out of the development, the queue lengths are expected to nearly double in length internal the shopping center. Queues are expected to overflow into the internal intersection with or without the development during the PM peak hour. The queue length for Alternative #1 and #2 remains unchanged. However, there is a difference in the distance to the internal intersection between the two alternatives. In alternative #1, Driveway A is moved 60 feet north to align with Driveway B, while in alternative #2, Driveway A stays in the same location as in the no-build scenario. Thus, the internal intersection distance in alternative #2 is the same as in the no-build scenario. The queueing from the signal is likely to impede the restaurant driveway if it remains as existing.

Level of Service Comparison

The results of the intersection capacity analysis for the no-build and build alternatives with the development are summarized in **Table 12** below for comparison. Trips generated from the development do increase delays for the study intersections, but the overall LOS remains acceptable.

Table 12: Level of Service Comparison

Intersection	Control Type	Approaches	No-Build Conditions		Alternative #1		Alternative #2	
			Delay (LOS)		Delay (LOS)		Delay (LOS)	
			AM	PM	AM	PM	AM	PM
Medlock Corners Driveway at Driveway A & B	Minor-Street Stop-Control	Eastbound	9 (A)	10 (A)	9 (A)	10 (A)	9 (A)	11 (B)
		Westbound	9 (A)	10 (A)	12 (B)	16 (C)	9 (A)	10 (A)
State Bridge Road at Medlock Corners Driveway/State Bridge Corners Driveway	Traffic Signal	Northbound	45 (D)	48 (D)	45 (D)	46 (D)	45 (D)	46 (D)
		Southbound	45 (D)	49 (D)	47 (D)	49 (D)	47 (D)	49 (D)
		Eastbound	4 (A)	9 (A)	4 (A)	11 (B)	4 (A)	11 (B)
		Westbound	5 (A)	7 (A)	6 (A)	8 (A)	6 (A)	8 (A)
		Overall	5 (A)	10 (A)	6 (A)	12 (B)	6 (A)	12 (B)

CONCLUSION

A restaurant development is proposed in the Medlock Corners Shopping Center in Johns Creek, GA. The development is in the northwest quadrant of the intersection of State Bridge Road at Medlock Corners Driveway/State Bridge Corners Driveway and is expected to be constructed by 2024. The development will include a 3,500 SF fast-casual restaurant with a drive-through window. This study analyzed the impact of additional development-generated trips on the surrounding roadway network and study intersections internal the shopping center to determine the preferred location for the restaurant's driveway internal the shopping center.

Based on the operational analysis, the study intersections operate at an acceptable level of service in the existing year (2023). The study intersections are expected to operate at an acceptable level of service in the no-build year (2024), with future background traffic that includes trips from the proposed Scooters Coffee Shop (Driveway B). The study analyzed two alternatives for driveway A (development driveway): one aligned with Driveway B and another not aligned. The trips expected from the development were factored into future background traffic volumes. The study found that both alternatives operate acceptably. The development has a nominal impact on the signalized intersection operations at State Bridge Road.

Queue analysis indicated that queues are expected to block the existing internal intersection prior to the fast-casual restaurant addition. In alternative #1, Driveway A is moved 60 feet north to align with Scooter's relocated Driveway B, while in alternative #2, Driveway A stays in the same location as in the existing/no-build scenario. The queueing from the signal at Sate Bridge Road is likely to impede the Driveway A if it remains in its existing location. If the driveway is shifted north as proposed in alternative #1 it would improve operations internal the parking lot and the driveway by allowing vehicles accessing the driveway not to be impeded by the queue from the traffic signal. Moving the driveway farther from the signal would be an improvement from the existing conditions

The following is the recommended configuration at the development driveways:

<u>Medlock Corners Driveway at Driveway A</u>

- Driveway A approach should be stop sign control.
- Driveway A approach is recommended to be a two-lane facility, with one entry and one exit lane.
- Relocate Driveway A to align with Driveway B.

No other roadway improvements are required for this development.

APPENDICES

Appendix A : Site Plan

Appendix B : Traffic Counts Summary Sheets

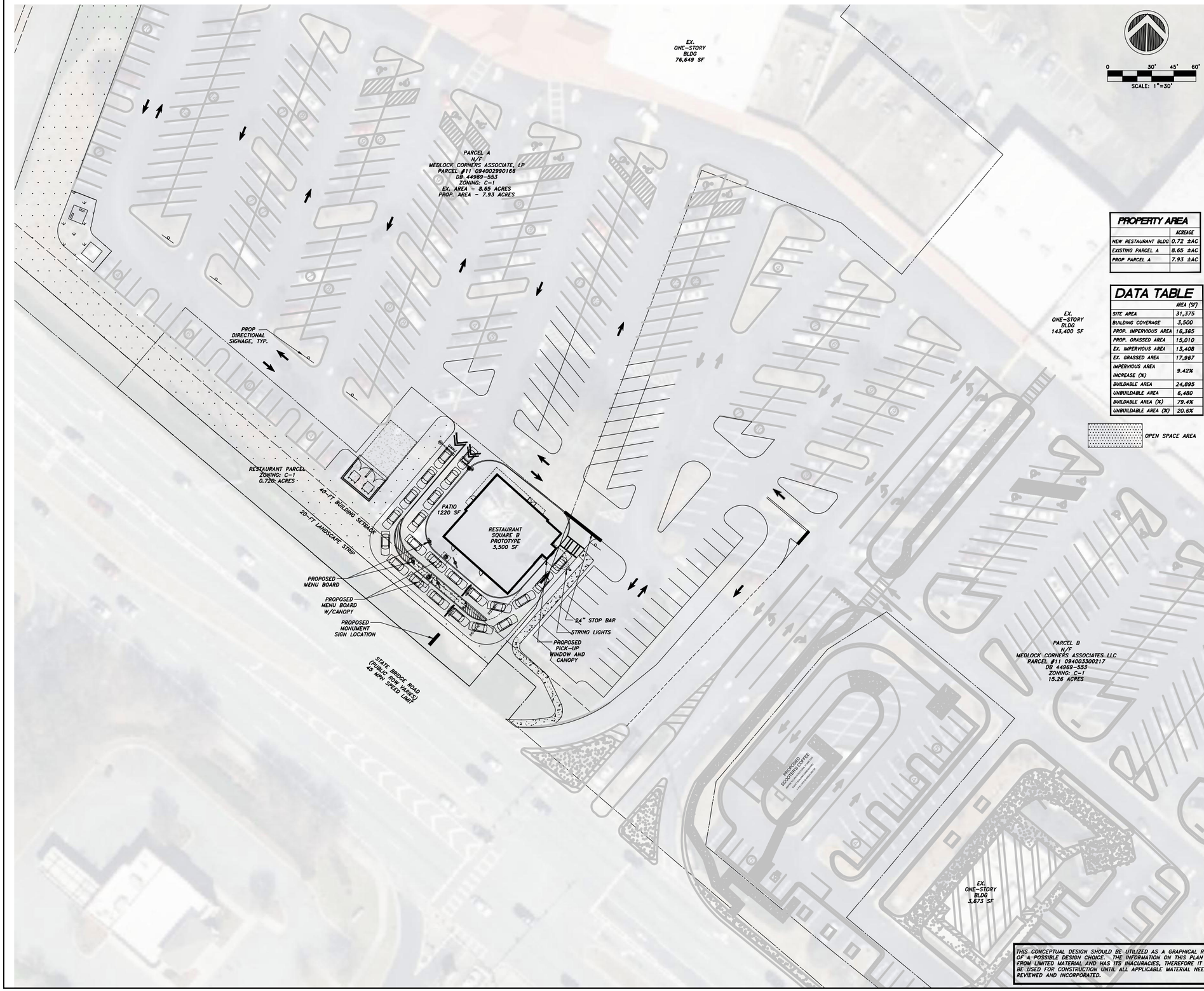
Appendix C : Growth Rate Summary

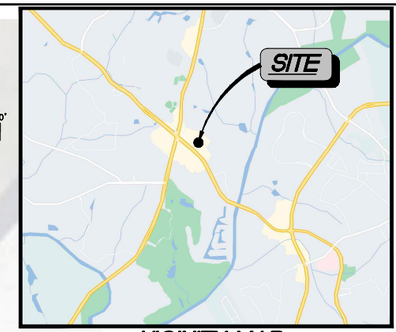
Appendix D : Synchro Reports

Appendix E : Adjacent Project Trip Generation Report

Appendix F : Trip Generation Report

Appendix A
Site Plan





VICINITY MAP
N.T.S.

PROPERTY AREA

	ACREAGE
NEW RESTAURANT BLDG	0.72 ±AC
EXISTING PARCEL A	8.65 ±AC
PROP PARCEL A	7.93 ±AC

DATA TABLE

	AREA (SF)
SITE AREA	31,375
BUILDING COVERAGE	3,500
PROP. IMPERVIOUS AREA	16,365
PROP. GRASSED AREA	15,010
EX. IMPERVIOUS AREA	13,408
EX. GRASSED AREA	17,967
IMPERVIOUS AREA INCREASE (%)	9.42%
BUILDABLE AREA	24,895
UNBUILDABLE AREA	6,480
BUILDABLE AREA (%)	79.4%
UNBUILDABLE AREA (%)	20.6%

OPEN SPACE AREA

PARKING DATA:

PARCEL A
PARKING REQUIREMENTS: ONE (1) PARKING SPACE PER TWO HUNDRED FIFTY (250) SQUARE FEET FOR SHOPPING CENTER EXCEEDING FIFTEEN THOUSAND (15,000) SQUARE FEET ACCORDING TO CITY OF JOHNS CREEK ORDINANCE SECTION 18.2.1, APPENDIX A.

PARCEL A EXISTING GROSS FLOOR AREA = 76,649 SF
PARCEL A EXISTING PARKING SPACES = 332
REQUIRED PARKING SPACES = 307
PROPOSED RESTAURANT = 3,500 SF + 1,220 SF(PATIO) = 4,720 SF
ADDITIONAL PARKING REQUIRED = 48 (1/100_SF)
TOTAL REQUIRED PARKING SPACES = 307+48 = 355
TOTAL PARKING SPACES PROVIDED = 299
SHOPPING CENTER PARCEL = 285
SHACK SHACK PARCEL = 14
REDUCTION OF PARKING SPACES = 56
NEW TOTAL GROSS FLOOR AREA = 81,369 SF

PARCEL B

ADJACENT PARKING ON PARCEL B IS 532 SPACES AND OPEN SPACE PER RZ-22-0006 = 74,936 SF 1.72 AC (11.28%). THERE WILL BE NO NET DECREASE IN PARKING OR OPEN SPACE REQUIREMENTS FOR THIS PROJECT ON PARCEL B PER RZ-22-0006.

SITE DATA:

PARCEL A - 8.65 ACRES
EXISTING IMPERVIOUS AREA - 6.60 AC (76.3%)
EXISTING LANDSCAPE - 2.05 AC (23.7%)
PROPOSED OPEN SPACE - 0.87 AC (10.1%)

PROPOSED RESTAURANT PARCEL - 0.720 ACRES
PROPOSED IMPERVIOUS AREA - 0.376 AC (52.2%)
PROPOSED LANDSCAPE - 0.248 AC (34.5%
PROPOSED OPEN SPACE - 0.096 AC (13.3%)

4.4.3.B - OPEN SPACES:
1. A MINIMUM OF TEN PERCENT (10%) OF THE SITE SHALL BE COMMON OPEN SPACE.
2. ONE OPEN SPACE AMENITY SUCH AS A PATIO/SEATING AREA, WATER FEATURE, CLOCK TOWER, OR A PEDESTRIAN PLAZA OR BENCH SHALL BE PROVIDED FOR EVERY 25,000 SQ. FT. OF GROSS FLOOR AREA OF A RETAIL/SERVICE COMMERCIAL ESTABLISHMENT. SUCH FEATURES SHALL BE CONSTRUCTED OF MATERIALS THAT ARE THE SAME OR SIMILAR TO THOSE USED FOR THE PRINCIPAL BUILDINGS AND LANDSCAPE.

3.3.15 - D.:
OPEN SPACE. A PORTION OF A SITE CONSISTING OF EITHER NATURAL FEATURES WORTHY OF PRESERVATION THAT MAY BE LEFT UNIMPROVED, OR BUILDABLE LAND THAT IS PERMANENTLY SET ASIDE AND IMPROVED FOR PUBLIC OR PRIVATE RECREATIONAL AREAS. ACTIVE RECREATIONAL AREAS MAY INCLUDE TENNIS COURTS, SWIMMING POOLS, SPLASH PAD, PLAYGROUNDS, COMMUNITY GARDENS, AND CLUBHOUSES. PASSIVE RECREATIONAL AREAS MAY INCLUDE TRAILS, PICNIC AND FIRE PIT AREAS, AND COMMUNITY GREENS. DETENTION FACILITIES, REQUIRED BUFFERS, LANDSCAPED STRIPS, AND PLATTED RESIDENTIAL LOTS SHALL NOT BE INCLUDED IN OPEN SPACE CALCULATIONS.

SITE NOTES:

1. THE PROPERTY IS NOT WITHIN THE BOUNDARY OF A 100-YR FLOOD PLAIN PER FEMA FIRM MAP 13121C0093G, DATED 9/18/2013
2. STORMWATER MANAGEMENT FOR THE SITE WILL BE LOCATED IN THE OFFSITE DETENTION FACILITY LOCATED BEHIND THE EXISTING SHOPPING PLAZA. THE PROPOSED PROJECT WILL COMPLY WITH CITY REGULATIONS
3. WATER SERVICE IS PROVIDED BY A 10" MAIN IN THE MEDIAN OF STATE BRIDGE ROAD THAT HAS BEEN PREVIOUS STUBBED TO THE SITE. THE SITE WILL CONNECT TO THE EXISTING WATER MAIN LOCATED ALONG CAMDEN WAY.
4. THERE ARE NO WETLANDS LOCATED ON OR WITHIN 200 FEET OF THE SITE
5. SANITARY SEWER TO TIE TO THE EXISTING PUBLIC SYSTEM LOCATED FOR THE PROPERTY. THERE ARE NO SEPTIC DRAINS FIELDS PROPOSED FOR THIS SITE.
6. THE SPEED LIMIT ALONG THE FRONTAGE OF STATE BRIDGE ROAD IS 45MPH
7. FRONT BUILDING SETBACK: 40-FT
   LANDSCAPE STRIPS: 20-FT FRONT, 15-FT SIDE
8. CURRENT ZONING: C-1-C
9. 15-FT WIDE LANDSCAPE STRIP BETWEEN THE EXISTING AND PROPOSED PARCEL LINES REQUESTED TO BE ELIMINATED WITH VARIANCE
10. PROJECT WILL REDUCE THE OVERALL PARKING TOTAL FOR PARCEL A BY 56 SPACES. THIS WILL REQUIRE A PARKING VARIANCE
11. THE PROPOSED PROJECT WILL INSTALL NEW DUMPSTER FOR THE PROJECT.
12. PROPOSED BUILDING IS ON NEW PARCEL AS SHOWN ON SITE PLAN
13. PROJECT WILL INCLUDE NEW MONUMENT SIGN FOR NEWLY CREATED PARCEL

THIS CONCEPTUAL DESIGN SHOULD BE UTILIZED AS A GRAPHICAL REPRESENTATION OF A POSSIBLE DESIGN CHOICE. THE INFORMATION ON THIS PLAN WAS DESIGNED FROM LIMITED MATERIAL AND HAS ITS INACURACIES, THEREFORE IT SHOULD NOT BE USED FOR CONSTRUCTION UNTIL ALL APPLICABLE MATERIAL NEEDED HAS BEEN REVIEWED AND INCORPORATED.

811 Know what's below. Call before you dig. Dial 811

MEDLOCK SHOPS - NEW RESTAURANT BUILDING

5805 STATE BRIDGE ROAD, JOHNS CREEK, GA 30097

PREPARED FOR:

WILLOW CAPITAL PARTNERS, LLC

LAND LOTS 330 & 331, DISTRICT 1, SECTION 1 CITY OF JOHNS CREEK
TAX PARCEL ID: 11 094002990166 & 11 094003300217

GEORGIA REGISTERED 34742 PROFESSIONAL ENGINEER JOEY P. MASSA

MASS ENGINEERING AND CONSULTANTS, LLC.
3459 ACWORTH DUE WEST ROAD, SUITE 565
ACWORTH, GEORGIA 30101
PHONE: 404.850.7790 EXT. 901
WWW.MASS-ENG.COM

MASS ENGINEERING AND CONSULTANTS, LLC

REVISIONS

DATE:	DESCRIPTION

CONCEPT LAYOUT

PROJECT NUMBER: 21-0102

DATE: OCTOBER 7, 2021

CSP-1

Appendix B
Traffic Counts Summary Sheets

Turning Movement Counts

State Bridge Road at Medlock Corners Driveway/State Bridge Corners Driveway

Peak Hour Turning Movement Count

Johns Creek, GA

Click here for Map

Marr Traffic DATA COLLECTION

www.marrtraffic.com

Wednesday, May 3, 2023	
Period	0600 - 0800
Peak Hour	0700 - 0800

* the Peak Hour Diagram does not include Bikes

Session Parameters

(Drop Down Menu)

Peak Hour

Volume

All vehicles

	Northbound					Southbound					Eastbound					Westbound					
	Driveway (South)					Driveway (North)					State Bridge Rd (West)					State Bridge Rd (East)					
	Left	Thru	Right	U-Turn	App	Left	Thru	Right	U-Turn	App	Left	Thru	Right	U-Turn	App	Left	Thru	Right	U-Turn	App	Int
Time	1.1	1.2	1.3	1.4	Total	1.5	1.6	1.7	1.8	Total	1.9	1.10	1.11	1.12	Total	1.13	1.14	1.15	1.16	Total	Total
0700 - 0715	5	0	1	0	6	1	0	3	0	4	3	190	3	1	197	1	495	9	0	505	712
0715 - 0730	0	0	1	0	1	1	1	1	0	3	8	279	6	0	293	5	494	5	0	504	801
0730 - 0745	8	0	0	0	8	3	0	5	0	8	6	374	7	0	387	3	453	8	0	464	867
0745 - 0800	4	0	4	0	8	3	1	3	0	7	9	393	9	2	413	3	444	5	0	452	880
Total	17	0	6	0	23	8	2	12	0	22	26	1236	25	3	1290	12	1886	27	0	1925	3260
Approach %	73.91	0.00	26.09	0.00	-	36.36	9.09	54.55	0.00	-	2.02	95.81	1.94	0.23	-	0.62	97.97	1.40	0.00	-	
PHF	0.53	0.00	0.38	0.00	**0.72**	0.67	0.50	0.60	0.00	**0.69**	0.72	0.79	0.69	0.38	**0.78**	0.60	0.95	0.75	0.00	**0.95**	**0.93**

