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Flagstaff Federal Courthouse

Traffic Impact Analysis

1535 and 1609 W Route 66

Flagstaff, Arizona

September 2024

First Submittal: August 2024

PREPARED FOR:

ARDURRA

PREPARED BY:

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Project No.24-042

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EXECUTIVE SUMMARY

The Flagstaff Federal Courthouse is a proposed commercial development located at 1535 and 1609 W Route 66 in Flagstaff, Arizona and will span across two parcels of land. This development is proposed on 4 acres of undeveloped land on the south side of Route 66. The proposed federal courthouse building will be 38,426 square feet spread across three floors.

TRIP GENERATION

- The proposed 38,426 square foot federal courthouse is anticipated to generate a total of 128 trips (entering and exiting) during the AM peak hour and 66 trips during the PM peak hour. The greatest hourly entering volume occurs during the AM peak hour, when 96 entering trips are anticipated.

SAFETY ANALYSIS

- During the three-year analysis period, there were 54 total crashes, where 35 of these crashes resulted in no injuries or property damage.
- One bicycle crash was recorded, where the bicyclist crash resulted in a suspected minor injury.
- No fatal crashes were reported.

SITE ACCESS

- The proposed development will provide access to the site by two driveways, with each driveway expected to operate as full-access access points.
- Driveway B is anticipated to be limited to officials, which is a requirement of federal courthouse buildings, and a higher percentage of traffic (80%) is anticipated to access Driveway A.
- Drivers accessing the site from one driveway will not be able to access the other driveway from within site.

LEVEL OF SERVICE ANALYSIS

- In the existing conditions, all approaches at the intersection of Woodlands Village Boulevard and Route 66 currently operate at acceptable levels of service (LOS D or above) in both the AM and PM peak hour conditions.
- At the intersection of Thompson Street and Route 66, the northbound and southbound approaches currently operate at failing levels of service (LOS E and LOS F) in the PM peak hour. This is a result of high levels of delay for the northbound and southbound left turn movements in both the AM and PM peak hours.
- The intersection of Thompson Street and Route 66 will continue to experience failing levels of service (LOS E and LOS F) for the northbound and southbound approaches, especially for the left turn movements in the 2025 opening year and 2028 horizon year.
- Level of service results for the intersection of Woodlands Village Boulevard and Route 66 are expected to remain acceptable (LOS D or above) in the 2025 opening years, with or without site traffic. In 2028, the eastbound approach, particularly the through/right movements in the PM peak hour, are expected to operate at LOS E both with and without site traffic.
- The site driveways at Route 66 are expected to operate acceptably in both the 2025 opening year and 2028 horizon year.

DRIVEWAY SPACING REQUIRMENTS

- The spacing between Driveway A and Driveway B is approximately 440 feet and according to the City of Flagstaff driveway spacing requirements, the minimum spacing for arterial street (Street Type 1) is 230 feet, therefore meeting the minimum spacing requirement.

TURN LANE ANALYSIS

- Based on right turn lane criteria in the ADOT TGP 245, right turn lanes are not warranted at Driveway A or Driveway B.

RECOMMENDATIONS

- Route 66 is expected to have two through lanes in each direction adjacent to the site.
- A traffic signal is anticipated to be installed by others at the intersection of Thompson Road and Route 66 as future developments increase traffic volumes. The traffic signal installation will reduce delays for the northbound and southbound approaches at this intersection.
- In the mitigated scenario for 2025 and 2028, adding the traffic signal and a through lane is expected to improve all approaches at Thompson Street and Route 66 to an acceptable level of service (LOS B or better).
- Signal timing optimization at Woodlands Village Blvd and Route 66 slightly reduces delays for the eastbound movement, improving that movement to a LOS E, which aligns with the projected 2028 background traffic conditions.

INTRODUCTION

The Flagstaff Federal Courthouse is a proposed civic development located at 1535 and 1609 W Route 66 in Flagstaff, Arizona and will span across two parcels of land. This development is proposed on 4 acres of undeveloped land on the south side of Route 66. The proposed federal courthouse building will be 38,426 square feet spread across three floors.

STUDY OBJECTIVES

The objectives of the study include the following:

- Document existing conditions and perform an existing level of service analysis.
- Perform a safety analysis by studying the past three years crashes within the study limits.
- Estimate generated trips for federal courthouse and distribute them to the surrounding street system.
- Add the new trips from the proposed development to the background traffic.
- Determine future levels of service with and without the proposed project.
- Conduct a turn lane warrant at each of the site driveways
- Recommend roadway improvements to provide for a safe and efficient transportation system and to minimize impacts of the proposed development.

SCOPE OF STUDY

The Traffic Impact Analysis has been prepared in accordance with City of Flagstaff and ADOT guidelines Traffic Impact Analysis guidelines. A Traffic Impact Analysis Pre-Submittal Form was prepared and submitted to ADOT for review prior to the preparation of this report. That form is available in **Appendix B.** The analysis years for the study are the existing year (2024), the opening year (assumed to be 2025), and a three-year horizon year (2028). **Figure 1** provides the vicinity map and **Figure 2** includes an aerial of existing site.

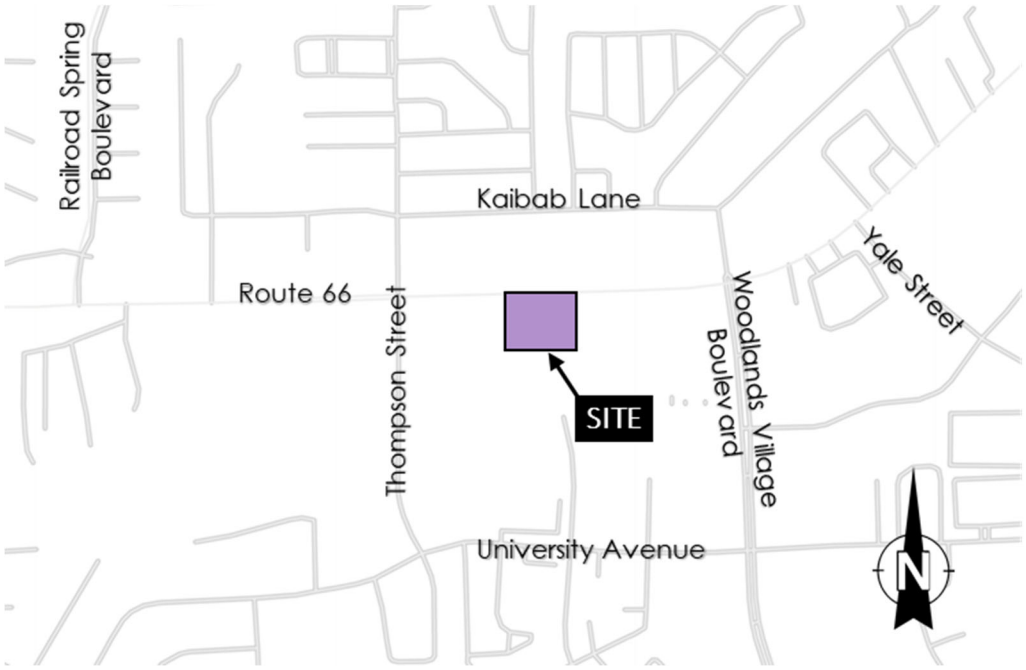


Figure 1: Vicinity Map

STUDY AREA

The study area includes the following intersections:

- Route 66/Woodlands Village Boulevard
- Thompson Street/Route 66
- Two Site Driveways

ANALYSIS TIME PERIODS AND HORIZON YEARS

The weekday AM and PM peak hour periods were analyzed from 7:00 to 9:00 AM 4:00 to 6:00 PM. The future traffic analysis was conducted for the 2025 Opening Year and for the 2028 Horizon Year.

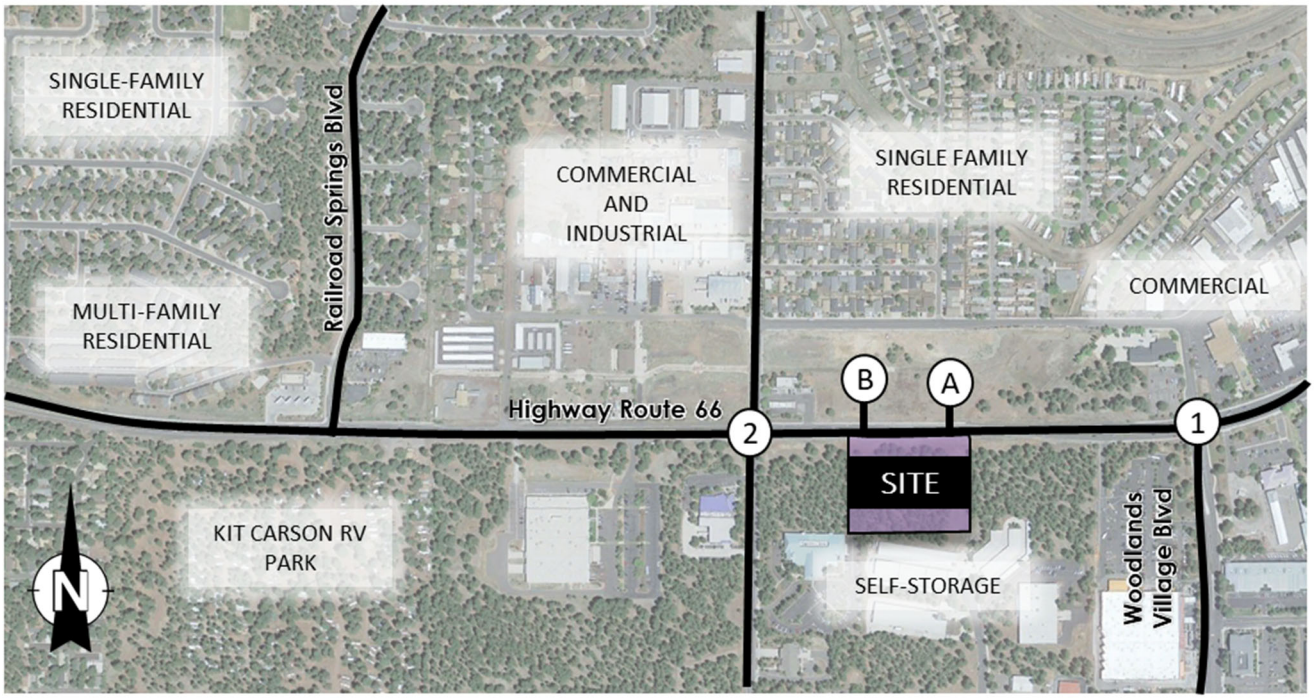


Figure 2: Project Site Aerial

EXISTING CONDITIONS

SURROUNDING AREA

The proposed courthouse development is located south of Route 66 and in between Thompson Street and Woodlands Village Boulevard. A self-storage facility is located south of the proposed site. Single-family residential developments, industrial, and commercial developments exist north of the development. Immediately north of Route 66 in proximity of the site is a gas station at the corner of Thomspon Street and Route 66 and undeveloped land.

DESCRIPTION OF EXISTING TRANSPORTATION SYSTEM

ROUTE 66

Route 66 is an east-west roadway that is classified as a minor arterial according to the City of Flagstaff Roadway Functional Classification Map. Immediately adjacent to the site, this roadway provides one lane in each direction, separated by a two-way left turn lane (TWLTL). In proximity to the site, curbs are provided on both sides of the roadway, but are not present along this roadway in both directions. Near the site, on the north side of Route 66, there are curb gutters and a sidewalk, while on the south side, curbs with drainage openings are present along a section of the road. Lighting, and bikes lanes are not present on either side of the roadway. The posted speed limit on Route 66 is 45 miles per hour (mph).

THOMPSON STREET

Thompson Street is a north-south roadway classified as a major collector according to the City of Flagstaff Roadway Functional Classification Map. This roadway provides one lane in each direction and is separated by a double yellow line. Curbs, gutters, and bike lanes are provided on both sides of the roadway. Sidewalks and lighting are present on the eastern side of Thompson Street. The posted speed limit is 30 mph.

WOODLANDS VILLAGE BOULEVARD

Woodlands Village Boulevard is a north-south roadway classified as a major collector according to the City of Flagstaff Roadway Functional Classification Map. This roadway provides two lanes in each direction and is separated by a multi-width median between Route 66 and University Avenue. Curbs, gutters, sidewalks and lighting are present on both sides of the roadway. Bike lanes are not present on either side of the roadway. The posted speed limit on this roadway is 40 mph.

INTERSECTION OF ROUTE 66 AND THOMPSON STREET

The intersection of Route 66 and Thompson Street is a four-legged minor street stop-controlled intersection where Thomspon Street is stop controlled. The northbound and southbound approaches provide one designated left turn lane and a shared through/right turn lane in each direction. The eastbound and westbound directions provide a designated left turn lane, a designated through lane, and a designated right turn lane. Pedestrian curb ramps are present on all corners of the intersection; however, the southeastern corner does not provide sidewalks in either direction. Striped crosswalks are not present at this intersection.

INTERSECTION OF ROUTE 66 AND WOODLANDS VILLAGE BOULEVARD

The intersection of Route 66 and Woodlands Village Boulevard is a four-legged signalized intersection. The northbound approach provides a designated left turn lane, a designated through lane, and a designated right turn lane. The southbound and eastbound approach provides a designated left turn lane, a designated through lane, and a shared through/right turn lane. The westbound approach provides a designated through lane, two designated left turn lanes, and a shared through/right turn lane. The westbound approach provides protected left turn phasing and the northbound, southbound, and eastbound approaches provide permitted/protected left turn phasing. Pedestrian curb ramps and crosswalks are present at each corner of the intersection.

The existing roadway geometry and intersection traffic control are depicted in **Figure 3**.

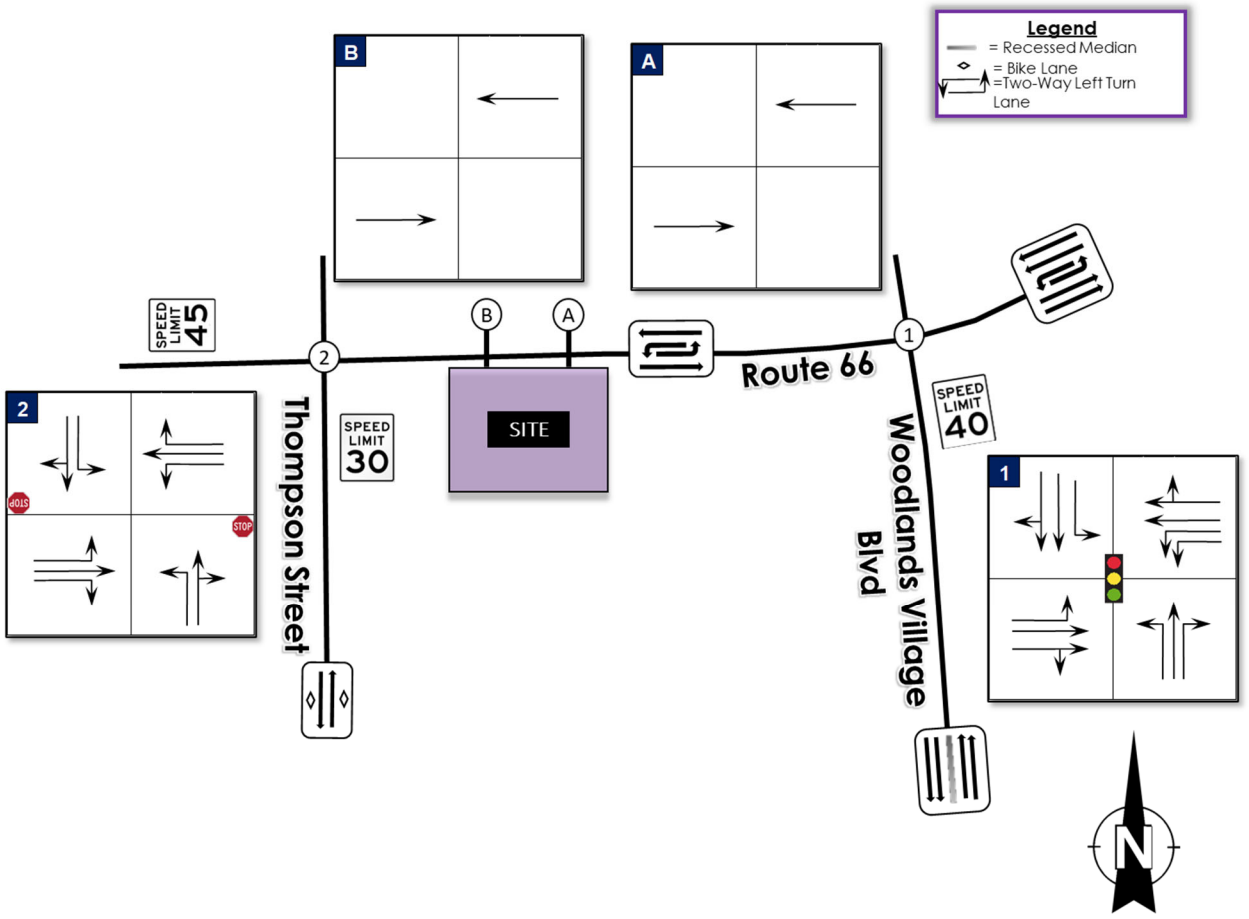


Figure 3: Existing Lane Configurations and Traffic Control

SAFETY ANALYSIS

The past three years of available crashes from the ADOT database, from January 1, 2020 to December 31, 2022 were analyzed within the study area to identify any trends. The study area includes the following:

- Route 66 and Woodlands Village Boulevard
- Route 66 and Thompson Street

After analyzing each intersection, the total number of crashes that occurred throughout the three-year analysis period was 54 crashes. No fatal crashes were recorded, and 35 crashes resulted in no injuries or property damage. One bicycle crash was recorded, where the bicyclist crash resulted in a suspected minor injury. The crashes distinguished by injury severities near the analyzed intersections are summarized in Table 1 and the crashes distinguished by collision manner are summarized in Table 2.

Table 1: 2020-2022 Crash Summary by Injury Severity

Injury Severity						
Year	Fatal	Serious Injury	Minor Injury	Possible Injury	No Injury	TOTAL
2020	0	0	0	3	4	7
2021	0	0	5	4	18	27
2022	0	1	2	4	13	20
Total	0	1	7	11	35	54

Table 2: 2020-2022 Crash Summary by Collision Manner

Collision Manner									
Year	Single Vehicle	Rear End	Angle (Front to Side) (Other than Left)	Left Turn	Sideswipe Same Direction	Sideswipe Opposite Direction	Head On	Other	TOTAL
2020	1	3	1	2	0	0	0	0	7
2021	2	5	8	4	4	1	2	1	27
2022	2	7	2	6	2	0	1	0	20
Total	5	15	11	12	6	1	3	1	54

EXISTING TRAFFIC VOLUMES

TRAFFIC COUNTS

Traffic volumes were obtained by All Traffic Data Services on Tuesday July 30, 2024. These volumes were used as baseline conditions for existing traffic volumes. Data was provided at the following intersections:

- Woodlands Village Boulevard and Route 66
- Thompson Street and Route 66

Collected volumes were used for analysis of existing conditions. Data is provided in **Appendix C**. Data was provided from 7:00-9:00AM, and 4:00-6:00PM. The peak hours were identified as 7:45-8:45AM and 4:30-5:30PM. The 2024 traffic volumes are shown in **Figure 4.**

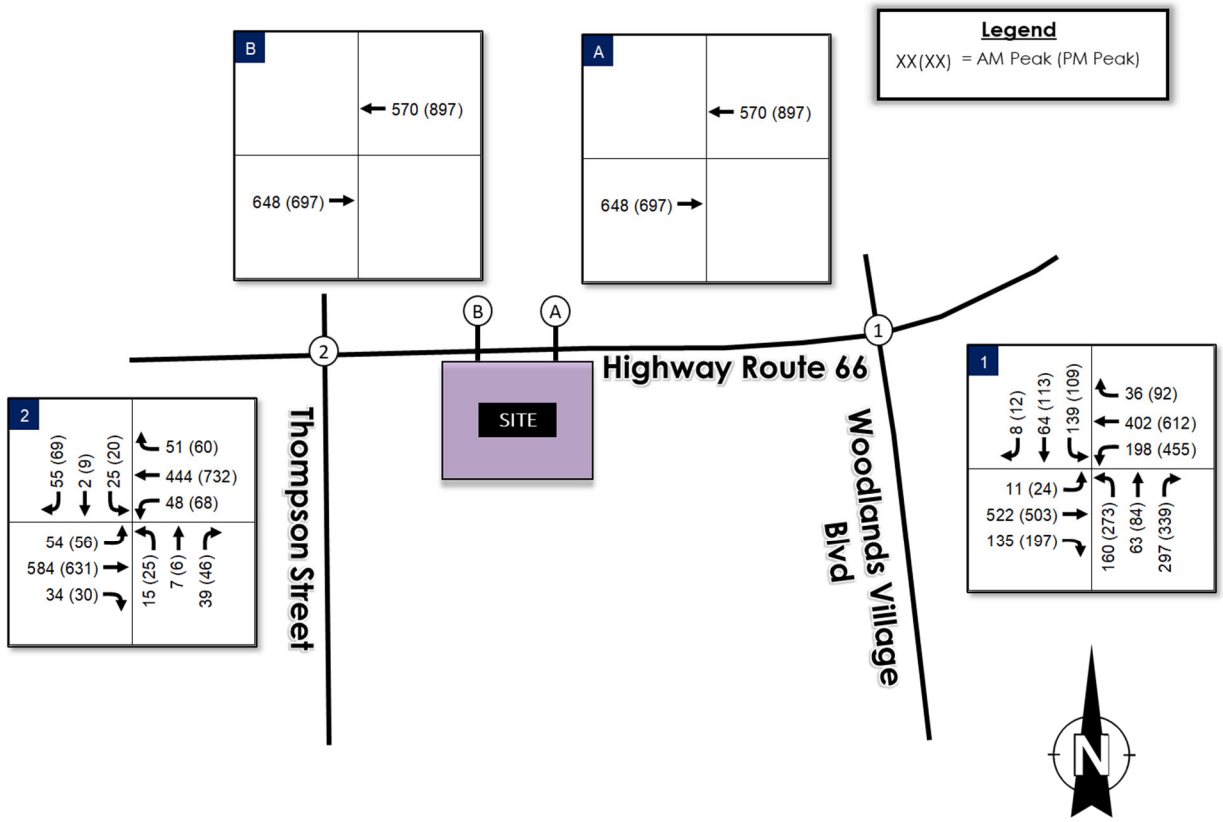


Figure 4: 2024 Existing Traffic Volumes

EXISTING LEVEL OF SERVICE ANALYSIS

The 2024 existing traffic volumes were analyzed to determine the level of service (LOS) during the weekday AM and PM peak hours at the existing intersection within the study area. The LOS analysis was prepared using Synchro 11 software. The level of service criteria, as stated in the *Highway Capacity Manual, Sixth Edition,* is provided in **Table 2**. The analysis worksheets are included in **Appendix D**, and a summary of the existing level of service analysis is provided in **Table 3.**

Table 2: Level of Service Criteria

	Average Delay (seconds per vehicle)	
Level-of-Service	**Unsignalized**	**Signalized**
A	≤ 10	≤ 10
B	> 10 to 15	> 10 to 20
C	> 15 to 25	> 20 to 35
D	> 25 to 35	> 35 to 55
E	> 35 to 50	> 55 to 80
F	> 50	> 80

Table 3: 2024 Existing Level of Service Analysis

Intersection	Traffic Control	Movement/ Approach	Existing Conditions			
			AM Peak Hour		PM Peak Hour	
			Avg Delay (sec/veh)	LOS	Avg Delay (sec/veh)	LOS
1 Woodlands Village Boulevard and Route 66	Traffic Signal	INTERSECTION	21.4	C	31.1	C
		EB Approach	27.5	C	45.5	D
		EB Left	20.3	C	26.7	C
		EB Thru/Right	27.6	C	45.8	D
		EB Right	27.7	C	46.7	D
		WB Approach	21.5	C	27.7	C
		WB Left	36.3	D	45.4	D
		WB Thru/Right	14.4	B	15.9	B
		WB Right	14.5	B	15.9	B
		NB Approach	16.3	B	26.0	C
		NB Left	15.5	B	28.6	C
		NB Thru	12.5	B	17.6	B
		NB Right	17.5	B	26.0	C
		SB Approach	15.4	B	20.0	B
		SB Left	17.2	B	23.3	C
		SB Thru/Right	12.2	B	17.3	B
		SB Right	12.2	B	17.3	B
2 Thompson Street and Route 66	Two Way Stop Sign	INTERSECTION	3.4	A	7.4	A
		EB Approach	0.7	A	0.8	A
		EB Left	8.7	A	10.0	A
		WB Approach	0.8	A	0.7	A
		WB Left	9.2	A	9.5	A
		NB Approach	25.6	D	90.1	F
		NB Left	50.0	E	100*	F
		NB Thru/Right	17.7	C	22.0	C
		SB Approach	26.3	D	50.3	F
		SB Left	56.7	F	100*	F
		SB Thru/Right	12.9	B	26.2	D

Under existing traffic conditions, the intersection of Route 66 and Woodlands Village Boulevard operates at acceptable levels of service (LOS D or above). The intersection of Thompson Street and Route 66 operates at accepting levels of service (LOS D or above), with the exception of the northbound and southbound approaches, where the northbound and southbound left turn movements operate at failing levels of service (LOS E and LOS F) in both the AM and PM conditions, resulting in the north and southbound movements experiencing LOS F in the PM conditions. Signal timing assumptions used to determine delay are documented in the Synchro report found in **Appendix D**.

PROPOSED DEVELOPMENT

SITE LOCATION AND ACCESS

The proposed Flagstaff Federal Courthouse building will be located at 1535 and 1609 West Route 66 on two undeveloped parcels of land. The proposed 38,426 square foot building will be accessed by two proposed driveways north of the site on Route 66, where Driveway A and Driveway B will operate as full-access driveways. Driveway B is located west of the site and will provide secured access to the federal building. This secondary driveway with secured access is a requirement of federal courthouse buildings. This access is anticipated to have less traffic due to this access point being exclusively utilized by officials. It is anticipated that approximately 20% of traffic will use Driveway B and approximately 80% of traffic will utilize Driveway A, which is located east of the site. The site is expected to contribute half-street improvements along Route 66, upgrading the roadway to a five-lane cross section. This will include two lanes in each direction, along with a two-way left-turn lane.

The site plan is shown in **Figure 5** while a detailed site plan is provided in **Appendix E.**

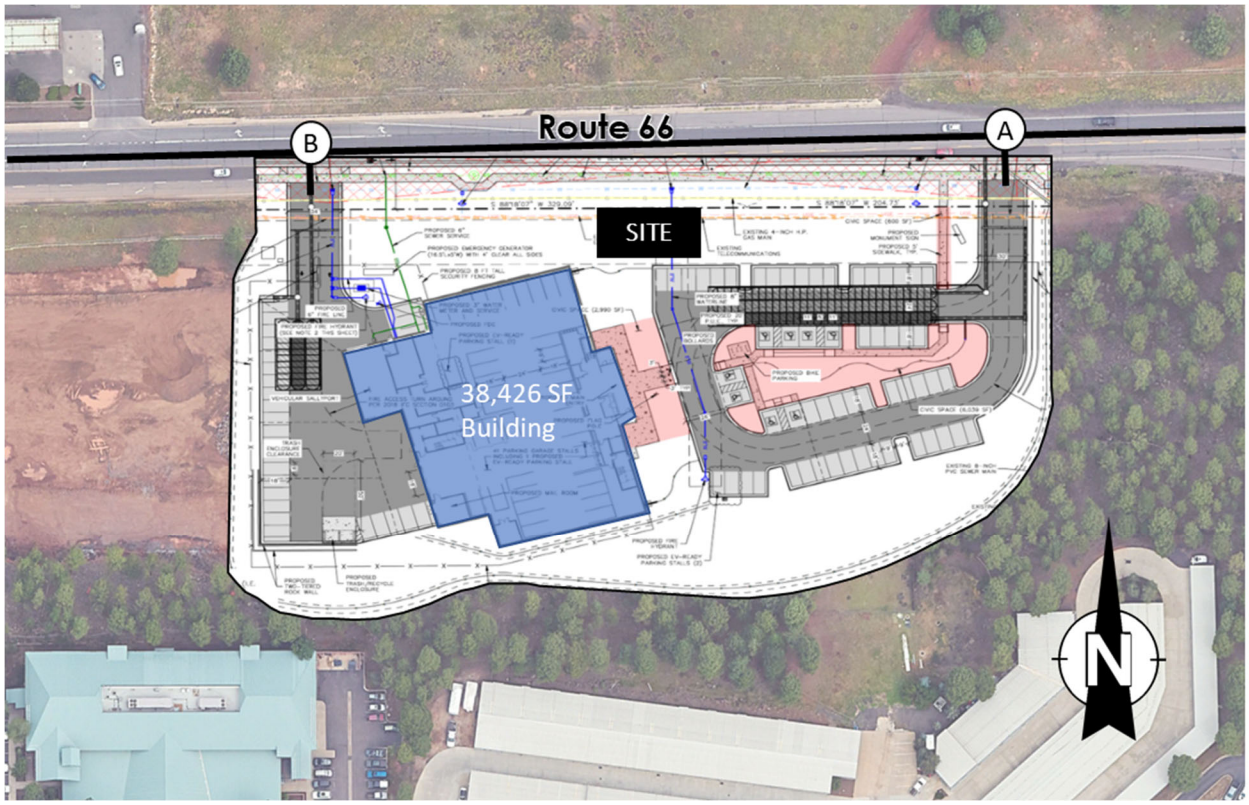


Figure 5: Site Plan

TRIP GENERATION

The trip generation for the project was estimated using the Institute of Transportation Engineers' (ITE) Trip Generation Manual, 11th Edition. ITE's Trip Generation Manual contains data collected by various transportation professionals for a wide range of different land uses. The data summarized in the manual includes average rates and equations that have been established correlating the relationship between an independent variable that describes the development size and generated trips for each categorized land

use. ITE Land Use Code 730 – Government Office Building was used to estimate trips for the federal courthouse. The estimated trips of the proposed development are shown in **Table 4**.

