300 MARKETPLACE

DRI #3252

Market Place Boulevard
City of Locust Grove, Georgia

PREPARED FOR:

AHAD Properties, LLC

PREPARED BY:

KCI Technologies, Inc.
2160 Satellite Blvd, Suite 130
Duluth, GA 30097
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April 2021

KCI Project # 242006576

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April 2021

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EXECUTIVE SUMMARY

The purpose of this study is to evaluate the potential traffic impacts of the proposed *DRI #3252 300 Marketplace* development. The site is in the City of Locust Grove, Georgia.

The development proposes a maximum of 540 residential units (apartments), 20,000 SF of retail space, 175,000 SF of mini-storage, and 5,000 SF of fast-food restaurant. Because the proposed development is located in the 'Developing Suburbs' as indicated in ARC's Unified Growth Policy Map and meets the DRI criteria #8 - Mixed Use (Gross Square footage exceeding 500,000SF), the development is considered a Development of Regional Impact.

The development two full movement driveways located on Market Place Blvd. The expected completion (built-out) of the development is 2023. The site plan (see Appendix B) for the development illustrates the conditions in the study area, including the proposed development uses and access locations.

This study includes an analysis of existing traffic conditions and future traffic conditions. The future conditions analysis was performed for two scenarios – No-Build (including background growth, and Build (with the 300 Marketplace development) to compare the impacts.

Per GRTA's Letter of Understanding (LOU), the traffic impact study network consisted of the following intersections:

- Bill Gardner Pkwy @ I-75 SB Ramps (traffic signal)
- Bill Gardner Pkwy @ I-75 NB Ramps (traffic signal)
- Bill Gardner Pkwy @ Tanger Blvd/Market Place Blvd (traffic signal)
- Market Place Blvd @ SR 42 (stop-control)
- Market Place Blvd @ Wal-mart South driveway/Proposed Driveway #1 (stop-control)
- Market Place Blvd @ Wal-mart Sorth driveway/Proposed Driveway #2 (stop-control)
- Bill Gardner Pkwy @ SR 42 (traffic signal)

Based on the year 2021 Existing Conditions and 2023 No-Build Conditions capacity analysis, three intersections require improvements in order to meet the level of service standard. The No-Build Conditions analysis includes background growth in traffic volumes and two DRI developments in the area.

The recommended improvements are:

- Bill Gardner Pkwy at Tanger Blvd/Market Place Blvd (#3):
  - Add a right-turn signal overlap phase for the southbound Market Place Blvd approach
  - Along Bill Gardner Parkway, install a second eastbound left-turn lane (dual left-turns) and a second receiving lane along northbound Market Place Blvd
  - Note: Maintain the traffic signal split-phasing for the north and south approaches.
- Market Place Blvd at SR 42 (#4):
  - Install a traffic signal (when meets warrants)
- Bill Gardner Pkwy at SR 42 (#7):
  - Along Bill Gardner Parkway, install a second eastbound left-turn lane (dual left-turns) and a second receiving lane along northbound SR 42

Based on the year 2023 Build Conditions analysis, two intersections require improvements in order to meet the level of service standard. The Build Conditions analysis includes the No-Build traffic volumes plus the traffic from the 300 Marketplace development.

The recommended improvements are:

- Bill Gardner Pkwy at I-75 SB Ramps (#1):
  - Install a dedicated eastbound right-turn lane along Bill Gardner Pkwy

EXECUTIVE SUMMARY

To provide an acceptable level of service at the intersection of Bill Gardner Pkwy at Tanger Blvd/Market Place Blvd, improvement options were considered and analyzed in addition to the No-Build identified improvements. Section 4.5 provides information about the need for and considerations at this intersection. For the purposes of the DRI analysis, one geometric option was identified:

- Bill Gardner Pkwy at Tanger Blvd/Market Place Blvd (#3):
    - Add a dedicated right-turn lane along northbound Tanger Blvd by removing the median and re-striping the travel lanes. This would result in three approach lanes (left-turn lane, shared left-turn/through lane, right-turn lane).

Recommendations at the two proposed driveways are provided below as well potential recommendations to accommodate pedestrians crossing Market Place Blvd.

- Market Place Blvd at Proposed Driveway #1:
    - Site Driveway - west leg:
        - Stop control with one exit lane (shared left-turn/through/right-turn lane)
        - One lane entering
    - Add new southbound right-turn deceleration lane along Market Place Blvd
    - Restripe the existing hatched center lane along Market Place Blvd to provide a dedicated northbound left-turn lane
- Market Place Blvd at Proposed Driveway #1:
    - Site Driveway - west leg:
        - Stop control with two exit lanes (shared left-turn/through lane, separate right-turn lane)
        - One lane entering
    - Add new southbound right-turn deceleration lane along Market Place Blvd
    - Restripe the existing hatched center lane along Market Place Blvd to provide a dedicated northbound left-turn lane

To enhance pedestrian safety and provide improved multimodal travel, potential improvement options to aid crossing Market Place Blvd were considered. Two pedestrian crossing improvement options were considered:

- One option would be to add a 40-ft raised median, or “medianette”, half the distance between the two proposed site driveways. The small median located in the center of the street provides a refuge for pedestrians to make a two-stage crossing of Market Place Blvd.
- The second option would be to install a marked crosswalk with a Rectangular Rapid Flashing Beacon (RRFB).

Either improvement option is viable and will enhance pedestrian safety for crossing Market Place Blvd. The study recommends the developer and the City of Locust Grove agree on the preferred option and install as part of the development’s roadway improvements.

TABLE OF CONTENTS

TABLES

APPENDIX

1.0 Existing Conditions

1.1 Site Conditions

The proposed site is located along the west side of Market Place Blvd, and east side of I-75, in the City of Locust Grove, Georgia. 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 access points. (Figures included in Appendix A)

The development proposes two full movement driveways:

- Proposed Driveway #1 on Market Place Blvd at the Wal-mart south driveway
- Proposed Driveway #2 on Market Place Blvd at the Wal-mart north driveway

1.2 Roadway Conditions

Market Place Boulevard is a north-south oriented roadway in the vicinity of the proposed development. Market Place Blvd, adjacent to the site, is a three-lane roadway consisting of one travel lane in each direction with a center two-way left-turn lane. Market Place Blvd has a posted speed limit of 35 MPH adjacent to the development. The GDOT roadway classification is a Local Road (Urban). The roadway consists of curbed shoulders, with an existing sidewalk along the east side of Market Place Blvd adjacent to the Wal-mart.

Bill Gardner Parkway is an east-west oriented roadway. Bill Gardner Parkway consists of four travel lanes with a center two-way left-turn lane. Bill Gardner Parkway has a posted speed limit of 35 MPH. The GDOT roadway classification is Minor Arterial (Urban). The roadway consists of curbed shoulders and existing sidewalks along both sides of the street.

SR 42 is a north-south oriented roadway in the study area. SR 42 is a two-lane roadway with a posted speed limit of 45 MPH south of Market Place Blvd and 55 MPH north of Market Place Blvd. The GDOT roadway classification is Minor Arterial (Urban). The roadway consists of some sections of grass shoulders and some segments with curb and sidewalk on the west side of SR 42.

Preliminary review indicates sight distance to be acceptable along Market Place Boulevard at both proposed driveway locations. Verification would be the responsibility of the driveway designer.

1.3 Traffic Volumes

Due to COVID-19 impacts to traffic volumes, the GRTA DRI traffic studies have been utilizing historical traffic count data where available. The most recent DRI #2939 performed traffic counts at five of the study intersections in March 2019. This traffic count data was used in the traffic study. Additionally, new traffic data (intersection turning movement counts) were collected at the two proposed project driveways / Wal-mart driveways.

A 24-hour volume count was performed on Wednesday, March 3, 2021 on Market Place Blvd, west of SR 42. The count reported a total of 7,731 vehicles per day.

Intersection turning movement counts were performed at two study intersections on Wednesday, March 3, 2021 during the 7:00-9:00am and 4:00-6:00pm peak period. The traffic counts were performed during a typical weekday when public schools were in session.

Due to COVID-19's effect on traffic volumes, the 24-hour volume count was compared to the traffic count data from March 2019 (see below). The AM and PM peak hour volume was higher in 2021 than 2019. Based on discussions with GRTA, it was decided to utilize the 2021 turning movement counts with no adjustments factor applied at the two proposed driveway locations.

> From the TMC in DRI #2939 (collected 3/21/2019):
> AM: WB = 353, EB = 116; total 469 (7:15-8:15AM)
> PM: WB = 375, EB = 236; total 611 (4:45-5:45PM)
>
> 24-Hour tube count (same peak hours) collected 3/3/2021:
> AM: WB = 390, EB = 151; total = 541
> PM: WB = 417, EB = 267; total = 684

Additionally, GRTA requested the existing year be analyzed as year 2021. This required increasing the previously collected year 2019 traffic volumes based on the agreed upon historical growth rate of 2.0% per year.

Figure 3 (in Appendix A) illustrates the year 2021 existing traffic volumes. The traffic counts are included in Appendix C.

2.0 Future Conditions

2.1 Future No-Build Traffic Volumes

Future No-Build traffic volumes were developed by reviewing the historical traffic volumes on area roadways within the vicinity of the project and historic population growth in the county (+/-2 percent annually the past five years). Two GDOT count stations in the area, located on SR 42 and Bill Gardner Parkway, indicated historic growth rates between 1.6% and 4.0%. Based on the GRTA LOU, a 2.0% per year growth rate to account for background traffic volume growth was used on all roadways except at one intersection. A 2.5% per year growth rate to account for background traffic volume growth was used at the intersection of SR 42 at Market Place Blvd.

For the purposes of this study the proposed development is expected to be completed and opened by 2023. A 2.0% per year growth rate was applied to the year 2021 existing volumes. Additionally, trip generation for any other major developments currently underway in the study area were taken into consideration. Trips from DRI# 2939 (Gardiner 42 Expansion) and DRI# 2687 (75 South Logistics Center) were added into the analysis based on the values included in the Traffic Report for DRI #2939. The 2023 No-Build traffic volumes are indicated in the Intersection Volume Development tables included in Appendix E.

2.2 Future No-Build Roadway Conditions

A review of Georgia DOT and Henry County planned and programmed transportation projects was performed in the study area. There are four projects located in the vicinity of the project.

Information on GDOT's projects is provided below and in the Appendix.

1. ARC #HE-126B / GDOT PI 0000562 – A project to widen Bill Gardner Pkwy from SR 155 to I-75; 2 lanes to 4 lanes to Lester Mill Rd & 2 lanes to 6 lanes to I-75. The network year is 2030.
2. ARC #HE-202 / GDOT PI 0015823 – A project to widen SR 42/US 23 from Bill Garner Parkway to Peeksville Road. A second southbound lane is proposed. The network year is 2030.
3. ARC #AR-318 / GDOT PI 0014203 – a project to add northbound Commercial Vehicle Lanes on I-75 from I-475 to SR 155. The network year 2030.

The Henry County 2016 Comprehensive Transportation Plan was reviewed. During the DRI Pre-review meeting, Henry County staff indicated the County is in the process of identifying a project at the intersection of SR 42 at Bill Gardner Parkway.

For the purposes of this traffic analysis, no roadway improvement projects were included in the 2023 No-Build conditions.

3.0 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, Tenth Edition. The development proposes a maximum of 540 residential units (apartments), 20,000 SF of retail space, 175,000 SF of mini-storage, and 5,000 SF of fast-food restaurant. Due to the development type, pass-by reductions were included for the retail use, and internal capture reductions were included between the residential and retail uses. **Table 1** below summarizes the trips expected daily, during the AM peak hour, and during the PM peak hour for the development.

TABLE 1 - TRIP GENERATION
300 Marketplace DRI #3252

Land Use		Units	Intensity	Daily Trips	AM Peak Hour of Adjacent Street			PM Peak Hour of Adjacent Street		
				Two-way	Total	In	Out	Total	In	Out
151	Mini-Warehouse	gross SF	175,000	264	18	11	7	30	14	16
220	Multifamily Housing (10th Ed)	DU	540	4,042	237	55	182	265	167	98
820	Shopping Center	SF	20,000	2,012	162	100	62	165	79	86
934	Fast-Food Restaurant with Drive-Through Window	SF	5,000	2,355	201	103	98	163	85	78
Gross Trips (Total without reductions)				8,673	618	269	349	623	345	278
Total Mixed-Use Reductions				-874	0	0	0	-70	-35	-35
Total Pass-By Reductions				-1,676	-54	-27	-27	-122	-61	-61
Net New Trips (Total with reductions)				6,123	564	242	322	431	249	182
Driveway Volumes				7,799	618	269	349	553	310	243

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 intersections and development driveways.

PROPOSED DEVELOPMENT TRAFFIC

The directional distribution for the proposed development is shown in **Figure 4** (in Appendix A) and estimated to be:

Residential:

- 25% to/from the north along Market Place Blvd
- 75% to/from the south along Market Place Blvd

Retail/Institutional:

- 25% to/from the north along Market Place Blvd
- 75% to/from the south along Market Place Blvd

3.3 Future Build Traffic Volumes

The 2023 future Build traffic volumes were calculated by adding the proposed development (300 Marketplace) traffic volumes to the projected 2023 No-Build traffic volumes. **Figure 5** (in Appendix A) illustrates the 2023 Build traffic volumes.

4.0 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 *2000 Highway Capacity Manual*. The *Synchro Studio 10* software, which utilizes the HCM 2000 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 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 motorists 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 controlled delay incurred for vehicles on the stop controlled approach. Controlled delay for unsignalized intersections includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration 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. The level-of-service criteria for two-way stop-controlled and all-way stop-controlled intersections is presented in **Table 2**. For stop-controlled intersections, LOS E and F exist when there are insufficient gaps in traffic, resulting in long delays. Low level of service for stop-controlled approaches are not uncommon at major cross-streets.

Table 2
Level of Service Summary Criteria for Unsignalized Intersections

LOS	Average Delay (seconds)
A	<= 10
B	> 10 and <= 15
C	> 15 and <= 25
D	> 25 and <= 35
E	> 35 and <= 50
F	> 50

Source: 2000 Highway Capacity Manual

Level-of-service at signalized intersections is defined in terms of average controlled delay per vehicle. Controlled delay for vehicles includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration

delay. The level-of-service criteria for signalized intersections is presented in **Table 3**. Level-of-service "E" is typically considered to be the limit of acceptable delay.

Table 3
Level of Service Summary Criteria for Signalized Intersections

LOS	Average Delay (seconds)
A	<= 10
B	> 10 and <= 20
C	> 20 and <= 35
D	> 35 and <= 55
E	> 55 and <= 80
F	> 80

Source: 2000 Highway Capacity Manual

4.1 Existing Conditions Capacity Analysis

Capacity analysis was performed for the year 2021 traffic volumes and the existing roadway conditions. The existing traffic conditions are illustrated in **Figure 3**. **Table 4** summarizes the results of the capacity analysis. Six of the intersections operate at or above level of service D. One of the intersections operate at LOS E or F. Based on GRTA's technical guidelines, the LOS standard is shown below for each intersection.

Table 4
Level of Service Summary, Existing Conditions

	Intersection	Traffic Control	Approach	LOS Standard	AM Peak Hour LOS (Delay*)	PM Peak Hour LOS (Delay*)
1	Bill Gardner Pkwy at I-75 SB Ramps	Signal	Overall	D	C (24.6)	D (40.8)
2	Bill Gardner Pkwy at I-75 NB Ramps	Signal	Overall	D	A (8.0)	A (7.5)
3	Bill Gardner Pkwy at Tanger Blvd/Market Place Blvd	Signal	Overall	D	D (42.7)	D (44.7)
4	Market Place Blvd at SR 42	Side-Street Stop Control	Eastbound	E	D (28)	F (67.8)
5	Market Place Blvd at Wal-Mart South Driveway/Proposed Driveway #1	Side-Street Stop Control	Westbound	D	B (11.2)	B (13.4)
6	Market Place Blvd at Wal-Mart North Driveway /Proposed Driveway #2	Side-Street Stop Control	Westbound	D	B (10)	A (9.1)
7	Bill Gardner Pkwy at SR 42	Signal	Overall	D	D (35.1)	C (26.5)

**Average Delay in seconds*

4.2 Future No-Build Conditions Capacity Analysis

Capacity analysis was performed for the year 2023 traffic volumes and the existing roadway conditions. **Table 5** summarizes the results of the capacity analysis. Four of the study intersections are expected to operate at an acceptable Level of Service (LOS); however, three intersections require improvements in order to meet the level of service standard. Section 4.3 identifies the improvements analyzed.

Table 5
Level of Service Summary, No-Build Conditions

	Intersection	Traffic Control	Approach	LOS Standard	AM Peak Hour LOS (Delay*)	PM Peak Hour LOS (Delay*)
1	Bill Gardner Pkwy at I-75 SB Ramps	Signal	Overall	D	C (31.6)	D (48.2)
2	Bill Gardner Pkwy at I-75 NB Ramps	Signal	Overall	D	A (3.9)	A (5.8)
3	Bill Gardner Pkwy at Tanger Blvd/Market Place Blvd	Signal	Overall	D	D (50.1)	E (55.3)
4	Market Place Blvd at SR 42	Side-Street Stop Control	Eastbound	E	F (91.3)	F (274)
5	Market Place Blvd at Wal-Mart South Driveway/Proposed Driveway #1	Side-Street Stop Control	Westbound	D	B (13.1)	C (24.2)
6	Market Place Blvd at Wal-Mart North Driveway /Proposed Driveway #2	Side-Street Stop Control	Westbound	D	B (11.6)	A (9.9)
7	Bill Gardner Pkwy at SR 42	Signal	Overall	D	E (66.1)	D (38.3)

**Average Delay in seconds*

The intersection of Bill Gardner Pkwy at Tanger Blvd/Market Place Blvd is indicated to operate at LOS E during the PM peak hour, below the LOS D standard. This is a high volume intersection where the traffic signal operates with split-phasing for the north and south approaches (Tanger Blvd and Market Place Blvd).

In the No-Build Conditions, the stop-control westbound approach of Market Place Blvd at SR 42 is indicated to operate at LOS F and have high average vehicle delay during the AM and PM peak hours. The stop-control approach has a two-lane approach with a separate left-turn and right-turn lane. Left-turn and right-turn vehicle must wait for gaps in the main street traffic before proceeding. This results in the intersection operating below the LOS E standard.

The intersection of Bill Gardner Pkwy at SR 42 is indicated to operate at LOS E during the AM peak hour, below the LOS D standard.

4.3 Future No-Build Conditions with Improvements Capacity Analysis

To provide an acceptable level of service at three intersections, improvement options were considered and analyzed. To provide an acceptable level of service at the intersection of Market Place Blvd at SR 42, the installation of a traffic signal was analyzed. A traffic signal warrant analysis would be required prior to installation of a traffic signal. The results of the capacity analysis are indicated in **Table 6**.

The recommended improvements are:

- Bill Gardner Pkwy at Tanger Blvd/Market Place Blvd (#3):
  - Add a right-turn signal overlap phase for the southbound Market Place Blvd approach
  - Along Bill Gardner Parkway, install a second eastbound left-turn lane (dual left-turns) and a second receiving lane along northbound Market Place Blvd
  - Note: Maintain the traffic signal split-phasing for the north and south approaches.
- Market Place Blvd at SR 42 (#4):
  - Install a traffic signal (when meets warrants)
- Bill Gardner Pkwy at SR 42 (#7):
  - Along Bill Gardner Parkway, install a second eastbound left-turn lane (dual left-turns) and a second receiving lane along northbound SR 42 (Note: This recommendation was included in DRI #2939 report as a No-Build improvement)

Table 6
Level of Service Summary, No-Build Conditions WITH IMPROVEMENT

Intersection		Traffic Control	Approach	LOS Standard	AM Peak Hour LOS (Delay*)	PM Peak Hour LOS (Delay*)
3	Bill Gardner Pkwy at Tanger Blvd/Market Place Blvd	Signal	Overall	D	D (48.3)	D (54.3)
4	Market Place Blvd at SR 42	Signal	Overall	E	B (12.5)	B (15.1)
7	Bill Gardner Pkwy at SR 42	Signal	Overall	D	D (39.1)	C (34.2)

**Average Delay in seconds*

4.4 Future Build Conditions Capacity Analysis

Capacity analysis was performed for the year 2023 Future Conditions and includes the No-Build traffic volumes plus the 300 Marketplace development volumes. The No-Build with improvement roadway conditions are included in the analysis. The Build traffic conditions and volumes are illustrated in **Figure 5** (in Appendix A). **Table 7** summarizes the results of the capacity analysis.

Table 7
Level of Service Summary, Build Conditions

	Intersection	Traffic Control	Approach	LOS Standard	AM Peak Hour LOS (Delay*)	PM Peak Hour LOS (Delay*)
1	Bill Gardner Pkwy at I-75 SB Ramps	Signal	Overall	D	C (30.7)	E (57.4)
2	Bill Gardner Pkwy at I-75 NB Ramps	Signal	Overall	D	A (3.5)	A (5.3)
3	Bill Gardner Pkwy at Tanger Blvd/Market Place Blvd	Signal	Overall	D	D (51.7)	E (56.7)
4	Market Place Blvd at SR 42	Signal	Overall	E	B (14.1)	A (9.6)
5	Market Place Blvd at Wal-Mart South Driveway/Proposed Driveway #1	Side-Street Stop Control	Westbound	D	D (33.2)	F (177.8)
			Eastbound	D	C (20.8)	E (36.3)
6	Market Place Blvd at Wal-Mart North Driveway/Proposed Driveway #2	Side-Street Stop Control	Westbound	D	D (29.1)	B (10.5)
			Eastbound	D	C (20.8)	E (38.3)
7	Bill Gardner Pkwy at SR 42	Signal	Overall	D	D (45.3)	C (25.4)

**Average Delay in seconds*

Three of the study intersections are expected to operate at an acceptable Level of Service (LOS); however, four intersections require the identification of improvements in order to meet the level of service standard. Section 4.5 identifies the improvements analyzed.

The intersection of Bill Gardner Pkwy at I-75 SB Ramps is indicated to operate at LOS E during the PM peak hour, below the LOS D standard.

The intersection of Bill Gardner Pkwy at Tanger Blvd/Market Place Blvd is indicated to operate at LOS E during the PM peak hour, below the LOS D standard (55 seconds of delay).

At the Wal-Mart South Driveway, the westbound side-street approach is identified to have long average delay during the PM peak hour. Similarly, the Proposed Driveway #1 reports a LOS E during the PM peak hour. It is not uncommon for vehicles at a side-street stop approach to experience long delay when turning onto a major

roadway. The traffic study does not identify the need for an improvement; however, GRTA required (as part of the Notice of Decision) a capacity analysis for a traffic signal. The results of the capacity analysis were: LOS B (11.7 seconds average delay) during the AM peak hour and LOS B (12.1 seconds average delay) during the PM peak hour.

A traffic signal warrant analysis would be required prior to installation of a traffic signal. The side-street left-turn volume would need to exceed 75 vehicle per hour for multiple hours during the day to meet traffic volume warrants.

The intersection of Market Place Blvd at the Proposed Driveway #2 also reported a LOS E during the PM peak hour. It is not uncommon for vehicles at a side-street stop approach to experience long delay when turning onto a major roadway. The traffic study does not identify the need for an improvement. A traffic signal warrant analysis would be required prior to installation of a traffic signal. The side-street left-turn volume would need to exceed 75 vehicle per hour for multiple hours during the day to meet traffic volume warrants. Based on the projected development traffic volumes, a traffic signal is not anticipated to be warranted.

4.5 Future Build Conditions with Improvements Capacity Analysis

To provide an acceptable level of service at the intersection of Bill Gardner Pkwy at I-75 SB Ramps, improvement options were considered and analyzed. The recommended improvement is:

- Bill Gardner Pkwy at I-75 SB Ramps (#1):
    - Install a dedicated eastbound right-turn lane along Bill Gardner Pkwy

To provide an acceptable level of service at the intersection of Bill Gardner Pkwy at Tanger Blvd/Market Place Blvd, improvement options were considered and analyzed. It is worth noting the average delay is approximately 2.5 seconds higher in the "Build" conditions compared to the "No-Build" conditions (on the border between LOS D and LOS E).

The previous DRI Traffic Study for DRI #2939 identified the following recommendation as a "Build" improvement; however, the analysis performed during this study found this results in higher average delay for the intersection. Additionally, the existing two left-turn lanes provide more capacity for the high volume northbound left-turn movement from Tanger Blvd onto Bill Gardner Parkway.

> *Along Tanger Blvd, restripe the northbound approach to provide one left-turn lane and one shared through/right-turn lane. Additionally remove the split-phase signal operation for the side-streets and provide left-turn protected/permitted phases.*

CAPACITY ANALYSIS

One geometric option was analyzed which included adding a dedicated right-turn lane along northbound Tanger Blvd by removing the median and re-striping the travel lanes. This would result in three approach lanes (left-turn lane, shared left-turn/through lane, right-turn lane). This improvement would require moving/relocating the existing large Tanger Outlet Sign in the median on Tanger Blvd. This option resulted in the intersection meeting the LOS standard D (55 seconds of average delay).

Table 8 summarizes the results of the improvements. The improvements are also identified in **Figure 5** (in Appendix A).

Table 8
Level of Service Summary, Build Conditions WITH IMPROVEMENT

Intersection		Traffic Control	Approach	LOS Standard	AM Peak Hour LOS (Delay*)	PM Peak Hour LOS (Delay*)
1	Bill Gardner Pkwy at I-75 SB Ramps	Signal	Overall	D	C (28.5)	D (46)
3	Bill Gardner Pkwy at Tanger Blvd/Market Place Blvd	Signal	Overall	D	D (54.9)	D (53.1)

**Average Delay in seconds*

5.0 Recommendations

Recommendations along the development street frontage to accommodate the proposed development are based on existing conditions, the proposed development use, and expected traffic volumes. The need for dedicated turn lanes at the proposed development driveway and appropriate traffic control (i.e. stop control or a traffic signal) were reviewed. Recommendations included reviewing GDOT's *Regulations for Driveway and Encroachment Control,* and knowledge of general transportation standards, and engineering judgment. Specifics of the driveway design will need to follow the City of Locust Grove requirements.

Recommendations at the two proposed driveways are provided below as well potential recommendations to accommodate pedestrians crossing Market Place Blvd.

5.1 Proposed Driveway #1 along Market Place Boulevard

The driveway is proposed to provide ingress and egress primarily to the retail uses. The driveway is aligned with (opposite) the existing Wal-mart south driveway. The driveway is recommended to allow full-movement, with stop-control. The geometric recommendations for the driveway include:

- Site Driveway - west leg:
  - Stop control with one exit lane (shared left-turn/through/right-turn lane)
  - One lane entering
- Add new southbound right-turn deceleration lane along Market Place Blvd
- Restripe the existing hatched center lane along Market Place Blvd to provide a dedicated northbound left-turn lane

5.2 Proposed Driveway #2 along Market Place Boulevard

The driveway is proposed to provide primary ingress and egress to the apartment units, and access to the retail uses. The driveway is aligned with (opposite) the existing Wal-mart north driveway. The driveway is recommended to allow full-movement, with stop-control. The geometric recommendations for the driveway include:

- Site Driveway - west leg:
  - Stop control with two exit lanes (shared left-turn/through lane, separate right-turn lane)
  - One lane entering
- Add new southbound right-turn deceleration lane along Market Place Blvd
- Restripe the existing hatched center lane along Market Place Blvd to provide a dedicated northbound left-turn lane

5.3 Pedestrian Improvements on Market Place Boulevard

Based on the type of development, pedestrians are anticipated to walk from the apartment complex to businesses and retail in the area, including the Wal-mart on the east side of Market Place Blvd. To enhance pedestrian safety and provide improved multimodal travel, potential improvement options to aid crossing Market Place Blvd were considered.

FHWA provides guidance on appropriate types of pedestrian crossing treatments in the 2005 publication, *Safety Effects of Marked Versus Unmarked Crosswalks at Uncontrolled Locations*. Chapter 4 provides conclusions and recommendations. Included in Chapter 4 is Table 11 which provides recommendations for crosswalk treatment, based on given vehicle volumes, speed and roadway width.