Passenger Vehicles (1-3)

	Northbound					Southbound					Eastbound					Westbound					
	Driveway (South)					Driveway (North)					State Bridge Rd (West)					State Bridge Rd (East)					
	Left	Thru	Right	U-Turn	App	Left	Thru	Right	U-Turn	App	Left	Thru	Right	U-Turn	App	Left	Thru	Right	U-Turn	App	Int
Time	1.1	1.2	1.3	1.4	Total	1.5	1.6	1.7	1.8	Total	1.9	1.10	1.11	1.12	Total	1.13	1.14	1.15	1.16	Total	Total
0700 - 0715	5	0	0	0	5	1	0	3	0	4	3	183	2	1	189	1	481	9	0	491	689
0715 - 0730	0	0	1	0	1	1	1	1	0	3	8	274	6	0	288	5	478	5	0	488	780
0730 - 0745	8	0	0	0	8	3	0	5	0	8	6	364	7	0	377	3	441	8	0	452	845
0745 - 0800	3	0	3	0	6	3	1	3	0	7	9	393	8	2	412	3	436	5	0	444	869
Total	16	0	4	0	20	8	2	12	0	22	26	1214	23	3	1266	12	1836	27	0	1875	3183
Approach %	80.00	0.00	20.00	0.00	-	36.36	9.09	54.55	0.00	-	2.05	95.89	1.82	0.24	-	0.64	97.92	1.44	0.00	-	
PHF	0.50	0.00	0.33	0.00	**0.63**	0.67	0.50	0.60	0.00	**0.69**	0.72	0.77	0.72	0.38	**0.77**	0.60	0.95	0.75	0.00	**0.95**	**0.92**

Single Unit Trucks (4-7)

	Northbound					Southbound					Eastbound					Westbound					
	Driveway (South)					Driveway (North)					State Bridge Rd (West)					State Bridge Rd (East)					
	Left	Thru	Right	U-Turn	App	Left	Thru	Right	U-Turn	App	Left	Thru	Right	U-Turn	App	Left	Thru	Right	U-Turn	App	Int
Time	1.1	1.2	1.3	1.4	Total	1.5	1.6	1.7	1.8	Total	1.9	1.10	1.11	1.12	Total	1.13	1.14	1.15	1.16	Total	Total
0700 - 0715	0	0	1	0	1	0	0	0	0	0	0	5	1	0	6	0	11	0	0	11	18
0715 - 0730	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	12	0	0	12	14
0730 - 0745	0	0	0	0	0	0	0	0	0	0	0	6	0	0	6	0	8	0	0	8	14
0745 - 0800	1	0	1	0	2	0	0	0	0	0	0	0	1	0	1	0	6	0	0	6	9
Total	1	0	2	0	3	0	0	0	0	0	0	13	2	0	15	0	37	0	0	37	55
Approach %	33.33	0.00	66.67	0.00	-	0.00	0.00	0.00	0.00	-	0.00	86.67	13.33	0.00	-	0.00	100.00	0.00	0.00	-	
PHF	0.25	0.00	0.50	0.00	**0.38**	0.00	0.00	0.00	0.00	**0.00**	0.00	0.54	0.50	0.00	**0.63**	0.00	0.77	0.00	0.00	**0.77**	**0.76**

Combination Trucks (8-13)

	Northbound					Southbound					Eastbound					Westbound					
	Driveway (South)					Driveway (North)					State Bridge Rd (West)					State Bridge Rd (East)					
	Left	Thru	Right	U-Turn	App	Left	Thru	Right	U-Turn	App	Left	Thru	Right	U-Turn	App	Left	Thru	Right	U-Turn	App	Int
Time	1.1	1.2	1.3	1.4	Total	1.5	1.6	1.7	1.8	Total	1.9	1.10	1.11	1.12	Total	1.13	1.14	1.15	1.16	Total	Total
0700 - 0715	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	3	0	0	3	5
0715 - 0730	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	4	0	0	4	7
0730 - 0745	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4	0	4	0	0	4	8
0745 - 0800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2
Total	0	0	0	0	0	0	0	0	0	0	0	9	0	0	9	0	13	0	0	13	22
Approach %	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	-	0.00	100.00	0.00	0.00	-	0.00	100.00	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**	0.00	0.56	0.00	0.00	**0.56**	0.00	0.81	0.00	0.00	**0.81**	**0.69**

Bikes

	Northbound					Southbound					Eastbound					Westbound					
	Driveway (South)					Driveway (North)					State Bridge Rd (West)					State Bridge Rd (East)					
	Left	Thru	Right	U-Turn	App	Left	Thru	Right	U-Turn	App	Left	Thru	Right	U-Turn	App	Left	Thru	Right	U-Turn	App	Int
Time	1.1	1.2	1.3	1.4	Total	1.5	1.6	1.7	1.8	Total	1.9	1.10	1.11	1.12	Total	1.13	1.14	1.15	1.16	Total	Total
0700 - 0715	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0715 - 0730	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0730 - 0745	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0745 - 0800	0	0	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
Approach %	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	-	0.00	0.00	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**	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	**0.00**	**0.00**

Peak Hour Turning Movement Count

Johns Creek, GA

Click here for Map

Marr Traffic DATA COLLECTION

www.marrtraffic.com

Wednesday, May 3, 2023	
Period	1600 - 1800
Peak Hour	1700 - 1800

* the Peak Hour Diagram does not include Bikes

Session Parameters

(Drop Down Menu)

Peak Hour

Volume

All vehicles

	Northbound					Southbound					Eastbound					Westbound					
	Driveway (South)					Driveway (North)					State Bridge Rd (West)					State Bridge Rd (East)					
	Left	Thru	Right	U-Turn	App	Left	Thru	Right	U-Turn	App	Left	Thru	Right	U-Turn	App	Left	Thru	Right	U-Turn	App	Int
Time	1.1	1.2	1.3	1.4	Total	1.5	1.6	1.7	1.8	Total	1.9	1.10	1.11	1.12	Total	1.13	1.14	1.15	1.16	Total	Total
1700 - 1715	25	4	21	0	50	16	10	29	0	55	32	532	8	0	572	15	435	9	2	461	1138
1715 - 1730	8	9	34	0	51	22	9	25	0	56	30	549	13	1	593	12	451	12	0	475	1175
1730 - 1745	25	6	33	0	64	20	5	33	0	58	25	583	14	1	623	7	406	8	0	421	1166
1745 - 1800	23	4	24	0	51	19	11	24	0	54	26	549	7	1	583	9	427	20	0	456	1144
Total	81	23	112	0	216	77	35	111	0	223	113	2213	42	3	2371	43	1719	49	2	1813	4623
Approach %	37.50	10.65	51.85	0.00	-	34.53	15.70	49.78	0.00	-	4.77	93.34	1.77	0.13	-	2.37	94.82	2.70	0.11	-	
PHF	0.81	0.64	0.82	0.00	**0.84**	0.88	0.80	0.84	0.00	**0.96**	0.88	0.95	0.75	0.75	**0.95**	0.72	0.95	0.61	0.25	**0.95**	**0.98**

Passenger Vehicles (1-3)

	Northbound					Southbound					Eastbound					Westbound					
	Driveway (South)					Driveway (North)					State Bridge Rd (West)					State Bridge Rd (East)					
	Left	Thru	Right	U-Turn	App	Left	Thru	Right	U-Turn	App	Left	Thru	Right	U-Turn	App	Left	Thru	Right	U-Turn	App	Int
Time	1.1	1.2	1.3	1.4	Total	1.5	1.6	1.7	1.8	Total	1.9	1.10	1.11	1.12	Total	1.13	1.14	1.15	1.16	Total	Total
1700 - 1715	24	4	21	0	49	16	10	29	0	55	32	520	8	0	560	15	430	9	1	455	1119
1715 - 1730	8	9	34	0	51	22	9	24	0	55	30	536	13	1	580	12	445	12	0	469	1155
1730 - 1745	25	6	33	0	64	20	5	32	0	57	25	568	14	1	608	7	402	8	0	417	1146
1745 - 1800	23	4	24	0	51	19	11	24	0	54	26	540	7	1	574	9	425	20	0	454	1133
Total	80	23	112	0	215	77	35	109	0	221	113	2164	42	3	2322	43	1702	49	1	1795	4553
Approach %	37.21	10.70	52.09	0.00	-	34.84	15.84	49.32	0.00	-	4.87	93.20	1.81	0.13	-	2.40	94.82	2.73	0.06	-	
PHF	0.80	0.64	0.82	0.00	**0.84**	0.88	0.80	0.85	0.00	**0.97**	0.88	0.95	0.75	0.75	**0.95**	0.72	0.96	0.61	0.25	**0.96**	**0.99**

Single Unit Trucks (4-7)

	Northbound					Southbound					Eastbound					Westbound					
	Driveway (South)					Driveway (North)					State Bridge Rd (West)					State Bridge Rd (East)					
	Left	Thru	Right	U-Turn	App	Left	Thru	Right	U-Turn	App	Left	Thru	Right	U-Turn	App	Left	Thru	Right	U-Turn	App	Int
Time	1.1	1.2	1.3	1.4	Total	1.5	1.6	1.7	1.8	Total	1.9	1.10	1.11	1.12	Total	1.13	1.14	1.15	1.16	Total	Total
1700 - 1715	1	0	0	0	1	0	0	0	0	0	0	10	0	0	10	0	4	0	1	5	16
1715 - 1730	0	0	0	0	0	0	0	1	0	1	0	10	0	0	10	0	4	0	0	4	15
1730 - 1745	0	0	0	0	0	0	0	1	0	1	0	12	0	0	12	0	3	0	0	3	16
1745 - 1800	0	0	0	0	0	0	0	0	0	0	0	7	0	0	7	0	2	0	0	2	9
Total	1	0	0	0	1	0	0	2	0	2	0	39	0	0	39	0	13	0	1	14	56
Approach %	100.00	0.00	0.00	0.00	-	0.00	0.00	100.00	0.00	-	0.00	100.00	0.00	0.00	-	0.00	92.86	0.00	7.14	-	
PHF	0.25	0.00	0.00	0.00	**0.25**	0.00	0.00	0.50	0.00	**0.50**	0.00	0.81	0.00	0.00	**0.81**	0.00	0.81	0.00	0.25	**0.70**	**0.88**

Combination Trucks (8-13)

	Northbound					Southbound					Eastbound					Westbound					
	Driveway (South)					Driveway (North)					State Bridge Rd (West)					State Bridge Rd (East)					
	Left	Thru	Right	U-Turn	App	Left	Thru	Right	U-Turn	App	Left	Thru	Right	U-Turn	App	Left	Thru	Right	U-Turn	App	Int
Time	1.1	1.2	1.3	1.4	Total	1.5	1.6	1.7	1.8	Total	1.9	1.10	1.11	1.12	Total	1.13	1.14	1.15	1.16	Total	Total
1700 - 1715	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	1	0	0	1	3
1715 - 1730	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	2	0	0	2	5
1730 - 1745	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	1	0	0	1	4
1745 - 1800	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	2
Total	0	0	0	0	0	0	0	0	0	0	0	10	0	0	10	0	4	0	0	4	14
Approach %	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	-	0.00	100.00	0.00	0.00	-	0.00	100.00	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**	0.00	0.83	0.00	0.00	**0.83**	0.00	0.50	0.00	0.00	**0.50**	**0.70**

Bikes

	Northbound					Southbound					Eastbound					Westbound					
	Driveway (South)					Driveway (North)					State Bridge Rd (West)					State Bridge Rd (East)					
	Left	Thru	Right	U-Turn	App	Left	Thru	Right	U-Turn	App	Left	Thru	Right	U-Turn	App	Left	Thru	Right	U-Turn	App	Int
Time	1.1	1.2	1.3	1.4	Total	1.5	1.6	1.7	1.8	Total	1.9	1.10	1.11	1.12	Total	1.13	1.14	1.15	1.16	Total	Total
1700 - 1715	0	0	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	0	0
1730 - 1745	0	0	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	0	0
Total	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	-	0.00	0.00	0.00	0.00	-	0.00	0.00	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**	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	**0.00**	**0.00**

Classified Turn Movement Count || All vehicles

Marr Traffic DATA COLLECTION

Johns Creek, GA

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Site 1 of 2
Driveway (South)
Driveway (North)
State Bridge Rd (West)
State Bridge Rd (East)

Date
Wednesday, May 3, 2023

Weather
Fair
61°F

Lat/Long
34.016416°, -84.187805°

0600 - 0800 (Weekday 2h Session) (05-03-2023)

All vehicles

	Northbound					Southbound					Eastbound					Westbound					
	Driveway (South)					Driveway (North)					State Bridge Rd (West)					State Bridge Rd (East)					
TIME	Left 1.1	Thru 1.2	Right 1.3	U-Turn 1.4	App Total	Left 1.5	Thru 1.6	Right 1.7	U-Turn 1.8	App Total	Left 1.9	Thru 1.10	Right 1.11	U-Turn 1.12	App Total	Left 1.13	Thru 1.14	Right 1.15	U-Turn 1.16	App Total	Int Total
0600 - 0615	1	1	0	0	2	1	0	0	0	1	0	96	1	1	98	0	198	2	0	200	301
0615 - 0630	1	0	0	0	1	1	0	2	0	3	0	110	1	0	111	0	301	6	1	308	423
0630 - 0645	1	1	1	0	3	1	0	1	0	2	2	199	0	0	201	2	394	4	1	401	607
0645 - 0700	1	0	1	0	2	0	0	1	0	1	5	187	2	0	194	0	442	2	0	444	641
Hourly Total	4	2	2	0	**8**	3	0	4	0	**7**	7	592	4	1	**604**	2	1335	14	2	**1353**	**1972**
0700 - 0715	5	0	1	0	6	1	0	3	0	4	3	190	3	1	197	1	495	9	0	505	712
0715 - 0730	0	0	1	0	1	1	1	1	0	3	8	279	6	0	293	5	494	5	0	504	801
0730 - 0745	8	0	0	0	8	3	0	5	0	8	6	374	7	0	387	3	453	8	0	464	867
0745 - 0800	4	0	4	0	8	3	1	3	0	7	9	393	9	2	413	3	444	5	0	452	880
Hourly Total	17	0	6	0	**23**	8	2	12	0	**22**	26	1236	25	3	**1290**	12	1886	27	0	**1925**	**3260**
Grand Total	21	2	8	0	**31**	11	2	16	0	**29**	33	1828	29	4	**1894**	14	3221	41	2	**3278**	**5232**
Approach %	67.74	6.45	25.81	0.00	-	37.93	6.90	55.17	0.00	-	1.74	96.52	1.53	0.21	-	0.43	98.26	1.25	0.06	-	
Intersection %	0.40	0.04	0.15	0.00	0.59	0.21	0.04	0.31	0.00	0.55	0.63	34.94	0.55	0.08	36.20	0.27	61.56	0.78	0.04	62.65	
PHF	0.53	0.00	0.38	0.00	**0.72**	0.67	0.50	0.60	0.00	**0.69**	0.72	0.79	0.69	0.38	**0.78**	0.60	0.95	0.75	0.00	**0.95**	**0.93**

1600 - 1800 (Weekday 2h Session) (05-03-2023)

All vehicles

	Northbound					Southbound					Eastbound					Westbound					
	Driveway (South)					Driveway (North)					State Bridge Rd (West)					State Bridge Rd (East)					
TIME	Left 1.1	Thru 1.2	Right 1.3	U-Turn 1.4	App Total	Left 1.5	Thru 1.6	Right 1.7	U-Turn 1.8	App Total	Left 1.9	Thru 1.10	Right 1.11	U-Turn 1.12	App Total	Left 1.13	Thru 1.14	Right 1.15	U-Turn 1.16	App Total	Int Total
1600 - 1615	21	8	16	0	45	22	8	37	0	67	50	457	13	1	521	18	432	29	0	479	1112
1615 - 1630	20	5	16	0	41	23	6	31	0	60	35	454	25	2	516	19	440	27	0	486	1103
1630 - 1645	29	5	19	0	53	20	4	32	0	56	26	509	26	1	562	12	440	24	0	476	1147
1645 - 1700	18	9	30	0	57	23	8	23	0	54	31	480	17	0	528	20	442	16	0	478	1117
Hourly Total	88	27	81	0	**196**	88	26	123	0	**237**	142	1900	81	4	**2127**	69	1754	96	0	**1919**	**4479**
1700 - 1715	25	4	21	0	50	16	10	29	0	55	32	532	8	0	572	15	435	9	2	461	1138
1715 - 1730	8	9	34	0	51	22	9	25	0	56	30	549	13	1	593	12	451	12	0	475	1175
1730 - 1745	25	6	33	0	64	20	5	33	0	58	25	583	14	1	623	7	406	8	0	421	1166
1745 - 1800	23	4	24	0	51	19	11	24	0	54	26	549	7	1	583	9	427	20	0	456	1144
Hourly Total	81	23	112	0	**216**	77	35	111	0	**223**	113	2213	42	3	**2371**	43	1719	49	2	**1813**	**4623**
Grand Total	169	50	193	0	**412**	165	61	234	0	**460**	255	4113	123	7	**4498**	112	3473	145	2	**3732**	**9102**
Approach %	41.02	12.14	46.84	0.00	-	35.87	13.26	50.87	0.00	-	5.67	91.44	2.73	0.16	-	3.00	93.06	3.89	0.05	-	
Intersection %	1.86	0.55	2.12	0.00	4.53	1.81	0.67	2.57	0.00	5.05	2.80	45.19	1.35	0.08	49.42	1.23	38.16	1.59	0.02	41.00	
PHF	0.81	0.64	0.82	0.00	**0.84**	0.88	0.80	0.84	0.00	**0.96**	0.88	0.95	0.75	0.75	**0.95**	0.72	0.95	0.61	0.25	**0.95**	**0.98**

Turning Movement Counts
Medlock Corners Driveway at Driveway A / B

Peak Hour Turning Movement Count

Johns Creek, GA

Click here for Map

Marr Traffic DATA COLLECTION

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Wednesday, May 3, 2023	
Period	0600 - 0800
Peak Hour	0700 - 0800

* the Peak Hour Diagram does not include Bikes

Session Parameters

(Drop Down Menu)