Table 4: Trip Generation – Weekday

DESCRIPTION OF LAND USE					VEHICLE GENERATED TRIPS						
					Daily	AM Peak Hour			PM Peak Hour		
ID	Land Use	ITE LUC	Size		Total	Enter	Exit	Total	Enter	Exit	Total
1	Government Office Building	730	38.4	KSF	867	96	32	128	16	50	66
				Total	**867**	**96**	**32**	**128**	**16**	**50**	**66**

As summarized in **Table 4**, the project is anticipated to generate a total of 128 trips (entering and exiting) during the AM peak hour and 66 trips during the PM peak hour. The greatest hourly entering volume occurs during the AM peak hour, when 96 entering trips are anticipated.

TRIP DISTRIBUTION AND ASSIGNMENT

The generated trips for the proposed development were distributed and assigned to the surrounding street system based on existing traffic patterns and volumes. The distribution and assignment percentages used in the analysis are depicted in **Figure 6.** Using the trip generation estimates and the site distribution assumptions, the hourly volumes were assigned to the study network as shown in **Figure 7.**

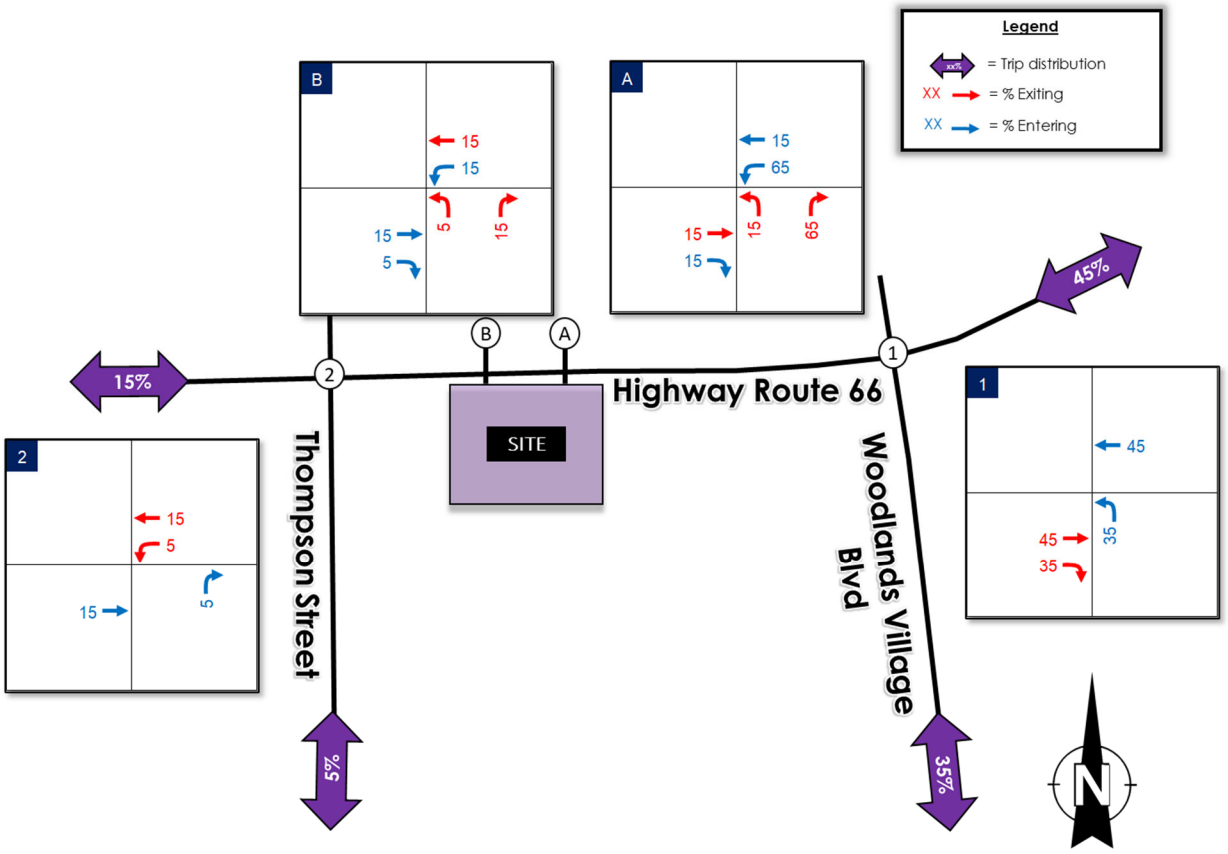


Figure 6: Trip Assignment

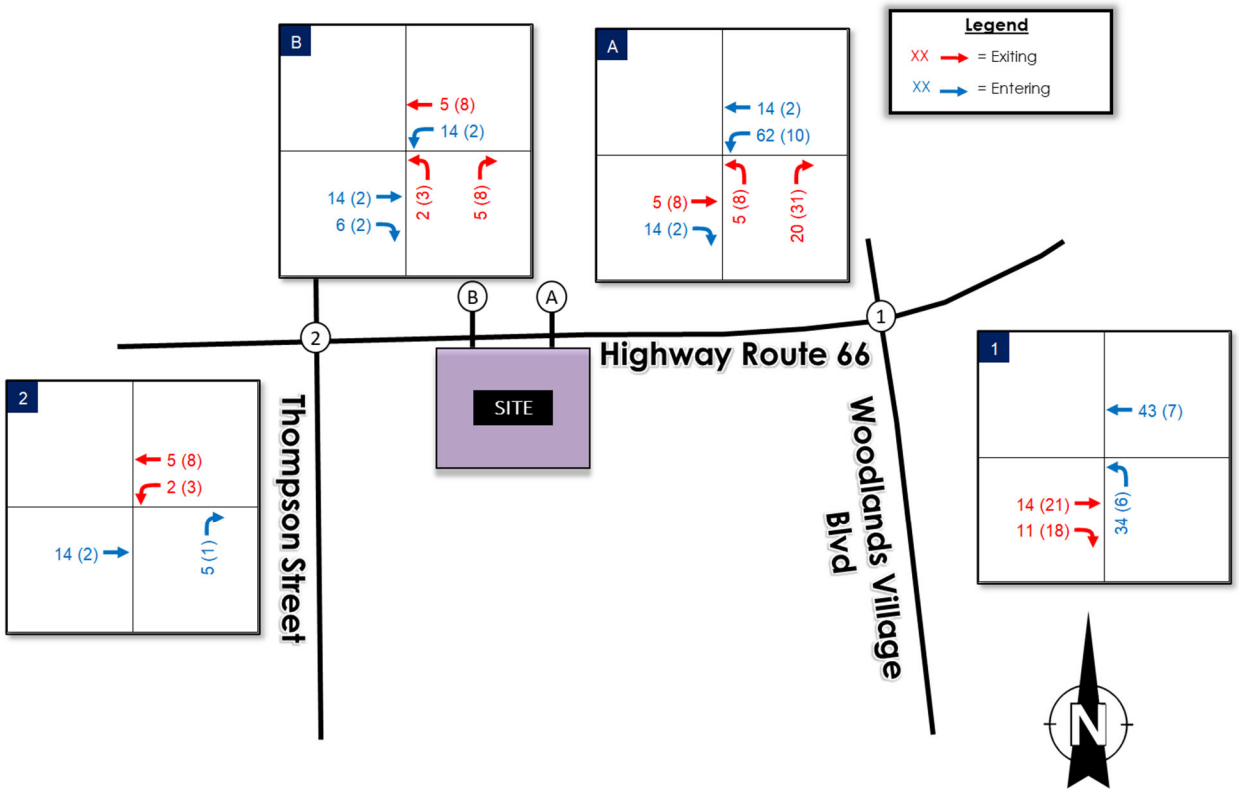


Figure 7: Site Volumes

FUTURE TRAFFIC

ANNUAL GROWTH RATE AND BACKGROUND TRAFFIC VOLUMES

Due to anticipated growth in the project vicinity, a compounded annual growth rate of 4% is a conservative estimate for future growth in the project area. The growth rate was applied to the 2024 traffic volumes to estimate background traffic volumes for the 2025 opening year and for the 2028 horizon year. The 2025 background traffic volumes are shown in **Figure 8** and the 2028 background volumes are shown in **Figure 9**.

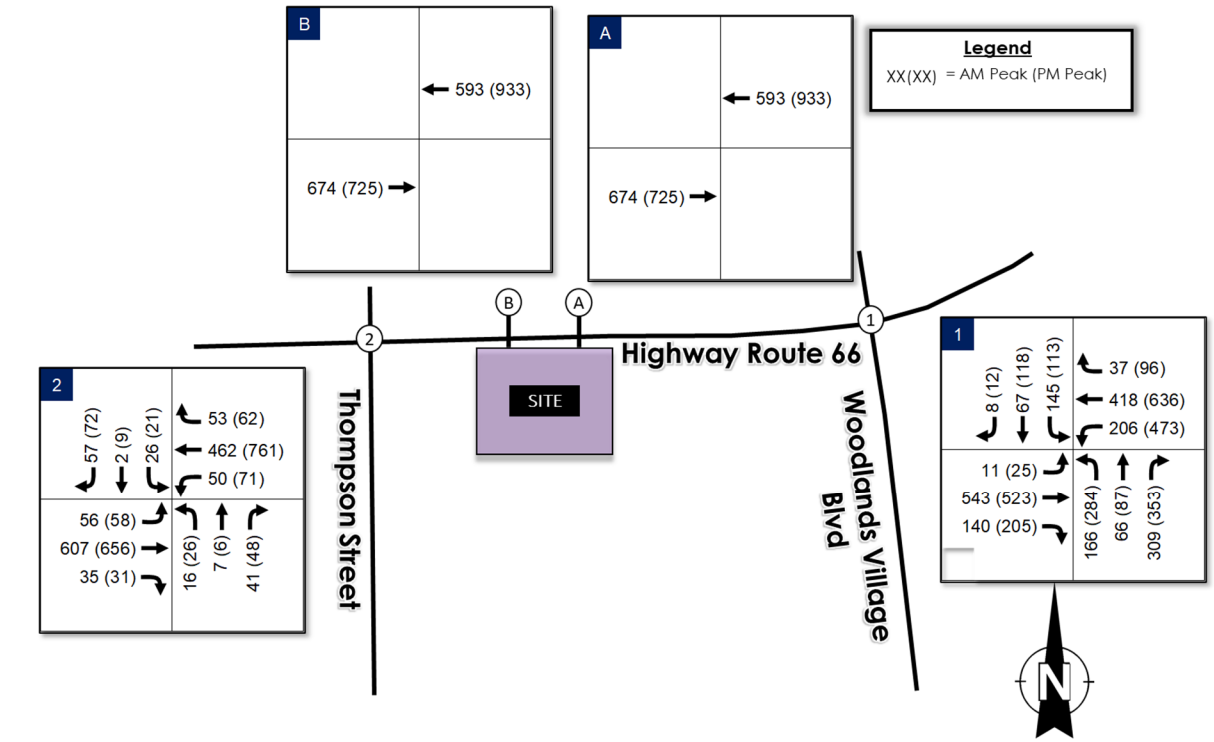


Figure 8: 2025 Background Traffic Volumes

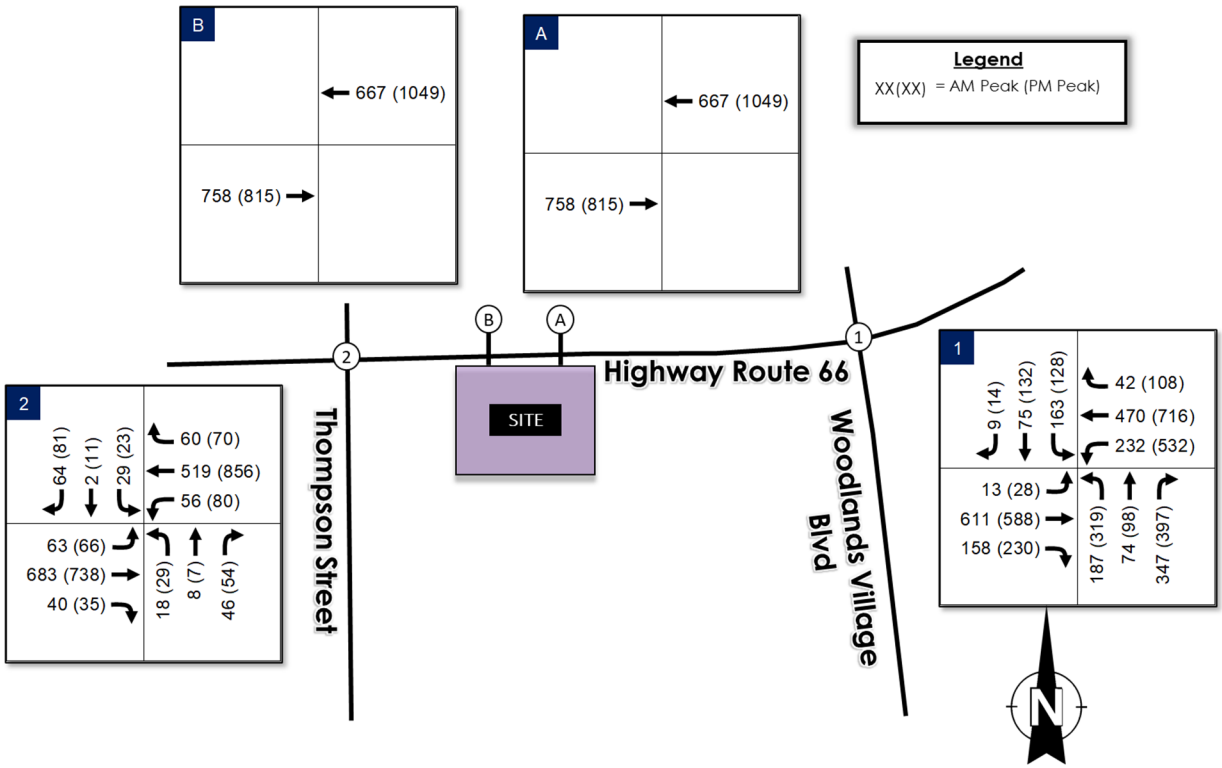


Figure 9: 2028 Background Traffic Volumes

TOTAL TRAFFIC VOLUMES

The total traffic volumes represent the sum of the background volumes shown in **Figure 8** and in **Figure 9, and** the future site traffic shown in **Figure 7**. The total traffic volumes estimated in 2025 are shown in **Figure 10** and the total traffic volumes in 2028 are shown in **Figure 11.** The applied growth rate for this analysis is 4%.

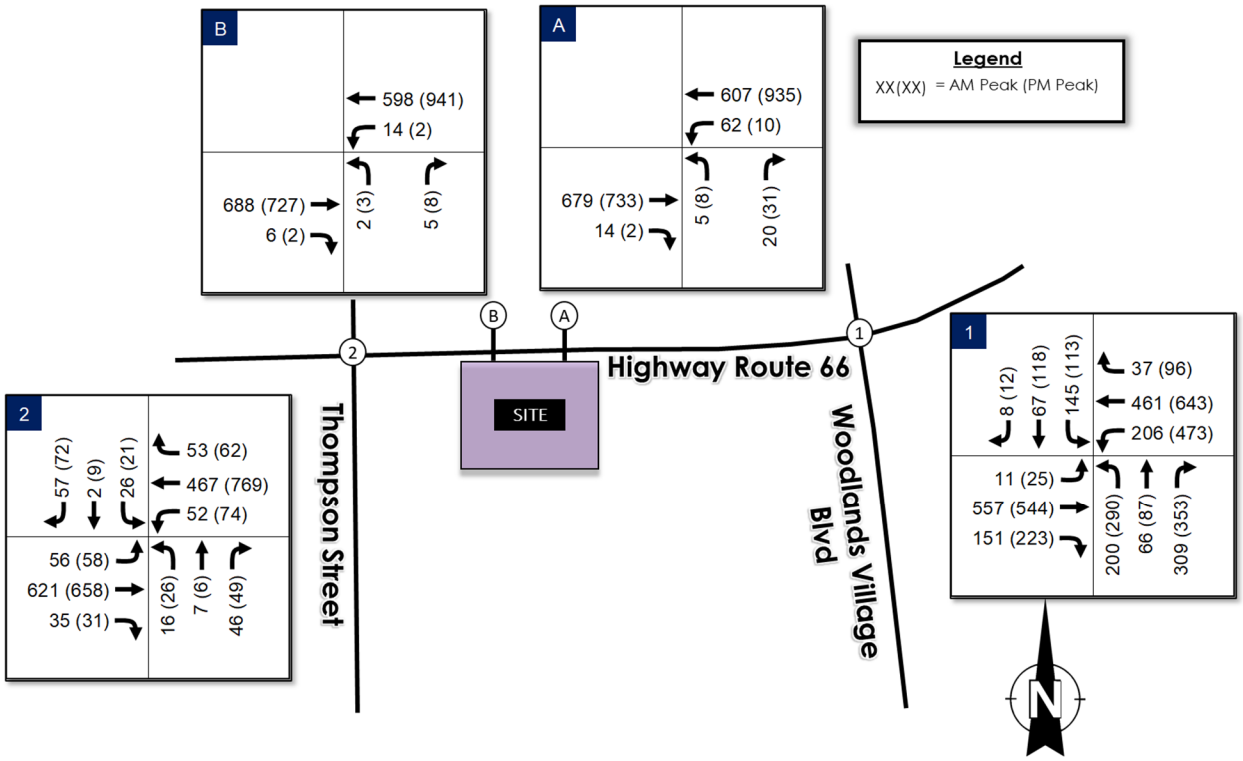


Figure 10: 2025 Total Traffic Volumes

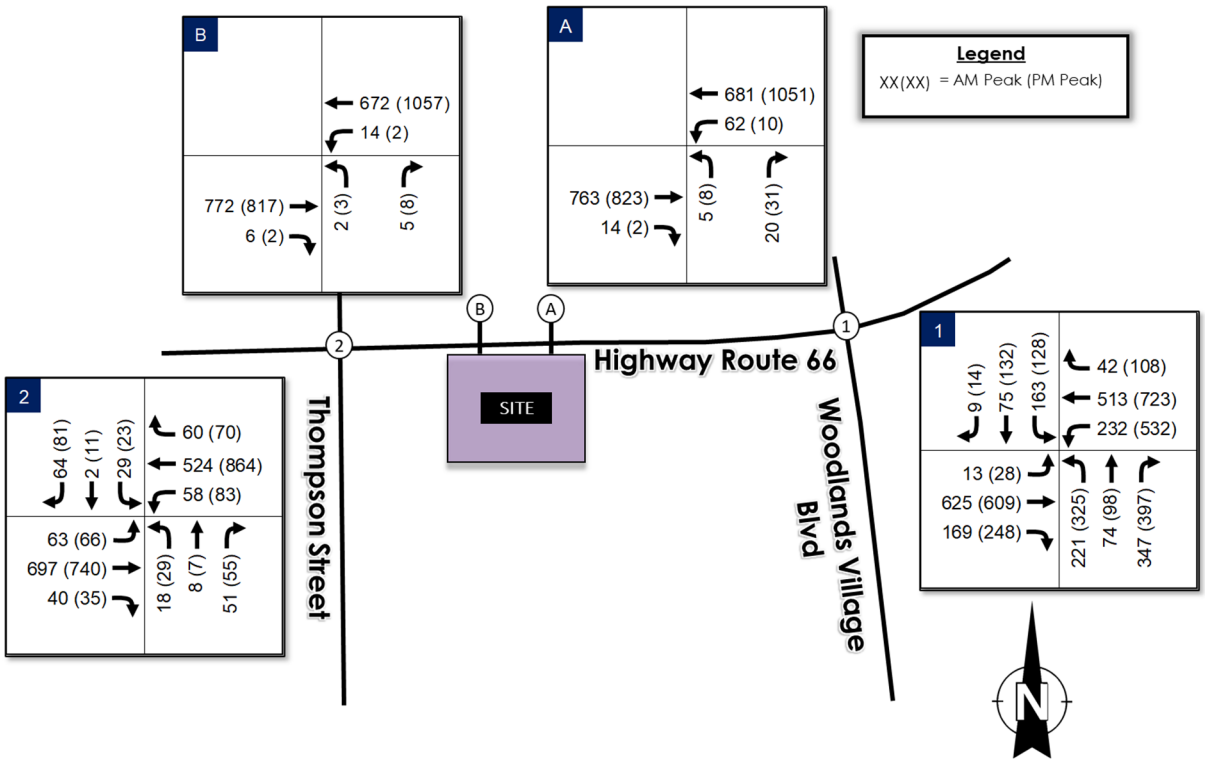


Figure 11: 2028 Total Traffic Volumes

FUTURE TRAFFIC ANALYSES

LEVEL OF SERVICE ANALYSES

Level-of-service (LOS) analyses were prepared for the AM and PM peak hours for the study intersections utilizing Synchro 11 software. Conditions were analyzed for the opening year with and without traffic from the proposed federal courthouse. The level of service criteria, as stated in the *Highway Capacity Manual,* is provided in **Table 2.** A summary of the LOS analysis is provided in **Table 5** for the Opening Year and **Table 6** for the Horizon Year. The Synchro reports are included in **Appendix F** and **Appendix G.**

Table 5: 2025 Level of Service Analysis

Intersection	Traffic Control	Movement/ Approach	2025 Background Conditions				2025 Total Conditions			
			AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
			Avg Delay (sec/veh)	LOS	Avg Delay (sec/veh)	LOS	Avg Delay (sec/veh)	LOS	Avg Delay (sec/veh)	LOS
1 Woodlands Village Boulevard and Route 66	Traffic Signal	INTERSECTION	21.8	C	32.8	C	22.0	C	34.5	C
		EB Approach	27.7	C	48.7	D	28.1	C	53.4	D
		EB Left	20.2	C	26.9	C	20.2	C	26.8	C
		EB Thru/Right	27.7	C	49.0	D	28.2	C	53.8	D
		EB Right	27.9	C	50.0	D	28.2	C	54.8	D
		WB Approach	21.6	C	28.4	C	21.3	C	28.6	C
		WB Left	36.8	D	47.2	D	37.1	D	48.1	D
		WB Thru/Right	14.3	B	15.8	B	14.5	B	15.7	B
		WB Right	14.3	B	15.8	B	14.5	B	15.7	B
		NB Approach	17.3	B	27.9	C	17.8	B	28.9	C
		NB Left	16.4	B	31.0	C	17.6	B	32.4	C
		NB Thru	13.1	B	18.4	B	13.2	B	18.8	B
		NB Right	18.7	B	28.0	C	18.9	B	28.7	C
		SB Approach	16.4	B	21.1	C	16.6	B	21.6	C
		SB Left	18.4	B	24.7	C	18.6	B	25.3	C
		SB Thru/Right	12.7	B	18.0	B	12.9	B	18.5	B
		SB Right	12.7	B	18.1	B	12.9	B	18.5	B
2 Thompson Street and Route 66	Two Way Stop Sign	INTERSECTION	3.7	A	9.2	A	3.9	A	9.5	A
		EB Approach	0.7	A	0.8	A	0.7	A	0.8	A
		EB Left	8.8	A	10.2	B	8.8	A	10.2	B
		WB Approach	0.8	A	0.8	A	0.8	A	0.8	A
		WB Left	9.3	A	9.6	A	9.3	A	9.6	A
		NB Approach	28.0	D	100*	F	28.1	D	100*	F
		NB Left	57.2	F	100*	F	59.5	F	100*	F
		NB Thru/Right	18.3	C	23.6	C	18.6	C	23.8	C
		SB Approach	29.1	D	60.9	F	31.1	D	63.2	F
		SB Left	65.1	F	100*	F	71.6	F	100*	F
		SB Thru/Right	13.2	B	28.6	D	13.3	B	29.4	D
3 Route 66 and Driveway A	Minor Street Stop Control	INTERSECTION	N/A Movement Does Not Exist				0.7	A	0.4	A
		WB Approach					0.9	A	0.1	A
		WB Left					9.6	A	9.4	A
		NB Approach					14.9	B	16.2	C
4 Route 66 and Driveway B	Minor Street Stop Control	INTERSECTION	N/A Movement Does Not Exist				0.2	A	0.1	A
		WB Approach					0.2	A	0.0	A
		WB Left					9.3	A	9.4	A
		NB Approach					15.0	B	16.7	C

Under 2025 traffic conditions, all approaches at the intersection of Woodlands Village Boulevard and Route 66 are expected to operate at acceptable levels of service (LOS D or above) in both the AM and PM peak hour conditions with and without site traffic. To effectively evaluate intersections compared to the existing conditions, the same signal timing assumptions were used. Site driveways are also anticipated to operate at acceptable levels of service. At the intersection of Thompson Street and Route 66, the eastbound and westbound approaches operate at acceptable levels of service (LOS B or better) during both the AM and PM peak hours. However, the northbound and southbound approaches are expected to operate at failing levels of service (LOS F) during the PM peak hour under both background and total conditions. This is due to the northbound and southbound left turn movements, which are projected to operate at LOS F during both the AM and PM peak periods under these conditions. The site is not anticipated to add additional traffic to this movement.

