

TO: Cameron Grogan; Project Turbo, LLC

FROM: Andrew Antweiler, PE, PTOE, RSP1; KCI Technologies, Inc.

DATE: August 18, 2025

RE: 2400 O'Kelly Road – Proposed Development Trip Generation

Project Background

The purpose of this memorandum is to summarize the expected trip generation and driveway volumes for the proposed 2400 O'Kelly Road development. The site is located at the end of O'Kelly Road. Access to the site is provided via O'Kelly Road to SR 60. The intersection of SR 60 at O'Kelly Road is currently a side-street stop-control three-leg intersection, with SR 60 as the northbound/southbound free-flow approaches and O'Kelly Road as the westbound stop-control approach. The most recent (April 2025) GDOT TADA count station (139-0303) located to the north of the intersection recorded 16,346 vehicle per day along SR 60.

Based on information from the client and the concept plan, the development is to include up to 900,000 square feet of buildings for data center use with one site access location at the end of O'Kelly Road.

Site Traffic

Traffic anticipated to be generated by the land use was based on the Trip Generation Manual, 11th Edition, by the Institute of Transportation Engineers (ITE). This is the nationally recognized database which provides trip generation estimates for a wide variety of land uses. For this development, site traffic was estimated for the typical weekday daily, AM peak hour, and PM peak hour volumes for the most applicable land use code: Data Center (Land Use Code 160).

The ITE estimated development volumes represent a conservatively high estimate of project traffic compared to the actual anticipated traffic volumes. Based on other DRI reviews for proposed data centers, we are aware there are ongoing discussions with ARC and GRTA regarding trip generation rates for data centers. It is worth noting in June 2025 the DCA paused the requirement for DRI review of data centers while they revise the DRI rules to more specifically include data center projects.

The site will generate trips from employees managing the data centers with limited additional trips. Information from the client indicates the development is expected to employ 100 employees in shifts over a 24-hour period. Therefore, the expected number of site trips is lower than the ITE rates.

Since there is no available data to base lower volumes on, the ITE manual rates were utilized. Based on ITE rates, the estimated total project volumes are summarized in **Table 1**. The total number of vehicles (entering plus exiting) the site on a weekday is estimated to be 891 vehicles. The total number of vehicles during the AM peak hour is 111 vehicles and during the PM peak hour is 93 vehicles. Additionally, due to the development type, no pass-by reductions or internal capture reductions were included in the traffic analysis.

Table 1: Proposed Site Trip Generation								
Land Use (ITE Code)	Units	Daily Trips	AM Peak Hour			PM Peak Hour		
		Two-Way Total	Enter	Exit	Total	Enter	Exit	Total
Data Center (160)	900,000 SF	891	61	50	111	28	65	93
Total Driveway Trips		891	61	50	111	28	65	93

Figure 1 below illustrates the proposed development project trips on the area roadways based on the ITE manual rates in Table 1. This memorandum provides an estimate of traffic volumes for the site. The actual traffic volumes may vary.

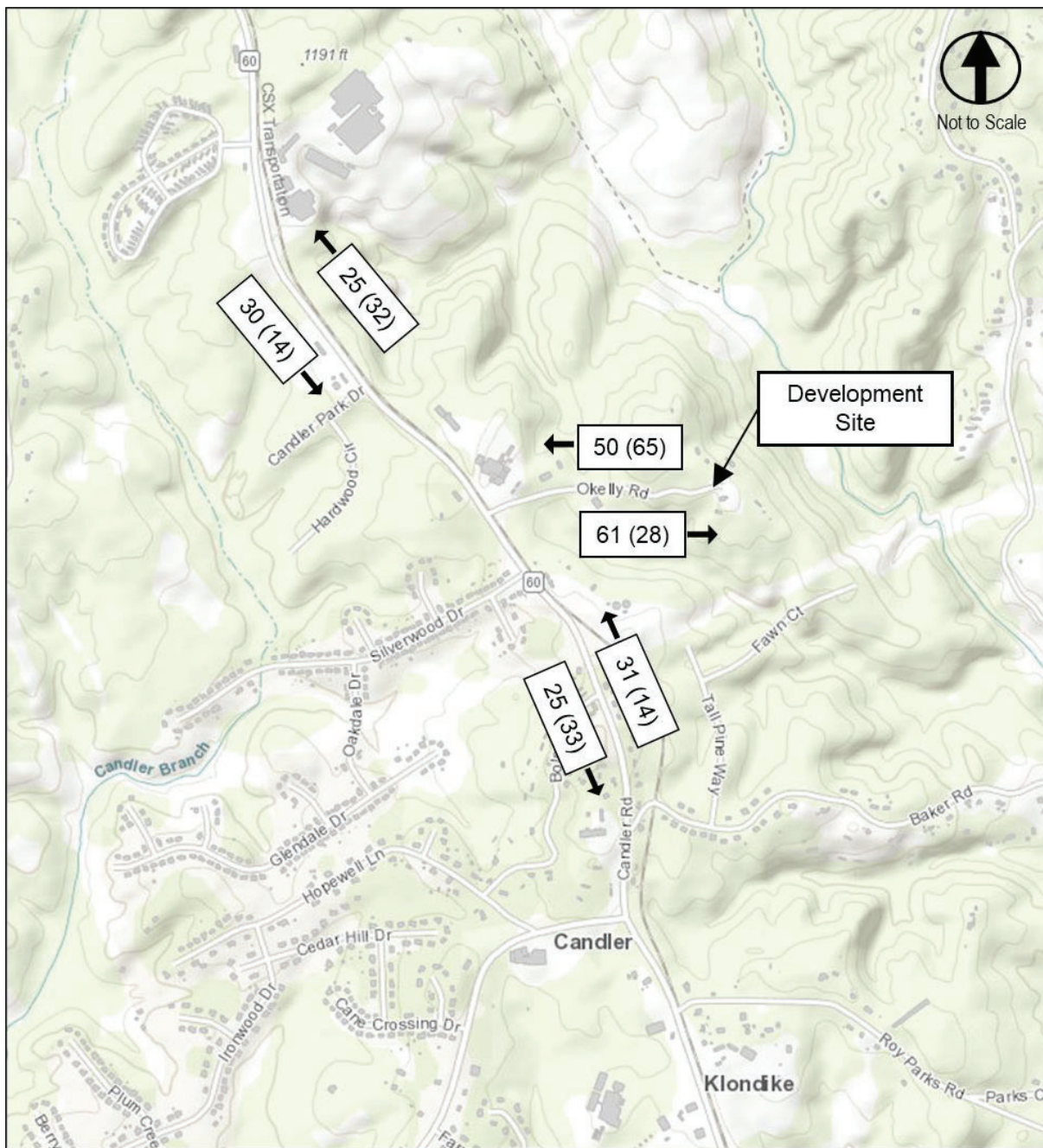


Figure 1: Estimated project trips on area roadways based on ITE Manual Rates



2400 O'Kelly Road Development Traffic Impact Study

Prepared for:

Project Turbo, LLC

Prepared by:

KCI Technologies Inc.

2160 Satellite Boulevard, Suite 130

Duluth, GA 30097

www.kci.com

678.990.6200

September 2025

A stylized, monochromatic blue illustration of a cityscape. It features various buildings, a bridge, a water tower, and cars on a road. The illustration is positioned at the bottom of the page, partially overlapping the text.