Table 11: Recommendations for installing marked crosswalks and other needed pedestrian improvements at uncontrolled locations (from FHWA Publication)

Roadway Type (Number of Travel Lanes and Median Type)	Vehicle ADT ≤ 9,000			Vehicle ADT >9,000 to 12,000			Vehicle ADT >12,000–15,000			Vehicle ADT > 15,000		
	Speed Limit**											
	≤ 48.3 km/h (30 mi/h)	56.4 km/h (35 mi/h)	64.4 km/h (40 mi/h)	≤ 48.3 km/h (30 mi/h)	56.4 km/h (35 mi/h)	64.4 km/h (40 mi/h)	≤ 48.3 km/h (30 mi/h)	56.4 km/h (35 mi/h)	64.4 km/h (40 mi/h)	≤ 48.3 km/h (30 mi/h)	56.4 km/h (35 mi/h)	64.4 km/h (40 mi/h)
Two lanes	C	C	P	C	C	P	C	C	N	C	P	N
Three lanes	C	C	P	C	P	P	P	P	N	P	N	N
Multilane (four or more lanes) with raised median***	C	C	P	C	P	N	P	P	N	N	N	N
Multilane (four or more lanes) without raised median	C	P	N	P	P	N	N	N	N	N	N	N

* These guidelines include intersection and midblock locations with no traffic signals or stop signs on the approach to the crossing. They do not apply to school crossings. A two-way center turn lane is not considered a median. Crosswalks should not be installed at locations that could present an increased safety risk to pedestrians, such as where there is poor sight distance, complex or confusing designs, a substantial volume of heavy trucks, or other dangers, without first providing adequate design features and/or traffic control devices. Adding crosswalks alone will not make crossings safer, nor will they necessarily result in more vehicles stopping for pedestrians. Whether or not marked crosswalks are installed, it is important to consider other pedestrian facility enhancements (e.g., raised median, traffic signal, roadway narrowing, enhanced overhead lighting, traffic-calming measures, curb extensions), as needed, to improve the safety of the crossing. These are general recommendations; good engineering judgment should be used in individual cases for deciding where to install crosswalks.

** Where the speed limit exceeds 64.4 km/h (40 mi/h), marked crosswalks alone should not be used at unsignalized locations.

*** The raised median or crossing island must be at least 1.2 m (4 ft) wide and 1.8 m (6 ft) long to serve adequately as a refuge area for pedestrians, in accordance with MUTCD and American Association of State Highway and Transportation Officials (AASHTO) guidelines.

C = Candidate sites for marked crosswalks. Marked crosswalks must be installed carefully and selectively. Before installing new marked crosswalks, an engineering study is needed to determine whether the location is suitable for a marked crosswalk. For an engineering study, a site review may be sufficient at some locations, while a more indepth study of pedestrian volume, vehicle speed, sight distance, vehicle mix, and other factors may be needed at other sites. It is recommended that a minimum utilization of 20 pedestrian crossings per peak hour (or 15 or more elderly and/or child pedestrians) be confirmed at a location before placing a high priority on the installation of a marked crosswalk alone.

P = Possible increase in pedestrian crash risk may occur if crosswalks are added without other pedestrian facility enhancements. These locations should be closely monitored and enhanced with other pedestrian crossing improvements, if necessary, before adding a marked crosswalk.

N = Marked crosswalks alone are insufficient, since pedestrian crash risk may be increased by providing marked crosswalks alone. Consider using other treatments, such as traffic-calming treatments, traffic signals with pedestrian signals where warranted, or other substantial crossing improvement to improve crossing safety for pedestrians.

The most recent collected ADT on Market Place Boulevard was 7,731 vehicles per day. Market Place Boulevard is a 3-lane roadway with a posted speed limit of 35mph. Based on FHWA Table 11, a marked crosswalk is a candidate option; however, it should be installed carefully and selectively. The guidance recommends a minimum of 20 pedestrian crossings per peak hour before placing a marked crosswalk.

With the development and traffic growth in the area, the daily traffic volume along Market Place Blvd will increase; however, the hourly pedestrian crossing volume is unknown and likely less than 20 per hour.

RECOMMENDATIONS

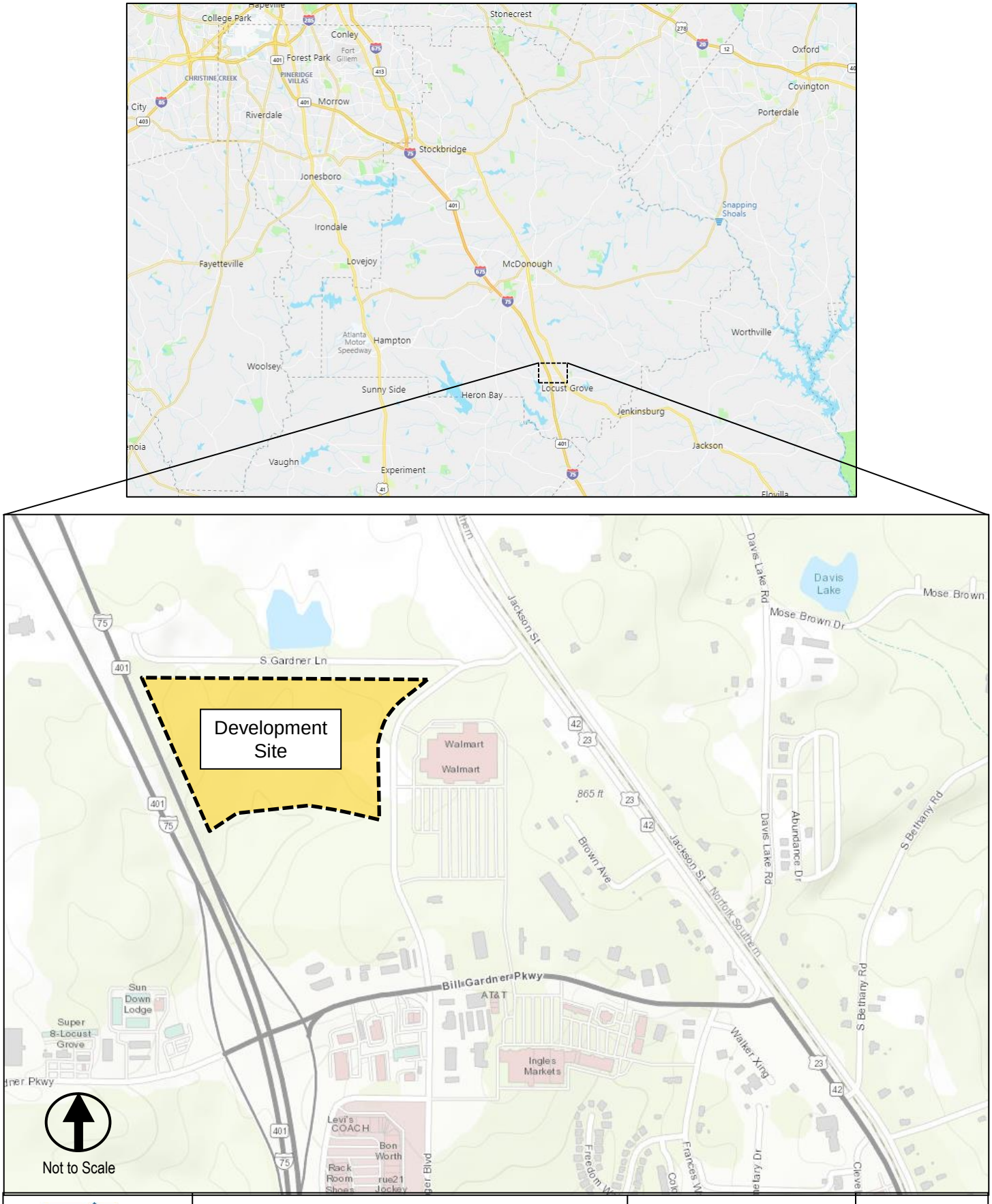
Two pedestrian crossing improvement options were considered:

- One option would be to add a 40-ft raised median, or “medianette”, half the distance between the two proposed site driveways. The small median located in the center of the street provides a refuge for pedestrians to make a two-stage crossing of Market Place Blvd. GDOT’s *Pedestrian and Streetscape Guide* provides guidance that pedestrian refuge areas may be installed on streets with a speed limit of 45 mph or less. Further, the guidance states installing a median refuge without additional devices is an option and considered a best practice.
- The second option would be to install a marked crosswalk with a Rectangular Rapid Flashing Beacon (RRFB). GDOT’s *Pedestrian and Streetscape Guide* provides guidance that RRFBs may be installed on streets with a speed limit of 35 mph or less at mid-block locations.

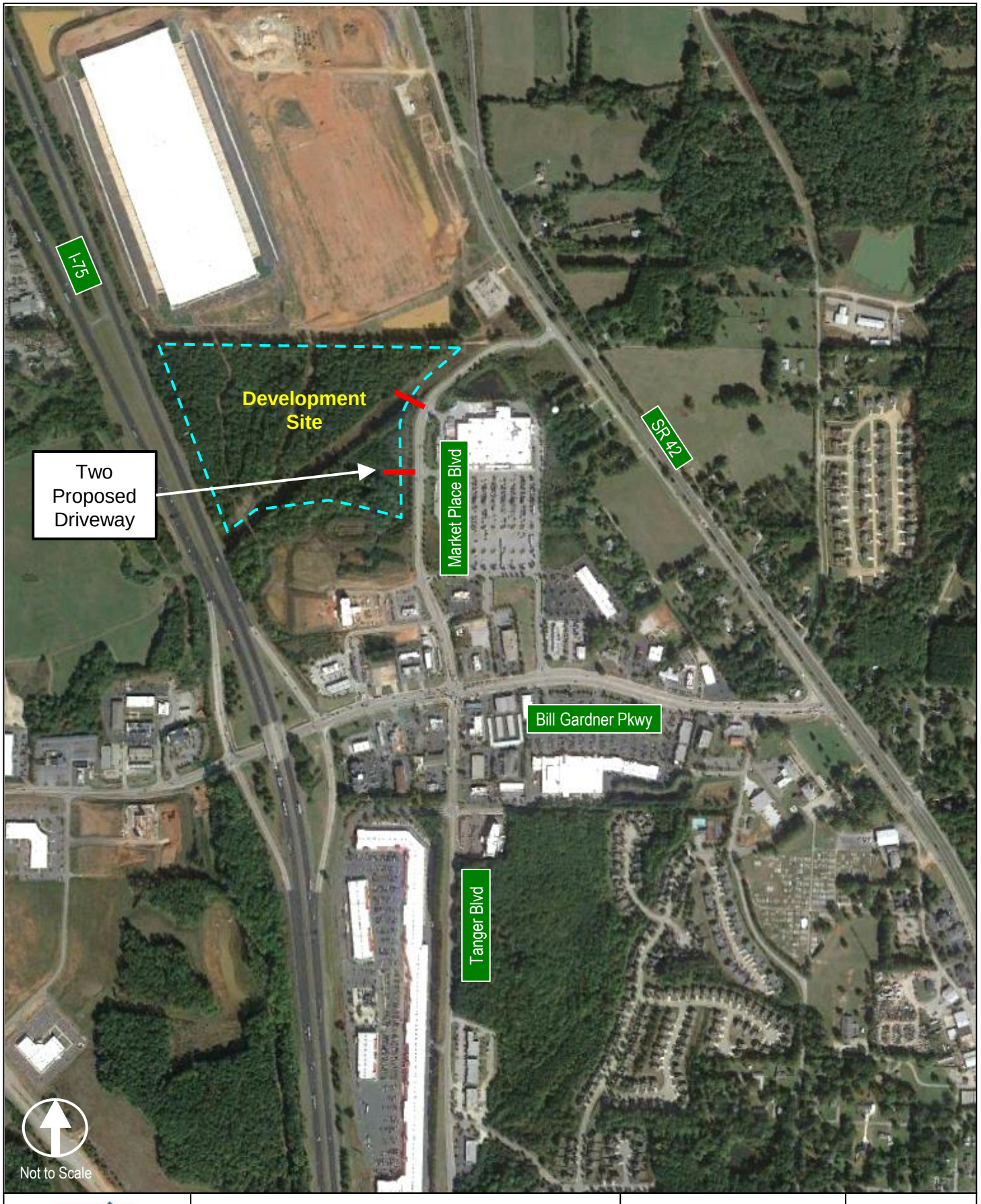
Either improvement option is viable and will enhance pedestrian safety for crossing Market Place Blvd. The study recommends the developer and the City of Locust Grove agree on the preferred option and install as part of the development’s roadway improvements. Additionally, the optimal location for a marked crosswalk/RRFB along Market Place Blvd should consider geometric conditions and where the most pedestrian crossings are anticipated.

APPENDIX A

Figures



KCI TECHNOLOGIES	**300 Marketplace DRI #3252** **City of Locust Grove, Georgia**	**Location Map**	**Figure 1**

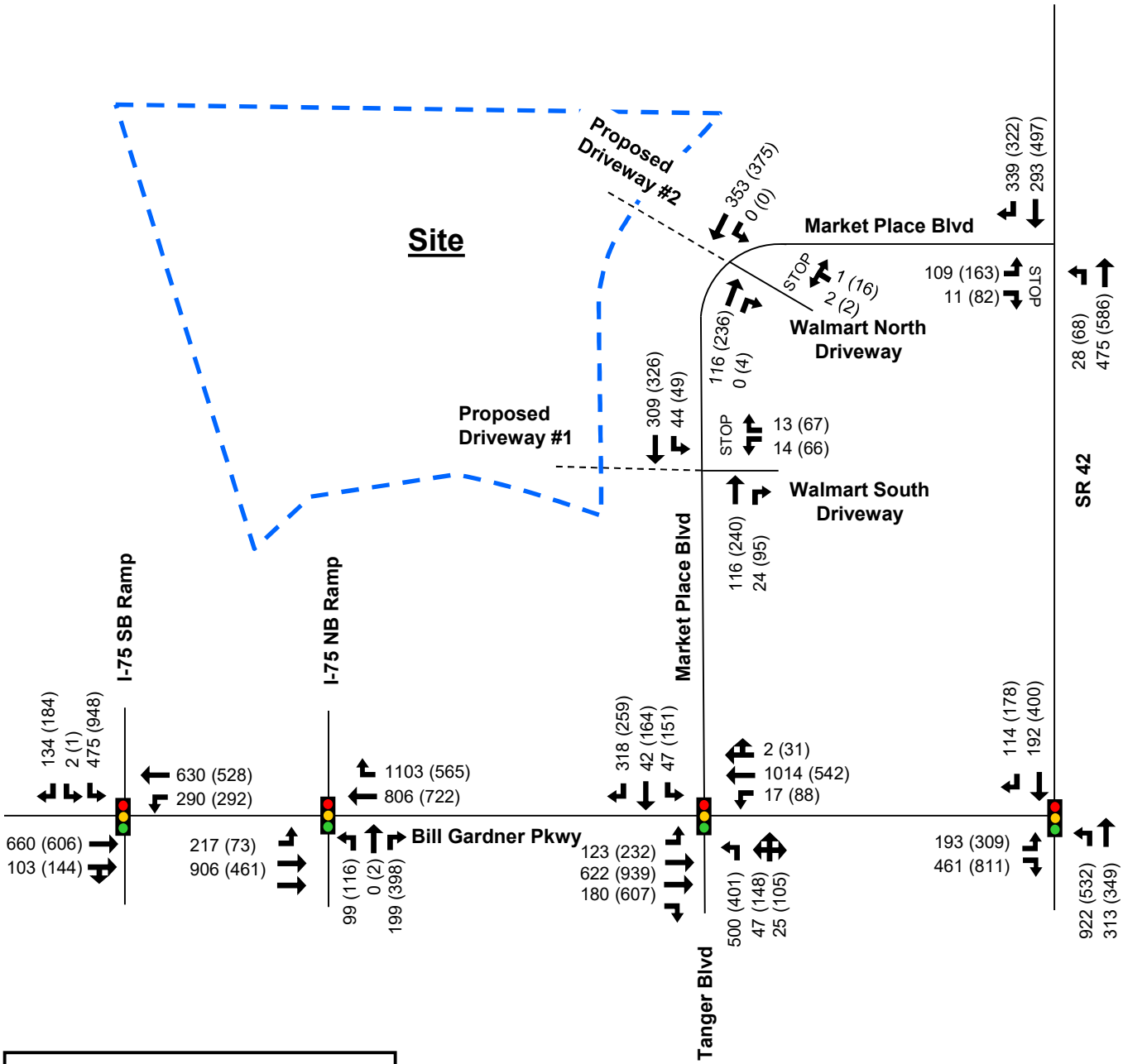


KCI TECHNOLOGIES

300 Marketplace DRI #3252
City of Locust Grove, Georgia

Aerial

Figure 2



LEGEND

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

Note: 2021 volumes are shown as Existing Year

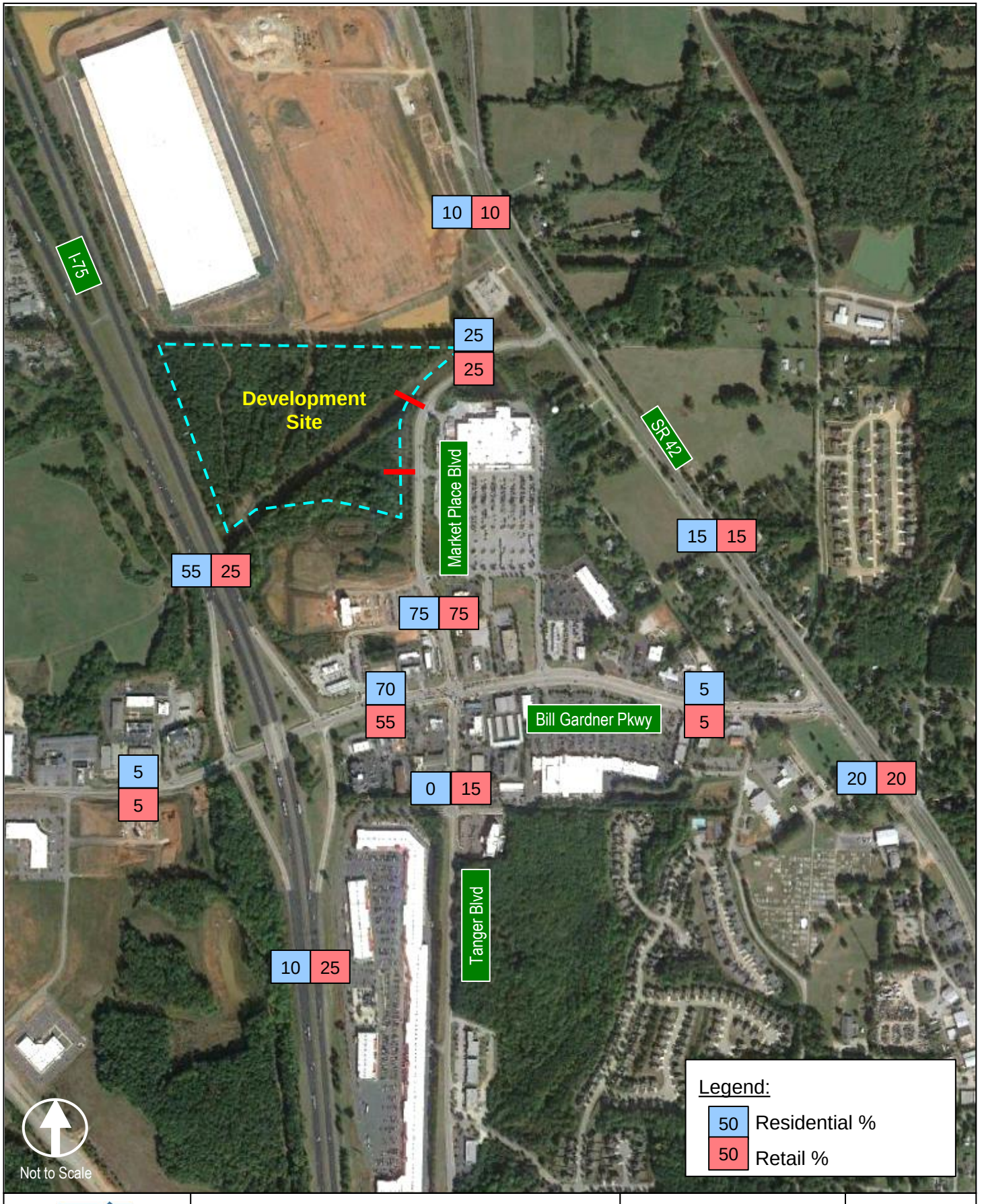
Not to Scale

KCI TECHNOLOGIES

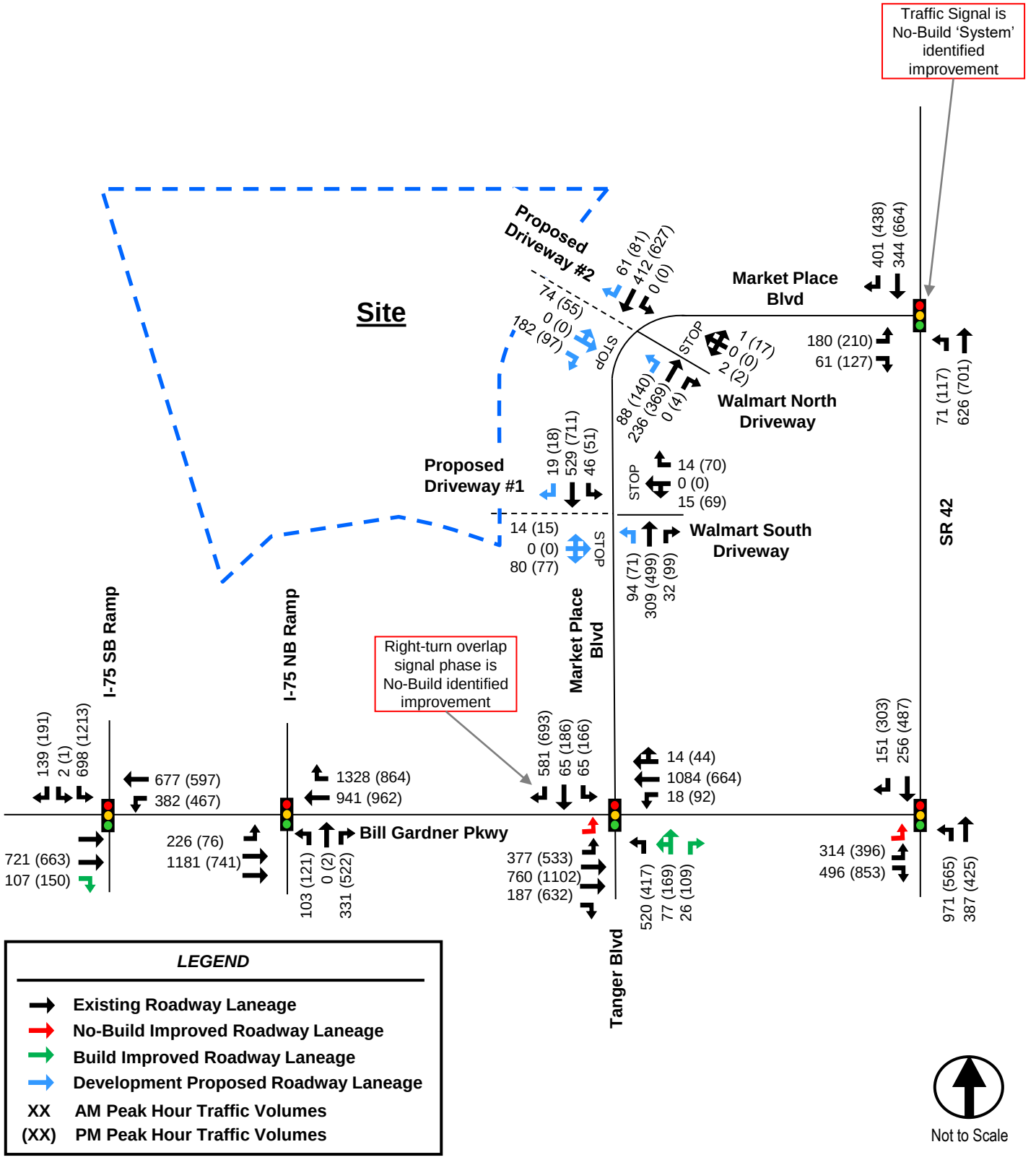
300 Marketplace DRI #3252
City of Locust Grove, Georgia

2021 Existing Traffic Conditions

Figure 3



KCI TECHNOLOGIES	**300 Marketplace DRI #3252** **City of Locust Grove, Georgia**	**Project Trip Distribution**	**Figure 4**



KCI TECHNOLOGIES	**300 Marketplace DRI #3252** **City of Locust Grove, Georgia**	**2023 Build Traffic Conditions**	**Figure 5**

APPENDIX B

Development Site Plan

LEGEND

MULTI-FAMILY (29.91 AC)
- 540 UNITS (MAX)
- ~18.05 UNITS / AC
- 3-4 STORY BUILDINGS

COMMERCIAL / RETAIL / OFFICE / STORAGE (8.04 AC)
- 20,000 SF RETAIL / 115 PARKING SPACES
- 5,000 SF QUICK SERVICE RESTAURANT / ~50 PARKING SPACES
- 175,000 SF STORAGE
- 0.571 FAR

CLIENT

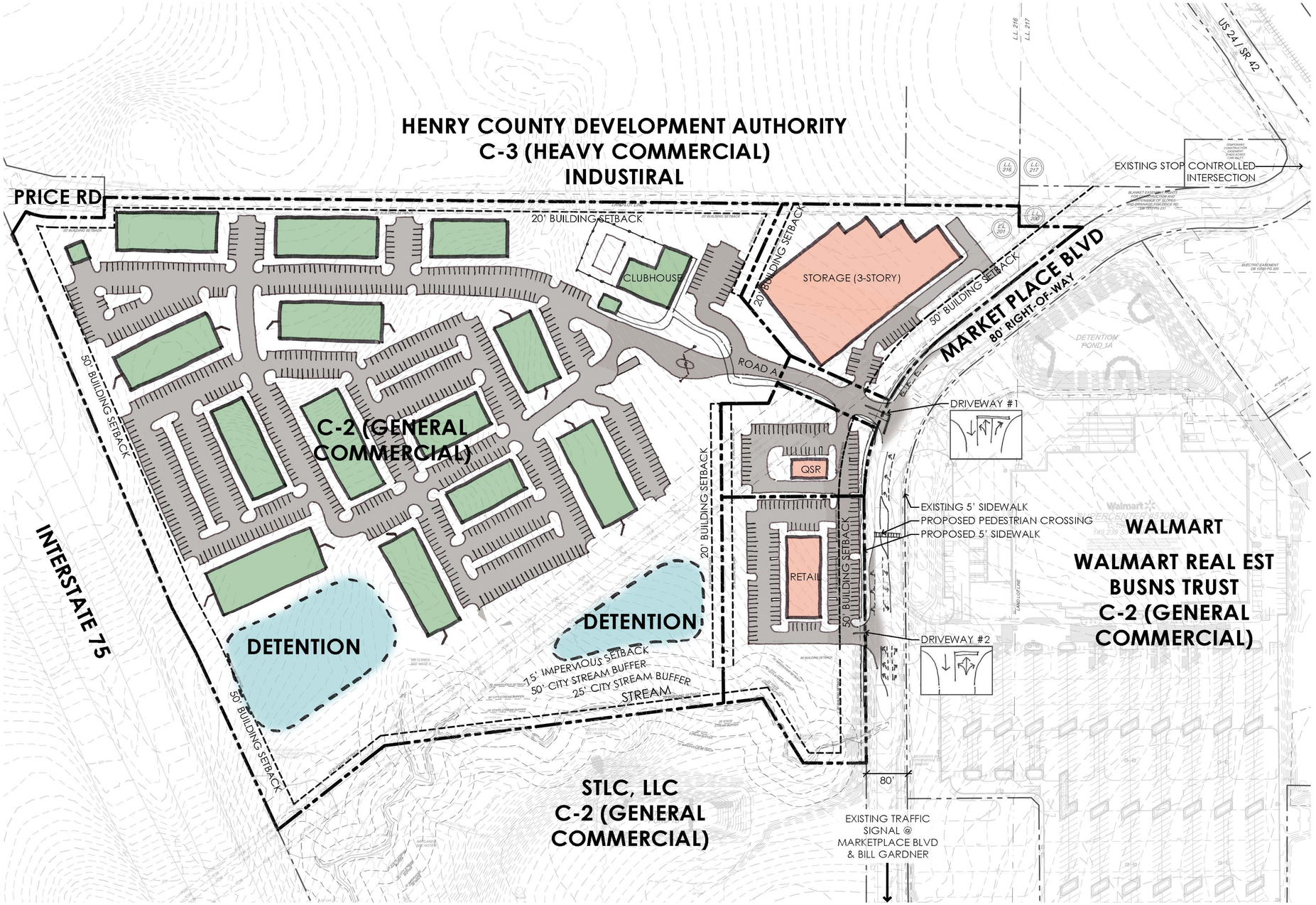
AHAD PROPERTIES
C/O LANG REAL ESTATE SERVICES
PO BOX 788
YORBA LINDA, CALIFORNIA 47885
JACOB LANG