Table 6: 2028 Level of Service Analysis

Intersection	Traffic Control	Movement/ Approach	2028 Background Conditions				2028 Total Conditions			
			AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
			Avg Delay (sec/veh)	LOS	Avg Delay (sec/veh)	LOS	Avg Delay (sec/veh)	LOS	Avg Delay (sec/veh)	LOS
1 Woodlands Village Boulevard and Route 66	Traffic Signal	INTERSECTION	27.3	C	40.3	D	28.1	C	43.9	D
		EB Approach	40.4	D	65.9	E	42.6	D	78.3	E
		EB Left	22.3	C	27.9	C	22.2	C	27.9	C
		EB Thru/Right	40.5	D	66.8	E	42.8	D	79.5	E
		EB Right	40.9	D	67.8	E	43.1	D	80.7	F
		WB Approach	23.6	C	31.1	C	23.4	C	31.1	C
		WB Left	39.9	D	53.9	D	40.2	D	53.9	D
		WB Thru/Right	15.9	B	15.8	B	16.1	B	15.9	B
		WB Right	18.2	B	15.8	B	16.1	B	15.9	B
		NB Approach	19.3	B	35.2	D	19.9	B	35.6	D
		NB Left	18.2	B	40.3	D	19.6	B	41.2	D
		NB Thru	14.0	B	20.4	C	14.2	B	20.4	C
		NB Right	21.0	C	35.0	C	21.3	C	35.0	C
		SB Approach	18.5	B	24.4	C	18.8	B	24.4	C
		SB Left	21.2	C	29.7	C	21.5	C	29.7	C
		SB Thru/Right	13.6	B	20.0	B	13.8	B	20.0	B
		SB Right	13.7	B	20.1	C	13.8	B	20.0	B
2 Thompson Street and Route 66	Two Way Stop Sign	INTERSECTION	5.2	A	21.3	C	3.5	A	8.8	A
		EB Approach	0.7	A	0.9	A	0.7	A	0.9	A
		EB Left	9.1	A	10.8	B	9.1	A	10.9	B
		WB Approach	0.9	A	0.8	A	0.9	A	0.8	A
		WB Left	9.7	A	10.1	B	9.8	A	10.2	B
		NB Approach	38.6	E	100*	F	26.9	D	99.7	F
		NB Left	87.8	F	100*	F	54.4	F	100*	F
		NB Thru/Right	22.2	C	33.1	D	18.5	C	27.8	D
		SB Approach	46.0	E	100*	F	25.2	D	64.9	F
		SB Left	100*	F	100*	F	55.4	F	100*	F
		SB Thru/Right	14.3	B	47.5	E	12.0	B	35.3	E
3 Route 66 and Driveway A	Minor Street Stop Control	INTERSECTION	N/A Movement Does Not Exist				0.6	A	0.3	A
		WB Approach					0.8	A	0.1	A
		WB Left					10.0	A	9.9	A
		NB Approach					13.1	B	14.1	B
4 Route 66 and Driveway B	Minor Street Stop Control	INTERSECTION	N/A Movement Does Not Exist				0.2	A	0.1	A
		WB Approach					0.2	A	0.0	A
		WB Left					9.7	A	9.8	A
		NB Approach					13.1	B	13.9	B

Under 2028 traffic conditions, all approaches at the intersection of Woodlands Village Boulevard and Route 66, are expected to operate at acceptable levels of service (LOS D or above) in both the AM and PM peak hour periods with and without site traffic, with the exception of the eastbound approach, where the eastbound through/right movements are anticipated to degrade in a failing LOS E of LOS F during the PM peak periods in both conditions during the 2028 horizon year. To effectively evaluate intersections compared to the existing conditions, the same signal timing assumptions were used at the intersection of Woodlands Village Boulevard and Route 66.

Each of the site driveways on Route 66 are anticipated to operate with acceptable LOS C or above. At the intersection of Thompson Street and Route 66, the eastbound and westbound approaches are expected to maintain acceptable levels of service (LOS C or better). However, the northbound and southbound

approaches are anticipated to continue operating at failing levels of service (LOS E or F) under both background and total conditions. Specifically, the northbound and southbound left turn movements are projected to fail during both the AM and PM peak periods, while the southbound through/right turn movements are expected to fail during the PM peak period under both conditions.

DRIVEWAY SPACING ANALYSIS

Driveway spacing was analyzed at the site driveways of the federal courthouse to determine if minimum requirements provided by the City of Flagstaff are met. The City of Flagstaff criteria requires that driveway spacing along existing and proposed arterial and collector streets shall be determined as a function of arterial or collector street type. In *Chapter 10-07: Parking, Loading, Access and Private Street Requirements* provided by the City of Flagstaff, the minimum spacing for arterial roadways (Street Type I) is 230 feet. The space between Driveway A and Driveway B is approximately 440 feet, therefore, meeting the requirements. Figure 12 provides the spacing between the two site driveways.

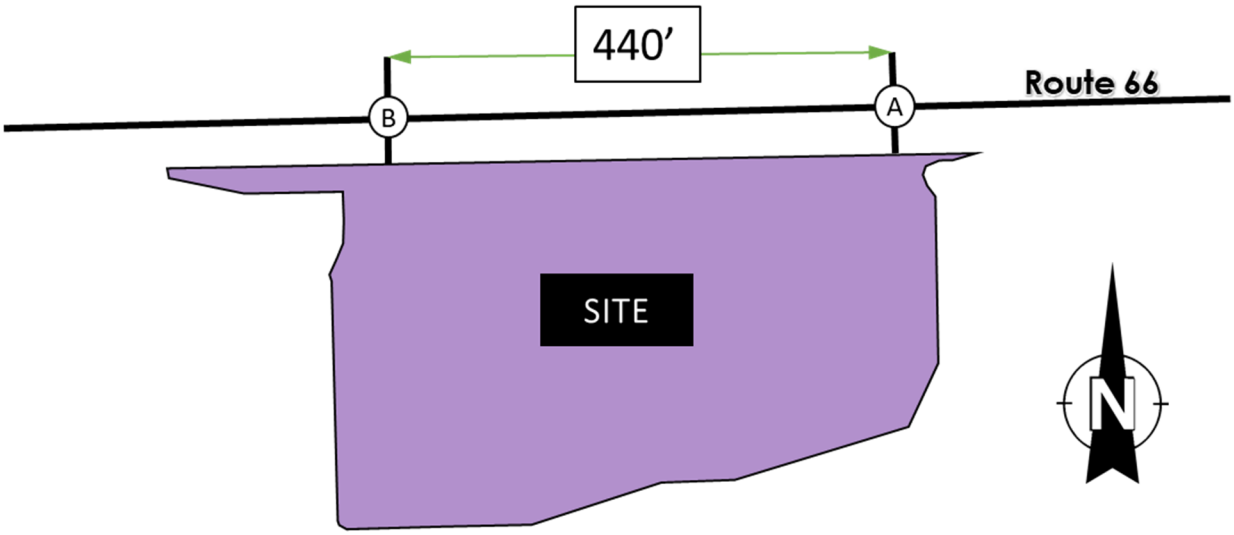


Figure 12: Driveway Spacing

AUXILIARY LANES ANALYSIS

The primary factors that determine the need for right turn lane lanes include the combination of through and turning traffic volumes and the posted roadway speed. Given that the site is expected to provide half-street improvements, including a proposed two-way left-turn lane (TWLTL) on Route 66 near the site, a left-turn lane warrant analysis will not be conducted.

As Route 66 is under the jurisdiction of the Arizona Department of Transportation (ADOT), right-turn Lane warrant criteria is referenced from the *ADOT TGP 245*. Driveway A and Driveway B were evaluated to determine if the site traffic at the development warrants a right turn deceleration lane at each driveway. Figure 13 provides the right turn lane criteria based on speed limit and advancing direction.

Peak Hour Traffic Volume on the Highway in Advancing Direction	Minimum Peak Hour Right-turn Traffic Volume				
	# of thru lanes per direction				
	1		2		3
	< 45 MPH Posted Speed	≥ 45 MPH Posted Speed	< 45 MPH Posted Speed	≥ 45 MPH Posted Speed	All Speeds
≤ 200					
201 – 300	-	30	-	-	-
301 – 400	-	19	-	55	-
401 – 500	85	14	-	30	-
501 – 600	58	12	140	25	-
601 – 700	27	9	80	18	-
701 – 800	20	8	53	15	-
801 – 900	12	7	40	12	-
901 – 1000	9	6	30	11	-
1001 – 1100	8	5	23	9	18
1101 – 1200	7	5	18	8	16
1201 – 1300	6	4	14	8	15
1301 – 1400	6	4	11	6	12
1400+	5	3	8	6	10

Figure 13: Right Turn Lane Criteria

Based on collected and projected eastbound traffic at Driveway A and at Driveway B on Route 66, approximately 760 vehicles are estimated in the through direction during the peak hour, and with the anticipation of obtaining two lanes in each direction in proximity to the site on Route 66 and the speed limit being 40 mph, a minimum of 53 vehicles are required to make a right turn at each driveway to warrant a right turn lane. As such, right turn lanes are not warranted at the site driveways, considering less than 20 vehicles are anticipated to turn right.

RECOMMENDED IMPROVEMENTS

The recommendations are based on the site assumptions provided at the time of analysis. Route 66 is expected to feature two through lanes in each direction near the site. As future developments in the area contribute to increased traffic volumes, a traffic signal is anticipated at the intersection of Thompson Road and Route 66. The installation of this traffic signal will reduce delays for the northbound and southbound approaches.

Figure 14 portrays the lane configurations for each intersection and site driveway, where blue arrows indicate improvements implemented by the proposed project and green arrows indicate improvements anticipated to be implemented by others, which include ADOT, the City of Flagstaff, or other developments.

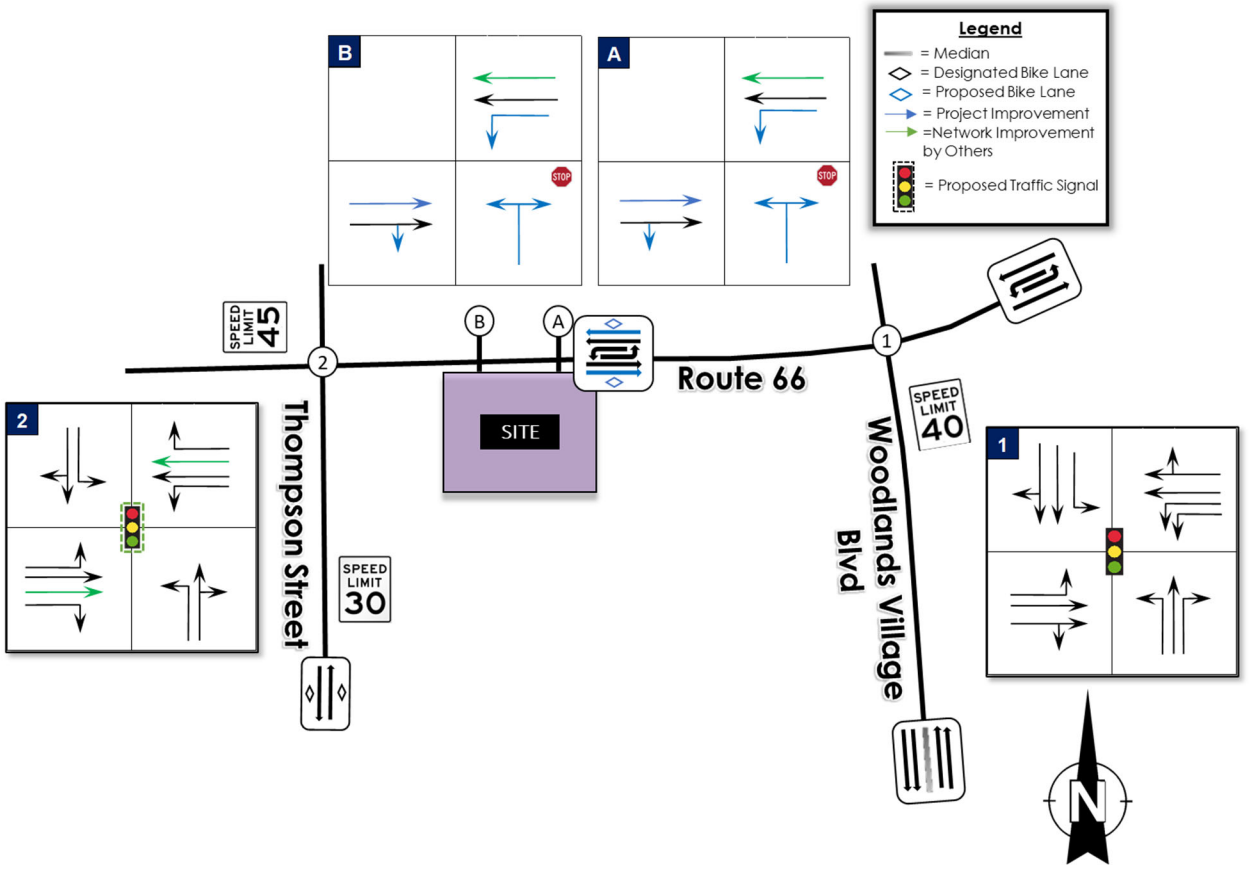


Figure 14: Mitigated Improvements

In addition to the lane configurations shown, traffic signal timing improvements were explored to improve the LOS at Woodlands Village Blvd and Route 66. A mitigated scenario, incorporating these improvements, was evaluated for the 2028 total conditions, with delay results shown in Table 7. Full results and signal timing assumptions are provided in Appendix H.

Table 7: 2028 Level of Service Analysis Mitigated

Intersection	Traffic Control	Movement/ Approach	2028 Total Conditions Without Mitigation				2028 Total With Mitigation			
			AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
			Avg Delay (sec/veh)	LOS	Avg Delay (sec/veh)	LOS	Avg Delay (sec/veh)	LOS	Avg Delay (sec/veh)	LOS
1 Woodlands Village Boulevard and Route 66	Traffic Signal	INTERSECTION	28.1	C	43.9	D	30.3	C	43.7	D
		EB Approach	42.6	D	78.3	E	39.7	D	67.7	E
		EB Left	22.2	C	27.9	C	21.8	C	23.8	C
		EB Thru	42.8	D	79.5	E	39.9	D	68.8	E
		EB Thru/Right	43.1	D	80.7	F	40.2	D	69.9	E
		WB Approach	23.4	C	31.1	C	29.0	C	34.2	C
		WB Left	40.2	D	53.9	D	45.8	D	53.9	D
		WB Thru	16.1	B	15.9	B	21.6	C	21.0	C
		WB Thru/Right	16.1	B	15.9	B	21.7	C	21.0	C
		NB Approach	19.9	B	35.6	D	19.7	B	34.8	C
		NB Left	19.6	B	41.2	D	18.3	B	36.4	D
		NB Thru	14.2	B	20.4	C	14.7	B	21.1	C
		NB Right	21.3	C	35.0	C	21.8	C	37.0	D
		SB Approach	18.8	B	24.4	C	32.0	C	41.5	D
		SB Left	21.5	C	29.7	C	36.3	D	49.9	D
		SB Thru	13.8	B	20.0	B	24.3	C	34.6	C
		SB Thru/Right	13.8	B	20.0	B	24.3	C	34.7	C
2 Thompson Street and Route 66	Two Way Stop Sign	INTERSECTION	3.5	A	8.8	A	14.0	B	13.4	B
		EB Approach	0.7	A	0.9	A	14.9	B	13.2	B
		EB Left	9.1	A	10.9	B	18.3	C	21.7	C
		EB Thru	0.0	A	0.0	A	14.7	B	12.5	B
		EB Right	0.0	A	0.0	A	11.7	B	9.8	A
		WB Approach	0.9	A	0.8	A	14.2	B	13.6	B
		WB Left	9.8	A	10.2	B	21.2	C	19.5	C
		WB Thru	0.0	A	0.0	A	13.7	B	13.3	B
		WB Right	0.0	A	0.0	A	11.9	B	10.1	B
		NB Approach	26.9	D	99.7	F	9.3	A	13.5	B
		NB Left	54.4	F	100*	F	9.7	A	14.6	B
		NB Thru/Right	18.5	C	27.8	D	0.0	A	0.0	A
		NB Right	0.0	A	0.0	A	9.2	A	13.1	B
		SB Approach	25.2	D	64.9	F	9.4	A	13.6	B
		SB Left	55.4	F	100*	F	9.7	A	13.8	B
		SB Thru/Right	12.0	B	35.3	E	0.0	A	0.0	A
		SB Right	0.0	A	0.0	A	9.3	A	13.6	B
3 Route 66 and Driveway A	Minor Street Stop Control	INTERSECTION	0.6	A	0.3	A	0.6	A	0.3	A
		WB Approach	0.8	A	0.1	A	0.8	A	0.1	A
		WB Left	10.0	A	9.9	A	10.0	A	9.9	A
		NB Approach	13.1	B	14.1	B	13.1	B	14.1	B
4 Route 66 and Driveway B	Minor Street Stop Control	INTERSECTION	0.2	A	0.1	A	0.2	A	0.1	A
		WB Approach	0.2	A	0.0	A	0.2	A	13.9	B
		WB Left	9.7	A	9.8	A	9.7	A	9.8	A
		NB Approach	13.1	B	13.9	B	13.1	B	13.9	B

In the mitigated scenario for both 2025 and 2028 conditions, the installation of a traffic signal at Thompson Road and Route 66, along with the addition of a through lane, is expected to improve previously failing delays at the intersection of Thompson Street and Route 66. All approaches are projected to operate at an acceptable level of service (LOS B or better).

Signal timing improvements at the intersection of Woodlands Boulevard and Route 66 improves delays for the eastbound movement, bringing that approach to a LOS E during the PM peak hour, which is reflective of the background traffic conditions.

PRINCIPAL FINDINGS

TRIP GENERATION

- The proposed 38,426 square foot federal courthouse is anticipated to generate a total of 128 trips (entering and exiting) during the AM peak hour and 66 trips during the PM peak hour. The greatest hourly entering volume occurs during the AM peak hour, when 96 entering trips are anticipated.

SAFETY ANALYSIS

- During the three-year analysis period, there were 54 total crashes, where 35 of these crashes resulted in no injuries or property damage.
- One bicycle crash was recorded, where the bicyclist crash resulted in a suspected minor injury.
- No fatal crashes were reported.

SITE ACCESS

- The proposed development will provide access to the site by two driveways, with each driveway expected to operate as full-access access points.
- Driveway B is anticipated to be limited to officials, which is a requirement of federal courthouse buildings, and a higher percentage of traffic (80%) is anticipated to access Driveway A.
- Drivers accessing the site from one driveway will not be able to access the other driveway from within site.

LEVEL OF SERVICE ANALYSIS

- In the existing conditions, all approaches at the intersection of Woodlands Village Boulevard and Route 66 currently operate at acceptable levels of service (LOS D or above) in both the AM and PM peak hour conditions.
- At the intersection of Thompson Street and Route 66, the northbound and southbound approaches currently operate at failing levels of service (LOS E and LOS F) in the PM peak hour. This is a result of high levels of delay for the northbound and southbound left turn movements in both the AM and PM peak hours.
- The intersection of Thompson Street and Route 66 will continue to experience failing levels of service (LOS E and LOS F) for the northbound and southbound approaches, especially for the left turn movements in the 2025 opening year and 2028 horizon year.
- Level of service results for the intersection of Woodlands Village Boulevard and Route 66 are expected to remain acceptable (LOS D or above) in the 2025 opening years, with or without site

traffic. In 2028, the eastbound approach, particularly the through/right movements in the PM peak hour, are expected to operate at LOS E both with and without site traffic.

- The site driveways at Route 66 are expected to operate acceptably in both the 2025 opening year and 2028 horizon year.

DRIVEWAY SPACING REQUIRMENTS

- The spacing between Driveway A and Driveway B is approximately 440 feet and according to the City of Flagstaff driveway spacing requirements, the minimum spacing for arterial street (Street Type 1) is 230 feet, therefore meeting the minimum spacing requirement.

TURN LANE ANALYSIS

- Based on right turn lane criteria in the ADOT TGP 245, right turn lanes are not warranted at Driveway A or Driveway B.

RECOMMENDATIONS

- Route 66 is expected to have two through lanes in each direction adjacent to the site.
- A traffic signal is anticipated to be installed by others at the intersection of Thompson Road and Route 66 as future developments increase traffic volumes. The traffic signal installation will reduce delays for the northbound and southbound approaches at this intersection.
- In the mitigated scenario for 2025 and 2028, adding the traffic signal and a through lane is expected to improve all approaches at Thompson Street and Route 66 to an acceptable level of service (LOS B or better).
- Signal timing optimization at Woodlands Village Blvd and Route 66 slightly reduces delays for the eastbound movement, improving that movement to a LOS E, which aligns with the projected 2028 background traffic conditions.

APPENDICES

APPENDIX A: REVIEW COMMENTS

ADOT USE ONLY							
Encroachment Permits Tracking Id.	T128747	Date:	9/6/2024	Permit Type	MJRA	Review Type	TIA Comments
Date submittal received:(PT)		Requested Return Date		Comments To applicant			
Route(s).	SR-40B/ Rt66	Milepost	194.57				
Encroachment Owner & Contact	Easterly Government Properties, Inc- Mark Bauer (208-720-6914)						
Engineer & Contact	Ardurra Group, Inc- Kayla Fleishman (702-401-0205)						
Contractor(s)/Applicant:	TBD						
Work Description- Permit Purpose:							
TIA							

Request for reviews from:		Name of Reviewer:	Request for reviews from:		Name of Reviewer:
	District Admin. - Engineer			Permits Supervisor	
	Regional Traffic Engineer			Roadside Dev.	
	Roadway Eng. - Drainage			Construction	
	Environmental Coord.			Right of way	
	Traffic Control				

Attachments. If not attached available at Drive - Use link below:							
	Construction Plans		Traffic Control Plans		Drainage Report		Application
	Permit Tech. Comments		Traffic Study		Landscape Plans		Other:
	Other:		Other:		Other:		Other:
	ADOT Share Folder Web Link:						

Return Comments to:							
	Yvonnie Giltner Supervisor 928-779-7529 Ygiltner@azdot.gov	X	Rebekah Wilkes Technician 928-779-7549 Rwilkes@azdot.gov		"Sky" Skylene Crank Technician 928-779-7520 Scrank@azdot.gov		Chuck King Technician 928-779-7558 Cking2@azdot.gov

Plan or Document & Page No.	*Review Comment No.*	ADOT Comments	Applicants Response
Name of Reviewer: Ryan Wolff Date of Review:_____ Hours Spent on Review:_____			
TIA	1	To confirm, the development is planning to continue the 2 lane EB section along site frontage?	Yes, that is correct.
	2	The eastern driveway should not be placed in the EB Route 66 taper as is shown on the site plan.	The taper has been revised to start after the new driveway.
	3	Per ADOT TGP 240 the eastbound right movement at Woodlands/Route 66 needs to be mitigated to pre-project levels of delay.	Signal timings were adjusted to achieve an improved delay reflective of pre-project levels (LOS E)

COMMENT RESPONSES

1st Review

Project:	Flagstaff Federal Courthouse		
Project Location	1535 and 1609 W Route 66 in Flagstaff, Arizona	Prepared by	Y2K Engineering
Agency	Arizona Department of Transportation	Date of Report	8/8/2024
Reviewed By	Ryan Wolff	Responses by	Y2K Engineering
Date	6/11/2024	Date of Responses	8/8/2024

A = WILL COMPLY

B = CONSULTANT / APPLICANT TO EVALUATE

C = AGENCY TO EVALUATE

D = REVIEW TEAM RECOMMENDS NO FURTHER ACTION

No	Agency	Page #	Comment By	Comment	Disposition		Comment Addressed By	Response / Comment
					Initial	Final		
1	ADOT		Ryan Wolff	One access would be preferred instead of 2. If 2 are necessary then justification will be needed in the TIA	A	A	Rae Stephani	Noted. Justification for two access points is provided in report. It was noted in report that one access point will primarily used by service officials.
2	ADOT		Ryan Wolff	Depending on the type of building consider a higher split for traffic from west due to increase in development in that direction as well as in Bellemont and Williams (if this type of building would have visitors from out of town)	A	A	Rae Stephani	Noted. The percentage of traffic arriving from the west was increased to take into account the new developments being constructed.
3	ADOT		Ryan Wolff	Thompson should be included in analysis	A	A	Rae Stephani	Noted. Intersection of Thompson Street and Route 66 was included in analysis
4	ADOT		Ryan Wolff	This section of Route 66 will be a 5 lane section in the future so instead of right turn lanes into the site (as shown on site plan), it would be sufficient for the development to continue the 2 lane EB section along the site frontage	A	A	Rae Stephani	Noted. Two eastbound and westbound lanes were included at the site frontage in the analysis

APPENDIX B: PRESCOPING

Exhibit 240-A. Traffic Impact Analysis Pre-Submittal Form

Project Name: Flagstaff Federal Court House

Developer/Owner: Easterly Government Properties/Gabe Halsey

Phone Number: 760-215-5778

Email: ghalsey@lusardi.com

Project Location

State Route (with nearest MP or Street): 1535 and 1609 W Route 66

Local Jurisdiction: Flagstaff

Stage of Development (choose one)

☐ Planning/Zoning ☒ Development Plan

Brief Description of Project (land use, intensity, timeframe/phasing)

The development is a three story, 38,426 SF federal courthouse proposed on 4 acres of undeveloped land and will span across two parcels. The land use for the federal courthouse building is classified as LUC 730, Government Office Building. The project is anticipated to generate between 100-500 peak hour trips and will correspond with a City of Flagstaff Category Study II and an ADOT Category I study. The project is expected to open in 2025 and a three year horizon year will be analyzed (2028).

Proposed Access (number, location, restrictions)

The project is located at 1535 and 1609 W Route 66 in Flagstaff, Arizona. Two full access driveways are proposed, which will provide access to Route 66.

Preliminary Assumptions (provide as attachment)

- Trip Generation - Attached
- Study Horizon Years - 2025 Opening, 2028 Horizon
- Trip Distribution - Attached
- Pass-By Or Internal Capture - N/A
- Future Roadway Network - N/A
- Study Area Intersections - Attached

Traffic Study Required (choose one) ☒ Yes ☐ No

Traffic Study Type (choose one if yes, none if no)

☐ Transportation Planning Study
☒ Traffic Impact Analysis
☐ Traffic Impact Statement

Traffic Study Preparer

Firm Name: Y2K Engineering

Contact: Rae Stephani

Phone: 720-735-5855

Email: rstephani@y2keng.com

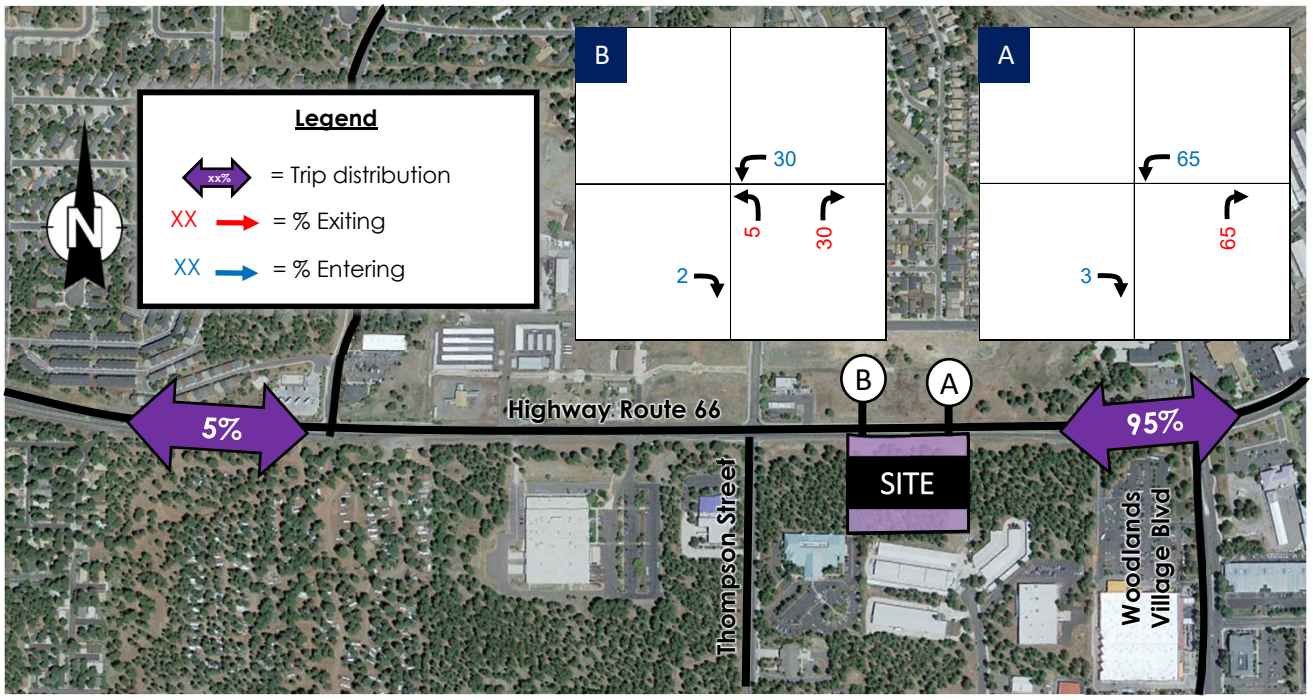
Pre-Submittal Forms are not required for each project but are a useful tool to reduce the number of submittals/reviews and aid development timeframes. When submitted, Regional Traffic Engineering staff will review and confirm the form in a timely manner. Changes to the above information should be provided in writing. A hard copy of an approved Pre-Submittal Form shall be included in the Study appendix.