**RISE TO THE
CHALLENGE**



2400 O'Kelly Road Development Traffic Impact Study

Prepared for:
Project Turbo, LLC

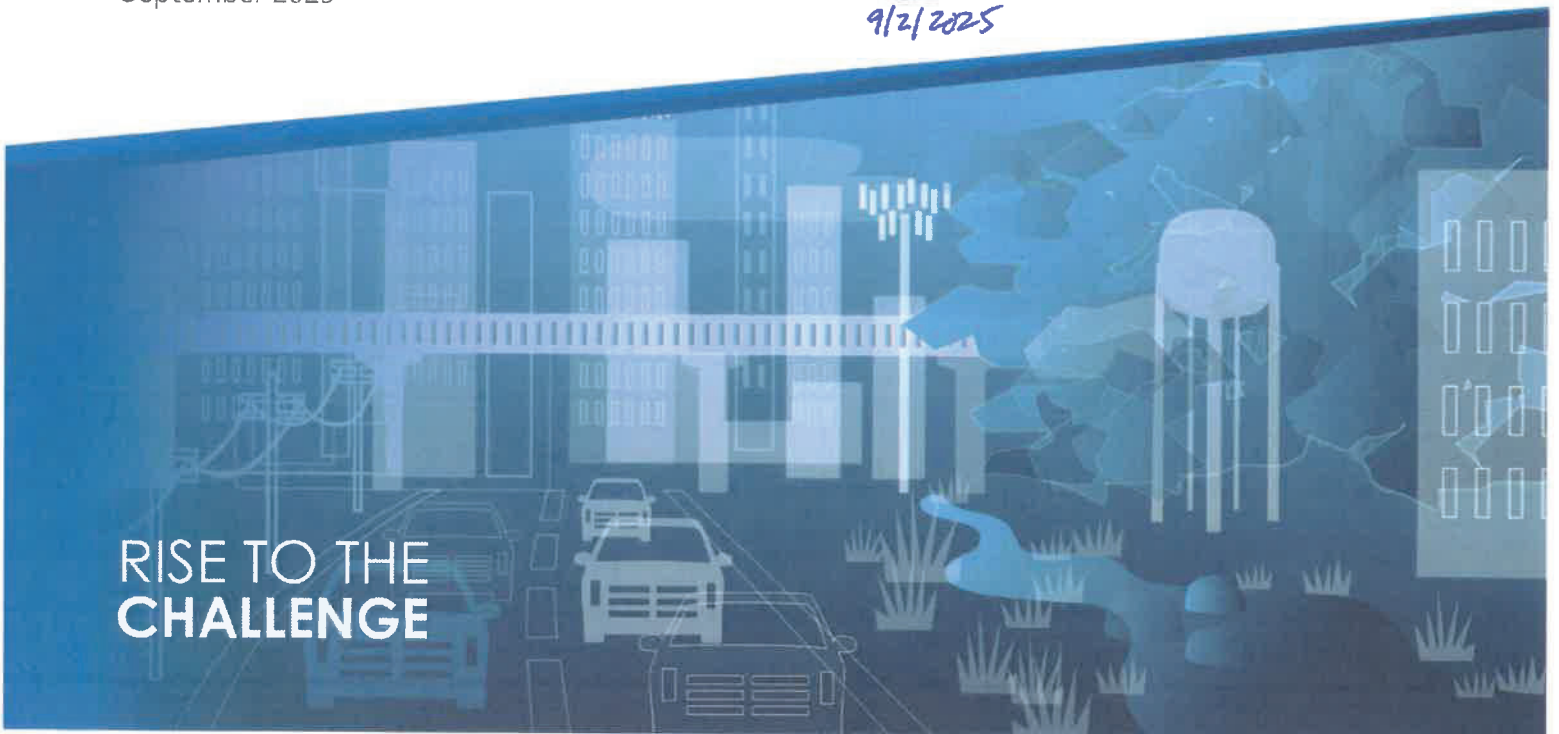
Prepared by:
KCI Technologies Inc.
2160 Satellite Boulevard, Suite 130
Duluth, GA 30097
www.kci.com
678.990.6200

September 2025



9/2/2025

RISE TO THE
CHALLENGE



Executive Summary

The purpose of this study is to evaluate the potential traffic impacts of the proposed 2400 O'Kelly Road development along O'Kelly Road in Hall County. Based on the overall site plan, the development will include up to a 900,000 square foot data center separated into three buildings. The concept plan (see Appendix B) for the development illustrates the conditions in the study area, including the proposed development and the proposed site driveway located at the end of O'Kelly Road.

The project driveway volumes were calculated based on the Institute of Transportation Engineers' (ITE) Trip Generation Manual, Twelfth Edition. The most applicable ITE land use (LU) codes is LU 160 (Data Center). In August ITE published the newest update, which included revisions to the LU 160 data. The new trip rates are based on 16 sites (daily), 20 sites (AM), and 19 sites (PM). The sites were surveyed in the 2010s and 2020s. The estimated total project volumes are 567 vehicles per day (284 entering and 283 exiting), 55 vehicles during the AM peak hour (39 entering and 16 exiting) and 45 vehicles during the PM peak hour (9 entering and 36 exiting).

The revised ITE estimated development volumes may still represent a conservatively high estimate of project traffic compared to the actual anticipated traffic volumes. The site will generate trips from employees managing the data centers with limited additional trips. Information from the client indicates the development is expected to employ 100 employees in shifts over a 24-hour period. Therefore, the expected number of site trips may be lower than the ITE rates.

The traffic impact study network consisted of one intersection that provides access to the development. The study intersection was SR 60 at O'Kelly Road. For the purposes of the traffic study, the analysis included the expected completion (build-out) of the development by year 2032. This study performed an analysis of existing traffic conditions and future traffic conditions. The future conditions analysis was performed for the year 2032 No-Build Conditions and the year 2032 Build Conditions.

Capacity Results

The results of the traffic analysis indicate the study intersection is currently operating at acceptable levels of service LOS C during the AM peak hour and LOS B during the PM peak hour. In the future year 2032, the no-build conditions indicated the intersection will continue to operate at acceptable levels of service D during the AM peak hour and LOS B during the PM peak hour. In the future year 2032, the build conditions (with the proposed 2400 O'Kelly Road development) indicated the intersection will continue to operate at acceptable levels of service D during the AM peak hour and LOS E during the PM peak hour. It is not uncommon for side-street stop control approaches to have high average vehicle delay due to high through volumes along the main road. Vehicles will have to wait to find gaps in traffic before entering SR 60 during the PM peak hour.

Recommendations

Recommendations for access for the proposed development are based on existing conditions, the proposed development use, and expected traffic volumes. Access to the development is proposed at one site driveway located at the end of O'Kelly Road. Based on the traffic analysis at the study intersection of SR 60 at O'Kelly Road, the current lane configuration and side-street stop control is expected to be sufficient to accommodate the proposed development traffic volumes.

Table of Contents

1.	Existing Conditions	1	
1.1	Site Conditions		1
1.2	Roadway Conditions		1
1.3	Traffic Volumes		1
1.4	Crash Review		1
2.	Future Conditions	2	
2.1	Future No-Build Traffic Volumes		2
2.2	Future Roadway Conditions		2
3.	Proposed Development Traffic	3	
3.1	Trip Generation		3
3.2	Trip Distribution and Assignment		3
3.3	Future Build Traffic Volumes		3
4.	Capacity Analysis	4	
4.1	Existing Conditions Capacity Analysis		5
4.2	Future No-Build Conditions Capacity Analysis		5
4.3	Future Build Conditions Capacity Analysis		6
4.4	Turn Lane Analysis at Study Intersection		7
5.	Recommendations	8	

Tables

Table 1: Proposed Site Trip Generation 3

Table 2: Level of Service Criteria 4

Table 3: Existing Year (2025) Level of Service 5

Table 4: Future Year (2032) No-Build Level of Service 5

Table 5: Future Year (2032) Build Level of Service 6

Appendix

A: Figures

- Figure 1 – Location Map
- Figure 2 – Aerial & Access Locations
- Figure 3 – Existing Site Conditions
- Figure 4 – Existing Traffic Conditions
- Figure 5 – Future Build (Year 2032) Conditions

B: Concept Plan

C: Traffic Count Data

D: GDOT Traffic Data

E: Intersection Volume Development

F: Capacity Analysis Reports

1. Existing Conditions

1.1 Site Conditions

The proposed development is located on undeveloped property. **Figure 1** provides a general location map. **Figure 2** is an aerial that shows the site location and the proposed site driveway (Figures included in Appendix A). Access to the property is proposed to be provided at one location at the end of O'Kelly Road (The concept plan is included in Appendix B). Nearby land uses are general industrial.

