Pittsburg Harbor View

Transportation Impact Assessment

Prepared for:
The City of Pittsburg
Raney Planning and Management

June 2022

WC21-3853

FEHR PEERS

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1. Introduction

This report presents the analysis and findings of the Transportation Impact Assessment (TIA) prepared for the Pittsburg Harbor View development (Project) proposed in the City of Pittsburg. This chapter discusses the TIA purpose, study locations and analysis scenarios, analysis methods, criteria used to identify significant impacts, and report organization.

Study Purpose and Project Description

The study's purpose is to evaluate the potential transportation impacts of the Project, located at 420 Third Street in Pittsburg, California, as shown in **Figure 1**. The site is currently unoccupied land. The proposed project would develop 207 single-family dwelling units and 20 multi-family dwelling units. The Project site plan is shown on **Figure 2.**

Vehicular access to the proposed development would be provided by new full movement driveways on East Third Steet and Harbor Street, as illustrated on Figure 2. Regional access is available via a full movement interchange with State Route 4 at Railroad Avenue.

Study Locations and Analysis Scenarios

Potential project violations of the city's established level of service policies at study area roadway facilities were determined by measuring the effect project traffic would have on intersections in the vicinity of the project site during the weekday morning (7:00 to 9:00 AM) and afternoon (4:00 to 6:00 PM) peak periods. The following intersections were selected based on a review of the Project location, estimates of the added traffic from the Project, and locations of planned roadways in the area:

1. East 8th Street / Railroad Avenue
2. East 8th Street / Harbor Street
3. East 10th Street / Railroad Avenue
4. Railroad Avenue / Civic Avenue
5. Railroad Avenue / State Route 4 Westbound Ramps
6. Railroad Avenue / State Route 4 Eastbound Ramps
7. East 10th Street / Harbor Street

Figure 1

Project Site Vicinity

WC21-3853_1_StudyArea

Product No.	Net du/ac	Arch product	Plan	Bed/bath	Notes	SF	Unit count
1	15-16	36' x 55'	Plan 1	3/3		1,752	33
			Plan 2	3/3.5		1,829	33
			Plan 3	3/3		1,851	33
			Plan 1-LW	3/3		1,752	2
						Total:	101
2	11-13	42' x 55'	Plan 1	3/3.5		1,980	35
			Plan 2	4/3.5		2,060	35
			Plan 3	4/3.5		2,120	35
						Total:	105
3	26-27	Live/Work	Plan 1	1/1		1,270	20
						Total:	20
						Grand Total:	226

Site Plan Source: Urban Arena, 12/20/21

Figure 2

Conceptual Project Site Plan

8. California Avenue / Harbor Street

The following scenarios were evaluated:

- ***Existing*** – Existing (2021) conditions based on recent traffic counts.
- ***Existing with Project*** – Existing (2021) conditions with project-related traffic.
- ***Near-Term without Project*** – Existing (2021) conditions with approved projects within the study area that could be constructed over the next five to ten years. Additional details are provided in Chapter 5.
- ***Near-Term with Project*** – Near-Term conditions with project-related traffic.
- ***Cumulative without Project*** – Forecasts for the cumulative scenario are based on traffic growth trends in traffic forecasts for the study area in the most recent Contra Costa Transportation Authority Countywide travel demand model. Additional details are provided in Chapter 6.
- ***Cumulative with Project*** – Future forecast conditions with project-related traffic.

Analysis Methods

Vehicle Miles of Travel

"VMT" or Vehicle Miles of Travel is a measure used to describe automobile use on a daily basis. VMT is the product of the total number of vehicles traveling and the number of miles traveled per vehicle. In December 2018, the Governor's Office of Planning and Research (OPR) finalized new CEQA guidelines (CEQA Guidelines section 15064.3) that identify VMT as the most appropriate criterium to evaluate a project's transportation impacts.

The implementation of Senate Bill (SB) 743 eliminated the use of criteria such as auto delay, level of service, and similar measures of vehicle capacity of traffic congestion as the basis for determining significant impacts as part of CEQA compliance. The SB 743 VMT criteria promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses. In compliance with SB 743 mandates, VMT was employed to assess the impacts of this project on the transportation network.

Level of Service

The operations of roadway facilities are described with the term "level of service" (LOS). LOS is a qualitative description of traffic flow from a vehicle driver's perspective based on factors such as speed, travel time, delay, and freedom to maneuver. Six levels of service are defined ranging from LOS A (free-

flow conditions) to LOS F (over capacity conditions). LOS E corresponds to operations "at capacity." When volumes exceed capacity, stop-and-go conditions result, and operations are designated LOS F.

Signalized Intersections

Traffic conditions at signalized intersections were evaluated using methods developed by the Transportation Research Board (TRB), as documented in the *Highway Capacity Manual, 6th Edition* (HCM 6th Edition) for vehicles using the analysis software Synchro 11.0. The HCM method calculates control delay at an intersection based on inputs such as traffic volumes, lane geometry, signal phasing and timing, pedestrian crossing times, and peak hour factors. Control delay is defined as the delay directly associated with the traffic control device (i.e., a stop sign or a traffic signal) and specifically includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. The relationship between LOS and control delay is summarized in **Table 1.**

Unsignalized Intersections

For unsignalized (all-way stop controlled and side-street stop controlled) intersections, the HCM 6th Edition method for unsignalized intersections was used. With this method, operations are defined by the average control delay per vehicle (measured in seconds). The control delay incorporates delay associated with deceleration, acceleration, stopping, and moving up in queue. **Table 2** summarizes the relationship between LOS and delay for unsignalized intersections. At side-street stop-controlled intersections, the delay is calculated for each stop-controlled movement, the left turn movement from the major street, as well as the intersection average. The intersection average delay and highest movement/approach delay are reported for side-street stop-controlled intersections.

Table 1: Signalized Intersection LOS Criteria

Level of Service	Description	Delay in Seconds
A	Progression is extremely favorable and most vehicles arrive during the green phase. Most vehicles do not stop at all. Short cycle lengths may also contribute to low delay.	≤ 10.0
B	Progression is good, cycle lengths are short, or both. More vehicles stop than with LOS A, causing higher levels of average delay.	> 10.1 to 20.0
C	Higher congestion may result from fair progression, longer cycle lengths, or both. Individual cycle failures may begin to appear at this level, though many still pass through the intersection without stopping.	> 20.1 to 35.0
D	The influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high V/C ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.	> 35.1 to 55.0

E	This level is considered by many agencies to be the limit of acceptable delay. These high delay values generally indicate poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences.	> 55.1 to 80.0
F	This level is considered unacceptable with oversaturation, which is when arrival flow rates exceed the capacity of the intersection. This level may also occur at high V/C ratios below 1.0 with many individual cycle failures. Poor progression and long cycle lengths may also be contributing factors to such delay levels.	> 80.0

Source: *Highway Capacity Manual, 6th Edition*, Transportation Research Board, 2017.

Table 2: Unsignalized Intersection LOS Criteria

Level of Service	Description	Delay in Seconds
A	Little or no delays	≤ 10.0
B	Short traffic delays	> 10.1 to 15.0
C	Average traffic delays	> 15.1 to 25.0
D	Long traffic delays	> 25.1 to 35.0
E	Very long traffic delays	> 35.1 to 50.0
F	Extreme traffic, delays where intersection capacity exceeded	> 50.0

Source: *Highway Capacity Manual, 6th Edition*, Transportation Research Board, 2017.

Regulatory Setting and Significance Criteria

Thresholds of Significance for VMT

In response to Senate Bill 743 (SB 743), the Office of Planning and Research (OPR) updated the California Environmental Quality Act (CEQA) guidelines to include new transportation-related evaluation metrics. Draft guidelines were developed in August 2014, with final guidelines published in November 2017 incorporating public comments from the August 2014 and January 2016 guidelines. In December 2018, the California Natural Resources Agency certified and adopted the CEQA Guidelines update package along with an updated Technical Advisory related to Evaluating Transportation Impacts in CEQA (December 2018). Full compliance with the guidelines is now required, and vehicle-delay based level of service calculations cannot be used to evaluate the environmental impacts of projects on the transportation system.

On July 15, 2020, the Contra Costa Transportation Authority (CCTA) adopted criteria, standards, and thresholds for the assessment of VMT (CCTA, *Approval of the Vehicle Miles Traveled Analysis Methodology for Land Use Projects in the Growth Management Program*, July 15, 2020). The methods and thresholds adopted by CCTA follow the guidance and recommendations of OPR pertaining to the implementation of SB 743.

As the City of Pittsburg has not yet formally adopted VMT criteria, standards, or thresholds at the time this report was prepared, this assessment follows the current OPR and CCTA guidance related to VMT, as described below:

- Residential Projects should use the home-based VMT per capita metric to evaluate their project generated VMT. The project generated home-based VMT per resident constitutes a significant impact if it is higher than 85% of the home-based VMT per resident in the subject municipality or unincorporated Authority subregion (for areas outside of municipalities) or 85% of the existing county-wide average home-based VMT per resident, whichever is less stringent.
- Employment-Generating Projects should use the home-work VMT per worker metric for their project generated VMT estimates. The project generated home-work WMT per worker constitutes a significant impact if it is higher than 85% of the home-work VMT per worker in the subject municipality or unincorporated Authority subregion (for areas outside of municipalities) or 85% of the existing Bay Area region-wide average home-work VMT per worker, whichever is less stringent.
- Other Uses and Projects need to be analyzed using a methodology developed by the lead agency specifically for the project, taking into account the specific methodologies and thresholds identified in *Approval of the Vehicle Miles Traveled Analysis Methodology for Land Use Projects in the Growth Management Program,* CCTA, July 15, 2020.
- Mixed-Use Projects may be analyzed using a combination of techniques.

CCTA guidance defines the following criteria that lead agencies can apply to screen projects out of conducting project-level VMT analysis:

- CEQA Exemption – Any project that is exempt from CEQA is not required to conduct a VMT analysis.
- Small projects – Small projects can be presumed to cause a less-than-significant VMT impact. Small projects are defined as having 10,000 square feet or less of non-residential space or 20 residential units or less, or otherwise generating less than 836 VMT per day.
- Local-Serving Uses – Projects that consist of Local-Serving Uses can generally be presumed to have a less-than-significant impact absent substantial evidence to the contrary, since these types of projects will primarily draw users and customers from a relatively small geographic area that will lead to short-distance trips and trips that are linked to other destinations.
- Projects Located in Transit Priority Areas (TPAs) – Projects located within a TPA can be presumed to have a less-than-significant impact absent substantial evidence to the contrary.
- Projects located in Low VMT Areas – residential and employment-generating projects located within a low VMT-generating area can be presumed to have a less-than-significant impact absent substantial evidence to the contrary. A Low VMT area is defined as follows:

- For housing projects: Cities, towns and unincorporated portions within Contra Costa that have existing home-based VMT per capita that is 85% or less of the existing county-wide average.
- For employment-generating projects: Cities, towns, and unincorporated portions within Contra Costa that have existing home-work VMT per worker that is 85% or less of the existing regional average.

Additional CEQA Thresholds

The following thresholds of significance were developed based on City of Pittsburg and East Contra Costa County Action Plan policies, as well as the CEQA Checklist criteria.

Would the project:

A. Conflict with a program, plan, ordinance or policy addressing the circulation system, including roadway, transit, bicycle and pedestrian facilities?

Transit System - The project would create a significant impact related to transit service if the following criteria is met:

1. The project interferes with existing transit facilities or precludes the construction of planned transit facilities.

Bicycle System - The project would create a significant impact related to the bicycle system if any of the following criteria are met:

1. Disrupt existing bicycle facilities; or
2. Interfere with planned bicycle facilities; or
3. Create inconsistencies with adopted bicycle system plans, guidelines, policies, or standards.

Pedestrian System - The project would create a significant impact related to the pedestrian system if any of the following criteria are met:

1. Disrupt existing pedestrian facilities; or
2. Interfere with planned pedestrian facilities; or
3. Create inconsistencies with adopted pedestrian system plans, guidelines, policies, or standards.

B. Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)1?

[1] This section of the CEQA Guidelines relates to the evaluation of vehicle miles of travel (VMT).

C. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

D. Result in inadequate emergency access?

Non-CEQA Evaluation Criteria

Although not a CEQA metric, intersection levels of service were evaluated in this study for General Plan compliance and to identify potential transportation improvements that could be implemented as part of the project to improve the overall operations of the transportation system for all travel modes. The City of Pittsburg generally strives to maintain level of service D operations for signalized intersections, unless other standards are adopted by CCTA or other regional agency.

The project could have a noticeable effect on local and regional travel if it would cause an increase in traffic which is substantial in relation to the traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, or delay and congestion at intersections), or change the condition of an existing street (e.g., street closures, changing direction of travel) in a manner that would substantially change access or traffic load and capacity of the street system.

CEQA Guidelines Appendix G, the City of Pittsburg General Plan, Contra Costa Transportation Authority's (CCTA) Technical Procedures, and the East County's Action Plan for Routes of Regional Significance were referenced to determine the criteria against which impacts should be evaluated as part of this analysis, as described below. The project would have a significant impact if it would:

E. Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency (CMA) for designated roads or highways.

Signalized Intersections - Project-related operational impacts on the signalized study intersections in the City of Pittsburg are considered significant if:

1. Project-related traffic causes the Level of Service (LOS) rating to deteriorate from low-LOS D (40 seconds) or better to LOS E or F, or from LOS E to LOS F for intersections not along a Regional Route of Significance in a Suburban setting as designated by the City of Pittsburg General Plan;

2. Project-related traffic causes the Level of Service (LOS) rating to deteriorate from mid-LOS D (50-seconds) or better to LOS E or F, or from LOS E to LOS F for intersections along Regional Routes of Significance (all study intersections);

3. Project-related traffic increases the average intersection delay by more than 5 seconds for intersections already operating at an unacceptable LOS without the project.

Unsignalized Intersections - Project-related operational impacts on unsignalized intersections are considered significant if:

4. Project generated traffic causes the worst-case movement (or average of all movements for all-way stop-controlled intersections) to deteriorate from LOS E or better to LOS F, and the signal warrant is met.

5. For intersections already operating at an unacceptable LOS without the project it is considered a significant impact if:

    - Project traffic results in satisfaction of the peak hour volume traffic signal warrant;
    - Project traffic increases the minor movement delay by more than 30 seconds; or
    - Where the peak hour volume signal warrant is met without Project traffic and delay cannot be measured, the project increases traffic by 10 or more vehicles per lane on the controlled approach.

Report Organization

This report is divided into 8 chapters as described below:

- **Chapter 1 – Introduction** discusses the purpose and organization of the report.
- **Chapter 2 – Existing Conditions** describes the transportation system in the Project vicinity, including the surrounding roadway network morning and evening peak period intersection turning movement volumes, existing bicycle, pedestrian, and transit facilities, and intersection operations.
- **Chapter 3 – Project Characteristics** presents relevant project information, such as the Project components and project trip generation, distribution, and assignment.
- **Chapter 4 – Existing with Project Traffic Conditions** addresses the existing conditions with the Project and discusses project vehicular impacts.
- **Chapter 5 – Near-Term Traffic Conditions** addresses the near-term future conditions, both without and with the Project and discusses project vehicular impacts.
- **Chapter 6 – Cumulative Traffic Conditions** addresses the long-term future conditions, both without and with the Project and discusses project vehicular impacts.

- **Chapter 7 – Site Plan Review** describes Project access and circulation for all travel modes.
- **Chapter 8 – Vehicle Miles of Travel** presents the results of the VMT assessment conducted for the Project.

2. Existing Conditions

This chapter describes transportation facilities in the Project study area, including the surrounding roadway network, transit, pedestrian, and bicycle facilities in the Project site vicinity. Existing intersection operations are also described.

Roadway System

The Project site is surrounded by existing residential, school, and open space uses. Pittsburg is located in eastern Contra Costa County, adjacent to the cities of Bay Point, Antioch, and Concord located west, southeast, and southwest respectively.

Regional access to the site is provided by State Route 4 and Railroad Avenue; East Third Street, East Eight Street and Harbor Street provide local access. The following roadways would access to the site and are most likely to experience direct traffic effects, if any, from the proposed Project:

Regional Access

Railroad Avenue is defined as a Route of Regional Significance in CCTA's *East County Action Plan for Routes of Regional Significance*, connecting to the cities of Walnut Creek and Clayton. It is a north-south major arterial with two travel lanes in each direction and a center left turn lane. In the Project vicinity, sidewalks with no buffers and sidewalks with landscaped buffers are provided on both sides at various locations along Railroad Avenue. Bicycle facilities are present south of East Tenth Street and north of Civic Avenue. The posted speed limit is 35 mph.

State Route 4 (SR-4) is defined as a Route of Regional Significance in CCTA's *East County Action Plan for Routes of Regional Significance*. It is an east-west freeway that extends from Hercules in the west to Stockton and beyond in the east. The facility is an eight-lane freeway within the study area, with interchanges at Railroad Avenue. All signalized intersections at its on and off-ramps are operated by the California Department of Transportation (Caltrans). All interchanges at Railroad Avenue are signalized.

Local Access

East Third Street is an east-west local road with two travel lanes in each direction west of the project site, and one travel lane in each direction east of the project site. Sidewalks are provided between Riverway Drive and Railroad Avenue on both sides with no buffers. Sidewalks are provided between Riverway Drive and Harbor Street on the southern side with no buffers. There are no sidewalks on East Third Street east of Harbor Street. The posted speed limit is 25 mph. Bicycle facilities are not present. East Third Street

serves residential communities west of the Project site and industrial developments east of the Project site. A proposed entrance to the Project site is located on East Third Street.

Harbor Street is a north-south local road with two travel lanes in each direction and a center left turn lane. Sidewalks with no buffers and bicycle lanes are provided. Currently, there is no sidewalk on the west side of Harbor Street abutting Project site. The posted speed limit is 35 mph. Harbor Street serves residential communities located south of the Project site. A proposed entrance to the Project site is located on Harbor Street.

East Eighth Street is an east-west local road with one travel lane in each direction. Sidewalks with landscaped buffers and bicycle lanes are provided. The posted speed limit is 25 mph. East Eighth Street serves the residential communities east of the Project site and provides access to Harbor Street.

Existing Pedestrian and Bicycle Facilities

Pedestrian facilities in the study area include sidewalks, crosswalks, pedestrian signals and multi-use trails. Three- to ten-foot sidewalks are provided on most roadways in the study area, although a number of gaps exist. Crosswalks are provided at signalized and unsignalized intersections. Pedestrian push-button actuated signals are provided at signalized intersections in the study area.

Bicycle facilities in Pittsburg include the following:

- **Bike paths (Class I)** – Bike paths provide a completely separate right-of-way and are designated for the exclusive use of people riding bicycles and walking with minimal cross-flow traffic. Such paths can be well situated along creeks, canals, and rail lines. Class I Bikeways can also offer opportunities not provided by the road system by serving as both recreational areas and/or desirable commuter routes.

- **Bike lanes (Class II)** – Bike lanes provide designated street space for bicyclists, typically adjacent to the outer vehicle travel lanes. Bike lanes include special lane markings, pavement legends, and signage. Bike lanes may be enhanced with painted buffers between vehicle lanes and/or parking, and green paint at conflict zones (such as driveways or intersections).

- **Bike routes (Class III)** – Bike routes provide enhanced mixed-traffic conditions for bicyclists through signage, striping, and/or traffic calming treatments, and to provide continuity to a bikeway network. Bike routes are typically designated along gaps between bike trails or bike lanes, or along low-volume, low-speed streets. Bicycle boulevards provide further enhancements to bike routes to encourage slow speeds and discourage non-local vehicle traffic via traffic diverters, chicanes, traffic circles, and/or speed tables. Bicycle boulevards can also feature special wayfinding signage to nearby destinations or other bikeways.

Within the Project vicinity, Railroad Avenue, Harbor Street and East Eighth Street provide Class II bicycle facilities.

Existing Transit Service

The Eastern Contra Costa Transit Authority (Tri Delta Transit) provides transit service in eastern Contra Costa County, serving the communities of Brentwood, Antioch, Oakley, Concord, Discovery Bay, Bay Point and Pittsburg. The following routes operate in the vicinity of the Project site:

- Route 380 - Pittsburg-Bay Point BART/Antioch BART (Weekdays only)
- Route 381 - Pittsburg Marina/Los Medanos College Pittsburg (Weekdays only)
- Route 387 - Antioch BART/Pittsburg-Bay Point BART (Weekdays only)
- Route 388 - Pittsburg-Bay Point BART/Kaiser Antioch Medical Center (Weekdays only)
- Route 390 - Antioch BART/Pittsburg-Bay Point BART (Weekdays only/Commute hours)
- Route 391 – Brentwood Park & Ride/Pittsburg Center Station (Weekdays only)
- Route 392 - Antioch BART/Pittsburg-Bay Point BART (Weekends and Holidays)
- Route 394 - Antioch BART/Pittsburg-Bay Point BART (Weekends and Holidays)
- Route 396 - Somersville Towne Center/Bay Point (Weekends and Holidays)

Route 387 operates along Harbor Street and East Third Street in the Project site vicinity. This route provides connections to the other Tri Delta routes as well as the Pittsburg Transit Center, Pittsburg/Bay Point BART Station and Antioch BART station.

In addition to the regular transit service to the study area, dial-a-ride door-to-door service within Eastern Contra Costa County is provided by Tri Delta Transit for disabled people of all ages and senior citizens.

Bay Area Rapid Transit (BART) provides fixed rail transit to eastern Contra Costa County. The Yellow Line-Antioch-SFO/Millbrae line provides access to two stations located in Pittsburg. The Pittsburg/Bay Point station is approximately five miles west of the Project site. The Pittsburg Center station is approximately one and one-half miles south of the Project site. Weekday service is provided on approximately 15-minute headways and weekend service is provided on approximately 20-minute headways. The Antioch-SFO/Millbrae Line connects to key regional employment centers, including Concord, Pleasant Hill, Walnut Creek, Oakland and San Francisco. Transfers to other lines can be made in Oakland.

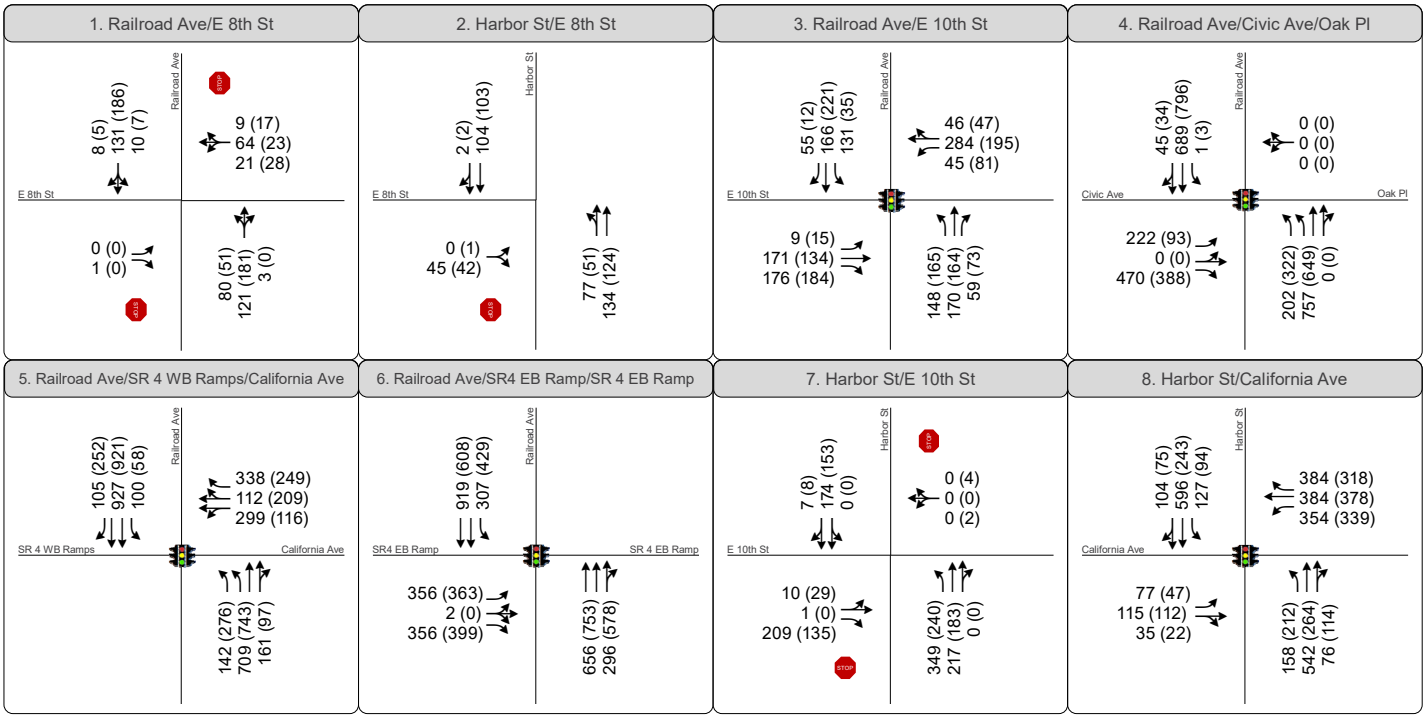
Existing Traffic Counts

Weekday morning (7:00 to 9:00 AM) and evening (4:00 to 6:00 PM) peak period intersection turning movement counts were collected at the study intersections in November 2021 and April 2022 with area schools in normal sessions. Peak hour intersection vehicle volumes are summarized on **Figure 3** along with existing lane configurations and traffic controls. The traffic counts for existing conditions are provided in **Appendix A**.

Existing Intersection Levels of Service

Existing intersection lane configurations, signal timings, and peak hour turning movement volumes were used to calculate the LOS for the study intersections during each peak hour. Synchro 11.0 software program was used to analyze all intersections. The existing levels of service are presented in **Table 3.** Observed peak hour factors[2] were used at all intersections for the existing analysis. Detailed intersection LOS calculation worksheets are presented in **Appendix B**.

[2] The peak hour factor is the relationship between the peak 15-minute flow rate and the full hourly volume: PHF = Hourly volume / (4 x (volume during the peak 15 minutes of flow)). The analysis level of served is based on peak rates of flow occurring within the peak hour because substantial short term fluctuations typically occurring during an hour.



XX (YY) AM (PM) Peak Hour Traffic Volumes Signalized Intersection Stop Sign

Project Site # Study Intersection

Figure 3

Existing Peak Hour Intersection Traffic Volumes, Lane Configurations, and Traffic Controls

Table 3: Existing Conditions Peak Hour Intersection LOS Summary

Intersection	Control[1]	Peak Hour	LOS Standard	Delay[3]	LOS
1. East 8th Street / Railroad Avenue	SSSC	AM PM	Mid-LOS D (30 seconds)	6.0 (20.7) 2.8 (14.1)	A (C) A (B)
2. East 8th Street / Harbor Street	SSSC	AM PM	Mid-LOS D (30 seconds)	2.9 (9.1) 2.4 (8.9)	A (A) A (A)
3. East 10th Street / Railroad Avenue	Signal	AM PM	Mid-LOS D (50 seconds)	20.9 20.0	C B
4. Railroad Avenue / Civic Avenue	Signal	AM PM	Mid-LOS D (50 seconds)	19.2 17.7	B B
5. Railroad Avenue / SR-4 WB Ramps	Signal	AM PM	Mid-LOS D (50 seconds)	38.8 40.4	D D
6. Railroad Avenue / SR-4 EB Ramps	Signal	AM PM	Mid-LOS D (50 seconds)	23.3 53.2	C D
7. East 10th Street / Harbor Street	SSSC	AM PM	Mid-LOS D (30 seconds)	6.0 **(45.6)** 5.2 (20.8)	A **(E)** A (C)
8. California Avenue / Harbor Street	Signal	AM PM	Mid-LOS D (50 seconds)	**96.3** **89.9**	**F** **F**

Notes:
1. Traffic control type (Signal = Signalized; SSSC = Side-Street Stop-Controlled)
2. AM = Weekday morning peak hour, PM = Weekday evening peak hour
3. Whole intersection average delay reported for signalized intersections. Side-street stop-controlled delay presented as Whole Intersection Average Delay (Worst Movement Delay). Delay calculated per HCM 6th methodologies.
Bold indicates unacceptable operations.
Source: Fehr & Peers, 2022.

According to the City of Pittsburg LOS standards, two intersections operate unacceptably under existing conditions:

- Intersection 7: East 10th Street / Harbor Street AM peak worst movement operates at LOS E
- Intersection 8: California Avenue / Harbor Street AM and PM peaks operate at LOS F

3. Project Characteristics

This chapter provides an overview of the proposed Project components and addresses the proposed project trip generation, distribution, and assignment characteristics, allowing for an evaluation of project impacts on the surrounding roadway network. The amount of traffic associated with the Project was estimated using a three-step process:

4. **Trip Generation** – The *amount* of vehicle traffic entering/exiting the Project site was estimated.
5. **Trip Distribution** – The *direction* trips would use to approach and depart the site was projected.
6. **Trip Assignment** – Trips were then *assigned* to specific roadway segments and intersection turning movements.

Project Description

The Project site is located at 420 Third Street, as shown in **Figure 1**. The site is currently unoccupied land. The proposed project would construct 207 single-family dwelling units and 20 multi-family dwelling units. The Project site plan is shown on **Figure 2.**

The proposed vehicular access to the residential development would be provided by new driveways on East Third Steet and Harbor Street. Regional access is available via a full movement interchange with State Route 4 at Railroad Avenue.

Trip Generation

Trip generation refers to the process of estimating the amount of vehicular traffic a project would add to the surrounding roadway system. Estimates are created for the daily condition and for the peak one-hour period during the morning and evening commute when traffic volumes on the adjacent streets are typically the highest. Project trip generation was estimated using rates from the Institute of Transportation Engineers (ITE) *Trip Generation Manual* (11th Edition).

Trip generation estimates were developed for the proposed Project and are presented in **Table 4**. The project is expected to generate approximately 2,088 daily vehicle trips, including approximately 153 morning peak hour trips and approximately 206 evening peak hour trips. This includes the trip generating potential of both the single-family detached and multi-family residences.

Table 4: Trip Generation Summary

Land Use	Size	Daily	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Single Family Detached Housing[1]	207 Dwelling Units	1,953	38	107	145	122	73	195
Multi-Family Housing[2]	20 Dwelling Units	135	1	7	8	6	5	11
Total New Vehicle Trips		***2,088***	***39***	***114***	***153***	***128***	***78***	***206***

1. ITE land use category 210 – Single-Family Detached Housing (Adj Streets, 7-9A, 4-6P):
   Daily: T = 9.43(X)
   AM Peak Hour: T = 0.70(X); Enter = 26%; Exit = 74%
   PM Peak Hour: T = 0.94(X); Enter = 63%; Exit = 37%
2. ITE land use category 220 – Multi-Family Housing (Adj Streets, 7-9A, 4-6P):
   Daily: T = 6.74(X)
   AM Peak Hour: T = 0.40(X); Enter = 24%; Exit = 76%
   PM Peak Hour: T = 0.51(X); Enter = 63%; Exit = 37%

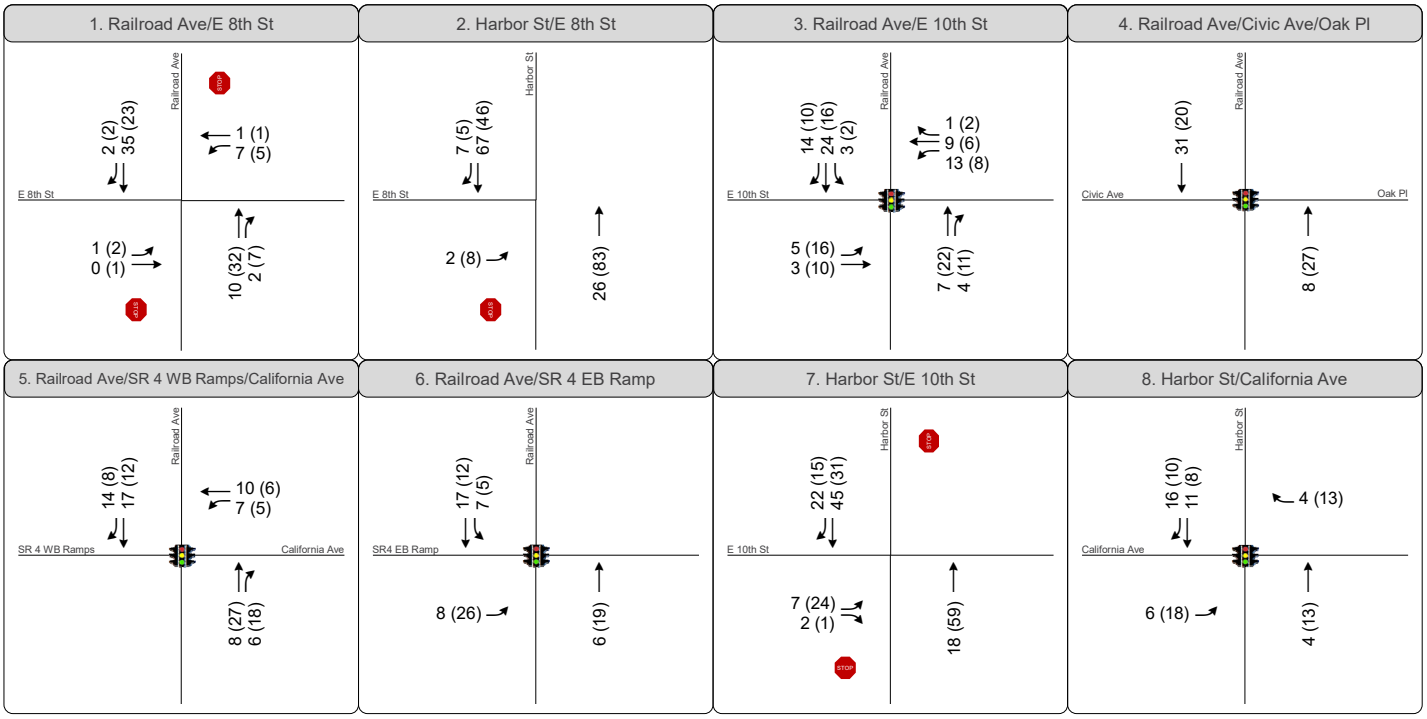
Source: *Trip Generation Manual* (11th Edition), ITE, 2017; Fehr & Peers, 2022.

Project Trip Distribution and Assignment

Project trip distribution refers to the directions of approach and departure that vehicles would take to access and leave the site. Estimates of regional project trip distribution were developed based on existing travel patterns in the area, a select zone analysis using the Contra Costa Transportation Authority (CCTA) travel demand model, and the location of complementary land uses. The resulting trip distribution percentages are shown on **Figure 4**. Project trips were then assigned to the roadway network, as shown on **Figure 5**.

Figure 4

Project Trip Distribution



XX (YY) AM (PM) Peak Hour Traffic Volumes Signalized Intersection Stop Sign

Project Site # Study Intersection

Figure 5

Project Trip Assignment

4. Existing With Project Traffic Conditions

This chapter provides an evaluation of the project's potential off-site effects on intersection levels of service under Existing with Project conditions.

Existing with Project Traffic Volumes

The Project traffic volumes on Figure 5 were added to the existing traffic volumes from Figure 3 to estimate the Existing with Project traffic volumes, as shown on **Figure 6.** An assessment of site access is provided in the site plan review.

Analysis of Existing with Project Conditions

Intersection Operations

Existing with Project intersections were evaluated using the methods descried in Chapter 1. The Existing with Project analysis results are based on the traffic volumes and intersection configurations presented on Figure 6. A comparison of Existing and Existing with Project operations results is presented in **Table 5**.

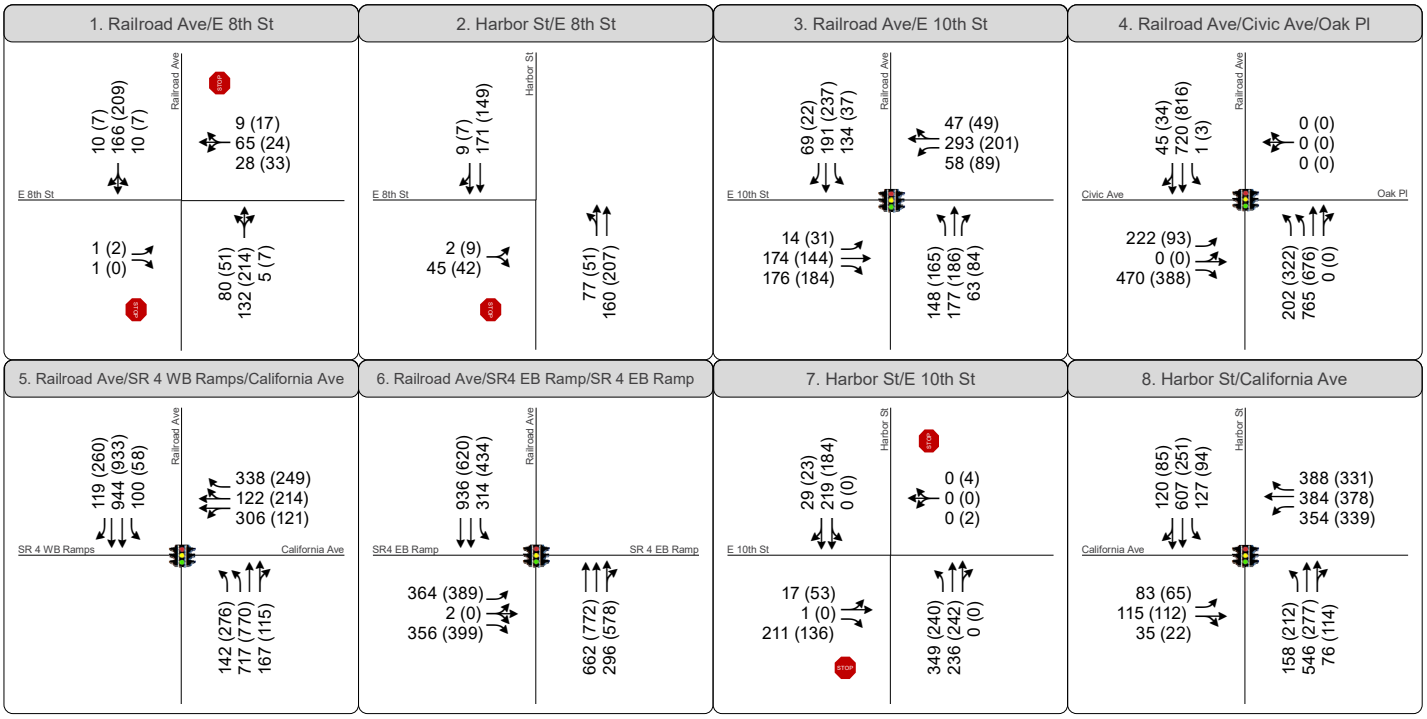
Table 5: Existing with Project Conditions Peak Hour Intersection LOS Summary

Intersection	Control[1]	Peak Hour[2]	LOS Standard	Existing		Existing with Project	
				Delay[3]	LOS	Delay[3]	LOS
1. East 8th Street / Railroad Avenue	SSSC	AM PM	Mid-LOS D (30 seconds)	6.0 (20.7) 2.8 (14.1)	A (C) A (B)	6.4 (24.2) 2.9 (15.8)	A (C) A (C)
2. East 8th Street / Harbor Street	SSSC	AM PM	Mid-LOS D (30 seconds)	2.9 (9.1) 2.4 (8.9)	A (A) A (A)	2.4 (9.8) 1.9 (9.5)	A (A) A (A)
3. East 10th Street / Railroad Avenue	Signal	AM PM	Mid-LOS D (50 seconds)	20.9 20.0	C B	21.4 20.5	C C
4. Railroad Avenue / Civic Avenue	Signal	AM PM	Mid-LOS D (50 seconds)	19.2 17.7	B B	19.0 17.4	B B
5. Railroad Avenue / SR-4 WB Ramps	Signal	AM PM	Mid-LOS D (50 seconds)	38.8 40.4	D D	39.3 40.6	D D
6. Railroad Avenue / SR-4 EB Ramps	Signal	AM PM	Mid-LOS D (50 seconds)	23.3 53.2	C D	23.4 54.2	C D
7. East 10th Street / Harbor Street	SSSC	AM PM	Mid-LOS D (30 seconds)	6.0 **(45.6)** 5.2 (20.8)	A **(E)** A (C)	6.3 **(60.9)** 5.3 (25.8)	A **(F)** A (D)
8. California Avenue / Harbor Street	Signal	AM PM	Mid-LOS D (50 seconds)	**96.3** **89.9**	**F** **F**	**101.0** **90.9**	**F** **F**

Notes:
1. Existing intersection traffic control type (SSSC = Side-Street Stop-Controlled)
2. AM = Weekday morning peak hour, PM = Weekday evening peak hour
3. Whole intersection average delay reported for signalized intersections. Side-street stop-controlled delay presented as Whole Intersection Average Delay (Worst Movement Delay). Delay calculated per HCM 6th methodologies.
Bold indicates unacceptable operations.
Underline indicates a policy violation related to Project-generated traffic.
Source: Fehr & Peers, 2022.