Peak Hour

Volume

All vehicles

	Northbound					Southbound					Eastbound					Westbound					
	Driveway (South)					Driveway (North)					Driveway (West)					Driveway (East)					
	Left	Thru	Right	U-Turn	App	Left	Thru	Right	U-Turn	App	Left	Thru	Right	U-Turn	App	Left	Thru	Right	U-Turn	App	Int
Time	2.1	2.2	2.3	2.4	Total	2.5	2.6	2.7	2.8	Total	2.9	2.10	2.11	2.12	Total	2.13	2.14	2.15	2.16	Total	Total
0700 - 0715	9	3	0	0	12	0	1	0	0	1	0	0	3	0	3	0	0	0	0	0	16
0715 - 0730	10	2	1	0	13	0	0	0	0	0	0	0	4	0	4	1	9	0	0	10	27
0730 - 0745	9	3	3	0	15	0	0	0	0	0	0	0	6	0	6	1	8	0	0	9	30
0745 - 0800	8	6	1	0	15	0	2	0	0	2	0	0	4	0	4	1	14	0	0	15	36
Total	36	14	5	0	55	0	3	0	0	3	0	0	17	0	17	3	31	0	0	34	109
Approach %	65.45	25.45	9.09	0.00	-	0.00	100.00	0.00	0.00	-	0.00	0.00	100.00	0.00	-	8.82	91.18	0.00	0.00	-	
PHF	0.90	0.58	0.42	0.00	**0.92**	0.00	0.38	0.00	0.00	**0.38**	0.00	0.00	0.71	0.00	**0.71**	0.75	0.55	0.00	0.00	**0.57**	**0.76**

Passenger Vehicles (1-3)

	Northbound					Southbound					Eastbound					Westbound					
	Driveway (South)					Driveway (North)					Driveway (West)					Driveway (East)					
	Left	Thru	Right	U-Turn	App	Left	Thru	Right	U-Turn	App	Left	Thru	Right	U-Turn	App	Left	Thru	Right	U-Turn	App	Int
Time	2.1	2.2	2.3	2.4	Total	2.5	2.6	2.7	2.8	Total	2.9	2.10	2.11	2.12	Total	2.13	2.14	2.15	2.16	Total	Total
0700 - 0715	9	3	0	0	12	0	1	0	0	1	0	0	3	0	3	0	0	0	0	0	16
0715 - 0730	10	2	1	0	13	0	0	0	0	0	0	0	4	0	4	1	9	0	0	10	27
0730 - 0745	9	3	3	0	15	0	0	0	0	0	0	0	6	0	6	1	8	0	0	9	30
0745 - 0800	8	6	1	0	15	0	2	0	0	2	0	0	4	0	4	1	14	0	0	15	36
Total	36	14	5	0	55	0	3	0	0	3	0	0	17	0	17	3	31	0	0	34	109
Approach %	65.45	25.45	9.09	0.00	-	0.00	100.00	0.00	0.00	-	0.00	0.00	100.00	0.00	-	8.82	91.18	0.00	0.00	-	
PHF	0.90	0.58	0.42	0.00	**0.92**	0.00	0.38	0.00	0.00	**0.38**	0.00	0.00	0.71	0.00	**0.71**	0.75	0.55	0.00	0.00	**0.57**	**0.76**

Single Unit Trucks (4-7)

	Northbound					Southbound					Eastbound					Westbound					
	Driveway (South)					Driveway (North)					Driveway (West)					Driveway (East)					
	Left	Thru	Right	U-Turn	App	Left	Thru	Right	U-Turn	App	Left	Thru	Right	U-Turn	App	Left	Thru	Right	U-Turn	App	Int
Time	2.1	2.2	2.3	2.4	Total	2.5	2.6	2.7	2.8	Total	2.9	2.10	2.11	2.12	Total	2.13	2.14	2.15	2.16	Total	Total
0700 - 0715	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0715 - 0730	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0730 - 0745	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0745 - 0800	0	0	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
Approach %	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	-	0.00	0.00	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**	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	**0.00**	**0.00**

Combination Trucks (8-13)

	Northbound					Southbound					Eastbound					Westbound					
	Driveway (South)					Driveway (North)					Driveway (West)					Driveway (East)					
	Left	Thru	Right	U-Turn	App	Left	Thru	Right	U-Turn	App	Left	Thru	Right	U-Turn	App	Left	Thru	Right	U-Turn	App	Int
Time	2.1	2.2	2.3	2.4	Total	2.5	2.6	2.7	2.8	Total	2.9	2.10	2.11	2.12	Total	2.13	2.14	2.15	2.16	Total	Total
0700 - 0715	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0715 - 0730	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0730 - 0745	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0745 - 0800	0	0	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
Approach %	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	-	0.00	0.00	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**	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	**0.00**	**0.00**

Bikes

	Northbound					Southbound					Eastbound					Westbound					
	Driveway (South)					Driveway (North)					Driveway (West)					Driveway (East)					
	Left	Thru	Right	U-Turn	App	Left	Thru	Right	U-Turn	App	Left	Thru	Right	U-Turn	App	Left	Thru	Right	U-Turn	App	Int
Time	2.1	2.2	2.3	2.4	Total	2.5	2.6	2.7	2.8	Total	2.9	2.10	2.11	2.12	Total	2.13	2.14	2.15	2.16	Total	Total
0700 - 0715	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0715 - 0730	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0730 - 0745	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0745 - 0800	0	0	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
Approach %	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	-	0.00	0.00	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**	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	**0.00**	**0.00**

Peak Hour Turning Movement Count

Johns Creek, GA

Click here for Map

Marr Traffic DATA COLLECTION

www.marrtraffic.com

Wednesday, May 3, 2023	
Period	1600 - 1800
Peak Hour	1600 - 1700

* the Peak Hour Diagram does not include Bikes

Session Parameters

(Drop Down Menu)

Peak Hour

Volume

All vehicles

	Northbound					Southbound					Eastbound					Westbound					
	Driveway (South)					Driveway (North)					Driveway (West)					Driveway (East)					
	Left	Thru	Right	U-Turn	App	Left	Thru	Right	U-Turn	App	Left	Thru	Right	U-Turn	App	Left	Thru	Right	U-Turn	App	Int
Time	2.1	2.2	2.3	2.4	Total	2.5	2.6	2.7	2.8	Total	2.9	2.10	2.11	2.12	Total	2.13	2.14	2.15	2.16	Total	Total
1600 - 1615	35	24	25	1	85	0	24	0	0	24	0	4	38	0	42	9	1	0	0	10	161
1615 - 1630	29	12	27	0	68	0	22	0	0	22	0	2	23	0	25	9	2	0	0	11	126
1630 - 1645	16	21	17	0	54	0	20	0	0	20	0	2	33	0	35	5	0	0	0	5	114
1645 - 1700	24	20	14	0	58	0	16	0	0	16	0	1	29	0	30	7	2	0	0	9	113
Total	104	77	83	1	265	0	82	0	0	82	0	9	123	0	132	30	5	0	0	35	514
Approach %	39.25	29.06	31.32	0.38	-	0.00	100.00	0.00	0.00	-	0.00	6.82	93.18	0.00	-	85.71	14.29	0.00	0.00	-	
PHF	0.74	0.80	0.77	0.25	**0.78**	0.00	0.85	0.00	0.00	**0.85**	0.00	0.56	0.81	0.00	**0.79**	0.83	0.63	0.00	0.00	**0.80**	**0.80**

Passenger Vehicles (1-3)

	Northbound					Southbound					Eastbound					Westbound					
	Driveway (South)					Driveway (North)					Driveway (West)					Driveway (East)					
	Left	Thru	Right	U-Turn	App	Left	Thru	Right	U-Turn	App	Left	Thru	Right	U-Turn	App	Left	Thru	Right	U-Turn	App	Int
Time	2.1	2.2	2.3	2.4	Total	2.5	2.6	2.7	2.8	Total	2.9	2.10	2.11	2.12	Total	2.13	2.14	2.15	2.16	Total	Total
1600 - 1615	35	24	25	1	85	0	24	0	0	24	0	4	38	0	42	9	1	0	0	10	161
1615 - 1630	29	12	27	0	68	0	22	0	0	22	0	2	23	0	25	9	2	0	0	11	126
1630 - 1645	16	21	17	0	54	0	19	0	0	19	0	2	33	0	35	5	0	0	0	5	113
1645 - 1700	24	20	14	0	58	0	16	0	0	16	0	1	29	0	30	7	2	0	0	9	113
Total	104	77	83	1	265	0	81	0	0	81	0	9	123	0	132	30	5	0	0	35	513
Approach %	39.25	29.06	31.32	0.38	-	0.00	100.00	0.00	0.00	-	0.00	6.82	93.18	0.00	-	85.71	14.29	0.00	0.00	-	
PHF	0.74	0.80	0.77	0.25	**0.78**	0.00	0.84	0.00	0.00	**0.84**	0.00	0.56	0.81	0.00	**0.79**	0.83	0.63	0.00	0.00	**0.80**	**0.80**

Single Unit Trucks (4-7)

	Northbound					Southbound					Eastbound					Westbound					
	Driveway (South)					Driveway (North)					Driveway (West)					Driveway (East)					
	Left	Thru	Right	U-Turn	App	Left	Thru	Right	U-Turn	App	Left	Thru	Right	U-Turn	App	Left	Thru	Right	U-Turn	App	Int
Time	2.1	2.2	2.3	2.4	Total	2.5	2.6	2.7	2.8	Total	2.9	2.10	2.11	2.12	Total	2.13	2.14	2.15	2.16	Total	Total
1600 - 1615	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1615 - 1630	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1630 - 1645	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
1645 - 1700	0	0	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	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Approach %	0.00	0.00	0.00	0.00	-	0.00	100.00	0.00	0.00	-	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	-	
PHF	0.00	0.00	0.00	0.00	**0.00**	0.00	0.25	0.00	0.00	**0.25**	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	**0.00**	**0.25**

Combination Trucks (8-13)

	Northbound					Southbound					Eastbound					Westbound					
	Driveway (South)					Driveway (North)					Driveway (West)					Driveway (East)					
	Left	Thru	Right	U-Turn	App	Left	Thru	Right	U-Turn	App	Left	Thru	Right	U-Turn	App	Left	Thru	Right	U-Turn	App	Int
Time	2.1	2.2	2.3	2.4	Total	2.5	2.6	2.7	2.8	Total	2.9	2.10	2.11	2.12	Total	2.13	2.14	2.15	2.16	Total	Total
1600 - 1615	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1615 - 1630	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1630 - 1645	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1645 - 1700	0	0	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
Approach %	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	-	0.00	0.00	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**	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	**0.00**	**0.00**

Bikes

	Northbound					Southbound					Eastbound					Westbound					
	Driveway (South)					Driveway (North)					Driveway (West)					Driveway (East)					
	Left	Thru	Right	U-Turn	App	Left	Thru	Right	U-Turn	App	Left	Thru	Right	U-Turn	App	Left	Thru	Right	U-Turn	App	Int
Time	2.1	2.2	2.3	2.4	Total	2.5	2.6	2.7	2.8	Total	2.9	2.10	2.11	2.12	Total	2.13	2.14	2.15	2.16	Total	Total
1600 - 1615	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1615 - 1630	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1630 - 1645	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1645 - 1700	0	0	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
Approach %	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	-	0.00	0.00	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**	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	**0.00**	**0.00**

Classified Turn Movement Count || All vehicles

Marr Traffic DATA COLLECTION

Johns Creek, GA

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Site 2 of 2
Driveway (South)
Driveway (North)
Driveway (West)
Driveway (East)

Date
Wednesday, May 3, 2023

Weather
Fair
61°F

Lat/Long
34.016854°, -84.187362°

0600 - 0800 (Weekday 2h Session) (05-03-2023)

All vehicles

	Northbound					Southbound					Eastbound					Westbound					
	Driveway (South)					Driveway (North)					Driveway (West)					Driveway (East)					
TIME	Left 2.1	Thru 2.2	Right 2.3	U-Turn 2.4	App Total	Left 2.5	Thru 2.6	Right 2.7	U-Turn 2.8	App Total	Left 2.9	Thru 2.10	Right 2.11	U-Turn 2.12	App Total	Left 2.13	Thru 2.14	Right 2.15	U-Turn 2.16	App Total	Int Total
0600 - 0615	3	0	0	0	3	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	4
0615 - 0630	5	1	0	0	6	0	0	0	0	0	0	1	2	0	3	1	0	0	0	1	10
0630 - 0645	5	1	0	0	6	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	8
0645 - 0700	5	3	0	0	8	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	9
Hourly Total	18	5	0	0	**23**	0	1	0	0	**1**	0	1	5	0	**6**	1	0	0	0	**1**	**31**
0700 - 0715	9	3	0	0	12	0	1	0	0	1	0	0	3	0	3	0	0	0	0	0	16
0715 - 0730	10	2	1	0	13	0	0	0	0	0	0	0	4	0	4	1	9	0	0	10	27
0730 - 0745	9	3	3	0	15	0	0	0	0	0	0	0	6	0	6	1	8	0	0	9	30
0745 - 0800	8	6	1	0	15	0	2	0	0	2	0	0	4	0	4	1	14	0	0	15	36
Hourly Total	36	14	5	0	**55**	0	3	0	0	**3**	0	0	17	0	**17**	3	31	0	0	**34**	**109**
Grand Total	54	19	5	0	**78**	0	4	0	0	**4**	0	1	22	0	**23**	4	31	0	0	**35**	**140**
Approach %	69.23	24.36	6.41	0.00	-	0.00	100.00	0.00	0.00	-	0.00	4.35	95.65	0.00	-	11.43	88.57	0.00	0.00	-	
Intersection %	38.57	13.57	3.57	0.00	55.71	0.00	2.86	0.00	0.00	2.86	0.00	0.71	15.71	0.00	16.43	2.86	22.14	0.00	0.00	25.00	
PHF	0.90	0.58	0.42	0.00	**0.92**	0.00	0.38	0.00	0.00	**0.38**	0.00	0.00	0.71	0.00	**0.71**	0.75	0.55	0.00	0.00	**0.57**	**0.76**

1600 - 1800 (Weekday 2h Session) (05-03-2023)

All vehicles

	Northbound					Southbound					Eastbound					Westbound					
	Driveway (South)					Driveway (North)					Driveway (West)					Driveway (East)					
TIME	Left 2.1	Thru 2.2	Right 2.3	U-Turn 2.4	App Total	Left 2.5	Thru 2.6	Right 2.7	U-Turn 2.8	App Total	Left 2.9	Thru 2.10	Right 2.11	U-Turn 2.12	App Total	Left 2.13	Thru 2.14	Right 2.15	U-Turn 2.16	App Total	Int Total
1600 - 1615	35	24	25	1	85	0	24	0	0	24	0	4	38	0	42	9	1	0	0	10	161
1615 - 1630	29	12	27	0	68	0	22	0	0	22	0	2	23	0	25	9	2	0	0	11	126
1630 - 1645	16	21	17	0	54	0	20	0	0	20	0	2	33	0	35	5	0	0	0	5	114
1645 - 1700	24	20	14	0	58	0	16	0	0	16	0	1	29	0	30	7	2	0	0	9	113
Hourly Total	104	77	83	1	**265**	0	82	0	0	**82**	0	9	123	0	**132**	30	5	0	0	**35**	**514**
1700 - 1715	21	14	12	0	47	1	17	0	0	18	0	0	25	0	25	13	10	0	0	23	113
1715 - 1730	22	15	15	0	52	0	20	1	0	21	1	0	30	0	31	8	3	0	0	11	115
1730 - 1745	14	8	14	0	36	0	15	0	0	15	0	3	28	0	31	11	5	1	0	17	99
1745 - 1800	16	12	21	0	49	0	17	0	0	17	0	0	36	0	36	6	4	0	0	10	112
Hourly Total	73	49	62	0	**184**	1	69	1	0	**71**	1	3	119	0	**123**	38	22	1	0	**61**	**439**
Grand Total	177	126	145	1	**449**	1	151	1	0	**153**	1	12	242	0	**255**	68	27	1	0	**96**	**953**
Approach %	39.42	28.06	32.29	0.22	-	0.65	98.69	0.65	0.00	-	0.39	4.71	94.90	0.00	-	70.83	28.13	1.04	0.00	-	
Intersection %	18.57	13.22	15.22	0.10	47.11	0.10	15.84	0.10	0.00	16.05	0.10	1.26	25.39	0.00	26.76	7.14	2.83	0.10	0.00	10.07	
PHF	0.74	0.80	0.77	0.25	**0.78**	0.00	0.85	0.00	0.00	**0.85**	0.00	0.56	0.81	0.00	**0.79**	0.83	0.63	0.00	0.00	**0.80**	**0.80**

24-Hour Classification Count

State Bridge Road west of Medlock Corners Driveway/State Bridge Corners Driveway

Bi-Directional Class Count || NB EB 15min

Johns Creek, GA

Marr Traffic DATA COLLECTION
www.marrtraffic.com

Site 3
State Bridge Rd (West),
west of Driveway (North)