1.2 Roadway Conditions

SR 60 is a two-lane roadway with a 45 mph posted speed limit. Horizontal and vertical curvature is common throughout its entire length. SR 60 is a north-south oriented roadway. GDOT classifies SR 60 as a minor arterial roadway. A railroad follows SR 60 along the east side of the roadway with a significant ditch for stormwater management in between the roadway and the railroad.

O'Kelly Road is a two-lane roadway, with a 25 mph posted speed limit. O'Kelly Road is an east-west oriented roadway with a west approach. GDOT classifies O'Kelly Road as a local roadway and acts as a driveway entrance for Ampro Productions. The roadway has mostly grassed shoulders on both sides.

The study intersection, SR 60 at O'Kelly Road, is a side-street stop-controlled with a single lane per approach. SR 60 is considered the main roadway within the study area, while O'Kelly Road is considered the side-street. **Figure 3** provides field images of the intersection conditions (Figure included in Appendix A).

1.3 Traffic Volumes

Traffic counts were collected on Wednesday, August 20, 2025, for use in the traffic analysis. Hall County public schools were in session. The traffic data collected included intersection turning movement counts at the following locations during the 7-9AM and 4-6PM peak periods.

1. SR 60 at O'Kelly Road

Historical traffic volume data available from the GDOT TADA source were utilized to inform the annual growth factor. The location is indicated in Appendix D. The locations are:

- GDOT Count Station #139-0303 located on SR 60, north of O'Kelly Road.
- GDOT Count Station #139-0301 located on SR 60, south of O'Kelly Road.

1.4 Crash Review

Crash history was reviewed for the investigation of possible intersection adaptations. From January 1, 2014 to December 31, 2024, two crashes occurred within the intersection. A semi-truck turning left onto O'Kelly Rd with oncoming traffic caused crash #1 with a rear end of two cars traveling northbound. Crash #2 occurred from a car slowing down to make a left onto O'Kelly Rd and the second car failing to stop causing a rear end crash. Both crashes within this intersection were caused by behavioral issues of drivers following too closely; therefore, the crash data does not support a change within the intersection.

2. Future Conditions

2.1 Future No-Build Traffic Volumes

Future No-Build traffic volumes were developed by reviewing the historical traffic volumes roadways within the vicinity of the project and historic population growth in the county. Two nearby GDOT count stations were evaluated to determine a growth rate. The annual historic compound growth rate at the GDOT count stations averaged 3.31% per year. Hall County's population growth rate was most recently reported as 2.0% per year in 2020. The Governor's Office of Planning and Budget developed population projections which indicated an estimated growth of 1.05% per year by 2032 in Hall County.

Considering this data, a 2.0% per year growth rate to account for background traffic volume growth was used in the traffic study. For the purposes of this study the proposed development is expected to be completed and opened by 2032. A 2.0% per year growth rate was applied to the 2025 existing volumes to calculate year 2032 No-Build traffic volumes. The 2032 No-Build traffic volumes are indicated in the Intersection Volume Development tables included in the Appendix E.

2.2 Future Roadway Conditions

A review of Georgia DOT and Hall County planned and programmed transportation projects was performed. One planned roadway project was located near the development site. Per the Gainesville-Hall MPO, a roadway widening project is planned for long-term (year 2055+) along SR 60, from CR 711/Lee Land Road to I-985. The roadway project limits are north of the study intersection at O'Kelly Road.

3. Proposed Development Traffic

Project traffic was calculated for the proposed development. Project traffic is defined as the vehicular trips expected to be generated by the development and distributed over the roadway network.

3.1 Trip Generation

The project driveway volumes were calculated based on the Institute of Transportation Engineers' (ITE) Trip Generation Manual, Twelfth Edition. The development proposes a total of 900,000 square feet of buildings for data center use. The most applicable ITE land use (LU) codes is LU 160 (Data Center). Due to the development type, pass-by reductions and internal capture reductions were not included for the traffic analysis. **Table 1** below summarizes the trips expected daily, during the AM peak hour and during the PM peak hour for the development.

Table 1: Proposed Site Trip Generation								
Land Use (ITE Code)	Units	Daily Trips	AM Peak Hour			PM Peak Hour		
		Two-Way Total	Enter	Exit	Total	Enter	Exit	Total
Data Center (160)	900,000 SF	567	39	16	55	9	36	45
Total Driveway Trips		567	39	16	55	9	36	45

In August ITE published the newest update, which included revisions to the LU 160 data. The new trip rates are based on 16 sites (daily), 20 sites (AM), and 19 sites (PM). The sites were surveyed in the 2010s and 2020s. The revised ITE estimated development volumes may still represent a conservatively high estimate of project traffic compared to the actual anticipated traffic volumes. The site will generate trips from employees managing the data centers with limited additional trips. Information from the client indicates the development is expected to employ 100 employees in shifts over a 24-hour period. Therefore, the expected number of site trips may be lower than the ITE rates.

3.2 Trip Distribution and Assignment

An overall trip distribution and assignment of project trips was based on existing traffic patterns and a review of land uses and the street network in the area. This information was used to apply the project traffic volumes at the study intersection with development driveway.

The directional distribution for the proposed development is estimated to be:

- Residential use:
 - 50% to/from the south along SR 60
 - 50% to/from the north along SR 60

3.3 Future Build Traffic Volumes

The 2032 future Build traffic volumes were calculated by adding the proposed development traffic volumes to the projected year 2032 No-Build traffic volumes. **Figure 5** (in Appendix A) illustrates the year 2032 Build traffic volumes.

4. Capacity Analysis

Capacity analysis was performed at the study intersections for the weekday AM and PM peak hours. Intersection Level of Service (LOS) was calculated based on the methodologies contained in the Highway Capacity Manual, 7th Edition. The Synchro Studio software, which utilizes the HCM 7th Edition methodology, was utilized to perform the analyses.

Capacity is defined as the maximum number of vehicles that can pass over a particular road segment or through a particular intersection within a specified period under prevailing roadway, traffic, and control conditions. Level of service (LOS) is used to describe the operating characteristics of a road segment or intersection in relation to its capacity. LOS is defined as a qualitative measure that describes operational conditions and motorist's perceptions. The Highway Capacity Manual defines six levels of service, LOS A through LOS F. Level of service A indicates excellent operations with little delay to motorists, while level of service F indicates extremely long delay.

Level of service for unsignalized intersections is calculated for the average control delay incurred for vehicles on the stop control approach, compared to the average control delay per vehicle for all approaches at a signalized intersection. Control delay for vehicles include initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. **Table 2** below indicates the relationship between delay and LOS for signalized and unsignalized intersections, respectively. Level-of-service "E" is typically considered to be the limit of acceptable delay.

Several factors affect the controlled delay for unsignalized intersections, including the availability of gaps in the cross-street traffic, and acceptable gap time to make the movement from the stop position. For stop-control intersections, LOS E and F exist when there are insufficient gaps in traffic, resulting in long delays. Low level of service for stop-control approaches are not uncommon at major cross-streets.

Table 2: Level of Service Criteria		
Level of Service	Average 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

4.1 Existing Conditions Capacity Analysis

Capacity analysis was performed for the year 2025 traffic volumes and the existing roadway conditions. The existing traffic conditions are illustrated in **Figure 4**. **Table 3** summarizes the results of the capacity analysis.