CONTACTS

SITE PLANNER
FORESITE GROUP, LLC
3740 DAVINCIN CT, SUITE 100
PEACHTREE CORNERS, GA 30092
DAVID STONIECKI, PE

TRAFFIC CONSULTANT
KCI TECHNOLOGIES, INC
2160 SATELLITE BLVD, SUITE 130
DULUTH, GA 30097
ANDREW ANTWEILER, PE PTOE

LOCATION MAP



300 MARKETPLACE BLVD - LOCUST GROVE, GA

SITE PLAN - DRI NO. 3252 300 MARKETPLACE

FORESITE group

100 50 0 100

APR · 01 · 2021
1601.001

APPENDIX C

Traffic Counts

Prepared by National Data & Surveying Services

VOLUME

Market Pl Blvd/Price Dr S/O US 23/SR 42

Day: Wednesday
Date: 3/3/2021

City: Locust Grove
Project #: GA21_180055_001

DAILY TOTALS	NB	SB	EB	WB	Total
	3,256	4,475	0	0	7,731

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOTAL	
00:00	8		4				12		12:00	58		62				120	
00:15	6		3				9		12:15	43		63				106	
00:30	3		6				9		12:30	56		69				125	
00:45	2	19	3	16			5	35	12:45	48	205	67	261			115	466
01:00	4		4				8		13:00	53		80				133	
01:15	3		2				5		13:15	57		76				133	
01:30	2		2				4		13:30	49		81				130	
01:45	0	9	5	13			5	22	13:45	58	217	100	337			158	554
02:00	5		0				5		14:00	54		94				148	
02:15	6		5				11		14:15	56		73				129	
02:30	2		67				69		14:30	51		73				124	
02:45	6	19	15	87			21	106	14:45	66	227	68	308			134	535
03:00	1		6				7		15:00	63		81				144	
03:15	1		4				5		15:15	56		103				159	
03:30	6		9				15		15:30	57		144				201	
03:45	12	20	4	23			16	43	15:45	61	237	103	431			164	668
04:00	10		4				14		16:00	64		100				164	
04:15	17		6				23		16:15	50		76				126	
04:30	35		8				43		16:30	54		100				154	
04:45	56	118	6	24			62	142	16:45	60	228	104	380			164	608
05:00	13		12				25		17:00	66		93				159	
05:15	10		8				18		17:15	65		113				178	
05:30	19		21				40		17:30	76		107				183	
05:45	31	73	17	58			48	131	17:45	56	263	92	405			148	668
06:00	23		16				39		18:00	72		79				151	
06:15	19		24				43		18:15	69		87				156	
06:30	27		31				58		18:30	60		79				139	
06:45	39	108	38	109			77	217	18:45	52	253	69	314			121	567
07:00	31		60				91		19:00	46		51				97	
07:15	23		82				105		19:15	39		37				76	
07:30	34		129				163		19:30	43		37				80	
07:45	53	141	102	373			155	514	19:45	26	154	32	157			58	311
08:00	41		77				118		20:00	35		19				54	
08:15	44		46				90		20:15	30		22				52	
08:30	26		39				65		20:30	27		24				51	
08:45	36	147	38	200			74	347	20:45	19	111	20	85			39	196
09:00	26		47				73		21:00	27		24				51	
09:15	40		44				84		21:15	32		14				46	
09:30	26		57				83		21:30	19		15				34	
09:45	37	129	61	209			98	338	21:45	20	98	12	65			32	163
10:00	33		65				98		22:00	23		7				30	
10:15	45		58				103		22:15	11		7				18	
10:30	38		66				104		22:30	18		12				30	
10:45	42	158	66	255			108	413	22:45	16	68	12	38			28	106
11:00	45		100				145		23:00	10		5				15	
11:15	70		60				130		23:15	7		10				17	
11:30	58		63				121		23:30	7		9				16	
11:45	55	228	76	299			131	527	23:45	2	26	4	28			6	54
TOTALS		1169		1666				**2835**	**TOTALS**		2087		2809				**4896**
SPLIT %		41.2%		58.8%				**36.7%**	**SPLIT %**		42.6%		57.4%				**63.3%**

DAILY TOTALS	NB	SB	EB	WB	Total
	3,256	4,475	0	0	7,731

AM Peak Hour	11:15	07:15				**07:15**	**PM Peak Hour**	17:30	15:15				**15:15**
AM Pk Volume	241	390				**541**	**PM Pk Volume**	273	450				**688**
Pk Hr Factor	0.861	0.756				**0.830**	**Pk Hr Factor**	0.898	0.781				**0.856**
7 - 9 Volume	288	573	0	0		**861**	**4 - 6 Volume**	491	785	0	0		**1276**
7 - 9 Peak Hour	07:30	07:15				**07:15**	**4 - 6 Peak Hour**	16:45	16:45				**16:45**
7 - 9 Pk Volume	172	390	0	0		**541**	**4 - 6 Pk Volume**	267	417	0	0		**684**
Pk Hr Factor	0.811	0.756	0.000	0.000		**0.830**	**Pk Hr Factor**	0.878	0.923	0.000	0.000		**0.934**

Project ID: 21-180054-001
Location: Market Pl Blvd/Price Dr & Walmart Center Dwy (South)
City: Locust Grove

Day: Wednesday
Date: 3/3/2021

Groups Printed - Cars, PU, Vans - Heavy Trucks

	Market Pl Blvd/Price Dr Northbound						Market Pl Blvd/Price Dr Southbound						Walmart Center Dwy (South) Eastbound						Walmart Center Dwy (South) Westbound						
Start Time	Left	Thru	Rgt	Uturn	Peds	App. Total	Left	Thru	Rgt	Uturn	Peds	App. Total	Left	Thru	Rgt	Uturn	Peds	App. Total	Left	Thru	Rgt	Uturn	Peds	App. Total	Int. Total
7:00 AM	0	26	10	0	0	36	2	55	0	0	0	57	0	0	0	0	0	0	2	0	4	0	0	6	99
7:15 AM	0	17	9	0	0	26	8	78	0	0	0	86	0	0	0	0	0	0	4	0	4	0	0	8	120
7:30 AM	0	34	3	0	0	37	9	118	0	0	0	127	0	0	0	0	0	0	2	0	0	0	0	2	166
7:45 AM	0	50	3	0	0	53	13	94	0	0	0	107	0	0	0	0	0	0	6	0	6	0	0	12	172
Total	0	127	25	0	0	152	32	345	0	0	0	377	0	0	0	0	0	0	14	0	14	0	0	28	557
8:00 AM	0	40	9	0	0	49	14	60	0	0	0	74	0	0	0	0	0	0	2	0	3	0	0	5	128
8:15 AM	0	36	8	0	0	44	4	42	0	0	0	46	0	0	0	0	0	0	4	0	5	0	0	9	99
8:30 AM	0	23	13	0	0	36	5	31	0	0	0	36	0	0	0	0	0	0	11	0	4	0	0	15	87
8:45 AM	0	32	16	0	0	48	6	31	0	0	0	37	0	0	0	0	0	0	8	0	6	0	0	14	99
Total	0	131	46	0	0	177	29	164	0	0	0	193	0	0	0	0	0	0	25	0	18	0	0	43	413
BREAK																									
4:00 PM	0	44	28	0	0	72	19	72	0	0	0	91	0	0	0	0	0	0	23	0	17	0	0	40	203
4:15 PM	0	46	31	0	0	77	17	60	0	0	0	77	0	0	0	0	0	0	21	0	6	0	0	27	181
4:30 PM	0	37	15	0	0	52	22	70	0	0	0	92	0	0	0	0	0	0	17	0	16	0	0	33	177
4:45 PM	0	43	24	0	0	67	28	79	0	0	0	107	0	0	0	0	0	0	20	0	14	0	0	34	208
Total	0	170	98	0	0	268	86	281	0	0	0	367	0	0	0	0	0	0	81	0	53	0	0	134	769
5:00 PM	0	47	22	0	0	69	20	73	0	0	0	93	0	0	0	0	0	0	7	0	17	0	0	24	186
5:15 PM	0	43	22	0	0	65	20	89	0	0	0	109	0	0	0	0	0	0	17	0	16	0	0	33	207
5:30 PM	0	50	27	0	0	77	21	85	0	0	0	106	0	0	0	0	0	0	22	0	20	0	0	42	225
5:45 PM	0	44	21	0	0	65	18	71	0	0	0	89	0	0	0	0	0	0	13	0	10	0	0	23	177
Total	0	184	92	0	0	276	79	318	0	0	0	397	0	0	0	0	0	0	59	0	63	0	0	122	795
Grand Total	0	612	261	0	0	873	226	1108	0	0	0	1334	0	0	0	0	0	0	179	0	148	0	0	327	2534
Apprch %	0.0	70.1	29.9	0.0	0.0		16.9	83.1	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		54.7	0.0	45.3	0.0	0.0		
Total %	0.0	24.2	10.3	0.0	0.0	34.5	8.9	43.7	0.0	0.0	0.0	52.6	0.0	0.0	0.0	0.0	0.0	0.0	7.1	0.0	5.8	0.0	0.0	12.9	
Cars, PU, Vans	0	575	260	0		835	223	1052	0	0		1275	0	0	0	0		0	178	0	146	0		324	2434
% Cars, PU, Vans	0.0	94.0	99.6	0.0		95.6	98.7	94.9	0.0	0.0		95.6	0.0	0.0	0.0	0.0		0.0	99.4	0.0	98.6	0.0		99.1	96.1
Heavy trucks	0	37	1	0		38	3	56	0	0		59	0	0	0	0		0	1	0	2	0		3	100
%Heavy trucks	0.0	6.0	0.4	0.0		4.4	1.3	5.1	0.0	0.0		4.4	0.0	0.0	0.0	0.0		0.0	0.6	0.0	1.4	0.0		0.9	3.9

Project ID: 21-180054-001
Location: Market Pl Blvd/Price Dr & Walmart Center Dwy (Sou
City: Locust Grove

PEAK HOURS

Day: Wednesday
Date: 3/3/2021

AM

	Market Pl Blvd/Price Dr Northbound					Market Pl Blvd/Price Dr Southbound					Walmart Center Dwy (South) Eastbound					Walmart Center Dwy (South) Westbound					
Start Time	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	Int. Total
Peak Hour Analysis from 07:00 AM - 09:00 AM																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
7:15 AM	0	17	9	0	26	8	78	0	0	86	0	0	0	0	0	4	0	4	0	8	120
7:30 AM	0	34	3	0	37	9	118	0	0	127	0	0	0	0	0	2	0	0	0	2	166
7:45 AM	0	50	3	0	53	13	94	0	0	107	0	0	0	0	0	6	0	6	0	12	172
8:00 AM	0	40	9	0	49	14	60	0	0	74	0	0	0	0	0	2	0	3	0	5	128
Total Volume	0	141	24	0	165	44	350	0	0	394	0	0	0	0	0	14	0	13	0	27	586
% App. Total	0.0	85.5	14.5	0.0	100	11.2	88.8	0.0	0.0	100	0.0	0.0	0.0	0.0	0	51.9	0.0	48.1	0.0	100	
PHF					0.778					0.776										0.563	0.852
Cars, PU, Vans	0	127	24	0	151	44	331	0	0	375	0	0	0	0	0	14	0	13	0	27	553
% Cars, PU, Vans	0.0	90.1	100.0	0.0	91.5	100.0	94.6	0.0	0.0	95.2	0.0	0.0	0.0	0.0	0.0	100.0	0.0	100.0	0.0	100.0	94.4
Heavy trucks	0	14	0	0	14	0	19	0	0	19	0	0	0	0	0	0	0	0	0	0	33
%Heavy trucks	0.0	9.9	0.0	0.0	8.5	0.0	5.4	0.0	0.0	4.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.6

PM

	Market Pl Blvd/Price Dr Northbound					Market Pl Blvd/Price Dr Southbound					Walmart Center Dwy (South) Eastbound					Walmart Center Dwy (South) Westbound					
Start Time	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	Int. Total
Peak Hour Analysis from 04:00 PM - 06:00 PM																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
4:45 PM	0	43	24	0	67	28	79	0	0	107	0	0	0	0	0	20	0	14	0	34	208
5:00 PM	0	47	22	0	69	20	73	0	0	93	0	0	0	0	0	7	0	17	0	24	186
5:15 PM	0	43	22	0	65	20	89	0	0	109	0	0	0	0	0	17	0	16	0	33	207
5:30 PM	0	50	27	0	77	21	85	0	0	106	0	0	0	0	0	22	0	20	0	42	225
Total Volume	0	183	95	0	278	89	326	0	0	415	0	0	0	0	0	66	0	67	0	133	826
% App. Total	0.0	65.8	34.2	0.0	100	21.4	78.6	0.0	0.0	100	0.0	0.0	0.0	0.0	0	49.6	0.0	50.4	0.0	100	
PHF					0.903					0.952										0.792	0.918
Cars, PU, Vans	0	181	95	0	276	89	316	0	0	405	0	0	0	0	0	66	0	66	0	132	813
% Cars, PU, Vans	0.0	98.9	100.0	0.0	99.3	100.0	96.9	0.0	0.0	97.6	0.0	0.0	0.0	0.0	0.0	100.0	0.0	98.5	0.0	99.2	98.4
Heavy trucks	0	2	0	0	2	0	10	0	0	10	0	0	0	0	0	0	0	1	0	1	13
%Heavy trucks	0.0	1.1	0.0	0.0	0.7	0.0	3.1	0.0	0.0	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.0	0.8	1.6

Project ID: 21-180054-002
Location: Market Pl Blvd/Price Dr & Walmart Rear Dwy (North)
City: Locust Grove

Day: Wednesday
Date: 3/3/2021

Groups Printed - Cars, PU, Vans - Heavy Trucks

	Market Pl Blvd/Price Dr Northbound						Market Pl Blvd/Price Dr Southbound						Walmart Rear Dwy (North) Eastbound						Walmart Rear Dwy (North) Westbound						
Start Time	Left	Thru	Rgt	Uturn	Peds	App. Total	Left	Thru	Rgt	Uturn	Peds	App. Total	Left	Thru	Rgt	Uturn	Peds	App. Total	Left	Thru	Rgt	Uturn	Peds	App. Total	Int. Total
7:00 AM	0	30	0	0	0	30	1	58	0	0	0	59	0	0	0	0	0	0	1	0	0	0	0	1	90
7:15 AM	0	22	0	0	0	22	0	83	0	0	0	83	0	0	0	0	0	0	1	0	0	0	0	1	106
7:30 AM	0	35	0	0	0	35	0	131	0	0	0	131	0	0	0	0	0	0	0	0	0	0	0	0	166
7:45 AM	0	52	2	0	0	54	1	103	0	0	0	104	0	0	0	0	0	0	1	0	0	0	0	1	159
Total	0	139	2	0	0	141	2	375	0	0	0	377	0	0	0	0	0	0	3	0	0	0	0	3	521
8:00 AM	0	41	1	0	0	42	3	73	0	0	0	76	0	0	0	0	0	0	0	0	1	0	0	1	119
8:15 AM	0	41	1	0	0	42	0	44	0	0	0	44	0	0	0	0	0	0	3	0	1	0	0	4	90
8:30 AM	0	26	1	0	0	27	2	36	0	0	0	38	0	0	0	0	0	0	0	0	0	0	1	0	65
8:45 AM	0	37	1	0	0	38	2	37	0	0	0	39	0	0	0	0	0	0	0	0	0	0	0	0	77
Total	0	145	4	0	0	149	7	190	0	0	0	197	0	0	0	0	0	0	3	0	2	0	1	5	351
BREAK																									
4:00 PM	0	62	0	0	0	62	4	94	0	0	0	98	0	0	0	0	0	0	1	0	1	0	0	2	162
4:15 PM	0	50	1	0	0	51	1	74	0	0	0	75	0	0	0	0	0	0	0	0	2	0	0	2	128
4:30 PM	0	51	1	0	0	52	8	90	0	0	0	98	0	0	0	0	0	0	1	0	1	0	0	2	152
4:45 PM	0	59	1	0	0	60	1	104	0	0	0	105	0	0	0	0	0	0	1	0	3	0	0	4	169
Total	0	222	3	0	0	225	14	362	0	0	0	376	0	0	0	0	0	0	3	0	7	0	0	10	611
5:00 PM	0	61	1	0	0	62	1	96	0	0	0	97	0	0	0	0	0	0	1	0	3	0	0	4	163
5:15 PM	0	61	0	0	0	61	2	107	0	1	0	110	0	0	0	0	0	0	0	0	1	0	0	1	172
5:30 PM	0	68	1	0	0	69	1	107	0	0	0	108	0	0	0	0	0	0	0	0	9	0	0	9	186
5:45 PM	0	54	0	0	0	54	2	88	0	0	0	90	0	0	0	0	0	0	0	0	3	0	0	3	147
Total	0	244	2	0	0	246	6	398	0	1	0	405	0	0	0	0	0	0	1	0	16	0	0	17	668
Grand Total	0	750	11	0	0	761	29	1325	0	1	0	1355	0	0	0	0	0	0	10	0	25	0	1	35	2151
Apprch %	0.0	98.6	1.4	0.0	0.0		2.1	97.8	0.0	0.1	0.0		0.0	0.0	0.0	0.0	0.0		28.6	0.0	71.4	0.0	2.9		
Total %	0.0	34.9	0.5	0.0	0.0	35.4	1.3	61.6	0.0	0.0	0.0	63.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	1.2	0.0	0.0	1.6	
Cars, PU, Vans	0	719	3	0		722	28	1274	0	1		1303	0	0	0	0		0	2	0	23	0		25	2050
% Cars, PU, Vans	0.0	95.9	27.3	0.0		94.9	96.6	96.2	0.0	100.0		96.2	0.0	0.0	0.0	0.0		0.0	20.0	0.0	92.0	0.0		71.4	95.3
Heavy trucks	0	31	8	0		39	1	51	0	0		52	0	0	0	0		0	8	0	2	0		10	101
%Heavy trucks	0.0	4.1	72.7	0.0		5.1	3.4	3.8	0.0	0.0		3.8	0.0	0.0	0.0	0.0		0.0	80.0	0.0	8.0	0.0		28.6	4.7

Project ID: 21-180054-002
Location: Market Pl Blvd/Price Dr & Walmart Rear Dwy (North)
City: Locust Grove

PEAK HOURS

Day: Wednesday
Date: 3/3/2021

AM

	Market Pl Blvd/Price Dr Northbound					Market Pl Blvd/Price Dr Southbound					Walmart Rear Dwy (North) Eastbound					Walmart Rear Dwy (North) Westbound					
Start Time	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	Int. Total
Peak Hour Analysis from 07:00 AM - 09:00 AM																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
7:15 AM	0	22	0	0	22	0	83	0	0	83	0	0	0	0	0	1	0	0	0	1	106
7:30 AM	0	35	0	0	35	0	131	0	0	131	0	0	0	0	0	0	0	0	0	0	166
7:45 AM	0	52	2	0	54	1	103	0	0	104	0	0	0	0	0	1	0	0	0	1	159
8:00 AM	0	41	1	0	42	3	73	0	0	76	0	0	0	0	0	0	0	1	0	1	119
Total Volume	0	150	3	0	153	4	390	0	0	394	0	0	0	0	0	2	0	1	0	3	550
% App. Total	0.0	98.0	2.0	0.0	100	1.0	99.0	0.0	0.0	100	0.0	0.0	0.0	0.0	0	66.7	0.0	33.3	0.0	100	
PHF					0.708					0.752										0.750	0.828
Cars, PU, Vans	0	139	0	0	139	3	373	0	0	376	0	0	0	0	0	0	0	1	0	1	516
% Cars, PU, Vans	0.0	92.7	0.0	0.0	90.8	75.0	95.6	0.0	0.0	95.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	33.3	93.8
Heavy trucks	0	11	3	0	14	1	17	0	0	18	0	0	0	0	0	2	0	0	0	2	34
%Heavy trucks	0.0	7.3	100.0	0.0	9.2	25.0	4.4	0.0	0.0	4.6	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	66.7	6.2

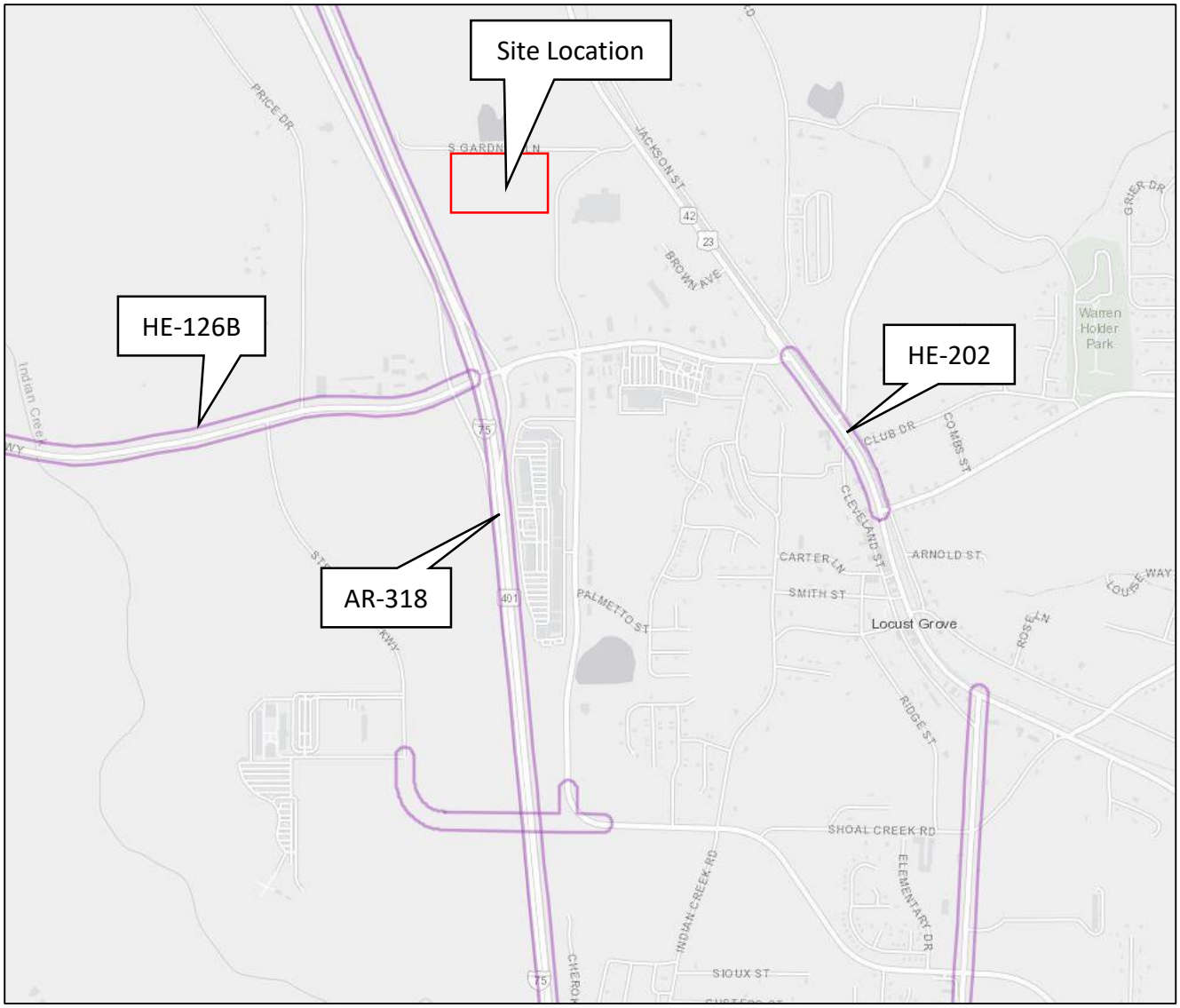
PM

	Market Pl Blvd/Price Dr Northbound					Market Pl Blvd/Price Dr Southbound					Walmart Rear Dwy (North) Eastbound					Walmart Rear Dwy (North) Westbound					
Start Time	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	Int. Total
Peak Hour Analysis from 04:00 PM - 06:00 PM																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
4:45 PM	0	59	1	0	60	1	104	0	0	105	0	0	0	0	0	1	0	3	0	4	169
5:00 PM	0	61	1	0	62	1	96	0	0	97	0	0	0	0	0	1	0	3	0	4	163
5:15 PM	0	61	0	0	61	2	107	0	1	110	0	0	0	0	0	0	0	1	0	1	172
5:30 PM	0	68	1	0	69	1	107	0	0	108	0	0	0	0	0	0	0	9	0	9	186
Total Volume	0	249	3	0	252	5	414	0	1	420	0	0	0	0	0	2	0	16	0	18	690
% App. Total	0.0	98.8	1.2	0.0	100	1.2	98.6	0.0	0.2	100	0.0	0.0	0.0	0.0	0	11.1	0.0	88.9	0.0	100	
PHF					0.913					0.955										0.500	0.927
Cars, PU, Vans	0	247	2	0	249	5	405	0	1	411	0	0	0	0	0	1	0	15	0	16	676
% Cars, PU, Vans	0.0	99.2	66.7	0.0	98.8	100.0	97.8	0.0	100.0	97.9	0.0	0.0	0.0	0.0	0.0	50.0	0.0	93.8	0.0	88.9	98.0
Heavy trucks	0	2	1	0	3	0	9	0	0	9	0	0	0	0	0	1	0	1	0	2	14
%Heavy trucks	0.0	0.8	33.3	0.0	1.2	0.0	2.2	0.0	0.0	2.1	0.0	0.0	0.0	0.0	0.0	50.0	0.0	6.3	0.0	11.1	2.0

APPENDIX D

Planned/Programmed Area Projects

ARC RTP Project Map



HE-126B

Atlanta Region's Plan RTP (2020) PROJECT FACT SHEET

Short Title	BILL GARDNER PARKWAY WIDENING AT SR 155 TO LESTER MILL ROAD (4 LANES) AND FROM LESTER MILL ROAD TO I-75 SOUTH (6 LANES)
GDOT Project No.	0000562
Federal ID No.	N/A
Status	Long Range
Service Type	Roadway / General Purpose Capacity
Sponsor	Henry County
Jurisdiction	Henry County
Analysis Level	In the Region's Air Quality Conformity Analysis

Existing Thru Lane	2	**LCI**		**Network Year**	2030
Planned Thru Lane	4/6	**Flex**		**Corridor Length**	3.4 miles

Detailed Description and Justification

Widening of the section from SR 155 to Lester Mill Road from 2 to 4 lanes and the section from Lester Mill Road to I-75 South from 2 to 6 lanes.

Phase Status & Funding Information		Status	FISCAL YEAR	TOTAL PHASE COST	BREAKDOWN OF TOTAL PHASE COST BY FUNDING SOURCE			
					FEDERAL	STATE	BONDS	LOCAL/PRIVATE
ALL	General Federal Aid - 2026-2050		LR 2026-2030	**$18,000,000**	$14,400,000	$0,000	$0,000	$3,600,000
				$18,000,000	**$14,400,000**	**$0,000**	**$0,000**	**$3,600,000**

SCP: Scoping PE: Preliminary engineering / engineering / design / planning PE-OV: GDOT oversight services for engineering ROW: Right-of-way Acquistion
UTL: Utility relocation CST: Construction / Implementation ALL: Total estimated cost, inclusive of all phases

? For additional information about this project, please call (404) 463-3100 or email transportation@atlantaregional.com.