Existing Conditions Policy Violations and Improvements

No off-site intersection policy violations of the proposed Project were identified in the Existing with Project condition based on the established criteria and policies. While the project would add traffic to intersections function at LOS E or F, the project's contribution to conditions at those locations was not found to be in violation of the city's policies. The addition of project traffic at the East 10th Street/Harbor Street intersection would not result in signal warrants being met at this unsignalized intersection. The project would not increase vehicle delay at the California Street/Harbor Street intersection by five or more seconds.



XX (YY) AM (PM) Peak Hour Traffic Volumes Signalized Intersection Stop Sign

Project Site # Study Intersection

Figure 6

Existing with Project Peak Hour Intersection Traffic Volumes, Lane Configurations, and Traffic Controls

5. Near-Term Traffic Conditions

This chapter discusses near-term traffic conditions both without and with the Project. The near-term conditions analysis considers approved projects within the study area that are expected to be constructed and occupied in the next five to ten years.

Near-Term Roadway Assumptions

No roadway improvements were assumed at any of the study intersections for the analysis of near-term conditions. The analysis of cumulative conditions (see Chapter 6 for details) considers development within the City of Pittsburg as described in the General Plan.

Near-Term Forecasts

The near-term scenario reflects existing traffic counts plus traffic from approved and pending developments. Therefore, the near-term condition represents the likely traffic levels at the time of project completion. The latest project list from the City of Pittsburg Current Project Pipeline Map (accessed February 2022 and May 2022) was used to determine which approved and pending developments to be incorporated. Based on a review of the list, several developments were identified that would generate additional traffic through the study area. These proposed developments are listed in **Table 6** and their locations are shown on **Figure 7**.

Near-Term project vehicle trip generation was estimated using trip generation rates and equations for the proposed land uses from ITE's *Trip Generation Manual* (11th Edition). The results are provided in **Appendix C**. Traffic generated by approved developments was added to the existing traffic volumes to provide the basis for the Near-Term analysis, as presented on **Figure 8**. Project generated traffic was added to the Near-Term volumes to estimate Near-Term with Project volumes, as presented on **Figure 9**.

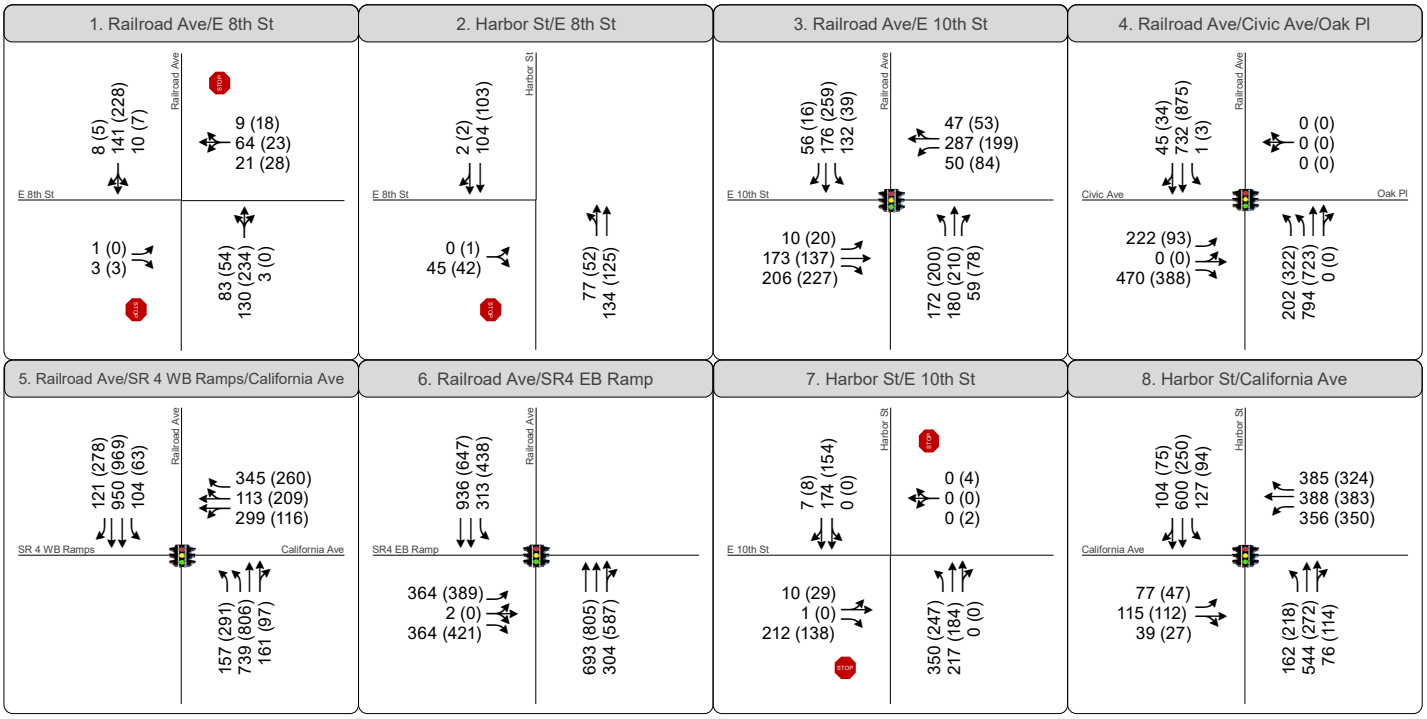
Table 6: Near-Term Approved and Pending Projects

Map Location	Project Name	Size[1]	Land Use
1	Fishermen's Catch	8,807 SF	Commercial / Institutional
2	Burlessas Building Rehabilitation	8 DU	Multi-Family Residential
3	Veterans Square Housing	30 DU	Multi-Family Residential
4	Galloway Multiplex (172 West 10th Street)	4 DU	Multi-Family Residential
5	Galloway Multiplex (345 West 10th Street)	4 DU	Multi-Family Residential
6	Galloway Multiplex (463 West 10th Street)	4 DU	Multi-Family Residential
7	Beacon Villas	57 DU	Multi-Family Residential
8	Courtyard by Marriott	68,821 SF	Commercial / Institutional
9	The Atchison Mixed-Use Development	202 DU 13,669	Multi-Family Residential Commercial / Institutional

Note:
1. DU=dwelling unit; SF=Square feet
Source: City of Pittsburg Project Pipeline, accessed May 2022

Figure 7

Near-Term Approved Project Locations

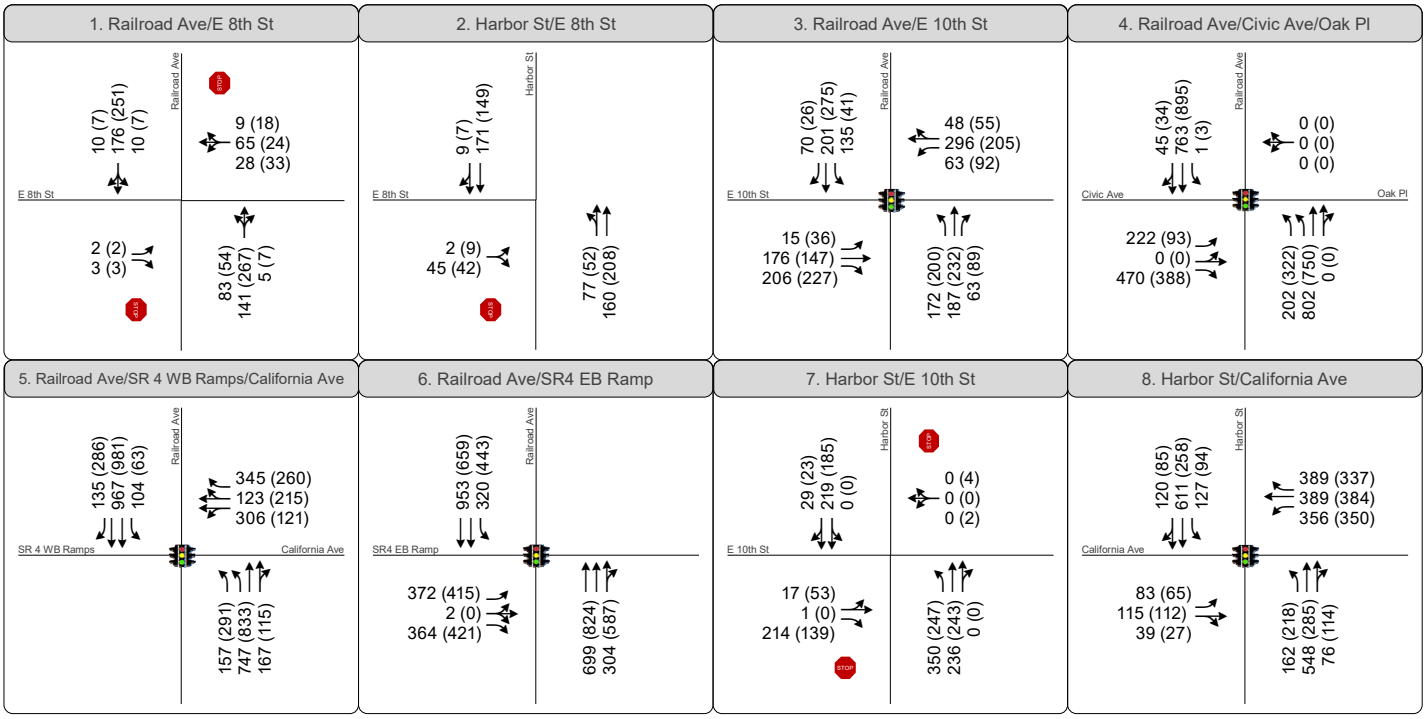


XX (YY) AM (PM) Peak Hour Traffic Volumes Signalized Intersection Stop Sign

Project Site # Study Intersection

Figure 8

Near-Term without Project Peak Hour Intersection Traffic Volumes, Lane Configurations, and Traffic Controls



XX (YY) AM (PM) Peak Hour Traffic Volumes Signalized Intersection Stop Sign

Project Site # Study Intersection

Figure 9

Near-Term with Project Peak Hour Intersection Traffic Volumes, Lane Configurations, and Traffic Controls

Analysis of Near-Term Conditions

Intersection Operations

Near-Term without and with Project conditions were evaluated using the methods described in Chapter 1. The analysis results are presented in **Table 7**, based on the traffic volumes and lane configurations presented on Figure 8 and Figure 9.

Table 7: Near-Term Conditions Peak Hour Intersection LOS Summary

Intersection	Control[1]	Peak Hour[2]	LOS Standard	Near-Term		Near-Term with Project	
				Delay[3]	LOS	Delay[3]	LOS
1. East 8th Street / Railroad Avenue	SSSC	AM PM	Mid-LOS D (30 seconds)	6.1 (22.1) 2.7 (15.9)	A (C) A (C)	6.6 (26.1) 2.8 (18.1)	A (D) A (C)
2. East 8th Street / Harbor Street	SSSC	AM PM	Mid-LOS D (30 seconds)	2.9 (9.1) 2.4 (8.9)	A (A) A (A)	2.4 (9.8) 1.9 (9.5)	A (A) A (A)
3. East 10th Street / Railroad Avenue	Signal	AM PM	Mid-LOS D (50 seconds)	21.6 21.1	C C	22.2 21.9	C C
4. Railroad Avenue / Civic Avenue	Signal	AM PM	Mid-LOS D (50 seconds)	18.7 16.9	B B	18.6 16.6	B B
5. Railroad Avenue / SR-4 WB Ramps	Signal	AM PM	Mid-LOS D (50 seconds)	39.2 41.0	D D	39.7 38.5	D D
6. Railroad Avenue / SR-4 EB Ramps	Signal	AM PM	Mid-LOS D (50 seconds)	23.5 54.4	C D	23.7 **55.4**	C **E**
7. East 10th Street / Harbor Street	SSSC	AM PM	Mid-LOS D (30 seconds)	6.0 **(46.1)** 5.3 (21.6)	A **(E)** A (C)	6.3 **(60.9)** 5.5 (26.9)	A **(F)** A (D)
8. California Avenue / Harbor Street	Signal	AM PM	Mid-LOS D (50 seconds)	**99.6** **96.2**	**F** **F**	**104.5** **97.5**	**F** **F**

Notes:
1. Existing intersection traffic control type (SSSC = Side-Street Stop-Controlled)
2. AM = Weekday morning peak hour, PM = Weekday evening peak hour
3. Whole intersection average delay reported for signalized intersections. Side-street stop-controlled delay presented as Whole Intersection Average Delay (Worst Movement Delay). Delay calculated per HCM 6th methodologies.
Bold indicates unacceptable operations.
Underline indicates a policy violation related to Project-generated traffic.
Source: Fehr & Peers, 2022.

Near-Term Conditions Policy Violations and Improvements

Off-site intersection violations of city level of service policies related to the proposed Project were found in the Near-Term with Project condition at:

- Intersection 6: Railroad Avenue / SR-4 EB Ramps degrades near-term PM acceptable LOS D to LOS E

Policy Violation Statement 1: The Railroad Avenue at SR-4 EB Ramps is projected to operate at LOS E during the PM peak hour in the near-term with project condition. The addition of project traffic would increase delay by 1.0 seconds (54.4 seconds without project to 55.4 with project) in the PM peak hour.

Improvement Recommendation 1: The measure identified to improve the poor level of service at this intersection includes the widening of the eastbound (SR 4 off-ramp) approach by one lane (from three lanes to four lanes). With the widening, the approach would provide two exclusive left turn lanes and two exclusive right turn lanes. With implementation of the improvement, the intersection would operate within acceptable standards based on the City of Pittsburg policies, as shown in **Table 8**.

Table 8: Near-Term Conditions Peak Hour Intersection LOS Summary with Improvement

Intersection	Control[1]	Peak Hour[2]	Near-Term Without Project		Near-Term with Project		Near-Term with Project with Improvement	
			Delay[3]	LOS	Delay[3]	LOS	Delay[3]	LOS
6. Railroad Avenue / SR-4 EB Ramps	Signal	AM PM	23.5 54.4	C D	23.7 **55.4**	C **E**	23.3 54.9	C D

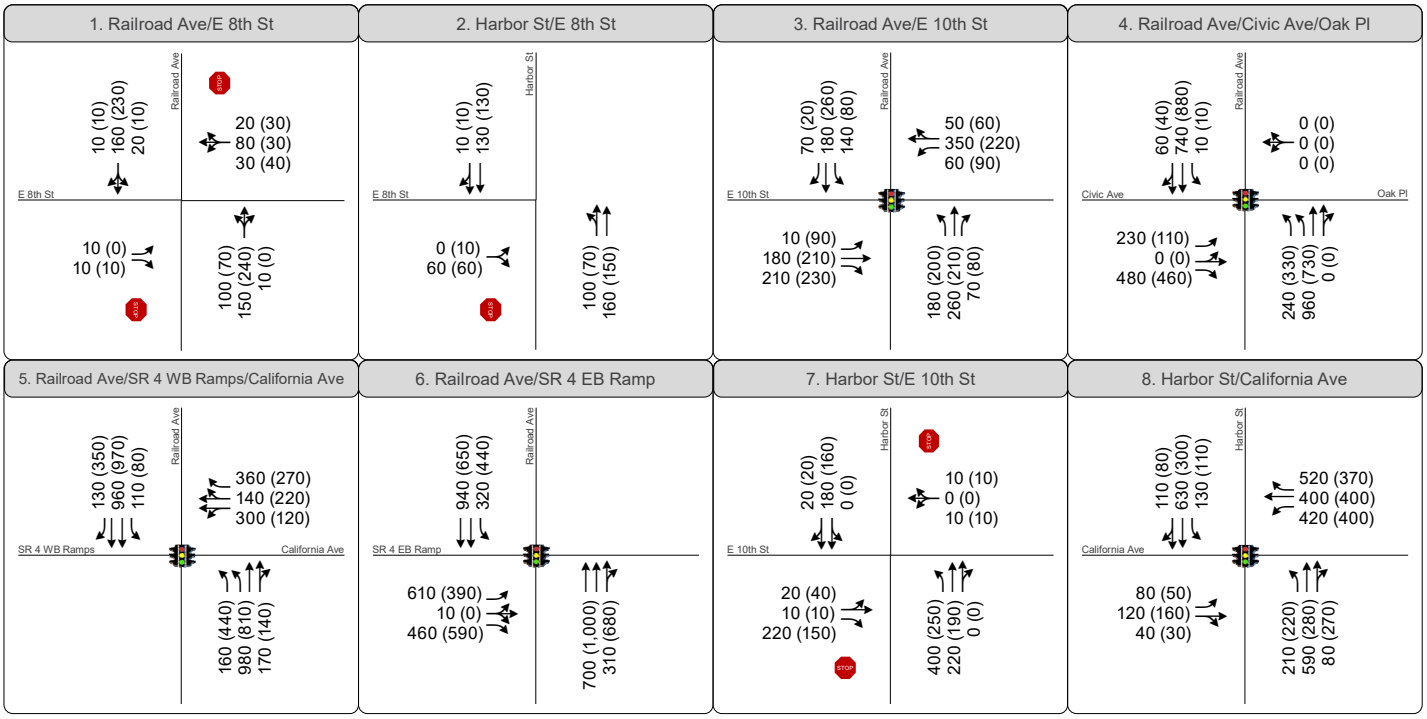
Notes:
1. Existing intersection traffic control type (SSSC = Side-Street Stop-Controlled)
2. AM = Weekday morning peak hour, PM = Weekday evening peak hour
3. Whole intersection average delay reported for signalized intersections. Side-street stop-controlled delay presented as Whole Intersection Average Delay (Worst Movement Delay). Delay calculated per HCM 6th methodologies.
Bold indicates unacceptable operations.
Source: Fehr & Peers, 2022.

6. Cumulative Traffic Conditions

This chapter discusses Cumulative traffic conditions both without and with the Project. The future conditions analysis considers development within the City of Pittsburg as described in the General Plan.

Cumulative Traffic Forecasts

To assess future growth with planned development in the City of Pittsburg, several sources of data were reviewed, including the Contra Costa County Travel Demand Model (CCTA Model), and the traffic growth trends as described in the Pittsburg General Plan EIR. Traffic forecasts within the immediate study area were reviewed to ensure that known developments were adequately reflected in the forecasts. Minor adjustments were made to the forecasts to balance traffic volumes between closely spaced intersections in the study area. The resulting Cumulative without project forecasts are presented on **Figure 10**, which are representative of conditions over the next 20 years. The Project volumes from **Figure 5** were added to the Cumulative without Project traffic volumes to represent Cumulative with Project conditions, as presented on **Figure 11**.



XX (YY) AM (PM) Peak Hour Traffic Volumes Signalized Intersection Stop Sign

Project Site # Study Intersection

Figure 10

Cumulative without Project Peak Hour Intersection Traffic Volumes, Lane Configurations, and Traffic Controls

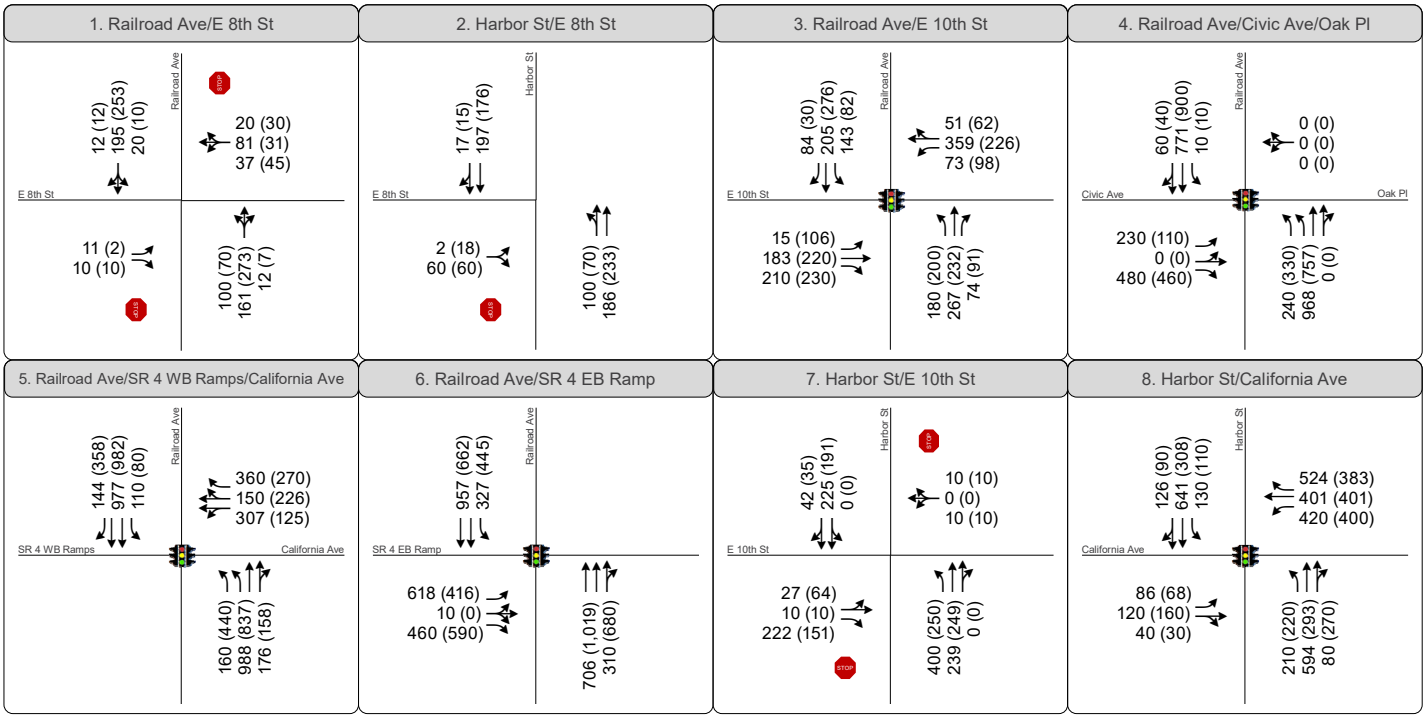


Figure 11

Cumulative with Project Peak Hour Intersection Traffic Volumes, Lane Configurations, and Traffic Controls

Analysis of Cumulative Conditions

Intersection Operations

Cumulative without and with Project conditions were evaluated using the methods described in Chapter 1. The analysis results are presented in **Table 9**, based on traffic volumes presented on Figure 10 and Figure 11.

Table 9: Cumulative Conditions Peak Hour Intersection LOS Summary

Intersection	Control[1]	Peak Hour[2]	LOS Standard	Cumulative		Cumulative with Project	
				Delay[3]	LOS	Delay[3]	LOS
1. East 8th Street / Railroad Avenue	SSSC	AM PM	Mid-LOS D (30 seconds)	10.1 (35.9) 3.8 (18.3)	B (C) A (C)	12.5 **(48.6)** 4.1 (21.0)	B **(E)** A (C)
2. East 8th Street / Harbor Street	SSSC	AM PM	Mid-LOS D (30 seconds)	3.0 (9.4) 2.8 (9.5)	A (A) A (A)	2.7 (10.2) 2.5 (10.3)	A (B) A (B)
3. East 10th Street / Railroad Avenue	Signal	AM PM	Mid-LOS D (50 seconds)	23.3 23.8	C C	24.6 25.6	C C
4. Railroad Avenue / Civic Avenue	Signal	AM PM	Mid-LOS D (50 seconds)	18.6 18.9	B B	18.5 18.6	B B
5. Railroad Avenue / SR-4 WB Ramps	Signal	AM PM	Mid-LOS D (50 seconds)	40.6 41.9	D D	41.0 39.6	D D
6. Railroad Avenue / SR-4 EB Ramps	Signal	AM PM	Mid-LOS D (50 seconds)	29.9 54.9	C D	30.1 **56.0**	C **E**
7. East 10th Street / Harbor Street	SSSC	AM PM	Mid-LOS D (30 seconds)	9.4 **(94.8)** 6.1 (24.7)	A **(F)** A (C)	11.5 **(150.2)** 6.5 (32.4)	B **(F)** A (D)
8. California Avenue / Harbor Street	Signal	AM PM	Mid-LOS D (50 seconds)	**152.2** **130.0**	**F** **F**	**158.1** **134.5**	**F** **F**

Notes:
1. Existing intersection traffic control type (SSSC = Side-Street Stop-Controlled)
2. AM = Weekday morning peak hour, PM = Weekday evening peak hour
3. Whole intersection average delay reported for signalized intersections. Side-street stop-controlled delay presented as Whole Intersection Average Delay (Worst Movement Delay). Delay calculated per HCM 6th methodologies.
Bold indicates unacceptable operations.
Underline indicates a policy violation related to Project-generated traffic.
Source: Fehr & Peers, 2022.

Cumulative Conditions Policy Violations and Improvements

Off-site intersection violations of city level of service policies related to the proposed Project were found in the Cumulative with Project condition at:

- Intersection 6: Railroad Avenue / SR-4 EB Ramps degrades cumulative PM acceptable LOS D to LOS E

- Intersection 7: East 10th Street / Harbor Street AM peak worst movement operates at LOS F and warrants a signal

- Intersection 8: California Avenue / Harbor Street increases already failing cumulative AM LOS F intersection average delay by more than 5 seconds

Policy Violation Statement 2: The Railroad Avenue at SR-4 EB Ramps is projected to operate at LOS E during the PM peak hour in the cumulative with project condition. The addition of project traffic would increase delay by 1.0 seconds (54.9 seconds without project to 56.0 with project) in the PM peak hour.

Improvement Recommendation 2: Implement Improvement Recommendation 1. The measure identified to improve the poor level of service at this intersection includes the widening of the eastbound (SR 4 off-ramp) approach by one lane (from three lanes to four lanes). With the widening, the approach would provide two exclusive left turn lanes and two exclusive right turn lanes. With implementation of the improvement, the intersection would operate within acceptable standards based on the City of Pittsburg policies, as shown in **Table 10**.

Policy Violation Statement 3: The East 10th Street at Harbor Street worst movement is projected to operate at LOS F during the AM peak hour in the cumulative with project condition. The addition of project traffic would increase delay by 55.4 seconds (94.8 seconds without project to 150.2 seconds with project) in the AM peak hour. The signal would also meet traffic signal warrants in this scenario. This is a violation of the City's level of service policies.

Improvement Measure 3: Install a traffic signal. As presented in Table 10, with the installation of a traffic signal, the intersection would function at LOS B in the morning peak hour and LOS A in the PM peak hour with cumulative plus project volumes.

Policy Violation Statement 4: The California Avenue at Harbor Street intersection is projected to operate at LOS F during the AM peak hour in the cumulative with project condition. The addition of project traffic would increase delay by 5.9 seconds (152.2 seconds without project to 158.1 seconds with project) in the AM peak hour. This is a violation of the City's level of service policies.

Improvement Measure 4: The improvement measure identified includes the addition of a second westbound left turn lane on California Avenue for movements to southbound Harbor Street. With implementation of the improvement, the intersection would operate within acceptable standards, as presented as Table 10.

Table 10: Cumulative Conditions Peak Hour Intersection LOS Summary with Improvement

Intersection	Control[1]	Peak Hour[2]	Cumulative Without Project		Cumulative with Project		Cumulative with Project with Improvement	
			Delay[3]	LOS	Delay[3]	LOS	Delay[3]	LOS
6. Railroad Avenue / SR-4 EB Ramps	Signal	AM PM	29.9 54.9	C D	30.1 **56.0**	C **E**	27.0 54.5	C D
7. East 10th Street / Harbor Street	SSSC	AM PM	9.4 **(94.8)** 6.1 (24.7)	A **(F)** A (C)	11.5 **(150.2)** 6.5 (32.4)	B **(F)** A (D)	11.2 5.9	B A
8. California Avenue / Harbor Street	Signal	AM PM	**152.2** **130.0**	**F** **F**	**158.1** **134.5**	**F** **F**	41.9 25.4	D C

Notes:
1. Existing intersection traffic control type (SSSC = Side-Street Stop-Controlled)
2. AM = Weekday morning peak hour, PM = Weekday evening peak hour
3. Whole intersection average delay reported for signalized intersections. Side-street stop-controlled delay presented as Whole Intersection Average Delay (Worst Movement Delay). Delay calculated per HCM 6th methodologies.
Bold indicates unacceptable operations.
Source: Fehr & Peers, May 2022.

7. Site Plan Review

This chapter analyzes site access and internal circulation for vehicles, pedestrians, bicycles, and emergency vehicles based on the site plan presented previously on Figure 2.

Vehicular Site Access and Circulation

Vehicular access to the Project site is proposed to be provided via two new roadway connections to the external street network, one on East Third Street and the other on Harbor Street. Figure 2 illustrates the proposed Project site plan, including both driveways, internal roadways, and parking spaces. Both project access points are proposed to have stop sign control on the driveway approaches, with the main street (East Third Street and Harbor Street) approaches being uncontrolled.

Field observed travel speeds along East Third Street in the vicinity of the Project site range between 20 and 30 miles per hour. The posted speed limit is 25 mph. Table 201.1 of the Caltrans Highway Design Manual (HDM) states that the stopping sight distance standard for a design speed of 25 miles per hour is 150 feet. Field observations of existing sight distance at the proposed driveway location on East Third Street indicate sight distances more than 150 feet. Field observed travel speeds along Harbor Street in the vicinity of the Project site range between 30 and 40 miles per hour, with the posted speed limit being 35 miles per hour. Field observations of existing sight distance at the proposed driveway location on Harbor Street indicate sight distances more than 250 feet, which would be the required stopping sight distance for a design speed of 35 miles per hour. Thus, adequate sight distance appears to be provided at both new driveway locations proposed by the Project. However, as the Project's design is finalized, these distances should be checked, and the Project should propose no features (signs, landscaping, etc.) that would compromise driveway sight distance.

> ***Site Recommendation 1:*** The final site plan for the Project should be analyzed by the Project's Civil Engineer to ensure that adequate sight distance is maintained at all driveways. No objects (landscaping, monument signs, etc.) greater than three feet in height should be allowed within the sight distance triangles at driveway intersections. Review available speed survey information from the City and adjust required sight distance if necessary.

As illustrated on Figure 2, the Project site provides parallel parking spaces along the internal roadways on a north-south axis, parallel to Harbor Street. Parking aisles are generally 26 feet in width. Trucks are expected to travel on site for moving, garbage, deliveries, and emergency access.

> ***Site Recommendation 2*:** The final site plan for the Project should illustrate truck turning templates at project driveways and internal roadways showing that applicable routes of travel

provide sufficient space for emergency vehicles, garbage trucks, moving trucks/vans and automobiles.

The project access points on Harbor Street and East Third Street would function at acceptable service levels as proposed (side street stop control).

Emergency Vehicle Access

Several factors determine whether a project has sufficient access for emergency vehicles, including:

1. Number of access points (both public and emergency access only)
2. Width of access points
3. Width of internal roadways

The project's proposed access points on East Third Street and Harbor Street would provide emergency vehicle access to the site. The 21- to 46-foot-wide roadways connecting through the site meet local regulations for street widths pertaining to emergency vehicle access.

> ***Site Recommendation 3:*** In accordance with City and Contra Costa County Fire District requirements and design standards, provide even surface pavement, appropriate signage, delineation, and other features at all emergency access points and internal roadways to accommodate emergency vehicles. As part of the Project's final design and permitting process seek and obtain approval of the Contra Costa County Fire District.

Pedestrian Access and Circulation

The Project would create a significant impact related to the pedestrian system if any of the following criteria are met:

- Disrupt existing pedestrian facilities; or
- Interfere with planned pedestrian facilities; or
- Create inconsistencies with adopted pedestrian system plans, guidelines, policies, or standards.

As previously described, a robust network of pedestrian facilities (sidewalks, crosswalks, paths, etc) are provided on the roadways surrounding the project site. The project would construct new city standard sidewalks along its East Third Street and Harbor Street frontages. The pedestrian network within the project site is currently not detailed on the conceptual site plan (Figure 2).

> ***Impact Statement 1: Pedestrian Circulation:*** As currently detailed, the project's site plan does not illustrate safe and adequate access for pedestrians through the site. Failure to provide

adequate facilities create unsafe pedestrian conditions and would be inconsistent with City and ADA requirements. This would result in a ***significant adverse impact***.

Mitigation Measure Trans-1 – Pedestrian Facilities: The project shall provide City-standard and ADA compliant sidewalks on roadways throughout the project site. At all internal roadway intersections, ADA compliant ramps shall be provided. Pedestrian paths should be identified and marked crosswalks installed at key uncontrolled pedestrian crossing locations.

Level of Significance after Mitigation – Less Than Significant – The implementation of this mitigation measure would reduce this potential impact to a less than significant level.

***Site Recommendation 4*:** Provide a pedestrian connection from the southeast corner of the Project site linking directly to the East 8th Street/Harbor Street intersection. Stripe a northbound-southbound pedestrian crosswalk on East 8th Street approach to Harbor Street to facilitate pedestrian movements.

Bike Access and Circulation

The Project would create a significant impact related to the bicycle system if any of the following criteria are met:

- Disrupt existing bicycle facilities; or
- Interfere with planned bicycle facilities; or
- Create inconsistencies with adopted bicycle system plans, guidelines, policies, or standards.

While the project does not propose any designated bicycle facilities (lanes, routes, or paths), bicycles would be permitted on all internal roadways. The project proposes no features that would be hazardous to bicycle travel and does not conflict with any bicycle facilities plans or programs.

Transit Access

The Project would create a significant impact related to transit service if the following criteria are met:

- The project interferes with existing transit facilities or precludes the construction of planned transit facilities.

The project proposes no features which conflict with existing or planned transit services. The project is not expected to result in increases in ridership on local or regional transit facilities that would exceed their capacity. Significant adverse project impacts related to transit were not identified.

Parking

The project proposes two-off street parking spaces per unit within each residence's garage. In addition, 83 on-street parking spaces would be provided within the project site. In total, 537 parking spaces would be provided within the site. On-street parking is also allowed along the project's East Third Street and Harbor Street frontages.

The estimated peak parking demand was predicted using data and rates from the *Parking Generation Manual*, *5th Edition* (2019), published by the Institute of Transportation Engineers (ITE). Based on the ITE methodology, the Project is expected to generate a total peak demand of approximately 252 spaces.

Chapter 18.78.040 of the City of Pittsburg's Municipal Code provides off-street parking and loading spaces required by land use type. Based on the City's code, 2 parking spaces per unit are required for both single-family and multifamily residential units.

The project provides sufficient parking to satisfy both the anticipated parking demand and City code requirements.

8. Vehicle Miles Traveled

This chapter discusses the governing legislation regarding vehicle-miles traveled (VMT), and the proposed project's effects on the different transportation systems in the area.

On September 27, 2013, Senate Bill (SB) 743 was signed into law. The California state legislature found that with the adoption of the Sustainable Communities and Climate Protection Act of 2008 (SB 375), the State had signaled its commitment to encourage land use and transportation planning decisions and investments that reduce vehicle miles traveled and thereby contribute to the reduction of greenhouse gas emissions, as required by the California Global Warming Solutions Act of 2006 (Assembly Bill 32). In December 2018, the Governor's Office of Planning and Research (OPR) finalized new CEQA guidelines (CEQA Guidelines section 15064.3), that identify vehicle-miles traveled as the most appropriate criteria to evaluate a project's transportation impacts.

The implementation of SB 743 eliminated the use of criteria such as auto delay, level of service, and similar measures of vehicle capacity of traffic congestion as the basis for determining significant impacts as part of CEQA compliance. The SB 743 VMT criteria promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses.

In November 2017, OPR released a technical advisory containing recommendations regarding the assessment of VMT, proposed thresholds of significance, and potential mitigation measures for lead agencies to use while implementing the required changes contained in Senate Bill 743 (SB 743). Also in November 2017, OPR released the proposed text for Section 15064.3, "Determining the Significance of Transportation Impacts," which summarized the criteria for analyzing transportation impacts for land use projects and transportation projects and directs lead agencies to "choose the most appropriate methodology to evaluate a project's vehicle miles traveled, including whether to express the change in absolute terms, per capita, per household or in any other measure." OPR recommends that for most instances a per service population threshold should be adopted and that a fifteen percent reduction below that of existing development would be a reasonable threshold.

On July 15, 2020, the Contra Costa Transportation Authority (CCTA) adopted criteria, standards, and thresholds for the assessment of VMT (CCTA, *Approval of the Vehicle Miles Traveled Analysis Methodology for Land Use Projects in the Growth Management Program*, July 15, 2020). The methods and thresholds adopted by CCTA follow the guidance and recommendations of OPR pertaining to the implementation of SB 743.

As the City of Pittsburg has not yet formally adopted VMT criteria, standards, or thresholds at the time this report was prepared, this assessment follows the current OPR and CCTA guidance related to VMT.

Analysis Methods

To conduct the VMT assessment, the CCTA travel demand model was used to estimate average daily vehicle miles of travel for each of the project's proposed components. Per CCTA guidance, home-based VMT was used to evaluate project generated VMT for the residential portion of the project. The existing baseline average daily home-based VMT per resident and the cumulative average daily home-based VMT per service population for the City of Pittsburg, Contra Costa County and the Project are presented in **Table 11** and **Table 12.**

Table 11: Baseline Home-Based VMT Per Resident

Land Use Type	Citywide		Countywide		Project
	VMT/Resident	Threshold[1]	VMT/Resident	Threshold[1]	VMT/Resident
Home Based VMT - 2021	16.2	13.8	17.2	14.6	19.0

1. The applicable threshold is 85 percent of the regional average.

Table 12: Cumulative Home-Based VMT Per Resident

Land Use Type	Citywide	Project
	VMT/Service Population	VMT/Service Population
Home Based VMT - 2040	6.8	6.8

A select zone analysis was conducted using the CCTA model whereby all the trips generated by each of the project's components were tracked through the transportation system. Based on this analysis, the proposed Project is estimated to generate 19.0 daily vehicle miles of travel per resident. This baseline VMT is above the countywide threshold of 14.6 vehicle miles of travel per resident and the citywide threshold of 13.8 vehicle miles of travel per resident.