Table 3: Existing Year (2025) Level of Service				
Intersection	Intersection Control	Approach	AM Peak Hour LOS (Delay*)	PM Peak Hour LOS (Delay*)
SR 60 at O'Kelly Rd	Stop-control	WB	C (22)	B (12)

**Average vehicle delay in seconds*

The study intersections are currently operating at an acceptable level of service during both the AM and PM peak hours.

4.2 Future No-Build Conditions Capacity Analysis

Capacity analysis was performed for the year 2032 Future Conditions and includes the No-Build traffic and the existing roadway conditions. **Table 4** summarizes the results of the capacity analysis for the Future No-Build Conditions.

Table 4: Future Year (2032) No-Build Level of Service				
Intersection	Intersection Control	Approach	AM Peak Hour LOS (Delay*)	PM Peak Hour LOS (Delay*)
SR 60 at O'Kelly Rd	Stop-Control	WB	D (27)	B (12)

**Average vehicle delay in seconds*

By the 2032 Future No-Build Conditions, the study intersection is expected to continue operating acceptably.

4.3 Future Build Conditions Capacity Analysis

Capacity analysis was performed for the year 2032 Future Conditions and includes the No-Build traffic volumes plus the proposed development volumes. The Build traffic conditions and volumes are illustrated in **Figure 5**. **Table 5** summarizes the results of the capacity analysis.

Table 5: Future Year (2032) Build Level of Service				
Intersection	Intersection Control	Approach	AM Peak Hour LOS (Delay*)	PM Peak Hour LOS (Delay*)
SR 60 at O'Kelly Rd	Stop-control	WB	D (29)	E (45)

**Average vehicle delay in seconds*

By the 2032 Future Build Conditions, the study intersection is expected to operate at an acceptable level of service during the AM peak hour and PM peak hours. It is not uncommon for side-street stop control approaches to have high average vehicle delay due to high through volumes along the main road. Vehicles will have to wait to find gaps in traffic before entering SR 60.

4.4 Turn Lane Analysis at Study Intersection

Hall County follows Georgia DOT guidelines regarding turn lanes at development site driveways. Although the study intersection is not the site driveway, the Georgia DOT Driveway and Encroachment Control Manual was reviewed for the study intersection of SR 60 at O'Kelly Road. The GDOT driveway manual, Section 4I, Auxiliary Turn Lanes, provides minimum volumes requiring right-turn or left-turn deceleration lanes. The year 2032 Build traffic volumes were compared to the Georgia DOT driveway requirements for right-turn and left-turn deceleration lanes. The average daily traffic volume along SR 60 is greater than 6,000 according to GDOT's historical count station TADA data.

Right-Turn Deceleration Lane Criteria

Based on the 45 mph speed limit, two-lane roadway, and greater than 6,000 ADT (Average Daily Traffic) on SR 60, Table 4-6 indicates a dedicated right-turn lane is required if there are at least 150 vehicles turning right into the site within a day. The estimated daily northbound right-turn volume entering O'Kelly Rd is the following:

- O'Kelly Rd: 284 daily entering trips x 50% distribution = 142 daily right-turning trips

Based on the expected trip distribution and assignment, the intersection does not meet the GDOT criteria to install a left-turn lane at the proposed driveway.

Left-Turn Lane Criteria

Based on the 45 mph speed limit, two-lane roadway, and more than 6,000 ADT on SR 60, Table 4-7a indicates a dedicated left-turn lane is required if there are at least 250 vehicles turning left into the site within a day. The estimated daily southbound left-turn volume entering O'Kelly Rd is the following:

- O'Kelly Rd: 284 daily entering trips x 50% distribution = 142 daily right-turning trips

Based on the expected trip distribution and assignment, the intersection does not meet the GDOT criteria to install a left-turn lane at the proposed driveway.

5. Recommendations

Recommendations for access for the proposed development are based on existing conditions, the proposed development use, and expected traffic volumes. Access to the development is proposed at one site driveway located at the end of O'Kelly Road.

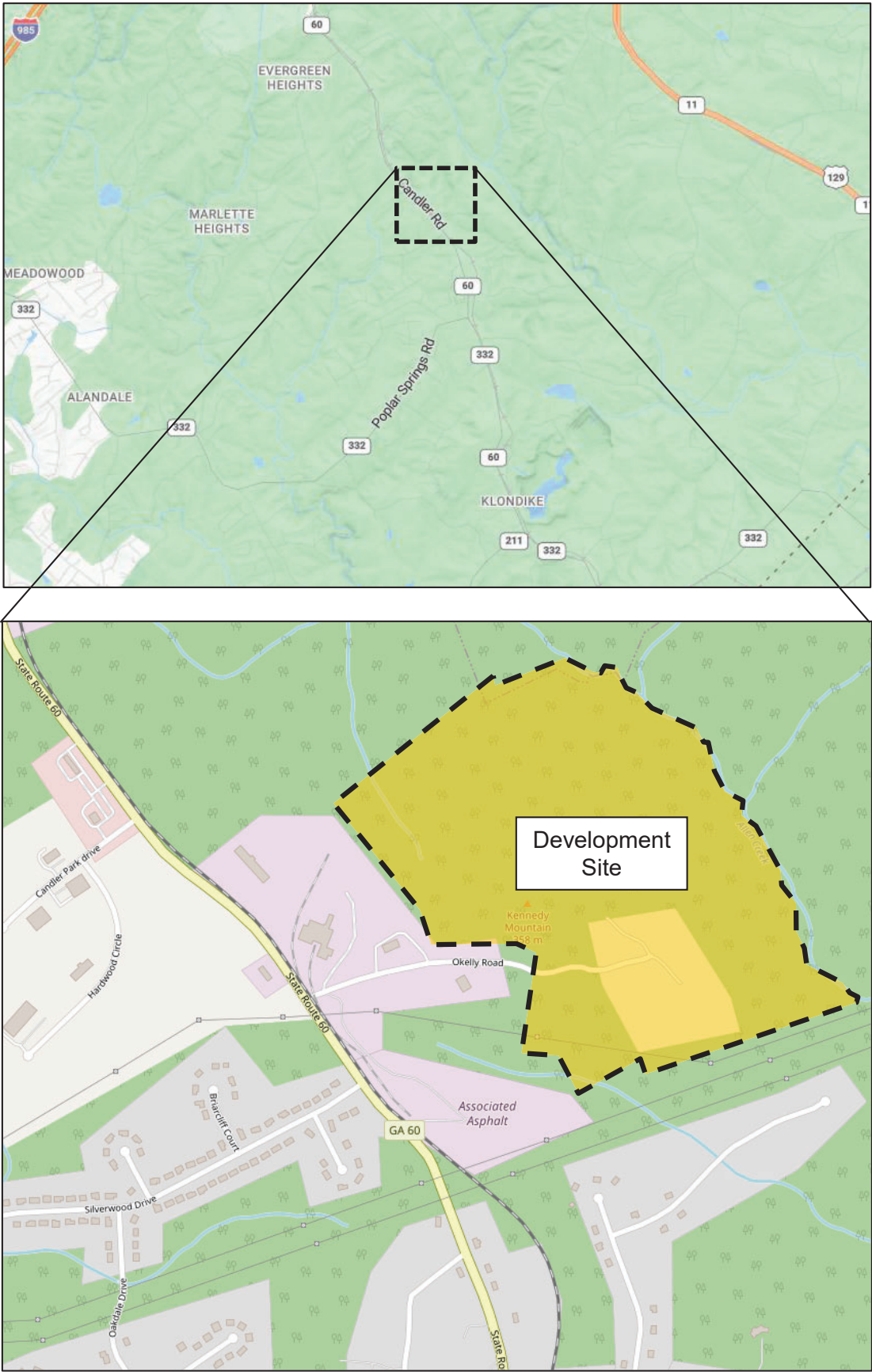
Based on the traffic analysis at the study intersection of SR 60 at O'Kelly Road, the current lane configuration and side-street stop control is expected to be sufficient to accommodate the proposed development traffic volumes.