Approval by: _____ Date: _____

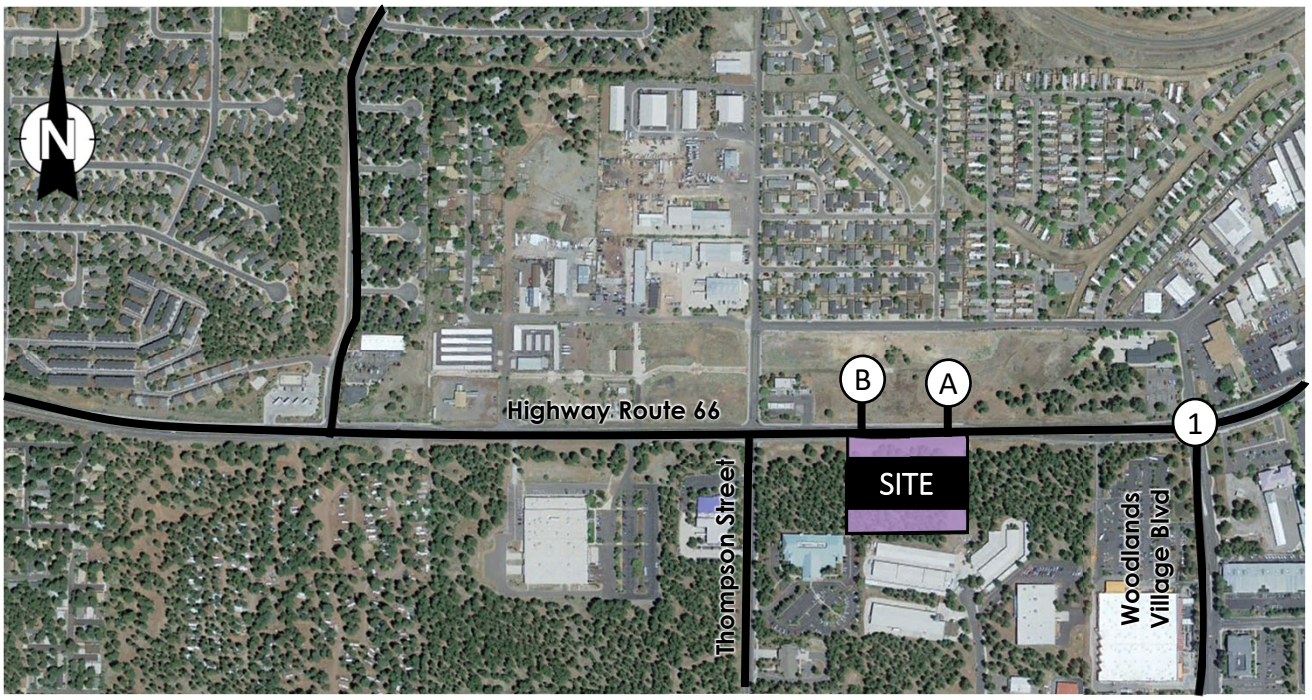
Estimated Trip Generation

DESCRIPTION OF LAND USE					VEHICLE GENERATED TRIPS						
					Daily	AM Peak Hour			PM Peak Hour		
ID	Land Use	ITE LUC	Size		Total	Enter	Exit	Total	Enter	Exit	Total
1	Government Office Building	730	38.4	KSF	867	96	32	128	16	50	66
				Total	**867**	**96**	**32**	**128**	**16**	**50**	**66**

Proposed Distribution



Study Intersections



ADOT USE ONLY							
Encroachment Permits Tracking Id.	T128747	Date:	6/11/2024	Permit Type	MJRA	Review Type	Administrative
Date submittal received:(PT)		Requested Return Date		Comments To applicant			
Route(s).	SR-40B/ Rt66	Milepost	194.57				
Encroachment Owner & Contact	Easterly Government Properties, Inc- Mark Bauer (208-720-6914)						
Engineer & Contact	Ardurra Group, Inc- Kayla Fleishman (702-401-0205)						
Contractor(s)/Applicant:	TBD						
Work Description- Permit Purpose:							
TIA							

Request for reviews from:		Name of Reviewer:	Request for reviews from:		Name of Reviewer:
	District Admin. - Engineer			Permits Supervisor	
X	Regional Traffic Engineer	Ryan Wolff		Roadside Dev.	
	Roadway Eng. - Drainage			Construction	
	Environmental Coord.			Right of way	
	Traffic Control				

Attachments. If not attached available at Drive - Use link below:							
	Construction Plans		Traffic Control Plans		Drainage Report		Application
	Permit Tech. Comments		Traffic Study		Landscape Plans		Other:
	Other:		Other:		Other:		Other:
	ADOT Share Folder Web Link:						

Return Comments to:							
	Yvonnie Giltner Supervisor 928-779-7529 Ygiltner@azdot.gov	X	Rebekah Wilkes Technician 928-779-7549 Rwilkes@azdot.gov		"Sky" Skylene Crank Technician 928-779-7520 Scrank@azdot.gov		Chuck King Technician 928-779-7558 Cking2@azdot.gov

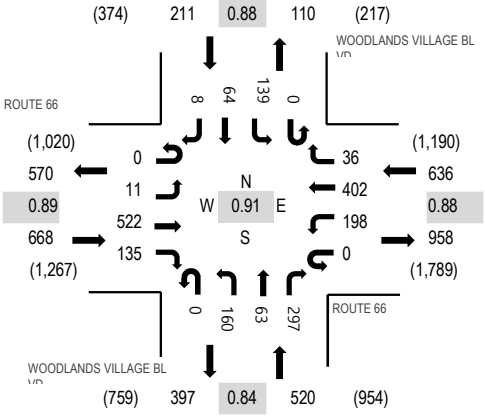
Plan or Document & Page No.	*Review Comment No.*	ADOT Comments	Applicants Response
Name of Reviewer: Ryan Wolff Date of Review: 7/8/-7/12 Hours Spent on Review:_____			
TIA	1	One access would be preferred instead of 2. If 2 are necessary then justification will be needed in the TIA	
	2	Depending on the type of building consider a higher split for traffic from west due to increase in development in that direction as well as in Bellemont and Williams (if this type of building would have visitors from out of town)	
	3	Thompson should be included in analysis	
	4	This section of Route 66 will be a 5 lane section in the future so instead of right turn lanes into the site (as shown on site plan), it would be sufficient for the development to continue the 2 lane EB section along the site frontage	

APPENDIX C: COLLECTED TRAFFIC VOLUMES

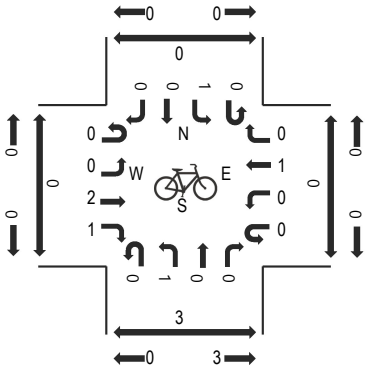
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 1 WOODLANDS VILLAGE BLVD & ROUTE 66 AM
Date: Tuesday, July 30, 2024
Peak Hour: 07:45 AM - 08:45 AM
Peak 15-Minutes: 07:45 AM - 08:00 AM

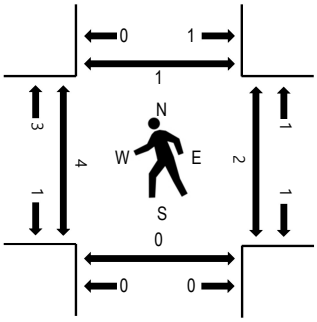
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

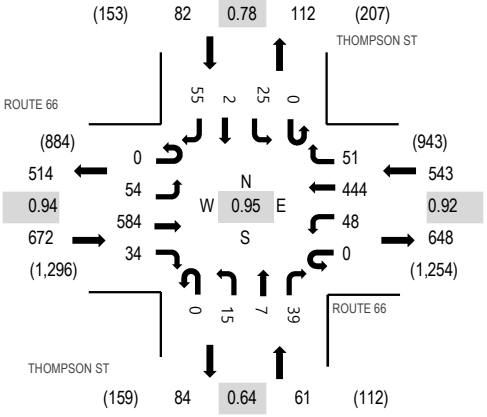
Traffic Counts - Motorized Vehicles

Interval Start Time	ROUTE 66 Eastbound				ROUTE 66 Westbound				WOODLANDS VILLAGE BLVD Northbound				WOODLANDS VILLAGE BLVD Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	0	2	81	20	0	27	65	5	0	30	9	50	0	16	8	2	315	1,775	0	2	0	0
7:15 AM	0	3	123	29	0	44	78	6	0	32	12	60	0	22	10	5	424	1,950	0	3	0	0
7:30 AM	1	1	130	29	0	40	87	11	0	24	13	81	0	32	24	2	475	2,004	1	0	1	0
7:45 AM	0	3	159	25	0	52	101	3	0	46	22	86	0	39	21	4	561	2,035	1	1	0	1
8:00 AM	0	2	118	38	0	46	103	10	0	43	10	70	0	36	13	1	490	2,010	2	0	0	0
8:15 AM	0	2	114	35	0	48	102	12	0	37	14	62	0	35	15	2	478		1	1	0	0
8:30 AM	0	4	131	37	0	52	96	11	0	34	17	79	0	29	15	1	506		0	0	0	0
8:45 AM	0	5	134	41	0	73	103	15	0	21	25	77	0	25	17	0	536		0	0	0	0
Count Total	1	22	990	254	0	382	735	73	0	267	122	565	0	234	123	17	3,785		5	7	1	1
Peak Hour	0	11	522	135	0	198	402	36	0	160	63	297	0	139	64	8	2,035		4	2	0	1

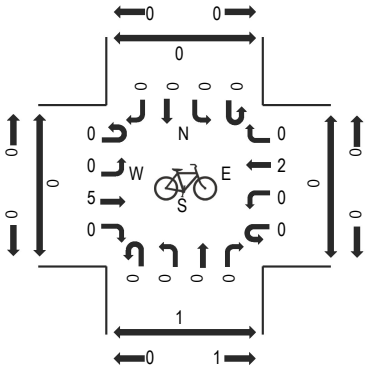
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 2 THOMPSON ST & ROUTE 66 AM
Date: Tuesday, July 30, 2024
Peak Hour: 07:45 AM - 08:45 AM
Peak 15-Minutes: 07:45 AM - 08:00 AM

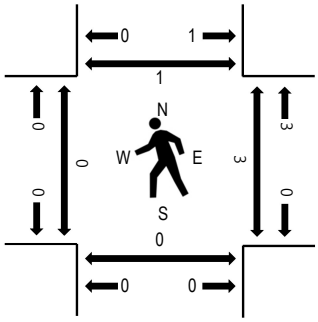
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

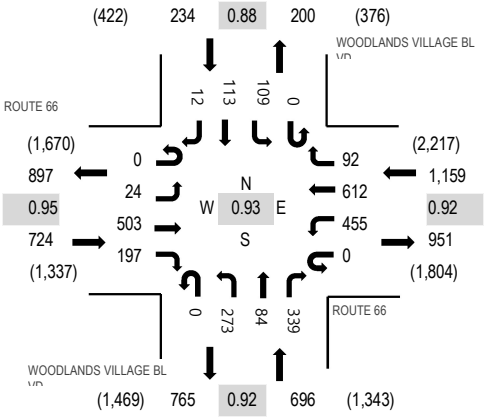
Traffic Counts - Motorized Vehicles

Interval Start Time	ROUTE 66 Eastbound				ROUTE 66 Westbound				THOMPSON ST Northbound				THOMPSON ST Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	0	13	97	11	0	4	70	16	0	3	0	9	0	4	0	9	236	1,185	0	1	0	0
7:15 AM	0	11	139	7	0	14	79	11	0	1	0	7	0	4	0	14	287	1,286	0	0	1	1
7:30 AM	0	14	146	10	0	10	80	11	0	1	3	10	0	6	0	14	305	1,316	0	0	2	0
7:45 AM	0	22	149	7	0	11	109	17	0	7	2	15	0	5	0	13	357	1,358	0	0	0	0
8:00 AM	0	10	141	12	0	13	119	15	0	3	2	4	0	10	0	8	337	1,319	0	2	0	0
8:15 AM	0	9	139	9	0	8	107	12	0	4	0	10	0	3	0	16	317		0	1	0	1
8:30 AM	0	13	155	6	0	16	109	7	0	1	3	10	0	7	2	18	347		0	0	0	0
8:45 AM	0	7	163	6	0	13	84	8	0	5	1	11	0	10	0	10	318		0	0	1	1
Count Total	0	99	1,129	68	0	89	757	97	0	25	11	76	0	49	2	102	2,504		0	4	4	3
Peak Hour	0	54	584	34	0	48	444	51	0	15	7	39	0	25	2	55	1,358		0	3	0	1

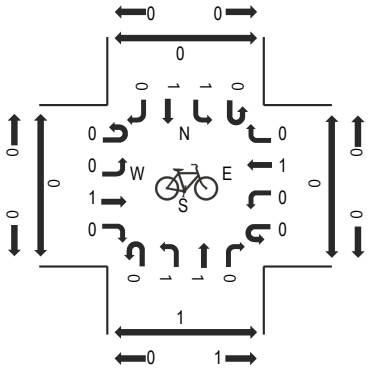
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 1 WOODLANDS VILLAGE BLVD & ROUTE 66 PM
Date: Tuesday, July 30, 2024
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 05:00 PM - 05:15 PM

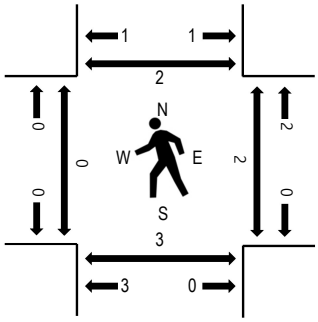
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

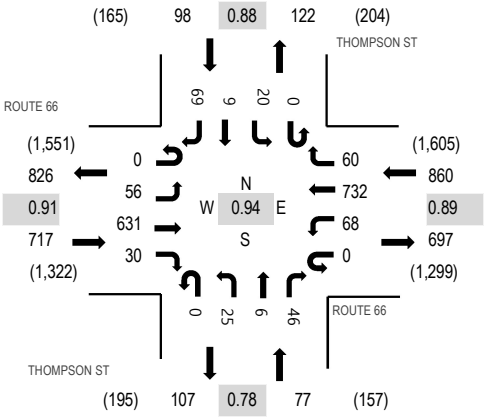
Traffic Counts - Motorized Vehicles

Interval Start Time	ROUTE 66 Eastbound				ROUTE 66 Westbound				WOODLANDS VILLAGE BLVD Northbound				WOODLANDS VILLAGE BLVD Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM	0	5	114	46	0	110	136	12	0	47	21	92	0	22	20	7	632	2,633	1	0	0	0
4:15 PM	0	6	105	37	0	134	141	19	0	57	24	83	0	18	17	6	647	2,758	1	1	0	2
4:30 PM	0	3	134	52	0	103	128	26	0	62	17	99	0	20	27	2	673	2,813	0	0	2	0
4:45 PM	0	6	118	47	0	97	152	24	0	73	25	83	0	36	18	2	681	2,799	0	2	1	1
5:00 PM	0	9	122	42	0	129	169	23	0	80	23	92	0	30	33	5	757	2,686	0	0	0	0
5:15 PM	0	6	129	56	0	126	163	19	0	58	19	65	0	23	35	3	702		0	0	0	1
5:30 PM	0	2	99	46	0	113	144	24	0	65	24	89	0	25	27	1	659		0	1	0	0
5:45 PM	0	6	104	43	0	95	117	13	1	50	20	74	0	28	15	2	568		0	1	0	0
Count Total	0	43	925	369	0	907	1,150	160	1	492	173	677	0	202	192	28	5,319		2	5	3	4
Peak Hour	0	24	503	197	0	455	612	92	0	273	84	339	0	109	113	12	2,813		0	2	3	2

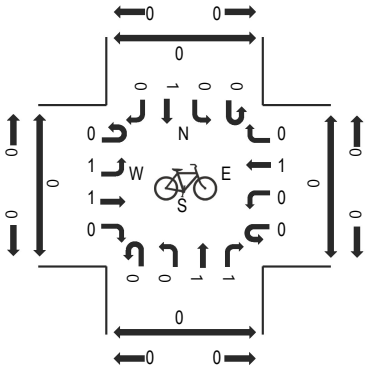
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 2 THOMPSON ST & ROUTE 66 PM
Date: Tuesday, July 30, 2024
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 05:00 PM - 05:15 PM

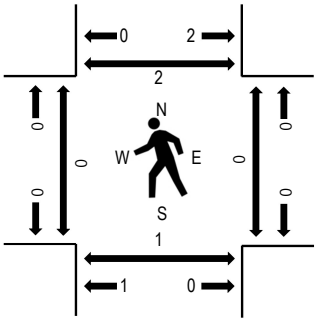
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	ROUTE 66 Eastbound				ROUTE 66 Westbound				THOMPSON ST Northbound				THOMPSON ST Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM	0	4	141	10	0	10	156	15	0	8	1	17	0	5	2	11	380	1,614	0	0	0	0
4:15 PM	0	10	117	14	0	13	163	15	0	6	1	19	0	2	0	14	374	1,700	0	0	0	2
4:30 PM	0	13	168	9	0	11	146	12	0	6	1	10	0	5	2	17	400	1,752	0	0	0	0
4:45 PM	0	17	172	8	0	16	193	21	0	6	3	3	0	8	2	11	460	1,741	0	0	0	1
5:00 PM	0	12	149	7	0	22	215	15	0	4	1	13	0	3	3	22	466	1,635	0	0	1	1
5:15 PM	0	14	142	6	0	19	178	12	0	9	1	20	0	4	2	19	426		0	0	0	0
5:30 PM	0	10	134	6	0	14	182	8	0	5	1	8	0	7	0	14	389		0	0	0	0
5:45 PM	0	9	144	6	0	12	151	6	0	7	2	5	0	3	1	8	354		0	0	0	0
Count Total	0	89	1,167	66	0	117	1,384	104	0	51	11	95	0	37	12	116	3,249		0	0	1	4
Peak Hour	0	56	631	30	0	68	732	60	0	25	6	46	0	20	9	69	1,752		0	0	1	2

APPENDIX D: EXISTING LEVEL OF SERVICE ANALYSIS

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	522	135	198	402	36	160	63	297	139	64	8
Future Volume (veh/h)	11	522	135	198	402	36	160	63	297	139	64	8
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, 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	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	14	580	159	233	447	45	188	79	349	164	80	10
Peak Hour Factor	0.80	0.90	0.85	0.85	0.90	0.80	0.85	0.80	0.85	0.85	0.80	0.80
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	347	773	211	335	1420	142	660	837	710	500	1426	175
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
Prop Arrive On Green	0.28	0.28	0.28	0.10	0.44	0.44	0.45	0.45	0.45	0.45	0.45	0.45
Unsig. Movement Delay												
Ln Grp Delay, s/veh	20.3	27.6	27.7	36.3	14.4	14.5	15.5	12.5	17.5	17.2	12.2	12.2
Ln Grp LOS	C	C	C	D	B	B	B	B	B	B	B	B
Approach Vol, veh/h		753			725			616			254	
Approach Delay, s/veh		27.5			21.5			16.3			15.4	
Approach LOS		C			C			B			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6		8
Case No		5.0	2.0	6.3		6.0		4.0
Phs Duration (G+Y+Rc), s		39.0	12.0	26.1		39.0		38.1
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5		4.5
Max Green (Gmax), s		34.5	15.5	36.5		34.5		56.5
Max Allow Headway (MAH), s		4.2	3.8	5.3		5.1		5.3
Max Q Clear (g_c+I1), s		14.0	7.0	16.8		13.0		8.9
Green Ext Time (g_e), s		2.3	0.5	4.8		1.3		3.3
Prob of Phs Call (p_c)		1.00	0.99	1.00		1.00		1.00
Prob of Max Out (p_x)		0.00	0.02	0.10		0.00		0.00

Left-Turn Movement Data								
Assigned Mvmt		5	3	7		1		
Mvmt Sat Flow, veh/h		1307	3456	905		960		

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1870		2758		3185		3261

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1585		754		391		327

Left Lane Group Data								
Assigned Mvmt	0	5	3	7	0	1	0	0
Lane Assignment		L	L (Prot)	L		L		

Lanes in Grp	0	1	2	1	0	1	0	0
Grp Vol (v), veh/h	0	188	233	14	0	164	0	0
Grp Sat Flow (s), veh/h/ln	0	1307	1728	905	0	960	0	0
Q Serve Time (g_s), s	0.0	7.3	5.0	0.9	0.0	9.2	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	8.5	5.0	0.9	0.0	11.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1307	0	905	0	960	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	34.5	0.0	21.6	0.0	34.5	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	33.4	0.0	21.6	0.0	32.6	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	7.3	0.0	0.9	0.0	9.2	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	660	335	347	0	500	0	0
V/C Ratio (X)	0.00	0.29	0.70	0.04	0.00	0.33	0.00	0.00
Avail Cap (c_a), veh/h	0	660	695	522	0	500	0	0
Upstream Filter (I)	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	14.5	33.7	20.3	0.0	15.5	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.1	2.6	0.0	0.0	1.7	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
Control Delay (d), s/veh	0.0	15.5	36.3	20.3	0.0	17.2	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	2.0	2.1	0.2	0.0	1.9	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.1	0.0	0.0	0.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	2.2	2.2	0.2	0.0	2.1	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.23	0.28	0.00	0.00	0.36	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	79	0	373	0	44	0	243
Grp Sat Flow (s), veh/h/ln	0	1870	0	1777	0	1777	0	1777
Q Serve Time (g_s), s	0.0	1.9	0.0	14.7	0.0	1.1	0.0	6.9
Cycle Q Clear Time (g_c), s	0.0	1.9	0.0	14.7	0.0	1.1	0.0	6.9
Lane Grp Cap (c), veh/h	0	837	0	498	0	796	0	774
V/C Ratio (X)	0.00	0.09	0.00	0.75	0.00	0.06	0.00	0.31
Avail Cap (c_a), veh/h	0	837	0	842	0	796	0	1303
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	12.3	0.0	25.3	0.0	12.1	0.0	14.2
Incr Delay (d2), s/veh	0.0	0.2	0.0	2.3	0.0	0.1	0.0	0.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	12.5	0.0	27.6	0.0	12.2	0.0	14.4
1st-Term Q (Q1), veh/ln	0.0	0.7	0.0	5.9	0.0	0.4	0.0	2.6
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.3	0.0	0.0	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.8	0.0	6.2	0.0	0.4	0.0	2.6
%ile Storage Ratio (RQ%)	0.00	0.07	0.00	0.15	0.00	0.13	0.00	0.20
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	349	0	366	0	46	0	249
Grp Sat Flow (s), veh/h/ln	0	1585	0	1735	0	1800	0	1812
Q Serve Time (g_s), s	0.0	12.0	0.0	14.8	0.0	1.1	0.0	6.9
Cycle Q Clear Time (g_c), s	0.0	12.0	0.0	14.8	0.0	1.1	0.0	6.9
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.43	0.00	0.22	0.00	0.18
Lane Grp Cap (c), veh/h	0	710	0	486	0	806	0	789
V/C Ratio (X)	0.00	0.49	0.00	0.75	0.00	0.06	0.00	0.32
Avail Cap (c_a), veh/h	0	710	0	822	0	806	0	1328
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	15.1	0.0	25.3	0.0	12.1	0.0	14.2
Incr Delay (d2), s/veh	0.0	2.4	0.0	2.4	0.0	0.1	0.0	0.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	17.5	0.0	27.7	0.0	12.2	0.0	14.5
1st-Term Q (Q1), veh/ln	0.0	4.0	0.0	5.8	0.0	0.4	0.0	2.7
2nd-Term Q (Q2), veh/ln	0.0	0.5	0.0	0.3	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	4.5	0.0	6.1	0.0	0.5	0.0	2.7
%ile Storage Ratio (RQ%)	0.00	0.45	0.00	0.15	0.00	0.14	0.00	0.21
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	21.4
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	3.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	54	584	34	48	444	51	15	7	39	25	2	55
Future Vol, veh/h	54	584	34	48	444	51	15	7	39	25	2	55
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	150	150	-	150	150	-	-	150	-	-
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	59	635	37	52	483	55	16	8	42	27	2	60

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	538	0	0	672	0	0	1399	1395	635	1384	1377	483
Stage 1	-	-	-	-	-	-	753	753	-	587	587	-
Stage 2	-	-	-	-	-	-	646	642	-	797	790	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
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	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1030	-	-	919	-	-	118	141	478	121	145	584
Stage 1	-	-	-	-	-	-	402	417	-	496	497	-
Stage 2	-	-	-	-	-	-	460	469	-	380	402	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1030	-	-	919	-	-	96	125	478	96	129	584
Mov Cap-2 Maneuver	-	-	-	-	-	-	96	125	-	96	129	-
Stage 1	-	-	-	-	-	-	379	393	-	468	469	-
Stage 2	-	-	-	-	-	-	388	442	-	320	379	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.7	0.8	25.6	26.3
HCM LOS			D	D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	96	334	1030	-	-	919	-	-	96	520
HCM Lane V/C Ratio	0.17	0.15	0.057	-	-	0.057	-	-	0.283	0.119
HCM Control Delay (s)	50	17.7	8.7	-	-	9.2	-	-	56.7	12.9
HCM Lane LOS	F	C	A	-	-	A	-	-	F	B
HCM 95th %tile Q(veh)	0.6	0.5	0.2	-	-	0.2	-	-	1.1	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	24	503	197	455	612	92	273	84	339	109	113	12
Future Volume (veh/h)	24	503	197	455	612	92	273	84	339	109	113	12
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, 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	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	30	559	232	535	680	115	321	105	399	128	141	15
Peak Hour Factor	0.80	0.90	0.85	0.85	0.90	0.80	0.85	0.80	0.85	0.85	0.80	0.80
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	257	648	268	625	1500	253	549	768	651	413	1333	140
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
Prop Arrive On Green	0.26	0.26	0.26	0.18	0.49	0.49	0.41	0.41	0.41	0.41	0.41	0.41
Unsig. Movement Delay												
Ln Grp Delay, s/veh	26.7	45.8	46.7	45.4	15.9	15.9	28.6	17.6	26.0	23.3	17.3	17.3
Ln Grp LOS	C	D	D	D	B	B	C	B	C	C	B	B
Approach Vol, veh/h		821			1330			825			284	
Approach Delay, s/veh		45.5			27.7			26.0			20.0	
Approach LOS		D			C			C			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6		8
Case No		5.0	2.0	6.3		6.0		4.0
Phs Duration (G+Y+Rc), s		43.0	21.5	29.3		43.0		50.7
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5		4.5
Max Green (Gmax), s		38.5	20.5	27.5		38.5		52.5
Max Allow Headway (MAH), s		4.2	3.8	5.4		5.3		5.3
Max Q Clear (g_c+I1), s		24.9	16.1	22.4		15.1		15.7
Green Ext Time (g_e), s		2.9	0.9	2.3		1.6		5.9
Prob of Phs Call (p_c)		1.00	1.00	1.00		1.00		1.00
Prob of Max Out (p_x)		0.00	0.75	1.00		0.00		0.01

Left-Turn Movement Data								
Assigned Mvmt		5	3	7		1		
Mvmt Sat Flow, veh/h		1231	3456	683		895		

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1870		2450		3245		3041

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1585		1014		341		514

Left Lane Group Data								
Assigned Mvmt	0	5	3	7	0	1	0	0
Lane Assignment		L	L (Prot)	L		L		

Lanes in Grp	0	1	2	1	0	1	0	0
Grp Vol (v), veh/h	0	321	535	30	0	128	0	0
Grp Sat Flow (s), veh/h/ln	0	1231	1728	683	0	895	0	0
Q Serve Time (g_s), s	0.0	20.4	14.1	3.2	0.0	9.8	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	22.9	14.1	3.2	0.0	13.1	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1231	0	683	0	895	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	38.5	0.0	24.8	0.0	38.5	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	36.0	0.0	24.8	0.0	35.2	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	20.4	0.0	3.2	0.0	9.8	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	549	625	257	0	413	0	0
V/C Ratio (X)	0.00	0.58	0.86	0.12	0.00	0.31	0.00	0.00
Avail Cap (c_a), veh/h	0	549	756	277	0	413	0	0
Upstream Filter (I)	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	24.1	37.2	26.5	0.0	21.3	0.0	0.0
Incr Delay (d2), s/veh	0.0	4.5	8.2	0.2	0.0	1.9	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
Control Delay (d), s/veh	0.0	28.6	45.4	26.7	0.0	23.3	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	5.7	5.8	0.5	0.0	2.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.7	0.7	0.0	0.0	0.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	6.4	6.5	0.5	0.0	2.2	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.65	0.83	0.01	0.00	0.38	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	105	0	405	0	76	0	397
Grp Sat Flow (s), veh/h/ln	0	1870	0	1777	0	1777	0	1777
Q Serve Time (g_s), s	0.0	3.3	0.0	20.4	0.0	2.5	0.0	13.7
Cycle Q Clear Time (g_c), s	0.0	3.3	0.0	20.4	0.0	2.5	0.0	13.7
Lane Grp Cap (c), veh/h	0	768	0	470	0	730	0	876
V/C Ratio (X)	0.00	0.14	0.00	0.86	0.00	0.10	0.00	0.45
Avail Cap (c_a), veh/h	0	768	0	521	0	730	0	995
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	17.2	0.0	32.9	0.0	17.0	0.0	15.5
Incr Delay (d2), s/veh	0.0	0.4	0.0	12.9	0.0	0.3	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	17.6	0.0	45.8	0.0	17.3	0.0	15.9
1st-Term Q (Q1), veh/ln	0.0	1.4	0.0	8.5	0.0	1.0	0.0	5.3
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	1.7	0.0	0.1	0.0	0.1