The cumulative VMT analysis compares the project's cumulative effect on VMT within the entire county using the boundary method. VMT between no project and plus project scenario. As presented in Table 13, the cumulative VMT within the city and county, measured on a service population basis, is essentially the same with and without the project.

Impact Statement 2: Home-Based Project Generated VMT – Project Residents: The results of the VMT analysis indicate that the project would contribute to an increase in home-based vehicle miles of travel on a per-capita basis as the project adds a housing development that would require residents to travel longer-than-average distances to meet their daily needs. Future project residents are expected to generate approximately 19.0 vehicle miles of travel per resident per day, which is substantially higher than the existing City or County-wide averages. Based on OPR and CCTA guidance this would be considered a ***significant adverse impact.***

Mitigation Measure Trans-2: Prepare and Implement Residential Travel Demand Management (TDM Plan) - Prior to issuance of residential building permits, the project applicant shall develop a TDM Plan for the residential components of the proposed project, including any anticipated phasing, and shall submit the TDM Plan to the City for review and approval. The TDM Plan shall identify trip reduction strategies as well as mechanisms for funding and overseeing the delivery of trip reduction programs and strategies. Trip reduction strategies applicable to the residential portions of the proposed project may include, but are not limited to, the following:

a. Increase Transit Accessibility
b. Provide Traffic Calming Measures
c. Provide Carpooling Programs
d. Implement Car-Sharing Program
e. Provide a Transit Riders Guide
f. Provide an Online TDM Information Center
g. Increase Bicycle and Pedestrian Facilities/Amenities
h. Free Trial Rides on Transit Services
i. Implement a Subsidized or Discounted Transit Program

Level of Significance after Mitigation – Significant and Unavoidable – While the implementation of a robust TDM program will likely reduce the amount of residential VMT associated with the project, the magnitude of the reduction is unlikely to reduce the impact to a less than significant level based on the available evidence.

Appendix A: Counts

Prepared by National Data & Surveying Services

Railroad Ave & E 8th St

Peak Hour Turning Movement Count

ID: 21-080299-001
City: Pittsburg

Day: Tuesday
Date: 11/2/2021

PEAK HOURS

AM	07:30 AM - 08:30 AM
NOON	NONE
PM	04:00 PM - 05:00 PM

COUNT PERIODS

AM	7:00 AM - 09:00 AM
NOON	NONE
PM	4:00 PM - 06:00 PM

SOUTHBOUND (Railroad Ave)

AM	8	131	10	0	130
NOON	0	0	0	0	0
PM	5	186	7	0	198

EASTBOUND (E 8th St)

AM	NOON	PM	
152	0	79	
0	0	0	0
0	0	0	0
0	0	0	0
1	0	0	0

WESTBOUND (E 8th St)

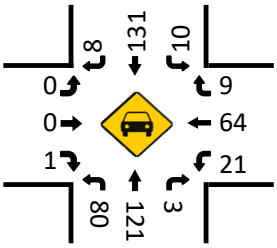
PM	NOON	AM	
17	0	9	0
23	0	64	1
28	0	21	0
0	0	0	0
7	0	13	

NORTHBOUND (Railroad Ave)

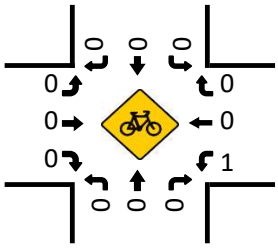
PM	214	0	51	181	0
NOON	0	0	0	0	0
AM	153	0	80	121	3

CONTROL			
1-Way Stop(WB)			
TEV	448 AM	0 NOON	498 PM
PHF	0.76		0.91

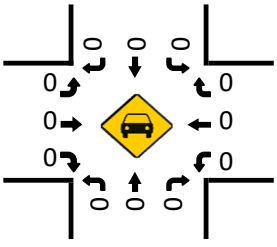
Totals (AM)



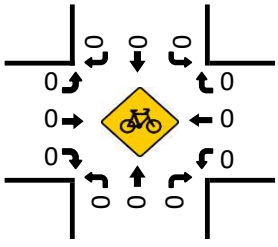
Total Bikes (AM)



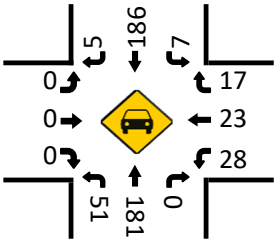
Totals (NOON)



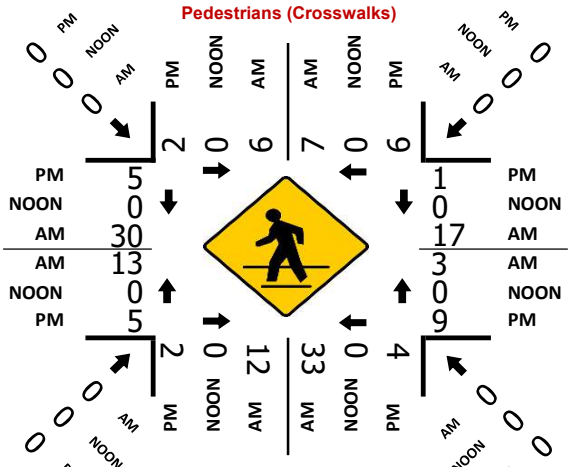
Total Bikes (NOON)



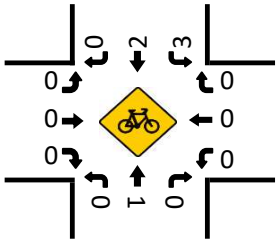
Totals (PM)



Pedestrians (Crosswalks)



Total Bikes (PM)



Prepared by National Data & Surveying Services

Harbor St & E 8th St

Peak Hour Turning Movement Count

ID: 21-080299-002
City: Pittsburg

Day: Tuesday
Date: 11/2/2021

PEAK HOURS	COUNT PERIODS
07:30 AM - 08:30 AM	7:00 AM - 09:00 AM
NONE	NONE
04:15 PM - 05:15 PM	4:00 PM - 06:00 PM

Harbor St

SOUTHBOUND

AM	2	104	0	0	134	AM
NOON	0	0	0	0	0	NOON
PM	2	103	0	0	125	PM

0 2 0 0

EASTBOUND — E 8th St

AM	NOON	PM	
79	0	52	
0	0	0	0
0	0	1	0
0	0	0	1
45	0	42	0
AM	NOON	PM	

CONTROL

1-Way Stop(EB)

TEV	362 AM	0 NOON	323 PM
PHF	0.66		0.93

WESTBOUND — E 8th St

PM	NOON	AM	
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	
PM	NOON	AM	

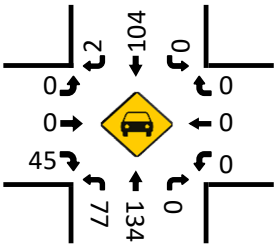
0 0 2 0

PM	146	1	50	124	0	PM
NOON	0	0	0	0	0	NOON
AM	149	0	77	134	0	AM

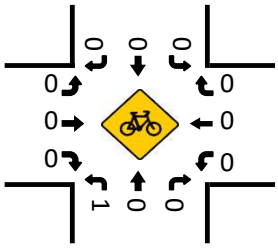
NORTHBOUND

Harbor St

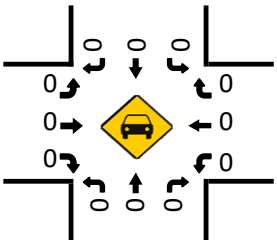
Totals (AM)



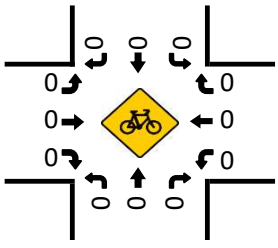
Total Bikes (AM)



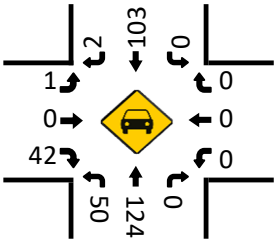
Totals (NOON)



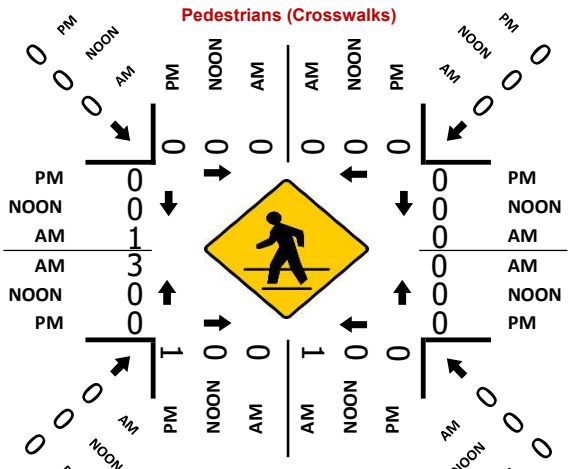
Total Bikes (NOON)



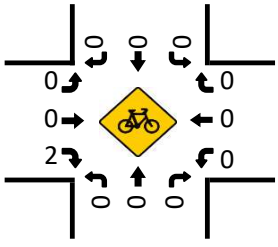
Totals (PM)



Pedestrians (Crosswalks)



Total Bikes (PM)



Prepared by National Data & Surveying Services

Railroad Ave & E 10th St

Peak Hour Turning Movement Count

ID: 21-080299-003
City: Pittsburg

Day: Tuesday
Date: 11/2/2021

PEAK HOURS	COUNT PERIODS
07:30 AM - 08:30 AM	7:00 AM - 09:00 AM
NONE	NONE
04:00 PM - 05:00 PM	4:00 PM - 06:00 PM

SOUTHBOUND (Railroad Ave)

	L	T	R	U	Total	
AM	55	166	131	0	225	AM
NOON	0	0	0	0	0	NOON
PM	12	221	35	0	226	PM

EASTBOUND (E 10th St)

AM	NOON	PM		
486	0	371		
0	0	0	0	
9	0	15	1	
171	0	134	1	
176	0	184	1	
AM	NOON	PM		

WESTBOUND (E 10th St)

PM	NOON	AM		
47	0	46	0.5	
195	0	284	0.5	
81	0	45	1	
0	0	0	0	
242	0	361		
PM	NOON	AM		

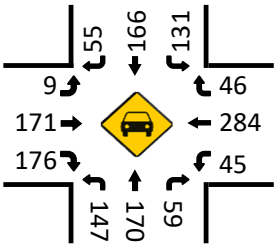
NORTHBOUND (Railroad Ave)

	L	T	T	R	Total	
PM	487	1	164	164	73	PM
NOON	0	0	0	0	0	NOON
AM	388	1	147	170	59	AM

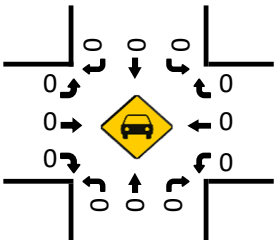
	L	T	T	R
	1	1	1	0
	0	1	1	1

CONTROL			
Signalized			
TEV	1460 AM	0 NOON	1326 PM
PHF	0.87		0.96

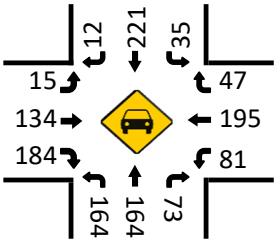
Totals (AM)



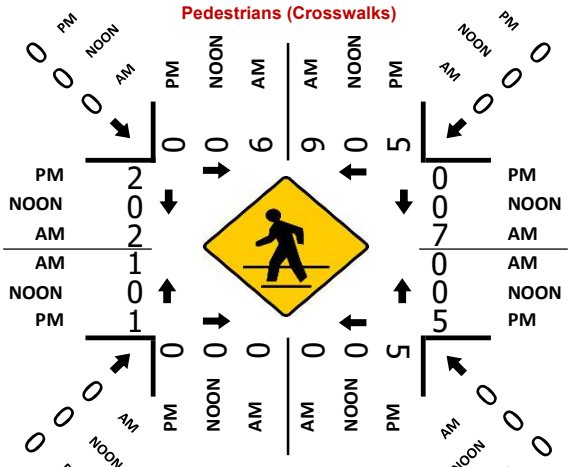
Totals (NOON)



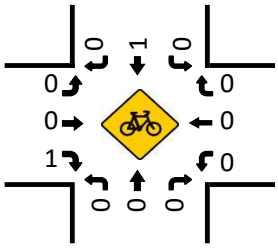
Totals (PM)



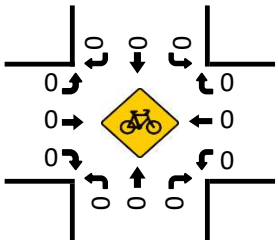
Pedestrians (Crosswalks)



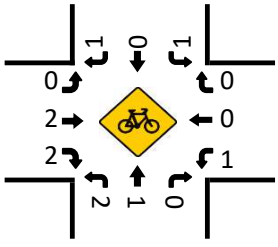
Total Bikes (AM)



Total Bikes (NOON)



Total Bikes (PM)



Prepared by National Data & Surveying Services

Railroad Ave & Civic Ave

Peak Hour Turning Movement Count

ID: 21-080299-004
City: Pittsburg

Day: Tuesday
Date: 11/2/2021

PEAK HOURS	COUNT PERIODS
07:15 AM - 08:15 AM	7:00 AM - 09:00 AM
NONE	NONE
04:45 PM - 05:45 PM	4:00 PM - 06:00 PM

SOUTHBOUND (Railroad Ave)

AM	45	689	0	1	978	AM
NOON	0	0	0	0	0	NOON
PM	34	796	1	2	743	PM
	0	2	0	0		

EASTBOUND (Civic Ave)

AM	NOON	PM	
249	0	357	
2	0	1	0
220	0	92	2
0	0	0	0
470	0	388	1
AM	NOON	PM	

WESTBOUND (Civic Ave)

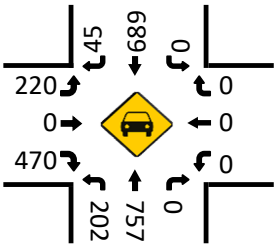
PM	NOON	AM	
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
1	0	0	
PM	NOON	AM	

CONTROL			
Signalized			
TEV	2386 AM	0 NOON	2285 PM
PHF	0.92		0.97

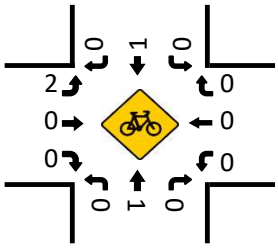
NORTHBOUND (Railroad Ave)

PM	1184	0	322	649	0	PM
NOON	0	0	0	0	0	NOON
AM	1159	0	202	757	0	AM
		0	2	2	0	

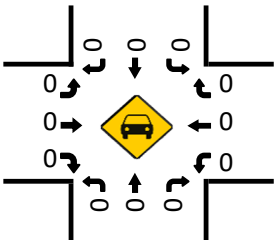
Totals (AM)



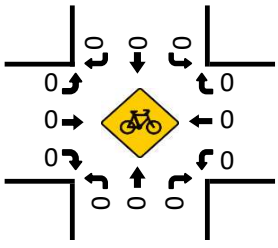
Total Bikes (AM)



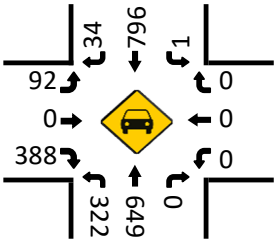
Totals (NOON)



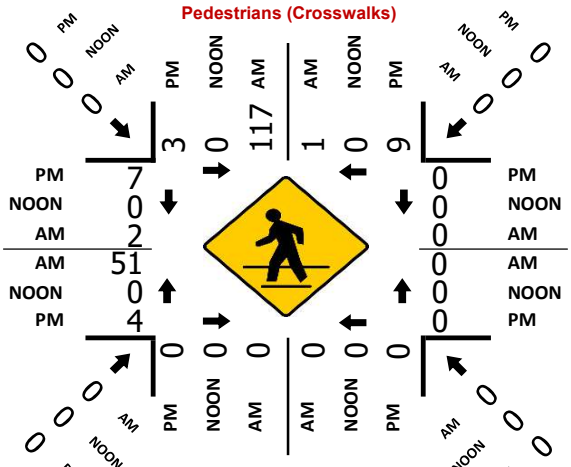
Total Bikes (NOON)



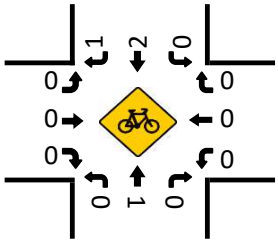
Totals (PM)



Pedestrians (Crosswalks)



Total Bikes (PM)



Prepared by National Data & Surveying Services

Railroad Ave & SR 4 WB Ramps

Peak Hour Turning Movement Count

ID: 21-080299-005
City: Pittsburg

Day: Tuesday
Date: 11/2/2021

PEAK HOURS	COUNT PERIODS
07:30 AM - 08:30 AM	7:00 AM - 09:00 AM
NONE	NONE
04:30 PM - 05:30 PM	4:00 PM - 06:00 PM

SOUTHBOUND (Railroad Ave)

AM	105	923	100	0	1047	AM
NOON	0	0	0	0	0	NOON
PM	252	894	58	0	992	PM
	1	2	1	0		

EASTBOUND (SR 4 WB Ramps)

AM	NOON	PM	
357	0	737	
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
AM	NOON	PM	

WESTBOUND (SR 4 WB Ramps)

PM	NOON	AM	
249	0	338	1.5
209	0	112	1
116	0	299	0.5
0	0	0	0
155	0	261	
PM	NOON	AM	

NORTHBOUND (Railroad Ave)

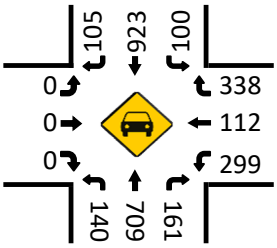
PM	1010	0	276	743	97	PM
NOON	0	0	0	0	0	NOON
AM	1224	2	140	709	161	AM
		0	2	2	0	

CONTROL

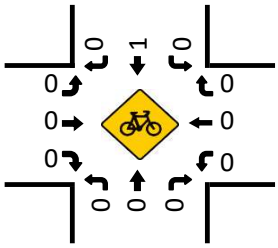
Signalized

TEV	2889 AM	0 NOON	2894 PM
PHF	0.92		0.95

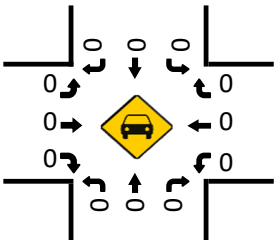
Totals (AM)



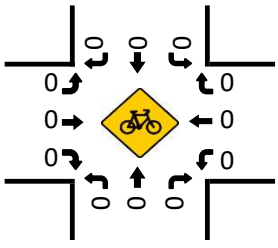
Total Bikes (AM)



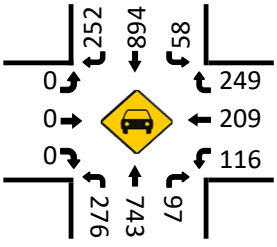
Totals (NOON)



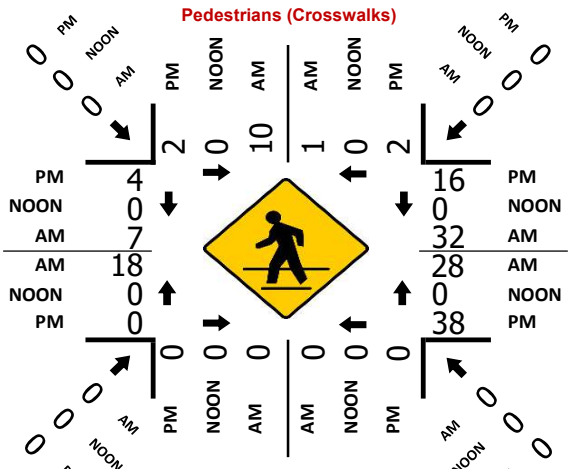
Total Bikes (NOON)



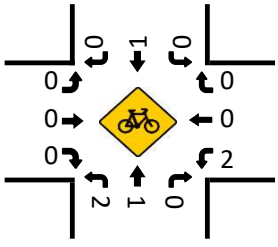
Totals (PM)



Pedestrians (Crosswalks)



Total Bikes (PM)



Prepared by National Data & Surveying Services

Railroad Ave & SR 4 EB Ramps

Peak Hour Turning Movement Count

ID: 21-080299-006
City: Pittsburg

Day: Tuesday
Date: 11/2/2021

PEAK HOURS	COUNT PERIODS
07:30 AM - 08:30 AM	7:00 AM - 09:00 AM
NONE	NONE
05:00 PM - 06:00 PM	4:00 PM - 06:00 PM

CONTROL: Signalized

	AM	NOON	PM
TEV	2893	0	3062
PHF	0.91		0.96

SOUTHBOUND (Railroad Ave)

	L	T	R	U	Total	
AM	0	921	307	0	1011	AM
NOON	0	0	0	0	0	NOON
PM	0	608	429	0	1048	PM

EASTBOUND (SR 4 EB Ramps)

AM	NOON	PM	
0	0	0	
0	0	0	0
356	0	363	1.5
2	0	0	0
356	0	399	1.5

WESTBOUND (SR 4 EB Ramps)

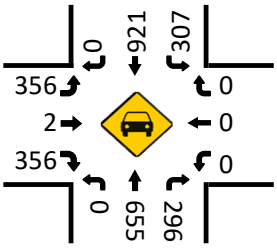
PM	NOON	AM	
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
1007	0	605	

NORTHBOUND (Railroad Ave)

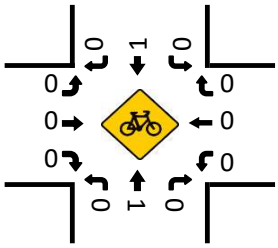
	L	T	R	U	Total	
PM	1007	0	0	685	578	PM
NOON	0	0	0	0	0	NOON
AM	1277	0	0	655	296	AM

0 2 1 0 — 0 0 2.5 0.5

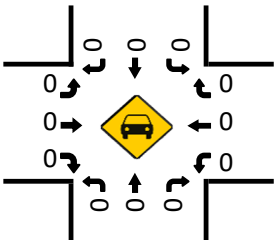
Totals (AM)



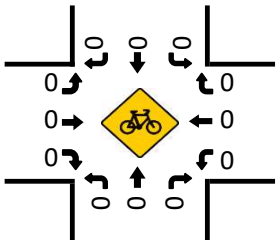
Total Bikes (AM)



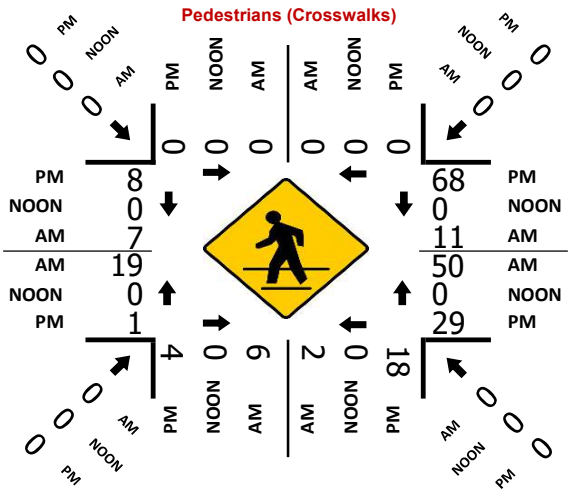
Totals (NOON)



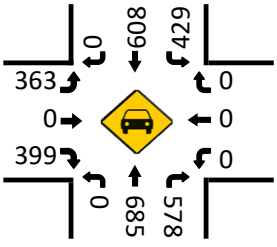
Total Bikes (NOON)



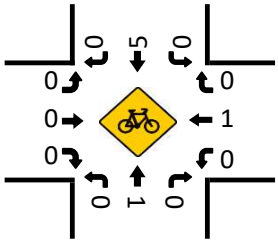
Pedestrians (Crosswalks)



Totals (PM)



Total Bikes (PM)



Prepared by National Data & Surveying Services

Harbor St & E 10th St

Peak Hour Turning Movement Count

ID: 22-080120-009
City: Pittsburg

Day: Wednesday
Date: 4/13/2022

PEAK HOURS

AM	07:30 AM - 08:30 AM
NOON	NONE
PM	05:00 PM - 06:00 PM

COUNT PERIODS

AM	7:00 AM - 09:00 AM
NOON	NONE
PM	4:00 PM - 06:00 PM

SOUTHBOUND (Harbor St)

	L	T	R	U	
AM	7	174	0	0	227 AM
NOON	0	0	0	0	0 NOON
PM	8	153	0	0	216 PM
	0	2	0	0	

EASTBOUND (E 10th St)

AM	NOON	PM		
356	0	246	⇦	
0	0	0	↶	0
10	0	29	↱	0
1	0	0	→	2
209	0	135	↴	0
AM	NOON	PM		

WESTBOUND (E 10th St)

PM	NOON	AM		
4	0	0	↰	0
0	0	0	←	1
2	0	0	↰	0
0	0	0	↰	0
0	0	1	⇨	
PM	NOON	AM		

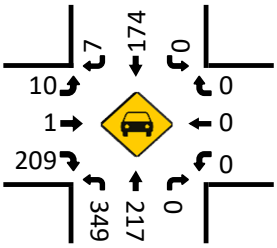
NORTHBOUND (Harbor St)

	L	T	R	U	
PM	292	2	238	183	0 PM
NOON	0	0	0	0	0 NOON
AM	383	0	349	217	0 AM
	0	1	2	0	

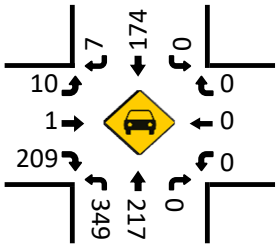
CONTROL: 1-Way Stop (EB)

	AM	NOON	PM
TEV	967	0	754
PHF	0.81		0.97

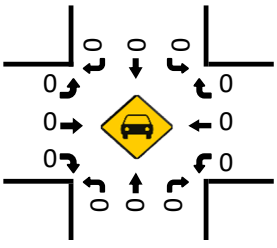
Totals (AM)



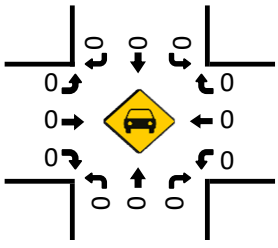
Totals (AM)



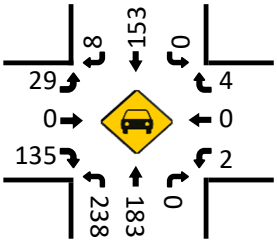
Totals (NOON)



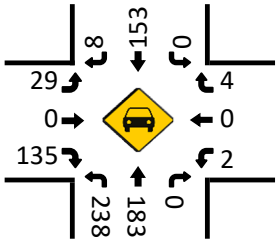
Totals (NOON)



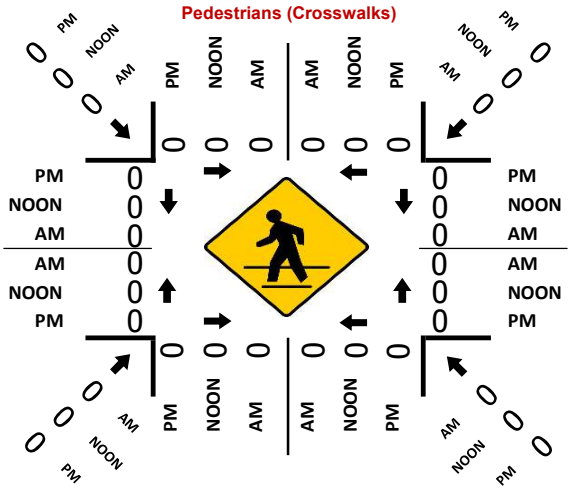
Totals (PM)



Totals (PM)



Pedestrians (Crosswalks)



Prepared by National Data & Surveying Services

Harbor St & California Ave

Peak Hour Turning Movement Count

ID: 22-080120-011
City: Pittsburg

Day: Wednesday
Date: 4/13/2022

PEAK HOURS	COUNT PERIODS
07:15 AM - 08:15 AM	7:00 AM - 09:00 AM
NONE	NONE
04:45 PM - 05:45 PM	4:00 PM - 06:00 PM

SOUTHBOUND (Harbor St)

AM	104	596	124	3	1006	AM
NOON	0	0	0	0	0	NOON
PM	75	243	90	4	633	PM

EASTBOUND (California Ave)

AM	NOON	PM	
646	0	665	
0	0	0	0
77	0	47	1
115	0	112	1
35	0	22	0
AM	NOON	PM	

WESTBOUND (California Ave)

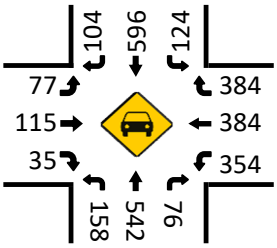
PM	NOON	AM	
318	0	384	1
378	0	384	1
339	0	354	1
0	0	0	0
316	0	315	
PM	NOON	AM	

NORTHBOUND (Harbor St)

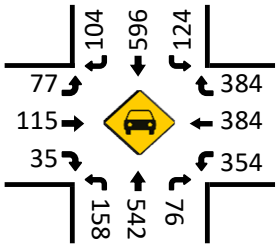
PM	604	0	212	264	114	PM
NOON	0	0	0	0	0	NOON
AM	985	0	158	542	76	AM

CONTROL			
Signalized			
TEV	2952 AM	0 NOON	2218 PM
PHF	0.88		0.94

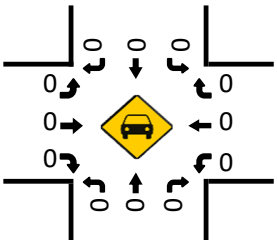
Total (AM)



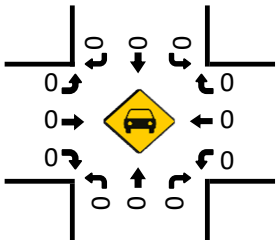
Total (AM)



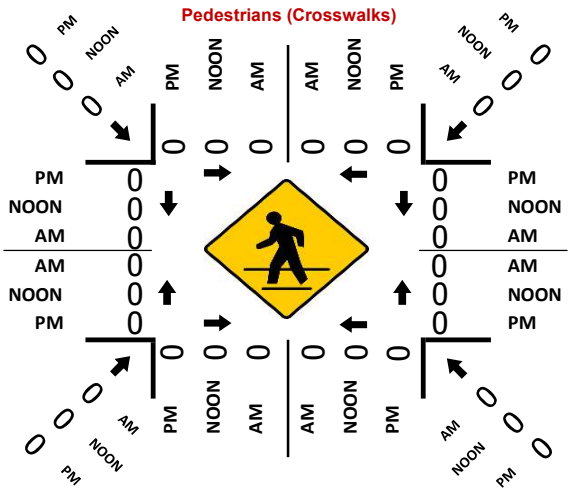
Total (NOON)



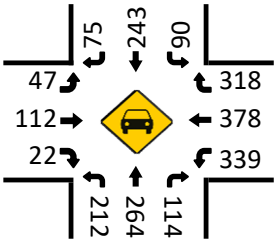
Total (NOON)



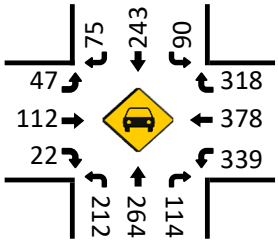
Pedestrians (Crosswalks)



Total (PM)



Total (PM)



Appendix B: LOS Calculation Worksheets

Intersection	
Int Delay, s/veh	6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	1	21	64	9	80	121	3	10	131	8
Future Vol, veh/h	0	0	1	21	64	9	80	121	3	10	131	8
Conflicting Peds, #/hr	13	0	45	45	0	13	43	0	20	20	0	43
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	0	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	76	76	76	76	76	76	76	76	76	76	76	76
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	0	0	1	28	84	12	105	159	4	13	172	11

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	679	-	266	640	643	194	226	0	0	183	0	0
Stage 1	247	-	-	391	391	-	-	-	-	-	-	-
Stage 2	432	-	-	249	252	-	-	-	-	-	-	-
Critical Hdwy	7.13	-	6.23	7.13	6.53	6.23	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.13	-	-	6.13	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.13	-	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.527	-	3.327	3.527	4.027	3.327	2.227	-	-	2.227	-	-
Pot Cap-1 Maneuver	364	0	770	387	391	845	1337	-	-	1386	-	-
Stage 1	755	0	-	631	605	-	-	-	-	-	-	-
Stage 2	600	0	-	753	697	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	253	-	707	335	331	819	1282	-	-	1360	-	-
Mov Cap-2 Maneuver	253	-	-	335	331	-	-	-	-	-	-	-
Stage 1	659	-	-	563	540	-	-	-	-	-	-	-
Stage 2	449	-	-	711	661	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.1	20.7	3.2	0.5
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1282	-	-	-	707	352	1360	-	-
HCM Lane V/C Ratio	0.082	-	-	-	0.002	0.351	0.01	-	-
HCM Control Delay (s)	8.1	0	-	0	10.1	20.7	7.7	0	-
HCM Lane LOS	A	A	-	A	B	C	A	A	-
HCM 95th %tile Q(veh)	0.3	-	-	-	0	1.5	0	-	-

Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	45	77	134	104	2
Future Vol, veh/h	0	45	77	134	104	2
Conflicting Peds, #/hr	0	1	4	0	0	4
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	66	66	66	66	66	66
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	0	68	117	203	158	3

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	500	86	165	0	-	0
Stage 1	164	-	-	-	-	-
Stage 2	336	-	-	-	-	-
Critical Hdwy	6.86	6.96	4.16	-	-	-
Critical Hdwy Stg 1	5.86	-	-	-	-	-
Critical Hdwy Stg 2	5.86	-	-	-	-	-
Follow-up Hdwy	3.53	3.33	2.23	-	-	-
Pot Cap-1 Maneuver	498	952	1403	-	-	-
Stage 1	845	-	-	-	-	-
Stage 2	693	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	448	947	1398	-	-	-
Mov Cap-2 Maneuver	448	-	-	-	-	-
Stage 1	762	-	-	-	-	-
Stage 2	690	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.1	3	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1398	-	947	-	-
HCM Lane V/C Ratio	0.083	-	0.072	-	-
HCM Control Delay (s)	7.8	0.2	9.1	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.3	-	0.2	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	171	176	45	284	46	148	170	59	131	166	55
Future Volume (veh/h)	9	171	176	45	284	46	148	170	59	131	166	55
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		0.97	1.00		0.98	1.00		0.97
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	10	197	0	52	326	45	170	195	17	151	191	14
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	23	452		90	448	62	220	419	349	196	394	324
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	0.01	0.24	0.00	0.05	0.28	0.28	0.12	0.23	0.23	0.11	0.21	0.21
Unsig. Movement Delay												
Ln Grp Delay, s/veh	37.6	17.0	0.0	29.4	0.0	18.6	27.3	17.9	15.5	28.3	18.6	16.0
Ln Grp LOS	D	B		C	A	B	C	B	B	C	B	B
Approach Vol, veh/h		207			423			382			356	
Approach Delay, s/veh		18.0			19.9			22.0			22.6	
Approach LOS		B			B			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	4.0
Phs Duration (G+Y+Rc), s	10.4	16.2	7.3	17.1	11.1	15.5	5.4	19.1
Change Period (Y+Rc), s	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7
Max Green (Gmax), s	* 12	* 24	* 5.3	* 30	* 13	* 23	* 5	* 30
Max Allow Headway (MAH), s	3.9	5.0	3.8	5.1	3.8	5.3	3.8	5.3
Max Q Clear (g_c+I1), s	6.2	6.6	3.5	6.6	6.8	6.6	2.3	11.5
Green Ext Time (g_e), s	0.2	0.9	0.0	1.0	0.2	1.0	0.0	2.2
Prob of Phs Call (p_c)	0.88	1.00	0.52	1.00	0.91	1.00	0.13	1.00
Prob of Max Out (p_x)	0.15	0.00	1.00	0.00	0.09	0.01	1.00	0.01

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1767		1767		1767		1767	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1856		1856		1856		1590

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1548		1572		1527		219

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

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	151	0	52	0	170	0	10	0
Grp Sat Flow (s), veh/h/ln	1767	0	1767	0	1767	0	1767	0
Q Serve Time (g_s), s	4.2	0.0	1.5	0.0	4.8	0.0	0.3	0.0
Cycle Q Clear Time (g_c), s	4.2	0.0	1.5	0.0	4.8	0.0	0.3	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	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)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	196	0	90	0	220	0	23	0
V/C Ratio (X)	0.77	0.00	0.58	0.00	0.77	0.00	0.44	0.00
Avail Cap (c_a), veh/h	426	0	184	0	460	0	173	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	22.0	0.0	23.7	0.0	21.6	0.0	25.0	0.0
Incr Delay (d2), s/veh	6.2	0.0	5.7	0.0	5.7	0.0	12.6	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	28.3	0.0	29.4	0.0	27.3	0.0	37.6	0.0
1st-Term Q (Q1), veh/ln	1.6	0.0	0.6	0.0	1.7	0.0	0.1	0.0
2nd-Term Q (Q2), veh/ln	0.3	0.0	0.1	0.0	0.3	0.0	0.1	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%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	2.0	0.0	0.7	0.0	2.1	0.0	0.2	0.0
%ile Storage Ratio (RQ%)	0.46	0.00	0.20	0.00	0.36	0.00	0.06	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		
Lanes in Grp	0	1	0	1	0	1	0	0
Grp Vol (v), veh/h	0	195	0	197	0	191	0	0
Grp Sat Flow (s), veh/h/ln	0	1856	0	1856	0	1856	0	0
Q Serve Time (g_s), s	0.0	4.6	0.0	4.6	0.0	4.6	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	4.6	0.0	4.6	0.0	4.6	0.0	0.0
Lane Grp Cap (c), veh/h	0	419	0	452	0	394	0	0
V/C Ratio (X)	0.00	0.47	0.00	0.44	0.00	0.48	0.00	0.00
Avail Cap (c_a), veh/h	0	858	0	1091	0	822	0	0
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	17.1	0.0	16.3	0.0	17.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.8	0.0	0.7	0.0	0.9	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	17.9	0.0	17.0	0.0	18.6	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	1.7	0.0	1.7	0.0	1.8	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.1	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	1.8	0.0	1.8	0.0	1.9	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.05	0.00	0.14	0.00	0.09	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

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	17	0	0	0	14	0	371
Grp Sat Flow (s), veh/h/ln	0	1548	0	1572	0	1527	0	1809
Q Serve Time (g_s), s	0.0	0.4	0.0	0.0	0.0	0.4	0.0	9.5
Cycle Q Clear Time (g_c), s	0.0	0.4	0.0	0.0	0.0	0.4	0.0	9.5
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	1.00	0.00	1.00	0.00	0.12
Lane Grp Cap (c), veh/h	0	349	0	383	0	324	0	510
V/C Ratio (X)	0.00	0.05	0.00	0.00	0.00	0.04	0.00	0.73
Avail Cap (c_a), veh/h	0	716	0	924	0	676	0	1074
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	15.5	0.0	0.0	0.0	16.0	0.0	16.6
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.0	0.0	0.1	0.0	2.0
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	0.0	0.0	0.0	16.0	0.0	18.6
1st-Term Q (Q1), veh/ln	0.0	0.1	0.0	0.0	0.0	0.1	0.0	3.4
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
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	0.1	0.0	0.0	0.0	0.1	0.0	3.7
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.46
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	20.9
HCM 6th LOS	C