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HE-202

Atlanta Region's Plan RTP (2020) PROJECT FACT SHEET

Short Title	SR 42 / US 23 WIDENING FROM BILL GARDNER PARKWAY TO PEEKSVILLE ROAD
GDOT Project No.	0015823
Federal ID No.	N/A
Status	Programmed
Service Type	Roadway / General Purpose Capacity
Sponsor	GDOT
Jurisdiction	Henry County
Analysis Level	In the Region's Air Quality Conformity Analysis

Existing Thru Lane	2	**LCI**		**Network Year**	2030
Planned Thru Lane	3	**Flex**		**Corridor Length**	0.4 miles

Detailed Description and Justification

This project is a reconstruction widening project. This project starting point begins at SR 42 going towards CS 636/BILL GARDNER PKWY and ending at CS 645/PEEKSVILLE RD. This project is 0.40 mile in length, located in the Congressional 3 District. An add lane in the southbound direction in the City of Locust Grove to release the congested corridors, high volume intersections, decrease the frequencies of crashed and overall traffic delays.

Phase Status & Funding Information		Status	FISCAL YEAR	TOTAL PHASE COST	BREAKDOWN OF TOTAL PHASE COST BY FUNDING SOURCE			
					FEDERAL	STATE	BONDS	LOCAL/PRIVATE
PE	Transportation Funding Act (HB 170)	AUTH	2018	**$200,000**	~~$0,000~~	~~$200,000~~	~~$0,000~~	~~$0,000~~
ROW	Transportation Funding Act (HB 170)		2020	**$1,300,000**	$0,000	$1,300,000	$0,000	$0,000
UTL	Local Jurisdiction/Municipality Funds		2023	**$137,735**	$0,000	$0,000	$0,000	$137,735
UTL	Transportation Funding Act (HB 170)		2023	**$250,000**	$0,000	$250,000	$0,000	$0,000
CST	Transportation Funding Act (HB 170)		2023	**$1,200,000**	$0,000	$1,200,000	$0,000	$0,000
				$3,087,735	**$0,000**	**$2,950,000**	**$0,000**	**$137,735**

SCP: Scoping PE: Preliminary engineering / engineering / design / planning PE-OV: GDOT oversight services for engineering ROW: Right-of-way Acquistion
UTL: Utility relocation CST: Construction / Implementation ALL: Total estimated cost, inclusive of all phases

? For additional information about this project, please call (404) 463-3100 or email transportation@atlantaregional.com.

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AR-318

Atlanta Region's Plan RTP (2020) PROJECT FACT SHEET

Short Title	I-75 COMMERCIAL VEHICLE LANES (NORTHBOUND DIRECTION ONLY) FROM I-475 TO SR 155
GDOT Project No.	0014203
Federal ID No.	N/A
Status	Programmed
Service Type	Roadway / Managed Lanes
Sponsor	GDOT
Jurisdiction	Henry County,Spalding County
Analysis Level	In the Region's Air Quality Conformity Analysis

Existing Thru Lane	0	**LCI**		**Network Year**	2030
Planned Thru Lane	2	**Flex**		**Corridor Length**	38.6 miles

Detailed Description and Justification

This project is part of the Governor's Major Mobility Investment Program. It proposes to add two new barrier-separated lanes to I-75 in the northbound direction, designated for commercial vehicles only. Tolling is not anticipated and the exact northern terminus will be determined during project development. I-75 between Atlanta and Macon serves as an important freight and motorist corridor that supports critical coastal port truck traffic and travelers from southern Georgia and Florida. As the percentage of truck traffic continues to grow, the increase in truck volume can and will accentuate operational differences, leading to less efficient traffic streams and increased delays. For example, compared to cars, trucks cannot accelerate as quickly on long grades. Providing a dedicated system of lanes separated from existing general purpose lanes is expected to enhance mobility both traffic streams.

Phase Status & Funding Information		Status	FISCAL YEAR	TOTAL PHASE COST	BREAKDOWN OF TOTAL PHASE COST BY FUNDING SOURCE			
					FEDERAL	STATE	BONDS	LOCAL/PRIVATE
PE	Transportation Funding Act (HB 170)	AUTH	2017	**$977,865**	~~$0,000~~	~~$977,865~~	~~$0,000~~	~~$0,000~~
PE	National Highway Performance Program (NHPP)	AUTH	2018	**$924,000**	~~$739,200~~	~~$184,800~~	~~$0,000~~	~~$0,000~~
PE	National Highway System	AUTH	2018	**$87,503**	~~$70,002~~	~~$17,501~~	~~$0,000~~	~~$0,000~~
PE	Repurposed Earmark	AUTH	2018	**$1,056,249**	~~$844,999~~	~~$211,250~~	~~$0,000~~	~~$0,000~~
PE	National Highway Performance Program (NHPP)	AUTH	2019	**$1,287,541**	~~$1,030,033~~	~~$257,508~~	~~$0,000~~	~~$0,000~~
PE	Repurposed Earmark (RPF9)	AUTH	2019	**$142,459**	~~$113,967~~	~~$28,492~~	~~$0,000~~	~~$0,000~~
PE	National Highway Performance Program (NHPP)	AUTH	2020	**$1,540,000**	~~$1,232,000~~	~~$308,000~~	~~$0,000~~	~~$0,000~~
PE	National Highway Performance Program (NHPP)		2021	**$1,760,000**	$1,408,000	$352,000	$0,000	$0,000
PE	National Highway Performance Program (NHPP)		2022	**$1,628,000**	$1,302,400	$325,600	$0,000	$0,000
PE	National Highway Performance Program (NHPP)		2023	**$1,012,000**	$789,360	$222,640	$0,000	$0,000

? For additional information about this project, please call (404) 463-3100 or email transportation@atlantaregional.com.

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ROW	National Highway Performance Program (NHPP)		2020	**$330,000**	$264,000	$66,000	$0,000	$0,000
ROW	National Highway Performance Program (NHPP)		2021	**$682,000**	$545,600	$136,400	$0,000	$0,000
ROW	National Highway Performance Program (NHPP)		2022	**$1,100,000**	$858,000	$242,000	$0,000	$0,000
ROW	National Highway Performance Program (NHPP)		2023	**$1,100,000**	$880,000	$220,000	$0,000	$0,000
ROW	National Highway Performance Program (NHPP)		2024	**$4,840,000**	$3,872,000	$968,000	$0,000	$0,000
ROW	National Highway Performance Program (NHPP)		2025	**$4,840,000**	$3,872,000	$968,000	$0,000	$0,000
CST	National Highway Performance Program (NHPP)		2024	**$1,072,000**	$836,160	$235,840	$0,000	$0,000
CST	National Highway Performance Program (NHPP)		2025	**$4,422,000**	$3,537,600	$884,400	$0,000	$0,000
CST	Toll Revenue Bonds		2025	**$13,332,000**	$0,000	$0,000	$13,332,000	$0,000
CST	General Federal Aid - 2026-2050		LR 2026-2030	**$54,846,000**	$43,876,800	$10,969,200	$0,000	$0,000
CST	Transportation Funding Act (HB 170)		LR 2026-2030	**$1,100,000**	$0,000	$1,100,000	$0,000	$0,000
CST	General Federal Aid - 2026-2050		LR 2031-2040	**$254,100,000**	$203,280,000	$50,820,000	$0,000	$0,000
CST	Transportation Funding Act (HB 170)		LR 2031-2040	**$11,000,000**	$0,000	$11,000,000	$0,000	$0,000
CST	General Federal Aid - 2026-2050		LR 2041-2050	**$282,700,000**	$226,160,000	$56,540,000	$0,000	$0,000
CST	Transportation Funding Act (HB 170)		LR 2041-2050	**$11,000,000**	$0,000	$11,000,000	$0,000	$0,000
CST	Design Build Finance (DBF) Repayment - Federal		LR 2051+	**$448,800,000**	$359,040,000	$89,760,000	$0,000	$0,000
CST	Design Build Finance (DBF) Repayment - State		LR 2051+	**$15,400,000**	$0,000	$15,400,000	$0,000	$0,000
				$1,121,079,617	**$854,552,121**	**$253,195,496**	**$13,332,000**	**$0,000**

SCP: Scoping PE: Preliminary engineering / engineering / design / planning PE-OV: GDOT oversight services for engineering ROW: Right-of-way Acquistion
UTL: Utility relocation CST: Construction / Implementation ALL: Total estimated cost, inclusive of all phases

APPENDIX E

Intersection Volume Development

Traffic Impact Study
300 Marketplace - DRI #3252
Intersection Traffic Volumes

Intersection #1: Bill Gardner Pkwy at I-75 SB Ramps (traffic signal)

A.M. PEAK HOUR

Condition	Northbound				I-75 Southbound Ramp Southbound				Bill Gardner Pkwy Eastbound				Bill Gardner Pkwy Westbound			
	U-turn	L	T	R	U-turn	L	T	R	U-turn	L	T	R	U-turn	L	T	R
Existing 2019 Volumes						457	2	129		0	635	99		279	606	0
Growth Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Adjusted 2021 Volumes	0	0	0	0	0	475	2	134	0	0	660	103	0	290	630	0
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%	2.0%	2.0%	2.0%	2.0%
Growth Factor	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040
DRI# 2939 Traffic						70					11			17	3	
DRI# 2867 Traffic						57					11			10	3	
Base Condition (2023)	0	0	0	0	0	621	2	139	0	0	709	107	0	329	661	0
Project Trips:																
Trip Distribution IN						55%					5%					
Trip Distribution OUT														10%	5%	
Residential Trips	0	0	0	0	0	30	0	0	0	0	3	0	0	18	9	0
Trip Distribution IN						25%					5%					
Trip Distribution OUT														25%	5%	
Retail Trips	0	0	0	0	0	47	0	0	0	0	9	0	0	35	7	0
Total Project Trips	0	0	0	0	0	77	0	0	0	0	12	0	0	53	16	0
Buildout Total (2023)	0	0	0	0	0	698	2	139	0	0	721	107	0	382	677	0

P.M. PEAK HOUR

Condition	Northbound				I-75 Southbound Ramp Southbound				Bill Gardner Pkwy Eastbound				Bill Gardner Pkwy Westbound			
	U-turn	L	T	R	U-turn	L	T	R	U-turn	L	T	R	U-turn	L	T	R
Existing 2019 Volumes						912	1	177			583	138		281	508	
Growth Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Adjusted 2021 Volumes	0	0	0	0	0	948	1	184	0	0	606	144	0	292	528	0
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%	2.0%	2.0%	2.0%	2.0%
Growth Factor	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040
DRI# 2939 Traffic						99					18			80	30	
DRI# 2867 Traffic						21					3			50	9	
Base Condition (2023)	0	0	0	0	0	1,106	1	191	0	0	651	150	0	434	588	0
Project Trips:																
Trip Distribution IN						55%					5%					
Trip Distribution OUT														10%	5%	
Residential Trips	0	0	0	0	0	81	0	0	0	0	7	0	0	8	4	0
Trip Distribution IN						25%					5%					
Trip Distribution OUT														25%	5%	
Retail Trips	0	0	0	0	0	26	0	0	0	0	5	0	0	25	5	0
Total Project Trips	0	0	0	0	0	107	0	0	0	0	12	0	0	33	9	0
Buildout Total (2023)	0	0	0	0	0	1,213	1	191	0	0	663	150	0	467	597	0

Traffic Impact Study
300 Marketplace - DRI #3252
Intersection Traffic Volumes

Intersection #2: Bill Gardner Pkwy at I-75 NB Ramps (traffic signal)

A.M. PEAK HOUR

Condition	I-75 Northbound Ramps Northbound						Southbound		Bill Gardner Pkwy Eastbound				Bill Gardner Pkwy Westbound			
	U-turn	L	T	R	U-turn	L	T	R	U-turn	L	T	R	U-turn	L	T	R
Existing 2019 Volumes		95	0	191						209	871				775	1,061
Growth Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Adjusted 2021 Volumes	0	99	0	199	0	0	0	0	0	217	906	0	0	0	806	1103
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%	2.0%	2.0%	2.0%	2.0%
Growth Factor	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040
DRI# 2939 Traffic				40							81				20	28
DRI# 2867 Traffic				31							68				13	17
Base Condition (2023)	0	103	0	278	0	0	0	0	0	226	1,092	0	0	0	872	1,193
Project Trips:																
Trip Distribution IN				10%							60%					
Trip Distribution OUT															15%	55%
Residential Trips	0	0	0	6	0	0	0	0	0	0	33	0	0	0	27	100
Trip Distribution IN				25%							30%					
Trip Distribution OUT															30%	25%
Retail Trips	0	0	0	47	0	0	0	0	0	0	56	0	0	0	42	35
Total Project Trips	0	0	0	53	0	0	0	0	0	0	89	0	0	0	69	135
Buildout Total (2023)	0	103	0	331	0	0	0	0	0	226	1,181	0	0	0	941	1,328

P.M. PEAK HOUR

Condition	I-75 Northbound Ramps Northbound						Southbound		Bill Gardner Pkwy Eastbound				Bill Gardner Pkwy Westbound			
	U-turn	L	T	R	U-turn	L	T	R	U-turn	L	T	R	U-turn	L	T	R
Existing 2019 Volumes		112	2	383						70	443				694	543
Growth Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Adjusted 2021 Volumes	0	116	2	398	0	0	0	0	0	73	461	0	0	0	722	565
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%	2.0%	2.0%	2.0%	2.0%
Growth Factor	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040
DRI# 2939 Traffic				55							118				110	149
DRI# 2867 Traffic				12							24				59	56
Base Condition (2023)	0	121	2	481	0	0	0	0	0	76	622	0	0	0	920	793
Project Trips:																
Trip Distribution IN				10%							60%					
Trip Distribution OUT															15%	55%
Residential Trips	0	0	0	15	0	0	0	0	0	0	88	0	0	0	12	46
Trip Distribution IN				25%							30%					
Trip Distribution OUT															30%	25%
Retail Trips	0	0	0	26	0	0	0	0	0	0	31	0	0	0	30	25
Total Project Trips	0	0	0	41	0	0	0	0	0	0	119	0	0	0	42	71
Buildout Total (2023)	0	121	2	522	0	0	0	0	0	76	741	0	0	0	962	864

Traffic Impact Study
300 Marketplace - DRI #3252
Intersection Traffic Volumes

Intersection #3: Bill Gardner Pkwy at Market Place Blvd/Tanger Blvd (traffic signal)

A.M. PEAK HOUR

Condition	Tanger Blvd Northbound				Market Place Blvd Southbound				Bill Gardner Parkway Eastbound				Bill Gardner Parkway Westbound			
	U-turn	L	T	R	U-turn	L	T	R	U-turn	L	T	R	U-turn	L	T	R
Existing 2019 Volumes		481	45	24		45	40	306		118	598	173		16	975	2
Growth Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Adjusted 2021 Volumes	0	500	47	25	0	47	42	318	0	123	622	180	0	17	1014	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%	2.0%	2.0%	2.0%	2.0%
Growth Factor	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040
DRI# 2939 Traffic								25		83	38				20	
DRI# 2867 Traffic								21		24	75				9	
Base Condition (2023)	0	520	49	26	0	49	44	377	0	235	760	187	0	18	1,084	2
Project Trips:																
Trip Distribution IN										70%						5%
Trip Distribution OUT						5%		70%								
Residential Trips	0	0	0	0	0	9	0	127	0	39	0	0	0	0	0	3
Trip Distribution IN			15%							55%						5%
Trip Distribution OUT						5%	15%	55%								
Retail Trips	0	0	28	0	0	7	21	77	0	103	0	0	0	0	0	9
Total Project Trips	0	0	28	0	0	16	21	204	0	142	0	0	0	0	0	12
Buildout Total (2023)	0	520	77	26	0	65	65	581	0	377	760	187	0	18	1,084	14

P.M. PEAK HOUR

Condition	Tanger Blvd Northbound				Market Place Blvd Southbound				Bill Gardner Parkway Eastbound				Bill Gardner Parkway Westbound			
	U-turn	L	T	R	U-turn	L	T	R	U-turn	L	T	R	U-turn	L	T	R
Existing 2019 Volumes		386	142	101		145	158	249		223	903	584		85	521	30
Growth Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Adjusted 2021 Volumes	0	401	148	105	0	151	164	259	0	232	939	607	0	88	542	31
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%	2.0%	2.0%	2.0%	2.0%
Growth Factor	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040
DRI# 2939 Traffic								193		125	47				48	
DRI# 2867 Traffic								119		8	78				52	
Base Condition (2023)	0	417	154	109	0	157	171	581	0	374	1,102	632	0	92	664	32
Project Trips:																
Trip Distribution IN										70%						5%
Trip Distribution OUT						5%		70%								
Residential Trips	0	0	0	0	0	4	0	58	0	103	0	0	0	0	0	7
Trip Distribution IN			15%							55%						5%
Trip Distribution OUT						5%	15%	55%								
Retail Trips	0	0	15	0	0	5	15	54	0	56	0	0	0	0	0	5
Total Project Trips	0	0	15	0	0	9	15	112	0	159	0	0	0	0	0	12
Buildout Total (2023)	0	417	169	109	0	166	186	693	0	533	1,102	632	0	92	664	44

Traffic Impact Study
300 Marketplace - DRI #3252
Intersection Traffic Volumes

Intersection #4: Market Place Blvd @ SR 42

A.M. PEAK HOUR

Condition	SR 42 Northbound				SR 42 Southbound				Market Place Blvd Eastbound				n/a Westbound			
	U-turn	L	T	R	U-turn	L	T	R	U-turn	L	T	R	U-turn	L	T	R
Existing 2019 Volumes		27	457				282	326		105		11				
Growth Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Adjusted 2021 Volumes	0	28	475	0	0	0	293	339	0	109	0	11	0	0	0	0
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%	2.0%	2.0%	2.0%	2.0%
Growth Factor	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040
DRI# 2939 Traffic		6	45				27	2		11		2				
DRI# 2867 Traffic			87				12	21		24						
Base Condition (2023)	0	35	626	0	0	0	344	376	0	148	0	13	0	0	0	0
Project Trips:																
Trip Distribution IN		15%						10%								
Trip Distribution OUT										10%		15%				
Residential Trips	0	8	0	0	0	0	0	6	0	18	0	27	0	0	0	0
Trip Distribution IN		15%						10%								
Trip Distribution OUT										10%		15%				
Retail Trips	0	28	0	0	0	0	0	19	0	14	0	21	0	0	0	0
Total Project Trips	0	36	0	0	0	0	0	25	0	32	0	48	0	0	0	0
Buildout Total (2023)	0	71	626	0	0	0	344	401	0	180	0	61	0	0	0	0

P.M. PEAK HOUR

Condition	SR 42 Northbound				SR 42 Southbound				Market Place Blvd Eastbound				n/a Westbound			
	U-turn	L	T	R	U-turn	L	T	R	U-turn	L	T	R	U-turn	L	T	R
Existing 2019 Volumes		65	563				478	310		157		79				
Growth Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Adjusted 2021 Volumes	0	68	586	0	0	0	497	322	0	163	0	82	0	0	0	0
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%	2.0%	2.0%	2.0%	2.0%
Growth Factor	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040
DRI# 2939 Traffic		9	59				84	15		14		15				
DRI# 2867 Traffic			32				63	63		8						
Base Condition (2023)	0	80	701	0	0	0	664	413	0	192	0	100	0	0	0	0
Project Trips:																
Trip Distribution IN		15%						10%								
Trip Distribution OUT										10%		15%				
Residential Trips	0	22	0	0	0	0	0	15	0	8	0	12	0	0	0	0
Trip Distribution IN		15%						10%								
Trip Distribution OUT										10%		15%				
Retail Trips	0	15	0	0	0	0	0	10	0	10	0	15	0	0	0	0
Total Project Trips	0	37	0	0	0	0	0	25	0	18	0	27	0	0	0	0
Buildout Total (2023)	0	117	701	0	0	0	664	438	0	210	0	127	0	0	0	0

Traffic Impact Study
300 Marketplace - DRI #3252
Intersection Traffic Volumes

Intersection #5: Market Place Blvd at Wal-mart south driveway/Proposed Driveway #1 (stop-control)

A.M. PEAK HOUR

Condition	Market Place Blvd Northbound				Market Place Blvd Southbound				Proposed Driveway #1 Eastbound				Wal-mart South Driveway Westbound			
	U-turn	L	T	R	U-turn	L	T	R	U-turn	L	T	R	U-turn	L	T	R
Existing Volumes 2021		0	116	24		44	309	0		0	0	0		14	0	13
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%	2.0%	2.0%	2.0%	2.0%
Growth Factor	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040
DRI# 2939 Traffic			83				25									
DRI# 2867 Traffic			24				21									
Base Condition (2023)	0	0	228	25	0	46	367	0	0	0	0	0	0	15	0	14
Project Trips:																
Trip Distribution IN			75%													
Trip Distribution OUT							75%									
Residential Trips	0	0	41	0	0	0	137	0	0	0	0	0	0	0	0	0
Trip Distribution IN		50%	25%					5%								
Trip Distribution OUT							25%			5%		50%				
Retail Trips	0	94	47	0	0	0	35	9	0	7	0	70	0	0	0	0
Pass-By Trips			-7	7			-10	10		7		10				
Total Project Trips	0	94	81	7	0	0	162	19	0	14	0	80	0	0	0	0
Buildout Total (2023)	0	94	309	32	0	46	529	19	0	14	0	80	0	15	0	14

P.M. PEAK HOUR

Condition	Market Place Blvd Northbound				Market Place Blvd Southbound				Proposed Driveway #1 Eastbound				Wal-mart South Driveway Westbound			
	U-turn	L	T	R	U-turn	L	T	R	U-turn	L	T	R	U-turn	L	T	R
Existing Volumes 2021		0	240	95	0	49	326	0			0			66	0	67
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%	2.0%	2.0%	2.0%	2.0%
Growth Factor	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040
DRI# 2939 Traffic			125				193									
DRI# 2867 Traffic			8				119									
Base Condition (2023)	0	0	383	99	0	51	651	0	0	0	0	0	0	69	0	70
Project Trips:																
Trip Distribution IN			75%													
Trip Distribution OUT							75%									
Residential Trips	0	0	110	0	0	0	62	0	0	0	0	0	0	0	0	0
Trip Distribution IN		50%	25%					5%								
Trip Distribution OUT							25%			5%		50%				
Retail Trips	0	51	26	0	0	0	25	5	0	5	0	50	0	0	0	0
Pass-By Trips		20	-20				-27	13		10		27				
Total Project Trips	0	71	116	0	0	0	60	18	0	15	0	77	0	0	0	0
Buildout Total (2023)	0	71	499	99	0	51	711	18	0	15	0	77	0	69	0	70

Traffic Impact Study
300 Marketplace - DRI #3252
Intersection Traffic Volumes

Intersection #6: Market Place Blvd at Wal-mart north driveway/Proposed Driveway #2 (stop-control)

A.M. PEAK HOUR

Condition	Market Place Blvd Northbound				Market Place Blvd Southbound				Proposed Driveway #2 Eastbound				Wal-mart North Driveway Westbound			
	U-turn	L	T	R	U-turn	L	T	R	U-turn	L	T	R	U-turn	L	T	R
Existing Volumes 2021		0	116	0		0	353	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%	2.0%	2.0%	2.0%	2.0%
Growth Factor	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040
DRI# 2939 Traffic			84				25									
DRI# 2867 Traffic			24				21									
Base Condition (2023)	0	0	229	0	0	0	413	0	0	0	0	0	0	2	0	1
Project Trips:																
Trip Distribution IN		75%						25%								
Trip Distribution OUT										25%		75%				
Residential Trips	0	41	0	0	0	0	0	14	0	46	0	137	0	0	0	0
Trip Distribution IN		25%					5%	20%								
Trip Distribution OUT			5%							20%		25%				
Retail Trips	0	47	7	0	0	0	9	37	0	28	0	35	0	0	0	0
Pass-By Trips							-10	10				10				
Total Project Trips	0	88	7	0	0	0	-1	61	0	74	0	182	0	0	0	0
Buildout Total (2023)	0	88	236	0	0	0	412	61	0	74	0	182	0	2	0	1

P.M. PEAK HOUR

Condition	Market Place Blvd Northbound				Market Place Blvd Southbound				Proposed Driveway #2 Eastbound				Wal-mart North Driveway Westbound			
	U-turn	L	T	R	U-turn	L	T	R	U-turn	L	T	R	U-turn	L	T	R
Existing Volumes 2021		0	236	4		0	375	0		0	0	0		2	0	16
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%	2.0%	2.0%	2.0%	2.0%
Growth Factor	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040
DRI# 2939 Traffic			124				193									
DRI# 2867 Traffic			8				63									
Base Condition (2023)	0	0	378	4	0	0	646	0	0	0	0	0	0	2	0	17
Project Trips:																
Trip Distribution IN		75%						25%								
Trip Distribution OUT										25%		75%				
Residential Trips	0	110	0	0	0	0	0	37	0	21	0	62	0	0	0	0
Trip Distribution IN		25%					5%	20%								
Trip Distribution OUT			5%							20%		25%				
Retail Trips	0	26	5	0	0	0	5	20	0	20	0	25	0	0	0	0
Pass-By Trips		4	-14				-24	24		14		10				
Total Project Trips	0	140	-9	0	0	0	-19	81	0	55	0	97	0	0	0	0
Buildout Total (2023)	0	140	369	4	0	0	627	81	0	55	0	97	0	2	0	17

Traffic Impact Study
300 Marketplace - DRI #3252
Intersection Traffic Volumes

Intersection #7: Bill Gardner Pkwy at SR 42 (traffic signal)

A.M. PEAK HOUR

Condition	SR 42 Northbound				SR 42 Southbound				Bill Gardner Pkwy Eastbound				Bill Gardner Pkwy Westbound			
	U-turn	L	T	R	U-turn	L	T	R	U-turn	L	T	R	U-turn	L	T	R
Existing 2019 Volumes		887	301				185	110		186		443				
Growth Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Adjusted 2021 Volumes	0	922	313	0	0	0	192	114	0	193	0	461	0	0	0	0
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%	2.0%	2.0%	2.0%	2.0%
Growth Factor	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040
DRI# 2939 Traffic			13				5	23		38						
DRI# 2867 Traffic			12				3	9		75						
Base Condition (2023)	0	959	351	0	0	0	208	151	0	314	0	480	0	0	0	0
Project Trips:																
Trip Distribution IN		5%	15%													
Trip Distribution OUT							15%					5%				
Residential Trips	0	3	8	0	0	0	27	0	0	0	0	9	0	0	0	0
Trip Distribution IN		5%	15%													
Trip Distribution OUT							15%					5%				
Retail Trips	0	9	28	0	0	0	21	0	0	0	0	7	0	0	0	0
Total Project Trips	0	12	36	0	0	0	48	0	0	0	0	16	0	0	0	0
Buildout Total (2023)	0	971	387	0	0	0	256	151	0	314	0	496	0	0	0	0

P.M. PEAK HOUR

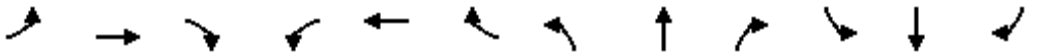
Condition	SR 42 Northbound				SR 42 Southbound				Bill Gardner Pkwy Eastbound				Bill Gardner Pkwy Westbound			
	U-turn	L	T	R	U-turn	L	T	R	U-turn	L	T	R	U-turn	L	T	R
Existing 2019 Volumes		512	336				385	171		297		780				
Growth Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Adjusted 2021 Volumes	0	532	349	0	0	0	400	178	0	309	0	811	0	0	0	0
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%	2.0%	2.0%	2.0%	2.0%
Growth Factor	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040	1.040
DRI# 2939 Traffic			21				33	66		47						
DRI# 2867 Traffic			4				11	52		28						
Base Condition (2023)	0	553	388	0	0	0	460	303	0	396	0	844	0	0	0	0
Project Trips:																
Trip Distribution IN		5%	15%													
Trip Distribution OUT							15%					5%				
Residential Trips	0	7	22	0	0	0	12	0	0	0	0	4	0	0	0	0
Trip Distribution IN		5%	15%													
Trip Distribution OUT							15%					5%				
Retail Trips	0	5	15	0	0	0	15	0	0	0	0	5	0	0	0	0
Total Project Trips	0	12	37	0	0	0	27	0	0	0	0	9	0	0	0	0
Buildout Total (2023)	0	565	425	0	0	0	487	303	0	396	0	853	0	0	0	0