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	1.5	0.0	10.2	0.0	1.1	0.0	5.4
%ile Storage Ratio (RQ%)	0.00	0.13	0.00	0.25	0.00	0.32	0.00	0.42
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	399	0	386	0	80	0	398
Grp Sat Flow (s), veh/h/ln	0	1585	0	1688	0	1809	0	1778
Q Serve Time (g_s), s	0.0	18.6	0.0	20.4	0.0	2.5	0.0	13.7
Cycle Q Clear Time (g_c), s	0.0	18.6	0.0	20.4	0.0	2.5	0.0	13.7
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.60	0.00	0.19	0.00	0.29
Lane Grp Cap (c), veh/h	0	651	0	446	0	743	0	877
V/C Ratio (X)	0.00	0.61	0.00	0.87	0.00	0.11	0.00	0.45
Avail Cap (c_a), veh/h	0	651	0	495	0	743	0	996
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	21.7	0.0	32.9	0.0	17.0	0.0	15.5
Incr Delay (d2), s/veh	0.0	4.3	0.0	13.8	0.0	0.3	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	26.0	0.0	46.7	0.0	17.3	0.0	15.9
1st-Term Q (Q1), veh/ln	0.0	6.6	0.0	8.1	0.0	1.0	0.0	5.3
2nd-Term Q (Q2), veh/ln	0.0	0.8	0.0	1.7	0.0	0.1	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	7.4	0.0	9.9	0.0	1.1	0.0	5.4
%ile Storage Ratio (RQ%)	0.00	0.75	0.00	0.24	0.00	0.34	0.00	0.42
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	31.1
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	7.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	56	631	30	68	732	60	25	6	46	20	9	69
Future Vol, veh/h	56	631	30	68	732	60	25	6	46	20	9	69
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	150	150	-	150	150	-	-	150	-	-
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	61	686	33	74	796	65	27	7	50	22	10	75

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	861	0	0	719	0	0	1827	1817	686	1797	1785	796
Stage 1	-	-	-	-	-	-	808	808	-	944	944	-
Stage 2	-	-	-	-	-	-	1019	1009	-	853	841	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
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	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	781	-	-	882	-	-	59	78	447	62	82	387
Stage 1	-	-	-	-	-	-	375	394	-	315	341	-
Stage 2	-	-	-	-	-	-	286	318	-	354	380	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	781	-	-	882	-	-	37	66	447	45	69	387
Mov Cap-2 Maneuver	-	-	-	-	-	-	37	66	-	45	69	-
Stage 1	-	-	-	-	-	-	346	363	-	290	312	-
Stage 2	-	-	-	-	-	-	205	291	-	285	350	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.8	0.7	90.1	50.3
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	37	268	781	-	-	882	-	-	45	253
HCM Lane V/C Ratio	0.734	0.211	0.078	-	-	0.084	-	-	0.483	0.335
HCM Control Delay (s)	231.6	22	10	-	-	9.5	-	-	144.5	26.2
HCM Lane LOS	F	C	A	-	-	A	-	-	F	D
HCM 95th %tile Q(veh)	2.6	0.8	0.3	-	-	0.3	-	-	1.8	1.4

APPENDIX E: SITE PLAN

PLOTTED: Sep 24, 2024–8:27am

CIVIL SITE PLAN
FOR
U.S. FEDERAL COURTHOUSE
FLAGSTAFF, ARIZONA

LOCATED IN SE QUARTER, SECTION 20, TOWNSHIP 21 NORTH, RANGE 7 EAST GILA AND SALT RIVER MERIDIAN, COCONINO COUNTY, FLAGSTAFF, ARIZONA

PROJECT INFORMATION

SITE ADDRESS: 1535 W. ROUTE 66
FLAGSTAFF, AZ 86001

APN	CURRENT ZONING	PROPOSED ZONING	ACREAGE
112–27–021A	LIGHT INDUSTRIAL OPEN	LIGHT INDUSTRIAL OPEN	±4.05 AC

OWNER:
EGP 1535 FLAGSTAFF LLC
4655 EXECUTIVE DRIVE, STE. 830
SAN DIEGO, CA 92121
CONTACT: MARK BAUER
(858) 768–0560

DEVELOPER:
EASTERLY GOVERNMENT PROPERTIES, INC.
4655 EXECUTIVE DRIVE, STE. 830
SAN DIEGO, CA 92121
CONTACT: MARK BAUER
(858) 768–0560

ARCHITECT:
SHIVE–HATTERY
4330 N. CAMPBELL AVE., STE. 268
TUCSON, AZ 85718
CONTACT: PAUL MICKELBERG
(520) 408–1044

CIVIL ENGINEER:
SHEPHARD–WESNITZER INC.,
AN ARDURRA COMPANY
110 WEST DALE AVE
FLAGSTAFF, AZ 86001
CONTACT: STEPHEN IRWIN
(928) 773–0354

CONTRACTOR:
LUSARDI CONSTRUCTION COMPANY
1570 LINDA VISTA DRIVE
SAN MARCOS, CA 92078
CONTACT: GABE HALSEY
(760) 215–5778

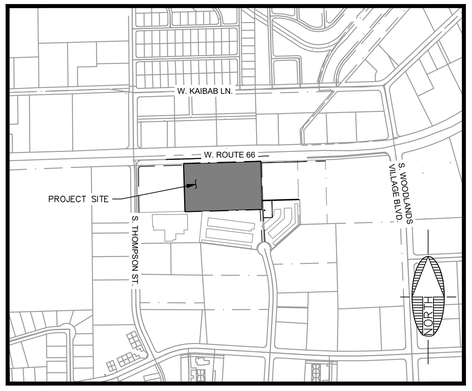
FLOOD ZONE CLASSIFICATION:
THE SUBJECT SITE LIES WITHIN ZONE 'X' – AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.

(PER FEMA FLOOD INSURANCE RATE MAP NUMBER 04005C6808G, EFFECTIVE DATE SEPTEMBER 3, 2010).

RESOURCE PRESERVATION:
THE SUBJECT SITE LIES WITHIN THE CITY OF FLAGSTAFF RESOURCE PROTECTION OVERLAY ZONE. REFER TO THE RESOURCE PROTECTION PLAN WITHIN THIS CONCEPT PLAN. THE PROJECT WILL BE REQUIRED TO PRESERVE A MINIMUM OF 20% OF THE ONSITE TREE RESOURCES. THE PRELIMINARY RESOURCE PROTECTION PLAN USES A TREE SURVEY AND FOLLOWS THE CURRENT TREE POINT SYSTEM INDICATED IN THE CITY ZONING CODE.

TOPOGRAPHIC & BOUNDARY INFORMATION:

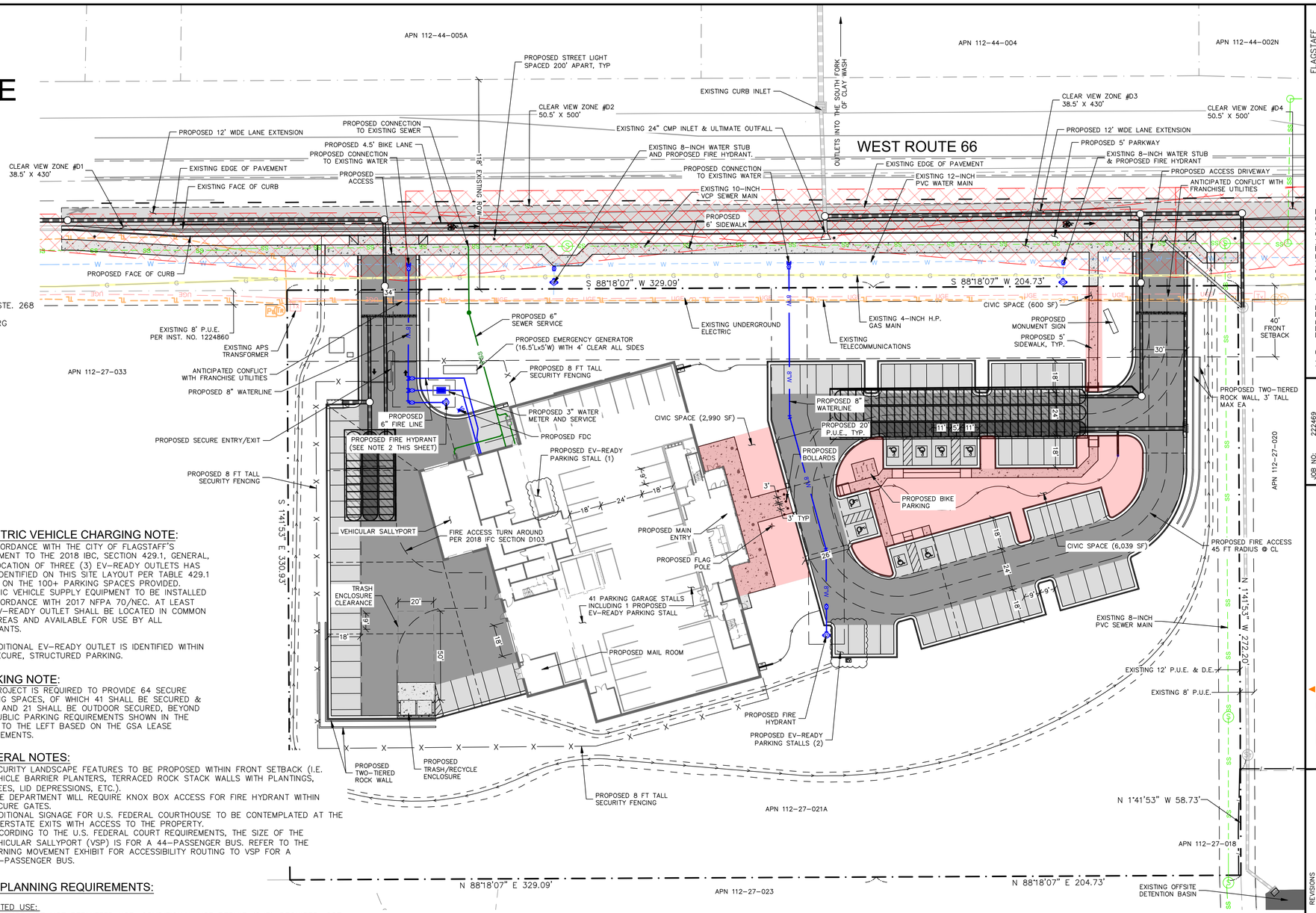
TOPOGRAPHIC AND BOUNDARY INFORMATION REFERENCED FROM CITY GIS DATA, TOPOGRAPHIC SURVEY BY ARDURRA DATED 3/21/2024, AND ALTA BY ARDURRA DATED 4/3/2024.



VICINITY MAP
NTS

LEGEND

- ROW
- EX LOT LINE
- PROPERTY LINE
- SETBACK
- EX. TELECOM
- EX. GAS
- EX. UNDERGROUND ELEC
- EX. WATER LINE
- EX. SEWER LINE
- EX. STORM DRAIN
- PROPOSED WATER LINE
- PROPOSED GRAVITY SEWER
- PROPOSED SECURITY FENCE
- PROPOSED SWALE
- PROPOSED STORM DRAIN
- PROPOSED EASEMENT
- EX. SEWER MANHOLE
- EX. STORM DRAIN MANHOLE
- DRAINAGE ARROW
- PROPOSED FIRE HYDRANT
- STORM DRAIN MANHOLE
- PROPOSED WATER METER



ELECTRIC VEHICLE CHARGING NOTE:
IN ACCORDANCE WITH THE CITY OF FLAGSTAFF'S AMENDMENT TO THE 2018 IBC, SECTION 429.1, GENERAL, THE LOCATION OF THREE (3) EV–READY OUTLETS HAS BEEN IDENTIFIED ON THIS SITE LAYOUT PER TABLE 429.1 BASED ON THE 100+ PARKING SPACES PROVIDED. ELECTRIC VEHICLE SUPPLY EQUIPMENT TO BE INSTALLED IN ACCORDANCE WITH 2017 NFPA 70/NEC. AT LEAST ONE EV–READY OUTLET SHALL BE LOCATED IN COMMON USE AREAS AND AVAILABLE FOR USE BY ALL OCCUPANTS.

AN ADDITIONAL EV–READY OUTLET IS IDENTIFIED WITHIN THE SECURE, STRUCTURED PARKING.

PARKING NOTE:
THE PROJECT IS REQUIRED TO PROVIDE 64 SECURE PARKING SPACES, OF WHICH 41 SHALL BE SECURED & INSIDE AND 21 SHALL BE OUTDOOR SECURED, BEYOND THE PUBLIC PARKING REQUIREMENTS SHOWN IN THE TABLE TO THE LEFT BASED ON THE GSA LEASE REQUIREMENTS.

GENERAL NOTES:
1. SECURITY LANDSCAPE FEATURES TO BE PROPOSED WITHIN FRONT SETBACK (I.E. VEHICLE BARRIER PLANTERS, TERRACED ROCK STACK WALLS WITH PLANTINGS, TREES, LID DEPRESSIONS, ETC.).
2. FIRE DEPARTMENT WILL REQUIRE KNOX BOX ACCESS FOR FIRE HYDRANT WITHIN SECURE GATES.
3. ADDITIONAL SIGNAGE FOR U.S. FEDERAL COURTHOUSE TO BE CONTEMPLATED AT THE INTERSTATE EXITS WITH ACCESS TO THE PROPERTY.
4. ACCORDING TO THE U.S. FEDERAL COURT REQUIREMENTS, THE SIZE OF THE VEHICULAR SALLYPORT (VSP) IS FOR A 44–PASSENGER BUS. REFER TO THE TURNING MOVEMENT EXHIBIT FOR ACCESSIBILITY ROUTING TO VSP FOR A 44–PASSENGER BUS.

SITE PLANNING REQUIREMENTS:

PERMITTED USE:
COURTHOUSE USE NOT PERMITTED USE, CONDITIONAL USE PERMIT (CUP) REQUIRED. COF CONSIDERS THE U.S. FEDERAL COURT AS AN OFFICE SPACE USE WITHIN THE LI–O ZONE.

SETBACKS:
FRONT (MIN.) = 40' (WOODLANDS VILLAGE SPECIFIC PLAN)
SIDE (MIN.) = 0' (NON–RESIDENTIAL USES ADJACENT)
REAR (MIN.) = 0' (NON–RESIDENTIAL USES ADJACENT)

BUILDING HEIGHT:
MAX. ALLOWABLE = 60'

LOT COVERAGE:
60% MAX LOT COVERAGE ALLOWED, EXCLUDING UNCOVERED PARKING AREAS – PER WOODLANDS VILLAGE SPECIFIC PLAN. APPROXIMATE LOT COVERAGE, INCLUDING SIDEWALKS AND DRIVE ISLES = 31%

GROSS F.A.R.:
MAX. ALLOWABLE = 0.38 (FOR OFFICE USE WITHIN LI–O ZONE)

OPEN/CIVIC SPACE:
OPEN SPACE NOT REQUIRED PER COF ZONING CODE.

CIVIC SPACE REQUIRED PER COF ZONING CODE SECTION 10–30.60.090.B.1.a.

TOTAL CIVIC SPACE REQUIRED (5% OF TOTAL LOT AREA) = 8,843 SF
TOTAL CIVIC SPACE PROVIDED = APPROX. 9,629 SF

THE CITY OF FLAGSTAFF VIEWS CIVIC SPACE AS AN AREA THAT ACTIVELY ENGAGES THE PUBLIC. THE ANTICIPATED CIVIC SPACE AREA ON THE SITE PLAN INCLUDES THE PEDESTRIAN SIDEWALKS, LARGE LANDSCAPE ISLAND IN MIDDLE OF PUBLIC PARKING AREA, AND LANDSCAPE AREA TO WEST OF PUBLIC SIDEWALK ACCESS POINT AT NORTHEAST DRIVEWAY. OTHER POSSIBLE CIVIC SPACE AMENITIES ARE TO BE DETERMINED BASED ON GSA AND CITY REQUIREMENTS. SEE RED HATCHED AREAS FOR CIVIC SPACE.

VEHICULAR PARKING REQUIREMENTS		
*1 PARKING SPACE PER 300 GSF		
BUILDING SQUARE FOOTAGE	38,426	SF
REQUIRED PARKING = 38,426 SF / 300 SF/SPACE	128	SPACES
REQUIRED ADA PARKING (WITHIN TOTAL REQ'D PARKING)	8	SPACES
PROVIDED INDOOR SECURE PARKING	41	SPACES
PROVIDED OUTDOOR SECURE PARKING	26	SPACES
PROVIDED PUBLIC PARKING (WITH 8 ADA)	58	SPACES
TOTAL PROVIDED PARKING	125	SPACES
COF TRANSIT PARKING REDUCTION (10% OF REQUIRED)	13	SPACES
TOTAL REQUIRED PARKING WITH REDUCTION	115	SPACES

BICYCLE PARKING REQUIREMENTS		
*5% OF TOTAL REQUIRED VEHICULAR PARKING SPACES		
TOTAL REQUIRED BIKE PARKING	6	SPACES
TOTAL PROVIDED BIKE PARKING	8	SPACES

PARKING REDUCTION NOTES:
1. CITY ZONING CODE SECTION 10-50.80.060.A PROVIDES GUIDANCE ON PARKING REDUCTION OPTIONS, "TRANSIT. IN ALL ZONES, A PARKING REDUCTION OF UP TO 10 PERCENT MAY BE APPROVED BY THE DIRECTOR FOR ANY USE WITHIN 1,320 FT OF A PERMANENT TRANSIT STOP." THERE ARE 2 PERMANENT BUS STOPS WITHIN 1,320 FT OF THE PROJECT ALONG MOUNTAIN LINE ROUTE 8, STOPS 4 AND 7. STOP 4 IS ON THE WEST SIDE OF THOMPSON STREET SOUTH OF THE OLD ARIZONA DAILY SUN PROPERTY. STOP 7 IS ON THE SOUTH SIDE OF W. ROUTE 66 AT THE DOUBLETREE HOTEL.

CLEAR VIEW ZONE CALCULATIONS

ID #	MAJOR STREET	MANEUVER DIRECTION	DESIGN SPEED (V_{MAJOR})[1]	TIME GAP $t_{g\,(unadjusted)}$[2]	GRADE ≤ 3%	MULTIPLE LANE CROSSINGS	NO. OF LANES[4]	TIME GAP $t_{g(adjusted)}$[2]	INTERSECTION SIGHT DISTANCE (ISD[3])	STOPPING SIGHT DISTANCE (SSD)
D1	WEST ROUTE 66	Right	45	6.5	Yes	No	1	6.5	430	360
D2	WEST ROUTE 66	Left	45	7.5	Yes	No	1	7.5	496	360
D3	WEST ROUTE 66	Right	45	6.5	Yes	No	1	6.5	430	360
D4	WEST ROUTE 66	Left	45	7.5	Yes	No	1	7.5	496	360

Notes:
(1) The major road speed limits (V_{MAJOR} in MPH) are based on existing conditions in the project vicinity.
(2) The time gap values, adjusted ($t_{g\,(adjusted)}$ in seconds) and unadjusted ($t_{g\,(unadjusted)}$ in seconds), are based on the current site plan and the *AASHTO-Geometric Design of Highways and Streets* Exhibits 9-54 and 9-57 for D1 and D2 and Exhibits 9-66 and 9-67 for M1. The first lane crossed does not warrant an adjustment
(3) The intersection site distance (ISD in feet) calculations are based on Equation 9-1 in the *AASHTO-Geometric Design of Highways and Streets*.
Equation 9-1: ISD=1.47*V_{MAJOR}*t_g
(4) The number of lanes crossed may include medians converted to equivalent lanes. The number of lanes provided in the table includes the first lane crossed.
(5) If the approach grade is greater than 3%, add 0.1 seconds for each percent grade.

PRELIMINARY
NOT FOR CONSTRUCTION, BIDDING OR RECORDING

FLAGSTAFF ARIZONA
U.S. FEDERAL COURTHOUSE
SITE PLAN

JOB NO: 222469
DATE: SEP 24
SCALE: AS SHOWN
DRAWN: KMF
DESIGN: KMF
CHECKED: SCI

110 W. Dale Avenue
Flagstaff, AZ 86001
928.773.0354
928.774.6934 fax
www.ardurra.com

Shephard Wesnitzer, Inc.
An ARDURRA Company

NO.	DESCRIPTION	DATE	BY
	REVISIONS		

Contact Arizona 811 at least two full working days before you begin excavation
Call 811 or click Arizona811.com

DRAWING NO.
SP01

SHT NO. 1 OF 3

FILE: \\FLG-FS02\PROJECTS\2022\222469\DRAWINGS\SITE PLANS\RLP SITE PLAN.DWG KFLEISHMAN

APPENDIX F: 2025 LEVEL OF SERVICE ANALYSIS WITHOUT MITIGATION

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	543	140	206	418	37	166	66	309	145	67	8
Future Volume (veh/h)	11	543	140	206	418	37	166	66	309	145	67	8
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, 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	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	14	603	165	242	464	46	195	82	364	171	84	10
Peak Hour Factor	0.80	0.90	0.85	0.85	0.90	0.80	0.85	0.80	0.85	0.85	0.80	0.80
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	348	794	217	343	1452	143	645	824	698	483	1411	165
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
Prop Arrive On Green	0.29	0.29	0.29	0.10	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44
Unsig. Movement Delay												
Ln Grp Delay, s/veh	20.2	27.7	27.9	36.8	14.3	14.3	16.4	13.1	18.7	18.4	12.7	12.7
Ln Grp LOS	C	C	C	D	B	B	B	B	B	B	B	B
Approach Vol, veh/h		782			752			641			265	
Approach Delay, s/veh		27.7			21.6			17.3			16.4	
Approach LOS		C			C			B			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6		8
Case No		5.0	2.0	6.3		6.0		4.0
Phs Duration (G+Y+Rc), s		39.0	12.3	27.1		39.0		39.3
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5		4.5
Max Green (Gmax), s		34.5	15.5	36.5		34.5		56.5
Max Allow Headway (MAH), s		4.2	3.8	5.3		5.1		5.3
Max Q Clear (g_c+I1), s		15.1	7.3	17.6		14.2		9.2
Green Ext Time (g_e), s		2.4	0.5	4.9		1.3		3.4
Prob of Phs Call (p_c)		1.00	0.99	1.00		1.00		1.00
Prob of Max Out (p_x)		0.00	0.03	0.13		0.00		0.00

Left-Turn Movement Data								
Assigned Mvmt		5	3	7		1		
Mvmt Sat Flow, veh/h		1302	3456	890		944		

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1870		2758		3204		3267

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1585		753		375		323

Left Lane Group Data								
Assigned Mvmt	0	5	3	7	0	1	0	0
Lane Assignment		L	L (Prot)	L		L		

Lanes in Grp	0	1	2	1	0	1	0	0
Grp Vol (v), veh/h	0	195	242	14	0	171	0	0
Grp Sat Flow (s), veh/h/ln	0	1302	1728	890	0	944	0	0
Q Serve Time (g_s), s	0.0	7.9	5.3	0.9	0.0	10.1	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	9.1	5.3	0.9	0.0	12.2	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1302	0	890	0	944	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	34.5	0.0	22.6	0.0	34.5	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	33.3	0.0	22.6	0.0	32.5	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	7.9	0.0	0.9	0.0	10.1	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	645	343	348	0	483	0	0
V/C Ratio (X)	0.00	0.30	0.71	0.04	0.00	0.35	0.00	0.00
Avail Cap (c_a), veh/h	0	645	684	507	0	483	0	0
Upstream Filter (I)	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	15.2	34.2	20.2	0.0	16.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.2	2.7	0.0	0.0	2.0	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
Control Delay (d), s/veh	0.0	16.4	36.8	20.2	0.0	18.4	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	2.2	2.2	0.2	0.0	2.1	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.1	0.0	0.0	0.3	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	2.4	2.3	0.2	0.0	2.3	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.25	0.29	0.00	0.00	0.39	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	82	0	388	0	46	0	252
Grp Sat Flow (s), veh/h/ln	0	1870	0	1777	0	1777	0	1777
Q Serve Time (g_s), s	0.0	2.0	0.0	15.6	0.0	1.2	0.0	7.2
Cycle Q Clear Time (g_c), s	0.0	2.0	0.0	15.6	0.0	1.2	0.0	7.2
Lane Grp Cap (c), veh/h	0	824	0	512	0	783	0	790
V/C Ratio (X)	0.00	0.10	0.00	0.76	0.00	0.06	0.00	0.32
Avail Cap (c_a), veh/h	0	824	0	828	0	783	0	1282
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	12.8	0.0	25.4	0.0	12.6	0.0	14.1
Incr Delay (d2), s/veh	0.0	0.2	0.0	2.3	0.0	0.1	0.0	0.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	13.1	0.0	27.7	0.0	12.7	0.0	14.3
1st-Term Q (Q1), veh/ln	0.0	0.8	0.0	6.3	0.0	0.4	0.0	2.7
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.3	0.0	0.0	0.0	0.1

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.9	0.0	6.6	0.0	0.5	0.0	2.7
%ile Storage Ratio (RQ%)	0.00	0.08	0.00	0.16	0.00	0.14	0.00	0.21
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	364	0	380	0	48	0	258
Grp Sat Flow (s), veh/h/ln	0	1585	0	1735	0	1803	0	1812
Q Serve Time (g_s), s	0.0	13.1	0.0	15.6	0.0	1.2	0.0	7.2
Cycle Q Clear Time (g_c), s	0.0	13.1	0.0	15.6	0.0	1.2	0.0	7.2
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.43	0.00	0.21	0.00	0.18
Lane Grp Cap (c), veh/h	0	698	0	499	0	794	0	806
V/C Ratio (X)	0.00	0.52	0.00	0.76	0.00	0.06	0.00	0.32
Avail Cap (c_a), veh/h	0	698	0	808	0	794	0	1307
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	15.9	0.0	25.4	0.0	12.6	0.0	14.1
Incr Delay (d2), s/veh	0.0	2.8	0.0	2.4	0.0	0.1	0.0	0.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	18.7	0.0	27.9	0.0	12.7	0.0	14.3
1st-Term Q (Q1), veh/ln	0.0	4.4	0.0	6.1	0.0	0.5	0.0	2.8
2nd-Term Q (Q2), veh/ln	0.0	0.5	0.0	0.3	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	4.9	0.0	6.5	0.0	0.5	0.0	2.8
%ile Storage Ratio (RQ%)	0.00	0.50	0.00	0.16	0.00	0.15	0.00	0.22
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	21.8
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	56	607	35	50	462	53	16	7	41	26	2	57
Future Vol, veh/h	56	607	35	50	462	53	16	7	41	26	2	57
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	150	150	-	150	150	-	-	150	-	-
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	61	660	38	54	502	58	17	8	45	28	2	62