Appendices

- Appendix A
 - Figures
- Appendix B
 - Concept Plan
- Appendix C
 - Traffic Count Data
- Appendix D
 - GDOT Traffic Data
- Appendix E
 - Intersection Volume Development
- Appendix F
 - Capacity Analysis Reports

Appendix A

Figures



Not to Scale



Traffic Impact Study
2400 O'Kelly Road
Hall County, Georgia

Location
Map

Figure
1

Legend:



Study Intersection



Not to Scale



Traffic Impact Study
2400 O'Kelly Road
Hall County, Georgia

Aerial &
Access
Locations

Figure
2

SR 60 North Approach



SR 60 South Approach



O'Kelly Rd East Approach



Field Visit Notes:

- Railroad located on east side of SR 60
- Minor hump on O'Kelly Rd at railroad crossing however does not impede traffic flow



Not to Scale

LEGEND:

- ← Existing Roadway Laneage
- XX AM Peak Hour Traffic Volumes
- (XX) PM Peak Hour Traffic Volumes



Not to Scale



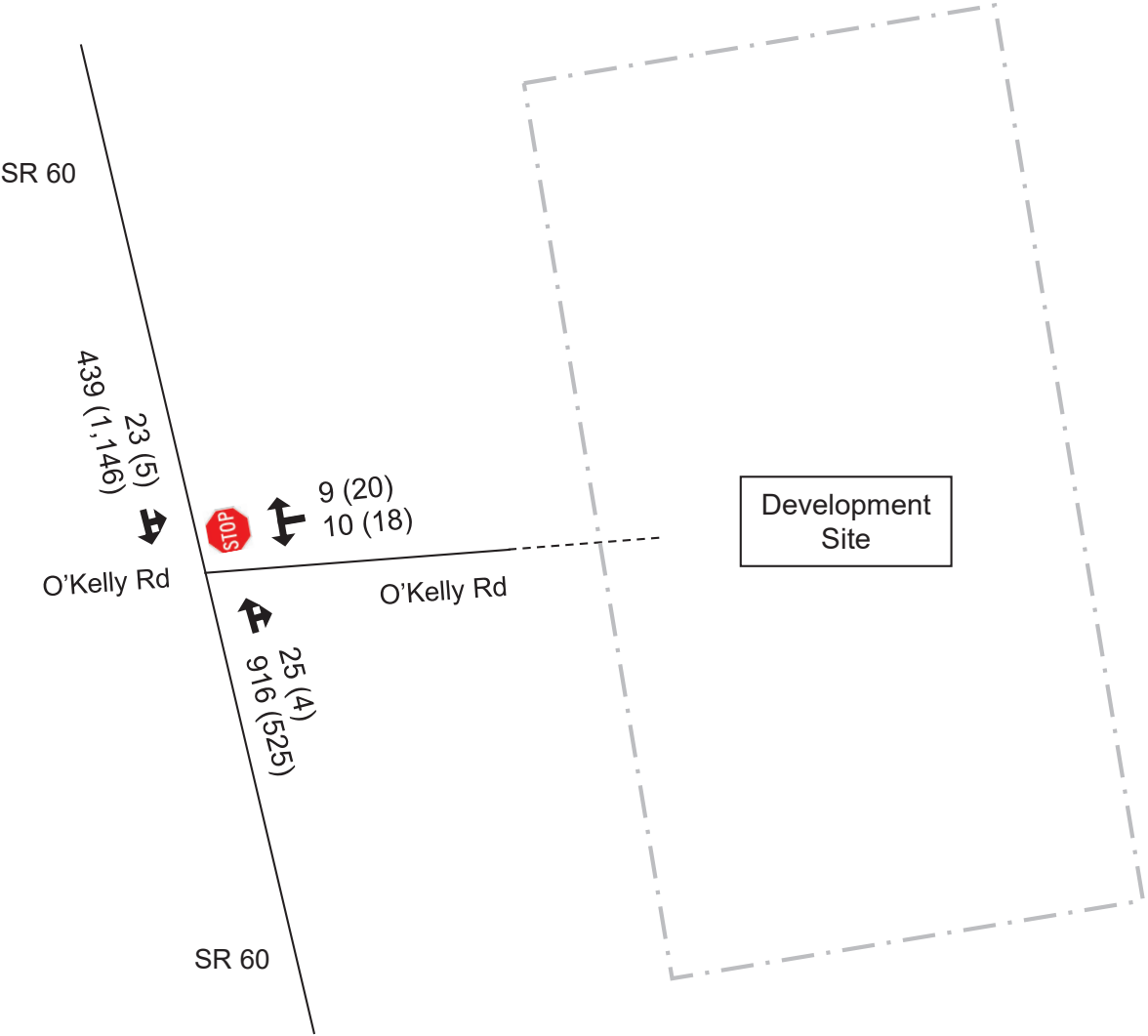
Traffic Impact Study
2400 O'Kelly Road
Hall County, Georgia

Existing Traffic
Conditions

Figure
4

LEGEND:

- ← Existing Roadway Laneage
- XX AM Peak Hour Traffic Volumes
- (XX) PM Peak Hour Traffic Volumes



Not to Scale



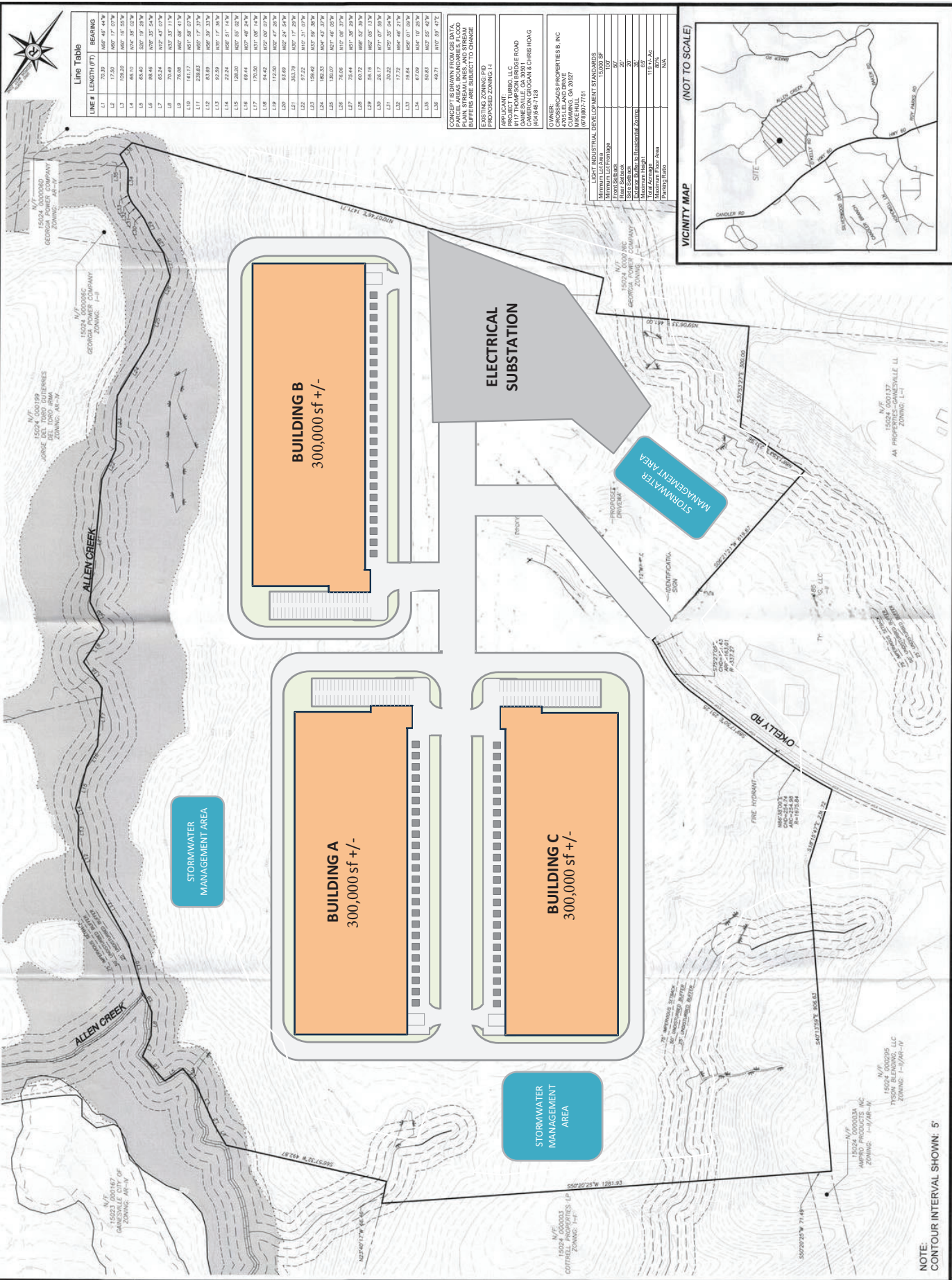
Traffic Impact Study
2400 O'Kelly Road
Hall County, Georgia