APPENDIX F

Capacity Analysis Reports

Synchro Reports

Existing Year 2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	660	103	290	630	0	0	0	0	475	0	134
Future Volume (veh/h)	0	660	103	290	630	0	0	0	0	475	0	134
Initial Q (Qb), veh	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
Parking Bus, Adj	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	
Adj Sat Flow, veh/h/ln	0	1870	1870	1841	1870	0				1796	0	1870
Adj Flow Rate, veh/h	0	750	117	330	716	0				540	0	152
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88				0.88	0.88	0.88
Percent Heavy Veh, %	0	2	2	4	2	0				7	0	2
Cap, veh/h	0	1784	278	500	1347	0				623	0	298
Arrive On Green	0.00	0.58	0.58	0.09	0.72	0.00				0.19	0.00	0.19
Sat Flow, veh/h	0	3174	480	1753	1870	0				3319	0	1585
Grp Volume(v), veh/h	0	433	434	330	716	0				540	0	152
Grp Sat Flow(s),veh/h/ln	0	1777	1784	1753	1870	0				1659	0	1585
Q Serve(g_s), s	0.0	17.6	17.6	9.4	22.6	0.0				20.5	0.0	11.2
Cycle Q Clear(g_c), s	0.0	17.6	17.6	9.4	22.6	0.0				20.5	0.0	11.2
Prop In Lane	0.00		0.27	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1029	1033	500	1347	0				623	0	298
V/C Ratio(X)	0.00	0.42	0.42	0.66	0.53	0.00				0.87	0.00	0.51
Avail Cap(c_a), veh/h	0	1029	1033	752	1347	0				817	0	390
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.68	0.68	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	15.2	15.2	10.9	8.3	0.0				51.2	0.0	47.4
Incr Delay (d2), s/veh	0.0	1.3	1.3	1.0	1.0	0.0				7.8	0.0	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	7.0	7.0	3.5	8.8	0.0				9.1	0.0	4.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	16.5	16.5	11.9	9.3	0.0				59.0	0.0	48.8
LnGrp LOS	A	B	B	B	A	A				E	A	D
Approach Vol, veh/h		867			1046						692	
Approach Delay, s/veh		16.5			10.1						56.8	
Approach LOS		B			B						E	

Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		99.6			18.3	81.3		30.4				
Change Period (Y+Rc), s		6.0			6.0	6.0		6.0				
Max Green Setting (Gmax), s		86.0			31.0	49.0		32.0				
Max Q Clear Time (g_c+I1), s		24.6			11.4	19.6		22.5				
Green Ext Time (p_c), s		6.2			1.0	5.5		1.9				

Intersection Summary												
HCM 6th Ctrl Delay			24.6									
HCM 6th LOS			C									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	217	906	0	0	806	1103	99	0	199	0	0	0
Future Volume (veh/h)	217	906	0	0	806	1103	99	0	199	0	0	0
Initial Q (Qb), veh	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			
Parking Bus, Adj	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				
Adj Sat Flow, veh/h/ln	1870	1841	0	0	1856	1856	1856	1900	1811			
Adj Flow Rate, veh/h	233	974	0	0	867	0	106	0	0			
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93			
Percent Heavy Veh, %	2	4	0	0	3	3	3	0	6			
Cap, veh/h	467	2916	0	0	1372		131	0				
Arrive On Green	0.06	1.00	0.00	0.00	0.74	0.00	0.07	0.00	0.00			
Sat Flow, veh/h	1781	3589	0	0	1856	1572	1767	0	3070			
Grp Volume(v), veh/h	233	974	0	0	867	0	106	0	0			
Grp Sat Flow(s),veh/h/ln	1781	1749	0	0	1856	1572	1767	0	1535			
Q Serve(g_s), s	4.0	0.0	0.0	0.0	29.7	0.0	7.7	0.0	0.0			
Cycle Q Clear(g_c), s	4.0	0.0	0.0	0.0	29.7	0.0	7.7	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	467	2916	0	0	1372		131	0				
V/C Ratio(X)	0.50	0.33	0.00	0.00	0.63		0.81	0.00				
Avail Cap(c_a), veh/h	532	2916	0	0	1372		272	0				
HCM Platoon Ratio	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.76	0.76	0.00	0.00	0.21	0.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	8.8	0.0	0.0	0.0	8.3	0.0	59.3	0.0	0.0			
Incr Delay (d2), s/veh	0.6	0.2	0.0	0.0	0.5	0.0	11.2	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			
%ile BackOfQ(50%),veh/ln	2.1	0.1	0.0	0.0	10.5	0.0	3.8	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	9.4	0.2	0.0	0.0	8.8	0.0	70.5	0.0	0.0			
LnGrp LOS	A	A	A	A	A		E	A				
Approach Vol, veh/h		1207			867	A		106	A			
Approach Delay, s/veh		2.0			8.8			70.5				
Approach LOS		A			A			E				

Timer - Assigned Phs	1	2		4		6			
Phs Duration (G+Y+Rc), s	12.3	102.1		15.6		114.4			
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0			
Max Green Setting (Gmax), s	11.0	81.0		20.0		98.0			
Max Q Clear Time (g_c+I1), s	6.0	31.7		9.7		2.0			
Green Ext Time (p_c), s	0.3	22.7		0.2		27.8			

Intersection Summary	
HCM 6th Ctrl Delay	8.0
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	123	622	180	17	1014	2	500	47	25	47	42	318
Future Volume (veh/h)	123	622	180	17	1014	2	500	47	25	47	42	318
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	1826	1826	1870	1841	1841	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	143	723	0	20	1179	2	647	0	0	55	49	0
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	5	5	2	4	4	2	2	2	2	2	2
Cap, veh/h	221	1504		300	1474	3	822	432	0	201	211	
Arrive On Green	0.02	0.14	0.00	0.04	0.41	0.41	0.23	0.00	0.00	0.11	0.11	0.00
Sat Flow, veh/h	1781	3469	1547	1781	3582	6	3563	1870	0	1781	1870	1585
Grp Volume(v), veh/h	143	723	0	20	576	605	647	0	0	55	49	0
Grp Sat Flow(s),veh/h/ln	1781	1735	1547	1781	1749	1840	1781	1870	0	1781	1870	1585
Q Serve(g_s), s	5.9	24.9	0.0	0.8	37.5	37.5	22.2	0.0	0.0	3.7	3.1	0.0
Cycle Q Clear(g_c), s	5.9	24.9	0.0	0.8	37.5	37.5	22.2	0.0	0.0	3.7	3.1	0.0
Prop In Lane	1.00		1.00	1.00		0.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	221	1504		300	719	757	822	432	0	201	211	
V/C Ratio(X)	0.65	0.48		0.07	0.80	0.80	0.79	0.00	0.00	0.27	0.23	
Avail Cap(c_a), veh/h	223	1504		300	719	757	822	432	0	301	317	
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.95	0.95	0.00	0.28	0.28	0.28	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	28.8	42.2	0.0	21.8	33.6	33.6	47.0	0.0	0.0	52.8	52.6	0.0
Incr Delay (d2), s/veh	5.9	1.0	0.0	0.1	2.7	2.6	7.5	0.0	0.0	0.7	0.6	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	3.0	11.8	0.0	0.3	16.1	16.9	10.8	0.0	0.0	1.7	1.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.7	43.3	0.0	21.9	36.3	36.2	54.5	0.0	0.0	53.5	53.1	0.0
LnGrp LOS	C	D		C	D	D	D	A	A	D	D	
Approach Vol, veh/h		866	A		1201			647			104	A
Approach Delay, s/veh		41.9			36.0			54.5			53.3	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	13.9	59.5		20.6	11.0	62.4		36.0
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0
Max Green Setting (Gmax), s	8.0	46.0		22.0	5.0	49.0		30.0
Max Q Clear Time (g_c+I1), s	7.9	39.5		5.7	2.8	26.9		24.2
Green Ext Time (p_c), s	0.0	3.8		0.3	0.0	5.0		1.4

Intersection Summary	
HCM 6th Ctrl Delay	42.7
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	2.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	109	11	28	475	293	339
Future Vol, veh/h	109	11	28	475	293	339
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	Yield
Storage Length	100	0	250	-	-	250
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	5	9	2	6	10	2
Mvmt Flow	128	13	33	559	345	399

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	970	345	345	0	-	0
Stage 1	345	-	-	-	-	-
Stage 2	625	-	-	-	-	-
Critical Hdwy	6.45	6.29	4.12	-	-	-
Critical Hdwy Stg 1	5.45	-	-	-	-	-
Critical Hdwy Stg 2	5.45	-	-	-	-	-
Follow-up Hdwy	3.545	3.381	2.218	-	-	-
Pot Cap-1 Maneuver	277	682	1214	-	-	-
Stage 1	710	-	-	-	-	-
Stage 2	528	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	270	682	1214	-	-	-
Mov Cap-2 Maneuver	270	-	-	-	-	-
Stage 1	691	-	-	-	-	-
Stage 2	528	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	28	0.4	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1214	-	270	682	-	-
HCM Lane V/C Ratio	0.027	-	0.475	0.019	-	-
HCM Control Delay (s)	8	-	29.8	10.4	-	-
HCM Lane LOS	A	-	D	B	-	-
HCM 95th %tile Q(veh)	0.1	-	2.4	0.1	-	-

Intersection	
Int Delay, s/veh	1.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	14	13	116	24	44	309
Future Vol, veh/h	14	13	116	24	44	309
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	Yield	-	None
Storage Length	0	0	-	200	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	16	15	135	28	51	359

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	596	135	0	0	135	0
Stage 1	135	-	-	-	-	-
Stage 2	461	-	-	-	-	-
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	466	914	-	-	1449	-
Stage 1	891	-	-	-	-	-
Stage 2	635	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	450	914	-	-	1449	-
Mov Cap-2 Maneuver	450	-	-	-	-	-
Stage 1	891	-	-	-	-	-
Stage 2	613	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.2	0	0.9
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	450	914	1449	-
HCM Lane V/C Ratio	-	-	0.036	0.017	0.035	-
HCM Control Delay (s)	-	-	13.3	9	7.6	-
HCM Lane LOS	-	-	B	A	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0.1	0.1	-

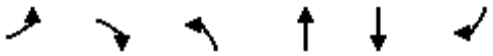
Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	116	0	0	353	2	1
Future Vol, veh/h	116	0	0	353	2	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Yield	-	None	-	Yield
Storage Length	-	200	200	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	34	0	0	2	2	0
Mvmt Flow	140	0	0	425	2	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	140	0	565	140
Stage 1	-	-	-	-	140	-
Stage 2	-	-	-	-	425	-
Critical Hdwy	-	-	4.1	-	6.42	6.2
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.2	-	3.518	3.3
Pot Cap-1 Maneuver	-	-	1456	-	486	913
Stage 1	-	-	-	-	887	-
Stage 2	-	-	-	-	659	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1456	-	486	913
Mov Cap-2 Maneuver	-	-	-	-	486	-
Stage 1	-	-	-	-	887	-
Stage 2	-	-	-	-	659	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	10
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	729	-	-	1456	-
HCM Lane V/C Ratio	0.005	-	-	-	-
HCM Control Delay (s)	10	-	-	0	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-



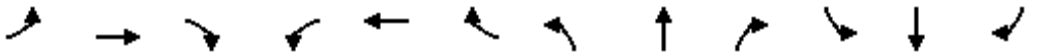
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	193	461	922	313	192	114
Future Volume (veh/h)	193	461	922	313	192	114
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1767	1856	1841	1841	1781	1722
Adj Flow Rate, veh/h	210	0	1002	340	209	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	9	3	4	4	8	12
Cap, veh/h	238		1016	1410	590	
Arrive On Green	0.14	0.00	0.39	0.77	0.33	0.00
Sat Flow, veh/h	1682	1572	1753	1841	1781	1459
Grp Volume(v), veh/h	210	0	1002	340	209	0
Grp Sat Flow(s),veh/h/ln	1682	1572	1753	1841	1781	1459
Q Serve(g_s), s	15.9	0.0	48.0	6.9	11.6	0.0
Cycle Q Clear(g_c), s	15.9	0.0	48.0	6.9	11.6	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	238		1016	1410	590	
V/C Ratio(X)	0.88		0.99	0.24	0.35	
Avail Cap(c_a), veh/h	440		1023	1410	590	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.83	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	54.7	0.0	15.0	4.4	32.9	0.0
Incr Delay (d2), s/veh	8.6	0.0	24.6	0.4	1.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.3	0.0	22.0	2.2	5.1	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	63.4	0.0	39.6	4.8	34.6	0.0
LnGrp LOS	E		D	A	C	
Approach Vol, veh/h	210	A		1342	209	A
Approach Delay, s/veh	63.4			30.8	34.6	
Approach LOS	E			C	C	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		105.6		24.4	56.5	49.1
Change Period (Y+Rc), s		6.0		6.0	6.0	6.0
Max Green Setting (Gmax), s		84.0		34.0	51.0	27.0
Max Q Clear Time (g_c+I1), s		8.9		17.9	50.0	13.6
Green Ext Time (p_c), s		4.5		0.5	0.5	1.5

Intersection Summary	
HCM 6th Ctrl Delay	35.1
HCM 6th LOS	D

Notes

Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	606	144	292	528	0	0	0	0	948	0	184
Future Volume (veh/h)	0	606	144	292	528	0	0	0	0	948	0	184
Initial Q (Qb), veh	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
Parking Bus, Adj	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	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1856	0	1870
Adj Flow Rate, veh/h	0	618	147	298	539	0				967	0	188
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98				0.98	0.98	0.98
Percent Heavy Veh, %	0	2	2	2	2	0				3	0	2
Cap, veh/h	0	817	194	577	1111	0				1117	0	516
Arrive On Green	0.00	0.29	0.29	0.54	1.00	0.00				0.33	0.00	0.33
Sat Flow, veh/h	0	2943	676	1781	1870	0				3428	0	1585
Grp Volume(v), veh/h	0	385	380	298	539	0				967	0	188
Grp Sat Flow(s),veh/h/ln	0	1777	1749	1781	1870	0				1714	0	1585
Q Serve(g_s), s	0.0	29.6	29.7	4.8	0.0	0.0				39.7	0.0	13.6
Cycle Q Clear(g_c), s	0.0	29.6	29.7	4.8	0.0	0.0				39.7	0.0	13.6
Prop In Lane	0.00		0.39	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	509	501	577	1111	0				1117	0	516
V/C Ratio(X)	0.00	0.76	0.76	0.52	0.48	0.00				0.87	0.00	0.36
Avail Cap(c_a), veh/h	0	509	501	577	1111	0				1417	0	655
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.80	0.80	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	48.7	48.8	24.8	0.0	0.0				47.5	0.0	38.7
Incr Delay (d2), s/veh	0.0	10.0	10.3	2.6	1.2	0.0				5.4	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	14.5	14.3	5.8	0.4	0.0				17.7	0.0	5.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	58.7	59.0	27.5	1.2	0.0				52.8	0.0	39.3
LnGrp LOS	A	E	E	C	A	A				D	A	D
Approach Vol, veh/h		765			837						1155	
Approach Delay, s/veh		58.9			10.6						50.6	
Approach LOS		E			B						D	

Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		95.1			46.1	49.0		54.9				
Change Period (Y+Rc), s		6.0			6.0	6.0		6.0				
Max Green Setting (Gmax), s		76.0			27.0	43.0		62.0				
Max Q Clear Time (g_c+I1), s		2.0			6.8	31.7		41.7				
Green Ext Time (p_c), s		12.0			0.8	6.7		7.1				

Intersection Summary												
HCM 6th Ctrl Delay			40.8									
HCM 6th LOS			D									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	73	461	0	0	722	565	116	0	398	0	0	0
Future Volume (veh/h)	73	461	0	0	722	565	116	0	398	0	0	0
Initial Q (Qb), veh	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			
Parking Bus, Adj	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				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1841	1841	1159	1856			
Adj Flow Rate, veh/h	76	480	0	0	752	0	121	0	0			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96			
Percent Heavy Veh, %	2	2	0	0	2	4	4	50	3			
Cap, veh/h	656	2977	0	0	1420		144	0				
Arrive On Green	0.08	1.00	0.00	0.00	1.00	0.00	0.08	0.00	0.00			
Sat Flow, veh/h	1781	3647	0	0	1870	1560	1753	0	3145			
Grp Volume(v), veh/h	76	480	0	0	752	0	121	0	0			
Grp Sat Flow(s),veh/h/ln	1781	1777	0	0	1870	1560	1753	0	1572			
Q Serve(g_s), s	1.3	0.0	0.0	0.0	0.0	0.0	10.2	0.0	0.0			
Cycle Q Clear(g_c), s	1.3	0.0	0.0	0.0	0.0	0.0	10.2	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	656	2977	0	0	1420		144	0				
V/C Ratio(X)	0.12	0.16	0.00	0.00	0.53		0.84	0.00				
Avail Cap(c_a), veh/h	695	2977	0	0	1420		280	0				
HCM Platoon Ratio	2.00	2.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00			
Upstream Filter(I)	0.60	0.60	0.00	0.00	0.75	0.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	2.7	0.0	0.0	0.0	0.0	0.0	67.9	0.0	0.0			
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.0	1.1	0.0	12.1	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			
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.0	0.0	0.4	0.0	5.0	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	2.7	0.1	0.0	0.0	1.1	0.0	79.9	0.0	0.0			
LnGrp LOS	A	A	A	A	A		E	A				
Approach Vol, veh/h		556			752	A		121	A			
Approach Delay, s/veh		0.4			1.1			79.9				
Approach LOS		A			A			E				

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	11.7	119.9		18.3		131.7						
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0						
Max Green Setting (Gmax), s	9.6	99.0		24.0		114.0						
Max Q Clear Time (g_c+I1), s	3.3	2.0		12.2		2.0						
Green Ext Time (p_c), s	0.1	21.1		0.2		9.7						

Intersection Summary	
HCM 6th Ctrl Delay	7.5
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	232	939	607	88	542	31	401	148	105	151	164	259
Future Volume (veh/h)	232	939	607	88	542	31	401	148	105	151	164	259
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	1856	1870	1870	1841	1841	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	239	968	0	91	559	32	337	259	108	156	169	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	3	2	2	4	4	2	2	2	2	2	2
Cap, veh/h	405	1362		257	1161	66	511	359	150	191	200	
Arrive On Green	0.13	0.51	0.00	0.06	0.35	0.35	0.29	0.29	0.29	0.11	0.11	0.00
Sat Flow, veh/h	1781	3526	1585	1781	3363	192	1781	1254	523	1781	1870	1585
Grp Volume(v), veh/h	239	968	0	91	290	301	337	0	367	156	169	0
Grp Sat Flow(s),veh/h/ln	1781	1763	1585	1781	1749	1806	1781	0	1776	1781	1870	1585
Q Serve(g_s), s	12.7	31.6	0.0	4.8	19.6	19.6	25.0	0.0	27.9	12.9	13.3	0.0
Cycle Q Clear(g_c), s	12.7	31.6	0.0	4.8	19.6	19.6	25.0	0.0	27.9	12.9	13.3	0.0
Prop In Lane	1.00		1.00	1.00		0.11	1.00		0.29	1.00		1.00
Lane Grp Cap(c), veh/h	405	1362		257	604	623	511	0	509	191	200	
V/C Ratio(X)	0.59	0.71		0.35	0.48	0.48	0.66	0.00	0.72	0.82	0.84	
Avail Cap(c_a), veh/h	492	1362		257	604	623	511	0	509	261	274	
HCM Platoon Ratio	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.98	0.98	0.00	0.62	0.62	0.62	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	26.5	30.1	0.0	30.5	38.6	38.6	47.1	0.0	48.1	65.5	65.7	0.0
Incr Delay (d2), s/veh	1.3	3.1	0.0	2.4	1.7	1.7	6.6	0.0	8.5	13.4	15.8	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	5.3	12.9	0.0	2.2	8.7	9.0	12.2	0.0	13.7	6.6	7.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.8	33.2	0.0	32.9	40.3	40.2	53.6	0.0	56.6	78.9	81.5	0.0
LnGrp LOS	C	C		C	D	D	D	A	E	E	F	
Approach Vol, veh/h		1207	A		682			704			325	A
Approach Delay, s/veh		32.1			39.3			55.2			80.3	
Approach LOS		C			D			E			F	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	21.2	57.8		22.1	15.0	63.9		49.0
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0
Max Green Setting (Gmax), s	22.5	38.5		22.0	9.0	52.0		43.0
Max Q Clear Time (g_c+I1), s	14.7	21.6		15.3	6.8	33.6		29.9
Green Ext Time (p_c), s	0.4	3.2		0.8	0.0	6.5		3.0

Intersection Summary	
HCM 6th Ctrl Delay	44.7
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	10

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	163	82	68	586	497	322
Future Vol, veh/h	163	82	68	586	497	322
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	Yield
Storage Length	100	0	250	-	-	250
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	99	99	99	99	99	99
Heavy Vehicles, %	3	2	2	2	2	2
Mvmt Flow	165	83	69	592	502	325

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1232	502	502	0	-	0
Stage 1	502	-	-	-	-	-
Stage 2	730	-	-	-	-	-
Critical Hdwy	6.43	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	195	569	1062	-	-	-
Stage 1	606	-	-	-	-	-
Stage 2	475	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	182	569	1062	-	-	-
Mov Cap-2 Maneuver	182	-	-	-	-	-
Stage 1	567	-	-	-	-	-
Stage 2	475	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	67.8	0.9	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1062	-	182	569	-	-
HCM Lane V/C Ratio	0.065	-	0.905	0.146	-	-
HCM Control Delay (s)	8.6	-	95.6	12.4	-	-
HCM Lane LOS	A	-	F	B	-	-
HCM 95th %tile Q(veh)	0.2	-	6.8	0.5	-	-

Intersection	
Int Delay, s/veh	2.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	66	67	240	95	49	326
Future Vol, veh/h	66	67	240	95	49	326
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	None
Storage Length	0	0	-	100	150	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	72	73	261	103	53	354

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	721	261	0	0	364	0
Stage 1	261	-	-	-	-	-
Stage 2	460	-	-	-	-	-
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	394	778	-	-	1195	-
Stage 1	783	-	-	-	-	-
Stage 2	636	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	377	778	-	-	1195	-
Mov Cap-2 Maneuver	377	-	-	-	-	-
Stage 1	783	-	-	-	-	-
Stage 2	608	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.4	0	1.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	377	778	1195	-
HCM Lane V/C Ratio	-	-	0.19	0.094	0.045	-
HCM Control Delay (s)	-	-	16.8	10.1	8.2	-
HCM Lane LOS	-	-	C	B	A	-
HCM 95th %tile Q(veh)	-	-	0.7	0.3	0.1	-

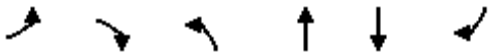
Intersection	
Int Delay, s/veh	0.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	236	4	0	375	2	16
Future Vol, veh/h	236	4	0	375	2	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Yield
Storage Length	-	210	200	-	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	0	2	2	0
Mvmt Flow	254	4	0	403	2	17

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	258	0	657	254
Stage 1	-	-	-	-	254	-
Stage 2	-	-	-	-	403	-
Critical Hdwy	-	-	4.1	-	6.42	6.2
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.2	-	3.518	3.3
Pot Cap-1 Maneuver	-	-	1318	-	430	790
Stage 1	-	-	-	-	788	-
Stage 2	-	-	-	-	675	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1318	-	430	790
Mov Cap-2 Maneuver	-	-	-	-	430	-
Stage 1	-	-	-	-	788	-
Stage 2	-	-	-	-	675	-

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

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	889	-	-	1318	-
HCM Lane V/C Ratio	0.022	-	-	-	-
HCM Control Delay (s)	9.1	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0	-



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	309	811	532	349	400	178
Future Volume (veh/h)	309	811	532	349	400	178
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1841	1870	1870	1870
Adj Flow Rate, veh/h	322	0	554	364	417	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	4	2	2	2
Cap, veh/h	350		700	1353	970	
Arrive On Green	0.20	0.00	0.16	0.72	0.52	0.00
Sat Flow, veh/h	1781	1585	1753	1870	1870	1585
Grp Volume(v), veh/h	322	0	554	364	417	0
Grp Sat Flow(s),veh/h/ln	1781	1585	1753	1870	1870	1585
Q Serve(g_s), s	26.6	0.0	21.0	10.0	20.7	0.0
Cycle Q Clear(g_c), s	26.6	0.0	21.0	10.0	20.7	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	350		700	1353	970	
V/C Ratio(X)	0.92		0.79	0.27	0.43	
Avail Cap(c_a), veh/h	594		890	1353	970	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.52	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	59.1	0.0	14.2	7.1	22.4	0.0
Incr Delay (d2), s/veh	7.2	0.0	3.8	0.5	1.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.6	0.0	8.1	3.8	9.2	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	66.2	0.0	18.0	7.6	23.8	0.0
LnGrp LOS	E		B	A	C	
Approach Vol, veh/h	322	A		918	417	A
Approach Delay, s/veh	66.2			13.9	23.8	
Approach LOS	E			B	C	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		114.5		35.5	30.7	83.8
Change Period (Y+Rc), s		6.0		6.0	6.0	6.0
Max Green Setting (Gmax), s		88.0		50.0	41.0	41.0
Max Q Clear Time (g_c+I1), s		12.0		28.6	23.0	22.7
Green Ext Time (p_c), s		4.9		0.9	1.7	4.2

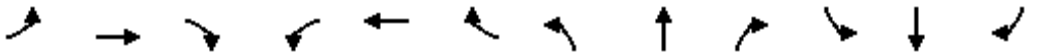
Intersection Summary	
HCM 6th Ctrl Delay	26.5
HCM 6th LOS	C

Notes

Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Synchro Reports

No-Build Conditions Year 2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	709	107	329	661	0	0	0	0	621	0	139
Future Volume (veh/h)	0	709	107	329	661	0	0	0	0	621	0	139
Initial Q (Qb), veh	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
Parking Bus, Adj	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	
Adj Sat Flow, veh/h/ln	0	1870	1870	1841	1870	0				1796	0	1870
Adj Flow Rate, veh/h	0	806	122	374	751	0				706	0	158
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88				0.88	0.88	0.88
Percent Heavy Veh, %	0	2	2	4	2	0				7	0	2
Cap, veh/h	0	1594	241	469	1273	0				753	0	360
Arrive On Green	0.00	0.51	0.51	0.12	0.68	0.00				0.23	0.00	0.23
Sat Flow, veh/h	0	3188	468	1753	1870	0				3319	0	1585
Grp Volume(v), veh/h	0	463	465	374	751	0				706	0	158
Grp Sat Flow(s),veh/h/ln	0	1777	1786	1753	1870	0				1659	0	1585
Q Serve(g_s), s	0.0	22.2	22.2	12.3	27.8	0.0				27.2	0.0	11.1
Cycle Q Clear(g_c), s	0.0	22.2	22.2	12.3	27.8	0.0				27.2	0.0	11.1
Prop In Lane	0.00		0.26	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	915	920	469	1273	0				753	0	360
V/C Ratio(X)	0.00	0.51	0.51	0.80	0.59	0.00				0.94	0.00	0.44
Avail Cap(c_a), veh/h	0	915	920	974	1273	0				766	0	366
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.60	0.60	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	20.7	20.7	16.2	11.1	0.0				49.3	0.0	43.1
Incr Delay (d2), s/veh	0.0	2.0	2.0	1.9	1.2	0.0				18.8	0.0	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	9.2	9.3	4.9	11.3	0.0				13.1	0.0	4.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	22.7	22.7	18.1	12.3	0.0				68.1	0.0	44.0
LnGrp LOS	A	C	C	B	B	A				E	A	D
Approach Vol, veh/h		928			1125						864	
Approach Delay, s/veh		22.7			14.2						63.7	
Approach LOS		C			B						E	

Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		94.5			21.5	72.9		35.5				
Change Period (Y+Rc), s		6.0			6.0	6.0		6.0				
Max Green Setting (Gmax), s		88.0			53.0	29.0		30.0				
Max Q Clear Time (g_c+I1), s		29.8			14.3	24.2		29.2				
Green Ext Time (p_c), s		6.7			1.2	2.3		0.4				

Intersection Summary												
HCM 6th Ctrl Delay			31.6									
HCM 6th LOS			C									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	226	1092	0	0	872	1193	103	0	278	0	0	0
Future Volume (veh/h)	226	1092	0	0	872	1193	103	0	278	0	0	0
Initial Q (Qb), veh	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			
Parking Bus, Adj	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				
Adj Sat Flow, veh/h/ln	1870	1841	0	0	1856	1856	1856	1900	1811			
Adj Flow Rate, veh/h	243	1174	0	0	938	0	111	0	0			
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93			
Percent Heavy Veh, %	2	4	0	0	3	3	3	0	6			
Cap, veh/h	562	2905	0	0	1358		136	0				
Arrive On Green	0.10	1.00	0.00	0.00	0.97	0.00	0.08	0.00	0.00			
Sat Flow, veh/h	1781	3589	0	0	1856	1572	1767	0	3070			
Grp Volume(v), veh/h	243	1174	0	0	938	0	111	0	0			
Grp Sat Flow(s),veh/h/ln	1781	1749	0	0	1856	1572	1767	0	1535			
Q Serve(g_s), s	4.6	0.0	0.0	0.0	5.3	0.0	8.0	0.0	0.0			
Cycle Q Clear(g_c), s	4.6	0.0	0.0	0.0	5.3	0.0	8.0	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	562	2905	0	0	1358		136	0				
V/C Ratio(X)	0.43	0.40	0.00	0.00	0.69		0.82	0.00				
Avail Cap(c_a), veh/h	603	2905	0	0	1358		261	0				
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.33	1.33	1.00	1.00	1.00			
Upstream Filter(I)	0.57	0.57	0.00	0.00	0.09	0.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	3.2	0.0	0.0	0.0	0.5	0.0	59.1	0.0	0.0			
Incr Delay (d2), s/veh	0.3	0.2	0.0	0.0	0.3	0.0	11.1	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			
%ile BackOfQ(50%),veh/ln	1.1	0.1	0.0	0.0	0.7	0.0	4.0	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	3.5	0.2	0.0	0.0	0.8	0.0	70.2	0.0	0.0			
LnGrp LOS	A	A	A	A	A		E	A				
Approach Vol, veh/h		1417			938	A		111	A			
Approach Delay, s/veh		0.8			0.8			70.2				
Approach LOS		A			A			E				

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	12.8	101.2		16.0		114.0						
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0						
Max Green Setting (Gmax), s	9.8	83.0		19.2		98.8						
Max Q Clear Time (g_c+I1), s	6.6	7.3		10.0		2.0						
Green Ext Time (p_c), s	0.2	31.5		0.2		38.9						

Intersection Summary	
HCM 6th Ctrl Delay	3.9
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	235	760	187	18	1084	2	520	49	26	49	44	377
Future Volume (veh/h)	235	760	187	18	1084	2	520	49	26	49	44	377
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	1826	1826	1870	1841	1841	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	273	884	0	21	1260	2	674	0	0	57	51	0
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	5	5	2	4	4	2	2	2	2	2	2
Cap, veh/h	289	1636		288	1417	2	685	360	0	201	211	
Arrive On Green	0.08	0.32	0.00	0.04	0.40	0.40	0.19	0.00	0.00	0.11	0.11	0.00
Sat Flow, veh/h	1781	3469	1547	1781	3583	6	3563	1870	0	1781	1870	1585
Grp Volume(v), veh/h	273	884	0	21	615	647	674	0	0	57	51	0
Grp Sat Flow(s),veh/h/ln	1781	1735	1547	1781	1749	1840	1781	1870	0	1781	1870	1585
Q Serve(g_s), s	13.6	27.3	0.0	0.9	42.6	42.6	24.5	0.0	0.0	3.8	3.2	0.0
Cycle Q Clear(g_c), s	13.6	27.3	0.0	0.9	42.6	42.6	24.5	0.0	0.0	3.8	3.2	0.0
Prop In Lane	1.00		1.00	1.00		0.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	289	1636		288	691	727	685	360	0	201	211	
V/C Ratio(X)	0.94	0.54		0.07	0.89	0.89	0.98	0.00	0.00	0.28	0.24	
Avail Cap(c_a), veh/h	289	1636		288	691	727	685	360	0	288	302	
HCM Platoon Ratio	0.67	0.67	0.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.90	0.90	0.00	0.12	0.12	0.12	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	37.6	32.8	0.0	22.3	36.6	36.6	52.3	0.0	0.0	52.8	52.6	0.0
Incr Delay (d2), s/veh	35.7	1.2	0.0	0.1	2.4	2.3	30.6	0.0	0.0	0.8	0.6	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	12.0	12.3	0.0	0.4	18.2	19.1	13.9	0.0	0.0	1.8	1.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	73.3	34.0	0.0	22.3	39.0	38.9	82.9	0.0	0.0	53.6	53.2	0.0
LnGrp LOS	E	C		C	D	D	F	A	A	D	D	
Approach Vol, veh/h		1157	A		1283			674			108	A
Approach Delay, s/veh		43.3			38.7			82.9			53.4	
Approach LOS		D			D			F			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	20.9	57.4		20.7	11.0	67.3		31.0
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0
Max Green Setting (Gmax), s	14.9	45.1		21.0	5.0	55.0		25.0
Max Q Clear Time (g_c+I1), s	15.6	44.6		5.8	2.9	29.3		26.5
Green Ext Time (p_c), s	0.0	0.3		0.3	0.0	6.6		0.0

Intersection Summary	
HCM 6th Ctrl Delay	50.1
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	9.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	148	13	35	626	344	376
Future Vol, veh/h	148	13	35	626	344	376
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	Yield
Storage Length	100	0	250	-	-	250
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	5	9	2	6	10	2
Mvmt Flow	174	15	41	736	405	442

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1223	405	405	0	-	0
Stage 1	405	-	-	-	-	-
Stage 2	818	-	-	-	-	-
Critical Hdwy	6.45	6.29	4.12	-	-	-
Critical Hdwy Stg 1	5.45	-	-	-	-	-
Critical Hdwy Stg 2	5.45	-	-	-	-	-
Follow-up Hdwy	3.545	3.381	2.218	-	-	-
Pot Cap-1 Maneuver	195	631	1154	-	-	-
Stage 1	667	-	-	-	-	-
Stage 2	429	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	188	631	1154	-	-	-
Mov Cap-2 Maneuver	188	-	-	-	-	-
Stage 1	643	-	-	-	-	-
Stage 2	429	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	91.3	0.4	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1154	-	188	631	-	-
HCM Lane V/C Ratio	0.036	-	0.926	0.024	-	-
HCM Control Delay (s)	8.2	-	98.4	10.8	-	-
HCM Lane LOS	A	-	F	B	-	-
HCM 95th %tile Q(veh)	0.1	-	7.3	0.1	-	-

Intersection	
Int Delay, s/veh	1.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	15	14	228	25	46	367
Future Vol, veh/h	15	14	228	25	46	367
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	Yield	-	None
Storage Length	0	0	-	200	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	17	16	265	29	53	427

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	798	265	0	0	265	0
Stage 1	265	-	-	-	-	-
Stage 2	533	-	-	-	-	-
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	355	774	-	-	1299	-
Stage 1	779	-	-	-	-	-
Stage 2	588	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	340	774	-	-	1299	-
Mov Cap-2 Maneuver	340	-	-	-	-	-
Stage 1	779	-	-	-	-	-
Stage 2	564	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.1	0	0.9
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	340	774	1299	-
HCM Lane V/C Ratio	-	-	0.051	0.021	0.041	-
HCM Control Delay (s)	-	-	16.2	9.8	7.9	-
HCM Lane LOS	-	-	C	A	A	-
HCM 95th %tile Q(veh)	-	-	0.2	0.1	0.1	-

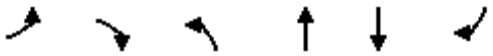
Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	229	0	0	413	2	1
Future Vol, veh/h	229	0	0	413	2	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Yield	-	None	-	Yield
Storage Length	-	200	200	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	34	0	0	2	2	0
Mvmt Flow	276	0	0	498	2	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	276	0	774	276
Stage 1	-	-	-	-	276	-
Stage 2	-	-	-	-	498	-
Critical Hdwy	-	-	4.1	-	6.42	6.2
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.2	-	3.518	3.3
Pot Cap-1 Maneuver	-	-	1299	-	367	768
Stage 1	-	-	-	-	771	-
Stage 2	-	-	-	-	611	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1299	-	367	768
Mov Cap-2 Maneuver	-	-	-	-	367	-
Stage 1	-	-	-	-	771	-
Stage 2	-	-	-	-	611	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	11.6
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	551	-	-	1299	-
HCM Lane V/C Ratio	0.007	-	-	-	-
HCM Control Delay (s)	11.6	-	-	0	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-



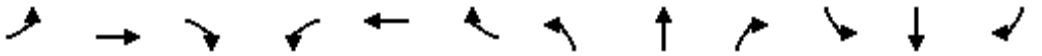
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	314	480	959	351	208	151
Future Volume (veh/h)	314	480	959	351	208	151
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1767	1856	1841	1841	1781	1722
Adj Flow Rate, veh/h	341	0	1042	382	226	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	9	3	4	4	8	12
Cap, veh/h	336		989	1303	241	
Arrive On Green	0.20	0.00	0.53	0.71	0.14	0.00
Sat Flow, veh/h	1682	1572	1753	1841	1781	1459
Grp Volume(v), veh/h	341	0	1042	382	226	0
Grp Sat Flow(s),veh/h/ln	1682	1572	1753	1841	1781	1459
Q Serve(g_s), s	26.0	0.0	68.4	10.0	16.3	0.0
Cycle Q Clear(g_c), s	26.0	0.0	68.4	10.0	16.3	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	336		989	1303	241	
V/C Ratio(X)	1.01		1.05	0.29	0.94	
Avail Cap(c_a), veh/h	336		989	1303	241	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.79	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	52.0	0.0	25.7	7.0	55.7	0.0
Incr Delay (d2), s/veh	47.0	0.0	43.9	0.6	43.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	15.2	0.0	37.3	3.6	10.1	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	99.0	0.0	69.5	7.6	99.3	0.0
LnGrp LOS	F		F	A	F	
Approach Vol, veh/h	341	A		1424	226	A
Approach Delay, s/veh	99.0			52.9	99.3	
Approach LOS	F			D	F	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		98.0		32.0	74.4	23.6
Change Period (Y+Rc), s		6.0		6.0	6.0	6.0
Max Green Setting (Gmax), s		92.0		26.0	68.4	17.6
Max Q Clear Time (g_c+I1), s		12.0		28.0	70.4	18.3
Green Ext Time (p_c), s		5.2		0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	66.1
HCM 6th LOS	E

Notes

Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	651	150	434	588	0	0	0	0	1106	0	191
Future Volume (veh/h)	0	651	150	434	588	0	0	0	0	1106	0	191
Initial Q (Qb), veh	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
Parking Bus, Adj	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	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1856	0	1870
Adj Flow Rate, veh/h	0	664	153	443	600	0				1129	0	195
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98				0.98	0.98	0.98
Percent Heavy Veh, %	0	2	2	2	2	0				3	0	2
Cap, veh/h	0	746	172	538	1059	0				1212	0	561
Arrive On Green	0.00	0.26	0.26	0.53	1.00	0.00				0.35	0.00	0.35
Sat Flow, veh/h	0	2962	660	1781	1870	0				3428	0	1585
Grp Volume(v), veh/h	0	411	406	443	600	0				1129	0	195
Grp Sat Flow(s),veh/h/ln	0	1777	1752	1781	1870	0				1714	0	1585
Q Serve(g_s), s	0.0	33.4	33.5	24.0	0.0	0.0				47.6	0.0	13.6
Cycle Q Clear(g_c), s	0.0	33.4	33.5	24.0	0.0	0.0				47.6	0.0	13.6
Prop In Lane	0.00		0.38	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	462	455	538	1059	0				1212	0	561
V/C Ratio(X)	0.00	0.89	0.89	0.82	0.57	0.00				0.93	0.00	0.35
Avail Cap(c_a), veh/h	0	462	455	538	1059	0				1257	0	581
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.64	0.64	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	53.4	53.5	29.5	0.0	0.0				46.7	0.0	35.7
Incr Delay (d2), s/veh	0.0	21.8	22.3	9.0	1.4	0.0				12.3	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	17.6	17.5	10.8	0.4	0.0				22.1	0.0	5.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	75.3	75.7	38.5	1.4	0.0				59.1	0.0	36.3
LnGrp LOS	A	E	E	D	A	A				E	A	D
Approach Vol, veh/h		817			1043						1324	
Approach Delay, s/veh		75.5			17.2						55.7	
Approach LOS		E			B						E	

Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		91.0			46.0	45.0		59.0				
Change Period (Y+Rc), s		6.0			6.0	6.0		6.0				
Max Green Setting (Gmax), s		83.0			38.0	39.0		55.0				
Max Q Clear Time (g_c+I1), s		2.0			26.0	35.5		49.6				
Green Ext Time (p_c), s		14.3			1.2	2.5		3.4				

Intersection Summary												
HCM 6th Ctrl Delay			48.2									
HCM 6th LOS			D									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	76	622	0	0	920	793	121	0	481	0	0	0
Future Volume (veh/h)	76	622	0	0	920	793	121	0	481	0	0	0
Initial Q (Qb), veh	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			
Parking Bus, Adj	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				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1841	1841	1159	1856			
Adj Flow Rate, veh/h	79	648	0	0	958	0	126	0	0			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96			
Percent Heavy Veh, %	2	2	0	0	2	4	4	50	3			
Cap, veh/h	560	2967	0	0	1415		149	0				
Arrive On Green	0.08	1.00	0.00	0.00	1.00	0.00	0.09	0.00	0.00			
Sat Flow, veh/h	1781	3647	0	0	1870	1560	1753	0	3145			
Grp Volume(v), veh/h	79	648	0	0	958	0	126	0	0			
Grp Sat Flow(s),veh/h/ln	1781	1777	0	0	1870	1560	1753	0	1572			
Q Serve(g_s), s	1.3	0.0	0.0	0.0	0.0	0.0	10.6	0.0	0.0			
Cycle Q Clear(g_c), s	1.3	0.0	0.0	0.0	0.0	0.0	10.6	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	560	2967	0	0	1415		149	0				
V/C Ratio(X)	0.14	0.22	0.00	0.00	0.68		0.85	0.00				
Avail Cap(c_a), veh/h	574	2967	0	0	1415		257	0				
HCM Platoon Ratio	2.00	2.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00			
Upstream Filter(I)	0.30	0.30	0.00	0.00	0.09	0.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	2.8	0.0	0.0	0.0	0.0	0.0	67.7	0.0	0.0			
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.0	0.2	0.0	12.2	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			
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.0	0.0	0.1	0.0	5.3	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	2.8	0.1	0.0	0.0	0.2	0.0	79.8	0.0	0.0			
LnGrp LOS	A	A	A	A	A		E	A				
Approach Vol, veh/h		727			958	A		126	A			
Approach Delay, s/veh		0.4			0.2			79.8				
Approach LOS		A			A			E				

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	11.8	119.5		18.8		131.2						
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0						
Max Green Setting (Gmax), s	7.8	103.0		22.0		116.0						
Max Q Clear Time (g_c+I1), s	3.3	2.0		12.6		2.0						
Green Ext Time (p_c), s	0.0	36.2		0.2		14.6						

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

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	374	1102	632	92	664	32	417	154	109	157	171	581
Future Volume (veh/h)	374	1102	632	92	664	32	417	154	109	157	171	581
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	1856	1870	1870	1841	1841	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	407	1136	0	95	685	35	354	273	112	171	186	0
Peak Hour Factor	0.92	0.97	0.97	0.97	0.97	0.92	0.97	0.92	0.97	0.92	0.92	0.92
Percent Heavy Veh, %	2	3	2	2	4	4	2	2	2	2	2	2
Cap, veh/h	470	1693		223	1203	61	368	260	107	213	224	
Arrive On Green	0.16	0.48	0.00	0.03	0.36	0.36	0.21	0.21	0.21	0.12	0.12	0.00
Sat Flow, veh/h	1781	3526	1585	1781	3385	173	1781	1260	517	1781	1870	1585
Grp Volume(v), veh/h	407	1136	0	95	354	366	354	0	385	171	186	0
Grp Sat Flow(s),veh/h/ln	1781	1763	1585	1781	1749	1810	1781	0	1777	1781	1870	1585
Q Serve(g_s), s	21.0	37.1	0.0	5.0	24.5	24.5	29.5	0.0	31.0	14.0	14.6	0.0
Cycle Q Clear(g_c), s	21.0	37.1	0.0	5.0	24.5	24.5	29.5	0.0	31.0	14.0	14.6	0.0
Prop In Lane	1.00		1.00	1.00		0.10	1.00		0.29	1.00		1.00
Lane Grp Cap(c), veh/h	470	1693		223	621	643	368	0	367	213	224	
V/C Ratio(X)	0.87	0.67		0.43	0.57	0.57	0.96	0.00	1.05	0.80	0.83	
Avail Cap(c_a), veh/h	537	1693		223	621	643	368	0	367	392	411	
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)	0.96	0.96	0.00	0.46	0.46	0.46	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	27.0	29.9	0.0	31.4	39.1	39.1	58.9	0.0	59.5	64.3	64.5	0.0
Incr Delay (d2), s/veh	12.2	2.1	0.0	2.7	1.7	1.7	38.2	0.0	60.1	6.8	7.7	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	10.3	16.0	0.0	2.4	10.8	11.2	17.3	0.0	20.2	6.8	7.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.2	31.9	0.0	34.2	40.8	40.8	97.1	0.0	119.6	71.1	72.3	0.0
LnGrp LOS	D	C		C	D	D	F	A	F	E	E	
Approach Vol, veh/h		1543	A		815			739			357	A
Approach Delay, s/veh		33.8			40.0			108.8			71.7	
Approach LOS		C			D			F			E	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	29.7	59.3		24.0	11.0	78.0		37.0
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0
Max Green Setting (Gmax), s	23.4	32.6		33.0	5.0	57.0		31.0
Max Q Clear Time (g_c+I1), s	23.0	26.5		16.6	7.0	39.1		33.0
Green Ext Time (p_c), s	0.7	2.2		1.4	0.0	7.7		0.0

Intersection Summary	
HCM 6th Ctrl Delay	55.3
HCM 6th LOS	E

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	37.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	192	100	80	701	664	413
Future Vol, veh/h	192	100	80	701	664	413
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	Yield
Storage Length	100	0	250	-	-	250
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	99	99	99	99	99	99
Heavy Vehicles, %	3	2	2	2	2	2
Mvmt Flow	194	101	81	708	671	417

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1541	671	671	0	-	0
Stage 1	671	-	-	-	-	-
Stage 2	870	-	-	-	-	-
Critical Hdwy	6.43	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	~ 126	456	919	-	-	-
Stage 1	506	-	-	-	-	-
Stage 2	408	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 115	456	919	-	-	-
Mov Cap-2 Maneuver	~ 115	-	-	-	-	-
Stage 1	461	-	-	-	-	-
Stage 2	408	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	274	1	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	919	-	115	456	-	-
HCM Lane V/C Ratio	0.088	-	1.686	0.222	-	-
HCM Control Delay (s)	9.3	-	$ 408.9	15.1	-	-
HCM Lane LOS	A	-	F	C	-	-
HCM 95th %tile Q(veh)	0.3	-	14.8	0.8	-	-

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

Intersection	
Int Delay, s/veh	2.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	69	70	383	99	51	651
Future Vol, veh/h	69	70	383	99	51	651
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	None
Storage Length	0	0	-	100	150	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	75	76	416	108	55	708

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1234	416	0	0	524	0
Stage 1	416	-	-	-	-	-
Stage 2	818	-	-	-	-	-
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	195	637	-	-	1043	-
Stage 1	666	-	-	-	-	-
Stage 2	434	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	185	637	-	-	1043	-
Mov Cap-2 Maneuver	185	-	-	-	-	-
Stage 1	666	-	-	-	-	-
Stage 2	411	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	24.2	0	0.6
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	185	637	1043	-
HCM Lane V/C Ratio	-	-	0.405	0.119	0.053	-
HCM Control Delay (s)	-	-	37.1	11.4	8.6	-
HCM Lane LOS	-	-	E	B	A	-
HCM 95th %tile Q(veh)	-	-	1.8	0.4	0.2	-

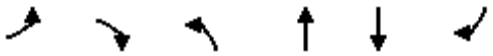
Intersection	
Int Delay, s/veh	0.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	378	4	0	646	2	17
Future Vol, veh/h	378	4	0	646	2	17
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Yield
Storage Length	-	210	200	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	99	99	99	99	99	99
Heavy Vehicles, %	2	2	0	2	2	0
Mvmt Flow	382	4	0	653	2	17

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	386	0	1035	382
Stage 1	-	-	-	-	382	-
Stage 2	-	-	-	-	653	-
Critical Hdwy	-	-	4.1	-	6.42	6.2
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.2	-	3.518	3.3
Pot Cap-1 Maneuver	-	-	1184	-	257	670
Stage 1	-	-	-	-	690	-
Stage 2	-	-	-	-	518	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1184	-	257	670
Mov Cap-2 Maneuver	-	-	-	-	257	-
Stage 1	-	-	-	-	690	-
Stage 2	-	-	-	-	518	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	9.9
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	749	-	-	1184	-
HCM Lane V/C Ratio	0.026	-	-	-	-
HCM Control Delay (s)	9.9	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0	-



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	396	844	553	388	460	303
Future Volume (veh/h)	396	844	553	388	460	303
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1841	1870	1870	1870
Adj Flow Rate, veh/h	412	0	576	404	479	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	4	2	2	2
Cap, veh/h	439		612	1259	815	
Arrive On Green	0.25	0.00	0.20	0.67	0.44	0.00
Sat Flow, veh/h	1781	1585	1753	1870	1870	1585
Grp Volume(v), veh/h	412	0	576	404	479	0
Grp Sat Flow(s),veh/h/ln	1781	1585	1753	1870	1870	1585
Q Serve(g_s), s	34.0	0.0	25.9	13.5	29.1	0.0
Cycle Q Clear(g_c), s	34.0	0.0	25.9	13.5	29.1	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	439		612	1259	815	
V/C Ratio(X)	0.94		0.94	0.32	0.59	
Avail Cap(c_a), veh/h	558		787	1259	815	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.50	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	55.4	0.0	22.2	10.2	32.1	0.0
Incr Delay (d2), s/veh	12.5	0.0	16.7	0.7	3.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	16.7	0.0	12.4	5.4	13.6	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	67.9	0.0	38.9	10.9	35.2	0.0
LnGrp LOS	E		D	B	D	
Approach Vol, veh/h	412	A		980	479	A
Approach Delay, s/veh	67.9			27.4	35.2	
Approach LOS	E			C	D	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		107.0		43.0	35.7	71.3
Change Period (Y+Rc), s		6.0		6.0	6.0	6.0
Max Green Setting (Gmax), s		91.0		47.0	44.6	40.4
Max Q Clear Time (g_c+I1), s		15.5		36.0	27.9	31.1
Green Ext Time (p_c), s		5.6		1.0	1.7	3.2

Intersection Summary	
HCM 6th Ctrl Delay	38.3
HCM 6th LOS	D

Notes

Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Synchro Reports

No-Build Conditions Year 2023 WITH IMPROVEMENTS

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	235	760	187	18	1084	2	520	49	26	49	44	377
Future Volume (veh/h)	235	760	187	18	1084	2	520	49	26	49	44	377
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	1826	1826	1870	1841	1841	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	273	884	0	21	1260	2	674	0	0	57	51	0
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	5	5	2	4	4	2	2	2	2	2	2
Cap, veh/h	335	1609		282	1452	2	713	374	0	201	211	
Arrive On Green	0.06	0.31	0.00	0.04	0.41	0.41	0.20	0.00	0.00	0.11	0.11	0.00
Sat Flow, veh/h	3456	3469	1547	1781	3583	6	3563	1870	0	1781	1870	1585
Grp Volume(v), veh/h	273	884	0	21	615	647	674	0	0	57	51	0
Grp Sat Flow(s),veh/h/ln	1728	1735	1547	1781	1749	1840	1781	1870	0	1781	1870	1585
Q Serve(g_s), s	10.1	27.5	0.0	0.9	41.9	41.9	24.3	0.0	0.0	3.8	3.2	0.0
Cycle Q Clear(g_c), s	10.1	27.5	0.0	0.9	41.9	41.9	24.3	0.0	0.0	3.8	3.2	0.0
Prop In Lane	1.00		1.00	1.00		0.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	335	1609		282	709	746	713	374	0	201	211	
V/C Ratio(X)	0.81	0.55		0.07	0.87	0.87	0.95	0.00	0.00	0.28	0.24	
Avail Cap(c_a), veh/h	478	1609		282	709	746	713	374	0	206	216	
HCM Platoon Ratio	0.67	0.67	0.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.89	0.89	0.00	0.31	0.31	0.31	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	59.6	33.5	0.0	21.9	35.4	35.4	51.3	0.0	0.0	52.8	52.6	0.0
Incr Delay (d2), s/veh	6.4	1.2	0.0	0.2	4.8	4.6	22.8	0.0	0.0	0.8	0.6	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	4.8	12.4	0.0	0.4	18.3	19.3	13.2	0.0	0.0	1.8	1.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	66.0	34.7	0.0	22.1	40.2	40.0	74.1	0.0	0.0	53.6	53.2	0.0
LnGrp LOS	E	C		C	D	D	E	A	A	D	D	
Approach Vol, veh/h		1157	A		1283			674			108	A
Approach Delay, s/veh		42.1			39.8			74.1			53.4	
Approach LOS		D			D			E			D	

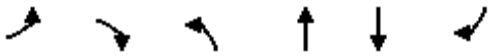
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	18.6	58.7		20.7	11.0	66.3		32.0				
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s	18.0	47.0		15.0	5.0	60.0		26.0				
Max Q Clear Time (g_c+I1), s	12.1	43.9		5.8	2.9	29.5		26.3				
Green Ext Time (p_c), s	0.5	2.1		0.2	0.0	7.0		0.0				

Intersection Summary			
HCM 6th Ctrl Delay		48.3	
HCM 6th LOS		D	

Notes

User approved volume balancing among the lanes for turning movement.