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	222	0	470	0	0	0	202	757	0	1	689	45
Future Volume (veh/h)	222	0	470	0	0	0	202	757	0	1	689	45
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)	0.57		1.00	1.00		1.00	1.00		1.00	1.00		0.96
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	241	0	119	0	0	0	220	823	0	1	749	49
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	275	0	344	0	2	0	280	2624	0	2	2224	145
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Prop Arrive On Green	0.14	0.00	0.14	0.00	0.00	0.00	0.16	1.00	0.00	0.00	0.66	0.66
Unsig. Movement Delay												
Ln Grp Delay, s/veh	73.5	0.0	40.2	0.0	0.0	0.0	53.3	0.3	0.0	145.8	9.5	9.5
Ln Grp LOS	E	A	D	A	A	A	D	A	A	F	A	A
Approach Vol, veh/h		360			0			1043			799	
Approach Delay, s/veh		62.5			0.0			11.5			9.7	
Approach LOS		E						B			A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	8	4	5	6		
Case No	2.0	4.0	12.0	9.0	2.0	4.0		
Phs Duration (G+Y+Rc), s	4.9	94.0	0.0	21.1	14.5	84.4		
Change Period (Y+Rc), s	* 4.7	* 4.7	4.7	* 4.7	* 4.7	* 4.7		
Max Green (Gmax), s	* 5	* 48	30.0	* 18	* 17	* 36		
Max Allow Headway (MAH), s	3.8	5.1	0.0	4.9	3.8	5.1		
Max Q Clear (g_c+I1), s	2.1	2.0	0.0	16.1	9.4	13.6		
Green Ext Time (g_e), s	0.0	6.7	0.0	0.3	0.4	5.0		
Prob of Phs Call (p_c)	0.03	1.00	0.00	1.00	1.00	1.00		
Prob of Max Out (p_x)	1.00	0.00	0.00	1.00	0.03	0.00		

Left-Turn Movement Data								
Assigned Mvmt	1		3	7	5			
Mvmt Sat Flow, veh/h	1767		0	2012	3428			

Through Movement Data								
Assigned Mvmt		2	8	4		6		
Mvmt Sat Flow, veh/h		3618	1856	0		3350		

Right-Turn Movement Data								
Assigned Mvmt		12	18	14		16		
Mvmt Sat Flow, veh/h		0	0	1572		219		

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

Lanes in Grp	1	0	0	2	2	0	0	0
Grp Vol (v), veh/h	1	0	0	241	220	0	0	0
Grp Sat Flow (s), veh/h/ln	1767	0	0	1006	1714	0	0	0
Q Serve Time (g_s), s	0.1	0.0	0.0	14.1	7.4	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.1	0.0	0.0	14.1	7.4	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	1006	0	0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	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)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	2	0	0	275	280	0	0	0
V/C Ratio (X)	0.41	0.00	0.00	0.87	0.78	0.00	0.00	0.00
Avail Cap (c_a), veh/h	74	0	0	298	494	0	0	0
Upstream Filter (I)	1.00	0.00	0.00	1.00	0.85	0.00	0.00	0.00
Uniform Delay (d1), s/veh	59.9	0.0	0.0	50.8	49.2	0.0	0.0	0.0
Incr Delay (d2), s/veh	85.9	0.0	0.0	22.7	4.1	0.0	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	145.8	0.0	0.0	73.5	53.3	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	3.5	2.9	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	0.0	0.9	0.2	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%)	1.00	0.00	1.00	1.00	1.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.1	0.0	0.0	4.4	3.1	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.04	0.00	0.00	1.88	0.40	0.00	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	8	4	0	6	0	0
Lane Assignment		T	T			T		
Lanes in Grp	0	2	1	0	0	1	0	0
Grp Vol (v), veh/h	0	823	0	0	0	394	0	0
Grp Sat Flow (s), veh/h/ln	0	1763	1856	0	0	1763	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	11.6	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	11.6	0.0	0.0
Lane Grp Cap (c), veh/h	0	2624	2	0	0	1170	0	0
V/C Ratio (X)	0.00	0.31	0.00	0.00	0.00	0.34	0.00	0.00
Avail Cap (c_a), veh/h	0	2624	464	0	0	1170	0	0
Upstream Filter (I)	0.00	0.85	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	8.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.3	0.0	0.0	0.0	0.8	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	0.3	0.0	0.0	0.0	9.5	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	4.1	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	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	0.1	0.0	0.0	0.0	4.4	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.23	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

Right Lane Group Data								
Assigned Mvmt	0	12	18	14	0	16	0	0
Lane Assignment				R		T+R		
Lanes in Grp	0	0	0	1	0	1	0	0
Grp Vol (v), veh/h	0	0	0	119	0	404	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1572	0	1807	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	7.7	0.0	11.6	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	7.7	0.0	11.6	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	1572.5	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	9.8	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	1.00	0.00	0.12	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	344	0	1199	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.35	0.00	0.34	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	362	0	1199	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	39.6	0.0	8.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.6	0.0	0.8	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	0.0	0.0	40.2	0.0	9.5	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	3.0	0.0	4.2	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	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	0.0	0.0	3.1	0.0	4.5	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.07	0.00	0.23	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

Intersection Summary	
HCM 6th Ctrl Delay	19.2
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	299	112	338	142	709	161	100	927	105
Future Volume (veh/h)	0	0	0	299	112	338	142	709	161	100	927	105
Number				3	8	18	5	2	12	1	6	16
Initial Q, veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)				1.00		0.99	1.00		0.95	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln				1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h				325	182	327	154	771	162	109	1008	0
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				3	3	3	3	3	3	3	3	3
Opposing Right Turn Influence				Yes			Yes			Yes		
Cap, veh/h				389	408	460	1017	1684	354	133	1284	
HCM Platoon Ratio				1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Prop Arrive On Green				0.22	0.22	0.22	0.10	0.19	0.19	0.08	0.36	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh				49.8	40.8	39.2	40.3	32.7	32.7	60.5	37.8	0.0
Ln Grp LOS				D	D	D	D	C	C	E	D	
Approach Vol, veh/h					834			1087			1117	
Approach Delay, s/veh					43.6			33.8			40.0	
Approach LOS					D			C			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	8		6	5		
Case No	2.0	4.0	11.0		3.0	2.0		
Phs Duration (G+Y+Rc), s	13.8	75.1	31.1		48.6	40.3		
Change Period (Y+Rc), s	* 4.7	* 4.7	4.7		* 4.9	4.7		
Max Green (Gmax), s	* 14	* 54	38.0		* 44	24.0		
Max Allow Headway (MAH), s	1.0	2.4	1.9		2.3	1.0		
Max Q Clear (g_c+I1), s	9.3	30.5	24.6		32.5	6.9		
Green Ext Time (g_e), s	0.0	0.9	0.4		1.3	0.0		
Prob of Phs Call (p_c)	0.97	1.00	1.00		1.00	0.99		
Prob of Max Out (p_x)	0.52	0.00	0.00		0.00	0.00		

Left-Turn Movement Data								
Assigned Mvmt	1		3			5		
Mvmt Sat Flow, veh/h	1767		1767			3428		

Through Movement Data								
Assigned Mvmt		2	8		6			
Mvmt Sat Flow, veh/h		2869	1856		3526			

Right-Turn Movement Data								
Assigned Mvmt		12	18		16			
Mvmt Sat Flow, veh/h		603	1549		1572			

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

Lanes in Grp	1	0	1	0	0	2	0	0
Grp Vol (v), veh/h	109	0	325	0	0	154	0	0
Grp Sat Flow (s), veh/h/ln	1767	0	1767	0	0	1714	0	0
Q Serve Time (g_s), s	7.3	0.0	21.1	0.0	0.0	4.9	0.0	0.0
Cycle Q Clear Time (g_c), s	7.3	0.0	21.1	0.0	0.0	4.9	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	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)	1.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	133	0	389	0	0	1017	0	0
V/C Ratio (X)	0.82	0.00	0.84	0.00	0.00	0.15	0.00	0.00
Avail Cap (c_a), veh/h	206	0	560	0	0	1017	0	0
Upstream Filter (I)	0.78	0.00	1.00	0.00	0.00	0.82	0.00	0.00
Uniform Delay (d1), s/veh	54.7	0.0	44.7	0.0	0.0	40.3	0.0	0.0
Incr Delay (d2), s/veh	5.8	0.0	5.0	0.0	0.0	0.0	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	60.5	0.0	49.8	0.0	0.0	40.3	0.0	0.0
1st-Term Q (Q1), veh/ln	3.2	0.0	9.1	0.0	0.0	2.1	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.2	0.0	0.5	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%)	1.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	3.4	0.0	9.7	0.0	0.0	2.1	0.0	0.0
%ile Storage Ratio (RQ%)	0.59	0.00	0.87	0.00	0.00	0.16	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	8	0	6	0	0	0
Lane Assignment		T	T		T			
Lanes in Grp	0	1	1	0	2	0	0	0
Grp Vol (v), veh/h	0	474	182	0	1008	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1763	1856	0	1763	0	0	0
Q Serve Time (g_s), s	0.0	28.5	10.2	0.0	30.5	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	28.5	10.2	0.0	30.5	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	1035	408	0	1284	0	0	0
V/C Ratio (X)	0.00	0.46	0.45	0.00	0.79	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	1035	588	0	1284	0	0	0
Upstream Filter (I)	0.00	0.82	1.00	0.00	0.78	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	31.5	40.5	0.0	34.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.2	0.3	0.0	3.8	0.0	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	32.7	40.8	0.0	37.8	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	13.4	4.6	0.0	12.8	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.0	0.7	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	1.00	0.00	1.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	13.8	4.6	0.0	13.4	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	1.05	0.42	0.00	0.31	0.00	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

Right Lane Group Data								
Assigned Mvmt	0	12	18	0	16	0	0	0
Lane Assignment		T+R	R		R			
Lanes in Grp	0	1	1	0	1	0	0	0
Grp Vol (v), veh/h	0	459	327	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1709	1549	0	1572	0	0	0
Q Serve Time (g_s), s	0.0	28.5	22.6	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	28.5	22.6	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	1572.5	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	9.1	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.35	1.00	0.00	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	1003	460	0	573	0	0	0
V/C Ratio (X)	0.00	0.46	0.71	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	1003	609	0	573	0	0	0
Upstream Filter (I)	0.00	0.82	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	31.5	37.7	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.2	1.4	0.0	0.0	0.0	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	32.7	39.2	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	13.0	8.4	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.2	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	1.00	0.00	1.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	13.4	8.6	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	1.02	1.47	0.00	0.00	0.00	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

Intersection Summary	
HCM 6th Ctrl Delay	38.8
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	356	2	356	0	0	0	0	656	296	307	919	0
Future Volume (veh/h)	356	2	356	0	0	0	0	656	296	307	919	0
Number	7	4	14				5	2	12	1	6	16
Initial Q, veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.98				1.00		0.96	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1856	1856	1856				0	1856	1856	1856	1856	0
Adj Flow Rate, veh/h	475	0	179				0	721	270	337	1010	0
Peak Hour Factor	0.91	0.91	0.91				0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	3	3	3				0	3	3	3	3	0
Opposing Right Turn Influence	Yes						No			Yes		
Cap, veh/h	617	0	270				0	1840	678	357	2634	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Prop Arrive On Green	0.17	0.00	0.17				0.00	0.51	0.51	0.40	1.00	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh	48.0	0.0	47.3				0.0	18.6	19.5	57.6	0.3	0.0
Ln Grp LOS	D	A	D				A	B	B	E	A	A
Approach Vol, veh/h		654						991			1347	
Approach Delay, s/veh		47.8						18.8			14.6	
Approach LOS		D						B			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Case No	2.0	8.0		9.0		4.0		
Phs Duration (G+Y+Rc), s	28.3	66.1		25.6		94.4		
Change Period (Y+Rc), s	4.0	* 4.7		* 4.7		* 4.7		
Max Green (Gmax), s	28.0	* 41		* 38		* 73		
Max Allow Headway (MAH), s	2.8	6.2		2.8		6.1		
Max Q Clear (g_c+I1), s	24.0	17.0		17.4		2.0		
Green Ext Time (g_e), s	0.2	9.7		1.1		14.2		
Prob of Phs Call (p_c)	1.00	1.00		1.00		1.00		
Prob of Max Out (p_x)	0.35	0.00		0.00		0.00		

Left-Turn Movement Data								
Assigned Mvmt	1	5		7				
Mvmt Sat Flow, veh/h	1767	0		3534				

Through Movement Data								
Assigned Mvmt		2		4		6		
Mvmt Sat Flow, veh/h		3763		0		3618		

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		
Mvmt Sat Flow, veh/h		1325		1545		0		

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

Lanes in Grp	1	0	0	2	0	0	0	0
Grp Vol (v), veh/h	337	0	0	475	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1767	0	0	1767	0	0	0	0
Q Serve Time (g_s), s	22.0	0.0	0.0	15.4	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	22.0	0.0	0.0	15.4	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	1767	0	0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	61.4	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)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	357	0	0	617	0	0	0	0
V/C Ratio (X)	0.94	0.00	0.00	0.77	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	412	0	0	1119	0	0	0	0
Upstream Filter (I)	0.76	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	35.1	0.0	0.0	47.2	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	22.5	0.0	0.0	0.8	0.0	0.0	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	57.6	0.0	0.0	48.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	7.4	0.0	0.0	6.6	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	2.2	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%)	1.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	9.7	0.0	0.0	6.6	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.74	0.00	0.00	0.15	0.00	0.00	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	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	2	0	0
Grp Vol (v), veh/h	0	676	0	0	0	1010	0	0
Grp Sat Flow (s), veh/h/ln	0	1689	0	0	0	1763	0	0
Q Serve Time (g_s), s	0.0	14.7	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	14.7	0.0	0.0	0.0	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	1728	0	0	0	2634	0	0
V/C Ratio (X)	0.00	0.39	0.00	0.00	0.00	0.38	0.00	0.00
Avail Cap (c_a), veh/h	0	1728	0	0	0	2634	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	0.76	0.00	0.00
Uniform Delay (d1), s/veh	0.0	17.9	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.7	0.0	0.0	0.0	0.3	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	18.6	0.0	0.0	0.0	0.3	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	5.6	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.2	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	0.00
%ile Back of Q (50%), veh/ln	0.0	5.7	0.0	0.0	0.0	0.1	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.61	0.00	0.00	0.00	0.01	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

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment		T+R		R				
Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	315	0	179	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1544	0	1545	0	0	0	0
Q Serve Time (g_s), s	0.0	15.0	0.0	13.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	15.0	0.0	13.0	0.0	0.0	0.0	0.0
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	0.86	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	790	0	270	0	0	0	0
V/C Ratio (X)	0.00	0.40	0.00	0.66	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	790	0	489	0	0	0	0
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	18.0	0.0	46.2	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.5	0.0	1.1	0.0	0.0	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	19.5	0.0	47.3	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	5.2	0.0	4.9	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.3	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	0.00
%ile Back of Q (50%), veh/ln	0.0	5.5	0.0	4.9	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.59	0.00	0.32	0.00	0.00	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

Intersection Summary	
HCM 6th Ctrl Delay	23.3
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	1	209	0	0	0	349	217	0	0	174	7
Future Vol, veh/h	10	1	209	0	0	0	349	217	0	0	174	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	120	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	81	81	81	81	81	81	81	81	81	81	81	81
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	12	1	258	0	0	0	431	268	0	0	215	9

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1216	1350	112	1238	1354	134	224	0	0	268	0	0
Stage 1	220	220	-	1130	1130	-	-	-	-	-	-	-
Stage 2	996	1130	-	108	224	-	-	-	-	-	-	-
Critical Hdwy	7.56	6.56	6.96	7.56	6.56	6.96	4.16	-	-	4.16	-	-
Critical Hdwy Stg 1	6.56	5.56	-	6.56	5.56	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.56	5.56	-	6.56	5.56	-	-	-	-	-	-	-
Follow-up Hdwy	3.53	4.03	3.33	3.53	4.03	3.33	2.23	-	-	2.23	-	-
Pot Cap-1 Maneuver	136	148	916	131	147	887	1335	-	-	1285	-	-
Stage 1	759	717	-	215	275	-	-	-	-	-	-	-
Stage 2	260	275	-	883	715	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	102	100	916	70	100	887	1335	-	-	1285	-	-
Mov Cap-2 Maneuver	102	100	-	70	100	-	-	-	-	-	-	-
Stage 1	514	717	-	146	186	-	-	-	-	-	-	-
Stage 2	176	186	-	633	715	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12.3	0	5.5	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1335	-	-	102	916	-	1285	-	-
HCM Lane V/C Ratio	0.323	-	-	0.133	0.282	-	-	-	-
HCM Control Delay (s)	9	-	-	45.6	10.5	0	0	-	-
HCM Lane LOS	A	-	-	E	B	A	A	-	-
HCM 95th %tile Q(veh)	1.4	-	-	0.4	1.2	-	0	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	77	115	35	354	384	384	158	542	76	127	596	104
Future Volume (veh/h)	77	115	35	354	384	384	158	542	76	127	596	104
Number	3	8	18	7	4	14	1	6	16	5	2	12
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	88	131	31	402	436	136	180	616	77	144	677	104
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	112	339	80	209	535	453	134	864	108	187	932	143
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	0.06	0.23	0.23	0.12	0.29	0.29	0.08	0.27	0.27	0.11	0.30	0.30
Unsig. Movement Delay												
Ln Grp Delay, s/veh	54.2	0.0	23.2	462.3	26.3	19.8	229.7	24.9	24.9	37.0	23.7	23.7
Ln Grp LOS	D	A	C	F	C	B	F	C	C	D	C	C
Approach Vol, veh/h		250			974			873			925	
Approach Delay, s/veh		34.1			205.3			67.1			25.7	
Approach LOS		C			F			E			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	3.0	2.0	4.0	2.0	4.0
Phs Duration (G+Y+Rc), s	10.0	26.0	9.2	24.9	12.1	23.9	13.0	21.1
Change Period (Y+Rc), s	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7
Max Green (Gmax), s	* 5.3	* 53	* 5.3	* 37	* 27	* 31	* 8.3	* 34
Max Allow Headway (MAH), s	3.8	5.2	3.8	4.8	3.8	5.2	3.7	5.2
Max Q Clear (g_c+I1), s	7.3	15.8	5.4	17.3	7.6	14.4	10.3	7.3
Green Ext Time (g_e), s	0.0	5.5	0.0	2.9	0.3	3.9	0.0	0.9
Prob of Phs Call (p_c)	0.97	1.00	0.82	1.00	0.94	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.01	1.00	0.02	0.00	0.11	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1767		1767		1767		1767	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3064		1856		3154		1451

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		470		1572		394		343

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

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	180	0	88	0	144	0	402	0
Grp Sat Flow (s), veh/h/ln	1767	0	1767	0	1767	0	1767	0
Q Serve Time (g_s), s	5.3	0.0	3.4	0.0	5.6	0.0	8.3	0.0
Cycle Q Clear Time (g_c), s	5.3	0.0	3.4	0.0	5.6	0.0	8.3	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	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)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	134	0	112	0	187	0	209	0
V/C Ratio (X)	1.35	0.00	0.78	0.00	0.77	0.00	1.92	0.00
Avail Cap (c_a), veh/h	134	0	134	0	689	0	209	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	32.4	0.0	32.3	0.0	30.5	0.0	30.9	0.0
Incr Delay (d2), s/veh	197.3	0.0	21.9	0.0	6.5	0.0	431.4	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	229.7	0.0	54.2	0.0	37.0	0.0	462.3	0.0
1st-Term Q (Q1), veh/ln	2.1	0.0	1.4	0.0	2.2	0.0	3.3	0.0
2nd-Term Q (Q2), veh/ln	7.3	0.0	0.7	0.0	0.3	0.0	25.1	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%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	9.5	0.0	2.1	0.0	2.6	0.0	28.4	0.0
%ile Storage Ratio (RQ%)	1.52	0.00	0.49	0.00	0.30	0.00	2.27	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	11.6	0.0	0.0	0.0	0.0	0.0	48.2	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	0.3	0.0	0.0	0.0	0.0	0.0	0.5	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		
Lanes in Grp	0	1	0	1	0	1	0	0
Grp Vol (v), veh/h	0	389	0	436	0	344	0	0
Grp Sat Flow (s), veh/h/ln	0	1763	0	1856	0	1763	0	0
Q Serve Time (g_s), s	0.0	13.8	0.0	15.3	0.0	12.3	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	13.8	0.0	15.3	0.0	12.3	0.0	0.0
Lane Grp Cap (c), veh/h	0	536	0	535	0	483	0	0
V/C Ratio (X)	0.00	0.73	0.00	0.82	0.00	0.71	0.00	0.00
Avail Cap (c_a), veh/h	0	1341	0	988	0	787	0	0
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	21.8	0.0	23.2	0.0	22.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.9	0.0	3.1	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	23.7	0.0	26.3	0.0	24.9	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	5.2	0.0	6.0	0.0	4.7	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.5	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	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	5.5	0.0	6.5	0.0	5.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.23	0.00	0.39	0.00	0.19	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

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	392	0	136	0	349	0	162
Grp Sat Flow (s), veh/h/ln	0	1771	0	1572	0	1785	0	1794
Q Serve Time (g_s), s	0.0	13.8	0.0	4.7	0.0	12.4	0.0	5.3
Cycle Q Clear Time (g_c), s	0.0	13.8	0.0	4.7	0.0	12.4	0.0	5.3
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	0.27	0.00	1.00	0.00	0.22	0.00	0.19
Lane Grp Cap (c), veh/h	0	539	0	453	0	489	0	419
V/C Ratio (X)	0.00	0.73	0.00	0.30	0.00	0.71	0.00	0.39
Avail Cap (c_a), veh/h	0	1347	0	837	0	797	0	878
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	21.8	0.0	19.4	0.0	23.0	0.0	22.6
Incr Delay (d2), s/veh	0.0	1.9	0.0	0.4	0.0	2.0	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	23.7	0.0	19.8	0.0	24.9	0.0	23.2
1st-Term Q (Q1), veh/ln	0.0	5.2	0.0	1.6	0.0	4.8	0.0	2.1
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.0	0.0	0.3	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	5.5	0.0	1.6	0.0	5.0	0.0	2.2
%ile Storage Ratio (RQ%)	0.00	0.23	0.00	0.10	0.00	0.19	0.00	0.04
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	96.3
HCM 6th LOS	F

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	2.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	28	23	17	51	181	0	7	186	5
Future Vol, veh/h	0	0	0	28	23	17	51	181	0	7	186	5
Conflicting Peds, #/hr	8	0	6	6	0	8	10	0	10	10	0	10
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	0	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	0	0	0	31	25	19	56	199	0	8	204	5

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	574	-	223	550	556	217	219	0	0	209	0	0
Stage 1	233	-	-	321	321	-	-	-	-	-	-	-
Stage 2	341	-	-	229	235	-	-	-	-	-	-	-
Critical Hdwy	7.13	-	6.23	7.13	6.53	6.23	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.13	-	-	6.13	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.13	-	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.527	-	3.327	3.527	4.027	3.327	2.227	-	-	2.227	-	-
Pot Cap-1 Maneuver	428	0	814	444	438	820	1344	-	-	1356	-	-
Stage 1	768	0	-	689	650	-	-	-	-	-	-	-
Stage 2	672	0	-	772	709	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	375	-	802	419	406	806	1331	-	-	1343	-	-
Mov Cap-2 Maneuver	375	-	-	419	406	-	-	-	-	-	-	-
Stage 1	725	-	-	650	613	-	-	-	-	-	-	-
Stage 2	595	-	-	762	697	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	14.1	1.7	0.3
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1331	-	-	-	-	470	1343	-	-
HCM Lane V/C Ratio	0.042	-	-	-	-	0.159	0.006	-	-
HCM Control Delay (s)	7.8	0	-	0	0	14.1	7.7	0	-
HCM Lane LOS	A	A	-	A	A	B	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	-	-	0.6	0	-	-

Intersection	
Int Delay, s/veh	2.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	42	51	124	103	2
Future Vol, veh/h	1	42	51	124	103	2
Conflicting Peds, #/hr	0	1	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	1	45	55	133	111	2

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	289	58	113	0	-	0
Stage 1	112	-	-	-	-	-
Stage 2	177	-	-	-	-	-
Critical Hdwy	6.86	6.96	4.16	-	-	-
Critical Hdwy Stg 1	5.86	-	-	-	-	-
Critical Hdwy Stg 2	5.86	-	-	-	-	-
Follow-up Hdwy	3.53	3.33	2.23	-	-	-
Pot Cap-1 Maneuver	675	993	1467	-	-	-
Stage 1	897	-	-	-	-	-
Stage 2	833	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	648	992	1467	-	-	-
Mov Cap-2 Maneuver	648	-	-	-	-	-
Stage 1	861	-	-	-	-	-
Stage 2	833	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.9	2.3	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1467	-	980	-	-
HCM Lane V/C Ratio	0.037	-	0.047	-	-
HCM Control Delay (s)	7.5	0.1	8.9	-	-
HCM Lane LOS	A	A	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)	15	134	184	81	195	47	165	164	73	35	221	12
Future Volume (veh/h)	15	134	184	81	195	47	165	164	73	35	221	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		0.99	1.00		0.97	1.00		0.99
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	16	140	0	84	203	39	172	171	26	36	230	2
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	35	414		121	410	79	222	556	457	69	395	331
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	0.22	0.00	0.07	0.27	0.27	0.13	0.30	0.30	0.04	0.21	0.21
Unsig. Movement Delay												
Ln Grp Delay, s/veh	33.6	17.1	0.0	30.2	0.0	16.4	27.2	14.1	12.7	29.9	19.3	15.8
Ln Grp LOS	C	B		C	A	B	C	B	B	C	B	B
Approach Vol, veh/h		156			326			369			268	
Approach Delay, s/veh		18.8			19.9			20.1			20.7	
Approach LOS		B			B			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	4.0
Phs Duration (G+Y+Rc), s	6.7	19.9	8.2	16.1	11.1	15.5	5.7	18.5
Change Period (Y+Rc), s	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7
Max Green (Gmax), s	* 12	* 24	* 5.3	* 30	* 13	* 23	* 5	* 30
Max Allow Headway (MAH), s	3.9	5.0	3.8	5.1	3.8	5.4	3.8	5.3
Max Q Clear (g_c+I1), s	3.0	5.6	4.4	5.2	6.8	7.7	2.5	7.8
Green Ext Time (g_e), s	0.0	0.9	0.0	0.7	0.2	1.1	0.0	1.4
Prob of Phs Call (p_c)	0.40	1.00	0.69	1.00	0.91	1.00	0.20	1.00
Prob of Max Out (p_x)	0.00	0.00	1.00	0.00	0.10	0.02	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1767		1767		1767		1767	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1856		1856		1856		1510

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1526		1572		1554		290

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

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	36	0	84	0	172	0	16	0
Grp Sat Flow (s), veh/h/ln	1767	0	1767	0	1767	0	1767	0
Q Serve Time (g_s), s	1.0	0.0	2.4	0.0	4.8	0.0	0.5	0.0
Cycle Q Clear Time (g_c), s	1.0	0.0	2.4	0.0	4.8	0.0	0.5	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	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)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	69	0	121	0	222	0	35	0
V/C Ratio (X)	0.52	0.00	0.70	0.00	0.77	0.00	0.46	0.00
Avail Cap (c_a), veh/h	427	0	184	0	462	0	174	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	24.0	0.0	23.2	0.0	21.5	0.0	24.7	0.0
Incr Delay (d2), s/veh	5.9	0.0	7.0	0.0	5.6	0.0	8.9	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	29.9	0.0	30.2	0.0	27.2	0.0	33.6	0.0
1st-Term Q (Q1), veh/ln	0.4	0.0	0.9	0.0	1.8	0.0	0.2	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	0.2	0.0	0.3	0.0	0.1	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%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.5	0.0	1.1	0.0	2.1	0.0	0.3	0.0
%ile Storage Ratio (RQ%)	0.12	0.00	0.32	0.00	0.36	0.00	0.08	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		
Lanes in Grp	0	1	0	1	0	1	0	0
Grp Vol (v), veh/h	0	171	0	140	0	230	0	0
Grp Sat Flow (s), veh/h/ln	0	1856	0	1856	0	1856	0	0
Q Serve Time (g_s), s	0.0	3.6	0.0	3.2	0.0	5.7	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	3.6	0.0	3.2	0.0	5.7	0.0	0.0
Lane Grp Cap (c), veh/h	0	556	0	414	0	395	0	0
V/C Ratio (X)	0.00	0.31	0.00	0.34	0.00	0.58	0.00	0.00
Avail Cap (c_a), veh/h	0	861	0	1094	0	824	0	0
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	13.7	0.0	16.6	0.0	18.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.3	0.0	0.5	0.0	1.4	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	14.1	0.0	17.1	0.0	19.3	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	1.3	0.0	1.2	0.0	2.2	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	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	1.3	0.0	1.2	0.0	2.4	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.03	0.00	0.10	0.00	0.11	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

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	26	0	0	0	2	0	242
Grp Sat Flow (s), veh/h/ln	0	1526	0	1572	0	1554	0	1800
Q Serve Time (g_s), s	0.0	0.6	0.0	0.0	0.0	0.1	0.0	5.8
Cycle Q Clear Time (g_c), s	0.0	0.6	0.0	0.0	0.0	0.1	0.0	5.8
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	1.00	0.00	1.00	0.00	1.00	0.00	0.16
Lane Grp Cap (c), veh/h	0	457	0	351	0	331	0	489
V/C Ratio (X)	0.00	0.06	0.00	0.00	0.00	0.01	0.00	0.49
Avail Cap (c_a), veh/h	0	708	0	927	0	690	0	1072
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	12.7	0.0	0.0	0.0	15.8	0.0	15.6
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	12.7	0.0	0.0	0.0	15.8	0.0	16.4
1st-Term Q (Q1), veh/ln	0.0	0.2	0.0	0.0	0.0	0.0	0.0	2.1
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	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	0.2	0.0	0.0	0.0	0.0	0.0	2.2
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	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

Intersection Summary	
HCM 6th Ctrl Delay	20.0
HCM 6th LOS	C

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	93	0	388	0	0	0	322	649	0	3	796	34
Future Volume (veh/h)	93	0	388	0	0	0	322	649	0	3	796	34
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)	0.92		0.95	1.00		1.00	1.00		1.00	1.00		0.98
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	96	0	81	0	0	0	332	669	0	3	821	35
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	250	0	293	0	1	0	388	2858	0	7	2415	103
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Prop Arrive On Green	0.08	0.00	0.08	0.00	0.00	0.00	0.23	1.00	0.00	0.00	0.70	0.70
Unsig. Movement Delay												
Ln Grp Delay, s/veh	58.0	0.0	45.6	0.0	0.0	0.0	58.0	0.2	0.0	101.4	8.4	8.3
Ln Grp LOS	E	A	D	A	A	A	E	A	A	F	A	A
Approach Vol, veh/h		177			0			1001			859	
Approach Delay, s/veh		52.3			0.0			19.3			8.7	
Approach LOS		D						B			A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	8	4	5	6		
Case No	2.0	4.0	12.0	9.0	2.0	4.0		
Phs Duration (G+Y+Rc), s	5.2	110.1	0.0	14.7	19.4	95.9		
Change Period (Y+Rc), s	* 4.7	* 4.7	4.7	* 4.7	* 4.7	* 4.7		
Max Green (Gmax), s	* 5	* 58	30.0	* 18	* 21	* 43		
Max Allow Headway (MAH), s	3.8	5.1	0.0	4.1	3.8	5.1		
Max Q Clear (g_c+I1), s	2.2	2.0	0.0	8.0	14.1	14.2		
Green Ext Time (g_e), s	0.0	5.2	0.0	0.4	0.6	5.8		
Prob of Phs Call (p_c)	0.10	1.00	0.00	1.00	1.00	1.00		
Prob of Max Out (p_x)	1.00	0.00	0.00	0.01	0.18	0.00		

Left-Turn Movement Data								
Assigned Mvmt	1		3	7	5			
Mvmt Sat Flow, veh/h	1767		0	3259	3428			

Through Movement Data								
Assigned Mvmt		2	8	4		6		
Mvmt Sat Flow, veh/h		3618	1856	0		3442		

Right-Turn Movement Data								
Assigned Mvmt		12	18	14		16		
Mvmt Sat Flow, veh/h		0	0	1499		147		

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

Lanes in Grp	1	0	0	2	2	0	0	0
Grp Vol (v), veh/h	3	0	0	96	332	0	0	0
Grp Sat Flow (s), veh/h/ln	1767	0	0	1629	1714	0	0	0
Q Serve Time (g_s), s	0.2	0.0	0.0	3.6	12.1	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.2	0.0	0.0	3.6	12.1	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	1629	0	0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	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)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	7	0	0	250	388	0	0	0
V/C Ratio (X)	0.43	0.00	0.00	0.38	0.86	0.00	0.00	0.00
Avail Cap (c_a), veh/h	68	0	0	446	541	0	0	0
Upstream Filter (I)	1.00	0.00	0.00	1.00	0.91	0.00	0.00	0.00
Uniform Delay (d1), s/veh	64.6	0.0	0.0	57.1	49.3	0.0	0.0	0.0
Incr Delay (d2), s/veh	36.8	0.0	0.0	1.0	8.7	0.0	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	101.4	0.0	0.0	58.0	58.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.1	0.0	0.0	1.5	4.6	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	0.0	0.0	0.5	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%)	1.00	0.00	1.00	1.00	1.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.2	0.0	0.0	1.5	5.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.09	0.00	0.00	0.66	0.65	0.00	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	8	4	0	6	0	0
Lane Assignment		T	T			T		
Lanes in Grp	0	2	1	0	0	1	0	0
Grp Vol (v), veh/h	0	669	0	0	0	420	0	0
Grp Sat Flow (s), veh/h/ln	0	1763	1856	0	0	1763	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	12.2	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	12.2	0.0	0.0
Lane Grp Cap (c), veh/h	0	2858	1	0	0	1237	0	0
V/C Ratio (X)	0.00	0.23	0.00	0.00	0.00	0.34	0.00	0.00
Avail Cap (c_a), veh/h	0	2858	428	0	0	1237	0	0
Upstream Filter (I)	0.00	0.91	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	7.6	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.0	0.0	0.7	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	0.2	0.0	0.0	0.0	8.4	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	4.2	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	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	0.1	0.0	0.0	0.0	4.5	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.23	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

Right Lane Group Data								
Assigned Mvmt	0	12	18	14	0	16	0	0
Lane Assignment				R		T+R		
Lanes in Grp	0	0	0	1	0	1	0	0
Grp Vol (v), veh/h	0	0	0	81	0	436	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1499	0	1826	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	6.0	0.0	12.2	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	6.0	0.0	12.2	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	1572.5	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	14.7	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	1.00	0.00	0.08	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	293	0	1281	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.28	0.00	0.34	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	383	0	1281	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	45.1	0.0	7.6	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.5	0.0	0.7	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	0.0	0.0	45.6	0.0	8.3	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	2.3	0.0	4.4	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	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	0.0	0.0	2.3	0.0	4.6	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.05	0.00	0.24	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

Intersection Summary	
HCM 6th Ctrl Delay	17.7
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	116	209	249	276	743	97	58	921	252
Future Volume (veh/h)	0	0	0	116	209	249	276	743	97	58	921	252
Number				3	8	18	5	2	12	1	6	16
Initial Q, veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)				1.00		0.99	1.00		0.94	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln				1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h				122	280	222	291	782	97	61	969	0
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				3	3	3	3	3	3	3	3	3
Opposing Right Turn Influence				Yes			Yes			Yes		
Cap, veh/h				166	409	321	1149	2150	267	85	1402	
HCM Platoon Ratio				1.00	1.00	1.00	0.33	0.33	0.33	0.67	0.67	0.67
Prop Arrive On Green				0.16	0.16	0.16	0.11	0.23	0.23	0.03	0.27	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh				53.6	52.5	48.9	43.0	27.0	27.0	65.8	43.0	0.0
Ln Grp LOS				D	D	D	D	C	C	E	D	
Approach Vol, veh/h					624			1170			1030	
Approach Delay, s/veh					51.6			30.9			44.4	
Approach LOS					D			C			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	8		6	5		
Case No	2.0	4.0	11.0		3.0	2.0		
Phs Duration (G+Y+Rc), s	10.9	93.9	25.1		56.6	48.3		
Change Period (Y+Rc), s	* 4.7	* 4.7	4.7		* 4.9	4.7		
Max Green (Gmax), s	* 14	* 64	38.0		* 52	26.0		
Max Allow Headway (MAH), s	1.0	2.4	2.0		2.3	1.0		
Max Q Clear (g_c+I1), s	6.4	29.4	19.1		34.1	12.1		
Green Ext Time (g_e), s	0.0	0.9	0.3		1.3	0.0		
Prob of Phs Call (p_c)	0.89	1.00	1.00		1.00	1.00		
Prob of Max Out (p_x)	0.46	0.00	0.00		0.00	0.00		

Left-Turn Movement Data								
Assigned Mvmt	1		3			5		
Mvmt Sat Flow, veh/h	1767		1058			3428		

Through Movement Data								
Assigned Mvmt		2	8		6			
Mvmt Sat Flow, veh/h		3131	2601		3526			

Right-Turn Movement Data								
Assigned Mvmt		12	18		16			
Mvmt Sat Flow, veh/h		388	1560		1572			

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

Lanes in Grp	1	0	1	0	0	2	0	0
Grp Vol (v), veh/h	61	0	208	0	0	291	0	0
Grp Sat Flow (s), veh/h/ln	1767	0	1803	0	0	1714	0	0
Q Serve Time (g_s), s	4.4	0.0	14.3	0.0	0.0	10.1	0.0	0.0
Cycle Q Clear Time (g_c), s	4.4	0.0	14.3	0.0	0.0	10.1	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	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)	1.00	0.00	0.59	0.00	0.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	85	0	283	0	0	1149	0	0
V/C Ratio (X)	0.72	0.00	0.73	0.00	0.00	0.25	0.00	0.00
Avail Cap (c_a), veh/h	190	0	527	0	0	1149	0	0
Upstream Filter (I)	0.89	0.00	1.00	0.00	0.00	0.72	0.00	0.00
Uniform Delay (d1), s/veh	62.1	0.0	52.2	0.0	0.0	42.9	0.0	0.0
Incr Delay (d2), s/veh	3.8	0.0	1.4	0.0	0.0	0.0	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	65.8	0.0	53.6	0.0	0.0	43.0	0.0	0.0
1st-Term Q (Q1), veh/ln	2.0	0.0	6.4	0.0	0.0	4.6	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	0.1	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%)	1.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	2.1	0.0	6.5	0.0	0.0	4.6	0.0	0.0
%ile Storage Ratio (RQ%)	0.36	0.00	0.59	0.00	0.00	0.35	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	8	0	6	0	0	0
Lane Assignment		T	T		T			
Lanes in Grp	0	1	1	0	2	0	0	0
Grp Vol (v), veh/h	0	440	194	0	969	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1763	1856	0	1763	0	0	0
Q Serve Time (g_s), s	0.0	27.4	12.8	0.0	32.1	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	27.4	12.8	0.0	32.1	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	1210	292	0	1402	0	0	0
V/C Ratio (X)	0.00	0.36	0.67	0.00	0.69	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	1210	542	0	1402	0	0	0
Upstream Filter (I)	0.00	0.72	1.00	0.00	0.89	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	26.3	51.6	0.0	40.5	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.6	1.0	0.0	2.5	0.0	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	27.0	52.5	0.0	43.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	12.9	5.9	0.0	14.5	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.1	0.0	0.5	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	1.00	0.00	1.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	13.1	6.0	0.0	15.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	1.00	0.54	0.00	0.34	0.00	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