Future Build
(Year 2032)
Conditions

Figure
5

Appendix B

Concept Plan



Appendix C

Traffic Count Data



[Click here for Map](#)

Peak Hour Turning Movement Count

Hall County, GA



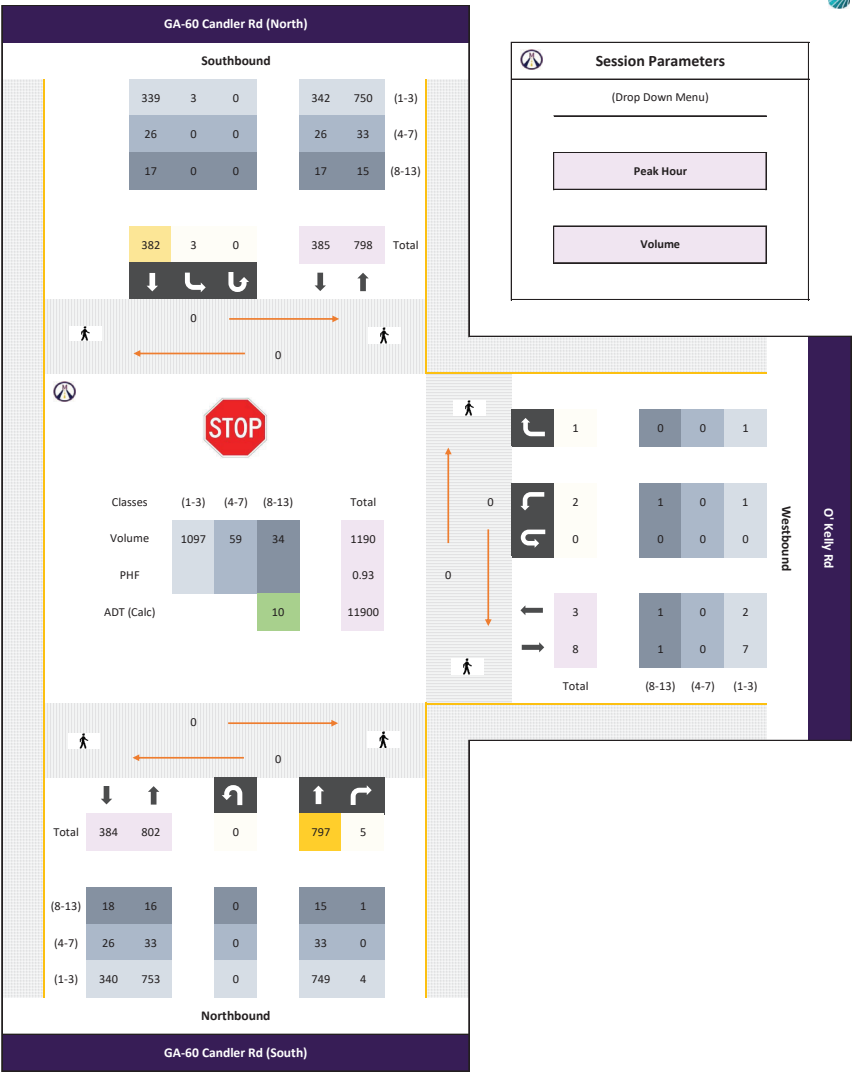
Marr Traffic
DATA COLLECTION

www.marrtraffic.com



Wednesday, August 20, 2025		
	Fair	79°F
Period	0700 - 0900	APPLY
Peak Hour	0700 - 0800	APPLY
Global PH	0700 - 0800	APPLY

* the Peak Hour Diagram does not include bicycles



Hall County, GA



[Click here for Map](#)

Wednesday, August 20, 2025		
	Fair	79°F
Period	1600 - 1800	APPLY
Peak Hour	1700 - 1800	APPLY
Global PH	1700 - 1800	APPLY