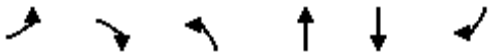
Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	148	13	35	626	344	376
Future Volume (veh/h)	148	13	35	626	344	376
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1826	1767	1870	1811	1752	1870
Adj Flow Rate, veh/h	174	15	41	736	405	442
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	5	9	2	6	10	2
Cap, veh/h	200	172	530	1435	1388	1256
Arrive On Green	0.12	0.12	0.79	0.79	0.79	0.79
Sat Flow, veh/h	1739	1497	650	1811	1752	1585
Grp Volume(v), veh/h	174	15	41	736	405	442
Grp Sat Flow(s),veh/h/ln	1739	1497	650	1811	1752	1585
Q Serve(g_s), s	12.8	1.2	2.4	18.5	8.1	10.4
Cycle Q Clear(g_c), s	12.8	1.2	10.5	18.5	8.1	10.4
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	200	172	530	1435	1388	1256
V/C Ratio(X)	0.87	0.09	0.08	0.51	0.29	0.35
Avail Cap(c_a), veh/h	254	219	530	1435	1388	1256
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.86	0.86	1.00	1.00
Uniform Delay (d), s/veh	56.6	51.4	5.0	4.7	3.6	3.9
Incr Delay (d2), s/veh	22.0	0.2	0.2	1.1	0.5	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.8	0.4	0.3	5.3	2.3	2.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	78.6	51.6	5.3	5.8	4.2	4.7
LnGrp LOS	E	D	A	A	A	A
Approach Vol, veh/h	189			777	847	
Approach Delay, s/veh	76.4			5.8	4.4	
Approach LOS	E			A	A	

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		109.0		21.0		109.0
Change Period (Y+Rc), s		6.0		6.0		6.0
Max Green Setting (Gmax), s		99.0		19.0		99.0
Max Q Clear Time (g_c+I1), s		20.5		14.8		12.4
Green Ext Time (p_c), s		6.1		0.2		4.2

Intersection Summary	
HCM 6th Ctrl Delay	12.5
HCM 6th LOS	B



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	314	480	959	351	208	151
Future Volume (veh/h)	314	480	959	351	208	151
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1767	1856	1841	1841	1781	1722
Adj Flow Rate, veh/h	341	0	1042	382	226	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	9	3	4	4	8	12
Cap, veh/h	398		1070	1446	413	
Arrive On Green	0.12	0.00	0.51	0.79	0.08	0.00
Sat Flow, veh/h	3264	1572	1753	1841	1781	1459
Grp Volume(v), veh/h	341	0	1042	382	226	0
Grp Sat Flow(s),veh/h/ln	1632	1572	1753	1841	1781	1459
Q Serve(g_s), s	13.3	0.0	60.9	7.3	15.9	0.0
Cycle Q Clear(g_c), s	13.3	0.0	60.9	7.3	15.9	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	398		1070	1446	413	
V/C Ratio(X)	0.86		0.97	0.26	0.55	
Avail Cap(c_a), veh/h	502		1151	1446	413	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	0.33	0.33
Upstream Filter(I)	0.83	0.00	1.00	1.00	0.97	0.00
Uniform Delay (d), s/veh	56.0	0.0	19.1	3.8	53.5	0.0
Incr Delay (d2), s/veh	9.7	0.0	19.8	0.4	5.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.0	0.0	26.3	2.2	8.2	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	65.7	0.0	38.9	4.2	58.5	0.0
LnGrp LOS	E		D	A	E	
Approach Vol, veh/h	341	A		1424	226	A
Approach Delay, s/veh	65.7			29.6	58.5	
Approach LOS	E			C	E	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		108.2		21.8	72.0	36.1
Change Period (Y+Rc), s		6.0		6.0	6.0	6.0
Max Green Setting (Gmax), s		98.0		20.0	72.0	20.0
Max Q Clear Time (g_c+I1), s		9.3		15.3	62.9	17.9
Green Ext Time (p_c), s		5.2		0.5	3.2	0.4

Intersection Summary	
HCM 6th Ctrl Delay	39.1
HCM 6th LOS	D

Notes

Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	374	1102	632	92	664	32	417	154	109	157	171	581
Future Volume (veh/h)	374	1102	632	92	664	32	417	154	109	157	171	581
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	1856	1870	1870	1841	1841	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	407	1136	0	95	685	35	354	273	112	171	186	0
Peak Hour Factor	0.92	0.97	0.97	0.97	0.97	0.92	0.97	0.92	0.97	0.92	0.92	0.92
Percent Heavy Veh, %	2	3	2	2	4	4	2	2	2	2	2	2
Cap, veh/h	472	1574		262	1251	64	392	277	114	203	213	
Arrive On Green	0.18	0.59	0.00	0.06	0.37	0.37	0.22	0.22	0.22	0.11	0.11	0.00
Sat Flow, veh/h	3456	3526	1585	1781	3385	173	1781	1260	517	1781	1870	1585
Grp Volume(v), veh/h	407	1136	0	95	354	366	354	0	385	171	186	0
Grp Sat Flow(s),veh/h/ln	1728	1763	1585	1781	1749	1810	1781	0	1777	1781	1870	1585
Q Serve(g_s), s	17.1	34.4	0.0	4.8	24.0	24.0	29.0	0.0	32.4	14.1	14.7	0.0
Cycle Q Clear(g_c), s	17.1	34.4	0.0	4.8	24.0	24.0	29.0	0.0	32.4	14.1	14.7	0.0
Prop In Lane	1.00		1.00	1.00		0.10	1.00		0.29	1.00		1.00
Lane Grp Cap(c), veh/h	472	1574		262	646	669	392	0	391	203	213	
V/C Ratio(X)	0.86	0.72		0.36	0.55	0.55	0.90	0.00	0.98	0.84	0.87	
Avail Cap(c_a), veh/h	898	1574		262	646	669	392	0	391	226	237	
HCM Platoon Ratio	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.91	0.91	0.00	0.47	0.47	0.47	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	60.0	23.9	0.0	27.9	37.4	37.4	56.9	0.0	58.2	65.2	65.4	0.0
Incr Delay (d2), s/veh	4.4	2.6	0.0	1.8	1.6	1.5	26.6	0.0	41.8	22.6	26.6	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	7.5	13.3	0.0	2.2	10.5	10.9	16.1	0.0	19.2	7.7	8.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	64.3	26.5	0.0	29.8	38.9	38.9	83.6	0.0	100.1	87.8	92.1	0.0
LnGrp LOS	E	C		C	D	D	F	A	F	F	F	
Approach Vol, veh/h		1543	A		815			739			357	A
Approach Delay, s/veh		36.5			37.8			92.2			90.0	
Approach LOS		D			D			F			F	

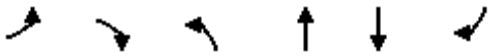
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	26.5	61.4		23.1	15.0	72.9		39.0				
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s	39.0	35.0		19.0	9.0	65.0		33.0				
Max Q Clear Time (g_c+I1), s	19.1	26.0		16.7	6.8	36.4		34.4				
Green Ext Time (p_c), s	1.4	2.9		0.4	0.0	9.5		0.0				

Intersection Summary	
HCM 6th Ctrl Delay	54.3
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

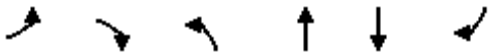
Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	192	100	80	701	664	413
Future Volume (veh/h)	192	100	80	701	664	413
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1856	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	194	101	81	708	671	417
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	3	2	2	2	2	2
Cap, veh/h	222	199	400	1486	1486	1259
Arrive On Green	0.13	0.13	0.79	0.79	0.79	0.79
Sat Flow, veh/h	1767	1585	518	1870	1870	1585
Grp Volume(v), veh/h	194	101	81	708	671	417
Grp Sat Flow(s),veh/h/ln	1767	1585	518	1870	1870	1585
Q Serve(g_s), s	16.2	8.9	8.9	18.8	17.3	11.0
Cycle Q Clear(g_c), s	16.2	8.9	26.2	18.8	17.3	11.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	222	199	400	1486	1486	1259
V/C Ratio(X)	0.87	0.51	0.20	0.48	0.45	0.33
Avail Cap(c_a), veh/h	353	317	400	1486	1486	1259
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.93	0.93	1.00	1.00
Uniform Delay (d), s/veh	64.4	61.2	9.1	5.1	4.9	4.3
Incr Delay (d2), s/veh	13.3	2.0	1.1	1.0	1.0	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.1	3.7	1.1	6.1	5.6	3.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	77.7	63.2	10.2	6.1	5.9	5.0
LnGrp LOS	E	E	B	A	A	A
Approach Vol, veh/h	295			789	1088	
Approach Delay, s/veh	72.7			6.5	5.6	
Approach LOS	E			A	A	

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		125.1		24.9		125.1
Change Period (Y+Rc), s		6.0		6.0		6.0
Max Green Setting (Gmax), s		108.0		30.0		108.0
Max Q Clear Time (g_c+I1), s		28.2		18.2		19.3
Green Ext Time (p_c), s		6.6		0.7		6.7

Intersection Summary	
HCM 6th Ctrl Delay	15.1
HCM 6th LOS	B



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	396	844	553	388	460	303
Future Volume (veh/h)	396	844	553	388	460	303
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1841	1870	1870	1870
Adj Flow Rate, veh/h	412	0	576	404	479	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	4	2	2	2
Cap, veh/h	482		637	1460	1111	
Arrive On Green	0.14	0.00	0.15	0.78	0.20	0.00
Sat Flow, veh/h	3456	1585	1753	1870	1870	1585
Grp Volume(v), veh/h	412	0	576	404	479	0
Grp Sat Flow(s),veh/h/ln	1728	1585	1753	1870	1870	1585
Q Serve(g_s), s	17.5	0.0	18.1	9.1	33.7	0.0
Cycle Q Clear(g_c), s	17.5	0.0	18.1	9.1	33.7	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	482		637	1460	1111	
V/C Ratio(X)	0.85		0.90	0.28	0.43	
Avail Cap(c_a), veh/h	1083		902	1460	1111	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	0.33	0.33
Upstream Filter(I)	0.57	0.00	1.00	1.00	0.90	0.00
Uniform Delay (d), s/veh	63.0	0.0	18.5	4.6	38.0	0.0
Incr Delay (d2), s/veh	2.6	0.0	9.5	0.5	1.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.8	0.0	11.9	3.1	17.3	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	65.6	0.0	27.9	5.1	39.1	0.0
LnGrp LOS	E		C	A	D	
Approach Vol, veh/h	412	A		980	479	A
Approach Delay, s/veh	65.6			18.5	39.1	
Approach LOS	E			B	D	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		123.1		26.9	27.9	95.1
Change Period (Y+Rc), s		6.0		6.0	6.0	6.0
Max Green Setting (Gmax), s		91.0		47.0	44.6	40.4
Max Q Clear Time (g_c+I1), s		11.1		19.5	20.1	35.7
Green Ext Time (p_c), s		5.6		1.5	1.8	1.9

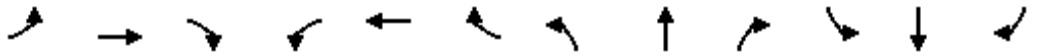
Intersection Summary	
HCM 6th Ctrl Delay	34.2
HCM 6th LOS	C

Notes

Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Synchro Reports

Build Conditions Year 2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	721	107	382	677	0	0	0	0	698	0	139
Future Volume (veh/h)	0	721	107	382	677	0	0	0	0	698	0	139
Initial Q (Qb), veh	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
Parking Bus, Adj	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	
Adj Sat Flow, veh/h/ln	0	1870	1870	1841	1870	0				1796	0	1870
Adj Flow Rate, veh/h	0	819	122	434	769	0				793	0	158
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88				0.88	0.88	0.88
Percent Heavy Veh, %	0	2	2	4	2	0				7	0	2
Cap, veh/h	0	1333	198	490	1213	0				860	0	411
Arrive On Green	0.00	0.43	0.43	0.35	1.00	0.00				0.26	0.00	0.26
Sat Flow, veh/h	0	3195	462	1753	1870	0				3319	0	1585
Grp Volume(v), veh/h	0	469	472	434	769	0				793	0	158
Grp Sat Flow(s),veh/h/ln	0	1777	1787	1753	1870	0				1659	0	1585
Q Serve(g_s), s	0.0	26.6	26.6	19.3	0.0	0.0				30.2	0.0	10.7
Cycle Q Clear(g_c), s	0.0	26.6	26.6	19.3	0.0	0.0				30.2	0.0	10.7
Prop In Lane	0.00		0.26	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	763	768	490	1213	0				860	0	411
V/C Ratio(X)	0.00	0.61	0.61	0.89	0.63	0.00				0.92	0.00	0.38
Avail Cap(c_a), veh/h	0	763	768	646	1213	0				919	0	439
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.38	0.38	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	28.7	28.7	16.2	0.0	0.0				46.9	0.0	39.6
Incr Delay (d2), s/veh	0.0	3.7	3.7	4.8	1.0	0.0				13.9	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	11.6	11.7	5.3	0.3	0.0				14.0	0.0	4.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	32.4	32.4	21.0	1.0	0.0				60.7	0.0	40.2
LnGrp LOS	A	C	C	C	A	A				E	A	D
Approach Vol, veh/h		941			1203						951	
Approach Delay, s/veh		32.4			8.2						57.3	
Approach LOS		C			A						E	

Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		90.3			28.5	61.8		39.7				
Change Period (Y+Rc), s		6.0			6.0	6.0		6.0				
Max Green Setting (Gmax), s		82.0			34.0	42.0		36.0				
Max Q Clear Time (g_c+I1), s		2.0			21.3	28.6		32.2				
Green Ext Time (p_c), s		7.1			1.2	4.6		1.5				

Intersection Summary												
HCM 6th Ctrl Delay			30.7									
HCM 6th LOS			C									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	226	1181	0	0	941	1328	103	0	331	0	0	0
Future Volume (veh/h)	226	1181	0	0	941	1328	103	0	331	0	0	0
Initial Q (Qb), veh	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			
Parking Bus, Adj	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				
Adj Sat Flow, veh/h/ln	1870	1841	0	0	1856	1856	1856	1900	1811			
Adj Flow Rate, veh/h	243	1270	0	0	1012	0	111	0	0			
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93			
Percent Heavy Veh, %	2	4	0	0	3	3	3	0	6			
Cap, veh/h	558	2904	0	0	1355		136	0				
Arrive On Green	0.11	1.00	0.00	0.00	1.00	0.00	0.08	0.00	0.00			
Sat Flow, veh/h	1781	3589	0	0	1856	1572	1767	0	3070			
Grp Volume(v), veh/h	243	1270	0	0	1012	0	111	0	0			
Grp Sat Flow(s),veh/h/ln	1781	1749	0	0	1856	1572	1767	0	1535			
Q Serve(g_s), s	4.6	0.0	0.0	0.0	0.0	0.0	8.0	0.0	0.0			
Cycle Q Clear(g_c), s	4.6	0.0	0.0	0.0	0.0	0.0	8.0	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	558	2904	0	0	1355		136	0				
V/C Ratio(X)	0.44	0.44	0.00	0.00	0.75		0.81	0.00				
Avail Cap(c_a), veh/h	654	2904	0	0	1355		299	0				
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.67	1.67	1.00	1.00	1.00			
Upstream Filter(I)	0.46	0.46	0.00	0.00	0.09	0.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	2.9	0.0	0.0	0.0	0.0	0.0	59.1	0.0	0.0			
Incr Delay (d2), s/veh	0.2	0.2	0.0	0.0	0.4	0.0	11.0	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			
%ile BackOfQ(50%),veh/ln	1.1	0.1	0.0	0.0	0.1	0.0	4.0	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	3.2	0.2	0.0	0.0	0.4	0.0	70.0	0.0	0.0			
LnGrp LOS	A	A	A	A	A		E	A				
Approach Vol, veh/h		1513			1012	A		111	A			
Approach Delay, s/veh		0.7			0.4			70.0				
Approach LOS		A			A			E				

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	13.0	101.0		16.0		114.0						
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0						
Max Green Setting (Gmax), s	14.0	76.0		22.0		96.0						
Max Q Clear Time (g_c+I1), s	6.6	2.0		10.0		2.0						
Green Ext Time (p_c), s	0.4	36.4		0.2		44.3						

Intersection Summary	
HCM 6th Ctrl Delay	3.5
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	377	760	187	18	1084	14	520	77	26	65	65	581
Future Volume (veh/h)	377	760	187	18	1084	14	520	77	26	65	65	581
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	1826	1826	1870	1841	1841	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	438	884	0	21	1260	16	697	0	0	76	76	0
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	5	5	2	4	4	2	2	2	2	2	2
Cap, veh/h	500	1683		362	1340	17	630	331	0	205	215	
Arrive On Green	0.29	0.97	0.00	0.04	0.38	0.38	0.18	0.00	0.00	0.04	0.04	0.00
Sat Flow, veh/h	3456	3469	1547	1781	3536	45	3563	1870	0	1781	1870	1585
Grp Volume(v), veh/h	438	884	0	21	623	653	697	0	0	76	76	0
Grp Sat Flow(s),veh/h/ln	1728	1735	1547	1781	1749	1833	1781	1870	0	1781	1870	1585
Q Serve(g_s), s	15.7	2.0	0.0	0.9	44.7	44.7	23.0	0.0	0.0	5.4	5.2	0.0
Cycle Q Clear(g_c), s	15.7	2.0	0.0	0.9	44.7	44.7	23.0	0.0	0.0	5.4	5.2	0.0
Prop In Lane	1.00		1.00	1.00		0.02	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	500	1683		362	663	694	630	331	0	205	215	
V/C Ratio(X)	0.88	0.53		0.06	0.94	0.94	1.11	0.00	0.00	0.37	0.35	
Avail Cap(c_a), veh/h	718	1683		362	663	694	630	331	0	206	216	
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	0.87	0.87	0.00	0.25	0.25	0.25	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	45.1	1.0	0.0	22.3	39.0	39.0	53.5	0.0	0.0	58.0	57.8	0.0
Incr Delay (d2), s/veh	7.6	1.0	0.0	0.1	8.2	7.9	68.4	0.0	0.0	1.1	1.0	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	6.2	0.6	0.0	0.4	20.2	21.1	16.3	0.0	0.0	2.6	2.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	52.7	2.1	0.0	22.4	47.1	46.9	121.9	0.0	0.0	59.1	58.8	0.0
LnGrp LOS	D	A		C	D	D	F	A	A	E	E	
Approach Vol, veh/h		1322	A		1297			697			152	A
Approach Delay, s/veh		18.8			46.6			121.9			58.9	
Approach LOS		B			D			F			E	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	24.8	55.3		20.9	11.0	69.1		29.0
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0
Max Green Setting (Gmax), s	27.8	41.0		15.0	5.0	63.0		23.0
Max Q Clear Time (g_c+I1), s	17.7	46.7		7.4	2.9	4.0		25.0
Green Ext Time (p_c), s	1.1	0.0		0.3	0.0	7.6		0.0

Intersection Summary	
HCM 6th Ctrl Delay	51.7
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	180	61	71	626	344	401
Future Volume (veh/h)	180	61	71	626	344	401
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1826	1767	1870	1811	1752	1870
Adj Flow Rate, veh/h	212	72	84	736	405	472
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	5	9	2	6	10	2
Cap, veh/h	244	210	497	1390	1344	1216
Arrive On Green	0.14	0.14	0.77	0.77	0.77	0.77
Sat Flow, veh/h	1739	1497	632	1811	1752	1585
Grp Volume(v), veh/h	212	72	84	736	405	472
Grp Sat Flow(s),veh/h/ln	1739	1497	632	1811	1752	1585
Q Serve(g_s), s	15.5	5.6	6.0	20.7	9.1	12.8
Cycle Q Clear(g_c), s	15.5	5.6	15.1	20.7	9.1	12.8
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	244	210	497	1390	1344	1216
V/C Ratio(X)	0.87	0.34	0.17	0.53	0.30	0.39
Avail Cap(c_a), veh/h	428	369	497	1390	1344	1216
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.83	0.83	1.00	1.00
Uniform Delay (d), s/veh	54.7	50.5	6.9	5.9	4.6	5.0
Incr Delay (d2), s/veh	9.2	1.0	0.6	1.2	0.6	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.4	2.2	0.8	6.5	2.8	3.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	63.9	51.4	7.5	7.1	5.1	5.9
LnGrp LOS	E	D	A	A	A	A
Approach Vol, veh/h	284			820	877	
Approach Delay, s/veh	60.7			7.2	5.6	
Approach LOS	E			A	A	

Timer - Assigned Phs	2		4		6
Phs Duration (G+Y+Rc), s	105.8		24.2		105.8
Change Period (Y+Rc), s	6.0		6.0		6.0
Max Green Setting (Gmax), s	86.0		32.0		86.0
Max Q Clear Time (g_c+I1), s	22.7		17.5		14.8
Green Ext Time (p_c), s	6.7		0.7		4.4

Intersection Summary	
HCM 6th Ctrl Delay	14.1
HCM 6th LOS	B

Intersection	
Int Delay, s/veh	3.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	14	0	80	15	0	14	94	309	32	46	529	19
Future Vol, veh/h	14	0	80	15	0	14	94	309	32	46	529	19
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	-	-	Yield	-	-	Yield	-	-	None
Storage Length	-	-	-	-	-	0	100	-	200	100	-	100
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	16	0	93	17	0	16	109	359	37	53	615	22

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1298	1298	615	1356	1320	359	637	0	0	359	0	0
Stage 1	721	721	-	577	577	-	-	-	-	-	-	-
Stage 2	577	577	-	779	743	-	-	-	-	-	-	-
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	139	162	491	126	157	685	947	-	-	1200	-	-
Stage 1	419	432	-	502	502	-	-	-	-	-	-	-
Stage 2	502	502	-	389	422	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	120	137	491	90	133	685	947	-	-	1200	-	-
Mov Cap-2 Maneuver	120	137	-	90	133	-	-	-	-	-	-	-
Stage 1	371	413	-	444	444	-	-	-	-	-	-	-
Stage 2	434	444	-	301	403	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	20.8	33.2	2	0.6
HCM LOS	C	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	947	-	-	336	90	685	1200	-	-
HCM Lane V/C Ratio	0.115	-	-	0.325	0.194	0.024	0.045	-	-
HCM Control Delay (s)	9.3	-	-	20.8	54.4	10.4	8.1	-	-
HCM Lane LOS	A	-	-	C	F	B	A	-	-
HCM 95th %tile Q(veh)	0.4	-	-	1.4	0.7	0.1	0.1	-	-

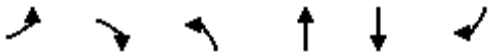
Intersection	
Int Delay, s/veh	5.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	74	0	182	2	0	1	88	236	0	0	412	61
Future Vol, veh/h	74	0	182	2	0	1	88	236	0	0	412	61
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	-	-	Yield	-	-	Yield	-	-	None
Storage Length	-	-	0	-	-	-	100	-	200	200	-	100
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	83	83	83	83	83	83	83	83	83
Heavy Vehicles, %	2	2	2	2	2	0	2	34	0	0	2	2
Mvmt Flow	89	0	219	2	0	1	106	284	0	0	496	73

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	992	992	496	1138	1065	284	569	0	0	284	0	0
Stage 1	496	496	-	496	496	-	-	-	-	-	-	-
Stage 2	496	496	-	642	569	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.2	4.12	-	-	4.1	-	-
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	3.3	2.218	-	-	2.2	-	-
Pot Cap-1 Maneuver	225	246	574	179	223	760	1003	-	-	1290	-	-
Stage 1	556	545	-	556	545	-	-	-	-	-	-	-
Stage 2	556	545	-	463	506	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	207	220	574	102	199	760	1003	-	-	1290	-	-
Mov Cap-2 Maneuver	207	220	-	102	199	-	-	-	-	-	-	-
Stage 1	497	545	-	497	487	-	-	-	-	-	-	-
Stage 2	496	487	-	286	506	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	20.8	29.1	2.4	0
HCM LOS	C	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1003	-	-	207	574	153	1290	-	-
HCM Lane V/C Ratio	0.106	-	-	0.431	0.382	0.024	-	-	-
HCM Control Delay (s)	9	-	-	34.9	15.1	29.1	0	-	-
HCM Lane LOS	A	-	-	D	C	D	A	-	-
HCM 95th %tile Q(veh)	0.4	-	-	2	1.8	0.1	0	-	-



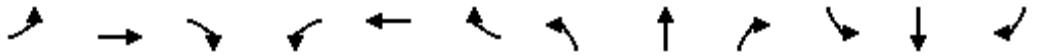
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	314	496	971	387	256	151
Future Volume (veh/h)	314	496	971	387	256	151
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1767	1856	1841	1841	1781	1722
Adj Flow Rate, veh/h	341	0	1055	421	278	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	9	3	4	4	8	12
Cap, veh/h	391		1064	1450	348	
Arrive On Green	0.12	0.00	0.55	0.79	0.20	0.00
Sat Flow, veh/h	3264	1572	1753	1841	1781	1459
Grp Volume(v), veh/h	341	0	1055	421	278	0
Grp Sat Flow(s),veh/h/ln	1632	1572	1753	1841	1781	1459
Q Serve(g_s), s	13.3	0.0	69.4	8.2	19.3	0.0
Cycle Q Clear(g_c), s	13.3	0.0	69.4	8.2	19.3	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	391		1064	1450	348	
V/C Ratio(X)	0.87		0.99	0.29	0.80	
Avail Cap(c_a), veh/h	427		1064	1450	348	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.84	0.00	1.00	1.00	0.96	0.00
Uniform Delay (d), s/veh	56.2	0.0	22.3	3.8	49.8	0.0
Incr Delay (d2), s/veh	14.5	0.0	25.5	0.5	16.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.2	0.0	35.7	2.4	10.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	70.7	0.0	47.9	4.3	66.4	0.0
LnGrp LOS	E		D	A	E	
Approach Vol, veh/h	341	A		1476	278	A
Approach Delay, s/veh	70.7			35.4	66.4	
Approach LOS	E			D	E	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		108.4		21.6	77.0	31.4
Change Period (Y+Rc), s		6.0		6.0	6.0	6.0
Max Green Setting (Gmax), s		101.0		17.0	71.0	24.0
Max Q Clear Time (g_c+I1), s		10.2		15.3	71.4	21.3
Green Ext Time (p_c), s		5.9		0.2	0.0	0.6

Intersection Summary	
HCM 6th Ctrl Delay	45.3
HCM 6th LOS	D

Notes

Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	663	150	467	597	0	0	0	0	1213	0	191
Future Volume (veh/h)	0	663	150	467	597	0	0	0	0	1213	0	191
Initial Q (Qb), veh	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
Parking Bus, Adj	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	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1856	0	1870
Adj Flow Rate, veh/h	0	677	153	477	609	0				1238	0	195
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98				0.98	0.98	0.98
Percent Heavy Veh, %	0	2	2	2	2	0				3	0	2
Cap, veh/h	0	749	169	502	1025	0				1276	0	590
Arrive On Green	0.00	0.26	0.26	0.33	0.73	0.00				0.37	0.00	0.37
Sat Flow, veh/h	0	2973	650	1781	1870	0				3428	0	1585
Grp Volume(v), veh/h	0	417	413	477	609	0				1238	0	195
Grp Sat Flow(s),veh/h/ln	0	1777	1753	1781	1870	0				1714	0	1585
Q Serve(g_s), s	0.0	34.1	34.2	33.9	23.4	0.0				53.2	0.0	13.2
Cycle Q Clear(g_c), s	0.0	34.1	34.2	33.9	23.4	0.0				53.2	0.0	13.2
Prop In Lane	0.00		0.37	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	462	456	502	1025	0				1276	0	590
V/C Ratio(X)	0.00	0.90	0.90	0.95	0.59	0.00				0.97	0.00	0.33
Avail Cap(c_a), veh/h	0	462	456	502	1025	0				1280	0	592
HCM Platoon Ratio	1.00	1.00	1.00	1.33	1.33	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.60	0.60	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	53.7	53.7	47.0	12.4	0.0				46.3	0.0	33.7
Incr Delay (d2), s/veh	0.0	23.7	24.1	21.1	1.5	0.0				18.5	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	18.2	18.0	19.4	8.5	0.0				25.6	0.0	5.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	77.3	77.8	68.1	13.9	0.0				64.7	0.0	34.2
LnGrp LOS	A	E	E	E	B	A				E	A	C
Approach Vol, veh/h		830			1086						1433	
Approach Delay, s/veh		77.5			37.7						60.6	
Approach LOS		E			D						E	

Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		88.2			43.2	45.0		61.8				
Change Period (Y+Rc), s		6.0			6.0	6.0		6.0				
Max Green Setting (Gmax), s		82.0			37.0	39.0		56.0				
Max Q Clear Time (g_c+I1), s		25.4			35.9	36.2		55.2				
Green Ext Time (p_c), s		13.9			0.2	2.1		0.6				