Right Lane Group Data								
Assigned Mvmt	0	12	18	0	16	0	0	0
Lane Assignment		T+R	R		R			
Lanes in Grp	0	1	1	0	1	0	0	0
Grp Vol (v), veh/h	0	439	222	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1757	1560	0	1572	0	0	0
Q Serve Time (g_s), s	0.0	27.4	17.1	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	27.4	17.1	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	1572.5	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	6.2	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.22	1.00	0.00	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	1206	321	0	625	0	0	0
V/C Ratio (X)	0.00	0.36	0.69	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	1206	531	0	625	0	0	0
Upstream Filter (I)	0.00	0.72	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	26.3	47.9	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.6	1.0	0.0	0.0	0.0	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	27.0	48.9	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	12.9	6.6	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.1	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	1.00	0.00	1.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	13.1	6.7	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	1.00	1.15	0.00	0.00	0.00	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

Intersection Summary	
HCM 6th Ctrl Delay	40.4
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	363	0	399	0	0	0	0	753	578	429	608	0
Future Volume (veh/h)	363	0	399	0	0	0	0	753	578	429	608	0
Number	7	4	14				5	2	12	1	6	16
Initial Q, veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.96				1.00		0.93	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1856	1856	1856				0	1856	1856	1856	1856	0
Adj Flow Rate, veh/h	430	0	111				0	784	510	447	633	0
Peak Hour Factor	0.96	0.96	0.96				0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3				0	3	3	3	3	0
Opposing Right Turn Influence	Yes						No			Yes		
Cap, veh/h	630	0	270				0	1804	785	326	2643	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Prop Arrive On Green	0.18	0.00	0.18				0.00	0.53	0.53	0.37	1.00	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh	50.5	0.0	47.8				0.0	19.1	25.8	223.2	0.2	0.0
Ln Grp LOS	D	A	D				A	B	C	F	A	A
Approach Vol, veh/h		541						1294			1080	
Approach Delay, s/veh		49.9						21.7			92.5	
Approach LOS		D						C			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Case No	2.0	8.0		9.0		4.0		
Phs Duration (G+Y+Rc), s	28.0	74.1		27.9		102.1		
Change Period (Y+Rc), s	4.0	* 4.7		* 4.7		* 4.7		
Max Green (Gmax), s	24.0	* 55		* 38		* 83		
Max Allow Headway (MAH), s	2.8	6.3		2.8		6.1		
Max Q Clear (g_c+I1), s	26.0	34.2		16.8		2.0		
Green Ext Time (g_e), s	0.0	12.1		0.9		7.3		
Prob of Phs Call (p_c)	1.00	1.00		1.00		1.00		
Prob of Max Out (p_x)	1.00	0.00		0.00		0.00		

Left-Turn Movement Data								
Assigned Mvmt	1	5		7				
Mvmt Sat Flow, veh/h	1767	0		3534				

Through Movement Data								
Assigned Mvmt		2		4		6		
Mvmt Sat Flow, veh/h		3544		0		3618		

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		
Mvmt Sat Flow, veh/h		1469		1514		0		

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

Lanes in Grp	1	0	0	2	0	0	0	0
Grp Vol (v), veh/h	447	0	0	430	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1767	0	0	1767	0	0	0	0
Q Serve Time (g_s), s	24.0	0.0	0.0	14.8	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	24.0	0.0	0.0	14.8	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	1767	0	0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	69.4	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)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	326	0	0	630	0	0	0	0
V/C Ratio (X)	1.37	0.00	0.00	0.68	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	326	0	0	1033	0	0	0	0
Upstream Filter (I)	0.84	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	41.0	0.0	0.0	50.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	182.2	0.0	0.0	0.5	0.0	0.0	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	223.2	0.0	0.0	50.5	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	8.6	0.0	0.0	6.4	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	16.5	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%)	1.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	25.1	0.0	0.0	6.4	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	1.91	0.00	0.00	0.14	0.00	0.00	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	30.2	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	0.3	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	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	2	0	0
Grp Vol (v), veh/h	0	784	0	0	0	633	0	0
Grp Sat Flow (s), veh/h/ln	0	1689	0	0	0	1763	0	0
Q Serve Time (g_s), s	0.0	18.3	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	18.3	0.0	0.0	0.0	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	1804	0	0	0	2643	0	0
V/C Ratio (X)	0.00	0.43	0.00	0.00	0.00	0.24	0.00	0.00
Avail Cap (c_a), veh/h	0	1804	0	0	0	2643	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	0.84	0.00	0.00
Uniform Delay (d1), s/veh	0.0	18.4	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.8	0.0	0.0	0.0	0.2	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	19.1	0.0	0.0	0.0	0.2	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	7.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.2	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	0.00
%ile Back of Q (50%), veh/ln	0.0	7.2	0.0	0.0	0.0	0.1	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.77	0.00	0.00	0.00	0.01	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

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment		T+R		R				
Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	510	0	111	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1469	0	1514	0	0	0	0
Q Serve Time (g_s), s	0.0	32.2	0.0	8.5	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	32.2	0.0	8.5	0.0	0.0	0.0	0.0
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	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	785	0	270	0	0	0	0
V/C Ratio (X)	0.00	0.65	0.00	0.41	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	785	0	443	0	0	0	0
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	21.6	0.0	47.4	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	4.1	0.0	0.4	0.0	0.0	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	25.8	0.0	47.8	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	10.7	0.0	3.1	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.9	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	0.00
%ile Back of Q (50%), veh/ln	0.0	11.6	0.0	3.2	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	1.24	0.00	0.20	0.00	0.00	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

Intersection Summary	
HCM 6th Ctrl Delay	53.2
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

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	29	0	135	2	0	4	240	183	0	0	153	8
Future Vol, veh/h	29	0	135	2	0	4	240	183	0	0	153	8
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	120	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	30	0	139	2	0	4	247	189	0	0	158	8

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	751	845	83	762	849	95	166	0	0	189	0	0
Stage 1	162	162	-	683	683	-	-	-	-	-	-	-
Stage 2	589	683	-	79	166	-	-	-	-	-	-	-
Critical Hdwy	7.56	6.56	6.96	7.56	6.56	6.96	4.16	-	-	4.16	-	-
Critical Hdwy Stg 1	6.56	5.56	-	6.56	5.56	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.56	5.56	-	6.56	5.56	-	-	-	-	-	-	-
Follow-up Hdwy	3.53	4.03	3.33	3.53	4.03	3.33	2.23	-	-	2.23	-	-
Pot Cap-1 Maneuver	298	296	957	292	295	940	1402	-	-	1375	-	-
Stage 1	821	761	-	403	445	-	-	-	-	-	-	-
Stage 2	459	445	-	918	757	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	257	244	957	216	243	940	1402	-	-	1375	-	-
Mov Cap-2 Maneuver	257	244	-	216	243	-	-	-	-	-	-	-
Stage 1	677	761	-	332	367	-	-	-	-	-	-	-
Stage 2	376	367	-	784	757	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.4	13.2	4.6	0
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1402	-	-	257	957	444	1375	-	-
HCM Lane V/C Ratio	0.176	-	-	0.116	0.145	0.014	-	-	-
HCM Control Delay (s)	8.1	-	-	20.8	9.4	13.2	0	-	-
HCM Lane LOS	A	-	-	C	A	B	A	-	-
HCM 95th %tile Q(veh)	0.6	-	-	0.4	0.5	0	0	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	47	112	22	339	378	318	212	264	114	94	243	75
Future Volume (veh/h)	47	112	22	339	378	318	212	264	114	94	243	75
Number	3	8	18	7	4	14	1	6	16	5	2	12
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	50	119	17	361	402	115	226	281	78	100	259	48
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	87	345	49	211	533	451	211	639	174	132	563	103
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	0.05	0.22	0.22	0.12	0.29	0.29	0.12	0.23	0.23	0.07	0.19	0.19
Unsig. Movement Delay												
Ln Grp Delay, s/veh	30.5	0.0	18.0	364.2	19.4	14.8	106.2	18.0	18.1	32.4	20.0	20.1
Ln Grp LOS	C	A	B	F	B	B	F	B	B	C	B	C
Approach Vol, veh/h		186			878			585			407	
Approach Delay, s/veh		21.4			160.6			52.1			23.1	
Approach LOS		C			F			D			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	3.0	2.0	4.0	2.0	4.0
Phs Duration (G+Y+Rc), s	11.0	14.7	7.3	19.9	8.7	17.0	11.0	16.2
Change Period (Y+Rc), s	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7
Max Green (Gmax), s	* 6.3	* 51	* 5	* 39	* 24	* 33	* 6.3	* 38
Max Allow Headway (MAH), s	3.8	5.2	3.8	4.8	3.8	5.2	3.7	5.2
Max Q Clear (g_c+I1), s	8.3	6.2	3.5	12.4	4.9	6.7	8.3	5.4
Green Ext Time (g_e), s	0.0	1.9	0.0	2.8	0.2	2.1	0.0	0.7
Prob of Phs Call (p_c)	0.96	1.00	0.52	1.00	0.77	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.00	0.00	0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1767		1767		1767		1767	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		2977		1856		2738		1588

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		544		1572		746		227

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

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	226	0	50	0	100	0	361	0
Grp Sat Flow (s), veh/h/ln	1767	0	1767	0	1767	0	1767	0
Q Serve Time (g_s), s	6.3	0.0	1.5	0.0	2.9	0.0	6.3	0.0
Cycle Q Clear Time (g_c), s	6.3	0.0	1.5	0.0	2.9	0.0	6.3	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	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)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	211	0	87	0	132	0	211	0
V/C Ratio (X)	1.07	0.00	0.58	0.00	0.76	0.00	1.71	0.00
Avail Cap (c_a), veh/h	211	0	167	0	812	0	211	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	23.3	0.0	24.6	0.0	24.0	0.0	23.3	0.0
Incr Delay (d2), s/veh	82.9	0.0	5.9	0.0	8.4	0.0	340.9	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	106.2	0.0	30.5	0.0	32.4	0.0	364.2	0.0
1st-Term Q (Q1), veh/ln	2.3	0.0	0.6	0.0	1.1	0.0	2.3	0.0
2nd-Term Q (Q2), veh/ln	4.8	0.0	0.1	0.0	0.3	0.0	19.9	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%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	7.2	0.0	0.7	0.0	1.4	0.0	22.2	0.0
%ile Storage Ratio (RQ%)	1.15	0.00	0.16	0.00	0.17	0.00	1.78	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	3.9	0.0	0.0	0.0	0.0	0.0	37.6	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	0.3	0.0	0.0	0.0	0.0	0.0	0.4	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		
Lanes in Grp	0	1	0	1	0	1	0	0
Grp Vol (v), veh/h	0	152	0	402	0	179	0	0
Grp Sat Flow (s), veh/h/ln	0	1763	0	1856	0	1763	0	0
Q Serve Time (g_s), s	0.0	4.0	0.0	10.4	0.0	4.6	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	4.0	0.0	10.4	0.0	4.6	0.0	0.0
Lane Grp Cap (c), veh/h	0	333	0	533	0	411	0	0
V/C Ratio (X)	0.00	0.46	0.00	0.75	0.00	0.44	0.00	0.00
Avail Cap (c_a), veh/h	0	1687	0	1379	0	1087	0	0
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	19.0	0.0	17.2	0.0	17.3	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.0	0.0	2.2	0.0	0.7	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	20.0	0.0	19.4	0.0	18.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	1.5	0.0	3.7	0.0	1.6	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.3	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	1.5	0.0	4.0	0.0	1.7	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.06	0.00	0.24	0.00	0.07	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

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	155	0	115	0	180	0	136
Grp Sat Flow (s), veh/h/ln	0	1758	0	1572	0	1721	0	1815
Q Serve Time (g_s), s	0.0	4.2	0.0	3.0	0.0	4.7	0.0	3.4
Cycle Q Clear Time (g_c), s	0.0	4.2	0.0	3.0	0.0	4.7	0.0	3.4
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	0.31	0.00	1.00	0.00	0.43	0.00	0.13
Lane Grp Cap (c), veh/h	0	332	0	451	0	402	0	394
V/C Ratio (X)	0.00	0.47	0.00	0.25	0.00	0.45	0.00	0.35
Avail Cap (c_a), veh/h	0	1682	0	1169	0	1061	0	1304
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	19.1	0.0	14.5	0.0	17.4	0.0	17.5
Incr Delay (d2), s/veh	0.0	1.0	0.0	0.3	0.0	0.8	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	20.1	0.0	14.8	0.0	18.1	0.0	18.0
1st-Term Q (Q1), veh/ln	0.0	1.5	0.0	0.9	0.0	1.6	0.0	1.2
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	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	1.6	0.0	0.9	0.0	1.7	0.0	1.3
%ile Storage Ratio (RQ%)	0.00	0.07	0.00	0.06	0.00	0.07	0.00	0.02
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	89.9
HCM 6th LOS	F

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	6.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	0	1	28	65	9	80	132	5	10	166	10
Future Vol, veh/h	1	0	1	28	65	9	80	132	5	10	166	10
Conflicting Peds, #/hr	13	0	45	45	0	13	43	0	20	20	0	43
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	0	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	76	76	76	76	76	76	76	76	76	76	76	76
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	1	0	1	37	86	12	105	174	7	13	218	13

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	744	-	313	704	708	211	274	0	0	201	0	0
Stage 1	294	-	-	408	408	-	-	-	-	-	-	-
Stage 2	450	-	-	296	300	-	-	-	-	-	-	-
Critical Hdwy	7.13	-	6.23	7.13	6.53	6.23	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.13	-	-	6.13	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.13	-	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.527	-	3.327	3.527	4.027	3.327	2.227	-	-	2.227	-	-
Pot Cap-1 Maneuver	329	0	725	350	358	827	1283	-	-	1365	-	-
Stage 1	712	0	-	618	595	-	-	-	-	-	-	-
Stage 2	587	0	-	710	664	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	221	-	666	302	301	801	1230	-	-	1339	-	-
Mov Cap-2 Maneuver	221	-	-	302	301	-	-	-	-	-	-	-
Stage 1	618	-	-	549	528	-	-	-	-	-	-	-
Stage 2	433	-	-	671	629	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	15.9	24.2	3	0.4
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1230	-	-	221	666	319	1339	-	-
HCM Lane V/C Ratio	0.086	-	-	0.006	0.002	0.421	0.01	-	-
HCM Control Delay (s)	8.2	0	-	21.4	10.4	24.2	7.7	0	-
HCM Lane LOS	A	A	-	C	B	C	A	A	-
HCM 95th %tile Q(veh)	0.3	-	-	0	0	2	0	-	-

Intersection	
Int Delay, s/veh	2.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	2	45	77	160	171	9
Future Vol, veh/h	2	45	77	160	171	9
Conflicting Peds, #/hr	0	1	4	0	0	4
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	66	66	66	66	66	66
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	3	68	117	242	259	14

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	625	142	277	0	-	0
Stage 1	270	-	-	-	-	-
Stage 2	355	-	-	-	-	-
Critical Hdwy	6.86	6.96	4.16	-	-	-
Critical Hdwy Stg 1	5.86	-	-	-	-	-
Critical Hdwy Stg 2	5.86	-	-	-	-	-
Follow-up Hdwy	3.53	3.33	2.23	-	-	-
Pot Cap-1 Maneuver	415	877	1276	-	-	-
Stage 1	748	-	-	-	-	-
Stage 2	678	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	368	873	1271	-	-	-
Mov Cap-2 Maneuver	368	-	-	-	-	-
Stage 1	666	-	-	-	-	-
Stage 2	675	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.8	2.8	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1271	-	825	-	-
HCM Lane V/C Ratio	0.092	-	0.086	-	-
HCM Control Delay (s)	8.1	0.2	9.8	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.3	-	0.3	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	14	174	176	58	293	47	148	177	63	134	191	69
Future Volume (veh/h)	14	174	176	58	293	47	148	177	63	134	191	69
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		0.97	1.00		0.98	1.00		0.97
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	16	200	0	67	337	46	170	203	21	154	220	30
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	35	458		105	456	62	220	407	340	200	387	318
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	0.25	0.00	0.06	0.29	0.29	0.12	0.22	0.22	0.11	0.21	0.21
Unsig. Movement Delay												
Ln Grp Delay, s/veh	34.2	17.2	0.0	30.2	0.0	18.9	27.8	18.8	16.2	28.6	19.8	16.8
Ln Grp LOS	C	B		C	A	B	C	B	B	C	B	B
Approach Vol, veh/h		216			450			394			404	
Approach Delay, s/veh		18.5			20.6			22.5			23.0	
Approach LOS		B			C			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	4.0
Phs Duration (G+Y+Rc), s	10.6	16.1	7.8	17.6	11.2	15.6	5.7	19.6
Change Period (Y+Rc), s	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7
Max Green (Gmax), s	* 12	* 24	* 5.3	* 30	* 13	* 23	* 5	* 30
Max Allow Headway (MAH), s	3.9	5.0	3.8	5.1	3.8	5.2	3.8	5.3
Max Q Clear (g_c+I1), s	6.4	7.0	3.9	6.7	6.9	7.5	2.5	12.0
Green Ext Time (g_e), s	0.2	1.0	0.0	1.0	0.2	1.2	0.0	2.2
Prob of Phs Call (p_c)	0.89	1.00	0.62	1.00	0.91	1.00	0.21	1.00
Prob of Max Out (p_x)	0.17	0.00	1.00	0.00	0.10	0.01	1.00	0.02

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1767		1767		1767		1767	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1856		1856		1856		1592

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1547		1572		1527		217

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

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	154	0	67	0	170	0	16	0
Grp Sat Flow (s), veh/h/ln	1767	0	1767	0	1767	0	1767	0
Q Serve Time (g_s), s	4.4	0.0	1.9	0.0	4.9	0.0	0.5	0.0
Cycle Q Clear Time (g_c), s	4.4	0.0	1.9	0.0	4.9	0.0	0.5	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	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)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	200	0	105	0	220	0	35	0
V/C Ratio (X)	0.77	0.00	0.64	0.00	0.77	0.00	0.46	0.00
Avail Cap (c_a), veh/h	417	0	180	0	451	0	170	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	22.4	0.0	23.9	0.0	22.1	0.0	25.2	0.0
Incr Delay (d2), s/veh	6.2	0.0	6.2	0.0	5.7	0.0	9.0	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	28.6	0.0	30.2	0.0	27.8	0.0	34.2	0.0
1st-Term Q (Q1), veh/ln	1.7	0.0	0.7	0.0	1.8	0.0	0.2	0.0
2nd-Term Q (Q2), veh/ln	0.3	0.0	0.2	0.0	0.4	0.0	0.1	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%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	2.1	0.0	0.9	0.0	2.1	0.0	0.3	0.0
%ile Storage Ratio (RQ%)	0.48	0.00	0.26	0.00	0.37	0.00	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		
Lanes in Grp	0	1	0	1	0	1	0	0
Grp Vol (v), veh/h	0	203	0	200	0	220	0	0
Grp Sat Flow (s), veh/h/ln	0	1856	0	1856	0	1856	0	0
Q Serve Time (g_s), s	0.0	5.0	0.0	4.7	0.0	5.5	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	5.0	0.0	4.7	0.0	5.5	0.0	0.0
Lane Grp Cap (c), veh/h	0	407	0	458	0	387	0	0
V/C Ratio (X)	0.00	0.50	0.00	0.44	0.00	0.57	0.00	0.00
Avail Cap (c_a), veh/h	0	841	0	1069	0	805	0	0
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	17.8	0.0	16.6	0.0	18.5	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.9	0.0	0.7	0.0	1.3	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	18.8	0.0	17.2	0.0	19.8	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	1.9	0.0	1.7	0.0	2.2	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.1	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	2.0	0.0	1.8	0.0	2.3	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.05	0.00	0.15	0.00	0.11	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

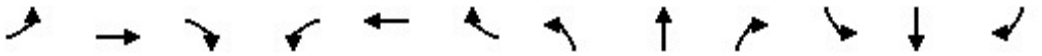
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	21	0	0	0	30	0	383
Grp Sat Flow (s), veh/h/ln	0	1547	0	1572	0	1527	0	1810
Q Serve Time (g_s), s	0.0	0.6	0.0	0.0	0.0	0.8	0.0	10.0
Cycle Q Clear Time (g_c), s	0.0	0.6	0.0	0.0	0.0	0.8	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	1.00	0.00	1.00	0.00	0.12
Lane Grp Cap (c), veh/h	0	340	0	388	0	318	0	519
V/C Ratio (X)	0.00	0.06	0.00	0.00	0.00	0.09	0.00	0.74
Avail Cap (c_a), veh/h	0	701	0	906	0	663	0	1053
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	16.1	0.0	0.0	0.0	16.6	0.0	16.8
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.0	0.0	0.1	0.0	2.1
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	16.2	0.0	0.0	0.0	16.8	0.0	18.9
1st-Term Q (Q1), veh/ln	0.0	0.2	0.0	0.0	0.0	0.3	0.0	3.6
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
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	0.0	0.0	0.3	0.0	3.9
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.49
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

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	222	0	470	0	0	0	202	765	0	1	720	45
Future Volume (veh/h)	222	0	470	0	0	0	202	765	0	1	720	45
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)	0.57		1.00	1.00		1.00	1.00		1.00	1.00		0.96
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	241	0	119	0	0	0	220	832	0	1	783	49
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	275	0	344	0	2	0	280	2624	0	2	2231	140
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Prop Arrive On Green	0.14	0.00	0.14	0.00	0.00	0.00	0.16	1.00	0.00	0.00	0.66	0.66
Unsig. Movement Delay												
Ln Grp Delay, s/veh	73.5	0.0	40.2	0.0	0.0	0.0	53.3	0.3	0.0	145.8	9.7	9.7
Ln Grp LOS	E	A	D	A	A	A	D	A	A	F	A	A
Approach Vol, veh/h		360			0			1052			833	
Approach Delay, s/veh		62.5			0.0			11.3			9.8	
Approach LOS		E						B			A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	8	4	5	6		
Case No	2.0	4.0	12.0	9.0	2.0	4.0		
Phs Duration (G+Y+Rc), s	4.9	94.0	0.0	21.1	14.5	84.4		
Change Period (Y+Rc), s	* 4.7	* 4.7	4.7	* 4.7	* 4.7	* 4.7		
Max Green (Gmax), s	* 5	* 48	30.0	* 18	* 17	* 36		
Max Allow Headway (MAH), s	3.8	5.1	0.0	4.9	3.8	5.1		
Max Q Clear (g_c+I1), s	2.1	2.0	0.0	16.1	9.4	14.3		
Green Ext Time (g_e), s	0.0	6.8	0.0	0.3	0.4	5.2		
Prob of Phs Call (p_c)	0.03	1.00	0.00	1.00	1.00	1.00		
Prob of Max Out (p_x)	1.00	0.00	0.00	1.00	0.03	0.00		

Left-Turn Movement Data								
Assigned Mvmt	1		3	7	5			
Mvmt Sat Flow, veh/h	1767		0	2012	3428			

Through Movement Data								
Assigned Mvmt		2	8	4		6		
Mvmt Sat Flow, veh/h		3618	1856	0		3361		

Right-Turn Movement Data								
Assigned Mvmt		12	18	14		16		
Mvmt Sat Flow, veh/h		0	0	1572		210		

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

Lanes in Grp	1	0	0	2	2	0	0	0
Grp Vol (v), veh/h	1	0	0	241	220	0	0	0
Grp Sat Flow (s), veh/h/ln	1767	0	0	1006	1714	0	0	0
Q Serve Time (g_s), s	0.1	0.0	0.0	14.1	7.4	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.1	0.0	0.0	14.1	7.4	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	1006	0	0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	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)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	2	0	0	275	280	0	0	0
V/C Ratio (X)	0.41	0.00	0.00	0.87	0.78	0.00	0.00	0.00
Avail Cap (c_a), veh/h	74	0	0	298	494	0	0	0
Upstream Filter (I)	1.00	0.00	0.00	1.00	0.84	0.00	0.00	0.00
Uniform Delay (d1), s/veh	59.9	0.0	0.0	50.8	49.2	0.0	0.0	0.0
Incr Delay (d2), s/veh	85.9	0.0	0.0	22.7	4.1	0.0	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	145.8	0.0	0.0	73.5	53.3	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	3.5	2.9	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	0.0	0.9	0.2	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%)	1.00	0.00	1.00	1.00	1.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.1	0.0	0.0	4.4	3.1	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.04	0.00	0.00	1.88	0.39	0.00	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	8	4	0	6	0	0
Lane Assignment		T	T			T		
Lanes in Grp	0	2	1	0	0	1	0	0
Grp Vol (v), veh/h	0	832	0	0	0	411	0	0
Grp Sat Flow (s), veh/h/ln	0	1763	1856	0	0	1763	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	12.2	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	12.2	0.0	0.0
Lane Grp Cap (c), veh/h	0	2624	2	0	0	1170	0	0
V/C Ratio (X)	0.00	0.32	0.00	0.00	0.00	0.35	0.00	0.00
Avail Cap (c_a), veh/h	0	2624	464	0	0	1170	0	0
Upstream Filter (I)	0.00	0.84	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	8.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.3	0.0	0.0	0.0	0.8	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	0.3	0.0	0.0	0.0	9.7	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	4.3	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	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	0.1	0.0	0.0	0.0	4.6	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.24	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

Right Lane Group Data								
Assigned Mvmt	0	12	18	14	0	16	0	0
Lane Assignment				R		T+R		
Lanes in Grp	0	0	0	1	0	1	0	0
Grp Vol (v), veh/h	0	0	0	119	0	421	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1572	0	1808	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	7.7	0.0	12.3	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	7.7	0.0	12.3	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	1572.5	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	9.8	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	1.00	0.00	0.12	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	344	0	1200	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.35	0.00	0.35	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	362	0	1200	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	39.6	0.0	8.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.6	0.0	0.8	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	0.0	0.0	40.2	0.0	9.7	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	3.0	0.0	4.4	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	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	0.0	0.0	3.1	0.0	4.7	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.07	0.00	0.24	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

Intersection Summary	
HCM 6th Ctrl Delay	19.0
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	306	122	338	142	717	167	100	944	119
Future Volume (veh/h)	0	0	0	306	122	338	142	717	167	100	944	119
Number				3	8	18	5	2	12	1	6	16
Initial Q, veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)				1.00		0.98	1.00		0.95	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln				1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h				333	207	318	154	779	169	109	1026	0
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				3	3	3	3	3	3	3	3	3
Opposing Right Turn Influence				Yes			Yes			Yes		
Cap, veh/h				381	400	453	1031	1685	366	133	1284	
HCM Platoon Ratio				1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Prop Arrive On Green				0.22	0.22	0.22	0.10	0.20	0.20	0.08	0.36	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh				52.8	41.9	39.0	40.0	32.6	32.7	60.4	38.3	0.0
Ln Grp LOS				D	D	D	D	C	C	E	D	
Approach Vol, veh/h					858			1102			1135	
Approach Delay, s/veh					45.1			33.7			40.4	
Approach LOS					D			C			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	8		6	5		
Case No	2.0	4.0	11.0		3.0	2.0		
Phs Duration (G+Y+Rc), s	13.8	75.6	30.6		48.6	40.8		
Change Period (Y+Rc), s	* 4.7	* 4.7	4.7		* 4.9	4.7		
Max Green (Gmax), s	* 14	* 54	38.0		* 44	24.0		
Max Allow Headway (MAH), s	1.0	2.4	2.0		2.3	1.0		
Max Q Clear (g_c+I1), s	9.3	31.0	24.0		33.3	6.9		
Green Ext Time (g_e), s	0.0	1.0	0.5		1.3	0.0		
Prob of Phs Call (p_c)	0.97	1.00	1.00		1.00	0.99		
Prob of Max Out (p_x)	0.52	0.00	0.00		0.00	0.00		

Left-Turn Movement Data								
Assigned Mvmt	1		3			5		
Mvmt Sat Flow, veh/h	1767		1767			3428		

Through Movement Data								
Assigned Mvmt		2	8		6			
Mvmt Sat Flow, veh/h		2850	1856		3526			

Right-Turn Movement Data								
Assigned Mvmt		12	18		16			
Mvmt Sat Flow, veh/h		618	1548		1572			

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

Lanes in Grp	1	0	1	0	0	2	0	0
Grp Vol (v), veh/h	109	0	333	0	0	154	0	0
Grp Sat Flow (s), veh/h/ln	1767	0	1767	0	0	1714	0	0
Q Serve Time (g_s), s	7.3	0.0	21.8	0.0	0.0	4.9	0.0	0.0
Cycle Q Clear Time (g_c), s	7.3	0.0	21.8	0.0	0.0	4.9	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	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)	1.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	133	0	381	0	0	1031	0	0
V/C Ratio (X)	0.82	0.00	0.87	0.00	0.00	0.15	0.00	0.00
Avail Cap (c_a), veh/h	206	0	560	0	0	1031	0	0
Upstream Filter (I)	0.77	0.00	1.00	0.00	0.00	0.82	0.00	0.00
Uniform Delay (d1), s/veh	54.7	0.0	45.5	0.0	0.0	40.0	0.0	0.0
Incr Delay (d2), s/veh	5.8	0.0	7.3	0.0	0.0	0.0	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	60.4	0.0	52.8	0.0	0.0	40.0	0.0	0.0
1st-Term Q (Q1), veh/ln	3.2	0.0	9.5	0.0	0.0	2.1	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.2	0.0	0.8	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%)	1.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	3.4	0.0	10.2	0.0	0.0	2.1	0.0	0.0
%ile Storage Ratio (RQ%)	0.59	0.00	0.92	0.00	0.00	0.16	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	8	0	6	0	0	0
Lane Assignment		T	T		T			
Lanes in Grp	0	1	1	0	2	0	0	0
Grp Vol (v), veh/h	0	482	207	0	1026	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1763	1856	0	1763	0	0	0
Q Serve Time (g_s), s	0.0	29.0	11.8	0.0	31.3	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	29.0	11.8	0.0	31.3	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	1042	400	0	1284	0	0	0
V/C Ratio (X)	0.00	0.46	0.52	0.00	0.80	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	1042	588	0	1284	0	0	0
Upstream Filter (I)	0.00	0.82	1.00	0.00	0.77	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	31.4	41.5	0.0	34.2	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.2	0.4	0.0	4.1	0.0	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	32.6	41.9	0.0	38.3	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	13.7	5.4	0.0	13.1	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	0.0	0.7	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	1.00	0.00	1.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	14.0	5.4	0.0	13.8	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	1.07	0.49	0.00	0.32	0.00	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

Right Lane Group Data								
Assigned Mvmt	0	12	18	0	16	0	0	0
Lane Assignment		T+R	R		R			
Lanes in Grp	0	1	1	0	1	0	0	0
Grp Vol (v), veh/h	0	466	318	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1705	1548	0	1572	0	0	0
Q Serve Time (g_s), s	0.0	29.0	22.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	29.0	22.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	1572.5	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	9.1	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.36	1.00	0.00	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	1008	453	0	573	0	0	0
V/C Ratio (X)	0.00	0.46	0.70	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	1008	609	0	573	0	0	0
Upstream Filter (I)	0.00	0.82	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	31.4	37.9	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.3	1.1	0.0	0.0	0.0	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	32.7	39.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	13.2	8.2	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.4	0.1	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	1.00	0.00	1.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	13.6	8.3	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	1.03	1.42	0.00	0.00	0.00	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

Intersection Summary	
HCM 6th Ctrl Delay	39.3
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	364	2	356	0	0	0	0	662	296	314	936	0
Future Volume (veh/h)	364	2	356	0	0	0	0	662	296	314	936	0
Number	7	4	14				5	2	12	1	6	16
Initial Q, veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.98				1.00		0.95	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1856	1856	1856				0	1856	1856	1856	1856	0
Adj Flow Rate, veh/h	484	0	179				0	727	270	345	1029	0
Peak Hour Factor	0.91	0.91	0.91				0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	3	3	3				0	3	3	3	3	0
Opposing Right Turn Influence	Yes						No			Yes		
Cap, veh/h	624	0	273				0	1821	666	365	2627	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Prop Arrive On Green	0.18	0.00	0.18				0.00	0.51	0.51	0.41	1.00	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh	47.9	0.0	47.0				0.0	19.1	20.0	57.5	0.3	0.0
Ln Grp LOS	D	A	D				A	B	C	E	A	A
Approach Vol, veh/h		663						997			1374	
Approach Delay, s/veh		47.7						19.4			14.7	
Approach LOS		D						B			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Case No	2.0	8.0		9.0		4.0		
Phs Duration (G+Y+Rc), s	28.8	65.3		25.9		94.1		
Change Period (Y+Rc), s	4.0	* 4.7		* 4.7		* 4.7		
Max Green (Gmax), s	28.0	* 41		* 38		* 73		
Max Allow Headway (MAH), s	2.8	6.2		2.8		6.1		
Max Q Clear (g_c+I1), s	24.6	17.3		17.7		2.0		
Green Ext Time (g_e), s	0.2	9.7		1.2		14.7		
Prob of Phs Call (p_c)	1.00	1.00		1.00		1.00		
Prob of Max Out (p_x)	0.56	0.00		0.00		0.00		

Left-Turn Movement Data								
Assigned Mvmt	1	5		7				
Mvmt Sat Flow, veh/h	1767	0		3534				

Through Movement Data								
Assigned Mvmt		2		4		6		
Mvmt Sat Flow, veh/h		3771		0		3618		

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		
Mvmt Sat Flow, veh/h		1318		1546		0		

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

Lanes in Grp	1	0	0	2	0	0	0	0
Grp Vol (v), veh/h	345	0	0	484	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1767	0	0	1767	0	0	0	0
Q Serve Time (g_s), s	22.6	0.0	0.0	15.7	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	22.6	0.0	0.0	15.7	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	1767	0	0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	60.6	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)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	365	0	0	624	0	0	0	0
V/C Ratio (X)	0.95	0.00	0.00	0.78	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	412	0	0	1119	0	0	0	0
Upstream Filter (I)	0.74	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	34.6	0.0	0.0	47.1	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	23.0	0.0	0.0	0.8	0.0	0.0	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	57.5	0.0	0.0	47.9	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	7.6	0.0	0.0	6.7	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	2.3	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%)	1.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	9.9	0.0	0.0	6.8	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.75	0.00	0.00	0.15	0.00	0.00	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	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	2	0	0
Grp Vol (v), veh/h	0	680	0	0	0	1029	0	0
Grp Sat Flow (s), veh/h/ln	0	1689	0	0	0	1763	0	0
Q Serve Time (g_s), s	0.0	15.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	15.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	1706	0	0	0	2627	0	0
V/C Ratio (X)	0.00	0.40	0.00	0.00	0.00	0.39	0.00	0.00
Avail Cap (c_a), veh/h	0	1706	0	0	0	2627	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	0.74	0.00	0.00
Uniform Delay (d1), s/veh	0.0	18.4	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.7	0.0	0.0	0.0	0.3	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	19.1	0.0	0.0	0.0	0.3	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	5.7	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.2	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	0.00
%ile Back of Q (50%), veh/ln	0.0	5.9	0.0	0.0	0.0	0.1	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.63	0.00	0.00	0.00	0.01	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

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment		T+R		R				
Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	317	0	179	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1545	0	1546	0	0	0	0
Q Serve Time (g_s), s	0.0	15.3	0.0	12.9	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	15.3	0.0	12.9	0.0	0.0	0.0	0.0
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	0.85	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	781	0	273	0	0	0	0
V/C Ratio (X)	0.00	0.41	0.00	0.66	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	781	0	489	0	0	0	0
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	18.5	0.0	46.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.6	0.0	1.0	0.0	0.0	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	20.0	0.0	47.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	5.3	0.0	4.8	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.3	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	0.00
%ile Back of Q (50%), veh/ln	0.0	5.7	0.0	4.9	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.60	0.00	0.31	0.00	0.00	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

Intersection Summary	
HCM 6th Ctrl Delay	23.4
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	6.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	17	1	211	0	0	0	349	236	0	0	219	29
Future Vol, veh/h	17	1	211	0	0	0	349	236	0	0	219	29
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	120	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	81	81	81	81	81	81	81	81	81	81	81	81
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	21	1	260	0	0	0	431	291	0	0	270	36

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1296	1441	153	1289	1459	146	306	0	0	291	0	0
Stage 1	288	288	-	1153	1153	-	-	-	-	-	-	-
Stage 2	1008	1153	-	136	306	-	-	-	-	-	-	-
Critical Hdwy	7.56	6.56	6.96	7.56	6.56	6.96	4.16	-	-	4.16	-	-
Critical Hdwy Stg 1	6.56	5.56	-	6.56	5.56	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.56	5.56	-	6.56	5.56	-	-	-	-	-	-	-
Follow-up Hdwy	3.53	4.03	3.33	3.53	4.03	3.33	2.23	-	-	2.23	-	-
Pot Cap-1 Maneuver	118	130	863	120	127	871	1244	-	-	1260	-	-
Stage 1	693	670	-	208	268	-	-	-	-	-	-	-
Stage 2	256	268	-	850	658	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	86	85	863	61	83	871	1244	-	-	1260	-	-
Mov Cap-2 Maneuver	86	85	-	61	83	-	-	-	-	-	-	-
Stage 1	453	670	-	136	175	-	-	-	-	-	-	-
Stage 2	167	175	-	592	658	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	14.9	0	5.6	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1244	-	-	86	863	-	1260	-	-
HCM Lane V/C Ratio	0.346	-	-	0.258	0.302	-	-	-	-
HCM Control Delay (s)	9.4	-	-	60.9	11	0	0	-	-
HCM Lane LOS	A	-	-	F	B	A	A	-	-
HCM 95th %tile Q(veh)	1.6	-	-	0.9	1.3	-	0	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	83	115	35	354	384	388	158	546	76	127	607	120
Future Volume (veh/h)	83	115	35	354	384	388	158	546	76	127	607	120
Number	3	8	18	7	4	14	1	6	16	5	2	12
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	94	131	31	402	436	141	180	620	77	144	690	122
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	120	348	82	202	532	450	129	886	110	186	937	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	0.07	0.24	0.24	0.11	0.29	0.29	0.07	0.28	0.28	0.11	0.31	0.31
Unsig. Movement Delay												
Ln Grp Delay, s/veh	58.0	0.0	23.6	492.7	27.3	20.6	250.3	25.1	25.1	38.2	24.1	24.2
Ln Grp LOS	E	A	C	F	C	C	F	C	C	D	C	C
Approach Vol, veh/h		256			979			877			956	
Approach Delay, s/veh		36.2			217.5			71.3			26.3	
Approach LOS		D			F			E			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	3.0	2.0	4.0	2.0	4.0
Phs Duration (G+Y+Rc), s	10.0	27.4	9.6	25.5	12.3	25.0	13.0	22.1
Change Period (Y+Rc), s	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7
Max Green (Gmax), s	* 5.3	* 53	* 5.3	* 37	* 27	* 31	* 8.3	* 34
Max Allow Headway (MAH), s	3.8	5.2	3.8	4.8	3.8	5.2	3.7	5.2
Max Q Clear (g_c+I1), s	7.3	16.9	5.8	17.9	7.7	14.8	10.3	7.5
Green Ext Time (g_e), s	0.0	5.7	0.0	2.9	0.3	3.9	0.0	0.9
Prob of Phs Call (p_c)	0.97	1.00	0.85	1.00	0.94	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.01	1.00	0.02	0.00	0.12	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1767		1767		1767		1767	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		2994		1856		3157		1451