* the Peak Hour Diagram does not include bicycles

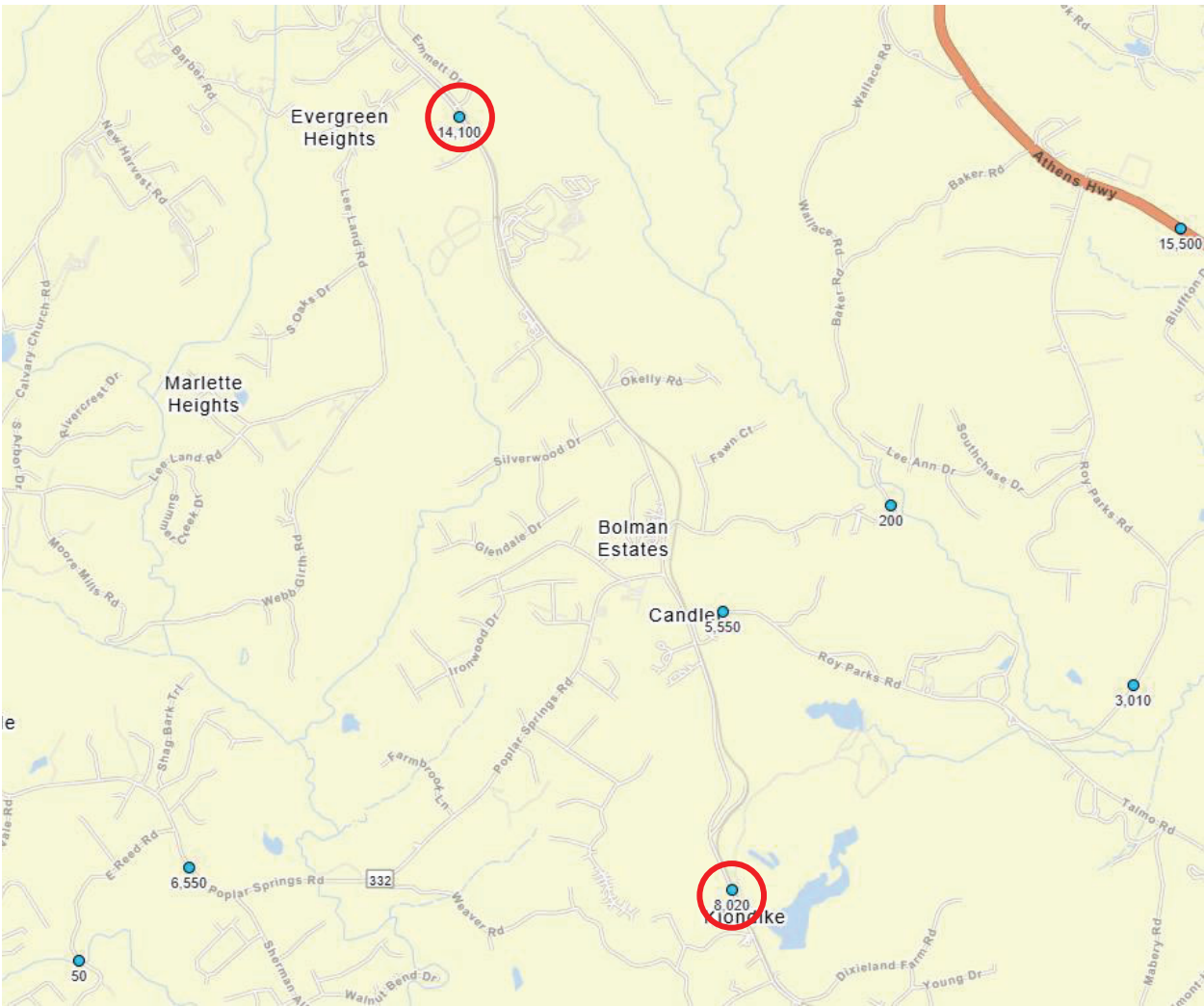


[illegible]

Appendix D

GDOT Traffic Data

Location Map of GDOT Count Stations



0000139_0303 - 139-0303 - CRY 075500 R**County:** Hall**Route number:** 00006000**LRS section:** 1391006000**Functional class:** 4U - Minor Arterial (Urban)**Coordinates:** 34.2388542921556, -83.7967603300136**Site Data****Count History**

Year	Month	Count type	Duration	Count	ADT
2025	April	Class	48 hours	32,693	16,346
2021	July	Class	48 hours	28,902	14,451
2019	January	Class	48 hours	25,716	12,858
2015	June	Class	48 hours	22,637	11,318
2011	September	Class	48 hours	20,415	10,208
2010	January	Class	48 hours	18,319	9,160

**0000139_0301 - 139-0301 - CRT 067100 L****County:** Hall**Route number:** 00006000**LRS section:** 1391006000**Functional class:** 5U - Major Collector (Urban)**Coordinates:** 34.19701991, -83.77895191**Site Data****Count History**

Year	Month	Count type	Duration	Count	ADT
2025	April	Class	48 hours	19,035	9,518
2022	April	Volume	48 hours	17,434	8,717
2019	December	Volume	48 hours	15,411	7,706
2018	May	Class	48 hours	13,263	6,632
2016	July	Volume	48 hours	11,164	5,582
2014	April	Volume	48 hours	11,480	5,740
2012	January	Volume	48 hours	9,102	4,551



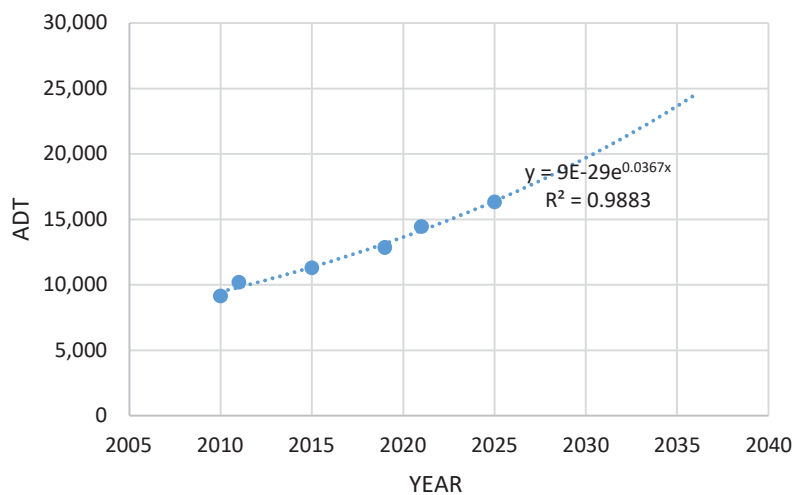
Count Station: GDOT #139-0303
 Street: SR 60
 Location: North of O'Kelly Rd
 Source: GDOT

YEAR	ADT	TREND
2010	9,160	9500
2011	10,208	9800
2012		10200
2013		10600
2014		10900
2015	11,318	11400
2016		11800
2017		12200
2018		12700
2019	12,858	13200
2020		13600
2021	14,451	14200
2022		14700
2023		15200
2024		15800
2025	16,346	16400
2026		17000
2027		17600
2028		18300
2029		19000
2030		19700
2031		20400
2032		21200
2033		22000
2034		22800
2035		23700
2036		24600

16-Years of Count Data

Trend Annual Historic Compound Growth Rate

3.73%



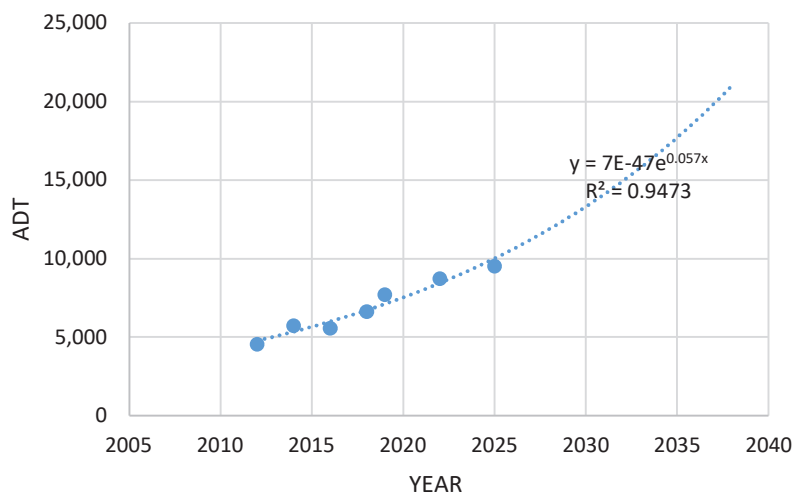
Count Station: GDOT #139-0301
 Street: SR 60
 Location: South of O'Kelly Rd
 Source: GDOT

YEAR	ADT	TREND
2012	4,551	4800
2013		5100
2014	5,740	5300
2015		5700
2016	5,582	6000
2017		6300
2018	6,632	6700
2019	7,706	7100
2020		7500
2021		8000
2022	8,717	8400
2023		8900
2024		9500
2025	9,518	10000
2026		10600
2027		11200
2028		11900
2029		12600
2030		13300
2031		14100
2032		14900
2033		15800
2034		16700
2035		17700
2036		18700
2037		19800
2038		21000

14-Years of Count Data

Trend Annual Historic Compound Growth Rate

5.91%



Appendix E

Intersection Volume Development

Traffic Impact Study
 Project Turbo Traffic Impact Study
 Intersection Traffic Volumes

Intersection: #1 - SR 60 and O'Kelly Rd

A.M. PEAK HOUR

Condition	SR 60 Northbound			SR 60 Southbound			n/a Eastbound			O'Kelly Rd Westbound		
	L	T	R	L	T	R	L	T	R	L	T	R
Existing Volumes (2025)	0	797	5	3	382	0	0	0	0	2	0	1
Annual Growth Rate	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Growth Factor	1.149	1.149	1.149	1.149	1.149	1.149	1.149	1.149	1.149	1.149	1.149	1.149
No-Build Condition (2032)	0	916	6	3	439	0	0	0	0	2	0	1
Trip Distribution IN			50%	50%								
Trip Distribution OUT										50%		50%
Development Trips	0	0	19	20	0	0	0	0	0	8	0	8
Total Project Trips	0	0	19	20	0	0	0	0	0	8	0	8
Buildout Total (2032)	0	916	25	23	439	0	0	0	0	10	0	9