Date
Wednesday, May 3, 2023

Lat/Long
34.016737°, -84.188253°

Click here for Map

Weather
Fair
61°F

0000 - 2400 (24h Session) (05-03-2023)
NB EB 15min

	Eastbound (Movement 3.1)													15min	60min
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	Total	Total
0000 - 0015	0	44	2	0	0	0	0	0	0	0	0	0	0	**46**	
0015 - 0030	0	38	1	0	0	0	0	0	0	0	0	0	0	**39**	
0030 - 0045	0	24	3	0	1	0	0	0	1	0	0	0	0	**29**	
0045 - 0100	0	13	1	0	0	0	0	0	2	0	0	0	0	**16**	**130**
0100 - 0115	0	24	2	0	0	0	0	0	1	0	0	0	0	**27**	
0115 - 0130	0	13	2	0	0	0	0	0	1	0	0	0	0	**16**	
0130 - 0145	0	11	3	0	0	2	0	0	0	0	0	0	0	**16**	
0145 - 0200	0	14	1	0	1	0	0	0	0	0	0	0	0	**16**	**75**
0200 - 0215	0	12	0	0	0	0	0	0	0	0	0	0	0	**12**	
0215 - 0230	0	17	5	0	0	0	0	0	2	0	0	0	0	**24**	
0230 - 0245	0	8	1	0	0	0	0	0	0	0	0	0	0	**9**	
0245 - 0300	0	12	1	0	0	1	0	0	0	0	0	0	0	**14**	**59**
0300 - 0315	0	6	2	0	0	0	0	0	0	0	0	0	0	**8**	
0315 - 0330	0	11	0	0	0	0	0	0	0	0	0	0	0	**11**	
0330 - 0345	0	6	2	0	1	0	0	0	0	0	0	0	0	**9**	
0345 - 0400	0	13	1	0	0	0	0	0	0	0	0	0	0	**14**	**42**
0400 - 0415	0	8	4	0	1	0	0	0	0	0	0	0	0	**13**	
0415 - 0430	0	11	0	0	0	0	0	0	0	0	0	0	0	**11**	
0430 - 0445	0	13	5	0	2	0	0	0	0	0	0	0	0	**20**	
0445 - 0500	0	19	5	0	0	1	0	0	0	0	0	0	0	**25**	**69**
0500 - 0515	0	19	3	0	1	2	0	0	1	0	0	0	0	**26**	
0515 - 0530	1	49	4	0	0	0	0	0	0	0	0	0	0	**54**	
0530 - 0545	1	49	16	0	0	0	0	0	0	0	0	0	0	**66**	
0545 - 0600	0	67	25	0	3	2	0	0	3	0	0	0	0	**100**	**246**
0600 - 0615	0	81	15	2	1	0	0	0	1	0	0	0	0	**100**	
0615 - 0630	0	93	16	0	1	0	0	0	1	0	0	0	0	**111**	
0630 - 0645	0	155	42	1	0	0	0	0	2	0	0	0	0	**200**	
0645 - 0700	0	146	41	2	1	1	0	0	0	0	0	0	0	**191**	**602**
0700 - 0715	0	161	29	1	5	1	0	0	1	0	0	0	0	**198**	
0715 - 0730	0	253	36	0	0	1	0	1	3	0	0	0	0	**294**	
0730 - 0745	0	325	52	0	4	2	0	0	4	0	0	0	0	**387**	
0745 - 0800	2	358	51	0	1	0	0	0	0	0	0	0	0	**412**	**1291**
0800 - 0815	0	317	47	2	4	0	0	5	0	0	0	0	0	**375**	
0815 - 0830	0	379	61	2	7	1	0	2	3	0	0	0	0	**455**	
0830 - 0845	0	395	67	0	4	2	0	1	1	0	0	0	0	**470**	
0845 - 0900	1	360	59	0	6	1	0	4	0	0	0	0	0	**431**	**1731**
0900 - 0915	0	362	57	0	4	2	0	1	3	0	0	0	0	**429**	
0915 - 0930	0	305	49	1	3	2	0	0	3	0	0	0	0	**363**	
0930 - 0945	0	301	53	0	11	1	0	1	1	0	0	0	0	**368**	
0945 - 1000	0	294	51	0	6	2	0	3	2	1	0	0	0	**359**	**1519**
1000 - 1015	0	274	57	0	8	3	0	0	1	0	0	0	0	**343**	
1015 - 1030	1	274	49	0	6	2	0	2	3	0	0	0	0	**337**	
1030 - 1045	0	257	45	1	13	2	0	2	1	0	0	0	0	**321**	
1045 - 1100	0	312	47	1	9	0	0	2	2	0	0	0	0	**373**	**1374**
1100 - 1115	0	269	66	0	3	1	0	0	2	0	0	0	0	**341**	
1115 - 1130	1	310	48	0	7	0	0	3	2	0	0	0	0	**371**	
1130 - 1145	1	290	56	0	6	1	0	2	1	0	1	0	0	**358**	
1145 - 1200	0	310	67	0	6	0	0	0	2	0	0	0	0	**385**	**1455**
1200 - 1215	0	328	52	0	7	1	0	1	2	0	0	0	0	**391**	
1215 - 1230	0	321	52	0	8	1	0	0	0	1	0	0	0	**383**	
1230 - 1245	1	328	45	0	3	0	0	1	0	0	0	0	0	**378**	
1245 - 1300	0	306	44	0	7	1	0	2	1	0	0	0	0	**361**	**1513**
1300 - 1315	0	325	68	0	5	1	0	0	1	0	0	0	0	**400**	
1315 - 1330	0	321	59	1	10	1	0	1	1	0	0	0	0	**394**	
1330 - 1345	1	330	66	0	4	3	0	0	1	0	0	0	0	**405**	
1345 - 1400	0	338	56	1	10	4	0	0	3	0	0	0	0	**412**	**1611**
1400 - 1415	0	330	51	0	11	3	0	1	2	0	0	0	0	**398**	
1415 - 1430	0	353	65	0	8	3	0	0	0	0	0	0	0	**429**	
1430 - 1445	0	408	76	2	3	0	0	0	1	0	0	0	0	**490**	
1445 - 1500	0	381	58	3	7	3	0	3	0	0	0	0	0	**455**	**1772**
1500 - 1515	0	384	73	0	9	0	0	0	3	0	0	0	0	**469**	
1515 - 1530	0	414	58	0	12	2	1	1	3	0	0	0	0	**491**	
1530 - 1545	0	466	69	0	12	1	0	0	0	0	0	0	0	**548**	
1545 - 1600	0	435	64	2	6	1	0	2	4	0	0	0	0	**514**	**2022**
1600 - 1615	1	441	71	0	3	1	0	0	3	0	0	0	0	**520**	
1615 - 1630	0	433	72	0	2	3	0	1	3	0	0	0	0	**514**	
1630 - 1645	0	467	72	3	12	2	0	2	0	0	0	0	0	**558**	
1645 - 1700	0	435	69	0	11	4	0	3	0	0	0	0	0	**522**	**2114**
1700 - 1715	0	468	91	1	7	2	0	2	0	0	0	0	0	**571**	
1715 - 1730	0	513	72	0	7	2	0	1	1	0	0	0	0	**596**	
1730 - 1745	1	534	74	0	8	2	0	2	1	0	0	0	0	**622**	
1745 - 1800	0	524	58	0	9	1	0	1	2	0	0	0	0	**595**	**2384**
1800 - 1815	0	495	74	0	6	0	0	1	2	0	0	0	0	**578**	
1815 - 1830	0	467	83	1	11	0	0	1	0	0	0	0	0	**563**	
1830 - 1845	2	471	72	2	6	0	0	2	0	0	0	0	0	**555**	
1845 - 1900	0	468	76	0	10	0	0	3	0	0	0	0	0	**557**	**2253**
1900 - 1915	0	390	44	0	4	1	0	0	2	0	0	0	0	**441**	
1915 - 1930	0	419	46	0	1	0	0	0	0	0	0	0	0	**466**	
1930 - 1945	0	314	42	0	1	1	0	0	0	0	0	0	0	**358**	
1945 - 2000	0	308	34	0	1	0	0	0	1	0	0	0	0	**344**	**1609**
2000 - 2015	2	285	35	0	3	0	0	0	1	0	0	0	0	**326**	
2015 - 2030	1	320	38	0	1	0	0	0	0	0	0	0	0	**360**	
2030 - 2045	0	265	43	0	1	0	0	1	1	0	0	0	0	**311**	
2045 - 2100	0	253	18	0	1	0	0	0	0	0	0	0	0	**272**	**1269**
2100 - 2115	0	244	20	0	0	0	0	0	0	0	0	0	0	**264**	
2115 - 2130	2	264	19	0	0	0	0	0	1	0	0	0	0	**286**	
2130 - 2145	1	203	14	0	0	0	0	0	0	0	0	0	0	**218**	
2145 - 2200	0	158	16	0	1	0	0	0	2	0	0	0	0	**177**	**945**
2200 - 2215	0	131	9	0	2	0	0	0	0	0	0	0	0	**142**	
2215 - 2230	1	129	13	0	3	0	0	0	0	0	0	0	0	**146**	
2230 - 2245	0	96	9	0	0	0	0	0	0	0	0	0	0	**105**	
2245 - 2300	0	93	8	0	0	0	0	0	0	0	0	0	0	**101**	**494**
2300 - 2315	0	92	7	0	0	0	0	0	0	0	0	0	0	**99**	
2315 - 2330	0	81	5	0	0	0	0	0	0	0	0	0	0	**86**	
2330 - 2345	1	64	4	0	1	0	0	0	1	0	0	0	0	**71**	
2345 - 0000	0	53	4	0	0	0	0	0	1	0	0	0	0	**58**	**314**

Session Total	22	22728	3518	29	360	77	1	61	94	2	1	0	0	**26893**
Session Average	0.23	236.75	36.65	0.30	3.75	0.80	0.01	0.64	0.98	0.02	0.01	0.00	0.00	**280.14**
Session Percentage	0.08	84.51	13.08	0.11	1.34	0.29	0.00	0.23	0.35	0.01	0.00	0.00	0.00	

AM Peak Hour	0500 - 0600	0815 - 0915	0815 - 0915	0600 - 0700	0945 - 1045	0945 - 1045	-	0800 - 0900	0900 - 1000	0900 - 1000	-	-	-	**0815 - 0915**
AM Peak Volume	2	1496	244	5	33	9	0	12	9	1	0	0	0	**1785**

Noon Peak Hour	1045 - 1145	1445 - 1545	1415 - 1515	1400 - 1500	1445 - 1545	1330 - 1430	1430 - 1530	1030 - 1130	1015 - 1115	1130 - 1230	1045 - 1145	-	-	**1445 - 1545**
Noon Peak Volume	2	1645	272	5	40	13	1	7	8	1	1	0	0	**1963**

PM Peak Hour	1930 - 2030	1715 - 1815	1645 - 1745	1545 - 1645	1500 - 1600	1615 - 1715	1500 - 1600	1615 - 1715	1500 - 1600	-	-	-	-	**1715 - 1815**
PM Peak Volume	3	2066	306	5	39	11	1	8	10	0	0	0	0	**2391**

Bi-Directional Class Count || SB WB 15min

Johns Creek, GA

Marr Traffic DATA COLLECTION

www.marrtraffic.com

Site 3
State Bridge Rd (West),
west of Driveway (North)

Date
Wednesday, May 3, 2023

Weather
Fair
61°F

Lat/Long
34.016737°, -84.188253°

Click here for Map

0000 - 2400 (24h Session) (05-03-2023)
SB WB 15min

	Westbound (Movement 3.2)													15min	60min
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	Total	Total
0000 - 0015	0	22	4	0	0	1	0	0	0	0	0	0	0	27	
0015 - 0030	0	24	2	0	0	0	0	0	0	0	0	0	0	26	
0030 - 0045	0	16	1	0	0	0	0	0	0	0	0	0	0	17	
0045 - 0100	0	22	2	0	0	0	0	0	0	0	0	0	0	24	94
0100 - 0115	0	10	0	0	0	0	0	0	0	0	0	0	0	10	
0115 - 0130	0	13	0	0	0	0	0	0	1	0	0	0	0	14	
0130 - 0145	0	15	1	0	0	0	0	0	2	0	0	0	0	18	
0145 - 0200	0	15	1	0	0	0	0	0	0	0	0	0	0	16	58
0200 - 0215	0	9	1	0	0	0	0	0	0	0	0	0	0	10	
0215 - 0230	0	7	0	0	1	0	0	0	0	0	0	0	0	8	
0230 - 0245	0	10	1	0	0	0	0	0	0	0	0	0	0	11	
0245 - 0300	0	7	0	0	0	0	0	0	0	0	0	0	0	7	36
0300 - 0315	0	7	0	0	0	0	0	0	0	0	0	0	0	7	
0315 - 0330	0	13	1	0	0	0	0	0	0	0	0	0	0	14	
0330 - 0345	0	12	1	0	0	0	0	0	2	0	0	0	0	15	
0345 - 0400	0	17	2	0	1	0	0	0	0	0	0	0	0	20	56
0400 - 0415	0	21	1	0	0	1	0	0	0	0	0	0	0	23	
0415 - 0430	0	29	2	0	1	0	0	0	0	0	0	0	0	32	
0430 - 0445	0	38	5	0	0	1	0	0	0	0	0	0	0	44	
0445 - 0500	0	54	8	2	1	0	0	0	0	0	0	0	0	65	164
0500 - 0515	0	63	10	0	2	0	0	0	0	0	0	0	0	75	
0515 - 0530	0	80	11	0	1	0	0	0	1	0	0	0	0	93	
0530 - 0545	0	164	22	0	0	0	0	0	2	0	0	0	0	188	
0545 - 0600	1	149	18	1	2	0	0	1	0	0	0	0	0	172	528
0600 - 0615	0	173	23	1	1	0	0	1	3	0	0	0	0	202	
0615 - 0630	1	251	46	0	3	4	0	0	0	0	0	0	0	305	
0630 - 0645	0	322	56	0	6	5	0	0	5	0	0	0	0	394	
0645 - 0700	1	379	59	1	5	5	0	0	1	0	0	0	0	451	1352
0700 - 0715	0	413	69	2	7	5	0	1	2	0	0	0	0	499	
0715 - 0730	0	409	65	2	6	4	0	4	1	0	0	0	0	491	
0730 - 0745	0	387	68	0	4	1	0	1	2	0	0	0	0	463	
0745 - 0800	0	379	69	1	5	1	0	1	1	0	0	0	0	457	1910
0800 - 0815	0	347	82	1	9	0	0	2	2	0	0	0	0	443	
0815 - 0830	0	356	70	1	14	2	0	3	1	1	0	0	0	448	
0830 - 0845	0	332	88	4	10	0	0	1	3	0	0	0	0	438	
0845 - 0900	0	352	86	2	7	0	0	0	1	0	0	0	0	448	1777
0900 - 0915	0	389	89	0	6	2	0	0	1	0	0	0	0	487	
0915 - 0930	0	359	96	0	5	0	0	0	1	0	0	0	0	461	
0930 - 0945	0	337	76	0	5	3	0	0	0	0	0	0	0	421	
0945 - 1000	0	301	77	0	6	0	0	1	1	0	0	0	0	386	1755
1000 - 1015	0	305	63	0	5	0	0	0	3	0	0	0	0	376	
1015 - 1030	0	319	98	1	8	1	0	0	0	0	0	0	0	427	
1030 - 1045	0	272	76	1	6	1	0	0	0	0	0	0	0	356	
1045 - 1100	0	309	59	0	9	0	0	0	2	0	0	0	0	379	1538
1100 - 1115	0	274	59	0	9	2	0	1	3	0	0	0	0	348	
1115 - 1130	0	291	76	0	2	0	0	0	0	0	0	0	0	369	
1130 - 1145	0	295	58	0	6	0	0	0	6	0	0	0	0	365	
1145 - 1200	0	338	63	0	5	0	0	0	3	0	0	0	0	409	1491
1200 - 1215	0	302	61	0	5	0	0	0	0	0	0	0	0	368	
1215 - 1230	0	329	55	0	6	0	0	0	2	0	0	0	0	392	
1230 - 1245	0	339	49	0	5	0	0	0	2	0	0	0	0	395	
1245 - 1300	0	332	50	0	8	0	0	0	1	0	0	0	0	391	1546
1300 - 1315	0	334	52	0	9	0	0	0	1	0	0	0	0	396	
1315 - 1330	0	337	46	0	8	1	0	0	2	0	0	0	0	394	
1330 - 1345	0	310	56	0	5	2	0	0	1	0	0	0	0	374	
1345 - 1400	0	392	57	0	6	0	0	0	1	0	0	0	0	456	1620
1400 - 1415	0	345	47	0	4	0	0	0	0	0	0	0	0	396	
1415 - 1430	0	378	41	0	5	0	0	0	3	0	0	0	0	427	
1430 - 1445	0	365	42	3	0	0	0	0	2	0	0	0	0	412	
1445 - 1500	0	328	44	0	5	1	0	0	0	0	0	0	0	378	1613
1500 - 1515	0	339	47	1	4	1	0	0	1	0	0	0	0	393	
1515 - 1530	0	331	48	1	0	1	0	0	0	0	0	0	0	381	
1530 - 1545	0	347	64	1	4	0	0	0	0	0	0	0	0	416	
1545 - 1600	0	368	65	0	0	0	0	0	0	0	0	0	0	433	1623
1600 - 1615	0	415	73	0	6	0	0	0	1	0	0	0	0	495	
1615 - 1630	0	433	57	0	1	0	0	1	1	0	0	0	0	493	
1630 - 1645	1	437	56	0	6	0	0	0	2	0	0	0	0	502	
1645 - 1700	0	425	43	4	5	2	0	1	2	0	0	0	0	482	1972
1700 - 1715	1	413	70	0	5	0	0	1	0	0	0	0	0	490	
1715 - 1730	3	410	67	0	7	1	0	2	0	0	1	0	0	491	
1730 - 1745	3	404	53	0	1	0	0	0	0	0	0	0	0	461	
1745 - 1800	0	408	59	0	2	0	0	0	0	0	0	0	0	469	1911
1800 - 1815	1	391	55	0	3	0	0	0	0	0	0	0	0	450	
1815 - 1830	0	402	46	0	3	0	0	0	0	0	0	0	0	451	
1830 - 1845	0	359	39	0	0	2	0	0	0	0	0	0	0	400	
1845 - 1900	0	293	25	0	0	1	0	0	1	0	0	0	0	320	1621
1900 - 1915	0	253	30	1	1	0	0	0	0	0	0	0	0	285	
1915 - 1930	0	247	19	0	2	0	0	0	3	0	0	0	0	271	
1930 - 1945	0	299	20	0	2	0	0	0	2	0	0	0	0	323	
1945 - 2000	0	277	13	0	0	0	0	0	0	0	0	0	0	290	1169
2000 - 2015	0	220	32	0	1	0	0	0	0	0	0	0	0	253	
2015 - 2030	0	195	27	0	0	0	0	0	0	0	0	0	0	222	
2030 - 2045	0	193	21	0	0	0	0	0	1	0	0	0	0	215	
2045 - 2100	0	208	37	0	0	0	0	0	1	0	0	0	0	246	936
2100 - 2115	0	167	48	0	1	0	0	0	0	0	0	0	0	216	
2115 - 2130	0	186	20	0	0	0	0	0	0	0	0	0	0	206	
2130 - 2145	0	137	22	0	1	0	0	0	1	0	0	0	0	161	
2145 - 2200	0	132	10	0	1	1	0	0	1	0	0	0	0	145	728
2200 - 2215	0	101	18	0	0	0	0	0	0	0	0	0	0	119	
2215 - 2230	0	85	15	0	0	0	0	0	0	0	0	0	0	100	
2230 - 2245	0	70	10	0	0	0	0	0	0	0	0	0	0	80	
2245 - 2300	0	65	12	0	1	0	0	0	1	0	0	0	0	79	378
2300 - 2315	0	60	11	0	0	0	0	0	0	0	0	0	0	71	
2315 - 2330	0	40	8	0	0	0	0	0	1	0	0	0	0	49	
2330 - 2345	0	30	7	0	0	0	0	0	1	0	0	0	0	38	
2345 - 0000	0	35	8	0	0	0	0	0	0	0	0	0	0	43	201