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	560	0	0	698	0	0	1453	1450	660	1438	1430	502
Stage 1	-	-	-	-	-	-	782	782	-	610	610	-
Stage 2	-	-	-	-	-	-	671	668	-	828	820	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
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	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1011	-	-	898	-	-	108	131	463	111	135	569
Stage 1	-	-	-	-	-	-	387	405	-	482	485	-
Stage 2	-	-	-	-	-	-	446	456	-	365	389	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1011	-	-	898	-	-	86	116	463	87	119	569
Mov Cap-2 Maneuver	-	-	-	-	-	-	86	116	-	87	119	-
Stage 1	-	-	-	-	-	-	364	381	-	453	456	-
Stage 2	-	-	-	-	-	-	372	429	-	304	366	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.7	0.8	28	29.1
HCM LOS			D	D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	86	322	1011	-	-	898	-	-	87	504
HCM Lane V/C Ratio	0.202	0.162	0.06	-	-	0.061	-	-	0.325	0.127
HCM Control Delay (s)	57.2	18.3	8.8	-	-	9.3	-	-	65.1	13.2
HCM Lane LOS	F	C	A	-	-	A	-	-	F	B
HCM 95th %tile Q(veh)	0.7	0.6	0.2	-	-	0.2	-	-	1.2	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	523	205	473	636	96	284	87	353	113	118	12
Future Volume (veh/h)	25	523	205	473	636	96	284	87	353	113	118	12
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, 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	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	31	581	241	556	707	120	334	109	415	133	148	15
Peak Hour Factor	0.80	0.90	0.85	0.85	0.90	0.80	0.85	0.80	0.85	0.85	0.80	0.80
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	254	658	273	641	1524	259	534	756	640	398	1318	132
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
Prop Arrive On Green	0.27	0.27	0.27	0.19	0.50	0.50	0.40	0.40	0.40	0.40	0.40	0.40
Unsig. Movement Delay												
Ln Grp Delay, s/veh	26.9	49.0	50.0	47.2	15.8	15.8	31.0	18.4	28.0	24.7	18.0	18.1
Ln Grp LOS	C	D	D	D	B	B	C	B	C	C	B	B
Approach Vol, veh/h		853			1383			858			296	
Approach Delay, s/veh		48.7			28.4			27.9			21.1	
Approach LOS		D			C			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6		8
Case No		5.0	2.0	6.3		6.0		4.0
Phs Duration (G+Y+Rc), s		43.0	22.2	30.1		43.0		52.3
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5		4.5
Max Green (Gmax), s		38.5	20.5	27.5		38.5		52.5
Max Allow Headway (MAH), s		4.2	3.8	5.4		5.3		5.3
Max Q Clear (g_c+I1), s		27.1	16.9	23.7		16.3		16.4
Green Ext Time (g_e), s		2.8	0.8	1.9		1.6		6.2
Prob of Phs Call (p_c)		1.00	1.00	1.00		1.00		1.00
Prob of Max Out (p_x)		0.00	1.00	1.00		0.00		0.01

Left-Turn Movement Data								
Assigned Mvmt		5	3	7		1		
Mvmt Sat Flow, veh/h		1223	3456	663		878		

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1870		2450		3262		3039

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1585		1015		327		515

Left Lane Group Data								
Assigned Mvmt	0	5	3	7	0	1	0	0
Lane Assignment		L	L (Prot)	L		L		

Lanes in Grp	0	1	2	1	0	1	0	0
Grp Vol (v), veh/h	0	334	556	31	0	133	0	0
Grp Sat Flow (s), veh/h/ln	0	1223	1728	663	0	878	0	0
Q Serve Time (g_s), s	0.0	22.4	14.9	3.4	0.0	10.8	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	25.1	14.9	3.4	0.0	14.3	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1223	0	663	0	878	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	38.5	0.0	25.6	0.0	38.5	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	35.8	0.0	25.6	0.0	35.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	22.4	0.0	3.4	0.0	10.8	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	534	641	254	0	398	0	0
V/C Ratio (X)	0.00	0.62	0.87	0.12	0.00	0.33	0.00	0.00
Avail Cap (c_a), veh/h	0	534	743	267	0	398	0	0
Upstream Filter (I)	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	25.6	37.7	26.7	0.0	22.5	0.0	0.0
Incr Delay (d2), s/veh	0.0	5.4	9.5	0.2	0.0	2.3	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	31.0	47.2	26.9	0.0	24.7	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	6.3	6.2	0.5	0.0	2.2	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.8	0.8	0.0	0.0	0.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	7.1	7.0	0.6	0.0	2.4	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.72	0.89	0.01	0.00	0.41	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	109	0	421	0	80	0	413
Grp Sat Flow (s), veh/h/ln	0	1870	0	1777	0	1777	0	1777
Q Serve Time (g_s), s	0.0	3.5	0.0	21.6	0.0	2.7	0.0	14.4
Cycle Q Clear Time (g_c), s	0.0	3.5	0.0	21.6	0.0	2.7	0.0	14.4
Lane Grp Cap (c), veh/h	0	756	0	478	0	718	0	891
V/C Ratio (X)	0.00	0.14	0.00	0.88	0.00	0.11	0.00	0.46
Avail Cap (c_a), veh/h	0	756	0	513	0	718	0	979
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	18.0	0.0	33.4	0.0	17.7	0.0	15.4
Incr Delay (d2), s/veh	0.0	0.4	0.0	15.6	0.0	0.3	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	18.4	0.0	49.0	0.0	18.0	0.0	15.8
1st-Term Q (Q1), veh/ln	0.0	1.5	0.0	9.1	0.0	1.1	0.0	5.5
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	2.1	0.0	0.1	0.0	0.1

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	1.6	0.0	11.2	0.0	1.1	0.0	5.6
%ile Storage Ratio (RQ%)	0.00	0.15	0.00	0.27	0.00	0.35	0.00	0.44
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	415	0	401	0	83	0	414
Grp Sat Flow (s), veh/h/ln	0	1585	0	1688	0	1812	0	1778
Q Serve Time (g_s), s	0.0	20.1	0.0	21.7	0.0	2.7	0.0	14.4
Cycle Q Clear Time (g_c), s	0.0	20.1	0.0	21.7	0.0	2.7	0.0	14.4
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.60	0.00	0.18	0.00	0.29
Lane Grp Cap (c), veh/h	0	640	0	454	0	732	0	892
V/C Ratio (X)	0.00	0.65	0.00	0.88	0.00	0.11	0.00	0.46
Avail Cap (c_a), veh/h	0	640	0	487	0	732	0	979
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	22.9	0.0	33.4	0.0	17.7	0.0	15.4
Incr Delay (d2), s/veh	0.0	5.0	0.0	16.6	0.0	0.3	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	28.0	0.0	50.0	0.0	18.1	0.0	15.8
1st-Term Q (Q1), veh/ln	0.0	7.2	0.0	8.7	0.0	1.1	0.0	5.6
2nd-Term Q (Q2), veh/ln	0.0	0.9	0.0	2.1	0.0	0.1	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	8.1	0.0	10.7	0.0	1.2	0.0	5.6
%ile Storage Ratio (RQ%)	0.00	0.83	0.00	0.26	0.00	0.36	0.00	0.44
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	32.8
HCM 6th LOS	C

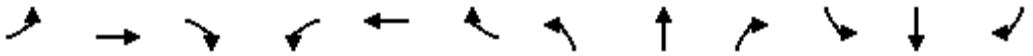
Intersection	
Int Delay, s/veh	9.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	58	656	31	71	761	62	26	6	48	21	9	72
Future Vol, veh/h	58	656	31	71	761	62	26	6	48	21	9	72
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	150	150	-	150	150	-	-	150	-	-
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	63	713	34	77	827	67	28	7	52	23	10	78

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	894	0	0	747	0	0	1898	1887	713	1867	1854	827
Stage 1	-	-	-	-	-	-	839	839	-	981	981	-
Stage 2	-	-	-	-	-	-	1059	1048	-	886	873	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
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	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	759	-	-	861	-	-	53	70	432	55	74	371
Stage 1	-	-	-	-	-	-	360	381	-	300	328	-
Stage 2	-	-	-	-	-	-	271	305	-	339	368	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	759	-	-	861	-	-	32	58	432	39	62	371
Mov Cap-2 Maneuver	-	-	-	-	-	-	32	58	-	39	62	-
Stage 1	-	-	-	-	-	-	330	349	-	275	299	-
Stage 2	-	-	-	-	-	-	188	278	-	268	337	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.8	0.8	114.8	60.9
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	32	252	759	-	-	861	-	-	39	239
HCM Lane V/C Ratio	0.883	0.233	0.083	-	-	0.09	-	-	0.585	0.368
HCM Control Delay (s)	$ 304.3	23.6	10.2	-	-	9.6	-	-	185.7	28.6
HCM Lane LOS	F	C	B	-	-	A	-	-	F	D
HCM 95th %tile Q(veh)	3	0.9	0.3	-	-	0.3	-	-	2.1	1.6



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	557	151	206	461	37	200	66	309	145	67	8
Future Volume (veh/h)	11	557	151	206	461	37	200	66	309	145	67	8
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, 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	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	14	619	178	242	512	46	235	82	364	171	84	10
Peak Hour Factor	0.80	0.90	0.85	0.85	0.90	0.80	0.85	0.80	0.85	0.85	0.80	0.80
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	339	793	228	342	1475	132	642	820	695	481	1405	165
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
Prop Arrive On Green	0.29	0.29	0.29	0.10	0.45	0.45	0.44	0.44	0.44	0.44	0.44	0.44
Unsig. Movement Delay												
Ln Grp Delay, s/veh	20.2	28.2	28.3	37.1	14.5	14.5	17.6	13.2	18.9	18.6	12.9	12.9
Ln Grp LOS	C	C	C	D	B	B	B	B	B	B	B	B
Approach Vol, veh/h		811			800			681			265	
Approach Delay, s/veh		28.1			21.3			17.8			16.6	
Approach LOS		C			C			B			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6		8
Case No		5.0	2.0	6.3		6.0		4.0
Phs Duration (G+Y+Rc), s		39.0	12.3	27.4		39.0		39.7
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5		4.5
Max Green (Gmax), s		34.5	15.5	36.5		34.5		56.5
Max Allow Headway (MAH), s		4.2	3.7	5.0		5.1		4.9
Max Q Clear (g_c+I1), s		15.2	7.3	18.4		14.2		10.0
Green Ext Time (g_e), s		2.5	0.5	4.5		1.3		3.3
Prob of Phs Call (p_c)		1.00	0.99	1.00		1.00		1.00
Prob of Max Out (p_x)		0.00	0.03	0.11		0.00		0.00

Left-Turn Movement Data								
Assigned Mvmt		5	3	7		1		
Mvmt Sat Flow, veh/h		1302	3456	851		944		

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1870		2724		3204		3298

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1585		782		375		296

Left Lane Group Data								
Assigned Mvmt	0	5	3	7	0	1	0	0
Lane Assignment		L	L (Prot)	L		L		

Lanes in Grp	0	1	2	1	0	1	0	0
Grp Vol (v), veh/h	0	235	242	14	0	171	0	0
Grp Sat Flow (s), veh/h/ln	0	1302	1728	851	0	944	0	0
Q Serve Time (g_s), s	0.0	10.0	5.3	0.9	0.0	10.2	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	11.2	5.3	0.9	0.0	12.2	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1302	0	851	0	944	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	34.5	0.0	22.9	0.0	34.5	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	33.3	0.0	22.9	0.0	32.5	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	10.0	0.0	0.9	0.0	10.2	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	642	342	339	0	481	0	0
V/C Ratio (X)	0.00	0.37	0.71	0.04	0.00	0.36	0.00	0.00
Avail Cap (c_a), veh/h	0	642	681	486	0	481	0	0
Upstream Filter (I)	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	16.0	34.3	20.1	0.0	16.6	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.6	2.7	0.0	0.0	2.0	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
Control Delay (d), s/veh	0.0	17.6	37.1	20.2	0.0	18.6	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	2.8	2.1	0.2	0.0	2.1	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.1	0.0	0.0	0.3	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	3.1	2.2	0.2	0.0	2.3	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.31	0.28	0.00	0.00	0.40	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	82	0	403	0	46	0	275
Grp Sat Flow (s), veh/h/ln	0	1870	0	1777	0	1777	0	1777
Q Serve Time (g_s), s	0.0	2.0	0.0	16.4	0.0	1.2	0.0	8.0
Cycle Q Clear Time (g_c), s	0.0	2.0	0.0	16.4	0.0	1.2	0.0	8.0
Lane Grp Cap (c), veh/h	0	820	0	517	0	779	0	794
V/C Ratio (X)	0.00	0.10	0.00	0.78	0.00	0.06	0.00	0.35
Avail Cap (c_a), veh/h	0	820	0	824	0	779	0	1276
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	13.0	0.0	25.6	0.0	12.7	0.0	14.2
Incr Delay (d2), s/veh	0.0	0.2	0.0	2.6	0.0	0.1	0.0	0.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	13.2	0.0	28.2	0.0	12.9	0.0	14.5
1st-Term Q (Q1), veh/ln	0.0	0.8	0.0	6.2	0.0	0.4	0.0	2.8
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.4	0.0	0.0	0.0	0.1

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.9	0.0	6.6	0.0	0.5	0.0	2.8
%ile Storage Ratio (RQ%)	0.00	0.08	0.00	0.16	0.00	0.14	0.00	0.22
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	364	0	394	0	48	0	283
Grp Sat Flow (s), veh/h/ln	0	1585	0	1730	0	1803	0	1817
Q Serve Time (g_s), s	0.0	13.2	0.0	16.4	0.0	1.2	0.0	8.0
Cycle Q Clear Time (g_c), s	0.0	13.2	0.0	16.4	0.0	1.2	0.0	8.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.45	0.00	0.21	0.00	0.16
Lane Grp Cap (c), veh/h	0	695	0	503	0	791	0	812
V/C Ratio (X)	0.00	0.52	0.00	0.78	0.00	0.06	0.00	0.35
Avail Cap (c_a), veh/h	0	695	0	802	0	791	0	1305
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	16.1	0.0	25.6	0.0	12.7	0.0	14.2
Incr Delay (d2), s/veh	0.0	2.8	0.0	2.7	0.0	0.1	0.0	0.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	18.9	0.0	28.3	0.0	12.9	0.0	14.5
1st-Term Q (Q1), veh/ln	0.0	4.1	0.0	6.1	0.0	0.5	0.0	2.8
2nd-Term Q (Q2), veh/ln	0.0	0.5	0.0	0.4	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	4.6	0.0	6.4	0.0	0.5	0.0	2.9
%ile Storage Ratio (RQ%)	0.00	0.47	0.00	0.16	0.00	0.15	0.00	0.23
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	22.0
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	3.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	56	621	35	52	467	53	16	7	46	26	2	57
Future Vol, veh/h	56	621	35	52	467	53	16	7	46	26	2	57
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	150	150	-	150	150	-	-	150	-	-
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	61	675	38	57	508	58	17	8	50	28	2	62

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	566	0	0	713	0	0	1480	1477	675	1467	1457	508
Stage 1	-	-	-	-	-	-	797	797	-	622	622	-
Stage 2	-	-	-	-	-	-	683	680	-	845	835	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
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	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1006	-	-	887	-	-	104	126	454	106	130	565
Stage 1	-	-	-	-	-	-	380	399	-	474	479	-
Stage 2	-	-	-	-	-	-	439	451	-	357	383	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1006	-	-	887	-	-	83	111	454	81	114	565
Mov Cap-2 Maneuver	-	-	-	-	-	-	83	111	-	81	114	-
Stage 1	-	-	-	-	-	-	357	375	-	445	448	-
Stage 2	-	-	-	-	-	-	364	422	-	292	360	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.7	0.8	28.1	31.1
HCM LOS			D	D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	83	322	1006	-	-	887	-	-	81	498
HCM Lane V/C Ratio	0.21	0.179	0.061	-	-	0.064	-	-	0.349	0.129
HCM Control Delay (s)	59.5	18.6	8.8	-	-	9.3	-	-	71.6	13.3
HCM Lane LOS	F	C	A	-	-	A	-	-	F	B
HCM 95th %tile Q(veh)	0.7	0.6	0.2	-	-	0.2	-	-	1.3	0.4

Intersection	
Int Delay, s/veh	0.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	679	14	62	607	5	20
Future Vol, veh/h	679	14	62	607	5	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	150	150	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	738	15	67	660	5	22

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	753	0	1202	738
Stage 1	-	-	-	-	738	-
Stage 2	-	-	-	-	464	-
Critical Hdwy	-	-	4.13	-	6.63	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.83	-
Follow-up Hdwy	-	-	2.219	-	3.519	3.319
Pot Cap-1 Maneuver	-	-	855	-	190	417
Stage 1	-	-	-	-	472	-
Stage 2	-	-	-	-	600	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	855	-	175	417
Mov Cap-2 Maneuver	-	-	-	-	312	-
Stage 1	-	-	-	-	472	-
Stage 2	-	-	-	-	553	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.9	14.9
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	391	-	-	855	-
HCM Lane V/C Ratio	0.069	-	-	0.079	-
HCM Control Delay (s)	14.9	-	-	9.6	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0.3	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	688	6	14	598	2	5
Future Vol, veh/h	688	6	14	598	2	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	150	150	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	748	7	15	650	2	5

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	755	0	1428	748
Stage 1	-	-	-	-	748	-
Stage 2	-	-	-	-	680	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	855	-	149	412
Stage 1	-	-	-	-	468	-
Stage 2	-	-	-	-	503	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	855	-	146	412
Mov Cap-2 Maneuver	-	-	-	-	286	-
Stage 1	-	-	-	-	468	-
Stage 2	-	-	-	-	494	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	15
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	366	-	-	855	-
HCM Lane V/C Ratio	0.021	-	-	0.018	-
HCM Control Delay (s)	15	-	-	9.3	-
HCM Lane LOS	C	-	-	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.1	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	544	223	473	643	96	290	87	353	113	118	12
Future Volume (veh/h)	25	544	223	473	643	96	290	87	353	113	118	12
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, 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	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	31	604	262	556	714	120	341	109	415	133	148	15
Peak Hour Factor	0.80	0.90	0.85	0.85	0.90	0.80	0.85	0.80	0.85	0.85	0.80	0.80
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	256	664	288	639	1542	259	529	748	634	394	1305	131
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
Prop Arrive On Green	0.27	0.27	0.27	0.18	0.51	0.51	0.40	0.40	0.40	0.40	0.40	0.40
Unsig. Movement Delay												
Ln Grp Delay, s/veh	26.8	53.8	54.8	48.1	15.7	15.7	32.4	18.8	28.7	25.3	18.5	18.5
Ln Grp LOS	C	D	D	D	B	B	C	B	C	C	B	B
Approach Vol, veh/h		897			1390			865			296	
Approach Delay, s/veh		53.4			28.6			28.9			21.6	
Approach LOS		D			C			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6		8
Case No		5.0	2.0	6.3		6.0		4.0
Phs Duration (G+Y+Rc), s		43.0	22.3	31.0		43.0		53.3
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5		4.5
Max Green (Gmax), s		38.5	20.5	27.5		38.5		52.5
Max Allow Headway (MAH), s		4.2	3.7	5.1		5.3		5.0
Max Q Clear (g_c+I1), s		28.2	17.0	25.3		16.5		16.6
Green Ext Time (g_e), s		2.7	0.7	1.1		1.6		5.4
Prob of Phs Call (p_c)		1.00	1.00	1.00		1.00		1.00
Prob of Max Out (p_x)		0.00	1.00	1.00		0.00		0.01

Left-Turn Movement Data								
Assigned Mvmt		5	3	7		1		
Mvmt Sat Flow, veh/h		1223	3456	658		878		

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1870		2413		3262		3044

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1585		1046		327		511

Left Lane Group Data								
Assigned Mvmt	0	5	3	7	0	1	0	0
Lane Assignment		L	L (Prot)	L		L		

Lanes in Grp	0	1	2	1	0	1	0	0
Grp Vol (v), veh/h	0	341	556	31	0	133	0	0
Grp Sat Flow (s), veh/h/ln	0	1223	1728	658	0	878	0	0
Q Serve Time (g_s), s	0.0	23.4	15.0	3.4	0.0	10.9	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	26.2	15.0	3.4	0.0	14.5	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1223	0	658	0	878	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	38.5	0.0	26.5	0.0	38.5	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	35.7	0.0	26.5	0.0	34.9	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	23.4	0.0	3.4	0.0	10.9	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	529	639	256	0	394	0	0
V/C Ratio (X)	0.00	0.65	0.87	0.12	0.00	0.34	0.00	0.00
Avail Cap (c_a), veh/h	0	529	736	263	0	394	0	0
Upstream Filter (I)	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	26.4	38.1	26.6	0.0	23.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	6.0	10.0	0.2	0.0	2.3	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	32.4	48.1	26.8	0.0	25.3	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	6.6	6.0	0.5	0.0	2.2	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.9	0.9	0.0	0.0	0.3	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	7.5	6.9	0.5	0.0	2.5	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.76	0.88	0.01	0.00	0.42	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	109	0	445	0	80	0	417
Grp Sat Flow (s), veh/h/ln	0	1870	0	1777	0	1777	0	1777
Q Serve Time (g_s), s	0.0	3.6	0.0	23.3	0.0	2.7	0.0	14.5
Cycle Q Clear Time (g_c), s	0.0	3.6	0.0	23.3	0.0	2.7	0.0	14.5
Lane Grp Cap (c), veh/h	0	748	0	489	0	711	0	900
V/C Ratio (X)	0.00	0.15	0.00	0.91	0.00	0.11	0.00	0.46
Avail Cap (c_a), veh/h	0	748	0	508	0	711	0	969
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	18.4	0.0	33.7	0.0	18.1	0.0	15.3
Incr Delay (d2), s/veh	0.0	0.4	0.0	20.1	0.0	0.3	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	18.8	0.0	53.8	0.0	18.5	0.0	15.7
1st-Term Q (Q1), veh/ln	0.0	1.5	0.0	9.4	0.0	1.1	0.0	5.2
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	2.7	0.0	0.1	0.0	0.1

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	1.6	0.0	12.1	0.0	1.2	0.0	5.3
%ile Storage Ratio (RQ%)	0.00	0.15	0.00	0.30	0.00	0.36	0.00	0.41
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	415	0	421	0	83	0	417
Grp Sat Flow (s), veh/h/ln	0	1585	0	1682	0	1812	0	1778
Q Serve Time (g_s), s	0.0	20.5	0.0	23.3	0.0	2.8	0.0	14.6
Cycle Q Clear Time (g_c), s	0.0	20.5	0.0	23.3	0.0	2.8	0.0	14.6
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.62	0.00	0.18	0.00	0.29
Lane Grp Cap (c), veh/h	0	634	0	463	0	725	0	901
V/C Ratio (X)	0.00	0.65	0.00	0.91	0.00	0.11	0.00	0.46
Avail Cap (c_a), veh/h	0	634	0	481	0	725	0	970
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	23.5	0.0	33.8	0.0	18.2	0.0	15.3
Incr Delay (d2), s/veh	0.0	5.2	0.0	21.1	0.0	0.3	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	28.7	0.0	54.8	0.0	18.5	0.0	15.7
1st-Term Q (Q1), veh/ln	0.0	7.0	0.0	8.9	0.0	1.1	0.0	5.2
2nd-Term Q (Q2), veh/ln	0.0	0.9	0.0	2.7	0.0	0.1	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	7.9	0.0	11.6	0.0	1.2	0.0	5.3
%ile Storage Ratio (RQ%)	0.00	0.81	0.00	0.29	0.00	0.37	0.00	0.41
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	34.5
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	9.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	58	658	31	74	769	62	26	6	49	21	9	72
Future Vol, veh/h	58	658	31	74	769	62	26	6	49	21	9	72
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	150	150	-	150	150	-	-	150	-	-
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	63	715	34	80	836	67	28	7	53	23	10	78

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	903	0	0	749	0	0	1915	1904	715	1884	1871	836
Stage 1	-	-	-	-	-	-	841	841	-	996	996	-
Stage 2	-	-	-	-	-	-	1074	1063	-	888	875	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
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	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	753	-	-	860	-	-	51	69	431	54	72	367
Stage 1	-	-	-	-	-	-	359	380	-	294	322	-
Stage 2	-	-	-	-	-	-	266	300	-	338	367	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	753	-	-	860	-	-	31	57	431	38	60	367
Mov Cap-2 Maneuver	-	-	-	-	-	-	31	57	-	38	60	-
Stage 1	-	-	-	-	-	-	329	348	-	269	292	-
Stage 2	-	-	-	-	-	-	183	272	-	266	336	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.8	0.8	119	63.2
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	31	251	753	-	-	860	-	-	38	234
HCM Lane V/C Ratio	0.912	0.238	0.084	-	-	0.094	-	-	0.601	0.376
HCM Control Delay (s)	$ 320.4	23.8	10.2	-	-	9.6	-	-	193.4	29.4
HCM Lane LOS	F	C	B	-	-	A	-	-	F	D
HCM 95th %tile Q(veh)	3.1	0.9	0.3	-	-	0.3	-	-	2.1	1.7

Intersection	
Int Delay, s/veh	0.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	733	2	10	935	8	31
Future Vol, veh/h	733	2	10	935	8	31
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	150	150	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	797	2	11	1016	9	34

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	799	0	1327	797
Stage 1	-	-	-	-	797	-
Stage 2	-	-	-	-	530	-
Critical Hdwy	-	-	4.13	-	6.63	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.83	-
Follow-up Hdwy	-	-	2.219	-	3.519	3.319
Pot Cap-1 Maneuver	-	-	822	-	159	386
Stage 1	-	-	-	-	443	-
Stage 2	-	-	-	-	556	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	822	-	157	386
Mov Cap-2 Maneuver	-	-	-	-	294	-
Stage 1	-	-	-	-	443	-
Stage 2	-	-	-	-	549	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	16.2
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	363	-	-	822	-
HCM Lane V/C Ratio	0.117	-	-	0.013	-
HCM Control Delay (s)	16.2	-	-	9.4	-
HCM Lane LOS	C	-	-	A	-
HCM 95th %tile Q(veh)	0.4	-	-	0	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	727	2	2	941	3	8
Future Vol, veh/h	727	2	2	941	3	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	150	150	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	790	2	2	1023	3	9

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	792	0	1817	790
Stage 1	-	-	-	-	790	-
Stage 2	-	-	-	-	1027	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	829	-	86	390
Stage 1	-	-	-	-	447	-
Stage 2	-	-	-	-	345	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	829	-	86	390
Mov Cap-2 Maneuver	-	-	-	-	216	-
Stage 1	-	-	-	-	447	-
Stage 2	-	-	-	-	344	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	16.7
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	320	-	-	829	-
HCM Lane V/C Ratio	0.037	-	-	0.003	-
HCM Control Delay (s)	16.7	-	-	9.4	-
HCM Lane LOS	C	-	-	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0	-

APPENDIX G: 2028 LEVEL OF SERVICE ANALYSIS WITHOUT MITIGATION

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	13	611	158	232	470	42	187	74	347	163	75	9
Future Volume (veh/h)	13	611	158	232	470	42	187	74	347	163	75	9
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, 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	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	16	679	186	273	522	52	220	92	408	192	94	11
Peak Hour Factor	0.80	0.90	0.85	0.85	0.90	0.80	0.85	0.80	0.85	0.85	0.80	0.80
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	324	791	217	373	1460	145	639	838	710	460	1438	166
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
Prop Arrive On Green	0.29	0.29	0.29	0.11	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45
Unsig. Movement Delay												
Ln Grp Delay, s/veh	22.3	40.5	40.9	39.9	15.9	15.9	18.2	14.0	21.0	21.2	13.6	13.7
Ln Grp LOS	C	D	D	D	B	B	B	B	C	C	B	B
Approach Vol, veh/h		881			847			720			297	
Approach Delay, s/veh		40.4			23.6			19.3			18.5	
Approach LOS		D			C			B			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6		8
Case No		5.0	2.0	6.3		6.0		4.0
Phs Duration (G+Y+Rc), s		43.0	13.8	29.2		43.0		42.9
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5		4.5
Max Green (Gmax), s		38.5	20.5	27.5		38.5		52.5
Max Allow Headway (MAH), s		4.2	3.8	5.3		5.2		5.3
Max Q Clear (g_c+I1), s		18.4	8.6	22.0		18.0		11.1
Green Ext Time (g_e), s		2.7	0.7	2.6		1.6		3.9
Prob of Phs Call (p_c)		1.00	1.00	1.00		1.00		1.00
Prob of Max Out (p_x)		0.00	0.00	0.98		0.00		0.00

Left-Turn Movement Data								
Assigned Mvmt		5	3	7		1		
Mvmt Sat Flow, veh/h		1289	3456	839		898		

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1870		2757		3211		3265

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1585		755		370		324

Left Lane Group Data								
Assigned Mvmt	0	5	3	7	0	1	0	0
Lane Assignment		L	L (Prot)	L		L		