P.M. PEAK HOUR

Condition	SR 60 Northbound			SR 60 Southbound			n/a Eastbound			O'Kelly Rd Westbound		
	L	T	R	L	T	R	L	T	R	L	T	R
Existing Volumes (2025)	0	457	0	0	998	0	0	0	0	0	0	2
Annual Growth Rate	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Growth Factor	1.149	1.149	1.149	1.149	1.149	1.149	1.149	1.149	1.149	1.149	1.149	1.149
No-Build Condition (2032)	0	525	0	0	1,146	0	0	0	0	0	0	2
Trip Distribution IN			50%	50%								
Trip Distribution OUT										50%		50%
Development Trips	0	0	4	5	0	0	0	0	0	18	0	18
Total Project Trips	0	0	4	5	0	0	0	0	0	18	0	18
Buildout Total (2032)	0	525	4	5	1,146	0	0	0	0	18	0	20

Appendix F

Capacity Analysis Reports

Existing Conditions – Year 2025

HCM 7th TWSC
1: SR 60 & O'Kelly Rd

AM Peak Hour
Existing 2025

Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	2	1	797	5	3	382
Future Vol, veh/h	2	1	797	5	3	382
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	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	1	857	5	3	411
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	1277	860	0	0	862	0
Stage 1	860	-	-	-	-	-
Stage 2	417	-	-	-	-	-
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	184	356	-	-	780	-
Stage 1	415	-	-	-	-	-
Stage 2	665	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	183	356	-	-	780	-
Mov Cap-2 Maneuver	183	-	-	-	-	-
Stage 1	415	-	-	-	-	-
Stage 2	661	-	-	-	-	-
Approach	WB	NB		SB		
HCM Ctrl Dly, s/v	21.75	0		0.08		
HCM LOS	C					
Minor Lane/Major Mvmt	NBT	NBRWBLn1		SBL	SBT	
Capacity (veh/h)	-	-	218	14	-	
HCM Lane V/C Ratio	-	-	0.015	0.004	-	
HCM Ctrl Dly (s/v)	-	-	21.8	9.6	0	
HCM Lane LOS	-	-	C	A	A	
HCM 95th %tile Q(veh)	-	-	0	0	-	

HCM 7th TWSC
1: SR 60 & O'Kelly Rd

PM Peak Hour
Existing 2025

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	2	457	0	0	998
Future Vol, veh/h	0	2	457	0	0	998
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	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	2	519	0	0	1134
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	1653	519	0	0	519	0
Stage 1	519	-	-	-	-	-
Stage 2	1134	-	-	-	-	-
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	108	557	-	-	1047	-
Stage 1	597	-	-	-	-	-
Stage 2	307	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	108	557	-	-	1047	-
Mov Cap-2 Maneuver	108	-	-	-	-	-
Stage 1	597	-	-	-	-	-
Stage 2	307	-	-	-	-	-
Approach	WB	NB		SB		
HCM Ctrl Dly, s/v	11.49	0		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	557	1047	-	
HCM Lane V/C Ratio	-	-	0.004	-	-	
HCM Ctrl Dly (s/v)	-	-	11.5	0	-	
HCM Lane LOS	-	-	B	A	-	
HCM 95th %tile Q(veh)	-	-	0	0	-	

Future No-Build Conditions – Year 2032

HCM 7th TWSC
1: SR 60 & O'Kelly Rd

AM Peak Hour
No-Build 2032

Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	2	1	916	6	3	439
Future Vol, veh/h	2	1	916	6	3	439
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	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	1	985	6	3	472
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	1467	988	0	0	991	0
Stage 1	988	-	-	-	-	-
Stage 2	478	-	-	-	-	-
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	141	300	-	-	697	-
Stage 1	360	-	-	-	-	-
Stage 2	623	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	140	300	-	-	697	-
Mov Cap-2 Maneuver	140	-	-	-	-	-
Stage 1	360	-	-	-	-	-
Stage 2	619	-	-	-	-	-
Approach	WB	NB		SB		
HCM Ctrl Dly, s/v	26.56	0		0.07		
HCM LOS	D					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	170	12	-	
HCM Lane V/C Ratio	-	-	0.019	0.005	-	
HCM Ctrl Dly (s/v)	-	-	26.6	10.2	0	
HCM Lane LOS	-	-	D	B	A	
HCM 95th %tile Q(veh)	-	-	0.1	0	-	

HCM 7th TWSC
1: SR 60 & O'Kelly Rd

PM Peak Hour
No-Build 2032

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	2	525	0	0	1146
Future Vol, veh/h	0	2	525	0	0	1146
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	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	2	597	0	0	1302
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1899	597	0	0	597	0
Stage 1	597	-	-	-	-	-
Stage 2	1302	-	-	-	-	-
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	76	503	-	-	980	-
Stage 1	550	-	-	-	-	-
Stage 2	255	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	76	503	-	-	980	-
Mov Cap-2 Maneuver	76	-	-	-	-	-
Stage 1	550	-	-	-	-	-
Stage 2	255	-	-	-	-	-
Approach	WB	NB	SB			
HCM Ctrl Dly, s/v	12.19	0	0			
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	503	980	-	
HCM Lane V/C Ratio	-	-	0.005	-	-	
HCM Ctrl Dly (s/v)	-	-	12.2	0	-	
HCM Lane LOS	-	-	B	A	-	
HCM 95th %tile Q(veh)	-	-	0	0	-	

Future Build Conditions – Year 2032

HCM 7th TWSC
1: SR 60 & O'Kelly Rd

AM Peak Hour
Build 2032

Intersection						
Int Delay, s/veh	0.6					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W	W	T	T	T	T
Traffic Vol, veh/h	10	9	916	25	23	439
Future Vol, veh/h	10	9	916	25	23	439
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	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	10	985	27	25	472
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1520	998	0	0	1012	0
Stage 1	998	-	-	-	-	-
Stage 2	522	-	-	-	-	-
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	131	296	-	-	685	-
Stage 1	356	-	-	-	-	-
Stage 2	596	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	124	296	-	-	685	-
Mov Cap-2 Maneuver	124	-	-	-	-	-
Stage 1	356	-	-	-	-	-
Stage 2	567	-	-	-	-	-
Approach	WB	NB	SB			
HCM Ctrl Dly, s/v	28.84	0	0.52			
HCM LOS	D					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	171	90	-	
HCM Lane V/C Ratio	-	-	0.119	0.036	-	
HCM Ctrl Dly (s/v)	-	-	28.8	10.5	0	
HCM Lane LOS	-	-	D	B	A	
HCM 95th %tile Q(veh)	-	-	0.4	0.1	-	

HCM 7th TWSC
1: SR 60 & O'Kelly Rd

PM Peak Hour
Build 2032

Intersection						
Int Delay, s/veh	1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	18	20	525	4	5	1146
Future Vol, veh/h	18	20	525	4	5	1146
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	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	20	23	597	5	6	1302
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1913	599	0	0	601	0
Stage 1	599	-	-	-	-	-
Stage 2	1314	-	-	-	-	-
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	75	502	-	-	976	-
Stage 1	549	-	-	-	-	-
Stage 2	251	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	73	502	-	-	976	-
Mov Cap-2 Maneuver	73	-	-	-	-	-
Stage 1	549	-	-	-	-	-
Stage 2	246	-	-	-	-	-
Approach	WB	NB	SB			
HCM Ctrl Dly, s/v	44.64	0	0.04			
HCM LOS	E					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	133	8	-	
HCM Lane V/C Ratio	-	-	0.325	0.006	-	
HCM Ctrl Dly (s/v)	-	-	44.6	8.7	0	
HCM Lane LOS	-	-	E	A	A	
HCM 95th %tile Q(veh)	-	-	1.3	0	-	