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		529		1572		391		343

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

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	180	0	94	0	144	0	402	0
Grp Sat Flow (s), veh/h/ln	1767	0	1767	0	1767	0	1767	0
Q Serve Time (g_s), s	5.3	0.0	3.8	0.0	5.7	0.0	8.3	0.0
Cycle Q Clear Time (g_c), s	5.3	0.0	3.8	0.0	5.7	0.0	8.3	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	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)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	129	0	120	0	186	0	202	0
V/C Ratio (X)	1.39	0.00	0.78	0.00	0.77	0.00	1.99	0.00
Avail Cap (c_a), veh/h	129	0	129	0	666	0	202	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	33.6	0.0	33.2	0.0	31.6	0.0	32.1	0.0
Incr Delay (d2), s/veh	216.7	0.0	24.7	0.0	6.7	0.0	460.6	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	250.3	0.0	58.0	0.0	38.2	0.0	492.7	0.0
1st-Term Q (Q1), veh/ln	2.2	0.0	1.6	0.0	2.3	0.0	3.3	0.0
2nd-Term Q (Q2), veh/ln	7.8	0.0	0.8	0.0	0.3	0.0	25.9	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%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	10.0	0.0	2.4	0.0	2.7	0.0	29.2	0.0
%ile Storage Ratio (RQ%)	1.59	0.00	0.55	0.00	0.31	0.00	2.34	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	12.7	0.0	0.0	0.0	0.0	0.0	49.9	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	0.3	0.0	0.0	0.0	0.0	0.0	0.5	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		
Lanes in Grp	0	1	0	1	0	1	0	0
Grp Vol (v), veh/h	0	406	0	436	0	346	0	0
Grp Sat Flow (s), veh/h/ln	0	1763	0	1856	0	1763	0	0
Q Serve Time (g_s), s	0.0	14.9	0.0	15.9	0.0	12.7	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	14.9	0.0	15.9	0.0	12.7	0.0	0.0
Lane Grp Cap (c), veh/h	0	552	0	532	0	495	0	0
V/C Ratio (X)	0.00	0.74	0.00	0.82	0.00	0.70	0.00	0.00
Avail Cap (c_a), veh/h	0	1297	0	955	0	762	0	0
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	22.2	0.0	24.1	0.0	23.3	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.9	0.0	3.2	0.0	1.8	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	24.1	0.0	27.3	0.0	25.1	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	5.7	0.0	6.3	0.0	4.9	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.5	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	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	5.9	0.0	6.7	0.0	5.1	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.25	0.00	0.40	0.00	0.20	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

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	406	0	141	0	351	0	162
Grp Sat Flow (s), veh/h/ln	0	1760	0	1572	0	1785	0	1794
Q Serve Time (g_s), s	0.0	14.9	0.0	5.1	0.0	12.8	0.0	5.5
Cycle Q Clear Time (g_c), s	0.0	14.9	0.0	5.1	0.0	12.8	0.0	5.5
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	0.30	0.00	1.00	0.00	0.22	0.00	0.19
Lane Grp Cap (c), veh/h	0	551	0	450	0	501	0	430
V/C Ratio (X)	0.00	0.74	0.00	0.31	0.00	0.70	0.00	0.38
Avail Cap (c_a), veh/h	0	1295	0	810	0	771	0	849
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	22.2	0.0	20.3	0.0	23.3	0.0	23.0
Incr Delay (d2), s/veh	0.0	1.9	0.0	0.4	0.0	1.8	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	24.2	0.0	20.6	0.0	25.1	0.0	23.6
1st-Term Q (Q1), veh/ln	0.0	5.7	0.0	1.7	0.0	5.0	0.0	2.2
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.0	0.0	0.3	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	5.9	0.0	1.8	0.0	5.2	0.0	2.2
%ile Storage Ratio (RQ%)	0.00	0.25	0.00	0.11	0.00	0.20	0.00	0.04
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	101.0
HCM 6th LOS	F

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	1	0	33	24	17	51	214	7	7	209	7
Future Vol, veh/h	2	1	0	33	24	17	51	214	7	7	209	7
Conflicting Peds, #/hr	8	0	6	6	0	8	10	0	10	10	0	10
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	0	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	2	1	0	36	26	19	56	235	8	8	230	8

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	642	625	250	618	625	257	248	0	0	253	0	0
Stage 1	260	260	-	361	361	-	-	-	-	-	-	-
Stage 2	382	365	-	257	264	-	-	-	-	-	-	-
Critical Hdwy	7.13	6.53	6.23	7.13	6.53	6.23	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.13	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.13	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.527	4.027	3.327	3.527	4.027	3.327	2.227	-	-	2.227	-	-
Pot Cap-1 Maneuver	386	400	786	400	400	779	1312	-	-	1306	-	-
Stage 1	743	691	-	655	624	-	-	-	-	-	-	-
Stage 2	638	622	-	745	688	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	335	370	774	376	370	766	1300	-	-	1294	-	-
Mov Cap-2 Maneuver	335	370	-	376	370	-	-	-	-	-	-	-
Stage 1	699	679	-	616	587	-	-	-	-	-	-	-
Stage 2	560	585	-	734	676	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	15.8	15.5	1.5	0.2
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1300	-	-	335	-	423	1294	-	-
HCM Lane V/C Ratio	0.043	-	-	0.007	-	0.192	0.006	-	-
HCM Control Delay (s)	7.9	0	-	15.8	0	15.5	7.8	0	-
HCM Lane LOS	A	A	-	C	A	C	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0	-	0.7	0	-	-

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	9	42	51	207	149	7
Future Vol, veh/h	9	42	51	207	149	7
Conflicting Peds, #/hr	0	1	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	10	45	55	223	160	8

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	386	85	168	0	-	0
Stage 1	164	-	-	-	-	-
Stage 2	222	-	-	-	-	-
Critical Hdwy	6.86	6.96	4.16	-	-	-
Critical Hdwy Stg 1	5.86	-	-	-	-	-
Critical Hdwy Stg 2	5.86	-	-	-	-	-
Follow-up Hdwy	3.53	3.33	2.23	-	-	-
Pot Cap-1 Maneuver	587	954	1400	-	-	-
Stage 1	845	-	-	-	-	-
Stage 2	791	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	561	953	1400	-	-	-
Mov Cap-2 Maneuver	561	-	-	-	-	-
Stage 1	807	-	-	-	-	-
Stage 2	791	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.5	1.6	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1400	-	848	-	-
HCM Lane V/C Ratio	0.039	-	0.065	-	-
HCM Control Delay (s)	7.7	0.1	9.5	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	31	144	184	89	201	49	165	186	84	37	237	22
Future Volume (veh/h)	31	144	184	89	201	49	165	186	84	37	237	22
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		0.99	1.00		0.97	1.00		0.99
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	32	150	0	93	209	41	172	194	38	39	247	13
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	63	413		127	389	76	222	550	452	74	393	330
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	0.04	0.22	0.00	0.07	0.26	0.26	0.13	0.30	0.30	0.04	0.21	0.21
Unsig. Movement Delay												
Ln Grp Delay, s/veh	30.4	17.3	0.0	31.6	0.0	17.3	27.3	14.5	13.1	29.8	20.0	16.0
Ln Grp LOS	C	B		C	A	B	C	B	B	C	B	B
Approach Vol, veh/h		182			343			404			299	
Approach Delay, s/veh		19.6			21.2			19.8			21.1	
Approach LOS		B			C			B			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	4.0
Phs Duration (G+Y+Rc), s	6.8	19.8	8.4	16.1	11.1	15.5	6.5	17.9
Change Period (Y+Rc), s	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7
Max Green (Gmax), s	* 12	* 24	* 5.3	* 30	* 13	* 23	* 5	* 30
Max Allow Headway (MAH), s	3.9	5.0	3.8	5.1	3.8	5.3	3.8	5.3
Max Q Clear (g_c+I1), s	3.1	6.2	4.6	5.5	6.8	8.2	2.9	8.1
Green Ext Time (g_e), s	0.0	1.0	0.0	0.7	0.2	1.3	0.0	1.4
Prob of Phs Call (p_c)	0.43	1.00	0.73	1.00	0.91	1.00	0.37	1.00
Prob of Max Out (p_x)	0.00	0.00	1.00	0.00	0.10	0.02	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1767		1767		1767		1767	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1856		1856		1856		1504

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1526		1572		1554		295

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

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	39	0	93	0	172	0	32	0
Grp Sat Flow (s), veh/h/ln	1767	0	1767	0	1767	0	1767	0
Q Serve Time (g_s), s	1.1	0.0	2.6	0.0	4.8	0.0	0.9	0.0
Cycle Q Clear Time (g_c), s	1.1	0.0	2.6	0.0	4.8	0.0	0.9	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	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)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	74	0	127	0	222	0	63	0
V/C Ratio (X)	0.53	0.00	0.73	0.00	0.77	0.00	0.51	0.00
Avail Cap (c_a), veh/h	425	0	183	0	460	0	173	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	24.0	0.0	23.2	0.0	21.6	0.0	24.2	0.0
Incr Delay (d2), s/veh	5.8	0.0	8.3	0.0	5.7	0.0	6.2	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	29.8	0.0	31.6	0.0	27.3	0.0	30.4	0.0
1st-Term Q (Q1), veh/ln	0.4	0.0	1.0	0.0	1.8	0.0	0.3	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	0.3	0.0	0.3	0.0	0.1	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%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.6	0.0	1.3	0.0	2.1	0.0	0.5	0.0
%ile Storage Ratio (RQ%)	0.13	0.00	0.37	0.00	0.36	0.00	0.14	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		
Lanes in Grp	0	1	0	1	0	1	0	0
Grp Vol (v), veh/h	0	194	0	150	0	247	0	0
Grp Sat Flow (s), veh/h/ln	0	1856	0	1856	0	1856	0	0
Q Serve Time (g_s), s	0.0	4.2	0.0	3.5	0.0	6.2	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	4.2	0.0	3.5	0.0	6.2	0.0	0.0
Lane Grp Cap (c), veh/h	0	550	0	413	0	393	0	0
V/C Ratio (X)	0.00	0.35	0.00	0.36	0.00	0.63	0.00	0.00
Avail Cap (c_a), veh/h	0	857	0	1089	0	820	0	0
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	14.1	0.0	16.8	0.0	18.3	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.4	0.0	0.5	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	14.5	0.0	17.3	0.0	20.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	1.5	0.0	1.3	0.0	2.4	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.1	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	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	1.4	0.0	2.6	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.04	0.00	0.11	0.00	0.12	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

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	38	0	0	0	13	0	250
Grp Sat Flow (s), veh/h/ln	0	1526	0	1572	0	1554	0	1799
Q Serve Time (g_s), s	0.0	0.9	0.0	0.0	0.0	0.3	0.0	6.1
Cycle Q Clear Time (g_c), s	0.0	0.9	0.0	0.0	0.0	0.3	0.0	6.1
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	1.00	0.00	1.00	0.00	0.16
Lane Grp Cap (c), veh/h	0	452	0	350	0	330	0	465
V/C Ratio (X)	0.00	0.08	0.00	0.00	0.00	0.04	0.00	0.54
Avail Cap (c_a), veh/h	0	705	0	923	0	687	0	1066
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	13.0	0.0	0.0	0.0	16.0	0.0	16.3
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.0	0.0	0.0	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	13.1	0.0	0.0	0.0	16.0	0.0	17.3
1st-Term Q (Q1), veh/ln	0.0	0.3	0.0	0.0	0.0	0.1	0.0	2.2
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	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	0.3	0.0	0.0	0.0	0.1	0.0	2.3
%ile Storage Ratio (RQ%)	0.00	0.01	0.00	0.00	0.00	0.03	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	20.5
HCM 6th LOS	C

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	93	0	388	0	0	0	322	676	0	3	816	34
Future Volume (veh/h)	93	0	388	0	0	0	322	676	0	3	816	34
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)	0.92		0.95	1.00		1.00	1.00		1.00	1.00		0.98
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	96	0	81	0	0	0	332	697	0	3	841	35
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	250	0	293	0	1	0	388	2858	0	7	2418	101
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Prop Arrive On Green	0.08	0.00	0.08	0.00	0.00	0.00	0.23	1.00	0.00	0.00	0.70	0.70
Unsig. Movement Delay												
Ln Grp Delay, s/veh	58.0	0.0	45.6	0.0	0.0	0.0	57.9	0.2	0.0	101.4	8.4	8.4
Ln Grp LOS	E	A	D	A	A	A	E	A	A	F	A	A
Approach Vol, veh/h		177			0			1029			879	
Approach Delay, s/veh		52.3			0.0			18.8			8.7	
Approach LOS		D						B			A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	8	4	5	6		
Case No	2.0	4.0	12.0	9.0	2.0	4.0		
Phs Duration (G+Y+Rc), s	5.2	110.1	0.0	14.7	19.4	95.9		
Change Period (Y+Rc), s	* 4.7	* 4.7	4.7	* 4.7	* 4.7	* 4.7		
Max Green (Gmax), s	* 5	* 58	30.0	* 18	* 21	* 43		
Max Allow Headway (MAH), s	3.8	5.1	0.0	4.1	3.8	5.1		
Max Q Clear (g_c+I1), s	2.2	2.0	0.0	8.0	14.1	14.5		
Green Ext Time (g_e), s	0.0	5.5	0.0	0.4	0.6	6.0		
Prob of Phs Call (p_c)	0.10	1.00	0.00	1.00	1.00	1.00		
Prob of Max Out (p_x)	1.00	0.00	0.00	0.01	0.18	0.00		

Left-Turn Movement Data								
Assigned Mvmt	1		3	7	5			
Mvmt Sat Flow, veh/h	1767		0	3259	3428			

Through Movement Data								
Assigned Mvmt		2	8	4		6		
Mvmt Sat Flow, veh/h		3618	1856	0		3446		

Right-Turn Movement Data								
Assigned Mvmt		12	18	14		16		
Mvmt Sat Flow, veh/h		0	0	1499		143		

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

Lanes in Grp	1	0	0	2	2	0	0	0
Grp Vol (v), veh/h	3	0	0	96	332	0	0	0
Grp Sat Flow (s), veh/h/ln	1767	0	0	1629	1714	0	0	0
Q Serve Time (g_s), s	0.2	0.0	0.0	3.6	12.1	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.2	0.0	0.0	3.6	12.1	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	1629	0	0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	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)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	7	0	0	250	388	0	0	0
V/C Ratio (X)	0.43	0.00	0.00	0.38	0.86	0.00	0.00	0.00
Avail Cap (c_a), veh/h	68	0	0	446	541	0	0	0
Upstream Filter (I)	1.00	0.00	0.00	1.00	0.90	0.00	0.00	0.00
Uniform Delay (d1), s/veh	64.6	0.0	0.0	57.1	49.3	0.0	0.0	0.0
Incr Delay (d2), s/veh	36.8	0.0	0.0	1.0	8.6	0.0	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	101.4	0.0	0.0	58.0	57.9	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.1	0.0	0.0	1.5	4.6	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	0.0	0.0	0.5	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%)	1.00	0.00	1.00	1.00	1.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.2	0.0	0.0	1.5	5.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.09	0.00	0.00	0.66	0.64	0.00	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	8	4	0	6	0	0
Lane Assignment		T	T			T		
Lanes in Grp	0	2	1	0	0	1	0	0
Grp Vol (v), veh/h	0	697	0	0	0	430	0	0
Grp Sat Flow (s), veh/h/ln	0	1763	1856	0	0	1763	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	12.5	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	12.5	0.0	0.0
Lane Grp Cap (c), veh/h	0	2858	1	0	0	1237	0	0
V/C Ratio (X)	0.00	0.24	0.00	0.00	0.00	0.35	0.00	0.00
Avail Cap (c_a), veh/h	0	2858	428	0	0	1237	0	0
Upstream Filter (I)	0.00	0.90	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	7.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.0	0.0	0.8	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	0.2	0.0	0.0	0.0	8.4	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	4.4	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	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	0.1	0.0	0.0	0.0	4.6	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.24	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

Right Lane Group Data								
Assigned Mvmt	0	12	18	14	0	16	0	0
Lane Assignment				R		T+R		
Lanes in Grp	0	0	0	1	0	1	0	0
Grp Vol (v), veh/h	0	0	0	81	0	446	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1499	0	1827	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	6.0	0.0	12.5	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	6.0	0.0	12.5	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	1572.5	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	14.7	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	1.00	0.00	0.08	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	293	0	1282	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.28	0.00	0.35	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	383	0	1282	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	45.1	0.0	7.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.5	0.0	0.7	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	0.0	0.0	45.6	0.0	8.4	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	2.3	0.0	4.5	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	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	0.0	0.0	2.3	0.0	4.8	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.05	0.00	0.25	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

Intersection Summary	
HCM 6th Ctrl Delay	17.4
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	121	214	249	276	770	115	58	933	260
Future Volume (veh/h)	0	0	0	121	214	249	276	770	115	58	933	260
Number				3	8	18	5	2	12	1	6	16
Initial Q, veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)				1.00		0.99	1.00		0.94	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln				1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h				127	292	217	291	811	116	61	982	0
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				3	3	3	3	3	3	3	3	3
Opposing Right Turn Influence				Yes			Yes			Yes		
Cap, veh/h				163	402	316	1158	2115	302	85	1402	
HCM Platoon Ratio				1.00	1.00	1.00	0.33	0.33	0.33	0.67	0.67	0.67
Prop Arrive On Green				0.15	0.15	0.15	0.11	0.23	0.23	0.03	0.27	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh				54.6	53.4	49.0	42.8	27.5	27.5	65.8	43.3	0.0
Ln Grp LOS				D	D	D	D	C	C	E	D	
Approach Vol, veh/h					636			1218			1043	
Approach Delay, s/veh					52.3			31.1			44.6	
Approach LOS					D			C			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	8		6	5		
Case No	2.0	4.0	11.0		3.0	2.0		
Phs Duration (G+Y+Rc), s	10.9	94.3	24.8		56.6	48.6		
Change Period (Y+Rc), s	* 4.7	* 4.7	4.7		* 4.9	4.7		
Max Green (Gmax), s	* 14	* 64	38.0		* 52	26.0		
Max Allow Headway (MAH), s	1.0	2.4	2.0		2.3	1.0		
Max Q Clear (g_c+I1), s	6.4	31.1	18.8		34.7	12.1		
Green Ext Time (g_e), s	0.0	0.9	0.3		1.3	0.0		
Prob of Phs Call (p_c)	0.89	1.00	1.00		1.00	1.00		
Prob of Max Out (p_x)	0.46	0.00	0.00		0.00	0.00		

Left-Turn Movement Data								
Assigned Mvmt	1		3			5		
Mvmt Sat Flow, veh/h	1767		1056			3428		

Through Movement Data								
Assigned Mvmt		2	8		6			
Mvmt Sat Flow, veh/h		3068	2602		3526			

Right-Turn Movement Data								
Assigned Mvmt		12	18		16			
Mvmt Sat Flow, veh/h		439	1560		1572			

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

Lanes in Grp	1	0	1	0	0	2	0	0
Grp Vol (v), veh/h	61	0	217	0	0	291	0	0
Grp Sat Flow (s), veh/h/ln	1767	0	1803	0	0	1714	0	0
Q Serve Time (g_s), s	4.4	0.0	15.0	0.0	0.0	10.1	0.0	0.0
Cycle Q Clear Time (g_c), s	4.4	0.0	15.0	0.0	0.0	10.1	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	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)	1.00	0.00	0.59	0.00	0.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	85	0	278	0	0	1158	0	0
V/C Ratio (X)	0.72	0.00	0.78	0.00	0.00	0.25	0.00	0.00
Avail Cap (c_a), veh/h	190	0	527	0	0	1158	0	0
Upstream Filter (I)	0.89	0.00	1.00	0.00	0.00	0.71	0.00	0.00
Uniform Delay (d1), s/veh	62.1	0.0	52.8	0.0	0.0	42.7	0.0	0.0
Incr Delay (d2), s/veh	3.8	0.0	1.8	0.0	0.0	0.0	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	65.8	0.0	54.6	0.0	0.0	42.8	0.0	0.0
1st-Term Q (Q1), veh/ln	2.0	0.0	6.8	0.0	0.0	4.6	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	0.1	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%)	1.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	2.1	0.0	6.9	0.0	0.0	4.6	0.0	0.0
%ile Storage Ratio (RQ%)	0.36	0.00	0.62	0.00	0.00	0.35	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	8	0	6	0	0	0
Lane Assignment		T	T		T			
Lanes in Grp	0	1	1	0	2	0	0	0
Grp Vol (v), veh/h	0	466	202	0	982	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1763	1856	0	1763	0	0	0
Q Serve Time (g_s), s	0.0	29.1	13.4	0.0	32.7	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	29.1	13.4	0.0	32.7	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	1215	287	0	1402	0	0	0
V/C Ratio (X)	0.00	0.38	0.71	0.00	0.70	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	1215	542	0	1402	0	0	0
Upstream Filter (I)	0.00	0.71	1.00	0.00	0.89	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	26.8	52.2	0.0	40.7	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.7	1.2	0.0	2.6	0.0	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	27.5	53.4	0.0	43.3	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	13.7	6.2	0.0	14.7	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.1	0.0	0.5	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	1.00	0.00	1.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	14.0	6.3	0.0	15.2	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	1.06	0.57	0.00	0.35	0.00	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

Right Lane Group Data								
Assigned Mvmt	0	12	18	0	16	0	0	0
Lane Assignment		T+R	R		R			
Lanes in Grp	0	1	1	0	1	0	0	0
Grp Vol (v), veh/h	0	461	217	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1744	1560	0	1572	0	0	0
Q Serve Time (g_s), s	0.0	29.1	16.8	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	29.1	16.8	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	1572.5	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	6.2	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.25	1.00	0.00	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	1202	316	0	625	0	0	0
V/C Ratio (X)	0.00	0.38	0.69	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	1202	531	0	625	0	0	0
Upstream Filter (I)	0.00	0.71	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	26.8	48.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.7	1.0	0.0	0.0	0.0	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	27.5	49.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	13.6	6.5	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.1	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	1.00	0.00	1.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	13.8	6.6	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	1.05	1.12	0.00	0.00	0.00	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

Intersection Summary	
HCM 6th Ctrl Delay	40.6
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	389	0	399	0	0	0	0	772	578	434	620	0
Future Volume (veh/h)	389	0	399	0	0	0	0	772	578	434	620	0
Number	7	4	14				5	2	12	1	6	16
Initial Q, veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.96				1.00		0.93	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1856	1856	1856				0	1856	1856	1856	1856	0
Adj Flow Rate, veh/h	457	0	111				0	804	510	452	646	0
Peak Hour Factor	0.96	0.96	0.96				0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3				0	3	3	3	3	0
Opposing Right Turn Influence	Yes						No			Yes		
Cap, veh/h	648	0	278				0	1786	777	326	2624	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Prop Arrive On Green	0.18	0.00	0.18				0.00	0.53	0.53	0.37	1.00	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh	50.3	0.0	47.1				0.0	19.7	26.4	229.6	0.2	0.0
Ln Grp LOS	D	A	D				A	B	C	F	A	A
Approach Vol, veh/h		568						1314			1098	
Approach Delay, s/veh		49.7						22.3			94.6	
Approach LOS		D						C			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Case No	2.0	8.0		9.0		4.0		
Phs Duration (G+Y+Rc), s	28.0	73.5		28.5		101.5		
Change Period (Y+Rc), s	4.0	* 4.7		* 4.7		* 4.7		
Max Green (Gmax), s	24.0	* 55		* 38		* 83		
Max Allow Headway (MAH), s	2.8	6.3		2.8		6.1		
Max Q Clear (g_c+I1), s	26.0	34.6		17.8		2.0		
Green Ext Time (g_e), s	0.0	12.1		1.0		7.5		
Prob of Phs Call (p_c)	1.00	1.00		1.00		1.00		
Prob of Max Out (p_x)	1.00	0.00		0.00		0.00		

Left-Turn Movement Data								
Assigned Mvmt	1	5		7				
Mvmt Sat Flow, veh/h	1767	0		3534				

Through Movement Data								
Assigned Mvmt		2		4		6		
Mvmt Sat Flow, veh/h		3544		0		3618		

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		
Mvmt Sat Flow, veh/h		1468		1516		0		

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

Lanes in Grp	1	0	0	2	0	0	0	0
Grp Vol (v), veh/h	452	0	0	457	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1767	0	0	1767	0	0	0	0
Q Serve Time (g_s), s	24.0	0.0	0.0	15.8	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	24.0	0.0	0.0	15.8	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	1767	0	0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	68.8	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)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	326	0	0	648	0	0	0	0
V/C Ratio (X)	1.39	0.00	0.00	0.71	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	326	0	0	1033	0	0	0	0
Upstream Filter (I)	0.83	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	41.0	0.0	0.0	49.8	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	188.6	0.0	0.0	0.5	0.0	0.0	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	229.6	0.0	0.0	50.3	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	8.6	0.0	0.0	6.8	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	17.1	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%)	1.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	25.6	0.0	0.0	6.8	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	1.95	0.00	0.00	0.15	0.00	0.00	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	31.4	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	0.3	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	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	2	0	0
Grp Vol (v), veh/h	0	804	0	0	0	646	0	0
Grp Sat Flow (s), veh/h/ln	0	1689	0	0	0	1763	0	0
Q Serve Time (g_s), s	0.0	19.1	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	19.1	0.0	0.0	0.0	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	1786	0	0	0	2624	0	0
V/C Ratio (X)	0.00	0.45	0.00	0.00	0.00	0.25	0.00	0.00
Avail Cap (c_a), veh/h	0	1786	0	0	0	2624	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	0.83	0.00	0.00
Uniform Delay (d1), s/veh	0.0	18.9	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.8	0.0	0.0	0.0	0.2	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	19.7	0.0	0.0	0.0	0.2	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	7.3	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.2	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	0.00
%ile Back of Q (50%), veh/ln	0.0	7.5	0.0	0.0	0.0	0.1	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.80	0.00	0.00	0.00	0.01	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

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment		T+R		R				
Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	510	0	111	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1468	0	1516	0	0	0	0
Q Serve Time (g_s), s	0.0	32.6	0.0	8.4	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	32.6	0.0	8.4	0.0	0.0	0.0	0.0
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	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	777	0	278	0	0	0	0
V/C Ratio (X)	0.00	0.66	0.00	0.40	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	777	0	443	0	0	0	0
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	22.1	0.0	46.8	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	4.3	0.0	0.3	0.0	0.0	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	26.4	0.0	47.1	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	10.9	0.0	3.1	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.9	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	0.00
%ile Back of Q (50%), veh/ln	0.0	11.8	0.0	3.1	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	1.26	0.00	0.20	0.00	0.00	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

Intersection Summary	
HCM 6th Ctrl Delay	54.2
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	5.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	53	0	136	2	0	4	240	242	0	0	184	23
Future Vol, veh/h	53	0	136	2	0	4	240	242	0	0	184	23
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	120	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	55	0	140	2	0	4	247	249	0	0	190	24

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	821	945	107	838	957	125	214	0	0	249	0	0
Stage 1	202	202	-	743	743	-	-	-	-	-	-	-
Stage 2	619	743	-	95	214	-	-	-	-	-	-	-
Critical Hdwy	7.56	6.56	6.96	7.56	6.56	6.96	4.16	-	-	4.16	-	-
Critical Hdwy Stg 1	6.56	5.56	-	6.56	5.56	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.56	5.56	-	6.56	5.56	-	-	-	-	-	-	-
Follow-up Hdwy	3.53	4.03	3.33	3.53	4.03	3.33	2.23	-	-	2.23	-	-
Pot Cap-1 Maneuver	265	259	923	257	255	899	1346	-	-	1306	-	-
Stage 1	778	731	-	371	418	-	-	-	-	-	-	-
Stage 2	440	418	-	898	722	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	227	211	923	187	208	899	1346	-	-	1306	-	-
Mov Cap-2 Maneuver	227	211	-	187	208	-	-	-	-	-	-	-
Stage 1	635	731	-	303	341	-	-	-	-	-	-	-
Stage 2	358	341	-	762	722	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	14.1	14.2	4.1	0
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1346	-	-	227	923	396	1306	-	-
HCM Lane V/C Ratio	0.184	-	-	0.241	0.152	0.016	-	-	-
HCM Control Delay (s)	8.3	-	-	25.8	9.6	14.2	0	-	-
HCM Lane LOS	A	-	-	D	A	B	A	-	-
HCM 95th %tile Q(veh)	0.7	-	-	0.9	0.5	0	0	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	65	112	22	339	378	331	212	277	114	94	251	85
Future Volume (veh/h)	65	112	22	339	378	331	212	277	114	94	251	85
Number	3	8	18	7	4	14	1	6	16	5	2	12
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	69	119	17	361	402	129	226	295	78	100	267	58
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	106	364	52	207	532	451	207	633	165	132	538	115
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	0.06	0.23	0.23	0.12	0.29	0.29	0.12	0.23	0.23	0.07	0.19	0.19
Unsig. Movement Delay												
Ln Grp Delay, s/veh	31.3	0.0	17.7	376.7	19.7	15.2	112.4	18.7	18.8	32.8	20.7	20.8
Ln Grp LOS	C	A	B	F	B	B	F	B	B	C	C	C
Approach Vol, veh/h		205			892			599			425	
Approach Delay, s/veh		22.3			163.5			54.1			23.6	
Approach LOS		C			F			D			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	3.0	2.0	4.0	2.0	4.0
Phs Duration (G+Y+Rc), s	11.0	14.7	7.9	20.1	8.7	17.0	11.0	17.0
Change Period (Y+Rc), s	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7
Max Green (Gmax), s	* 6.3	* 51	* 5	* 39	* 24	* 33	* 6.3	* 38
Max Allow Headway (MAH), s	3.8	5.2	3.8	4.8	3.8	5.2	3.7	5.2
Max Q Clear (g_c+I1), s	8.3	6.5	4.1	12.6	5.0	7.0	8.3	5.4
Green Ext Time (g_e), s	0.0	2.0	0.0	2.8	0.2	2.2	0.0	0.7
Prob of Phs Call (p_c)	0.97	1.00	0.64	1.00	0.78	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.00	0.00	0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1767		1767		1767		1767	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		2890		1856		2769		1588

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		618		1572		720		227

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

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	226	0	69	0	100	0	361	0
Grp Sat Flow (s), veh/h/ln	1767	0	1767	0	1767	0	1767	0
Q Serve Time (g_s), s	6.3	0.0	2.1	0.0	3.0	0.0	6.3	0.0
Cycle Q Clear Time (g_c), s	6.3	0.0	2.1	0.0	3.0	0.0	6.3	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	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)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	207	0	106	0	132	0	207	0
V/C Ratio (X)	1.09	0.00	0.65	0.00	0.76	0.00	1.74	0.00
Avail Cap (c_a), veh/h	207	0	165	0	800	0	207	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	23.7	0.0	24.7	0.0	24.4	0.0	23.7	0.0
Incr Delay (d2), s/veh	88.7	0.0	6.6	0.0	8.4	0.0	353.0	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	112.4	0.0	31.3	0.0	32.8	0.0	376.7	0.0
1st-Term Q (Q1), veh/ln	2.4	0.0	0.8	0.0	1.1	0.0	2.3	0.0
2nd-Term Q (Q2), veh/ln	5.1	0.0	0.2	0.0	0.3	0.0	20.3	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%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	7.5	0.0	1.0	0.0	1.4	0.0	22.6	0.0
%ile Storage Ratio (RQ%)	1.20	0.00	0.23	0.00	0.17	0.00	1.81	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	4.7	0.0	0.0	0.0	0.0	0.0	38.4	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	0.3	0.0	0.0	0.0	0.0	0.0	0.4	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		
Lanes in Grp	0	1	0	1	0	1	0	0
Grp Vol (v), veh/h	0	161	0	402	0	186	0	0
Grp Sat Flow (s), veh/h/ln	0	1763	0	1856	0	1763	0	0
Q Serve Time (g_s), s	0.0	4.4	0.0	10.6	0.0	4.9	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	4.4	0.0	10.6	0.0	4.9	0.0	0.0
Lane Grp Cap (c), veh/h	0	328	0	532	0	403	0	0
V/C Ratio (X)	0.00	0.49	0.00	0.76	0.00	0.46	0.00	0.00
Avail Cap (c_a), veh/h	0	1661	0	1358	0	1070	0	0
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	19.6	0.0	17.4	0.0	17.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.1	0.0	2.2	0.0	0.8	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	20.7	0.0	19.7	0.0	18.7	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	1.6	0.0	3.8	0.0	1.7	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.3	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	1.7	0.0	4.1	0.0	1.8	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.07	0.00	0.25	0.00	0.07	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

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	164	0	129	0	187	0	136
Grp Sat Flow (s), veh/h/ln	0	1744	0	1572	0	1726	0	1815
Q Serve Time (g_s), s	0.0	4.5	0.0	3.4	0.0	5.0	0.0	3.4
Cycle Q Clear Time (g_c), s	0.0	4.5	0.0	3.4	0.0	5.0	0.0	3.4
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	0.35	0.00	1.00	0.00	0.42	0.00	0.13
Lane Grp Cap (c), veh/h	0	325	0	451	0	395	0	416
V/C Ratio (X)	0.00	0.50	0.00	0.29	0.00	0.47	0.00	0.33
Avail Cap (c_a), veh/h	0	1643	0	1151	0	1048	0	1284
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	19.6	0.0	14.9	0.0	17.9	0.0	17.2
Incr Delay (d2), s/veh	0.0	1.2	0.0	0.3	0.0	0.9	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	20.8	0.0	15.2	0.0	18.8	0.0	17.7
1st-Term Q (Q1), veh/ln	0.0	1.6	0.0	1.1	0.0	1.8	0.0	1.2
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	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	1.7	0.0	1.1	0.0	1.9	0.0	1.3
%ile Storage Ratio (RQ%)	0.00	0.07	0.00	0.07	0.00	0.07	0.00	0.02
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	90.9
HCM 6th LOS	F

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	6.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	0	3	21	64	9	83	130	3	10	141	8
Future Vol, veh/h	1	0	3	21	64	9	83	130	3	10	141	8
Conflicting Peds, #/hr	13	0	45	45	0	13	43	0	20	20	0	43
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	0	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	76	76	76	76	76	76	76	76	76	76	76	76
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	1	0	4	28	84	12	109	171	4	13	186	11

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	713	-	280	676	677	206	240	0	0	195	0	0
Stage 1	261	-	-	411	411	-	-	-	-	-	-	-
Stage 2	452	-	-	265	266	-	-	-	-	-	-	-
Critical Hdwy	7.13	-	6.23	7.13	6.53	6.23	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.13	-	-	6.13	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.13	-	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.527	-	3.327	3.527	4.027	3.327	2.227	-	-	2.227	-	-
Pot Cap-1 Maneuver	346	0	756	366	373	832	1321	-	-	1372	-	-
Stage 1	742	0	-	616	593	-	-	-	-	-	-	-
Stage 2	585	0	-	738	687	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	236	-	694	314	314	806	1267	-	-	1346	-	-
Mov Cap-2 Maneuver	236	-	-	314	314	-	-	-	-	-	-	-
Stage 1	644	-	-	547	527	-	-	-	-	-	-	-
Stage 2	433	-	-	695	651	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12.7	22.1	3.1	0.5
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1267	-	-	236	694	333	1346	-	-
HCM Lane V/C Ratio	0.086	-	-	0.006	0.006	0.371	0.01	-	-
HCM Control Delay (s)	8.1	0	-	20.3	10.2	22.1	7.7	0	-
HCM Lane LOS	A	A	-	C	B	C	A	A	-
HCM 95th %tile Q(veh)	0.3	-	-	0	0	1.7	0	-	-

Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	45	77	134	104	2
Future Vol, veh/h	0	45	77	134	104	2
Conflicting Peds, #/hr	0	1	4	0	0	4
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	66	66	66	66	66	66
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	0	68	117	203	158	3

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	500	86	165	0	-	0
Stage 1	164	-	-	-	-	-
Stage 2	336	-	-	-	-	-
Critical Hdwy	6.86	6.96	4.16	-	-	-
Critical Hdwy Stg 1	5.86	-	-	-	-	-
Critical Hdwy Stg 2	5.86	-	-	-	-	-
Follow-up Hdwy	3.53	3.33	2.23	-	-	-
Pot Cap-1 Maneuver	498	952	1403	-	-	-
Stage 1	845	-	-	-	-	-
Stage 2	693	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	448	947	1398	-	-	-
Mov Cap-2 Maneuver	448	-	-	-	-	-
Stage 1	762	-	-	-	-	-
Stage 2	690	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.1	3	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1398	-	947	-	-
HCM Lane V/C Ratio	0.083	-	0.072	-	-
HCM Control Delay (s)	7.8	0.2	9.1	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.3	-	0.2	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	173	206	50	287	47	172	180	59	132	176	56
Future Volume (veh/h)	10	173	206	50	287	47	172	180	59	132	176	56
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		0.97	1.00		0.99	1.00		0.97
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	11	199	0	57	330	46	198	207	17	152	202	15
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	25	449		95	447	62	252	439	367	197	382	314
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	0.01	0.24	0.00	0.05	0.28	0.28	0.14	0.24	0.24	0.11	0.21	0.21
Unsig. Movement Delay												
Ln Grp Delay, s/veh	37.6	17.7	0.0	30.4	0.0	19.3	27.2	18.1	15.6	29.1	19.8	16.9
Ln Grp LOS	D	B		C	A	B	C	B	B	C	B	B
Approach Vol, veh/h		210			433			422			369	
Approach Delay, s/veh		18.7			20.8			22.3			23.5	
Approach LOS		B			C			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	4.0
Phs Duration (G+Y+Rc), s	10.6	17.2	7.5	17.5	12.2	15.6	5.4	19.6
Change Period (Y+Rc), s	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7
Max Green (Gmax), s	* 12	* 24	* 5.3	* 30	* 13	* 23	* 5	* 30
Max Allow Headway (MAH), s	3.9	5.0	3.8	5.1	3.8	5.3	3.8	5.3
Max Q Clear (g_c+I1), s	6.4	7.1	3.7	6.8	7.7	7.1	2.3	12.0
Green Ext Time (g_e), s	0.2	1.0	0.0	1.0	0.2	1.0	0.0	2.2
Prob of Phs Call (p_c)	0.89	1.00	0.57	1.00	0.95	1.00	0.15	1.00
Prob of Max Out (p_x)	0.17	0.00	1.00	0.00	0.24	0.01	1.00	0.02

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1767		1767		1767		1767	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1856		1856		1856		1587

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1549		1572		1527		221

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

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	152	0	57	0	198	0	11	0
Grp Sat Flow (s), veh/h/ln	1767	0	1767	0	1767	0	1767	0
Q Serve Time (g_s), s	4.4	0.0	1.7	0.0	5.7	0.0	0.3	0.0
Cycle Q Clear Time (g_c), s	4.4	0.0	1.7	0.0	5.7	0.0	0.3	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	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)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	197	0	95	0	252	0	25	0
V/C Ratio (X)	0.77	0.00	0.60	0.00	0.79	0.00	0.44	0.00
Avail Cap (c_a), veh/h	412	0	177	0	445	0	167	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	22.8	0.0	24.4	0.0	21.9	0.0	25.8	0.0
Incr Delay (d2), s/veh	6.3	0.0	6.0	0.0	5.4	0.0	11.8	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	29.1	0.0	30.4	0.0	27.2	0.0	37.6	0.0
1st-Term Q (Q1), veh/ln	1.7	0.0	0.6	0.0	2.1	0.0	0.1	0.0
2nd-Term Q (Q2), veh/ln	0.3	0.0	0.2	0.0	0.4	0.0	0.1	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%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	2.1	0.0	0.8	0.0	2.5	0.0	0.2	0.0
%ile Storage Ratio (RQ%)	0.48	0.00	0.23	0.00	0.42	0.00	0.07	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		
Lanes in Grp	0	1	0	1	0	1	0	0
Grp Vol (v), veh/h	0	207	0	199	0	202	0	0
Grp Sat Flow (s), veh/h/ln	0	1856	0	1856	0	1856	0	0
Q Serve Time (g_s), s	0.0	5.1	0.0	4.8	0.0	5.1	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	5.1	0.0	4.8	0.0	5.1	0.0	0.0
Lane Grp Cap (c), veh/h	0	439	0	449	0	382	0	0
V/C Ratio (X)	0.00	0.47	0.00	0.44	0.00	0.53	0.00	0.00
Avail Cap (c_a), veh/h	0	829	0	1054	0	794	0	0
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	17.3	0.0	17.0	0.0	18.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.8	0.0	0.7	0.0	1.1	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	18.1	0.0	17.7	0.0	19.8	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	1.9	0.0	1.8	0.0	2.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.1	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	2.0	0.0	1.9	0.0	2.2	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.05	0.00	0.15	0.00	0.10	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