Lanes in Grp	0	1	2	1	0	1	0	0
Grp Vol (v), veh/h	0	220	273	16	0	192	0	0
Grp Sat Flow (s), veh/h/ln	0	1289	1728	839	0	898	0	0
Q Serve Time (g_s), s	0.0	10.1	6.6	1.2	0.0	13.6	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	11.5	6.6	1.2	0.0	16.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1289	0	839	0	898	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	38.5	0.0	24.7	0.0	38.5	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	37.0	0.0	24.7	0.0	36.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	10.1	0.0	1.2	0.0	13.6	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	639	373	324	0	460	0	0
V/C Ratio (X)	0.00	0.34	0.73	0.05	0.00	0.42	0.00	0.00
Avail Cap (c_a), veh/h	0	639	824	352	0	460	0	0
Upstream Filter (I)	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	16.8	37.1	22.3	0.0	18.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.5	2.8	0.1	0.0	2.8	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	18.2	39.9	22.3	0.0	21.2	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	2.8	2.7	0.2	0.0	2.7	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.1	0.0	0.0	0.4	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	3.1	2.9	0.2	0.0	3.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.32	0.36	0.01	0.00	0.51	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	92	0	438	0	51	0	283
Grp Sat Flow (s), veh/h/ln	0	1870	0	1777	0	1777	0	1777
Q Serve Time (g_s), s	0.0	2.5	0.0	20.0	0.0	1.4	0.0	9.0
Cycle Q Clear Time (g_c), s	0.0	2.5	0.0	20.0	0.0	1.4	0.0	9.0
Lane Grp Cap (c), veh/h	0	838	0	510	0	796	0	795
V/C Ratio (X)	0.00	0.11	0.00	0.86	0.00	0.06	0.00	0.36
Avail Cap (c_a), veh/h	0	838	0	569	0	796	0	1085
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	13.8	0.0	29.0	0.0	13.5	0.0	15.6
Incr Delay (d2), s/veh	0.0	0.3	0.0	11.6	0.0	0.2	0.0	0.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	14.0	0.0	40.5	0.0	13.6	0.0	15.9
1st-Term Q (Q1), veh/ln	0.0	1.0	0.0	8.2	0.0	0.5	0.0	3.5
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	1.6	0.0	0.0	0.0	0.1

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	1.1	0.0	9.8	0.0	0.6	0.0	3.5
%ile Storage Ratio (RQ%)	0.00	0.10	0.00	0.24	0.00	0.18	0.00	0.27
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	408	0	427	0	54	0	291
Grp Sat Flow (s), veh/h/ln	0	1585	0	1735	0	1804	0	1812
Q Serve Time (g_s), s	0.0	16.4	0.0	20.0	0.0	1.5	0.0	9.1
Cycle Q Clear Time (g_c), s	0.0	16.4	0.0	20.0	0.0	1.5	0.0	9.1
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.44	0.00	0.21	0.00	0.18
Lane Grp Cap (c), veh/h	0	710	0	498	0	808	0	811
V/C Ratio (X)	0.00	0.57	0.00	0.86	0.00	0.07	0.00	0.36
Avail Cap (c_a), veh/h	0	710	0	555	0	808	0	1107
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	17.6	0.0	29.0	0.0	13.5	0.0	15.6
Incr Delay (d2), s/veh	0.0	3.4	0.0	11.9	0.0	0.2	0.0	0.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	21.0	0.0	40.9	0.0	13.7	0.0	15.9
1st-Term Q (Q1), veh/ln	0.0	5.6	0.0	8.0	0.0	0.6	0.0	3.6
2nd-Term Q (Q2), veh/ln	0.0	0.7	0.0	1.6	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	6.3	0.0	9.7	0.0	0.6	0.0	3.6
%ile Storage Ratio (RQ%)	0.00	0.64	0.00	0.24	0.00	0.19	0.00	0.28
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	27.3
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	5.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	63	683	40	56	519	60	18	8	46	29	2	64
Future Vol, veh/h	63	683	40	56	519	60	18	8	46	29	2	64
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	150	150	-	150	150	-	-	150	-	-
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	68	742	43	61	564	65	20	9	50	32	2	70

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	629	0	0	785	0	0	1633	1629	742	1615	1607	564
Stage 1	-	-	-	-	-	-	878	878	-	686	686	-
Stage 2	-	-	-	-	-	-	755	751	-	929	921	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
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	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	953	-	-	834	-	-	81	102	416	83	105	525
Stage 1	-	-	-	-	-	-	343	366	-	438	448	-
Stage 2	-	-	-	-	-	-	401	418	-	321	349	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	953	-	-	834	-	-	62	88	416	60	90	525
Mov Cap-2 Maneuver	-	-	-	-	-	-	62	88	-	60	90	-
Stage 1	-	-	-	-	-	-	319	340	-	407	415	-
Stage 2	-	-	-	-	-	-	321	387	-	256	324	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.7	0.9	38.6	46
HCM LOS			E	E

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	62	268	953	-	-	834	-	-	60	458
HCM Lane V/C Ratio	0.316	0.219	0.072	-	-	0.073	-	-	0.525	0.157
HCM Control Delay (s)	87.8	22.2	9.1	-	-	9.7	-	-	118.2	14.3
HCM Lane LOS	F	C	A	-	-	A	-	-	F	B
HCM 95th %tile Q(veh)	1.1	0.8	0.2	-	-	0.2	-	-	2.1	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	28	588	230	532	716	108	319	98	397	128	132	14
Future Volume (veh/h)	28	588	230	532	716	108	319	98	397	128	132	14
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, 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	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	35	653	271	626	796	135	375	122	467	151	165	18
Peak Hour Factor	0.80	0.90	0.85	0.85	0.90	0.80	0.85	0.80	0.85	0.85	0.80	0.80
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	239	678	281	691	1586	269	498	725	614	358	1254	135
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
Prop Arrive On Green	0.28	0.28	0.28	0.20	0.52	0.52	0.39	0.39	0.39	0.39	0.39	0.39
Unsig. Movement Delay												
Ln Grp Delay, s/veh	27.9	66.8	67.8	53.9	15.8	15.8	40.3	20.4	35.0	29.7	20.0	20.1
Ln Grp LOS	C	E	E	D	B	B	D	C	D	C	C	C
Approach Vol, veh/h		959			1557			964			334	
Approach Delay, s/veh		65.9			31.1			35.2			24.4	
Approach LOS		E			C			D			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6		8
Case No		5.0	2.0	6.3		6.0		4.0
Phs Duration (G+Y+Rc), s		43.0	24.4	32.0		43.0		56.4
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5		4.5
Max Green (Gmax), s		38.5	20.5	27.5		38.5		52.5
Max Allow Headway (MAH), s		4.3	3.8	5.4		5.4		5.3
Max Q Clear (g_c+I1), s		34.5	19.6	28.1		20.8		18.9
Green Ext Time (g_e), s		1.7	0.3	0.0		1.8		7.2
Prob of Phs Call (p_c)		1.00	1.00	1.00		1.00		1.00
Prob of Max Out (p_x)		0.00	1.00	1.00		0.00		0.03

Left-Turn Movement Data								
Assigned Mvmt		5	3	7		1		
Mvmt Sat Flow, veh/h		1201	3456	601		827		

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1870		2448		3236		3039

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1585		1016		349		515

Left Lane Group Data								
Assigned Mvmt	0	5	3	7	0	1	0	0
Lane Assignment		L	L (Prot)	L		L		

Lanes in Grp	0	1	2	1	0	1	0	0
Grp Vol (v), veh/h	0	375	626	35	0	151	0	0
Grp Sat Flow (s), veh/h/ln	0	1201	1728	601	0	827	0	0
Q Serve Time (g_s), s	0.0	29.1	17.6	4.4	0.0	14.5	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	32.5	17.6	4.4	0.0	18.8	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1201	0	601	0	827	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	38.5	0.0	27.5	0.0	38.5	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	35.2	0.0	27.5	0.0	34.3	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	29.1	0.0	4.4	0.0	14.5	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	498	691	239	0	358	0	0
V/C Ratio (X)	0.00	0.75	0.91	0.15	0.00	0.42	0.00	0.00
Avail Cap (c_a), veh/h	0	498	713	239	0	358	0	0
Upstream Filter (I)	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	30.1	38.8	27.6	0.0	26.1	0.0	0.0
Incr Delay (d2), s/veh	0.0	10.1	15.0	0.3	0.0	3.6	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	40.3	53.9	27.9	0.0	29.7	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	8.1	7.3	0.6	0.0	2.8	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	1.4	1.4	0.0	0.0	0.4	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	9.5	8.8	0.7	0.0	3.2	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.97	1.11	0.02	0.00	0.54	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	122	0	474	0	90	0	465
Grp Sat Flow (s), veh/h/ln	0	1870	0	1777	0	1777	0	1777
Q Serve Time (g_s), s	0.0	4.2	0.0	26.1	0.0	3.2	0.0	16.9
Cycle Q Clear Time (g_c), s	0.0	4.2	0.0	26.1	0.0	3.2	0.0	16.9
Lane Grp Cap (c), veh/h	0	725	0	492	0	688	0	927
V/C Ratio (X)	0.00	0.17	0.00	0.96	0.00	0.13	0.00	0.50
Avail Cap (c_a), veh/h	0	725	0	492	0	688	0	939
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	19.9	0.0	35.4	0.0	19.6	0.0	15.4
Incr Delay (d2), s/veh	0.0	0.5	0.0	31.4	0.0	0.4	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	20.4	0.0	66.8	0.0	20.0	0.0	15.8
1st-Term Q (Q1), veh/ln	0.0	1.8	0.0	11.0	0.0	1.3	0.0	6.5
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	4.3	0.0	0.1	0.0	0.1

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	1.9	0.0	15.3	0.0	1.4	0.0	6.6
%ile Storage Ratio (RQ%)	0.00	0.18	0.00	0.37	0.00	0.43	0.00	0.51
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	467	0	450	0	93	0	466
Grp Sat Flow (s), veh/h/ln	0	1585	0	1687	0	1808	0	1778
Q Serve Time (g_s), s	0.0	25.4	0.0	26.1	0.0	3.3	0.0	16.9
Cycle Q Clear Time (g_c), s	0.0	25.4	0.0	26.1	0.0	3.3	0.0	16.9
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.60	0.00	0.19	0.00	0.29
Lane Grp Cap (c), veh/h	0	614	0	467	0	700	0	928
V/C Ratio (X)	0.00	0.76	0.00	0.96	0.00	0.13	0.00	0.50
Avail Cap (c_a), veh/h	0	614	0	467	0	700	0	939
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	26.4	0.0	35.4	0.0	19.7	0.0	15.4
Incr Delay (d2), s/veh	0.0	8.6	0.0	32.4	0.0	0.4	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	35.0	0.0	67.8	0.0	20.1	0.0	15.8
1st-Term Q (Q1), veh/ln	0.0	9.3	0.0	10.5	0.0	1.4	0.0	6.5
2nd-Term Q (Q2), veh/ln	0.0	1.5	0.0	4.2	0.0	0.1	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	10.7	0.0	14.7	0.0	1.5	0.0	6.6
%ile Storage Ratio (RQ%)	0.00	1.09	0.00	0.36	0.00	0.45	0.00	0.51
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	40.3
HCM 6th LOS	D

Intersection	
Int Delay, s/veh	21.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	66	738	35	80	856	70	29	7	54	23	11	81
Future Vol, veh/h	66	738	35	80	856	70	29	7	54	23	11	81
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	150	150	-	150	150	-	-	150	-	-
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	72	802	38	87	930	76	32	8	59	25	12	88

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1006	0	0	840	0	0	2138	2126	802	2103	2088	930
Stage 1	-	-	-	-	-	-	946	946	-	1104	1104	-
Stage 2	-	-	-	-	-	-	1192	1180	-	999	984	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
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	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	689	-	-	795	-	-	36	50	384	38	53	324
Stage 1	-	-	-	-	-	-	314	340	-	256	287	-
Stage 2	-	-	-	-	-	-	228	264	-	293	327	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	689	-	-	795	-	-	~ 17	40	384	~ 23	42	324
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 17	40	-	~ 23	42	-
Stage 1	-	-	-	-	-	-	281	305	-	229	256	-
Stage 2	-	-	-	-	-	-	141	235	-	217	293	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.9	0.8	$ 303.2	129.7
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	17	193	689	-	-	795	-	-	23	180
HCM Lane V/C Ratio	1.854	0.344	0.104	-	-	0.109	-	-	1.087	0.556
HCM Control Delay (s)	$ 871.2	33.1	10.8	-	-	10.1	-	-	$ 458.5	47.5
HCM Lane LOS	F	D	B	-	-	B	-	-	F	E
HCM 95th %tile Q(veh)	4.5	1.4	0.3	-	-	0.4	-	-	3.2	2.9

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	13	625	169	232	513	42	221	74	347	163	75	9
Future Volume (veh/h)	13	625	169	232	513	42	221	74	347	163	75	9
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, 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	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	16	694	199	273	570	52	260	92	408	192	94	11
Peak Hour Factor	0.80	0.90	0.85	0.85	0.90	0.80	0.85	0.80	0.85	0.85	0.80	0.80
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	316	792	227	372	1483	135	636	834	706	458	1431	165
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
Prop Arrive On Green	0.29	0.29	0.29	0.11	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45
Unsig. Movement Delay												
Ln Grp Delay, s/veh	22.2	42.8	43.1	40.2	16.1	16.1	19.6	14.2	21.3	21.5	13.8	13.8
Ln Grp LOS	C	D	D	D	B	B	B	B	C	C	B	B
Approach Vol, veh/h		909			895			760			297	
Approach Delay, s/veh		42.6			23.4			19.9			18.8	
Approach LOS		D			C			B			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6		8
Case No		5.0	2.0	6.3		6.0		4.0
Phs Duration (G+Y+Rc), s		43.0	13.8	29.6		43.0		43.4
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5		4.5
Max Green (Gmax), s		38.5	20.5	27.5		38.5		52.5
Max Allow Headway (MAH), s		4.2	3.7	5.0		5.2		4.9
Max Q Clear (g_c+I1), s		18.6	8.6	22.9		18.2		12.0
Green Ext Time (g_e), s		2.9	0.7	2.2		1.6		3.7
Prob of Phs Call (p_c)		1.00	1.00	1.00		1.00		1.00
Prob of Max Out (p_x)		0.00	0.00	1.00		0.00		0.00

Left-Turn Movement Data								
Assigned Mvmt		5	3	7		1		
Mvmt Sat Flow, veh/h		1289	3456	802		898		

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1870		2725		3211		3293

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1585		781		370		300

Left Lane Group Data								
Assigned Mvmt	0	5	3	7	0	1	0	0
Lane Assignment		L	L (Prot)	L		L		

Lanes in Grp	0	1	2	1	0	1	0	0
Grp Vol (v), veh/h	0	260	273	16	0	192	0	0
Grp Sat Flow (s), veh/h/ln	0	1289	1728	802	0	898	0	0
Q Serve Time (g_s), s	0.0	12.5	6.6	1.2	0.0	13.7	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	13.9	6.6	1.2	0.0	16.2	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1289	0	802	0	898	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	38.5	0.0	25.1	0.0	38.5	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	37.0	0.0	25.1	0.0	36.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	12.5	0.0	1.2	0.0	13.7	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	636	372	316	0	458	0	0
V/C Ratio (X)	0.00	0.41	0.73	0.05	0.00	0.42	0.00	0.00
Avail Cap (c_a), veh/h	0	636	820	339	0	458	0	0
Upstream Filter (I)	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	17.7	37.4	22.2	0.0	18.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.9	2.8	0.1	0.0	2.8	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	19.6	40.2	22.2	0.0	21.5	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	3.5	2.7	0.2	0.0	2.7	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.1	0.0	0.0	0.4	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	3.9	2.8	0.2	0.0	3.1	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.39	0.36	0.01	0.00	0.52	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	92	0	452	0	51	0	307
Grp Sat Flow (s), veh/h/ln	0	1870	0	1777	0	1777	0	1777
Q Serve Time (g_s), s	0.0	2.5	0.0	20.9	0.0	1.4	0.0	9.9
Cycle Q Clear Time (g_c), s	0.0	2.5	0.0	20.9	0.0	1.4	0.0	9.9
Lane Grp Cap (c), veh/h	0	834	0	516	0	792	0	800
V/C Ratio (X)	0.00	0.11	0.00	0.88	0.00	0.06	0.00	0.38
Avail Cap (c_a), veh/h	0	834	0	566	0	792	0	1080
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	14.0	0.0	29.2	0.0	13.7	0.0	15.8
Incr Delay (d2), s/veh	0.0	0.3	0.0	13.6	0.0	0.2	0.0	0.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	14.2	0.0	42.8	0.0	13.8	0.0	16.1
1st-Term Q (Q1), veh/ln	0.0	1.0	0.0	8.2	0.0	0.6	0.0	3.6
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	2.0	0.0	0.0	0.0	0.1

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	1.1	0.0	10.1	0.0	0.6	0.0	3.6
%ile Storage Ratio (RQ%)	0.00	0.10	0.00	0.25	0.00	0.18	0.00	0.28
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	408	0	441	0	54	0	315
Grp Sat Flow (s), veh/h/ln	0	1585	0	1730	0	1804	0	1816
Q Serve Time (g_s), s	0.0	16.6	0.0	20.9	0.0	1.5	0.0	10.0
Cycle Q Clear Time (g_c), s	0.0	16.6	0.0	20.9	0.0	1.5	0.0	10.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.45	0.00	0.21	0.00	0.17
Lane Grp Cap (c), veh/h	0	706	0	503	0	804	0	818
V/C Ratio (X)	0.00	0.58	0.00	0.88	0.00	0.07	0.00	0.39
Avail Cap (c_a), veh/h	0	706	0	551	0	804	0	1104
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	17.9	0.0	29.2	0.0	13.7	0.0	15.8
Incr Delay (d2), s/veh	0.0	3.4	0.0	14.0	0.0	0.2	0.0	0.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	21.3	0.0	43.1	0.0	13.8	0.0	16.1
1st-Term Q (Q1), veh/ln	0.0	5.3	0.0	8.0	0.0	0.6	0.0	3.7
2nd-Term Q (Q2), veh/ln	0.0	0.7	0.0	1.9	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	6.0	0.0	9.9	0.0	0.6	0.0	3.7
%ile Storage Ratio (RQ%)	0.00	0.61	0.00	0.24	0.00	0.19	0.00	0.29
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	28.1
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	3.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	63	697	40	58	524	60	18	8	51	29	2	64
Future Vol, veh/h	63	697	40	58	524	60	18	8	51	29	2	64
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	150	150	-	150	150	-	-	150	-	-
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	68	758	43	63	570	65	20	9	55	32	2	70

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	635	0	0	801	0	0	1306	1655	379	1216	1633	285
Stage 1	-	-	-	-	-	-	894	894	-	696	696	-
Stage 2	-	-	-	-	-	-	412	761	-	520	937	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	944	-	-	818	-	-	117	97	619	137	100	712
Stage 1	-	-	-	-	-	-	302	358	-	398	441	-
Stage 2	-	-	-	-	-	-	588	412	-	507	342	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	944	-	-	818	-	-	92	83	619	102	86	712
Mov Cap-2 Maneuver	-	-	-	-	-	-	92	83	-	102	86	-
Stage 1	-	-	-	-	-	-	280	332	-	369	407	-
Stage 2	-	-	-	-	-	-	487	380	-	417	317	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.7	0.9	26.9	25.2
HCM LOS			D	D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	92	330	944	-	-	818	-	-	102	583
HCM Lane V/C Ratio	0.213	0.194	0.073	-	-	0.077	-	-	0.309	0.123
HCM Control Delay (s)	54.4	18.5	9.1	-	-	9.8	-	-	55.4	12
HCM Lane LOS	F	C	A	-	-	A	-	-	F	B
HCM 95th %tile Q(veh)	0.7	0.7	0.2	-	-	0.2	-	-	1.2	0.4

Intersection	
Int Delay, s/veh	0.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	763	14	62	681	5	20
Future Vol, veh/h	763	14	62	681	5	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	150	150	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	829	15	67	740	5	22

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	844	0	1333	415
Stage 1	-	-	-	-	829	-
Stage 2	-	-	-	-	504	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	788	-	145	586
Stage 1	-	-	-	-	389	-
Stage 2	-	-	-	-	572	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	788	-	133	586
Mov Cap-2 Maneuver	-	-	-	-	262	-
Stage 1	-	-	-	-	389	-
Stage 2	-	-	-	-	523	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.8	13.1
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	470	-	-	788	-
HCM Lane V/C Ratio	0.058	-	-	0.086	-
HCM Control Delay (s)	13.1	-	-	10	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0.3	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	772	6	14	672	2	5
Future Vol, veh/h	772	6	14	672	2	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	150	150	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	839	7	15	730	2	5

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	846	0	1234	420
Stage 1	-	-	-	-	839	-
Stage 2	-	-	-	-	395	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	787	-	169	582
Stage 1	-	-	-	-	384	-
Stage 2	-	-	-	-	650	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	787	-	166	582
Mov Cap-2 Maneuver	-	-	-	-	288	-
Stage 1	-	-	-	-	384	-
Stage 2	-	-	-	-	638	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	13.1
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	451	-	-	787	-
HCM Lane V/C Ratio	0.017	-	-	0.019	-
HCM Control Delay (s)	13.1	-	-	9.7	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.1	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	28	609	248	532	723	108	325	98	397	128	132	14
Future Volume (veh/h)	28	609	248	532	723	108	325	98	397	128	132	14
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, 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	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	35	677	292	626	803	135	382	122	467	151	165	18
Peak Hour Factor	0.80	0.90	0.85	0.85	0.90	0.80	0.85	0.80	0.85	0.85	0.80	0.80
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	238	669	289	691	1588	267	498	725	614	358	1254	135
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
Prop Arrive On Green	0.28	0.28	0.28	0.20	0.52	0.52	0.39	0.39	0.39	0.39	0.39	0.39
Unsig. Movement Delay												
Ln Grp Delay, s/veh	27.9	79.5	80.7	53.9	15.9	15.9	41.2	20.4	35.0	29.7	20.0	20.0
Ln Grp LOS	C	F	F	D	B	B	D	C	D	C	C	C
Approach Vol, veh/h		1004			1564			971			334	
Approach Delay, s/veh		78.3			31.1			35.6			24.4	
Approach LOS		E			C			D			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6		8
Case No		5.0	2.0	6.3		6.0		4.0
Phs Duration (G+Y+Rc), s		43.0	24.4	32.0		43.0		56.4
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5		4.5
Max Green (Gmax), s		38.5	20.5	27.5		38.5		52.5
Max Allow Headway (MAH), s		4.3	3.7	5.1		5.4		5.0
Max Q Clear (g_c+I1), s		35.2	19.6	29.5		20.8		19.0
Green Ext Time (g_e), s		1.4	0.3	0.0		1.8		6.2
Prob of Phs Call (p_c)		1.00	1.00	1.00		1.00		1.00
Prob of Max Out (p_x)		0.00	1.00	1.00		0.00		0.02

Left-Turn Movement Data								
Assigned Mvmt		5	3	7		1		
Mvmt Sat Flow, veh/h		1201	3456	597		827		

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1870		2417		3236		3043

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1585		1043		349		512

Left Lane Group Data								
Assigned Mvmt	0	5	3	7	0	1	0	0
Lane Assignment		L	L (Prot)	L		L		

Lanes in Grp	0	1	2	1	0	1	0	0
Grp Vol (v), veh/h	0	382	626	35	0	151	0	0
Grp Sat Flow (s), veh/h/ln	0	1201	1728	597	0	827	0	0
Q Serve Time (g_s), s	0.0	29.9	17.6	4.5	0.0	14.5	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	33.2	17.6	4.5	0.0	18.8	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1201	0	597	0	827	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	38.5	0.0	27.5	0.0	38.5	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	35.2	0.0	27.5	0.0	34.3	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	29.9	0.0	4.5	0.0	14.5	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	498	691	238	0	358	0	0
V/C Ratio (X)	0.00	0.77	0.91	0.15	0.00	0.42	0.00	0.00
Avail Cap (c_a), veh/h	0	498	713	238	0	358	0	0
Upstream Filter (I)	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	30.4	38.8	27.6	0.0	26.1	0.0	0.0
Incr Delay (d2), s/veh	0.0	10.8	15.1	0.3	0.0	3.6	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	41.2	53.9	27.9	0.0	29.7	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	8.4	7.1	0.6	0.0	2.8	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	1.5	1.4	0.0	0.0	0.4	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	9.9	8.5	0.6	0.0	3.2	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	1.00	1.08	0.02	0.00	0.54	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	122	0	498	0	90	0	469
Grp Sat Flow (s), veh/h/ln	0	1870	0	1777	0	1777	0	1777
Q Serve Time (g_s), s	0.0	4.2	0.0	27.5	0.0	3.2	0.0	17.0
Cycle Q Clear Time (g_c), s	0.0	4.2	0.0	27.5	0.0	3.2	0.0	17.0
Lane Grp Cap (c), veh/h	0	725	0	492	0	689	0	927
V/C Ratio (X)	0.00	0.17	0.00	1.01	0.00	0.13	0.00	0.51
Avail Cap (c_a), veh/h	0	725	0	492	0	689	0	939
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	19.9	0.0	35.9	0.0	19.6	0.0	15.4
Incr Delay (d2), s/veh	0.0	0.5	0.0	43.6	0.0	0.4	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	20.4	0.0	79.5	0.0	20.0	0.0	15.9
1st-Term Q (Q1), veh/ln	0.0	1.8	0.0	11.1	0.0	1.3	0.0	6.1
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	6.0	0.0	0.1	0.0	0.1

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	1.9	0.0	17.1	0.0	1.4	0.0	6.2
%ile Storage Ratio (RQ%)	0.00	0.18	0.00	0.42	0.00	0.43	0.00	0.48
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	1.5	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	467	0	471	0	93	0	469
Grp Sat Flow (s), veh/h/ln	0	1585	0	1683	0	1808	0	1778
Q Serve Time (g_s), s	0.0	25.4	0.0	27.5	0.0	3.3	0.0	17.0
Cycle Q Clear Time (g_c), s	0.0	25.4	0.0	27.5	0.0	3.3	0.0	17.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.62	0.00	0.19	0.00	0.29
Lane Grp Cap (c), veh/h	0	614	0	466	0	700	0	928
V/C Ratio (X)	0.00	0.76	0.00	1.01	0.00	0.13	0.00	0.51
Avail Cap (c_a), veh/h	0	614	0	466	0	700	0	940
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	26.4	0.0	35.9	0.0	19.7	0.0	15.4
Incr Delay (d2), s/veh	0.0	8.6	0.0	44.7	0.0	0.4	0.0	0.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	35.0	0.0	80.7	0.0	20.0	0.0	15.9
1st-Term Q (Q1), veh/ln	0.0	8.8	0.0	10.6	0.0	1.4	0.0	6.1
2nd-Term Q (Q2), veh/ln	0.0	1.5	0.0	5.8	0.0	0.1	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	10.3	0.0	16.3	0.0	1.5	0.0	6.2
%ile Storage Ratio (RQ%)	0.00	1.05	0.00	0.40	0.00	0.45	0.00	0.48
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	1.4	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	43.9
HCM 6th LOS	D

Intersection	
Int Delay, s/veh	8.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	66	740	35	83	864	70	29	7	55	23	11	81
Future Vol, veh/h	66	740	35	83	864	70	29	7	55	23	11	81
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	150	150	-	150	150	-	-	150	-	-
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	72	804	38	90	939	76	32	8	60	25	12	88

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1015	0	0	842	0	0	1604	2143	402	1669	2105	470
Stage 1	-	-	-	-	-	-	948	948	-	1119	1119	-
Stage 2	-	-	-	-	-	-	656	1195	-	550	986	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	679	-	-	789	-	-	70	48	598	63	51	540
Stage 1	-	-	-	-	-	-	280	338	-	220	280	-
Stage 2	-	-	-	-	-	-	421	258	-	487	324	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	679	-	-	789	-	-	38	38	598	41	40	540
Mov Cap-2 Maneuver	-	-	-	-	-	-	38	38	-	41	40	-
Stage 1	-	-	-	-	-	-	250	302	-	197	248	-
Stage 2	-	-	-	-	-	-	297	229	-	382	290	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.9	0.8	99.7	64.9
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	38	224	679	-	-	789	-	-	41	216
HCM Lane V/C Ratio	0.83	0.301	0.106	-	-	0.114	-	-	0.61	0.463
HCM Control Delay (s)	253.3	27.8	10.9	-	-	10.2	-	-	183.3	35.3
HCM Lane LOS	F	D	B	-	-	B	-	-	F	E
HCM 95th %tile Q(veh)	3.1	1.2	0.4	-	-	0.4	-	-	2.2	2.2