Session Total	12	21972	3620	31	281	52	0	22	85	1	1	0	0	26077
Session Average	0.13	228.88	37.71	0.32	2.93	0.54	0.00	0.23	0.89	0.01	0.01	0.00	0.00	271.64
Session Percentage	0.05	84.26	13.88	0.12	1.08	0.20	0.00	0.08	0.33	0.00	0.00	0.00	0.00	

AM Peak Hour	0530 - 0630	0645 - 0745	0830 - 0930	0800 - 0900	0800 - 0900	0615 - 0715	-	0715 - 0815	0600 - 0700	0730 - 0830	-	-	-	0700 - 0800
AM Peak Volume	2	1588	359	8	40	19	0	8	9	1	0	0	0	1910

Noon Peak Hour	-	1345 - 1445	1000 - 1100	1430 - 1530	1015 - 1115	1015 - 1115	-	1015 - 1115	1100 - 1200	-	-	-	-	1345 - 1445
Noon Peak Volume	0	1480	296	5	32	4	0	1	12	0	0	0	0	1691

PM Peak Hour	1645 - 1745	1600 - 1700	1530 - 1630	1600 - 1700	1630 - 1730	1630 - 1730	-	1630 - 1730	1600 - 1700	-	1630 - 1730	-	-	1600 - 1700
PM Peak Volume	7	1710	259	4	23	3	0	4	6	0	1	0	0	1972

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

Johns Creek, GA

Marr Traffic DATA COLLECTION
www.marrtraffic.com

Site 3
State Bridge Rd (West),
west of Driveway (North)

Date
Wednesday, May 3, 2023

Lat/Long
34.016737°, -84.188253°

Weather
Fair
61°F

0000 - 2400 (24h Session) (05-03-2023)
Bi-Directional 15min

	Bi-Directional 15min													15min	60min
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	Total	Total
0000 - 0015	0	66	6	0	0	1	0	0	0	0	0	0	0	73	
0015 - 0030	0	62	3	0	0	0	0	0	0	0	0	0	0	65	
0030 - 0045	0	40	4	0	1	0	0	0	1	0	0	0	0	46	
0045 - 0100	0	35	3	0	0	0	0	0	2	0	0	0	0	40	224
0100 - 0115	0	34	2	0	0	0	0	0	1	0	0	0	0	37	
0115 - 0130	0	26	2	0	0	0	0	0	2	0	0	0	0	30	
0130 - 0145	0	26	4	0	0	2	0	0	2	0	0	0	0	34	
0145 - 0200	0	29	2	0	1	0	0	0	0	0	0	0	0	32	133
0200 - 0215	0	21	1	0	0	0	0	0	0	0	0	0	0	22	
0215 - 0230	0	24	5	0	1	0	0	0	2	0	0	0	0	32	
0230 - 0245	0	18	2	0	0	0	0	0	0	0	0	0	0	20	
0245 - 0300	0	19	1	0	0	1	0	0	0	0	0	0	0	21	95
0300 - 0315	0	13	2	0	0	0	0	0	0	0	0	0	0	15	
0315 - 0330	0	24	1	0	0	0	0	0	0	0	0	0	0	25	
0330 - 0345	0	18	3	0	1	0	0	0	2	0	0	0	0	24	
0345 - 0400	0	30	3	0	1	0	0	0	0	0	0	0	0	34	98
0400 - 0415	0	29	5	0	1	1	0	0	0	0	0	0	0	36	
0415 - 0430	0	40	2	0	1	0	0	0	0	0	0	0	0	43	
0430 - 0445	0	51	10	0	2	1	0	0	0	0	0	0	0	64	
0445 - 0500	0	73	13	2	1	1	0	0	0	0	0	0	0	90	233
0500 - 0515	0	82	13	0	3	2	0	0	1	0	0	0	0	101	
0515 - 0530	1	129	15	0	1	0	0	0	1	0	0	0	0	147	
0530 - 0545	1	213	38	0	0	0	0	0	2	0	0	0	0	254	
0545 - 0600	1	216	43	1	5	2	0	1	3	0	0	0	0	272	774
0600 - 0615	0	254	38	3	2	0	0	1	4	0	0	0	0	302	
0615 - 0630	1	344	62	0	4	4	0	0	1	0	0	0	0	416	
0630 - 0645	0	477	98	1	6	5	0	0	7	0	0	0	0	594	
0645 - 0700	1	525	100	3	6	6	0	0	1	0	0	0	0	642	1954
0700 - 0715	0	574	98	3	12	6	0	1	3	0	0	0	0	697	
0715 - 0730	0	662	101	2	6	5	0	5	4	0	0	0	0	785	
0730 - 0745	0	712	120	0	8	3	0	1	6	0	0	0	0	850	
0745 - 0800	2	737	120	1	6	1	0	1	1	0	0	0	0	869	3201
0800 - 0815	0	664	129	3	13	0	0	7	2	0	0	0	0	818	
0815 - 0830	0	735	131	3	21	3	0	5	4	1	0	0	0	903	
0830 - 0845	0	727	155	4	14	2	0	2	4	0	0	0	0	908	
0845 - 0900	1	712	145	2	13	1	0	4	1	0	0	0	0	879	3508
0900 - 0915	0	751	146	0	10	4	0	1	4	0	0	0	0	916	
0915 - 0930	0	664	145	1	8	2	0	0	4	0	0	0	0	824	
0930 - 0945	0	638	129	0	16	4	0	1	1	0	0	0	0	789	
0945 - 1000	0	595	128	0	12	2	0	4	3	1	0	0	0	745	3274
1000 - 1015	0	579	120	0	13	3	0	0	4	0	0	0	0	719	
1015 - 1030	1	593	147	1	14	3	0	2	3	0	0	0	0	764	
1030 - 1045	0	529	121	2	19	3	0	2	1	0	0	0	0	677	
1045 - 1100	0	621	106	1	18	0	0	2	4	0	0	0	0	752	2912
1100 - 1115	0	543	125	0	12	3	0	1	5	0	0	0	0	689	
1115 - 1130	1	601	124	0	9	0	0	3	2	0	0	0	0	740	
1130 - 1145	1	585	114	0	12	1	0	2	7	0	1	0	0	723	
1145 - 1200	0	648	130	0	11	0	0	0	5	0	0	0	0	794	2946
1200 - 1215	0	630	113	0	12	1	0	1	2	0	0	0	0	759	
1215 - 1230	0	650	107	0	14	1	0	0	2	1	0	0	0	775	
1230 - 1245	1	667	94	0	8	0	0	1	2	0	0	0	0	773	
1245 - 1300	0	638	94	0	15	1	0	2	2	0	0	0	0	752	3059
1300 - 1315	0	659	120	0	14	1	0	0	2	0	0	0	0	796	
1315 - 1330	0	658	105	1	18	2	0	1	3	0	0	0	0	788	
1330 - 1345	1	640	122	0	9	5	0	0	2	0	0	0	0	779	
1345 - 1400	0	730	113	1	16	4	0	0	4	0	0	0	0	868	3231
1400 - 1415	0	675	98	0	15	3	0	1	2	0	0	0	0	794	
1415 - 1430	0	731	106	0	13	3	0	0	3	0	0	0	0	856	
1430 - 1445	0	773	118	5	3	0	0	0	3	0	0	0	0	902	
1445 - 1500	0	709	102	3	12	4	0	3	0	0	0	0	0	833	3385
1500 - 1515	0	723	120	1	13	1	0	0	4	0	0	0	0	862	
1515 - 1530	0	745	106	1	12	3	1	1	3	0	0	0	0	872	
1530 - 1545	0	813	133	1	16	1	0	0	0	0	0	0	0	964	
1545 - 1600	0	803	129	2	6	1	0	2	4	0	0	0	0	947	3645
1600 - 1615	1	856	144	0	9	1	0	0	4	0	0	0	0	1015	
1615 - 1630	0	866	129	0	3	3	0	2	4	0	0	0	0	1007	
1630 - 1645	1	904	128	3	18	2	0	2	2	0	0	0	0	1060	
1645 - 1700	0	860	112	4	16	6	0	4	2	0	0	0	0	1004	4086
1700 - 1715	1	881	161	1	12	2	0	3	0	0	0	0	0	1061	
1715 - 1730	3	923	139	0	14	3	0	3	1	0	1	0	0	1087	
1730 - 1745	4	938	127	0	9	2	0	2	1	0	0	0	0	1083	
1745 - 1800	0	932	117	0	11	1	0	1	2	0	0	0	0	1064	4295
1800 - 1815	1	886	129	0	9	0	0	1	2	0	0	0	0	1028	
1815 - 1830	0	869	129	1	14	0	0	1	0	0	0	0	0	1014	
1830 - 1845	2	830	111	2	6	2	0	2	0	0	0	0	0	955	
1845 - 1900	0	761	101	0	10	1	0	3	1	0	0	0	0	877	3874
1900 - 1915	0	643	74	1	5	1	0	0	2	0	0	0	0	726	
1915 - 1930	0	666	65	0	3	0	0	0	3	0	0	0	0	737	
1930 - 1945	0	613	62	0	3	1	0	0	2	0	0	0	0	681	
1945 - 2000	0	585	47	0	1	0	0	0	1	0	0	0	0	634	2778
2000 - 2015	2	505	67	0	4	0	0	0	1	0	0	0	0	579	
2015 - 2030	1	515	65	0	1	0	0	0	0	0	0	0	0	582	
2030 - 2045	0	458	64	0	1	0	0	1	2	0	0	0	0	526	
2045 - 2100	0	461	55	0	1	0	0	0	1	0	0	0	0	518	2205
2100 - 2115	0	411	68	0	1	0	0	0	0	0	0	0	0	480	
2115 - 2130	2	450	39	0	0	0	0	0	1	0	0	0	0	492	
2130 - 2145	1	340	36	0	1	0	0	0	1	0	0	0	0	379	
2145 - 2200	0	290	26	0	2	1	0	0	3	0	0	0	0	322	1673
2200 - 2215	0	232	27	0	2	0	0	0	0	0	0	0	0	261	
2215 - 2230	1	214	28	0	3	0	0	0	0	0	0	0	0	246	
2230 - 2245	0	166	19	0	0	0	0	0	0	0	0	0	0	185	
2245 - 2300	0	158	20	0	1	0	0	0	1	0	0	0	0	180	872
2300 - 2315	0	152	18	0	0	0	0	0	0	0	0	0	0	170	
2315 - 2330	0	121	13	0	0	0	0	0	1	0	0	0	0	135	
2330 - 2345	1	94	11	0	1	0	0	0	2	0	0	0	0	109	
2345 - 0000	0	88	12	0	0	0	0	0	1	0	0	0	0	101	515

Session Total	34	44700	7138	60	641	129	1	83	179	3	2	0	0	52970
Session Average	0.35	465.63	74.35	0.63	6.68	1.34	0.01	0.86	1.86	0.03	0.02	0.00	0.00	551.77
Session Percentage	0.06	84.39	13.48	0.11	1.21	0.24	0.00	0.16	0.34	0.01	0.00	0.00	0.00	

AM Peak Hour	0500 - 0600	0815 - 0915	0830 - 0930	0800 - 0900	0800 - 0900	0630 - 0730	-	0800 - 0900	0545 - 0645	0730 - 0830	-	-	-	0815 - 0915
AM Peak Volume	3	2925	591	12	61	22	0	18	15	1	0	0	0	3606

Noon Peak Hour	1045 - 1145	1445 - 1545	1015 - 1115	1430 - 1530	1000 - 1100	1330 - 1430	1430 - 1530	1030 - 1130	1100 - 1200	1130 - 1230	1045 - 1145	-	-	1445 - 1545
Noon Peak Volume	2	2990	499	10	64	15	1	8	19	1	1	0	0	3531

PM Peak Hour	1645 - 1745	1715 - 1815	1700 - 1800	1615 - 1715	1630 - 1730	1615 - 1715	1500 - 1600	1630 - 1730	1545 - 1645	-	1630 - 1730	-	-	1700 - 1800
PM Peak Volume	8	3679	544	8	60	13	1	12	14	0	1	0	0	4295

Bi-Directional Class Count || Volume Summary 15min

Johns Creek, GA

Marr Traffic DATA COLLECTION

www.marrtraffic.com

Site 3
State Bridge Rd (West),
west of Driveway (North)

Date
Wednesday, May 3, 2023

Weather
Fair
61°F

Lat/Long
34.016737°, -84.188253°

0000 - 2400 (24h Session) (05-03-2023)
Volume Summary 15min

TIME	Volume Summary 15min EB	WB	15min Total	60min Total
0000 - 0015	46	27	**73**	
0015 - 0030	39	26	**65**	
0030 - 0045	29	17	**46**	
0045 - 0100	16	24	**40**	**224**
0100 - 0115	27	10	**37**	
0115 - 0130	16	14	**30**	
0130 - 0145	16	18	**34**	
0145 - 0200	16	16	**32**	**133**
0200 - 0215	12	10	**22**	
0215 - 0230	24	8	**32**	
0230 - 0245	9	11	**20**	
0245 - 0300	14	7	**21**	**95**
0300 - 0315	8	7	**15**	
0315 - 0330	11	14	**25**	
0330 - 0345	9	15	**24**	
0345 - 0400	14	20	**34**	**98**
0400 - 0415	13	23	**36**	
0415 - 0430	11	32	**43**	
0430 - 0445	20	44	**64**	
0445 - 0500	25	65	**90**	**233**
0500 - 0515	26	75	**101**	
0515 - 0530	54	93	**147**	
0530 - 0545	66	188	**254**	
0545 - 0600	100	172	**272**	**774**
0600 - 0615	100	202	**302**	
0615 - 0630	111	305	**416**	
0630 - 0645	200	394	**594**	
0645 - 0700	191	451	**642**	**1954**
0700 - 0715	198	499	**697**	
0715 - 0730	294	491	**785**	
0730 - 0745	387	463	**850**	
0745 - 0800	412	457	**869**	**3201**
0800 - 0815	375	443	**818**	
0815 - 0830	455	448	**903**	
0830 - 0845	470	438	**908**	
0845 - 0900	431	448	**879**	**3508**
0900 - 0915	429	487	**916**	
0915 - 0930	363	461	**824**	
0930 - 0945	368	421	**789**	
0945 - 1000	359	386	**745**	**3274**
1000 - 1015	343	376	**719**	
1015 - 1030	337	427	**764**	
1030 - 1045	321	356	**677**	
1045 - 1100	373	379	**752**	**2912**
1100 - 1115	341	348	**689**	
1115 - 1130	371	369	**740**	
1130 - 1145	358	365	**723**	
1145 - 1200	385	409	**794**	**2946**

Time	Volume Summary 15min EB	WB	15min Total	60min Total
1200 - 1215	391	368	**759**	
1215 - 1230	383	392	**775**	
1230 - 1245	378	395	**773**	
1245 - 1300	361	391	**752**	**3059**
1300 - 1315	400	396	**796**	
1315 - 1330	394	394	**788**	
1330 - 1345	405	374	**779**	
1345 - 1400	412	456	**868**	**3231**
1400 - 1415	398	396	**794**	
1415 - 1430	429	427	**856**	
1430 - 1445	490	412	**902**	
1445 - 1500	455	378	**833**	**3385**
1500 - 1515	469	393	**862**	
1515 - 1530	491	381	**872**	
1530 - 1545	548	416	**964**	
1545 - 1600	514	433	**947**	**3645**
1600 - 1615	520	495	**1015**	
1615 - 1630	514	493	**1007**	
1630 - 1645	558	502	**1060**	
1645 - 1700	522	482	**1004**	**4086**
1700 - 1715	571	490	**1061**	
1715 - 1730	596	491	**1087**	
1730 - 1745	622	461	**1083**	
1745 - 1800	595	469	**1064**	**4295**
1800 - 1815	578	450	**1028**	
1815 - 1830	563	451	**1014**	
1830 - 1845	555	400	**955**	
1845 - 1900	557	320	**877**	**3874**
1900 - 1915	441	285	**726**	
1915 - 1930	466	271	**737**	
1930 - 1945	358	323	**681**	
1945 - 2000	344	290	**634**	**2778**
2000 - 2015	326	253	**579**	
2015 - 2030	360	222	**582**	
2030 - 2045	311	215	**526**	
2045 - 2100	272	246	**518**	**2205**
2100 - 2115	264	216	**480**	
2115 - 2130	286	206	**492**	
2130 - 2145	218	161	**379**	
2145 - 2200	177	145	**322**	**1673**
2200 - 2215	142	119	**261**	
2215 - 2230	146	100	**246**	
2230 - 2245	105	80	**185**	
2245 - 2300	101	79	**180**	**872**
2300 - 2315	99	71	**170**	
2315 - 2330	86	49	**135**	
2330 - 2345	71	38	**109**	
2345 - 0000	58	43	**101**	**515**

Session Total	26893	26077	**52970**
Session Average	280.14	271.64	**551.77**
Session Percentage	50.77	49.23	

Appendix C
Growth Rate Summary

Growth Rate Based on U.S Census Bureau			
Geographic Area	2010 Census	2020 Census	2010-2020 Population % Change
Fulton County	920,581	1,066,710	1.48%
City of Johns Creek	76,728	82,453	0.72%
Average			1.10%

GDOT Historical Growth Rate													
Location	Station ID	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	5 year	10 year
State Bridge Road west of Camden Road	121-0875	48,044		51,045		45,242				47,786	44,809		1.5%	0.8%
Medlock Bridge Road south of Old Alabama Road	121-0356	55,442		55,074		53,721		55,726		50,193		49,254	0.8%	1.2%
Medlock Bridge Road north of Wilson Road	121-0358	46,312	44,077		48,460		44,973		42,099		43,062		0.6%	0.8%
Peachtree Ind Blvd north of Riverwood Pkwy	135-0663	43,737		45,759			44,085				45,222		-0.2%	-0.4%
5 & 10 - Year Average													0.7%	0.6%
Weighted Average													0.6%	

Growth Rate Based on Georgia Governor's Office of Planning and Budget Annual Population Projections						
Geographic Area	Average 5-Year Growth Rate From 2020-2050					
	2020-2025	2025-2030	2030-2035	2035-2040	2040-2045	2045-2050
	1.6%	1.1%	0.9%	0.8%	0.8%	0.7%
Fulton County	Average			1.0%		
	Average 10-Year Growth Rate From 2020-2050					
	2020-2030		2030-2040		2040-2050	
	1.2%		1.0%		0.8%	
	Average			1.0%		