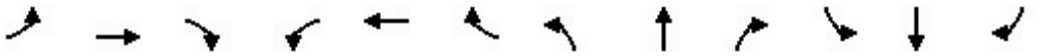
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	17	0	0	0	15	0	376
Grp Sat Flow (s), veh/h/ln	0	1549	0	1572	0	1527	0	1809
Q Serve Time (g_s), s	0.0	0.4	0.0	0.0	0.0	0.4	0.0	10.0
Cycle Q Clear Time (g_c), s	0.0	0.4	0.0	0.0	0.0	0.4	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	1.00	0.00	1.00	0.00	0.12
Lane Grp Cap (c), veh/h	0	367	0	381	0	314	0	509
V/C Ratio (X)	0.00	0.05	0.00	0.00	0.00	0.05	0.00	0.74
Avail Cap (c_a), veh/h	0	692	0	893	0	653	0	1038
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	15.6	0.0	0.0	0.0	16.8	0.0	17.2
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.0	0.0	0.1	0.0	2.1
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	15.6	0.0	0.0	0.0	16.9	0.0	19.3
1st-Term Q (Q1), veh/ln	0.0	0.1	0.0	0.0	0.0	0.1	0.0	3.6
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
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	0.1	0.0	0.0	0.0	0.1	0.0	3.9
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.49
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	21.6
HCM 6th LOS	C

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	222	0	470	0	0	0	202	794	0	1	732	45
Future Volume (veh/h)	222	0	470	0	0	0	202	794	0	1	732	45
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)	0.57		1.00	1.00		1.00	1.00		1.00	1.00		0.96
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	241	0	119	0	0	0	220	863	0	1	796	49
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	275	0	344	0	2	0	280	2624	0	2	2234	137
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Prop Arrive On Green	0.14	0.00	0.14	0.00	0.00	0.00	0.16	1.00	0.00	0.00	0.66	0.66
Unsig. Movement Delay												
Ln Grp Delay, s/veh	73.5	0.0	40.2	0.0	0.0	0.0	53.3	0.3	0.0	145.8	9.7	9.7
Ln Grp LOS	E	A	D	A	A	A	D	A	A	F	A	A
Approach Vol, veh/h		360			0			1083			846	
Approach Delay, s/veh		62.5			0.0			11.0			9.9	
Approach LOS		E						B			A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	8	4	5	6		
Case No	2.0	4.0	12.0	9.0	2.0	4.0		
Phs Duration (G+Y+Rc), s	4.9	94.0	0.0	21.1	14.5	84.4		
Change Period (Y+Rc), s	* 4.7	* 4.7	4.7	* 4.7	* 4.7	* 4.7		
Max Green (Gmax), s	* 5	* 48	30.0	* 18	* 17	* 36		
Max Allow Headway (MAH), s	3.8	5.1	0.0	4.9	3.8	5.1		
Max Q Clear (g_c+I1), s	2.1	2.0	0.0	16.1	9.4	14.5		
Green Ext Time (g_e), s	0.0	7.2	0.0	0.3	0.4	5.3		
Prob of Phs Call (p_c)	0.03	1.00	0.00	1.00	1.00	1.00		
Prob of Max Out (p_x)	1.00	0.00	0.00	1.00	0.03	0.00		

Left-Turn Movement Data								
Assigned Mvmt	1		3	7	5			
Mvmt Sat Flow, veh/h	1767		0	2012	3428			

Through Movement Data								
Assigned Mvmt		2	8	4		6		
Mvmt Sat Flow, veh/h		3618	1856	0		3365		

Right-Turn Movement Data								
Assigned Mvmt		12	18	14		16		
Mvmt Sat Flow, veh/h		0	0	1572		207		

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

Lanes in Grp	1	0	0	2	2	0	0	0
Grp Vol (v), veh/h	1	0	0	241	220	0	0	0
Grp Sat Flow (s), veh/h/ln	1767	0	0	1006	1714	0	0	0
Q Serve Time (g_s), s	0.1	0.0	0.0	14.1	7.4	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.1	0.0	0.0	14.1	7.4	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	1006	0	0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	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)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	2	0	0	275	280	0	0	0
V/C Ratio (X)	0.41	0.00	0.00	0.87	0.78	0.00	0.00	0.00
Avail Cap (c_a), veh/h	74	0	0	298	494	0	0	0
Upstream Filter (I)	1.00	0.00	0.00	1.00	0.84	0.00	0.00	0.00
Uniform Delay (d1), s/veh	59.9	0.0	0.0	50.8	49.2	0.0	0.0	0.0
Incr Delay (d2), s/veh	85.9	0.0	0.0	22.7	4.1	0.0	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	145.8	0.0	0.0	73.5	53.3	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	3.5	2.9	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	0.0	0.9	0.2	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%)	1.00	0.00	1.00	1.00	1.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.1	0.0	0.0	4.4	3.1	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.04	0.00	0.00	1.88	0.39	0.00	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	8	4	0	6	0	0
Lane Assignment		T	T			T		
Lanes in Grp	0	2	1	0	0	1	0	0
Grp Vol (v), veh/h	0	863	0	0	0	417	0	0
Grp Sat Flow (s), veh/h/ln	0	1763	1856	0	0	1763	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	12.5	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	12.5	0.0	0.0
Lane Grp Cap (c), veh/h	0	2624	2	0	0	1170	0	0
V/C Ratio (X)	0.00	0.33	0.00	0.00	0.00	0.36	0.00	0.00
Avail Cap (c_a), veh/h	0	2624	464	0	0	1170	0	0
Upstream Filter (I)	0.00	0.84	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	8.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.3	0.0	0.0	0.0	0.8	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	0.3	0.0	0.0	0.0	9.7	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	4.4	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	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	0.1	0.0	0.0	0.0	4.7	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.24	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

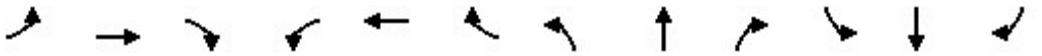
Right Lane Group Data								
Assigned Mvmt	0	12	18	14	0	16	0	0
Lane Assignment				R		T+R		
Lanes in Grp	0	0	0	1	0	1	0	0
Grp Vol (v), veh/h	0	0	0	119	0	428	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1572	0	1809	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	7.7	0.0	12.5	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	7.7	0.0	12.5	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	1572.5	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	9.8	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	1.00	0.00	0.11	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	344	0	1201	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.35	0.00	0.36	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	362	0	1201	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	39.6	0.0	8.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.6	0.0	0.8	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	0.0	0.0	40.2	0.0	9.7	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	3.0	0.0	4.5	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	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	0.0	0.0	3.1	0.0	4.8	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.07	0.00	0.25	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

Intersection Summary	
HCM 6th Ctrl Delay	18.7
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	299	113	345	157	739	161	104	950	121
Future Volume (veh/h)	0	0	0	299	113	345	157	739	161	104	950	121
Number				3	8	18	5	2	12	1	6	16
Initial Q, veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)				1.00		0.99	1.00		0.95	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln				1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h				325	178	338	171	803	162	113	1033	0
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				3	3	3	3	3	3	3	3	3
Opposing Right Turn Influence				Yes			Yes			Yes		
Cap, veh/h				398	417	471	1000	1676	338	138	1284	
HCM Platoon Ratio				1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Prop Arrive On Green				0.22	0.22	0.22	0.10	0.19	0.19	0.08	0.36	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh				48.6	40.1	39.0	40.9	33.7	33.7	61.6	38.5	0.0
Ln Grp LOS				D	D	D	D	C	C	E	D	
Approach Vol, veh/h					841			1136			1146	
Approach Delay, s/veh					42.9			34.8			40.8	
Approach LOS					D			C			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	8		6	5		
Case No	2.0	4.0	11.0		3.0	2.0		
Phs Duration (G+Y+Rc), s	14.0	74.3	31.7		48.6	39.7		
Change Period (Y+Rc), s	* 4.7	* 4.7	4.7		* 4.9	4.7		
Max Green (Gmax), s	* 14	* 54	38.0		* 44	24.0		
Max Allow Headway (MAH), s	1.0	2.4	1.9		2.3	1.0		
Max Q Clear (g_c+I1), s	9.6	31.7	25.3		33.6	7.5		
Green Ext Time (g_e), s	0.0	1.0	0.4		1.3	0.0		
Prob of Phs Call (p_c)	0.98	1.00	1.00		1.00	1.00		
Prob of Max Out (p_x)	0.54	0.00	0.00		0.00	0.00		

Left-Turn Movement Data								
Assigned Mvmt	1		3			5		
Mvmt Sat Flow, veh/h	1767		1767			3428		

Through Movement Data								
Assigned Mvmt		2	8		6			
Mvmt Sat Flow, veh/h		2892	1856		3526			

Right-Turn Movement Data								
Assigned Mvmt		12	18		16			
Mvmt Sat Flow, veh/h		583	1549		1572			

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

Lanes in Grp	1	0	1	0	0	2	0	0
Grp Vol (v), veh/h	113	0	325	0	0	171	0	0
Grp Sat Flow (s), veh/h/ln	1767	0	1767	0	0	1714	0	0
Q Serve Time (g_s), s	7.6	0.0	21.0	0.0	0.0	5.5	0.0	0.0
Cycle Q Clear Time (g_c), s	7.6	0.0	21.0	0.0	0.0	5.5	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	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)	1.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	138	0	398	0	0	1000	0	0
V/C Ratio (X)	0.82	0.00	0.82	0.00	0.00	0.17	0.00	0.00
Avail Cap (c_a), veh/h	206	0	560	0	0	1000	0	0
Upstream Filter (I)	0.76	0.00	1.00	0.00	0.00	0.81	0.00	0.00
Uniform Delay (d1), s/veh	54.5	0.0	44.2	0.0	0.0	40.9	0.0	0.0
Incr Delay (d2), s/veh	7.1	0.0	4.4	0.0	0.0	0.0	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	61.6	0.0	48.6	0.0	0.0	40.9	0.0	0.0
1st-Term Q (Q1), veh/ln	3.3	0.0	9.1	0.0	0.0	2.4	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.3	0.0	0.5	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%)	1.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	3.6	0.0	9.5	0.0	0.0	2.4	0.0	0.0
%ile Storage Ratio (RQ%)	0.61	0.00	0.86	0.00	0.00	0.18	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	8	0	6	0	0	0
Lane Assignment		T	T		T			
Lanes in Grp	0	1	1	0	2	0	0	0
Grp Vol (v), veh/h	0	489	178	0	1033	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1763	1856	0	1763	0	0	0
Q Serve Time (g_s), s	0.0	29.7	9.9	0.0	31.6	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	29.7	9.9	0.0	31.6	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	1022	417	0	1284	0	0	0
V/C Ratio (X)	0.00	0.48	0.43	0.00	0.80	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	1022	588	0	1284	0	0	0
Upstream Filter (I)	0.00	0.81	1.00	0.00	0.76	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	32.4	39.9	0.0	34.3	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.3	0.3	0.0	4.2	0.0	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	33.7	40.1	0.0	38.5	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	14.0	4.5	0.0	13.2	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	0.0	0.7	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	1.00	0.00	1.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	14.4	4.5	0.0	13.9	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	1.09	0.40	0.00	0.32	0.00	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

Right Lane Group Data								
Assigned Mvmt	0	12	18	0	16	0	0	0
Lane Assignment		T+R	R		R			
Lanes in Grp	0	1	1	0	1	0	0	0
Grp Vol (v), veh/h	0	476	338	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1713	1549	0	1572	0	0	0
Q Serve Time (g_s), s	0.0	29.7	23.3	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	29.7	23.3	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	1572.5	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	9.3	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.34	1.00	0.00	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	993	471	0	573	0	0	0
V/C Ratio (X)	0.00	0.48	0.72	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	993	613	0	573	0	0	0
Upstream Filter (I)	0.00	0.81	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	32.4	37.3	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.3	1.7	0.0	0.0	0.0	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	33.7	39.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	13.6	8.7	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.4	0.2	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	1.00	0.00	1.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	14.0	8.9	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	1.06	1.52	0.00	0.00	0.00	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

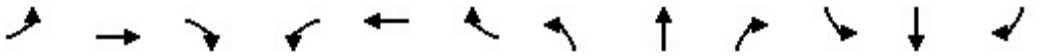
Intersection Summary	
HCM 6th Ctrl Delay	39.2
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	364	2	364	0	0	0	0	693	304	313	936	0
Future Volume (veh/h)	364	2	364	0	0	0	0	693	304	313	936	0
Number	7	4	14				5	2	12	1	6	16
Initial Q, veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.98				1.00		0.95	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1856	1856	1856				0	1856	1856	1856	1856	0
Adj Flow Rate, veh/h	487	0	185				0	762	279	344	1029	0
Peak Hour Factor	0.91	0.91	0.91				0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	3	3	3				0	3	3	3	3	0
Opposing Right Turn Influence	Yes						No			Yes		
Cap, veh/h	627	0	274				0	1826	660	364	2624	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Prop Arrive On Green	0.18	0.00	0.18				0.00	0.50	0.50	0.41	1.00	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh	47.9	0.0	47.2				0.0	19.4	20.4	57.5	0.3	0.0
Ln Grp LOS	D	A	D				A	B	C	E	A	A
Approach Vol, veh/h		672						1041			1373	
Approach Delay, s/veh		47.7						19.7			14.6	
Approach LOS		D						B			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Case No	2.0	8.0		9.0		4.0		
Phs Duration (G+Y+Rc), s	28.7	65.3		26.0		94.0		
Change Period (Y+Rc), s	4.0	* 4.7		* 4.7		* 4.7		
Max Green (Gmax), s	28.0	* 41		* 38		* 73		
Max Allow Headway (MAH), s	2.8	6.2		2.8		6.1		
Max Q Clear (g_c+I1), s	24.5	18.1		17.8		2.0		
Green Ext Time (g_e), s	0.2	10.0		1.2		14.7		
Prob of Phs Call (p_c)	1.00	1.00		1.00		1.00		
Prob of Max Out (p_x)	0.53	0.00		0.00		0.00		

Left-Turn Movement Data								
Assigned Mvmt	1	5		7				
Mvmt Sat Flow, veh/h	1767	0		3534				

Through Movement Data								
Assigned Mvmt		2		4		6		
Mvmt Sat Flow, veh/h		3784		0		3618		

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		
Mvmt Sat Flow, veh/h		1307		1546		0		

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

Lanes in Grp	1	0	0	2	0	0	0	0
Grp Vol (v), veh/h	344	0	0	487	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1767	0	0	1767	0	0	0	0
Q Serve Time (g_s), s	22.5	0.0	0.0	15.8	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	22.5	0.0	0.0	15.8	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	1767	0	0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	60.6	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)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	364	0	0	627	0	0	0	0
V/C Ratio (X)	0.95	0.00	0.00	0.78	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	412	0	0	1119	0	0	0	0
Upstream Filter (I)	0.74	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	34.6	0.0	0.0	47.1	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	22.8	0.0	0.0	0.8	0.0	0.0	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	57.5	0.0	0.0	47.9	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	7.5	0.0	0.0	6.7	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	2.3	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%)	1.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	9.8	0.0	0.0	6.8	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.75	0.00	0.00	0.15	0.00	0.00	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	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	2	0	0
Grp Vol (v), veh/h	0	711	0	0	0	1029	0	0
Grp Sat Flow (s), veh/h/ln	0	1689	0	0	0	1763	0	0
Q Serve Time (g_s), s	0.0	15.8	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	15.8	0.0	0.0	0.0	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	1705	0	0	0	2624	0	0
V/C Ratio (X)	0.00	0.42	0.00	0.00	0.00	0.39	0.00	0.00
Avail Cap (c_a), veh/h	0	1705	0	0	0	2624	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	0.74	0.00	0.00
Uniform Delay (d1), s/veh	0.0	18.6	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.8	0.0	0.0	0.0	0.3	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	19.4	0.0	0.0	0.0	0.3	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.2	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	0.00
%ile Back of Q (50%), veh/ln	0.0	6.2	0.0	0.0	0.0	0.1	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.66	0.00	0.00	0.00	0.01	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

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment		T+R		R				
Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	330	0	185	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1547	0	1546	0	0	0	0
Q Serve Time (g_s), s	0.0	16.1	0.0	13.4	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	16.1	0.0	13.4	0.0	0.0	0.0	0.0
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	0.84	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	781	0	274	0	0	0	0
V/C Ratio (X)	0.00	0.42	0.00	0.67	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	781	0	490	0	0	0	0
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	18.7	0.0	46.1	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.7	0.0	1.1	0.0	0.0	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	20.4	0.0	47.2	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	5.6	0.0	5.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.4	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	0.00
%ile Back of Q (50%), veh/ln	0.0	6.0	0.0	5.1	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.64	0.00	0.33	0.00	0.00	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

Intersection Summary	
HCM 6th Ctrl Delay	23.5
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	1	212	0	0	0	350	217	0	0	174	7
Future Vol, veh/h	10	1	212	0	0	0	350	217	0	0	174	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	120	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	81	81	81	81	81	81	81	81	81	81	81	81
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	12	1	262	0	0	0	432	268	0	0	215	9

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1218	1352	112	1240	1356	134	224	0	0	268	0	0
Stage 1	220	220	-	1132	1132	-	-	-	-	-	-	-
Stage 2	998	1132	-	108	224	-	-	-	-	-	-	-
Critical Hdwy	7.56	6.56	6.96	7.56	6.56	6.96	4.16	-	-	4.16	-	-
Critical Hdwy Stg 1	6.56	5.56	-	6.56	5.56	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.56	5.56	-	6.56	5.56	-	-	-	-	-	-	-
Follow-up Hdwy	3.53	4.03	3.33	3.53	4.03	3.33	2.23	-	-	2.23	-	-
Pot Cap-1 Maneuver	135	148	916	130	147	887	1335	-	-	1285	-	-
Stage 1	759	717	-	215	274	-	-	-	-	-	-	-
Stage 2	259	274	-	883	715	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	101	100	916	69	99	887	1335	-	-	1285	-	-
Mov Cap-2 Maneuver	101	100	-	69	99	-	-	-	-	-	-	-
Stage 1	513	717	-	145	185	-	-	-	-	-	-	-
Stage 2	175	185	-	630	715	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12.3	0	5.5	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1335	-	-	101	916	-	1285	-	-
HCM Lane V/C Ratio	0.324	-	-	0.134	0.286	-	-	-	-
HCM Control Delay (s)	9	-	-	46.1	10.5	0	0	-	-
HCM Lane LOS	A	-	-	E	B	A	A	-	-
HCM 95th %tile Q(veh)	1.4	-	-	0.4	1.2	-	0	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	77	115	39	356	388	385	162	544	76	127	600	104
Future Volume (veh/h)	77	115	39	356	388	385	162	544	76	127	600	104
Number	3	8	18	7	4	14	1	6	16	5	2	12
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	88	131	35	405	441	138	184	618	77	144	682	104
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	112	334	89	207	539	457	132	865	108	187	936	143
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	0.06	0.24	0.24	0.12	0.29	0.29	0.07	0.27	0.27	0.11	0.31	0.31
Unsig. Movement Delay												
Ln Grp Delay, s/veh	54.9	0.0	23.3	477.2	26.5	19.9	247.6	25.1	25.1	37.4	23.9	23.9
Ln Grp LOS	D	A	C	F	C	B	F	C	C	D	C	C
Approach Vol, veh/h		254			984			879			930	
Approach Delay, s/veh		34.2			211.1			71.7			26.0	
Approach LOS		C			F			E			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	3.0	2.0	4.0	2.0	4.0
Phs Duration (G+Y+Rc), s	10.0	26.3	9.2	25.3	12.2	24.1	13.0	21.5
Change Period (Y+Rc), s	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7
Max Green (Gmax), s	* 5.3	* 53	* 5.3	* 37	* 27	* 31	* 8.3	* 34
Max Allow Headway (MAH), s	3.8	5.2	3.8	4.8	3.8	5.2	3.7	5.2
Max Q Clear (g_c+I1), s	7.3	16.1	5.5	17.6	7.6	14.5	10.3	7.5
Green Ext Time (g_e), s	0.0	5.5	0.0	2.9	0.3	3.9	0.0	0.9
Prob of Phs Call (p_c)	0.97	1.00	0.82	1.00	0.94	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.01	1.00	0.02	0.00	0.11	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1767		1767		1767		1767	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3067		1856		3155		1411

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		467		1572		392		377

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

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	184	0	88	0	144	0	405	0
Grp Sat Flow (s), veh/h/ln	1767	0	1767	0	1767	0	1767	0
Q Serve Time (g_s), s	5.3	0.0	3.5	0.0	5.6	0.0	8.3	0.0
Cycle Q Clear Time (g_c), s	5.3	0.0	3.5	0.0	5.6	0.0	8.3	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	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)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	132	0	112	0	187	0	207	0
V/C Ratio (X)	1.39	0.00	0.78	0.00	0.77	0.00	1.95	0.00
Avail Cap (c_a), veh/h	132	0	132	0	682	0	207	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	32.7	0.0	32.6	0.0	30.8	0.0	31.2	0.0
Incr Delay (d2), s/veh	214.9	0.0	22.3	0.0	6.6	0.0	446.0	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	247.6	0.0	54.9	0.0	37.4	0.0	477.2	0.0
1st-Term Q (Q1), veh/ln	2.2	0.0	1.4	0.0	2.3	0.0	3.3	0.0
2nd-Term Q (Q2), veh/ln	7.9	0.0	0.7	0.0	0.3	0.0	25.7	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%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	10.1	0.0	2.1	0.0	2.6	0.0	29.0	0.0
%ile Storage Ratio (RQ%)	1.61	0.00	0.49	0.00	0.30	0.00	2.32	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	12.9	0.0	0.0	0.0	0.0	0.0	49.4	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	0.3	0.0	0.0	0.0	0.0	0.0	0.5	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		
Lanes in Grp	0	1	0	1	0	1	0	0
Grp Vol (v), veh/h	0	392	0	441	0	345	0	0
Grp Sat Flow (s), veh/h/ln	0	1763	0	1856	0	1763	0	0
Q Serve Time (g_s), s	0.0	14.0	0.0	15.6	0.0	12.5	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	14.0	0.0	15.6	0.0	12.5	0.0	0.0
Lane Grp Cap (c), veh/h	0	538	0	539	0	483	0	0
V/C Ratio (X)	0.00	0.73	0.00	0.82	0.00	0.71	0.00	0.00
Avail Cap (c_a), veh/h	0	1328	0	978	0	780	0	0
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	22.0	0.0	23.3	0.0	23.2	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.9	0.0	3.1	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	23.9	0.0	26.5	0.0	25.1	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	5.3	0.0	6.1	0.0	4.8	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.5	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	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	5.6	0.0	6.6	0.0	5.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.23	0.00	0.40	0.00	0.19	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

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	394	0	138	0	350	0	166
Grp Sat Flow (s), veh/h/ln	0	1771	0	1572	0	1785	0	1788
Q Serve Time (g_s), s	0.0	14.1	0.0	4.8	0.0	12.5	0.0	5.5
Cycle Q Clear Time (g_c), s	0.0	14.1	0.0	4.8	0.0	12.5	0.0	5.5
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	0.26	0.00	1.00	0.00	0.22	0.00	0.21
Lane Grp Cap (c), veh/h	0	540	0	457	0	490	0	423
V/C Ratio (X)	0.00	0.73	0.00	0.30	0.00	0.72	0.00	0.39
Avail Cap (c_a), veh/h	0	1335	0	829	0	790	0	867
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	22.0	0.0	19.5	0.0	23.2	0.0	22.7
Incr Delay (d2), s/veh	0.0	1.9	0.0	0.4	0.0	2.0	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	23.9	0.0	19.9	0.0	25.1	0.0	23.3
1st-Term Q (Q1), veh/ln	0.0	5.3	0.0	1.6	0.0	4.9	0.0	2.2
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.0	0.0	0.3	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	5.6	0.0	1.7	0.0	5.1	0.0	2.2
%ile Storage Ratio (RQ%)	0.00	0.23	0.00	0.10	0.00	0.20	0.00	0.04
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	99.6
HCM 6th LOS	F

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	2.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	3	28	23	18	54	234	0	7	228	5
Future Vol, veh/h	0	0	3	28	23	18	54	234	0	7	228	5
Conflicting Peds, #/hr	8	0	6	6	0	8	10	0	10	10	0	10
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	0	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	0	0	3	31	25	20	59	257	0	8	251	5

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	686	-	270	662	667	275	266	0	0	267	0	0
Stage 1	280	-	-	385	385	-	-	-	-	-	-	-
Stage 2	406	-	-	277	282	-	-	-	-	-	-	-
Critical Hdwy	7.13	-	6.23	7.13	6.53	6.23	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.13	-	-	6.13	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.13	-	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.527	-	3.327	3.527	4.027	3.327	2.227	-	-	2.227	-	-
Pot Cap-1 Maneuver	360	0	766	374	378	761	1292	-	-	1291	-	-
Stage 1	725	0	-	636	609	-	-	-	-	-	-	-
Stage 2	620	0	-	727	676	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	310	-	754	350	348	748	1280	-	-	1279	-	-
Mov Cap-2 Maneuver	310	-	-	350	348	-	-	-	-	-	-	-
Stage 1	679	-	-	596	571	-	-	-	-	-	-	-
Stage 2	542	-	-	715	665	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.8	15.9	1.5	0.2
HCM LOS	A	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1280	-	-	-	754	406	1279	-	-
HCM Lane V/C Ratio	0.046	-	-	-	0.004	0.187	0.006	-	-
HCM Control Delay (s)	7.9	0	-	0	9.8	15.9	7.8	0	-
HCM Lane LOS	A	A	-	A	A	C	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	-	0	0.7	0	-	-

Intersection	
Int Delay, s/veh	2.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	42	52	125	103	2
Future Vol, veh/h	1	42	52	125	103	2
Conflicting Peds, #/hr	0	1	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	1	45	56	134	111	2

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	291	58	113	0	-	0
Stage 1	112	-	-	-	-	-
Stage 2	179	-	-	-	-	-
Critical Hdwy	6.86	6.96	4.16	-	-	-
Critical Hdwy Stg 1	5.86	-	-	-	-	-
Critical Hdwy Stg 2	5.86	-	-	-	-	-
Follow-up Hdwy	3.53	3.33	2.23	-	-	-
Pot Cap-1 Maneuver	673	993	1467	-	-	-
Stage 1	897	-	-	-	-	-
Stage 2	831	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	645	992	1467	-	-	-
Mov Cap-2 Maneuver	645	-	-	-	-	-
Stage 1	860	-	-	-	-	-
Stage 2	831	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.9	2.3	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1467	-	980	-	-
HCM Lane V/C Ratio	0.038	-	0.047	-	-
HCM Control Delay (s)	7.6	0.1	8.9	-	-
HCM Lane LOS	A	A	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)	20	137	227	84	199	53	200	210	78	39	259	16
Future Volume (veh/h)	20	137	227	84	199	53	200	210	78	39	259	16
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		0.99	1.00		0.97	1.00		0.99
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	21	143	0	88	207	45	208	219	31	41	270	7
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	44	400		121	382	83	263	591	487	76	395	331
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	0.22	0.00	0.07	0.26	0.26	0.15	0.32	0.32	0.04	0.21	0.21
Unsig. Movement Delay												
Ln Grp Delay, s/veh	33.2	18.2	0.0	32.2	0.0	17.9	27.1	14.3	12.6	30.8	21.3	16.5
Ln Grp LOS	C	B		C	A	B	C	B	B	C	C	B
Approach Vol, veh/h		164			340			458			318	
Approach Delay, s/veh		20.1			21.6			20.0			22.5	
Approach LOS		C			C			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	4.0
Phs Duration (G+Y+Rc), s	7.0	21.6	8.3	16.1	12.6	16.0	6.0	18.4
Change Period (Y+Rc), s	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7
Max Green (Gmax), s	* 12	* 24	* 5.3	* 30	* 13	* 23	* 5	* 30
Max Allow Headway (MAH), s	3.9	5.0	3.8	5.1	3.8	5.4	3.8	5.3
Max Q Clear (g_c+I1), s	3.2	6.8	4.6	5.5	8.0	9.1	2.6	8.4
Green Ext Time (g_e), s	0.0	1.1	0.0	0.7	0.3	1.3	0.0	1.4
Prob of Phs Call (p_c)	0.45	1.00	0.73	1.00	0.95	1.00	0.27	1.00
Prob of Max Out (p_x)	0.00	0.00	1.00	0.00	0.31	0.04	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1767		1767		1767		1767	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1856		1856		1856		1474

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1527		1572		1554		320

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

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	41	0	88	0	208	0	21	0
Grp Sat Flow (s), veh/h/ln	1767	0	1767	0	1767	0	1767	0
Q Serve Time (g_s), s	1.2	0.0	2.6	0.0	6.0	0.0	0.6	0.0
Cycle Q Clear Time (g_c), s	1.2	0.0	2.6	0.0	6.0	0.0	0.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	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)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	76	0	121	0	263	0	44	0
V/C Ratio (X)	0.54	0.00	0.73	0.00	0.79	0.00	0.47	0.00
Avail Cap (c_a), veh/h	410	0	177	0	443	0	167	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	24.9	0.0	24.2	0.0	21.8	0.0	25.5	0.0
Incr Delay (d2), s/veh	5.9	0.0	8.0	0.0	5.3	0.0	7.6	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	30.8	0.0	32.2	0.0	27.1	0.0	33.2	0.0
1st-Term Q (Q1), veh/ln	0.5	0.0	1.0	0.0	2.2	0.0	0.2	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	0.3	0.0	0.4	0.0	0.1	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%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.6	0.0	1.3	0.0	2.6	0.0	0.3	0.0
%ile Storage Ratio (RQ%)	0.14	0.00	0.36	0.00	0.45	0.00	0.11	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		
Lanes in Grp	0	1	0	1	0	1	0	0
Grp Vol (v), veh/h	0	219	0	143	0	270	0	0
Grp Sat Flow (s), veh/h/ln	0	1856	0	1856	0	1856	0	0
Q Serve Time (g_s), s	0.0	4.8	0.0	3.5	0.0	7.1	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	4.8	0.0	3.5	0.0	7.1	0.0	0.0
Lane Grp Cap (c), veh/h	0	591	0	400	0	395	0	0
V/C Ratio (X)	0.00	0.37	0.00	0.36	0.00	0.68	0.00	0.00
Avail Cap (c_a), veh/h	0	826	0	1050	0	791	0	0
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	14.0	0.0	17.7	0.0	19.2	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.4	0.0	0.5	0.0	2.1	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	14.3	0.0	18.2	0.0	21.3	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	1.7	0.0	1.3	0.0	2.8	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.1	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	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	1.8	0.0	1.4	0.0	3.1	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.05	0.00	0.11	0.00	0.14	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

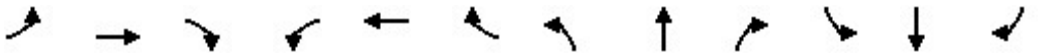
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	31	0	0	0	7	0	252
Grp Sat Flow (s), veh/h/ln	0	1527	0	1572	0	1554	0	1794
Q Serve Time (g_s), s	0.0	0.7	0.0	0.0	0.0	0.2	0.0	6.4
Cycle Q Clear Time (g_c), s	0.0	0.7	0.0	0.0	0.0	0.2	0.0	6.4
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	1.00	0.00	1.00	0.00	0.18
Lane Grp Cap (c), veh/h	0	487	0	339	0	331	0	465
V/C Ratio (X)	0.00	0.06	0.00	0.00	0.00	0.02	0.00	0.54
Avail Cap (c_a), veh/h	0	680	0	890	0	662	0	1025
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	12.6	0.0	0.0	0.0	16.5	0.0	16.9
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.0	0.0	0.0	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	12.6	0.0	0.0	0.0	16.5	0.0	17.9
1st-Term Q (Q1), veh/ln	0.0	0.2	0.0	0.0	0.0	0.1	0.0	2.4
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	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	0.2	0.0	0.0	0.0	0.1	0.0	2.5
%ile Storage Ratio (RQ%)	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.31
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	21.1
HCM 6th LOS	C

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	93	0	388	0	0	0	322	723	0	3	875	34
Future Volume (veh/h)	93	0	388	0	0	0	322	723	0	3	875	34
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)	0.92		0.95	1.00		1.00	1.00		1.00	1.00		0.98
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	96	0	81	0	0	0	332	745	0	3	902	35
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	250	0	293	0	1	0	388	2858	0	7	2425	94
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Prop Arrive On Green	0.08	0.00	0.08	0.00	0.00	0.00	0.23	1.00	0.00	0.00	0.70	0.70
Unsig. Movement Delay												
Ln Grp Delay, s/veh	58.0	0.0	45.6	0.0	0.0	0.0	57.8	0.2	0.0	101.4	8.7	8.7
Ln Grp LOS	E	A	D	A	A	A	E	A	A	F	A	A
Approach Vol, veh/h		177			0			1077			940	
Approach Delay, s/veh		52.3			0.0			18.0			9.0	
Approach LOS		D						B			A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	8	4	5	6		
Case No	2.0	4.0	12.0	9.0	2.0	4.0		
Phs Duration (G+Y+Rc), s	5.2	110.1	0.0	14.7	19.4	95.9		
Change Period (Y+Rc), s	* 4.7	* 4.7	4.7	* 4.7	* 4.7	* 4.7		
Max Green (Gmax), s	* 5	* 58	30.0	* 18	* 21	* 43		
Max Allow Headway (MAH), s	3.8	5.1	0.0	4.1	3.8	5.1		
Max Q Clear (g_c+I1), s	2.2	2.0	0.0	8.0	14.1	15.7		
Green Ext Time (g_e), s	0.0	6.0	0.0	0.4	0.6	6.5		
Prob of Phs Call (p_c)	0.10	1.00	0.00	1.00	1.00	1.00		
Prob of Max Out (p_x)	1.00	0.00	0.00	0.01	0.18	0.00		

Left-Turn Movement Data								
Assigned Mvmt	1		3	7	5			
Mvmt Sat Flow, veh/h	1767		0	3259	3428			

Through Movement Data								
Assigned Mvmt		2	8	4		6		
Mvmt Sat Flow, veh/h		3618	1856	0		3457		

Right-Turn Movement Data								
Assigned Mvmt		12	18	14		16		
Mvmt Sat Flow, veh/h		0	0	1499		134		

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

Lanes in Grp	1	0	0	2	2	0	0	0
Grp Vol (v), veh/h	3	0	0	96	332	0	0	0
Grp Sat Flow (s), veh/h/ln	1767	0	0	1629	1714	0	0	0
Q Serve Time (g_s), s	0.2	0.0	0.0	3.6	12.1	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.2	0.0	0.0	3.6	12.1	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	1629	0	0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	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)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	7	0	0	250	388	0	0	0
V/C Ratio (X)	0.43	0.00	0.00	0.38	0.86	0.00	0.00	0.00
Avail Cap (c_a), veh/h	68	0	0	446	541	0	0	0
Upstream Filter (I)	1.00	0.00	0.00	1.00	0.89	0.00	0.00	0.00
Uniform Delay (d1), s/veh	64.6	0.0	0.0	57.1	49.3	0.0	0.0	0.0
Incr Delay (d2), s/veh	36.8	0.0	0.0	1.0	8.5	0.0	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	101.4	0.0	0.0	58.0	57.8	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.1	0.0	0.0	1.5	4.6	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	0.0	0.0	0.5	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%)	1.00	0.00	1.00	1.00	1.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.2	0.0	0.0	1.5	5.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.09	0.00	0.00	0.66	0.64	0.00	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	8	4	0	6	0	0
Lane Assignment		T	T			T		
Lanes in Grp	0	2	1	0	0	1	0	0
Grp Vol (v), veh/h	0	745	0	0	0	460	0	0
Grp Sat Flow (s), veh/h/ln	0	1763	1856	0	0	1763	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	13.7	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	13.7	0.0	0.0
Lane Grp Cap (c), veh/h	0	2858	1	0	0	1237	0	0
V/C Ratio (X)	0.00	0.26	0.00	0.00	0.00	0.37	0.00	0.00
Avail Cap (c_a), veh/h	0	2858	428	0	0	1237	0	0
Upstream Filter (I)	0.00	0.89	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	7.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.0	0.0	0.9	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	0.2	0.0	0.0	0.0	8.7	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	4.8	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	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	0.1	0.0	0.0	0.0	5.1	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.26	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

Right Lane Group Data								
Assigned Mvmt	0	12	18	14	0	16	0	0
Lane Assignment				R		T+R		
Lanes in Grp	0	0	0	1	0	1	0	0
Grp Vol (v), veh/h	0	0	0	81	0	477	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1499	0	1829	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	6.0	0.0	13.7	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	6.0	0.0	13.7	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	1572.5	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	14.7	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	1.00	0.00	0.07	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	293	0	1283	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.28	0.00	0.37	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	383	0	1283	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	45.1	0.0	7.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.5	0.0	0.8	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	0.0	0.0	45.6	0.0	8.7	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	2.3	0.0	4.9	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	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	0.0	0.0	2.3	0.0	5.2	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.05	0.00	0.27	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

Intersection Summary	
HCM 6th Ctrl Delay	16.9
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	116	209	260	291	806	97	63	969	278
Future Volume (veh/h)	0	0	0	116	209	260	291	806	97	63	969	278
Number				3	8	18	5	2	12	1	6	16
Initial Q, veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)				1.00		0.99	1.00		0.94	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln				1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h				122	271	240	306	848	97	66	1020	0
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				3	3	3	3	3	3	3	3	3
Opposing Right Turn Influence				Yes			Yes			Yes		
Cap, veh/h				181	430	337	1116	2138	245	86	1402	
HCM Platoon Ratio				1.00	1.00	1.00	0.33	0.33	0.33	0.67	0.67	0.67
Prop Arrive On Green				0.17	0.17	0.17	0.11	0.22	0.22	0.03	0.27	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh				51.8	51.0	48.3	43.9	28.6	28.6	66.7	44.2	0.0
Ln Grp LOS				D	D	D	D	C	C	E	D	
Approach Vol, veh/h					633			1251			1086	
Approach Delay, s/veh					50.2			32.3			45.6	
Approach LOS					D			C			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	8		6	5		
Case No	2.0	4.0	11.0		3.0	2.0		
Phs Duration (G+Y+Rc), s	11.1	92.5	26.4		56.6	47.0		
Change Period (Y+Rc), s	* 4.7	* 4.7	4.7		* 4.9	4.7		
Max Green (Gmax), s	* 14	* 64	38.0		* 52	26.0		
Max Allow Headway (MAH), s	1.0	2.4	1.9		2.3	1.0		
Max Q Clear (g_c+I1), s	6.8	31.7	20.5		36.2	12.7		
Green Ext Time (g_e), s	0.0	0.9	0.3		1.4	0.0		
Prob of Phs Call (p_c)	0.91	1.00	1.00		1.00	1.00		
Prob of Max Out (p_x)	0.46	0.00	0.00		0.00	0.00		