Intersection	
Int Delay, s/veh	0.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	823	2	10	1051	8	31
Future Vol, veh/h	823	2	10	1051	8	31
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	150	150	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	895	2	11	1142	9	34

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	897	0	1488	448
Stage 1	-	-	-	-	895	-
Stage 2	-	-	-	-	593	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	753	-	115	558
Stage 1	-	-	-	-	359	-
Stage 2	-	-	-	-	515	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	753	-	113	558
Mov Cap-2 Maneuver	-	-	-	-	241	-
Stage 1	-	-	-	-	359	-
Stage 2	-	-	-	-	507	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	14.1
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	439	-	-	753	-
HCM Lane V/C Ratio	0.097	-	-	0.014	-
HCM Control Delay (s)	14.1	-	-	9.9	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.3	-	-	0	-

Intersection	
Int Delay, s/veh	0.1

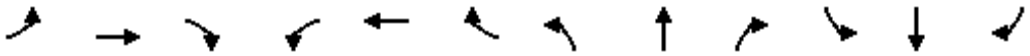
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	817	2	2	1057	3	8
Future Vol, veh/h	817	2	2	1057	3	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	150	150	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	888	2	2	1149	3	9

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	890	0	1467	444
Stage 1	-	-	-	-	888	-
Stage 2	-	-	-	-	579	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	757	-	119	561
Stage 1	-	-	-	-	362	-
Stage 2	-	-	-	-	524	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	757	-	119	561
Mov Cap-2 Maneuver	-	-	-	-	247	-
Stage 1	-	-	-	-	362	-
Stage 2	-	-	-	-	522	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	13.9
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	417	-	-	757	-
HCM Lane V/C Ratio	0.029	-	-	0.003	-
HCM Control Delay (s)	13.9	-	-	9.8	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0	-

APPENDIX H: 2028 LEVEL OF SERVICE ANALYSIS WITH MITIGATION



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	13	625	169	232	513	42	221	74	347	163	75	9
Future Volume (veh/h)	13	625	169	232	513	42	221	74	347	163	75	9
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, 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	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	16	694	199	273	570	52	260	92	408	192	94	11
Peak Hour Factor	0.80	0.90	0.85	0.85	0.90	0.80	0.85	0.80	0.85	0.85	0.80	0.80
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	313	813	233	352	1258	115	627	846	717	338	928	107
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
Prop Arrive On Green	0.02	0.30	0.30	0.10	0.38	0.38	0.11	0.45	0.45	0.29	0.29	0.29
Unsig. Movement Delay												
Ln Grp Delay, s/veh	21.8	39.9	40.2	45.8	21.6	21.7	18.3	14.7	21.8	36.3	24.3	24.3
Ln Grp LOS	C	D	D	D	C	C	B	B	C	D	C	C
Approach Vol, veh/h		909			895			760			297	
Approach Delay, s/veh		39.7			29.0			19.7			32.0	
Approach LOS		D			C			B			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4	5	6	7	8
Case No		3.0	2.0	4.0	1.2	6.3	1.1	4.0
Phs Duration (G+Y+Rc), s		46.0	13.9	31.9	15.0	31.0	6.2	39.5
Change Period (Y+Rc), s		4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green (Gmax), s		41.5	12.5	32.5	10.5	26.5	5.1	39.9
Max Allow Headway (MAH), s		4.3	3.7	5.0	3.8	5.2	3.7	4.9
Max Q Clear (g_c+I1), s		19.4	9.1	24.0	11.0	19.7	2.6	13.9
Green Ext Time (g_e), s		2.0	0.3	3.4	0.0	0.9	0.0	3.5
Prob of Phs Call (p_c)		1.00	1.00	1.00	1.00	1.00	0.33	1.00
Prob of Max Out (p_x)		0.00	1.00	0.60	1.00	0.00	1.00	0.01

Left-Turn Movement Data								
Assigned Mvmt			3		5	1	7	
Mvmt Sat Flow, veh/h			3456		1781	898	1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1870		2725		3211		3293

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1585		781		370		300

Left Lane Group Data								
Assigned Mvmt	0	0	3	0	5	1	7	0
Lane Assignment			L (Prot)		L (Pr/Pm)	LL (Pr/Pm)		

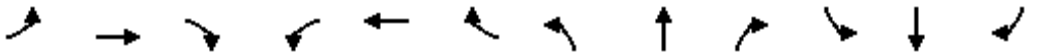
Lanes in Grp	0	0	2	0	1	1	1	0
Grp Vol (v), veh/h	0	0	273	0	260	192	16	0
Grp Sat Flow (s), veh/h/ln	0	0	1728	0	1781	898	1781	0
Q Serve Time (g_s), s	0.0	0.0	7.1	0.0	9.0	17.7	0.6	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	7.1	0.0	9.0	17.7	0.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	1289	898	802	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	28.5	26.5	27.4	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	24.5	26.5	23.1	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	1.0	17.7	0.1	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00
Lane Grp Cap (c), veh/h	0	0	352	0	627	338	313	0
V/C Ratio (X)	0.00	0.00	0.77	0.00	0.41	0.57	0.05	0.00
Avail Cap (c_a), veh/h	0	0	471	0	627	338	380	0
Upstream Filter (I)	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	40.2	0.0	17.8	29.5	21.7	0.0
Incr Delay (d2), s/veh	0.0	0.0	5.7	0.0	0.4	6.8	0.1	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	45.8	0.0	18.3	36.3	21.8	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	2.9	0.0	3.6	3.7	0.2	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.3	0.0	0.1	0.6	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	3.1	0.0	3.7	4.4	0.2	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.40	0.00	0.37	0.74	0.04	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	92	0	452	0	51	0	307
Grp Sat Flow (s), veh/h/ln	0	1870	0	1777	0	1777	0	1777
Q Serve Time (g_s), s	0.0	2.6	0.0	22.0	0.0	1.9	0.0	11.8
Cycle Q Clear Time (g_c), s	0.0	2.6	0.0	22.0	0.0	1.9	0.0	11.8
Lane Grp Cap (c), veh/h	0	846	0	530	0	513	0	679
V/C Ratio (X)	0.00	0.11	0.00	0.85	0.00	0.10	0.00	0.45
Avail Cap (c_a), veh/h	0	846	0	630	0	513	0	773
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	14.5	0.0	30.3	0.0	23.9	0.0	21.2
Incr Delay (d2), s/veh	0.0	0.3	0.0	9.6	0.0	0.4	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
Control Delay (d), s/veh	0.0	14.7	0.0	39.9	0.0	24.3	0.0	21.6
1st-Term Q (Q1), veh/ln	0.0	1.1	0.0	8.7	0.0	0.8	0.0	4.5
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	1.4	0.0	0.1	0.0	0.1

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	1.1	0.0	10.1	0.0	0.9	0.0	4.6
%ile Storage Ratio (RQ%)	0.00	0.10	0.00	0.25	0.00	0.26	0.00	0.36
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	408	0	441	0	54	0	315
Grp Sat Flow (s), veh/h/ln	0	1585	0	1730	0	1804	0	1816
Q Serve Time (g_s), s	0.0	17.4	0.0	22.0	0.0	2.0	0.0	11.9
Cycle Q Clear Time (g_c), s	0.0	17.4	0.0	22.0	0.0	2.0	0.0	11.9
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.45	0.00	0.21	0.00	0.17
Lane Grp Cap (c), veh/h	0	717	0	516	0	521	0	694
V/C Ratio (X)	0.00	0.57	0.00	0.85	0.00	0.10	0.00	0.45
Avail Cap (c_a), veh/h	0	717	0	613	0	521	0	790
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	18.5	0.0	30.3	0.0	23.9	0.0	21.2
Incr Delay (d2), s/veh	0.0	3.3	0.0	9.9	0.0	0.4	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
Control Delay (d), s/veh	0.0	21.8	0.0	40.2	0.0	24.3	0.0	21.7
1st-Term Q (Q1), veh/ln	0.0	5.7	0.0	8.5	0.0	0.8	0.0	4.6
2nd-Term Q (Q2), veh/ln	0.0	0.6	0.0	1.4	0.0	0.1	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	6.4	0.0	9.9	0.0	0.9	0.0	4.7
%ile Storage Ratio (RQ%)	0.00	0.65	0.00	0.24	0.00	0.28	0.00	0.37
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	30.3
HCM 6th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	63	697	40	58	524	60	18	8	51	29	2	64
Future Volume (veh/h)	63	697	40	58	524	60	18	8	51	29	2	64
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, 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	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	79	774	50	72	582	75	22	10	64	36	2	80
Peak Hour Factor	0.80	0.90	0.80	0.80	0.90	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	326	1364	608	263	1364	608	694	102	650	703	18	721
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
Prop Arrive On Green	0.38	0.38	0.38	0.38	0.38	0.38	0.46	0.46	0.46	0.46	0.46	0.46
Unsig. Movement Delay												
Ln Grp Delay, s/veh	18.3	14.7	11.7	21.2	13.7	11.9	9.7	0.0	9.2	9.7	0.0	9.3
Ln Grp LOS	B	B	B	C	B	B	A	A	A	A	A	A
Approach Vol, veh/h		903			729			96			118	
Approach Delay, s/veh		14.9			14.2			9.3			9.4	
Approach LOS		B			B			A			A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		6.0		5.0		6.0		5.0
Phs Duration (G+Y+Rc), s		32.0		27.2		32.0		27.2
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5
Max Green (Gmax), s		27.5		53.5		27.5		53.5
Max Allow Headway (MAH), s		5.2		4.9		5.1		5.0
Max Q Clear (g_c+I1), s		4.3		14.1		4.4		17.8
Green Ext Time (g_e), s		0.4		6.5		0.5		4.9
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.00		0.00		0.00		0.00
Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		1316		777		1326		665
Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		219		3554		39		3554
Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1400		1585		1552		1585
Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment		L		L		L		L

Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	22	0	79	0	36	0	72
Grp Sat Flow (s), veh/h/ln	0	1316	0	777	0	1326	0	665
Q Serve Time (g_s), s	0.0	0.6	0.0	4.9	0.0	0.9	0.0	5.7
Cycle Q Clear Time (g_c), s	0.0	2.3	0.0	12.1	0.0	2.4	0.0	15.8
Perm LT Sat Flow (s_l), veh/h/ln	0	1316	0	777	0	1326	0	665
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	27.5	0.0	22.7	0.0	27.5	0.0	22.7
Perm LT Serve Time (g_u), s	0.0	25.8	0.0	15.6	0.0	26.0	0.0	12.6
Perm LT Q Serve Time (g_ps), s	0.0	0.6	0.0	4.9	0.0	0.9	0.0	5.7
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	694	0	326	0	703	0	263
V/C Ratio (X)	0.00	0.03	0.00	0.24	0.00	0.05	0.00	0.27
Avail Cap (c_a), veh/h	0	694	0	729	0	703	0	608
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	9.6	0.0	17.9	0.0	9.6	0.0	20.6
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.4	0.0	0.1	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
Control Delay (d), s/veh	0.0	9.7	0.0	18.3	0.0	9.7	0.0	21.2
1st-Term Q (Q1), veh/ln	0.0	0.1	0.0	0.8	0.0	0.2	0.0	0.8
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.2	0.0	0.8	0.0	0.3	0.0	0.8
%ile Storage Ratio (RQ%)	0.00	0.03	0.00	0.13	0.00	0.04	0.00	0.14
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	2	0	0	0	2
Grp Vol (v), veh/h	0	0	0	774	0	0	0	582
Grp Sat Flow (s), veh/h/ln	0	0	0	1777	0	0	0	1777
Q Serve Time (g_s), s	0.0	0.0	0.0	10.2	0.0	0.0	0.0	7.1
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	10.2	0.0	0.0	0.0	7.1
Lane Grp Cap (c), veh/h	0	0	0	1364	0	0	0	1364
V/C Ratio (X)	0.00	0.00	0.00	0.57	0.00	0.00	0.00	0.43
Avail Cap (c_a), veh/h	0	0	0	3210	0	0	0	3210
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	14.4	0.0	0.0	0.0	13.4
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	14.7	0.0	0.0	0.0	13.7
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	3.2	0.0	0.0	0.0	2.3
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	3.3	0.0	0.0	0.0	2.3
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.22	0.00	0.00	0.00	0.14
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	74	0	50	0	82	0	75
Grp Sat Flow (s), veh/h/ln	0	1618	0	1585	0	1591	0	1585
Q Serve Time (g_s), s	0.0	1.5	0.0	1.2	0.0	1.7	0.0	1.8
Cycle Q Clear Time (g_c), s	0.0	1.5	0.0	1.2	0.0	1.7	0.0	1.8
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.86	0.00	1.00	0.00	0.98	0.00	1.00
Lane Grp Cap (c), veh/h	0	751	0	608	0	739	0	608
V/C Ratio (X)	0.00	0.10	0.00	0.08	0.00	0.11	0.00	0.12
Avail Cap (c_a), veh/h	0	751	0	1432	0	739	0	1432
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	8.9	0.0	11.6	0.0	9.0	0.0	11.8
Incr Delay (d2), s/veh	0.0	0.3	0.0	0.1	0.0	0.3	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	9.2	0.0	11.7	0.0	9.3	0.0	11.9
1st-Term Q (Q1), veh/ln	0.0	0.5	0.0	0.3	0.0	0.5	0.0	0.5
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.5	0.0	0.3	0.0	0.6	0.0	0.5
%ile Storage Ratio (RQ%)	0.00	0.03	0.00	0.06	0.00	0.13	0.00	0.09
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	14.0
HCM 6th LOS	B

Intersection	
Int Delay, s/veh	0.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	763	14	62	681	5	20
Future Vol, veh/h	763	14	62	681	5	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	150	150	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	829	15	67	740	5	22

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	844	0	1333	415
Stage 1	-	-	-	-	829	-
Stage 2	-	-	-	-	504	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	788	-	145	586
Stage 1	-	-	-	-	389	-
Stage 2	-	-	-	-	572	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	788	-	133	586
Mov Cap-2 Maneuver	-	-	-	-	262	-
Stage 1	-	-	-	-	389	-
Stage 2	-	-	-	-	523	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.8	13.1
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	470	-	-	788	-
HCM Lane V/C Ratio	0.058	-	-	0.086	-
HCM Control Delay (s)	13.1	-	-	10	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0.3	-

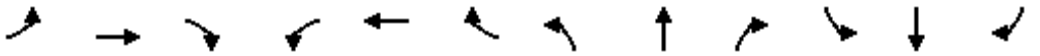
Intersection	
Int Delay, s/veh	0.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	772	6	14	672	2	5
Future Vol, veh/h	772	6	14	672	2	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	150	150	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	839	7	15	730	2	5

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	846	0	1234	420
Stage 1	-	-	-	-	839	-
Stage 2	-	-	-	-	395	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	787	-	169	582
Stage 1	-	-	-	-	384	-
Stage 2	-	-	-	-	650	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	787	-	166	582
Mov Cap-2 Maneuver	-	-	-	-	288	-
Stage 1	-	-	-	-	384	-
Stage 2	-	-	-	-	638	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	13.1
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	451	-	-	787	-
HCM Lane V/C Ratio	0.017	-	-	0.019	-
HCM Control Delay (s)	13.1	-	-	9.7	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.1	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	28	609	248	532	723	108	325	98	397	128	132	14
Future Volume (veh/h)	28	609	248	532	723	108	325	98	397	128	132	14
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, 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	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	35	677	292	626	803	135	382	122	467	151	165	18
Peak Hour Factor	0.80	0.90	0.85	0.85	0.90	0.80	0.85	0.80	0.85	0.85	0.80	0.80
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	283	693	299	691	1386	233	493	706	598	242	664	72
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
Prop Arrive On Green	0.03	0.29	0.29	0.20	0.46	0.46	0.13	0.38	0.38	0.21	0.21	0.21
Unsig. Movement Delay												
Ln Grp Delay, s/veh	23.8	68.8	69.9	53.9	21.0	21.0	36.4	21.1	37.0	49.9	34.6	34.7
Ln Grp LOS	C	E	E	D	C	C	D	C	D	D	C	C
Approach Vol, veh/h		1004			1564			971			334	
Approach Delay, s/veh		67.7			34.2			34.8			41.5	
Approach LOS		E			C			C			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4	5	6	7	8
Case No		3.0	2.0	4.0	1.2	6.3	1.1	4.0
Phs Duration (G+Y+Rc), s		42.0	24.4	33.0	17.1	24.9	7.6	49.8
Change Period (Y+Rc), s		4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green (Gmax), s		37.5	20.5	28.5	12.6	20.4	5.0	44.0
Max Allow Headway (MAH), s		4.3	3.7	5.0	3.8	5.4	3.7	5.0
Max Q Clear (g_c+I1), s		27.8	19.6	29.6	14.6	19.6	3.4	21.4
Green Ext Time (g_e), s		1.8	0.3	0.0	0.0	0.2	0.0	5.7
Prob of Phs Call (p_c)		1.00	1.00	1.00	1.00	1.00	0.62	1.00
Prob of Max Out (p_x)		0.00	1.00	1.00	1.00	0.00	1.00	0.09

Left-Turn Movement Data								
Assigned Mvmt			3		5	1	7	
Mvmt Sat Flow, veh/h			3456		1781	827	1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1870		2417		3236		3043

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1585		1043		349		512

Left Lane Group Data								
Assigned Mvmt	0	0	3	0	5	1	7	0
Lane Assignment			L (Prot)		L (Pr/Pm)	LL (Pr/Pm)		

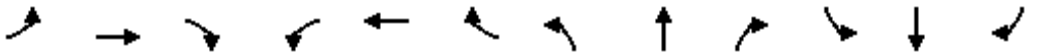
Lanes in Grp	0	0	2	0	1	1	1	0
Grp Vol (v), veh/h	0	0	626	0	382	151	35	0
Grp Sat Flow (s), veh/h/ln	0	0	1728	0	1781	827	1781	0
Q Serve Time (g_s), s	0.0	0.0	17.6	0.0	12.6	17.6	1.4	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	17.6	0.0	12.6	17.6	1.4	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	1201	827	597	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	22.4	20.4	28.5	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	16.1	20.4	25.9	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	11.4	17.6	0.2	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00
Lane Grp Cap (c), veh/h	0	0	691	0	493	242	283	0
V/C Ratio (X)	0.00	0.00	0.91	0.00	0.77	0.62	0.12	0.00
Avail Cap (c_a), veh/h	0	0	713	0	493	242	318	0
Upstream Filter (I)	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	38.8	0.0	28.8	38.4	23.6	0.0
Incr Delay (d2), s/veh	0.0	0.0	15.1	0.0	7.6	11.5	0.2	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	53.9	0.0	36.4	49.9	23.8	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	7.1	0.0	2.2	3.5	0.5	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	1.4	0.0	1.0	0.8	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	8.5	0.0	3.2	4.3	0.6	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	1.08	0.00	0.33	0.73	0.09	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	122	0	498	0	90	0	469
Grp Sat Flow (s), veh/h/ln	0	1870	0	1777	0	1777	0	1777
Q Serve Time (g_s), s	0.0	4.3	0.0	27.6	0.0	4.2	0.0	19.4
Cycle Q Clear Time (g_c), s	0.0	4.3	0.0	27.6	0.0	4.2	0.0	19.4
Lane Grp Cap (c), veh/h	0	706	0	510	0	365	0	809
V/C Ratio (X)	0.00	0.17	0.00	0.98	0.00	0.25	0.00	0.58
Avail Cap (c_a), veh/h	0	706	0	510	0	365	0	809
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	20.6	0.0	35.1	0.0	33.0	0.0	20.0
Incr Delay (d2), s/veh	0.0	0.5	0.0	33.7	0.0	1.6	0.0	1.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	21.1	0.0	68.8	0.0	34.6	0.0	21.0
1st-Term Q (Q1), veh/ln	0.0	1.9	0.0	11.1	0.0	1.8	0.0	7.3
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	4.8	0.0	0.2	0.0	0.2

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	2.0	0.0	15.9	0.0	2.0	0.0	7.5
%ile Storage Ratio (RQ%)	0.00	0.18	0.00	0.39	0.00	0.60	0.00	0.58
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	467	0	471	0	93	0	469
Grp Sat Flow (s), veh/h/ln	0	1585	0	1683	0	1808	0	1778
Q Serve Time (g_s), s	0.0	25.8	0.0	27.6	0.0	4.3	0.0	19.4
Cycle Q Clear Time (g_c), s	0.0	25.8	0.0	27.6	0.0	4.3	0.0	19.4
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.62	0.00	0.19	0.00	0.29
Lane Grp Cap (c), veh/h	0	598	0	483	0	371	0	810
V/C Ratio (X)	0.00	0.78	0.00	0.98	0.00	0.25	0.00	0.58
Avail Cap (c_a), veh/h	0	598	0	483	0	371	0	810
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	27.3	0.0	35.1	0.0	33.1	0.0	20.0
Incr Delay (d2), s/veh	0.0	9.7	0.0	34.8	0.0	1.6	0.0	1.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	37.0	0.0	69.9	0.0	34.7	0.0	21.0
1st-Term Q (Q1), veh/ln	0.0	9.0	0.0	10.6	0.0	1.9	0.0	7.3
2nd-Term Q (Q2), veh/ln	0.0	1.6	0.0	4.7	0.0	0.2	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	10.6	0.0	15.2	0.0	2.0	0.0	7.5
%ile Storage Ratio (RQ%)	0.00	1.08	0.00	0.37	0.00	0.62	0.00	0.59
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	43.7
HCM 6th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	66	740	35	83	864	70	29	7	55	23	11	81
Future Volume (veh/h)	66	740	35	83	864	70	29	7	55	23	11	81
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, 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	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	82	822	44	98	960	88	36	9	69	29	14	101
Peak Hour Factor	0.80	0.90	0.80	0.85	0.90	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	253	1658	740	304	1658	740	558	74	568	594	78	565
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
Prop Arrive On Green	0.47	0.47	0.47	0.47	0.47	0.47	0.40	0.40	0.40	0.40	0.40	0.40
Unsig. Movement Delay												
Ln Grp Delay, s/veh	21.7	12.5	9.8	19.5	13.3	10.1	14.6	0.0	13.1	13.8	0.0	13.6
Ln Grp LOS	C	B	A	B	B	B	B	A	B	B	A	B
Approach Vol, veh/h		948			1146			114			144	
Approach Delay, s/veh		13.2			13.6			13.5			13.6	
Approach LOS		B			B			B			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Case No		6.0		5.0		6.0		5.0
Phs Duration (G+Y+Rc), s		31.0		35.6		31.0		35.6
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5
Max Green (Gmax), s		26.5		54.5		26.5		54.5
Max Allow Headway (MAH), s		5.1		5.1		5.2		5.0
Max Q Clear (g_c+I1), s		6.3		23.9		5.1		21.0
Green Ext Time (g_e), s		0.5		7.2		0.7		8.9
Prob of Phs Call (p_c)		1.00		1.00		1.00		1.00
Prob of Max Out (p_x)		0.00		0.03		0.00		0.04

Left-Turn Movement Data								
Assigned Mvmt		5		7		1		3
Mvmt Sat Flow, veh/h		1277		538		1321		639

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		186		3554		197		3554

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1427		1585		1418		1585

Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	1	0	3
Lane Assignment		L		L		L		L

Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	36	0	82	0	29	0	98
Grp Sat Flow (s), veh/h/ln	0	1277	0	538	0	1321	0	639
Q Serve Time (g_s), s	0.0	1.3	0.0	8.7	0.0	0.9	0.0	8.4
Cycle Q Clear Time (g_c), s	0.0	4.3	0.0	21.9	0.0	3.0	0.0	19.0
Perm LT Sat Flow (s_l), veh/h/ln	0	1277	0	538	0	1321	0	639
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	26.5	0.0	31.1	0.0	26.5	0.0	31.1
Perm LT Serve Time (g_u), s	0.0	23.4	0.0	17.9	0.0	24.5	0.0	20.4
Perm LT Q Serve Time (g_ps), s	0.0	1.3	0.0	8.7	0.0	0.9	0.0	8.4
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	558	0	253	0	594	0	304
V/C Ratio (X)	0.00	0.06	0.00	0.32	0.00	0.05	0.00	0.32
Avail Cap (c_a), veh/h	0	558	0	443	0	594	0	529
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	14.4	0.0	21.0	0.0	13.6	0.0	18.9
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.7	0.0	0.2	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
Control Delay (d), s/veh	0.0	14.6	0.0	21.7	0.0	13.8	0.0	19.5
1st-Term Q (Q1), veh/ln	0.0	0.3	0.0	1.0	0.0	0.3	0.0	1.1
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.4	0.0	1.0	0.0	0.3	0.0	1.1
%ile Storage Ratio (RQ%)	0.00	0.06	0.00	0.17	0.00	0.05	0.00	0.19
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	2	0	0	0	2
Grp Vol (v), veh/h	0	0	0	822	0	0	0	960
Grp Sat Flow (s), veh/h/ln	0	0	0	1777	0	0	0	1777
Q Serve Time (g_s), s	0.0	0.0	0.0	10.7	0.0	0.0	0.0	13.1
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	10.7	0.0	0.0	0.0	13.1
Lane Grp Cap (c), veh/h	0	0	0	1658	0	0	0	1658
V/C Ratio (X)	0.00	0.00	0.00	0.50	0.00	0.00	0.00	0.58
Avail Cap (c_a), veh/h	0	0	0	2910	0	0	0	2910
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	12.3	0.0	0.0	0.0	13.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	12.5	0.0	0.0	0.0	13.3
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	3.4	0.0	0.0	0.0	4.1
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	3.4	0.0	0.0	0.0	4.2
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.23	0.00	0.00	0.00	0.26
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		T+R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	78	0	44	0	115	0	88
Grp Sat Flow (s), veh/h/ln	0	1613	0	1585	0	1615	0	1585
Q Serve Time (g_s), s	0.0	2.0	0.0	1.0	0.0	3.1	0.0	2.1
Cycle Q Clear Time (g_c), s	0.0	2.0	0.0	1.0	0.0	3.1	0.0	2.1
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.88	0.00	1.00	0.00	0.88	0.00	1.00
Lane Grp Cap (c), veh/h	0	642	0	740	0	643	0	740
V/C Ratio (X)	0.00	0.12	0.00	0.06	0.00	0.18	0.00	0.12
Avail Cap (c_a), veh/h	0	642	0	1298	0	643	0	1298
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	12.7	0.0	9.7	0.0	13.0	0.0	10.0
Incr Delay (d2), s/veh	0.0	0.4	0.0	0.0	0.0	0.6	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	13.1	0.0	9.8	0.0	13.6	0.0	10.1
1st-Term Q (Q1), veh/ln	0.0	0.7	0.0	0.3	0.0	1.0	0.0	0.6
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.7	0.0	0.3	0.0	1.1	0.0	0.6
%ile Storage Ratio (RQ%)	0.00	0.04	0.00	0.05	0.00	0.26	0.00	0.10
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	13.4
HCM 6th LOS	B

Intersection	
Int Delay, s/veh	0.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	823	2	10	1051	8	31
Future Vol, veh/h	823	2	10	1051	8	31
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	150	150	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	895	2	11	1142	9	34

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	897	0	1488	448
Stage 1	-	-	-	-	895	-
Stage 2	-	-	-	-	593	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	753	-	115	558
Stage 1	-	-	-	-	359	-
Stage 2	-	-	-	-	515	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	753	-	113	558
Mov Cap-2 Maneuver	-	-	-	-	241	-
Stage 1	-	-	-	-	359	-
Stage 2	-	-	-	-	507	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	14.1
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	439	-	-	753	-
HCM Lane V/C Ratio	0.097	-	-	0.014	-
HCM Control Delay (s)	14.1	-	-	9.9	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.3	-	-	0	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	817	2	2	1057	3	8
Future Vol, veh/h	817	2	2	1057	3	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	150	150	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	888	2	2	1149	3	9

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	890	0	1467	444
Stage 1	-	-	-	-	888	-
Stage 2	-	-	-	-	579	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	757	-	119	561
Stage 1	-	-	-	-	362	-
Stage 2	-	-	-	-	524	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	757	-	119	561
Mov Cap-2 Maneuver	-	-	-	-	247	-
Stage 1	-	-	-	-	362	-
Stage 2	-	-	-	-	522	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	13.9
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	417	-	-	757	-
HCM Lane V/C Ratio	0.029	-	-	0.003	-
HCM Control Delay (s)	13.9	-	-	9.8	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0	-