Average	1.0%
Weighted Average	1.0%

Growth Rate Based on ARC's Travel Demand Model						
Location	2020	2030	2040	2020-2030	2030-2040	2020-2040
States Bridge Rd w/o Medlock Bridge Rd	51169	51371	52183	0.0%	0.2%	0.1%
Medlock Bridge Rd s/o States Bridge Rd	64548	68830	69443	0.7%	0.1%	0.4%
Buice Rd n/o Old Alabama Rd	8415	9461	9516	1.3%	0.1%	0.7%
Old Alabama Rd w/o Medlock Bridge Rd	31970	35214	36259	1.1%	0.3%	0.7%
Peachtree Indus. Blvd n/o Pleasant Hill Rd	42284	46401	52702	1.0%	1.6%	1.3%
Pleasant Hill Rd w/o Peachtree Indus. Blvd	71412	82540	85824	1.6%	0.5%	1.1%
				1.0%	0.5%	0.7%
				0.7%		

Appendix D
Synchro Reports

Synchro Reports
Existing AM (2023)

Intersection	
Int Delay, s/veh	6.8

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↕			↕			↰	↗		↕	
Traffic Vol, veh/h	0	0	17	3	31	0	36	14	5	0	3	0
Future Vol, veh/h	0	0	17	3	31	0	36	14	5	0	3	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	18	3	34	0	39	15	5	0	3	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	116	101	3	105	96	15	3	0	0	20	0	0
Stage 1	3	3	-	93	93	-	-	-	-	-	-	-
Stage 2	113	98	-	12	3	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	861	789	1081	875	794	1065	1619	-	-	1596	-	-
Stage 1	1020	893	-	914	818	-	-	-	-	-	-	-
Stage 2	892	814	-	1009	893	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	817	770	1081	844	775	1065	1619	-	-	1596	-	-
Mov Cap-2 Maneuver	817	770	-	844	775	-	-	-	-	-	-	-
Stage 1	996	893	-	892	798	-	-	-	-	-	-	-
Stage 2	834	794	-	992	893	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	8.4	9.8	4.8	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NEL	NET	NER	NWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	1619	-	-	781	1081	1596	-	-
HCM Lane V/C Ratio	0.024	-	-	0.047	0.017	-	-	-
HCM Control Delay (s)	7.3	0	-	9.8	8.4	0	-	-
HCM Lane LOS	A	A	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.1	0.1	0	-	-

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	29	1236	25	12	1886	27	17	0	6	8	2	12
Future Volume (veh/h)	29	1236	25	12	1886	27	17	0	6	8	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1781	1870	1856	1870	1811	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	31	1329	0	13	2028	0	18	0	0	9	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	8	2	3	2	6	2	2	2	2	2
Cap, veh/h	263	3887		385	4768		120	0		108	8	
Arrive On Green	0.03	0.76	0.00	0.02	0.75	0.00	0.03	0.00	0.00	0.03	0.03	0.00
Sat Flow, veh/h	1781	5274	0	1781	6643	0	1492	0	1585	1312	292	1585
Grp Volume(v), veh/h	31	1329	0	13	2028	0	18	0	0	11	0	0
Grp Sat Flow(s),veh/h/ln	1781	1702	0	1781	1596	0	1492	0	1585	1604	0	1585
Q Serve(g_s), s	0.4	7.8	0.0	0.2	10.9	0.0	0.5	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.4	7.8	0.0	0.2	10.9	0.0	1.0	0.0	0.0	0.6	0.0	0.0
Prop In Lane	1.00		0.00	1.00		0.00	1.00		1.00	0.82		1.00
Lane Grp Cap(c), veh/h	263	3887		385	4768		120	0		116	0	
V/C Ratio(X)	0.12	0.34		0.03	0.43		0.15	0.00		0.09	0.00	
Avail Cap(c_a), veh/h	383	4091		531	5115		371	0		379	0	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	3.1	3.6	0.0	2.9	4.3	0.0	44.1	0.0	0.0	43.9	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.1	0.0	0.0	0.1	0.0	0.6	0.0	0.0	0.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	1.5	0.0	0.0	2.2	0.0	0.4	0.0	0.0	0.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	3.3	3.6	0.0	2.9	4.4	0.0	44.6	0.0	0.0	44.2	0.0	0.0
LnGrp LOS	A	A		A	A		D	A		D	A	
Approach Vol, veh/h		1360			2041			18			11	
Approach Delay, s/veh		3.6			4.4			44.6			44.2	
Approach LOS		A			A			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.4	76.3		8.6	8.7	75.0		8.6				
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s	9.0	74.0		19.0	9.0	74.0		19.0				
Max Q Clear Time (g_c+I1), s	2.2	9.8		3.0	2.4	12.9		2.6				
Green Ext Time (p_c), s	0.0	41.3		0.0	0.0	56.1		0.0				

Intersection Summary		
HCM 6th Ctrl Delay	4.4	
HCM 6th LOS	A	

Notes

Unsignalized Delay for [NER, NWR, SER, SWR] is excluded from calculations of the approach delay and intersection delay.

Synchro Reports
Existing PM (2023)

Intersection	
Int Delay, s/veh	5.6

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↕			↕			↰	↱		↕	
Traffic Vol, veh/h	1	3	120	38	22	1	74	49	63	1	70	1
Future Vol, veh/h	1	3	120	38	22	1	74	49	63	1	70	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	3	126	40	23	1	78	52	66	1	74	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	330	351	75	349	285	52	75	0	0	118	0	0
Stage 1	77	77	-	208	208	-	-	-	-	-	-	-
Stage 2	253	274	-	141	77	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	623	573	986	606	624	1016	1524	-	-	1470	-	-
Stage 1	932	831	-	794	730	-	-	-	-	-	-	-
Stage 2	751	683	-	862	831	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	578	541	986	504	589	1016	1524	-	-	1470	-	-
Mov Cap-2 Maneuver	578	541	-	504	589	-	-	-	-	-	-	-
Stage 1	881	830	-	750	690	-	-	-	-	-	-	-
Stage 2	685	645	-	748	830	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	9.3	12.6	3	0.1
HCM LOS	A	B		

Minor Lane/Major Mvmt	NEL	NET	NER	NWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	1524	-	-	536	961	1470	-	-
HCM Lane V/C Ratio	0.051	-	-	0.12	0.136	0.001	-	-
HCM Control Delay (s)	7.5	0	-	12.6	9.3	7.5	0	-
HCM Lane LOS	A	A	-	B	A	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0.4	0.5	0	-	-

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	116	2213	42	45	1719	49	81	23	112	77	35	111
Future Volume (veh/h)	116	2213	42	45	1719	49	81	23	112	77	35	111
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	118	2258	0	46	1754	0	83	23	0	79	36	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	313	3574		210	4493		168	29		158	45	
Arrive On Green	0.05	0.70	0.00	0.04	0.70	0.00	0.09	0.09	0.00	0.09	0.09	0.00
Sat Flow, veh/h	1781	5274	0	1781	6696	0	1169	324	1585	1100	501	1585
Grp Volume(v), veh/h	118	2258	0	46	1754	0	106	0	0	115	0	0
Grp Sat Flow(s),veh/h/ln	1781	1702	0	1781	1609	0	1494	0	1585	1601	0	1585
Q Serve(g_s), s	1.9	24.6	0.0	0.7	11.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.9	24.6	0.0	0.7	11.7	0.0	7.1	0.0	0.0	7.1	0.0	0.0
Prop In Lane	1.00		0.00	1.00		0.00	0.78		1.00	0.69		1.00
Lane Grp Cap(c), veh/h	313	3574		210	4493		197	0		203	0	
V/C Ratio(X)	0.38	0.63		0.22	0.39		0.54	0.00		0.57	0.00	
Avail Cap(c_a), veh/h	402	3658		302	4609		333	0		345	0	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	4.8	8.3	0.0	7.7	6.5	0.0	46.0	0.0	0.0	46.0	0.0	0.0
Incr Delay (d2), s/veh	0.7	0.3	0.0	0.5	0.1	0.0	2.3	0.0	0.0	2.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	6.9	0.0	0.2	3.1	0.0	2.8	0.0	0.0	3.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	5.5	8.7	0.0	8.3	6.5	0.0	48.2	0.0	0.0	48.4	0.0	0.0
LnGrp LOS	A	A		A	A		D	A		D	A	
Approach Vol, veh/h		2376			1800			106			115	
Approach Delay, s/veh		8.5			6.6			48.2			48.4	
Approach LOS		A			A			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.7	78.3		15.3	9.8	78.1		15.3				
Change Period (Y+Rc), s	6.0	6.0		6.0	5.0	6.0		6.0				
Max Green Setting (Gmax), s	9.0	74.0		19.0	10.0	74.0		19.0				
Max Q Clear Time (g_c+I1), s	2.7	26.6		9.1	3.9	13.7		9.1				
Green Ext Time (p_c), s	0.0	45.7		0.2	0.1	51.0		0.2				

Intersection Summary		
HCM 6th Ctrl Delay	9.7	
HCM 6th LOS	A	

Notes

Unsignalized Delay for [NER, NWR, SER, SWR] is excluded from calculations of the approach delay and intersection delay.

Synchro Reports
No-Build AM (2024)

Intersection	
Int Delay, s/veh	2.8

Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Vol, veh/h	0	17	36	39	26	31
Future Vol, veh/h	0	17	36	39	26	31
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	-	0	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	18	39	42	28	34

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	165	45	62	0	-	0
Stage 1	45	-	-	-	-	-
Stage 2	120	-	-	-	-	-
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	826	1025	1541	-	-	-
Stage 1	977	-	-	-	-	-
Stage 2	905	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	805	1025	1541	-	-	-
Mov Cap-2 Maneuver	805	-	-	-	-	-
Stage 1	953	-	-	-	-	-
Stage 2	905	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s	8.6	3.6	0
HCM LOS	A		

Minor Lane/Major Mvmt	NEL	NET	SELn1	SWT	SWR
Capacity (veh/h)	1541	-	1025	-	-
HCM Lane V/C Ratio	0.025	-	0.018	-	-
HCM Control Delay (s)	7.4	-	8.6	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	36	1248	25	12	1905	39	17	1	6	15	3	24
Future Volume (veh/h)	36	1248	25	12	1905	39	17	1	6	15	3	24
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1781	1870	1856	1870	1811	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	39	1342	0	13	2048	0	18	1	0	16	3	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	8	2	3	2	6	2	2	2	2	2
Cap, veh/h	264	3875		378	4725		124	3		115	8	
Arrive On Green	0.03	0.76	0.00	0.02	0.74	0.00	0.03	0.03	0.00	0.03	0.03	0.00
Sat Flow, veh/h	1781	5274	0	1781	6643	0	1460	81	1585	1324	248	1585
Grp Volume(v), veh/h	39	1342	0	13	2048	0	19	0	0	19	0	0
Grp Sat Flow(s),veh/h/ln	1781	1702	0	1781	1596	0	1541	0	1585	1573	0	1585
Q Serve(g_s), s	0.5	8.0	0.0	0.2	11.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.5	8.0	0.0	0.2	11.5	0.0	1.0	0.0	0.0	1.0	0.0	0.0
Prop In Lane	1.00		0.00	1.00		0.00	0.95		1.00	0.84		1.00
Lane Grp Cap(c), veh/h	264	3875		378	4725		127	0		124	0	
V/C Ratio(X)	0.15	0.35		0.03	0.43		0.15	0.00		0.15	0.00	
Avail Cap(c_a), veh/h	375	4035		522	5044		369	0		373	0	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	3.3	3.7	0.0	3.0	4.7	0.0	44.2	0.0	0.0	44.2	0.0	0.0
Incr Delay (d2), s/veh	0.3	0.1	0.0	0.0	0.1	0.0	0.5	0.0	0.0	0.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	1.6	0.0	0.0	2.4	0.0	0.5	0.0	0.0	0.5	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	3.6	3.7	0.0	3.1	4.7	0.0	44.7	0.0	0.0	44.8	0.0	0.0
LnGrp LOS	A	A		A	A		D	A		D	A	
Approach Vol, veh/h		1381			2061			19			19	
Approach Delay, s/veh		3.7			4.7			44.7			44.8	
Approach LOS		A			A			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.4	77.1		9.1	9.2	75.3		9.1				
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s	9.0	74.0		19.0	9.0	74.0		19.0				
Max Q Clear Time (g_c+I1), s	2.2	10.0		3.0	2.5	13.5		3.0				
Green Ext Time (p_c), s	0.0	41.6		0.0	0.0	55.8		0.0				

Intersection Summary		
HCM 6th Ctrl Delay	4.8	
HCM 6th LOS	A	

Notes

Unsignalized Delay for [NER, NWR, SER, SWR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	5

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	54	0	14	25	0	3
Future Vol, veh/h	54	0	14	25	0	3
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	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	59	0	15	27	0	3

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	32	29	0	0	42	0
Stage 1	29	-	-	-	-	-
Stage 2	3	-	-	-	-	-
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	982	1046	-	-	1567	-
Stage 1	994	-	-	-	-	-
Stage 2	1020	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	982	1046	-	-	1567	-
Mov Cap-2 Maneuver	982	-	-	-	-	-
Stage 1	994	-	-	-	-	-
Stage 2	1020	-	-	-	-	-

Approach	NW	NE	SW
HCM Control Delay, s	8.9	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NET	NER	NWLn1	SWL	SWT
Capacity (veh/h)	-	-	982	1567	-
HCM Lane V/C Ratio	-	-	0.06	-	-
HCM Control Delay (s)	-	-	8.9	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0.2	0	-

Synchro Reports
No-Build PM (2024)

Intersection	
Int Delay, s/veh	3.9

Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Vol, veh/h	4	120	74	120	115	23
Future Vol, veh/h	4	120	74	120	115	23
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	-	0	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	126	78	126	121	24

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	415	133	145	0	-	0
Stage 1	133	-	-	-	-	-
Stage 2	282	-	-	-	-	-
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	594	916	1437	-	-	-
Stage 1	893	-	-	-	-	-
Stage 2	766	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	562	916	1437	-	-	-
Mov Cap-2 Maneuver	562	-	-	-	-	-
Stage 1	845	-	-	-	-	-
Stage 2	766	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s	9.7	2.9	0
HCM LOS	A		

Minor Lane/Major Mvmt	NEL	NET	SELn1	SWT	SWR
Capacity (veh/h)	1437	-	898	-	-
HCM Lane V/C Ratio	0.054	-	0.145	-	-
HCM Control Delay (s)	7.6	-	9.7	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0.2	-	0.5	-	-

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	121	2235	42	45	1736	53	82	23	113	82	35	115
Future Volume (veh/h)	121	2235	42	45	1736	53	82	23	113	82	35	115
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	123	2281	0	46	1771	0	84	23	0	84	36	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	309	3562		206	4477		172	30		164	45	
Arrive On Green	0.05	0.70	0.00	0.04	0.70	0.00	0.09	0.09	0.00	0.09	0.09	0.00
Sat Flow, veh/h	1781	5274	0	1781	6696	0	1170	320	1585	1116	478	1585
Grp Volume(v), veh/h	123	2281	0	46	1771	0	107	0	0	120	0	0
Grp Sat Flow(s),veh/h/ln	1781	1702	0	1781	1609	0	1491	0	1585	1594	0	1585
Q Serve(g_s), s	2.0	25.4	0.0	0.7	12.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
Cycle Q Clear(g_c), s	2.0	25.4	0.0	0.7	12.0	0.0	7.2	0.0	0.0	7.5	0.0	0.0
Prop In Lane	1.00		0.00	1.00		0.00	0.79		1.00	0.70		1.00
Lane Grp Cap(c), veh/h	309	3562		206	4477		202	0		208	0	
V/C Ratio(X)	0.40	0.64		0.22	0.40		0.53	0.00		0.58	0.00	
Avail Cap(c_a), veh/h	397	3638		298	4584		331	0		343	0	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	5.0	8.6	0.0	8.1	6.6	0.0	45.9	0.0	0.0	46.1	0.0	0.0
Incr Delay (d2), s/veh	0.8	0.4	0.0	0.5	0.1	0.0	2.2	0.0	0.0	2.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	7.2	0.0	0.2	3.2	0.0	2.8	0.0	0.0	3.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	5.8	9.0	0.0	8.6	6.7	0.0	48.1	0.0	0.0	48.6	0.0	0.0
LnGrp LOS	A	A		A	A		D	A		D	A	
Approach Vol, veh/h		2404			1817			107			120	
Approach Delay, s/veh		8.8			6.7			48.1			48.6	
Approach LOS		A			A			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.7	78.5		15.7	9.9	78.3		15.7				
Change Period (Y+Rc), s	6.0	6.0		6.0	5.0	6.0		6.0				
Max Green Setting (Gmax), s	9.0	74.0		19.0	10.0	74.0		19.0				
Max Q Clear Time (g_c+I1), s	2.7	27.4		9.2	4.0	14.0		9.5				
Green Ext Time (p_c), s	0.0	45.1		0.2	0.2	51.1		0.2				

Intersection Summary		
HCM 6th Ctrl Delay		10.0
HCM 6th LOS		A

Notes

Unsignalized Delay for [NER, NWR, SER, SWR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	2.5

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	67	1	50	74	1	72
Future Vol, veh/h	67	1	50	74	1	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	-	-	-	-	-
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	73	1	54	80	1	78

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	174	94	0	0	134	0
Stage 1	94	-	-	-	-	-
Stage 2	80	-	-	-	-	-
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	816	963	-	-	1451	-
Stage 1	930	-	-	-	-	-
Stage 2	943	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	815	963	-	-	1451	-
Mov Cap-2 Maneuver	815	-	-	-	-	-
Stage 1	930	-	-	-	-	-
Stage 2	942	-	-	-	-	-

Approach	NW	NE	SW
HCM Control Delay, s	9.8	0	0.1
HCM LOS	A		

Minor Lane/Major Mvmt	NET	NER	NWLn1	SWL	SWT
Capacity (veh/h)	-	-	817	1451	-
HCM Lane V/C Ratio	-	-	0.09	0.001	-
HCM Control Delay (s)	-	-	9.8	7.5	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.3	0	-

Synchro Reports
Build AM (2024)

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	64	1248	25	12	1905	87	17	5	6	41	7	70
Future Volume (veh/h)	64	1248	25	12	1905	87	17	5	6	41	7	70
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1781	1870	1856	1870	1811	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	69	1342	0	13	2048	0	18	5	0	44	8	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	8	2	3	2	6	2	2	2	2	2
Cap, veh/h	274	3834		372	4611		121	26		130	11	
Arrive On Green	0.04	0.75	0.00	0.02	0.72	0.00	0.05	0.05	0.00	0.05	0.05	0.00
Sat Flow, veh/h	1781	5274	0	1781	6643	0	1164	548	1585	1313	239	1585
Grp Volume(v), veh/h	69	1342	0	13	2048	0	23	0	0	52	0	0
Grp Sat Flow(s),veh/h/ln	1781	1702	0	1781	1596	0	1712	0	1585	1552	0	1585
Q Serve(g_s), s	0.9	8.5	0.0	0.2	12.6	0.0	0.0	0.0	0.0	1.9	0.0	0.0
Cycle Q Clear(g_c), s	0.9	8.5	0.0	0.2	12.6	0.0	1.2	0.0	0.0	3.1	0.0	0.0
Prop In Lane	1.00		0.00	1.00		0.00	0.78		1.00	0.85		1.00
Lane Grp Cap(c), veh/h	274	3834		372	4611		147	0		141	0	
V/C Ratio(X)	0.25	0.35		0.03	0.44		0.16	0.00		0.37	0.00	
Avail Cap(c_a), veh/h	363	3929		511	4911		371	0		363	0	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	4.0	4.0	0.0	3.5	5.5	0.0	44.3	0.0	0.0	45.1	0.0	0.0
Incr Delay (d2), s/veh	0.5	0.1	0.0	0.0	0.1	0.0	0.5	0.0	0.0	1.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	1.9	0.0	0.0	2.9	0.0	0.6	0.0	0.0	1.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	4.5	4.1	0.0	3.6	5.5	0.0	44.7	0.0	0.0	46.7	0.0	0.0
LnGrp LOS	A	A		A	A		D	A		D	A	
Approach Vol, veh/h		1411			2061			23			52	
Approach Delay, s/veh		4.1			5.5			44.7			46.7	
Approach LOS		A			A			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.5	78.2		10.5	10.2	75.5		10.5				
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s	9.0	74.0		19.0	9.0	74.0		19.0				
Max Q Clear Time (g_c+I1), s	2.2	10.5		3.2	2.9	14.6		5.1				
Green Ext Time (p_c), s	0.0	41.4		0.0	0.1	54.9		0.1				

Intersection Summary		
HCM 6th Ctrl Delay		5.8
HCM 6th LOS		A

Notes

Unsignalized Delay for [NER, NWR, SER, SWR] is excluded from calculations of the approach delay and intersection delay.