Intersection Summary												
HCM 6th Ctrl Delay			57.4									
HCM 6th LOS			E									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	76	741	0	0	962	864	121	0	522	0	0	0
Future Volume (veh/h)	76	741	0	0	962	864	121	0	522	0	0	0
Initial Q (Qb), veh	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			
Parking Bus, Adj	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				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1841	1841	1159	1856			
Adj Flow Rate, veh/h	79	772	0	0	1002	0	126	0	0			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96			
Percent Heavy Veh, %	2	2	0	0	2	4	4	50	3			
Cap, veh/h	542	2966	0	0	1414		150	0				
Arrive On Green	0.08	1.00	0.00	0.00	1.00	0.00	0.09	0.00	0.00			
Sat Flow, veh/h	1781	3647	0	0	1870	1560	1753	0	3145			
Grp Volume(v), veh/h	79	772	0	0	1002	0	126	0	0			
Grp Sat Flow(s),veh/h/ln	1781	1777	0	0	1870	1560	1753	0	1572			
Q Serve(g_s), s	1.3	0.0	0.0	0.0	0.0	0.0	10.6	0.0	0.0			
Cycle Q Clear(g_c), s	1.3	0.0	0.0	0.0	0.0	0.0	10.6	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	542	2966	0	0	1414		150	0				
V/C Ratio(X)	0.15	0.26	0.00	0.00	0.71		0.84	0.00				
Avail Cap(c_a), veh/h	553	2966	0	0	1414		307	0				
HCM Platoon Ratio	2.00	2.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00			
Upstream Filter(I)	0.20	0.20	0.00	0.00	0.09	0.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	2.8	0.0	0.0	0.0	0.0	0.0	67.6	0.0	0.0			
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.3	0.0	11.9	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			
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.0	0.0	0.1	0.0	5.2	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	2.8	0.0	0.0	0.0	0.3	0.0	79.5	0.0	0.0			
LnGrp LOS	A	A	A	A	A		E	A				
Approach Vol, veh/h		851			1002	A		126	A			
Approach Delay, s/veh		0.3			0.3			79.5				
Approach LOS		A			A			E				

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	11.8	119.4		18.8		131.2						
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0						
Max Green Setting (Gmax), s	6.7	99.0		26.3		111.7						
Max Q Clear Time (g_c+I1), s	3.3	2.0		12.6		2.0						
Green Ext Time (p_c), s	0.0	39.7		0.2		19.0						

Intersection Summary	
HCM 6th Ctrl Delay	5.3
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	533	1102	632	92	664	44	417	169	109	166	186	693
Future Volume (veh/h)	533	1102	632	92	664	44	417	169	109	166	186	693
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	1856	1870	1870	1841	1841	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	549	1136	0	95	685	45	358	275	112	171	192	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	3	2	2	4	4	2	2	2	2	2	2
Cap, veh/h	621	1611		260	1101	72	380	269	110	207	218	
Arrive On Green	0.24	0.61	0.00	0.05	0.33	0.33	0.21	0.21	0.21	0.12	0.12	0.00
Sat Flow, veh/h	3456	3526	1585	1781	3331	219	1781	1263	514	1781	1870	1585
Grp Volume(v), veh/h	549	1136	0	95	359	371	358	0	387	171	192	0
Grp Sat Flow(s),veh/h/ln	1728	1763	1585	1781	1749	1801	1781	0	1778	1781	1870	1585
Q Serve(g_s), s	23.0	33.2	0.0	5.2	26.0	26.0	29.7	0.0	32.0	14.1	15.2	0.0
Cycle Q Clear(g_c), s	23.0	33.2	0.0	5.2	26.0	26.0	29.7	0.0	32.0	14.1	15.2	0.0
Prop In Lane	1.00		1.00	1.00		0.12	1.00		0.29	1.00		1.00
Lane Grp Cap(c), veh/h	621	1611		260	578	596	380	0	379	207	218	
V/C Ratio(X)	0.88	0.71		0.37	0.62	0.62	0.94	0.00	1.02	0.82	0.88	
Avail Cap(c_a), veh/h	1037	1611		260	578	596	380	0	379	226	237	
HCM Platoon Ratio	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.94	0.94	0.00	0.39	0.39	0.39	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	55.6	22.5	0.0	30.9	42.3	42.3	58.1	0.0	59.0	64.8	65.2	0.0
Incr Delay (d2), s/veh	5.0	2.5	0.0	1.6	2.0	1.9	33.6	0.0	51.5	20.1	28.2	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	10.0	12.7	0.0	2.4	11.5	11.9	17.0	0.0	19.9	7.6	9.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.6	25.0	0.0	32.5	44.3	44.2	91.7	0.0	110.5	84.9	93.5	0.0
LnGrp LOS	E	C		C	D	D	F	A	F	F	F	
Approach Vol, veh/h		1685	A		825			745			363	A
Approach Delay, s/veh		36.6			42.9			101.5			89.4	
Approach LOS		D			D			F			F	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	32.9	55.6		23.5	14.0	74.5		38.0
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0
Max Green Setting (Gmax), s	45.0	30.0		19.0	8.0	67.0		32.0
Max Q Clear Time (g_c+I1), s	25.0	28.0		17.2	7.2	35.2		34.0
Green Ext Time (p_c), s	1.9	0.9		0.3	0.0	9.8		0.0

Intersection Summary	
HCM 6th Ctrl Delay	56.7
HCM 6th LOS	E

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	210	127	117	701	664	438
Future Volume (veh/h)	210	127	117	701	664	438
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1856	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	212	128	118	708	671	442
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	3	2	2	2	2	2
Cap, veh/h	301	270	328	1117	1117	947
Arrive On Green	0.17	0.17	0.60	0.60	0.60	0.60
Sat Flow, veh/h	1767	1585	506	1870	1870	1585
Grp Volume(v), veh/h	212	128	118	708	671	442
Grp Sat Flow(s),veh/h/ln	1767	1585	506	1870	1870	1585
Q Serve(g_s), s	5.8	3.8	9.9	12.7	11.6	8.0
Cycle Q Clear(g_c), s	5.8	3.8	21.5	12.7	11.6	8.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	301	270	328	1117	1117	947
V/C Ratio(X)	0.70	0.47	0.36	0.63	0.60	0.47
Avail Cap(c_a), veh/h	1129	1013	859	3079	3079	2609
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.2	19.3	13.3	6.7	6.5	5.8
Incr Delay (d2), s/veh	3.0	1.3	0.7	0.6	0.5	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	1.3	0.9	2.7	2.5	1.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	23.2	20.6	13.9	7.3	7.0	6.2
LnGrp LOS	C	C	B	A	A	A
Approach Vol, veh/h	340			826	1113	
Approach Delay, s/veh	22.2			8.3	6.7	
Approach LOS	C			A	A	

Timer - Assigned Phs	2		4		6
Phs Duration (G+Y+Rc), s	36.8		14.8		36.8
Change Period (Y+Rc), s	6.0		6.0		6.0
Max Green Setting (Gmax), s	85.0		33.0		85.0
Max Q Clear Time (g_c+I1), s	23.5		7.8		13.6
Green Ext Time (p_c), s	7.4		1.0		6.9

Intersection Summary	
HCM 6th Ctrl Delay	9.6
HCM 6th LOS	A

Intersection	
Int Delay, s/veh	17.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	15	0	77	69	0	70	71	499	99	51	711	18
Future Vol, veh/h	15	0	77	69	0	70	71	499	99	51	711	18
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	-	-	Yield	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	100	-	100	150	-	100
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	16	0	84	75	0	76	77	542	108	55	773	20

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1633	1687	773	1631	1599	542	793	0	0	650	0	0
Stage 1	883	883	-	696	696	-	-	-	-	-	-	-
Stage 2	750	804	-	935	903	-	-	-	-	-	-	-
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	81	94	399	81	106	540	828	-	-	936	-	-
Stage 1	340	364	-	432	443	-	-	-	-	-	-	-
Stage 2	403	396	-	318	356	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	62	80	399	~ 57	90	540	828	-	-	936	-	-
Mov Cap-2 Maneuver	62	80	-	~ 57	90	-	-	-	-	-	-	-
Stage 1	308	343	-	392	402	-	-	-	-	-	-	-
Stage 2	314	359	-	237	335	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	36.3	177.8	1	0.6
HCM LOS	E	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	828	-	-	212	57	540	936	-	-
HCM Lane V/C Ratio	0.093	-	-	0.472	1.316	0.141	0.059	-	-
HCM Control Delay (s)	9.8	-	-	36.3	$ 345.2	12.8	9.1	-	-
HCM Lane LOS	A	-	-	E	F	B	A	-	-
HCM 95th %tile Q(veh)	0.3	-	-	2.3	6.5	0.5	0.2	-	-

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

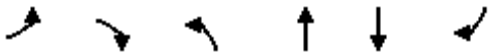
Intersection	
Int Delay, s/veh	5.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	55	0	97	2	0	17	140	369	4	0	627	81
Future Vol, veh/h	55	0	97	2	0	17	140	369	4	0	627	81
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	-	-	Yield	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	100	-	210	200	-	100
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	99	93	93
Heavy Vehicles, %	2	2	2	2	2	0	2	2	2	0	2	2
Mvmt Flow	59	0	104	2	0	18	151	397	4	0	674	87

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1375	1377	674	1469	1460	397	761	0	0	401	0	0
Stage 1	674	674	-	699	699	-	-	-	-	-	-	-
Stage 2	701	703	-	770	761	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.2	4.12	-	-	4.1	-	-
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	3.3	2.218	-	-	2.2	-	-
Pot Cap-1 Maneuver	123	145	455	106	129	657	851	-	-	1169	-	-
Stage 1	444	454	-	430	442	-	-	-	-	-	-	-
Stage 2	429	440	-	393	414	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	103	119	455	71	106	657	851	-	-	1169	-	-
Mov Cap-2 Maneuver	103	119	-	71	106	-	-	-	-	-	-	-
Stage 1	365	454	-	354	364	-	-	-	-	-	-	-
Stage 2	343	362	-	303	414	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	38.3	10.5	2.8	0
HCM LOS	E	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	851	-	-	103	455	675	1169	-	-
HCM Lane V/C Ratio	0.177	-	-	0.574	0.229	0.03	-	-	-
HCM Control Delay (s)	10.1	-	-	79.1	15.2	10.5	0	-	-
HCM Lane LOS	B	-	-	F	C	B	A	-	-
HCM 95th %tile Q(veh)	0.6	-	-	2.7	0.9	0.1	0	-	-



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	396	853	565	425	487	303
Future Volume (veh/h)	396	853	565	425	487	303
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1841	1870	1870	1870
Adj Flow Rate, veh/h	412	0	589	443	507	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	4	2	2	2
Cap, veh/h	482		696	1460	1103	
Arrive On Green	0.14	0.00	0.15	0.78	0.59	0.00
Sat Flow, veh/h	3456	1585	1753	1870	1870	1585
Grp Volume(v), veh/h	412	0	589	443	507	0
Grp Sat Flow(s),veh/h/ln	1728	1585	1753	1870	1870	1585
Q Serve(g_s), s	17.5	0.0	18.7	10.2	22.9	0.0
Cycle Q Clear(g_c), s	17.5	0.0	18.7	10.2	22.9	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	482		696	1460	1103	
V/C Ratio(X)	0.85		0.85	0.30	0.46	
Avail Cap(c_a), veh/h	1060		946	1460	1103	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.60	0.00	1.00	1.00	0.77	0.00
Uniform Delay (d), s/veh	63.0	0.0	13.1	4.7	17.3	0.0
Incr Delay (d2), s/veh	2.7	0.0	5.4	0.5	1.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.8	0.0	7.0	3.5	9.7	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	65.8	0.0	18.5	5.3	18.4	0.0
LnGrp LOS	E		B	A	B	
Approach Vol, veh/h	412	A		1032	507	A
Approach Delay, s/veh	65.8			12.8	18.4	
Approach LOS	E			B	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		123.1		26.9	28.6	94.5
Change Period (Y+Rc), s		6.0		6.0	6.0	6.0
Max Green Setting (Gmax), s		92.0		46.0	44.0	42.0
Max Q Clear Time (g_c+I1), s		12.2		19.5	20.7	24.9
Green Ext Time (p_c), s		6.3		1.5	1.9	5.1

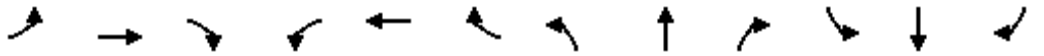
Intersection Summary	
HCM 6th Ctrl Delay	25.4
HCM 6th LOS	C

Notes

Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Synchro Reports

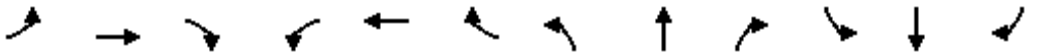
Build Conditions Year 2023 WITH IMPROVEMENTS



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	721	107	382	677	0	0	0	0	698	0	139
Future Volume (veh/h)	0	721	107	382	677	0	0	0	0	698	0	139
Initial Q (Qb), veh	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
Parking Bus, Adj	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	
Adj Sat Flow, veh/h/ln	0	1870	1870	1841	1870	0				1796	0	1870
Adj Flow Rate, veh/h	0	819	122	434	769	0				793	0	158
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88				0.88	0.88	0.88
Percent Heavy Veh, %	0	2	2	4	2	0				7	0	2
Cap, veh/h	0	1510	674	508	1207	0				872	0	416
Arrive On Green	0.00	0.43	0.43	0.35	1.00	0.00				0.26	0.00	0.26
Sat Flow, veh/h	0	3647	1585	1753	1870	0				3319	0	1585
Grp Volume(v), veh/h	0	819	122	434	769	0				793	0	158
Grp Sat Flow(s),veh/h/ln	0	1777	1585	1753	1870	0				1659	0	1585
Q Serve(g_s), s	0.0	22.4	6.2	19.4	0.0	0.0				30.1	0.0	10.6
Cycle Q Clear(g_c), s	0.0	22.4	6.2	19.4	0.0	0.0				30.1	0.0	10.6
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1510	674	508	1207	0				872	0	416
V/C Ratio(X)	0.00	0.54	0.18	0.85	0.64	0.00				0.91	0.00	0.38
Avail Cap(c_a), veh/h	0	1510	674	676	1207	0				970	0	463
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.45	0.45	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	27.9	23.3	14.9	0.0	0.0				46.4	0.0	39.3
Incr Delay (d2), s/veh	0.0	1.4	0.6	3.9	1.2	0.0				11.6	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	9.5	2.4	5.2	0.4	0.0				13.6	0.0	4.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	29.3	23.9	18.8	1.2	0.0				58.0	0.0	39.8
LnGrp LOS	A	C	C	B	A	A				E	A	D
Approach Vol, veh/h		941			1203						951	
Approach Delay, s/veh		28.6			7.5						55.0	
Approach LOS		C			A						D	

Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		89.9			28.6	61.3		40.1				
Change Period (Y+Rc), s		6.0			6.0	6.0		6.0				
Max Green Setting (Gmax), s		80.0			35.0	39.0		38.0				
Max Q Clear Time (g_c+I1), s		2.0			21.4	24.4		32.1				
Green Ext Time (p_c), s		7.1			1.2	4.9		2.0				

Intersection Summary												
HCM 6th Ctrl Delay			28.5									
HCM 6th LOS			C									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	377	760	187	18	1084	14	520	77	26	65	65	581
Future Volume (veh/h)	377	760	187	18	1084	14	520	77	26	65	65	581
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	1826	1826	1870	1841	1841	1870	1870	1841	1870	1870	1870
Adj Flow Rate, veh/h	438	884	0	21	1260	16	669	0	30	76	76	0
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	5	5	2	4	4	2	2	4	2	2	2
Cap, veh/h	511	1656		293	1301	17	658	0	288	205	215	
Arrive On Green	0.10	0.32	0.00	0.04	0.37	0.37	0.18	0.00	0.18	0.11	0.11	0.00
Sat Flow, veh/h	3456	3469	1547	1781	3536	45	3563	0	1560	1781	1870	1585
Grp Volume(v), veh/h	438	884	0	21	623	653	669	0	30	76	76	0
Grp Sat Flow(s),veh/h/ln	1728	1735	1547	1781	1749	1833	1781	0	1560	1781	1870	1585
Q Serve(g_s), s	16.2	27.2	0.0	0.9	45.5	45.5	24.0	0.0	2.1	5.1	4.9	0.0
Cycle Q Clear(g_c), s	16.2	27.2	0.0	0.9	45.5	45.5	24.0	0.0	2.1	5.1	4.9	0.0
Prop In Lane	1.00		1.00	1.00		0.02	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	511	1656		293	643	674	658	0	288	205	215	
V/C Ratio(X)	0.86	0.53		0.07	0.97	0.97	1.02	0.00	0.10	0.37	0.35	
Avail Cap(c_a), veh/h	691	1656		293	643	674	658	0	288	206	216	
HCM Platoon Ratio	0.67	0.67	0.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.84	0.84	0.00	0.14	0.14	0.14	1.00	0.00	1.00	0.78	0.78	0.00
Uniform Delay (d), s/veh	57.2	32.3	0.0	23.8	40.3	40.3	53.0	0.0	44.1	53.2	53.1	0.0
Incr Delay (d2), s/veh	6.8	1.0	0.0	0.1	7.7	7.5	39.5	0.0	0.7	0.9	0.8	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	7.8	12.2	0.0	0.4	20.5	21.4	14.4	0.0	0.9	2.4	2.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	64.0	33.4	0.0	23.9	48.1	47.9	92.5	0.0	44.8	54.1	53.8	0.0
LnGrp LOS	E	C		C	D	D	F	A	D	D	D	
Approach Vol, veh/h		1322	A		1297			699			152	A
Approach Delay, s/veh		43.5			47.6			90.4			54.0	
Approach LOS		D			D			F			D	

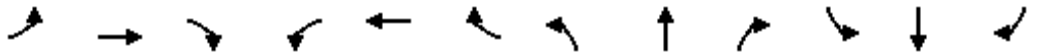
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	25.2	53.8		20.9	11.0	68.1		30.0				
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s	26.0	41.0		15.0	5.0	62.0		24.0				
Max Q Clear Time (g_c+I1), s	18.2	47.5		7.1	2.9	29.2		26.0				
Green Ext Time (p_c), s	1.0	0.0		0.3	0.0	7.1		0.0				

Intersection Summary			
HCM 6th Ctrl Delay		54.9	
HCM 6th LOS		D	

Notes

User approved volume balancing among the lanes for turning movement.

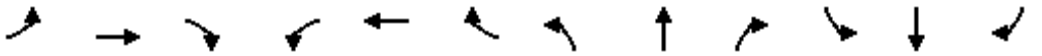
Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	663	150	467	597	0	0	0	0	1213	0	191
Future Volume (veh/h)	0	663	150	467	597	0	0	0	0	1213	0	191
Initial Q (Qb), veh	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
Parking Bus, Adj	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	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1856	0	1870
Adj Flow Rate, veh/h	0	677	153	477	609	0				1238	0	195
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98				0.98	0.98	0.98
Percent Heavy Veh, %	0	2	2	2	2	0				3	0	2
Cap, veh/h	0	924	412	537	1025	0				1276	0	590
Arrive On Green	0.00	0.26	0.26	0.50	1.00	0.00				0.37	0.00	0.37
Sat Flow, veh/h	0	3647	1585	1781	1870	0				3428	0	1585
Grp Volume(v), veh/h	0	677	153	477	609	0				1238	0	195
Grp Sat Flow(s),veh/h/ln	0	1777	1585	1781	1870	0				1714	0	1585
Q Serve(g_s), s	0.0	26.1	11.9	26.2	0.0	0.0				53.2	0.0	13.2
Cycle Q Clear(g_c), s	0.0	26.1	11.9	26.2	0.0	0.0				53.2	0.0	13.2
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	924	412	537	1025	0				1276	0	590
V/C Ratio(X)	0.00	0.73	0.37	0.89	0.59	0.00				0.97	0.00	0.33
Avail Cap(c_a), veh/h	0	924	412	537	1025	0				1280	0	592
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.60	0.60	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	50.7	45.5	31.9	0.0	0.0				46.3	0.0	33.7
Incr Delay (d2), s/veh	0.0	5.1	2.6	12.7	1.5	0.0				18.5	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	12.2	5.0	12.9	0.4	0.0				25.6	0.0	5.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	55.9	48.0	44.6	1.5	0.0				64.7	0.0	34.2
LnGrp LOS	A	E	D	D	A	A				E	A	C
Approach Vol, veh/h		830			1086						1433	
Approach Delay, s/veh		54.4			20.4						60.6	
Approach LOS		D			C						E	

Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		88.2			43.2	45.0		61.8				
Change Period (Y+Rc), s		6.0			6.0	6.0		6.0				
Max Green Setting (Gmax), s		82.0			37.0	39.0		56.0				
Max Q Clear Time (g_c+I1), s		2.0			28.2	28.1		55.2				
Green Ext Time (p_c), s		14.7			1.1	6.8		0.6				

Intersection Summary												
HCM 6th Ctrl Delay			46.0									
HCM 6th LOS			D									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	533	1102	632	92	664	44	417	169	109	166	186	693
Future Volume (veh/h)	533	1102	632	92	664	44	417	169	109	166	186	693
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	1856	1870	1870	1841	1841	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	549	1136	0	95	685	45	302	353	112	171	192	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	3	2	2	4	4	2	2	2	2	2	2
Cap, veh/h	621	1716		286	1200	79	344	362	306	190	200	
Arrive On Green	0.24	0.65	0.00	0.05	0.36	0.36	0.19	0.19	0.19	0.11	0.11	0.00
Sat Flow, veh/h	3456	3526	1585	1781	3331	219	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	549	1136	0	95	359	371	302	353	112	171	192	0
Grp Sat Flow(s),veh/h/ln	1728	1763	1585	1781	1749	1801	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	23.0	29.8	0.0	5.0	24.8	24.9	24.7	28.1	9.2	14.2	15.3	0.0
Cycle Q Clear(g_c), s	23.0	29.8	0.0	5.0	24.8	24.9	24.7	28.1	9.2	14.2	15.3	0.0
Prop In Lane	1.00		1.00	1.00		0.12	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	621	1716		286	630	649	344	362	306	190	200	
V/C Ratio(X)	0.88	0.66		0.33	0.57	0.57	0.88	0.98	0.37	0.90	0.96	
Avail Cap(c_a), veh/h	1106	1716		286	630	649	344	362	306	190	200	
HCM Platoon Ratio	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.88	0.88	0.00	0.39	0.39	0.39	1.00	1.00	1.00	0.70	0.70	0.00
Uniform Delay (d), s/veh	55.5	18.8	0.0	27.7	38.6	38.7	58.8	60.2	52.5	66.2	66.7	0.0
Incr Delay (d2), s/veh	3.9	1.8	0.0	1.2	1.5	1.4	25.5	41.7	3.3	30.1	43.0	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	9.9	10.9	0.0	2.2	10.9	11.2	13.7	17.7	4.0	8.1	9.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	59.4	20.6	0.0	29.0	40.1	40.1	84.3	101.9	55.9	96.3	109.7	0.0
LnGrp LOS	E	C		C	D	D	F	F	E	F	F	
Approach Vol, veh/h		1685	A		825			767			363	A
Approach Delay, s/veh		33.3			38.8			88.2			103.4	
Approach LOS		C			D			F			F	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	33.0	60.0		22.0	14.0	79.0		35.0				
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s	48.0	33.0		16.0	8.0	73.0		29.0				
Max Q Clear Time (g_c+I1), s	25.0	26.9		17.3	7.0	31.8		30.1				
Green Ext Time (p_c), s	2.0	2.3		0.0	0.0	10.5		0.0				

Intersection Summary			
HCM 6th Ctrl Delay		53.1	
HCM 6th LOS		D	

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Synchro Reports

Build Conditions Year 2023

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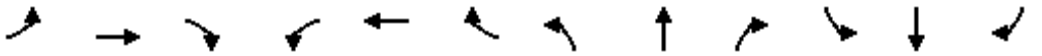
Traffic Signal Results at:

Market Place Blvd at Wal-Mart South Driveway/Proposed Driveway #1



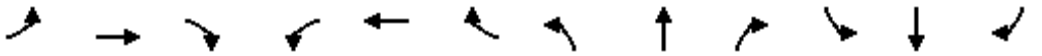
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	14	0	80	15	0	14	94	309	32	46	529	19
Future Volume (veh/h)	14	0	80	15	0	14	94	309	32	46	529	19
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	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	16	0	93	17	0	0	109	359	0	53	615	22
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	106	6	130	314	0		422	859		590	806	683
Arrive On Green	0.10	0.00	0.10	0.10	0.00	0.00	0.08	0.46	0.00	0.05	0.43	0.43
Sat Flow, veh/h	165	67	1344	1633	0	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	109	0	0	17	0	0	109	359	0	53	615	22
Grp Sat Flow(s),veh/h/ln	1576	0	0	1633	0	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	1.8	0.0	0.0	0.0	0.0	0.0	1.5	5.9	0.0	0.7	12.8	0.4
Cycle Q Clear(g_c), s	3.1	0.0	0.0	0.4	0.0	0.0	1.5	5.9	0.0	0.7	12.8	0.4
Prop In Lane	0.15		0.85	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	242	0	0	314	0		422	859		590	806	683
V/C Ratio(X)	0.45	0.00	0.00	0.05	0.00		0.26	0.42		0.09	0.76	0.03
Avail Cap(c_a), veh/h	903	0	0	867	0		663	3288		765	3166	2683
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	0.00	0.00	1.00	0.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.2	0.0	0.0	19.0	0.0	0.0	7.9	8.3	0.0	6.6	11.1	7.6
Incr Delay (d2), s/veh	1.3	0.0	0.0	0.1	0.0	0.0	0.3	0.3	0.0	0.1	1.5	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	1.1	0.0	0.0	0.2	0.0	0.0	0.4	1.9	0.0	0.2	4.4	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.5	0.0	0.0	19.0	0.0	0.0	8.2	8.7	0.0	6.6	12.6	7.6
LnGrp LOS	C	A	A	B	A		A	A		A	B	A
Approach Vol, veh/h		109			17	A		468	A		690	
Approach Delay, s/veh		21.5			19.0			8.6			12.0	
Approach LOS		C			B			A			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.5	27.2		10.5	9.8	25.9		10.5				
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s	7.0	81.0		24.0	10.0	78.0		24.0				
Max Q Clear Time (g_c+I1), s	2.7	7.9		5.1	3.5	14.8		2.4				
Green Ext Time (p_c), s	0.0	2.5		0.5	0.1	5.0		0.0				

Intersection Summary	
HCM 6th Ctrl Delay	11.7
HCM 6th LOS	B

Notes

Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	0	77	69	0	70	71	499	99	51	711	18
Future Volume (veh/h)	15	0	77	69	0	70	71	499	99	51	711	18
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	16	0	84	75	0	0	77	542	108	55	773	20
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	93	8	130	286	0		358	977	828	480	956	810
Arrive On Green	0.10	0.00	0.10	0.10	0.00	0.00	0.06	0.52	0.52	0.05	0.51	0.51
Sat Flow, veh/h	173	84	1348	1599	0	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	100	0	0	75	0	0	77	542	108	55	773	20
Grp Sat Flow(s),veh/h/ln	1604	0	0	1599	0	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	1.0	0.0	0.0	0.0	0.0	0.0	1.1	10.7	1.9	0.8	18.8	0.3
Cycle Q Clear(g_c), s	3.2	0.0	0.0	2.2	0.0	0.0	1.1	10.7	1.9	0.8	18.8	0.3
Prop In Lane	0.16		0.84	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	231	0	0	286	0		358	977	828	480	956	810
V/C Ratio(X)	0.43	0.00	0.00	0.26	0.00		0.22	0.55	0.13	0.11	0.81	0.02
Avail Cap(c_a), veh/h	764	0	0	736	0		409	2499	2118	551	2499	2118
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	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.7	0.0	0.0	23.3	0.0	0.0	8.8	8.8	6.7	6.4	11.1	6.6
Incr Delay (d2), s/veh	1.3	0.0	0.0	0.5	0.0	0.0	0.3	0.5	0.1	0.1	1.7	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	1.2	0.0	0.0	0.9	0.0	0.0	0.3	3.5	0.5	0.2	6.4	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.0	0.0	0.0	23.8	0.0	0.0	9.1	9.3	6.8	6.5	12.8	6.6
LnGrp LOS	C	A	A	C	A		A	A	A	A	B	A
Approach Vol, veh/h		100			75	A		727			848	
Approach Delay, s/veh		25.0			23.8			8.9			12.3	
Approach LOS		C			C			A			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.8	34.5		11.3	9.4	33.9		11.3				
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s	5.0	73.0		24.0	5.0	73.0		24.0				
Max Q Clear Time (g_c+I1), s	2.8	12.7		5.2	3.1	20.8		4.2				
Green Ext Time (p_c), s	0.0	4.5		0.5	0.0	7.1		0.3				

Intersection Summary		
HCM 6th Ctrl Delay	12.1	
HCM 6th LOS	B	

Notes

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

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