Synchro Reports
Alternative #1

Intersection	
Int Delay, s/veh	7.6

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↕			↕			↰	↱		↕	
Traffic Vol, veh/h	0	0	93	23	31	0	116	14	25	0	3	0
Future Vol, veh/h	0	0	93	23	31	0	116	14	25	0	3	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	101	25	34	0	126	15	27	0	3	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	301	297	3	321	270	15	3	0	0	42	0	0
Stage 1	3	3	-	267	267	-	-	-	-	-	-	-
Stage 2	298	294	-	54	3	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	651	615	1081	632	636	1065	1619	-	-	1567	-	-
Stage 1	1020	893	-	738	688	-	-	-	-	-	-	-
Stage 2	711	670	-	958	893	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	585	566	1081	538	585	1065	1619	-	-	1567	-	-
Mov Cap-2 Maneuver	585	566	-	538	585	-	-	-	-	-	-	-
Stage 1	938	893	-	679	633	-	-	-	-	-	-	-
Stage 2	619	616	-	868	893	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	8.7	12.1	5.5	0
HCM LOS	A	B		

Minor Lane/Major Mvmt	NEL	NET	NER	NWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	1619	-	-	564	1081	1567	-	-
HCM Lane V/C Ratio	0.078	-	-	0.104	0.094	-	-	-
HCM Control Delay (s)	7.4	0	-	12.1	8.7	0	-	-
HCM Lane LOS	A	A	-	B	A	A	-	-
HCM 95th %tile Q(veh)	0.3	-	-	0.3	0.3	0	-	-

Synchro Reports
Alternative #2

Intersection	
Int Delay, s/veh	5.6

Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Vol, veh/h	0	93	116	39	26	31
Future Vol, veh/h	0	93	116	39	26	31
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	-	0	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	101	126	42	28	34

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	339	45	62	0	-	0
Stage 1	45	-	-	-	-	-
Stage 2	294	-	-	-	-	-
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	657	1025	1541	-	-	-
Stage 1	977	-	-	-	-	-
Stage 2	756	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	603	1025	1541	-	-	-
Mov Cap-2 Maneuver	603	-	-	-	-	-
Stage 1	897	-	-	-	-	-
Stage 2	756	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s	8.9	5.6	0
HCM LOS	A		

Minor Lane/Major Mvmt	NEL	NET	SELn1	SWT	SWR
Capacity (veh/h)	1541	-	1025	-	-
HCM Lane V/C Ratio	0.082	-	0.099	-	-
HCM Control Delay (s)	7.5	-	8.9	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0.3	-	0.3	-	-

Intersection	
Int Delay, s/veh	5

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	54	0	14	25	0	3
Future Vol, veh/h	54	0	14	25	0	3
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	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	59	0	15	27	0	3

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	32	29	0	0	42	0
Stage 1	29	-	-	-	-	-
Stage 2	3	-	-	-	-	-
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	982	1046	-	-	1567	-
Stage 1	994	-	-	-	-	-
Stage 2	1020	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	982	1046	-	-	1567	-
Mov Cap-2 Maneuver	982	-	-	-	-	-
Stage 1	994	-	-	-	-	-
Stage 2	1020	-	-	-	-	-

Approach	NW	NE	SW
HCM Control Delay, s	8.9	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NET	NER	NWLn1	SWL	SWT
Capacity (veh/h)	-	-	982	1567	-
HCM Lane V/C Ratio	-	-	0.06	-	-
HCM Control Delay (s)	-	-	8.9	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0.2	0	-

Synchro Reports
Build PM (2024)

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	154	2235	42	45	1736	77	82	26	113	113	38	137
Future Volume (veh/h)	154	2235	42	45	1736	77	82	26	113	113	38	137
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	157	2281	0	46	1771	0	84	27	0	115	39	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	300	3465		198	4350		190	48		195	46	
Arrive On Green	0.05	0.68	0.00	0.03	0.68	0.00	0.12	0.12	0.00	0.12	0.12	0.00
Sat Flow, veh/h	1781	5274	0	1781	6696	0	1111	403	1585	1148	389	1585
Grp Volume(v), veh/h	157	2281	0	46	1771	0	111	0	0	154	0	0
Grp Sat Flow(s),veh/h/ln	1781	1702	0	1781	1609	0	1514	0	1585	1537	0	1585
Q Serve(g_s), s	2.9	27.8	0.0	0.8	13.2	0.0	0.0	0.0	0.0	3.0	0.0	0.0
Cycle Q Clear(g_c), s	2.9	27.8	0.0	0.8	13.2	0.0	7.4	0.0	0.0	10.4	0.0	0.0
Prop In Lane	1.00		0.00	1.00		0.00	0.76		1.00	0.75		1.00
Lane Grp Cap(c), veh/h	300	3465		198	4350		238	0		241	0	
V/C Ratio(X)	0.52	0.66		0.23	0.41		0.47	0.00		0.64	0.00	
Avail Cap(c_a), veh/h	383	3532		286	4451		325	0		328	0	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	6.4	10.0	0.0	9.5	7.7	0.0	44.8	0.0	0.0	46.1	0.0	0.0
Incr Delay (d2), s/veh	1.4	0.4	0.0	0.6	0.1	0.0	1.4	0.0	0.0	2.8	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	8.4	0.0	0.3	3.7	0.0	2.9	0.0	0.0	4.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	7.9	10.4	0.0	10.1	7.8	0.0	46.2	0.0	0.0	48.9	0.0	0.0
LnGrp LOS	A	B		B	A		D	A		D	A	
Approach Vol, veh/h		2438			1817			111			154	
Approach Delay, s/veh		10.3			7.9			46.2			48.9	
Approach LOS		B			A			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.7	78.6		18.6	10.0	78.3		18.6				
Change Period (Y+Rc), s	6.0	6.0		6.0	5.0	6.0		6.0				
Max Green Setting (Gmax), s	9.0	74.0		19.0	10.0	74.0		19.0				
Max Q Clear Time (g_c+I1), s	2.8	29.8		9.4	4.9	15.2		12.4				
Green Ext Time (p_c), s	0.0	42.8		0.2	0.2	50.3		0.2				

Intersection Summary	
HCM 6th Ctrl Delay	11.5
HCM 6th LOS	B

Notes

Unsignalized Delay for [NER, NWR, SER, SWR] is excluded from calculations of the approach delay and intersection delay.

Synchro Reports
Alternative #1

Intersection	
Int Delay, s/veh	6.7

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↕			↕			↰	↱		↕	
Traffic Vol, veh/h	1	3	176	45	22	1	134	49	71	1	70	1
Future Vol, veh/h	1	3	176	45	22	1	134	49	71	1	70	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	3	185	47	23	1	141	52	75	1	74	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	461	486	75	505	411	52	75	0	0	127	0	0
Stage 1	77	77	-	334	334	-	-	-	-	-	-	-
Stage 2	384	409	-	171	77	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	511	481	986	478	531	1016	1524	-	-	1459	-	-
Stage 1	932	831	-	680	643	-	-	-	-	-	-	-
Stage 2	639	596	-	831	831	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	454	432	986	356	477	1016	1524	-	-	1459	-	-
Mov Cap-2 Maneuver	454	432	-	356	477	-	-	-	-	-	-	-
Stage 1	839	830	-	612	579	-	-	-	-	-	-	-
Stage 2	552	536	-	672	830	-	-	-	-	-	-	-

Approach	SE	NW	NE	SW
HCM Control Delay, s	9.7	16.2	4	0.1
HCM LOS	A	C		

Minor Lane/Major Mvmt	NEL	NET	NER	NWLn1	SELn1	SWL	SWT	SWR
Capacity (veh/h)	1524	-	-	392	959	1459	-	-
HCM Lane V/C Ratio	0.093	-	-	0.183	0.198	0.001	-	-
HCM Control Delay (s)	7.6	0	-	16.2	9.7	7.5	0	-
HCM Lane LOS	A	A	-	C	A	A	A	-
HCM 95th %tile Q(veh)	0.3	-	-	0.7	0.7	0	-	-

Synchro Reports
Alternative #2

Intersection	
Int Delay, s/veh	5

Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Vol, veh/h	4	176	134	120	115	23
Future Vol, veh/h	4	176	134	120	115	23
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	-	0	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	185	141	126	121	24

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	541	133	145	0	-	0
Stage 1	133	-	-	-	-	-
Stage 2	408	-	-	-	-	-
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	502	916	1437	-	-	-
Stage 1	893	-	-	-	-	-
Stage 2	671	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	453	916	1437	-	-	-
Mov Cap-2 Maneuver	453	-	-	-	-	-
Stage 1	805	-	-	-	-	-
Stage 2	671	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s	10.1	4.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NEL	NET	SELn1	SWT	SWR
Capacity (veh/h)	1437	-	896	-	-
HCM Lane V/C Ratio	0.098	-	0.211	-	-
HCM Control Delay (s)	7.8	-	10.1	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.3	-	0.8	-	-

Intersection	
Int Delay, s/veh	2.5

Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	67	1	50	74	1	72
Future Vol, veh/h	67	1	50	74	1	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	-	-	-	-	-
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	73	1	54	80	1	78

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	174	94	0	0	134	0
Stage 1	94	-	-	-	-	-
Stage 2	80	-	-	-	-	-
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	816	963	-	-	1451	-
Stage 1	930	-	-	-	-	-
Stage 2	943	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	815	963	-	-	1451	-
Mov Cap-2 Maneuver	815	-	-	-	-	-
Stage 1	930	-	-	-	-	-
Stage 2	942	-	-	-	-	-

Approach	NW	NE	SW
HCM Control Delay, s	9.8	0	0.1
HCM LOS	A		

Minor Lane/Major Mvmt	NET	NER	NWLn1	SWL	SWT
Capacity (veh/h)	-	-	817	1451	-
HCM Lane V/C Ratio	-	-	0.09	0.001	-
HCM Control Delay (s)	-	-	9.8	7.5	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.3	0	-

Appendix E
Adjacent Project Trip Generation Report

Coffee/Donut Shop with Drive-Through Window and No Indoor Seating (938)

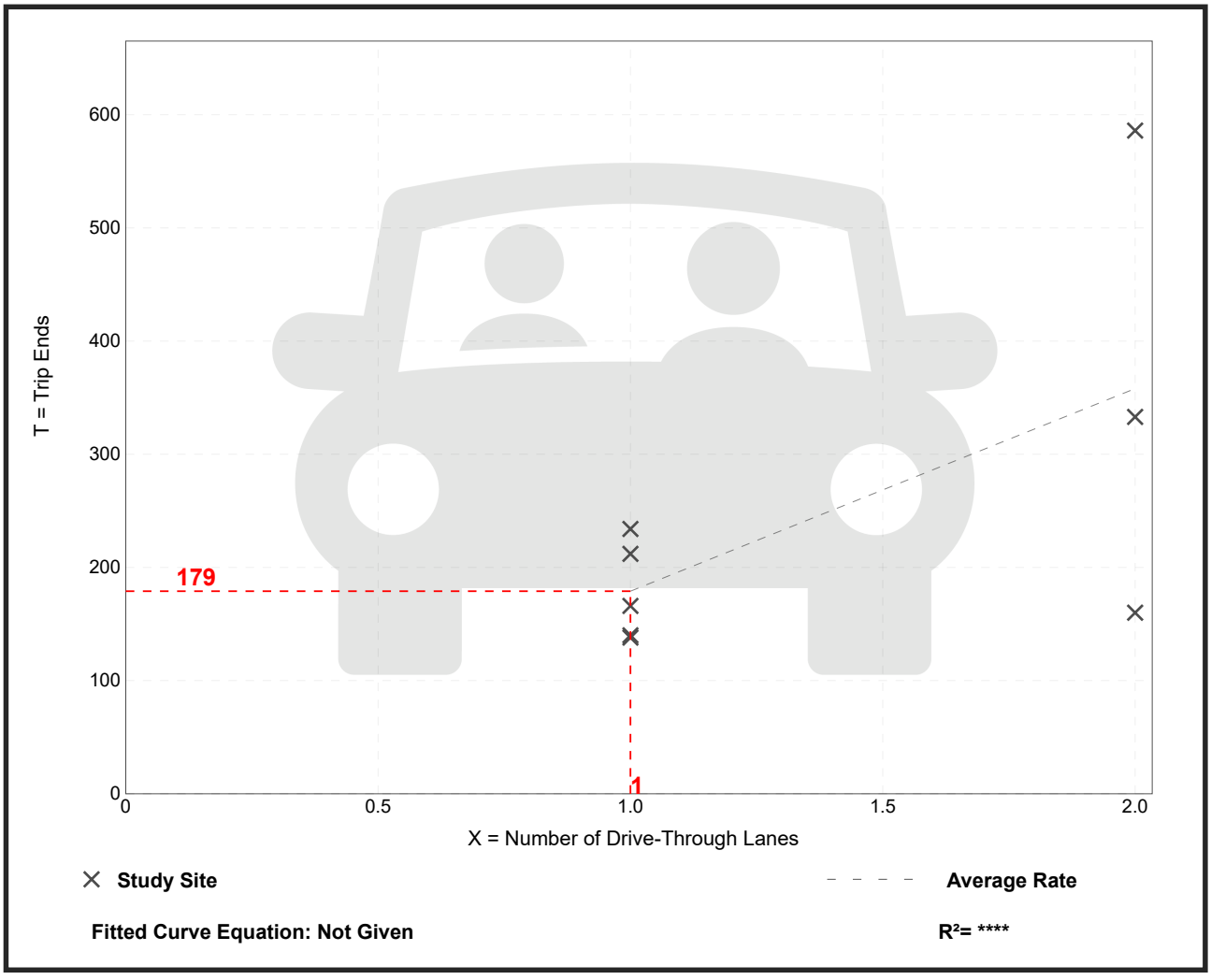
Vehicle Trip Ends vs: **Drive-Through Lanes**
On a: **Weekday**

Setting/Location: **General Urban/Suburban**
Number of Studies: 8
Avg. Num. of Drive-Through Lanes: 1
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Drive-Through Lane

Average Rate	Range of Rates	Standard Deviation
179.00	80.00 - 293.00	74.48

Data Plot and Equation



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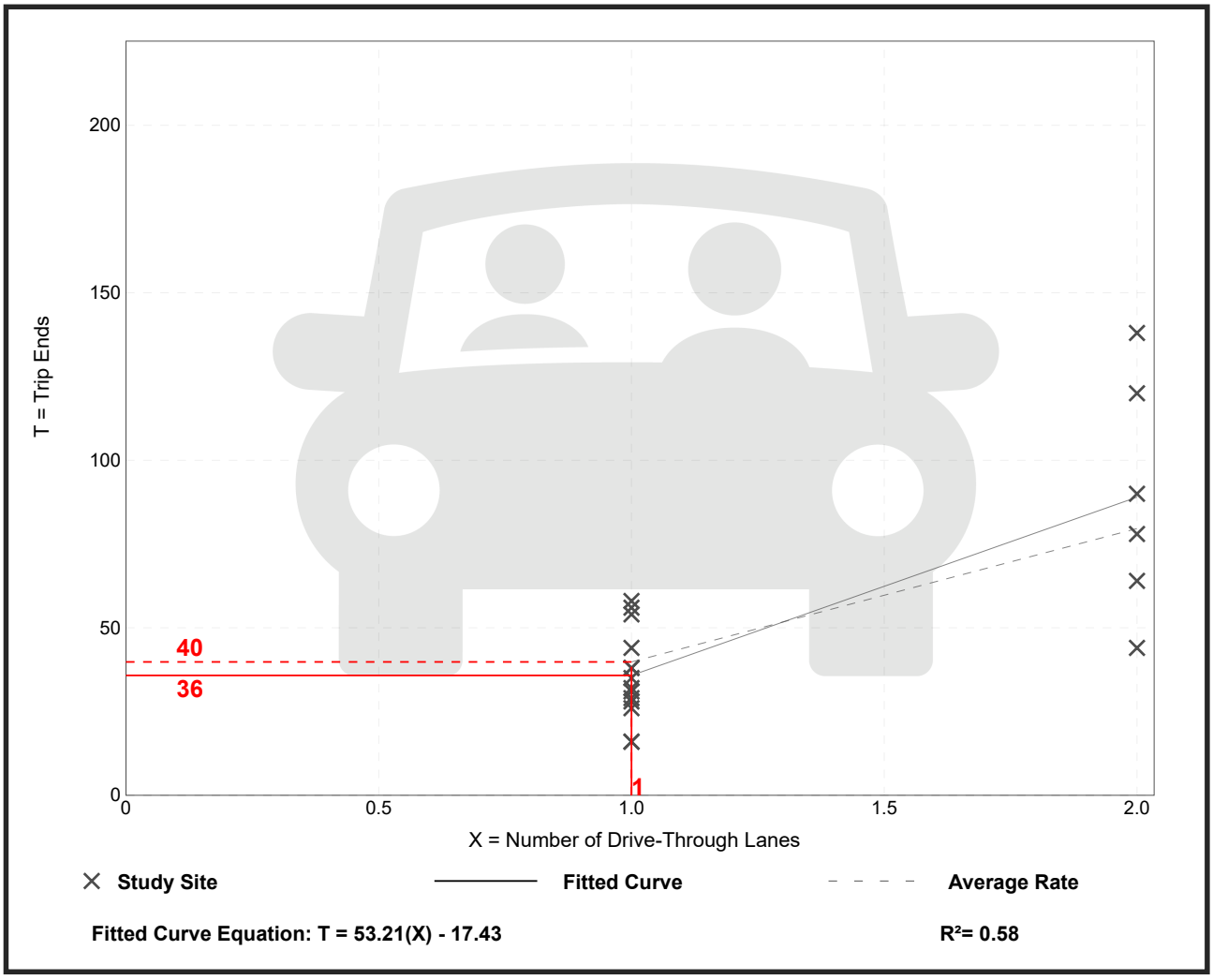
Coffee/Donut Shop with Drive-Through Window and No Indoor Seating (938)

Vehicle Trip Ends vs:	**Drive-Through Lanes**
On a:	**Weekday,** **Peak Hour of Adjacent Street Traffic,** **One Hour Between 7 and 9 a.m.**
Setting/Location:	**General Urban/Suburban**
Number of Studies:	20
Avg. Num. of Drive-Through Lanes:	1
Directional Distribution:	50% entering, 50% exiting

Vehicle Trip Generation per Drive-Through Lane

Average Rate	Range of Rates	Standard Deviation
39.81	16.00 - 69.00	15.44

Data Plot and Equation



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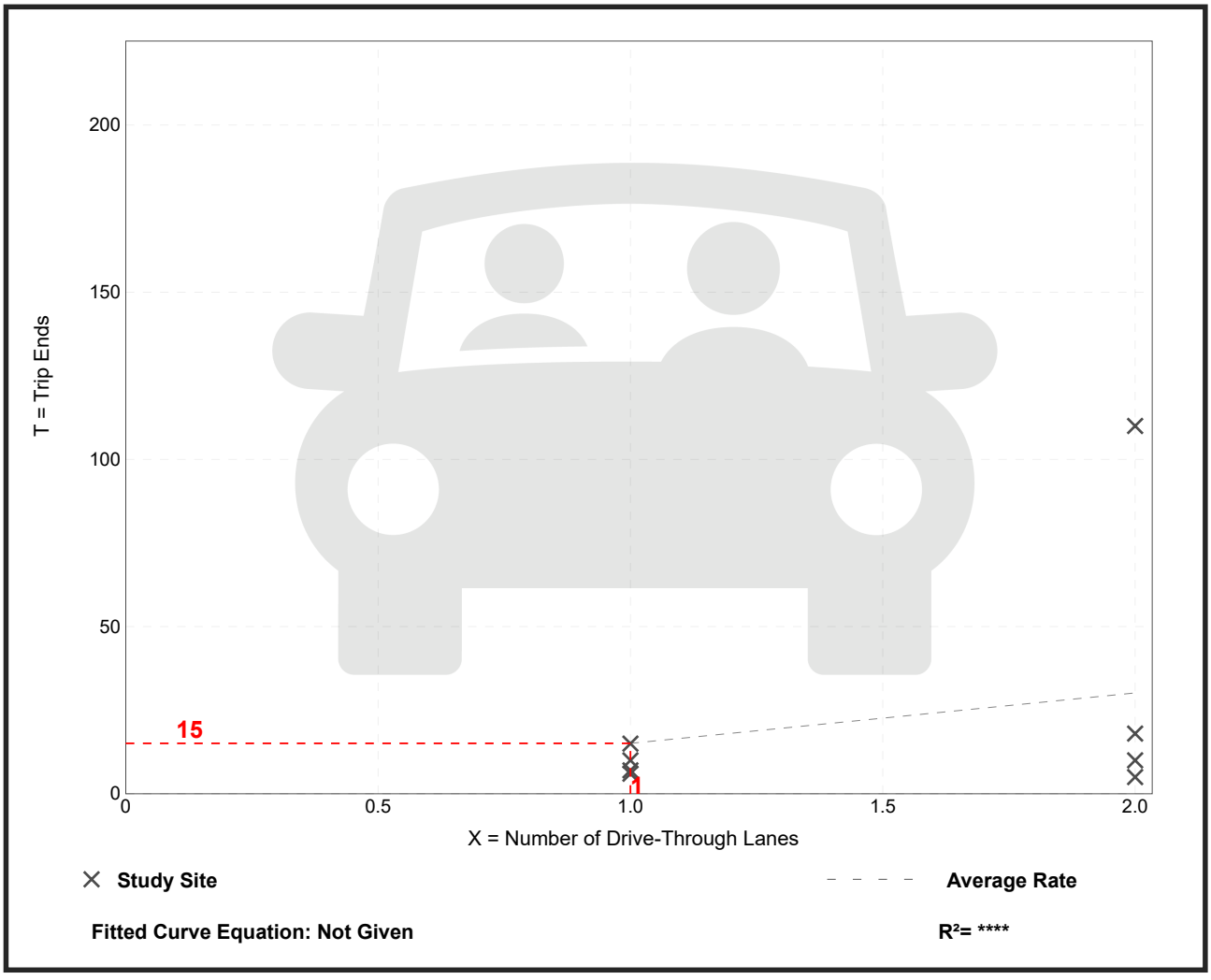
Coffee/Donut Shop with Drive-Through Window and No Indoor Seating (938)

Vehicle Trip Ends vs:	**Drive-Through Lanes**
On a:	**Weekday,**
	Peak Hour of Adjacent Street Traffic,
	One Hour Between 4 and 6 p.m.
Setting/Location:	**General Urban/Suburban**
Number of Studies:	8
Avg. Num. of Drive-Through Lanes:	2
Directional Distribution:	50% entering, 50% exiting

Vehicle Trip Generation per Drive-Through Lane

Average Rate	Range of Rates	Standard Deviation
15.08	2.50 - 55.00	19.41

Data Plot and Equation



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Appendix F
Trip Generation Report

Fast-Food Restaurant with Drive-Through Window
(934)

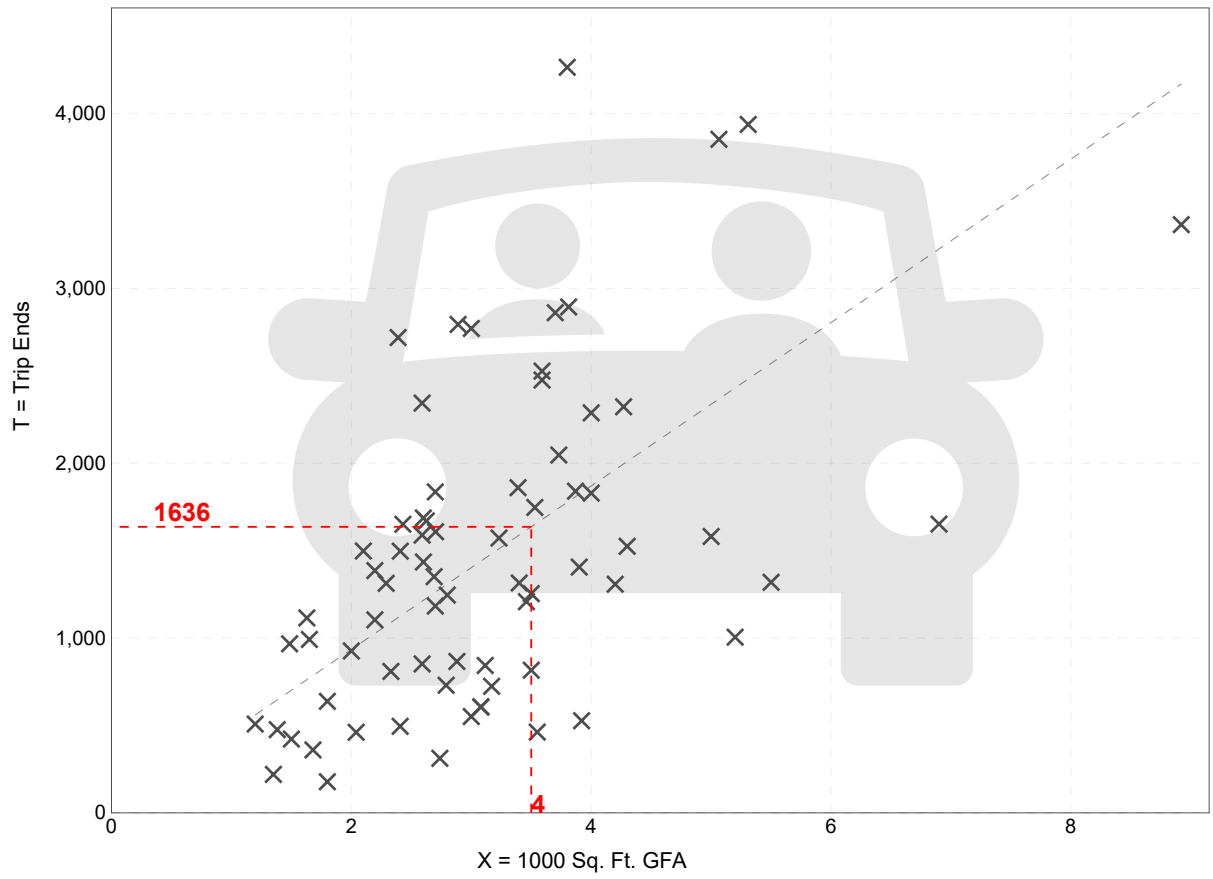
Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday**

Setting/Location: **General Urban/Suburban**
Number of Studies: 71
Avg. 1000 Sq. Ft. GFA: 3
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
467.48	98.89 - 1137.66	238.62

Data Plot and Equation



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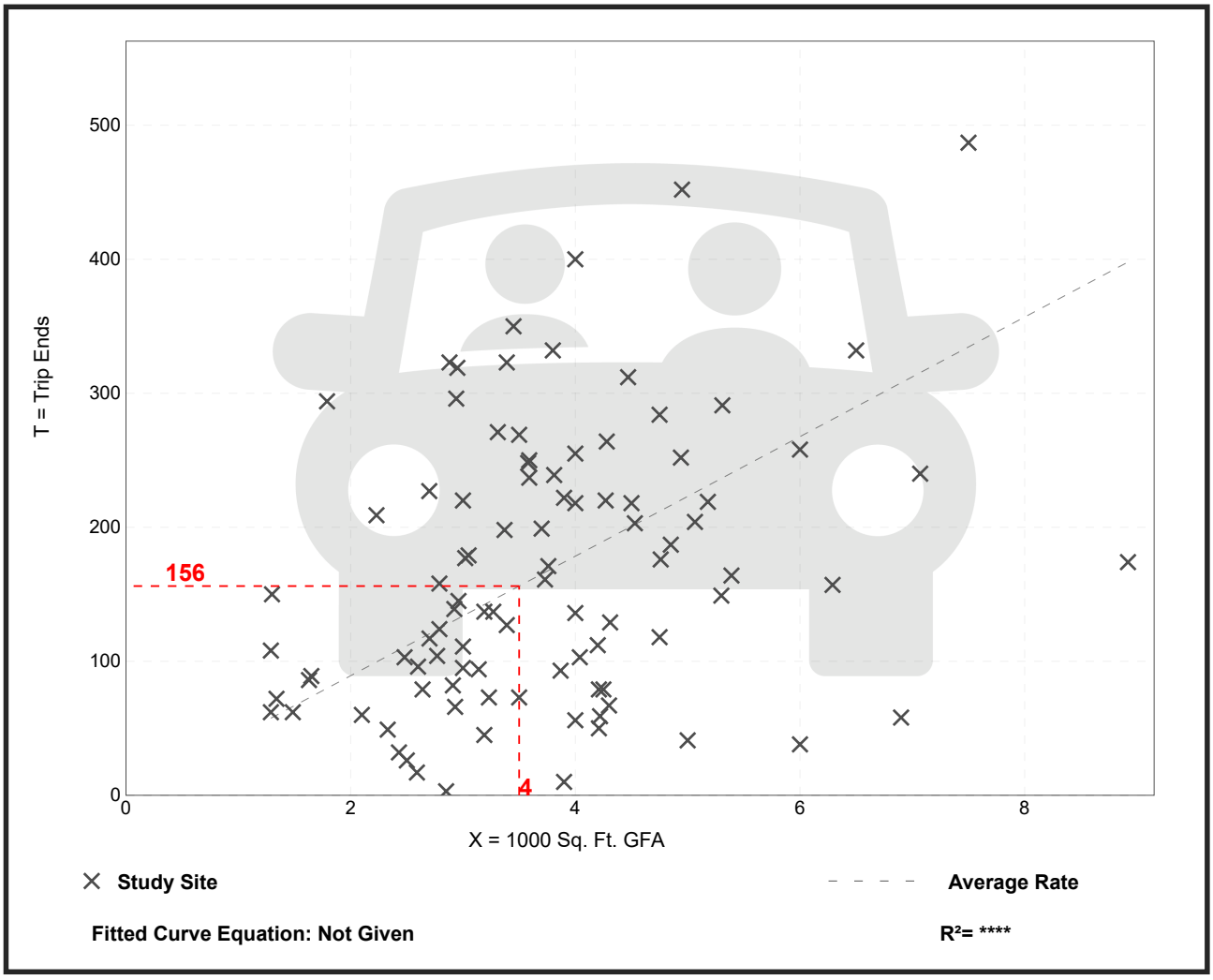
Fast-Food Restaurant with Drive-Through Window
(934)

Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 96
Avg. 1000 Sq. Ft. GFA: 4
Directional Distribution: 51% entering, 49% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
44.61	1.05 - 164.25	27.14

Data Plot and Equation



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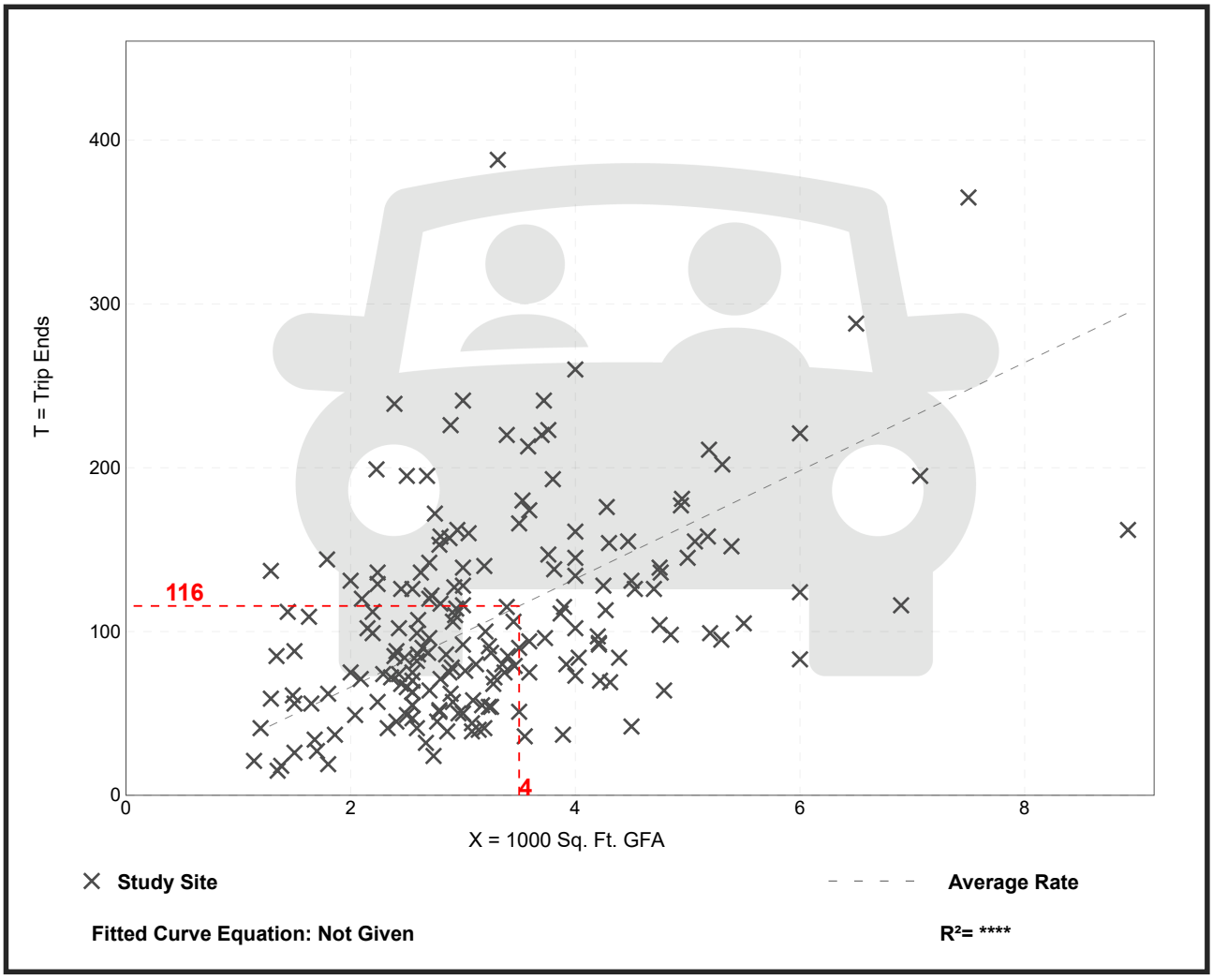
Fast-Food Restaurant with Drive-Through Window
(934)

Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 190
Avg. 1000 Sq. Ft. GFA: 3
Directional Distribution: 52% entering, 48% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
33.03	8.77 - 117.22	17.59

Data Plot and Equation



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