Left-Turn Movement Data								
Assigned Mvmt	1		3			5		
Mvmt Sat Flow, veh/h	1767		1082			3428		

Through Movement Data								
Assigned Mvmt		2	8		6			
Mvmt Sat Flow, veh/h		3164	2575		3526			

Right-Turn Movement Data								
Assigned Mvmt		12	18		16			
Mvmt Sat Flow, veh/h		362	1561		1572			

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

Lanes in Grp	1	0	1	0	0	2	0	0
Grp Vol (v), veh/h	66	0	203	0	0	306	0	0
Grp Sat Flow (s), veh/h/ln	1767	0	1801	0	0	1714	0	0
Q Serve Time (g_s), s	4.8	0.0	13.8	0.0	0.0	10.7	0.0	0.0
Cycle Q Clear Time (g_c), s	4.8	0.0	13.8	0.0	0.0	10.7	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	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)	1.00	0.00	0.60	0.00	0.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	86	0	301	0	0	1116	0	0
V/C Ratio (X)	0.76	0.00	0.68	0.00	0.00	0.27	0.00	0.00
Avail Cap (c_a), veh/h	190	0	527	0	0	1116	0	0
Upstream Filter (I)	0.88	0.00	1.00	0.00	0.00	0.68	0.00	0.00
Uniform Delay (d1), s/veh	62.1	0.0	50.8	0.0	0.0	43.9	0.0	0.0
Incr Delay (d2), s/veh	4.6	0.0	1.0	0.0	0.0	0.0	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	66.7	0.0	51.8	0.0	0.0	43.9	0.0	0.0
1st-Term Q (Q1), veh/ln	2.2	0.0	6.2	0.0	0.0	4.9	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	0.1	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%)	1.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	2.3	0.0	6.3	0.0	0.0	4.9	0.0	0.0
%ile Storage Ratio (RQ%)	0.39	0.00	0.56	0.00	0.00	0.37	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	8	0	6	0	0	0
Lane Assignment		T	T		T			
Lanes in Grp	0	1	1	0	2	0	0	0
Grp Vol (v), veh/h	0	472	190	0	1020	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1763	1856	0	1763	0	0	0
Q Serve Time (g_s), s	0.0	29.7	12.3	0.0	34.2	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	29.7	12.3	0.0	34.2	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	1191	310	0	1402	0	0	0
V/C Ratio (X)	0.00	0.40	0.61	0.00	0.73	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	1191	542	0	1402	0	0	0
Upstream Filter (I)	0.00	0.68	1.00	0.00	0.88	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	27.9	50.3	0.0	41.3	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.7	0.7	0.0	2.9	0.0	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	28.6	51.0	0.0	44.2	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	14.0	5.7	0.0	15.4	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.1	0.0	0.6	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	1.00	0.00	1.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	14.2	5.8	0.0	16.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	1.09	0.52	0.00	0.37	0.00	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

Right Lane Group Data								
Assigned Mvmt	0	12	18	0	16	0	0	0
Lane Assignment		T+R	R		R			
Lanes in Grp	0	1	1	0	1	0	0	0
Grp Vol (v), veh/h	0	473	240	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1763	1561	0	1572	0	0	0
Q Serve Time (g_s), s	0.0	29.7	18.5	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	29.7	18.5	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	1572.5	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	6.4	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.21	1.00	0.00	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	1192	337	0	625	0	0	0
V/C Ratio (X)	0.00	0.40	0.71	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	1192	533	0	625	0	0	0
Upstream Filter (I)	0.00	0.68	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	27.9	47.2	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.7	1.0	0.0	0.0	0.0	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	28.6	48.3	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	14.0	7.1	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.1	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	1.00	0.00	1.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	14.2	7.2	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	1.09	1.24	0.00	0.00	0.00	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

Intersection Summary	
HCM 6th Ctrl Delay	41.0
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	389	0	421	0	0	0	0	805	587	438	647	0
Future Volume (veh/h)	389	0	421	0	0	0	0	805	587	438	647	0
Number	7	4	14				5	2	12	1	6	16
Initial Q, veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.96				1.00		0.93	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1856	1856	1856				0	1856	1856	1856	1856	0
Adj Flow Rate, veh/h	464	0	126				0	839	519	456	674	0
Peak Hour Factor	0.96	0.96	0.96				0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3				0	3	3	3	3	0
Opposing Right Turn Influence	Yes						No			Yes		
Cap, veh/h	653	0	280				0	1781	774	326	2619	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Prop Arrive On Green	0.18	0.00	0.18				0.00	0.53	0.53	0.37	1.00	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh	50.3	0.0	47.5				0.0	20.2	27.0	234.5	0.2	0.0
Ln Grp LOS	D	A	D				A	C	C	F	A	A
Approach Vol, veh/h		590						1358			1130	
Approach Delay, s/veh		49.7						22.8			94.7	
Approach LOS		D						C			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Case No	2.0	8.0		9.0		4.0		
Phs Duration (G+Y+Rc), s	28.0	73.3		28.7		101.3		
Change Period (Y+Rc), s	4.0	* 4.7		* 4.7		* 4.7		
Max Green (Gmax), s	24.0	* 55		* 38		* 83		
Max Allow Headway (MAH), s	2.8	6.3		2.8		6.1		
Max Q Clear (g_c+I1), s	26.0	35.6		18.0		2.0		
Green Ext Time (g_e), s	0.0	12.0		1.0		7.9		
Prob of Phs Call (p_c)	1.00	1.00		1.00		1.00		
Prob of Max Out (p_x)	1.00	0.00		0.00		0.00		

Left-Turn Movement Data								
Assigned Mvmt	1	5		7				
Mvmt Sat Flow, veh/h	1767	0		3534				

Through Movement Data								
Assigned Mvmt		2		4		6		
Mvmt Sat Flow, veh/h		3544		0		3618		

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		
Mvmt Sat Flow, veh/h		1468		1516		0		

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

Lanes in Grp	1	0	0	2	0	0	0	0
Grp Vol (v), veh/h	456	0	0	464	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1767	0	0	1767	0	0	0	0
Q Serve Time (g_s), s	24.0	0.0	0.0	16.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	24.0	0.0	0.0	16.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	1767	0	0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	68.6	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)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	326	0	0	653	0	0	0	0
V/C Ratio (X)	1.40	0.00	0.00	0.71	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	326	0	0	1033	0	0	0	0
Upstream Filter (I)	0.81	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	41.0	0.0	0.0	49.7	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	193.5	0.0	0.0	0.5	0.0	0.0	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	234.5	0.0	0.0	50.3	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	8.6	0.0	0.0	6.9	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	17.5	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%)	1.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	26.1	0.0	0.0	7.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	1.99	0.00	0.00	0.16	0.00	0.00	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	32.4	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	0.3	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	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	2	0	0
Grp Vol (v), veh/h	0	839	0	0	0	674	0	0
Grp Sat Flow (s), veh/h/ln	0	1689	0	0	0	1763	0	0
Q Serve Time (g_s), s	0.0	20.3	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	20.3	0.0	0.0	0.0	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	1781	0	0	0	2619	0	0
V/C Ratio (X)	0.00	0.47	0.00	0.00	0.00	0.26	0.00	0.00
Avail Cap (c_a), veh/h	0	1781	0	0	0	2619	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	0.81	0.00	0.00
Uniform Delay (d1), s/veh	0.0	19.3	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.9	0.0	0.0	0.0	0.2	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	20.2	0.0	0.0	0.0	0.2	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	7.8	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.2	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	0.00
%ile Back of Q (50%), veh/ln	0.0	8.0	0.0	0.0	0.0	0.1	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.86	0.00	0.00	0.00	0.01	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

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment		T+R		R				
Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	519	0	126	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1468	0	1516	0	0	0	0
Q Serve Time (g_s), s	0.0	33.6	0.0	9.6	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	33.6	0.0	9.6	0.0	0.0	0.0	0.0
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	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	774	0	280	0	0	0	0
V/C Ratio (X)	0.00	0.67	0.00	0.45	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	774	0	443	0	0	0	0
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	22.4	0.0	47.1	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	4.6	0.0	0.4	0.0	0.0	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	27.0	0.0	47.5	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	11.2	0.0	3.6	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	1.0	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	0.00
%ile Back of Q (50%), veh/ln	0.0	12.2	0.0	3.6	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	1.30	0.00	0.23	0.00	0.00	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

Intersection Summary	
HCM 6th Ctrl Delay	54.4
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	5.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	29	0	138	2	0	4	247	184	0	0	154	8
Future Vol, veh/h	29	0	138	2	0	4	247	184	0	0	154	8
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	120	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	30	0	142	2	0	4	255	190	0	0	159	8

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	768	863	84	780	867	95	167	0	0	190	0	0
Stage 1	163	163	-	700	700	-	-	-	-	-	-	-
Stage 2	605	700	-	80	167	-	-	-	-	-	-	-
Critical Hdwy	7.56	6.56	6.96	7.56	6.56	6.96	4.16	-	-	4.16	-	-
Critical Hdwy Stg 1	6.56	5.56	-	6.56	5.56	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.56	5.56	-	6.56	5.56	-	-	-	-	-	-	-
Follow-up Hdwy	3.53	4.03	3.33	3.53	4.03	3.33	2.23	-	-	2.23	-	-
Pot Cap-1 Maneuver	289	289	955	284	288	940	1401	-	-	1374	-	-
Stage 1	820	760	-	394	437	-	-	-	-	-	-	-
Stage 2	449	437	-	917	757	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	247	236	955	208	236	940	1401	-	-	1374	-	-
Mov Cap-2 Maneuver	247	236	-	208	236	-	-	-	-	-	-	-
Stage 1	671	760	-	322	357	-	-	-	-	-	-	-
Stage 2	366	357	-	780	757	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.5	13.4	4.7	0
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1401	-	-	247	955	433	1374	-	-
HCM Lane V/C Ratio	0.182	-	-	0.121	0.149	0.014	-	-	-
HCM Control Delay (s)	8.1	-	-	21.6	9.4	13.4	0	-	-
HCM Lane LOS	A	-	-	C	A	B	A	-	-
HCM 95th %tile Q(veh)	0.7	-	-	0.4	0.5	0	0	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	47	112	27	350	383	324	218	272	114	94	250	75
Future Volume (veh/h)	47	112	27	350	383	324	218	272	114	94	250	75
Number	3	8	18	7	4	14	1	6	16	5	2	12
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	50	119	23	372	407	122	232	289	78	100	266	48
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	87	333	64	210	538	456	210	639	170	132	563	100
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	0.05	0.22	0.22	0.12	0.29	0.29	0.12	0.23	0.23	0.07	0.19	0.19
Unsig. Movement Delay												
Ln Grp Delay, s/veh	30.6	0.0	18.1	390.7	19.3	14.8	117.1	18.2	18.4	32.5	20.2	20.3
Ln Grp LOS	C	A	B	F	B	B	F	B	B	C	C	C
Approach Vol, veh/h		192			901			599			414	
Approach Delay, s/veh		21.3			172.1			56.6			23.2	
Approach LOS		C			F			E			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	3.0	2.0	4.0	2.0	4.0
Phs Duration (G+Y+Rc), s	11.0	14.7	7.3	20.1	8.7	17.0	11.0	16.4
Change Period (Y+Rc), s	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7
Max Green (Gmax), s	* 6.3	* 51	* 5	* 39	* 24	* 33	* 6.3	* 38
Max Allow Headway (MAH), s	3.8	5.2	3.8	4.8	3.8	5.2	3.7	5.2
Max Q Clear (g_c+I1), s	8.3	6.3	3.5	12.6	4.9	6.9	8.3	5.5
Green Ext Time (g_e), s	0.0	1.9	0.0	2.8	0.2	2.1	0.0	0.8
Prob of Phs Call (p_c)	0.97	1.00	0.52	1.00	0.77	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.00	0.00	0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1767		1767		1767		1767	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		2990		1856		2756		1511

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		532		1572		731		292

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

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	232	0	50	0	100	0	372	0
Grp Sat Flow (s), veh/h/ln	1767	0	1767	0	1767	0	1767	0
Q Serve Time (g_s), s	6.3	0.0	1.5	0.0	2.9	0.0	6.3	0.0
Cycle Q Clear Time (g_c), s	6.3	0.0	1.5	0.0	2.9	0.0	6.3	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	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)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	210	0	87	0	132	0	210	0
V/C Ratio (X)	1.11	0.00	0.58	0.00	0.76	0.00	1.77	0.00
Avail Cap (c_a), veh/h	210	0	166	0	809	0	210	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	23.4	0.0	24.7	0.0	24.1	0.0	23.4	0.0
Incr Delay (d2), s/veh	93.7	0.0	5.9	0.0	8.4	0.0	367.3	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	117.1	0.0	30.6	0.0	32.5	0.0	390.7	0.0
1st-Term Q (Q1), veh/ln	2.4	0.0	0.6	0.0	1.1	0.0	2.3	0.0
2nd-Term Q (Q2), veh/ln	5.5	0.0	0.1	0.0	0.3	0.0	21.4	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%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	7.8	0.0	0.7	0.0	1.4	0.0	23.7	0.0
%ile Storage Ratio (RQ%)	1.25	0.00	0.16	0.00	0.17	0.00	1.89	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	5.6	0.0	0.0	0.0	0.0	0.0	40.6	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	0.3	0.0	0.0	0.0	0.0	0.0	0.4	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		
Lanes in Grp	0	1	0	1	0	1	0	0
Grp Vol (v), veh/h	0	155	0	407	0	183	0	0
Grp Sat Flow (s), veh/h/ln	0	1763	0	1856	0	1763	0	0
Q Serve Time (g_s), s	0.0	4.2	0.0	10.6	0.0	4.7	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	4.2	0.0	10.6	0.0	4.7	0.0	0.0
Lane Grp Cap (c), veh/h	0	332	0	538	0	409	0	0
V/C Ratio (X)	0.00	0.47	0.00	0.76	0.00	0.45	0.00	0.00
Avail Cap (c_a), veh/h	0	1679	0	1373	0	1082	0	0
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	19.2	0.0	17.1	0.0	17.5	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.0	0.0	2.2	0.0	0.8	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	20.2	0.0	19.3	0.0	18.2	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	1.5	0.0	3.7	0.0	1.7	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.3	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	1.6	0.0	4.0	0.0	1.8	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.07	0.00	0.24	0.00	0.07	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

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	159	0	122	0	184	0	142
Grp Sat Flow (s), veh/h/ln	0	1760	0	1572	0	1724	0	1803
Q Serve Time (g_s), s	0.0	4.3	0.0	3.2	0.0	4.9	0.0	3.5
Cycle Q Clear Time (g_c), s	0.0	4.3	0.0	3.2	0.0	4.9	0.0	3.5
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	0.30	0.00	1.00	0.00	0.42	0.00	0.16
Lane Grp Cap (c), veh/h	0	331	0	456	0	400	0	398
V/C Ratio (X)	0.00	0.48	0.00	0.27	0.00	0.46	0.00	0.36
Avail Cap (c_a), veh/h	0	1677	0	1164	0	1058	0	1290
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	19.2	0.0	14.5	0.0	17.5	0.0	17.5
Incr Delay (d2), s/veh	0.0	1.1	0.0	0.3	0.0	0.8	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	20.3	0.0	14.8	0.0	18.4	0.0	18.1
1st-Term Q (Q1), veh/ln	0.0	1.5	0.0	1.0	0.0	1.7	0.0	1.3
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	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	1.6	0.0	1.0	0.0	1.8	0.0	1.3
%ile Storage Ratio (RQ%)	0.00	0.07	0.00	0.06	0.00	0.07	0.00	0.02
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	96.2
HCM 6th LOS	F

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	6.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	0	3	28	65	9	83	141	5	10	176	10
Future Vol, veh/h	2	0	3	28	65	9	83	141	5	10	176	10
Conflicting Peds, #/hr	13	0	45	45	0	13	43	0	20	20	0	43
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	0	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	76	76	76	76	76	76	76	76	76	76	76	76
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	3	0	4	37	86	12	109	186	7	13	232	13

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	778	-	327	740	742	223	288	0	0	213	0	0
Stage 1	308	-	-	428	428	-	-	-	-	-	-	-
Stage 2	470	-	-	312	314	-	-	-	-	-	-	-
Critical Hdwy	7.13	-	6.23	7.13	6.53	6.23	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.13	-	-	6.13	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.13	-	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.527	-	3.327	3.527	4.027	3.327	2.227	-	-	2.227	-	-
Pot Cap-1 Maneuver	312	0	712	331	342	814	1268	-	-	1351	-	-
Stage 1	700	0	-	603	583	-	-	-	-	-	-	-
Stage 2	572	0	-	696	654	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	206	-	654	283	286	789	1216	-	-	1325	-	-
Mov Cap-2 Maneuver	206	-	-	283	286	-	-	-	-	-	-	-
Stage 1	604	-	-	532	515	-	-	-	-	-	-	-
Stage 2	418	-	-	655	620	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	15.4	26.1	3	0.4
HCM LOS	C	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1216	-	-	206	654	302	1325	-	-
HCM Lane V/C Ratio	0.09	-	-	0.013	0.006	0.444	0.01	-	-
HCM Control Delay (s)	8.3	0	-	22.7	10.5	26.1	7.7	0	-
HCM Lane LOS	A	A	-	C	B	D	A	A	-
HCM 95th %tile Q(veh)	0.3	-	-	0	0	2.2	0	-	-

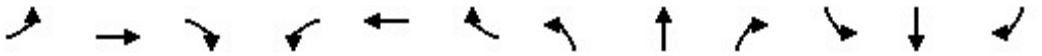
Intersection	
Int Delay, s/veh	2.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	2	45	77	160	171	9
Future Vol, veh/h	2	45	77	160	171	9
Conflicting Peds, #/hr	0	1	4	0	0	4
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	66	66	66	66	66	66
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	3	68	117	242	259	14

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	625	142	277	0	-	0
Stage 1	270	-	-	-	-	-
Stage 2	355	-	-	-	-	-
Critical Hdwy	6.86	6.96	4.16	-	-	-
Critical Hdwy Stg 1	5.86	-	-	-	-	-
Critical Hdwy Stg 2	5.86	-	-	-	-	-
Follow-up Hdwy	3.53	3.33	2.23	-	-	-
Pot Cap-1 Maneuver	415	877	1276	-	-	-
Stage 1	748	-	-	-	-	-
Stage 2	678	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	368	873	1271	-	-	-
Mov Cap-2 Maneuver	368	-	-	-	-	-
Stage 1	666	-	-	-	-	-
Stage 2	675	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.8	2.8	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1271	-	825	-	-
HCM Lane V/C Ratio	0.092	-	0.086	-	-
HCM Control Delay (s)	8.1	0.2	9.8	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.3	-	0.3	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	176	206	63	296	48	172	187	63	135	201	70
Future Volume (veh/h)	15	176	206	63	296	48	172	187	63	135	201	70
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		0.97	1.00		0.98	1.00		0.97
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	17	202	0	72	340	47	198	215	21	155	231	31
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	37	455		108	454	63	251	428	357	200	375	308
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	0.25	0.00	0.06	0.29	0.29	0.14	0.23	0.23	0.11	0.20	0.20
Unsig. Movement Delay												
Ln Grp Delay, s/veh	34.8	17.9	0.0	31.6	0.0	19.7	27.8	18.9	16.2	29.4	21.2	17.6
Ln Grp LOS	C	B		C	A	B	C	B	B	C	C	B
Approach Vol, veh/h		219			459			434			417	
Approach Delay, s/veh		19.2			21.5			22.8			24.0	
Approach LOS		B			C			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	4.0
Phs Duration (G+Y+Rc), s	10.8	17.1	8.0	17.9	12.4	15.6	5.8	20.1
Change Period (Y+Rc), s	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7
Max Green (Gmax), s	* 12	* 24	* 5.3	* 30	* 13	* 23	* 5	* 30
Max Allow Headway (MAH), s	3.9	5.0	3.8	5.1	3.8	5.2	3.8	5.3
Max Q Clear (g_c+I1), s	6.6	7.4	4.1	7.0	7.8	8.1	2.5	12.5
Green Ext Time (g_e), s	0.2	1.0	0.0	1.0	0.2	1.2	0.0	2.2
Prob of Phs Call (p_c)	0.90	1.00	0.66	1.00	0.95	1.00	0.22	1.00
Prob of Max Out (p_x)	0.20	0.00	1.00	0.00	0.26	0.02	1.00	0.02

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1767		1767		1767		1767	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1856		1856		1856		1589

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1549		1572		1527		220

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

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	155	0	72	0	198	0	17	0
Grp Sat Flow (s), veh/h/ln	1767	0	1767	0	1767	0	1767	0
Q Serve Time (g_s), s	4.6	0.0	2.1	0.0	5.8	0.0	0.5	0.0
Cycle Q Clear Time (g_c), s	4.6	0.0	2.1	0.0	5.8	0.0	0.5	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	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)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	200	0	108	0	251	0	37	0
V/C Ratio (X)	0.77	0.00	0.67	0.00	0.79	0.00	0.46	0.00
Avail Cap (c_a), veh/h	404	0	174	0	436	0	164	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	23.2	0.0	24.7	0.0	22.3	0.0	26.1	0.0
Incr Delay (d2), s/veh	6.2	0.0	6.8	0.0	5.4	0.0	8.7	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	29.4	0.0	31.6	0.0	27.8	0.0	34.8	0.0
1st-Term Q (Q1), veh/ln	1.8	0.0	0.8	0.0	2.2	0.0	0.2	0.0
2nd-Term Q (Q2), veh/ln	0.3	0.0	0.2	0.0	0.4	0.0	0.1	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%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	2.1	0.0	1.0	0.0	2.5	0.0	0.3	0.0
%ile Storage Ratio (RQ%)	0.50	0.00	0.30	0.00	0.43	0.00	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		
Lanes in Grp	0	1	0	1	0	1	0	0
Grp Vol (v), veh/h	0	215	0	202	0	231	0	0
Grp Sat Flow (s), veh/h/ln	0	1856	0	1856	0	1856	0	0
Q Serve Time (g_s), s	0.0	5.4	0.0	5.0	0.0	6.1	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	5.4	0.0	5.0	0.0	6.1	0.0	0.0
Lane Grp Cap (c), veh/h	0	428	0	455	0	375	0	0
V/C Ratio (X)	0.00	0.50	0.00	0.44	0.00	0.62	0.00	0.00
Avail Cap (c_a), veh/h	0	813	0	1034	0	779	0	0
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	18.0	0.0	17.2	0.0	19.6	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.9	0.0	0.7	0.0	1.6	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	18.9	0.0	17.9	0.0	21.2	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	2.0	0.0	1.9	0.0	2.4	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.1	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	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	2.2	0.0	1.9	0.0	2.6	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.05	0.00	0.15	0.00	0.12	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

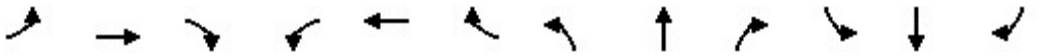
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	21	0	0	0	31	0	387
Grp Sat Flow (s), veh/h/ln	0	1549	0	1572	0	1527	0	1809
Q Serve Time (g_s), s	0.0	0.6	0.0	0.0	0.0	0.9	0.0	10.5
Cycle Q Clear Time (g_c), s	0.0	0.6	0.0	0.0	0.0	0.9	0.0	10.5
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	1.00	0.00	1.00	0.00	0.12
Lane Grp Cap (c), veh/h	0	357	0	386	0	308	0	517
V/C Ratio (X)	0.00	0.06	0.00	0.00	0.00	0.10	0.00	0.75
Avail Cap (c_a), veh/h	0	679	0	876	0	641	0	1018
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	16.2	0.0	0.0	0.0	17.5	0.0	17.5
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.0	0.0	0.1	0.0	2.2
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	16.2	0.0	0.0	0.0	17.6	0.0	19.7
1st-Term Q (Q1), veh/ln	0.0	0.2	0.0	0.0	0.0	0.3	0.0	3.8
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
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	0.0	0.0	0.3	0.0	4.2
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.52
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	22.2
HCM 6th LOS	C

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	222	0	470	0	0	0	202	802	0	1	763	45
Future Volume (veh/h)	222	0	470	0	0	0	202	802	0	1	763	45
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)	0.57		1.00	1.00		1.00	1.00		1.00	1.00		0.96
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	241	0	119	0	0	0	220	872	0	1	829	49
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	275	0	344	0	2	0	280	2624	0	2	2240	132
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Prop Arrive On Green	0.14	0.00	0.14	0.00	0.00	0.00	0.16	1.00	0.00	0.00	0.66	0.66
Unsig. Movement Delay												
Ln Grp Delay, s/veh	73.5	0.0	40.2	0.0	0.0	0.0	53.2	0.3	0.0	145.8	9.9	9.9
Ln Grp LOS	E	A	D	A	A	A	D	A	A	F	A	A
Approach Vol, veh/h		360			0			1092			879	
Approach Delay, s/veh		62.5			0.0			10.9			10.0	
Approach LOS		E						B			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	8	4	5	6		
Case No	2.0	4.0	12.0	9.0	2.0	4.0		
Phs Duration (G+Y+Rc), s	4.9	94.0	0.0	21.1	14.5	84.4		
Change Period (Y+Rc), s	* 4.7	* 4.7	4.7	* 4.7	* 4.7	* 4.7		
Max Green (Gmax), s	* 5	* 48	30.0	* 18	* 17	* 36		
Max Allow Headway (MAH), s	3.8	5.1	0.0	4.9	3.8	5.1		
Max Q Clear (g_c+I1), s	2.1	2.0	0.0	16.1	9.4	15.1		
Green Ext Time (g_e), s	0.0	7.3	0.0	0.3	0.4	5.5		
Prob of Phs Call (p_c)	0.03	1.00	0.00	1.00	1.00	1.00		
Prob of Max Out (p_x)	1.00	0.00	0.00	1.00	0.03	0.00		

Left-Turn Movement Data								
Assigned Mvmt	1		3	7	5			
Mvmt Sat Flow, veh/h	1767		0	2012	3428			

Through Movement Data								
Assigned Mvmt		2	8	4		6		
Mvmt Sat Flow, veh/h		3618	1856	0		3374		

Right-Turn Movement Data								
Assigned Mvmt		12	18	14		16		
Mvmt Sat Flow, veh/h		0	0	1572		199		

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

Lanes in Grp	1	0	0	2	2	0	0	0
Grp Vol (v), veh/h	1	0	0	241	220	0	0	0
Grp Sat Flow (s), veh/h/ln	1767	0	0	1006	1714	0	0	0
Q Serve Time (g_s), s	0.1	0.0	0.0	14.1	7.4	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.1	0.0	0.0	14.1	7.4	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	1006	0	0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	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)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	2	0	0	275	280	0	0	0
V/C Ratio (X)	0.41	0.00	0.00	0.87	0.78	0.00	0.00	0.00
Avail Cap (c_a), veh/h	74	0	0	298	494	0	0	0
Upstream Filter (I)	1.00	0.00	0.00	1.00	0.83	0.00	0.00	0.00
Uniform Delay (d1), s/veh	59.9	0.0	0.0	50.8	49.2	0.0	0.0	0.0
Incr Delay (d2), s/veh	85.9	0.0	0.0	22.7	4.0	0.0	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	145.8	0.0	0.0	73.5	53.2	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	3.5	2.9	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	0.0	0.9	0.2	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%)	1.00	0.00	1.00	1.00	1.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.1	0.0	0.0	4.4	3.1	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.04	0.00	0.00	1.88	0.39	0.00	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	8	4	0	6	0	0
Lane Assignment		T	T			T		
Lanes in Grp	0	2	1	0	0	1	0	0
Grp Vol (v), veh/h	0	872	0	0	0	433	0	0
Grp Sat Flow (s), veh/h/ln	0	1763	1856	0	0	1763	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	13.1	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	13.1	0.0	0.0
Lane Grp Cap (c), veh/h	0	2624	2	0	0	1170	0	0
V/C Ratio (X)	0.00	0.33	0.00	0.00	0.00	0.37	0.00	0.00
Avail Cap (c_a), veh/h	0	2624	464	0	0	1170	0	0
Upstream Filter (I)	0.00	0.83	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	9.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.3	0.0	0.0	0.0	0.9	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	0.3	0.0	0.0	0.0	9.9	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	4.7	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	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	0.1	0.0	0.0	0.0	4.9	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.26	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

Right Lane Group Data								
Assigned Mvmt	0	12	18	14	0	16	0	0
Lane Assignment				R		T+R		
Lanes in Grp	0	0	0	1	0	1	0	0
Grp Vol (v), veh/h	0	0	0	119	0	445	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1572	0	1811	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	7.7	0.0	13.1	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	7.7	0.0	13.1	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	1572.5	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	9.8	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	1.00	0.00	0.11	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	344	0	1202	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.35	0.00	0.37	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	362	0	1202	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	39.6	0.0	9.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.6	0.0	0.9	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	0.0	0.0	40.2	0.0	9.9	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	3.0	0.0	4.8	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	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	0.0	0.0	3.1	0.0	5.1	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.07	0.00	0.26	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

Intersection Summary	
HCM 6th Ctrl Delay	18.6
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	306	123	345	157	747	167	104	967	135
Future Volume (veh/h)	0	0	0	306	123	345	157	747	167	104	967	135
Number				3	8	18	5	2	12	1	6	16
Initial Q, veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)				1.00		0.99	1.00		0.95	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln				1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h				333	203	329	171	812	169	113	1051	0
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				3	3	3	3	3	3	3	3	3
Opposing Right Turn Influence				Yes			Yes			Yes		
Cap, veh/h				390	410	464	1015	1678	349	138	1284	
HCM Platoon Ratio				1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Prop Arrive On Green				0.22	0.22	0.22	0.10	0.19	0.19	0.08	0.36	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh				51.2	41.3	38.9	40.6	33.6	33.7	61.5	39.1	0.0
Ln Grp LOS				D	D	D	D	C	C	E	D	
Approach Vol, veh/h					865			1152			1164	
Approach Delay, s/veh					44.2			34.7			41.2	
Approach LOS					D			C			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	8		6	5		
Case No	2.0	4.0	11.0		3.0	2.0		
Phs Duration (G+Y+Rc), s	14.0	74.8	31.2		48.6	40.2		
Change Period (Y+Rc), s	* 4.7	* 4.7	4.7		* 4.9	4.7		
Max Green (Gmax), s	* 14	* 54	38.0		* 44	24.0		
Max Allow Headway (MAH), s	1.0	2.4	1.9		2.3	1.0		
Max Q Clear (g_c+I1), s	9.6	32.2	24.7		34.4	7.5		
Green Ext Time (g_e), s	0.0	1.0	0.5		1.3	0.0		
Prob of Phs Call (p_c)	0.98	1.00	1.00		1.00	1.00		
Prob of Max Out (p_x)	0.54	0.00	0.00		0.00	0.00		

Left-Turn Movement Data								
Assigned Mvmt	1		3			5		
Mvmt Sat Flow, veh/h	1767		1767			3428		

Through Movement Data								
Assigned Mvmt		2	8		6			
Mvmt Sat Flow, veh/h		2874	1856		3526			

Right-Turn Movement Data								
Assigned Mvmt		12	18		16			
Mvmt Sat Flow, veh/h		598	1549		1572			

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

Lanes in Grp	1	0	1	0	0	2	0	0
Grp Vol (v), veh/h	113	0	333	0	0	171	0	0
Grp Sat Flow (s), veh/h/ln	1767	0	1767	0	0	1714	0	0
Q Serve Time (g_s), s	7.6	0.0	21.7	0.0	0.0	5.5	0.0	0.0
Cycle Q Clear Time (g_c), s	7.6	0.0	21.7	0.0	0.0	5.5	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	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)	1.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	138	0	390	0	0	1015	0	0
V/C Ratio (X)	0.82	0.00	0.85	0.00	0.00	0.17	0.00	0.00
Avail Cap (c_a), veh/h	206	0	560	0	0	1015	0	0
Upstream Filter (I)	0.75	0.00	1.00	0.00	0.00	0.80	0.00	0.00
Uniform Delay (d1), s/veh	54.5	0.0	44.9	0.0	0.0	40.6	0.0	0.0
Incr Delay (d2), s/veh	7.0	0.0	6.3	0.0	0.0	0.0	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	61.5	0.0	51.2	0.0	0.0	40.6	0.0	0.0
1st-Term Q (Q1), veh/ln	3.3	0.0	9.4	0.0	0.0	2.4	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.3	0.0	0.7	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%)	1.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	3.6	0.0	10.1	0.0	0.0	2.4	0.0	0.0
%ile Storage Ratio (RQ%)	0.61	0.00	0.90	0.00	0.00	0.18	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	8	0	6	0	0	0
Lane Assignment		T	T		T			
Lanes in Grp	0	1	1	0	2	0	0	0
Grp Vol (v), veh/h	0	498	203	0	1051	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1763	1856	0	1763	0	0	0
Q Serve Time (g_s), s	0.0	30.2	11.5	0.0	32.4	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	30.2	11.5	0.0	32.4	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	1029	410	0	1284	0	0	0
V/C Ratio (X)	0.00	0.48	0.50	0.00	0.82	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	1029	588	0	1284	0	0	0
Upstream Filter (I)	0.00	0.80	1.00	0.00	0.75	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	32.3	40.9	0.0	34.6	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.3	0.3	0.0	4.5	0.0	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	33.6	41.3	0.0	39.1	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	14.2	5.2	0.0	13.5	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	0.0	0.8	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	1.00	0.00	1.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	14.6	5.3	0.0	14.3	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	1.11	0.47	0.00	0.33	0.00	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

Right Lane Group Data								
Assigned Mvmt	0	12	18	0	16	0	0	0
Lane Assignment		T+R	R		R			
Lanes in Grp	0	1	1	0	1	0	0	0
Grp Vol (v), veh/h	0	483	329	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1710	1549	0	1572	0	0	0
Q Serve Time (g_s), s	0.0	30.2	22.7	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	30.2	22.7	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	1572.5	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	9.3	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.35	1.00	0.00	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	998	464	0	573	0	0	0
V/C Ratio (X)	0.00	0.48	0.71	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	998	613	0	573	0	0	0
Upstream Filter (I)	0.00	0.80	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	32.3	37.5	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.3	1.4	0.0	0.0	0.0	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	33.7	38.9	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	13.8	8.5	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.4	0.2	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	1.00	0.00	1.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	14.2	8.6	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	1.08	1.47	0.00	0.00	0.00	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

Intersection Summary	
HCM 6th Ctrl Delay	39.7
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	372	2	364	0	0	0	0	699	304	320	953	0
Future Volume (veh/h)	372	2	364	0	0	0	0	699	304	320	953	0
Number	7	4	14				5	2	12	1	6	16
Initial Q, veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.98				1.00		0.95	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1856	1856	1856				0	1856	1856	1856	1856	0
Adj Flow Rate, veh/h	496	0	185				0	768	279	352	1047	0
Peak Hour Factor	0.91	0.91	0.91				0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	3	3	3				0	3	3	3	3	0
Opposing Right Turn Influence	Yes						No			Yes		
Cap, veh/h	635	0	278				0	1807	648	371	2616	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Prop Arrive On Green	0.18	0.00	0.18				0.00	0.50	0.50	0.42	1.00	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh	47.8	0.0	46.9				0.0	19.9	21.0	57.4	0.3	0.0
Ln Grp LOS	D	A	D				A	B	C	E	A	A
Approach Vol, veh/h		681						1047			1399	
Approach Delay, s/veh		47.5						20.3			14.7	
Approach LOS		D						C			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Case No	2.0	8.0		9.0		4.0		
Phs Duration (G+Y+Rc), s	29.2	64.5		26.3		93.7		
Change Period (Y+Rc), s	4.0	* 4.7		* 4.7		* 4.7		
Max Green (Gmax), s	28.0	* 41		* 38		* 73		
Max Allow Headway (MAH), s	2.8	6.2		2.8		6.1		
Max Q Clear (g_c+I1), s	25.0	18.4		18.1		2.0		
Green Ext Time (g_e), s	0.2	10.0		1.2		15.1		
Prob of Phs Call (p_c)	1.00	1.00		1.00		1.00		
Prob of Max Out (p_x)	0.84	0.00		0.00		0.00		

Left-Turn Movement Data								
Assigned Mvmt	1	5		7				
Mvmt Sat Flow, veh/h	1767	0		3534				

Through Movement Data								
Assigned Mvmt		2		4		6		
Mvmt Sat Flow, veh/h		3792		0		3618		

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		
Mvmt Sat Flow, veh/h		1300		1546		0		

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

Lanes in Grp	1	0	0	2	0	0	0	0
Grp Vol (v), veh/h	352	0	0	496	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1767	0	0	1767	0	0	0	0
Q Serve Time (g_s), s	23.0	0.0	0.0	16.1	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	23.0	0.0	0.0	16.1	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	1767	0	0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	59.8	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)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	371	0	0	635	0	0	0	0
V/C Ratio (X)	0.95	0.00	0.00	0.78	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	412	0	0	1119	0	0	0	0
Upstream Filter (I)	0.72	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	34.1	0.0	0.0	47.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	23.3	0.0	0.0	0.8	0.0	0.0	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	57.4	0.0	0.0	47.8	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	7.7	0.0	0.0	6.9	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	2.4	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%)	1.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	10.1	0.0	0.0	6.9	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.77	0.00	0.00	0.15	0.00	0.00	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	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	2	0	0
Grp Vol (v), veh/h	0	715	0	0	0	1047	0	0
Grp Sat Flow (s), veh/h/ln	0	1689	0	0	0	1763	0	0
Q Serve Time (g_s), s	0.0	16.2	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	16.2	0.0	0.0	0.0	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	1684	0	0	0	2616	0	0
V/C Ratio (X)	0.00	0.42	0.00	0.00	0.00	0.40	0.00	0.00
Avail Cap (c_a), veh/h	0	1684	0	0	0	2616	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	0.72	0.00	0.00
Uniform Delay (d1), s/veh	0.0	19.1	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.8	0.0	0.0	0.0	0.3	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	19.9	0.0	0.0	0.0	0.3	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	6.2	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.2	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	0.00
%ile Back of Q (50%), veh/ln	0.0	6.4	0.0	0.0	0.0	0.1	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.68	0.00	0.00	0.00	0.01	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

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment		T+R		R				
Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	332	0	185	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1548	0	1546	0	0	0	0
Q Serve Time (g_s), s	0.0	16.4	0.0	13.4	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	16.4	0.0	13.4	0.0	0.0	0.0	0.0
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	0.84	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	772	0	278	0	0	0	0
V/C Ratio (X)	0.00	0.43	0.00	0.67	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	772	0	490	0	0	0	0
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	19.2	0.0	45.9	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.8	0.0	1.0	0.0	0.0	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	21.0	0.0	46.9	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	5.7	0.0	5.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.4	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	0.00
%ile Back of Q (50%), veh/ln	0.0	6.1	0.0	5.1	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.65	0.00	0.32	0.00	0.00	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

Intersection Summary	
HCM 6th Ctrl Delay	23.7
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	6.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	17	1	214	0	0	0	350	236	0	0	219	29
Future Vol, veh/h	17	1	214	0	0	0	350	236	0	0	219	29
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	120	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	81	81	81	81	81	81	81	81	81	81	81	81
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	21	1	264	0	0	0	432	291	0	0	270	36

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1298	1443	153	1291	1461	146	306	0	0	291	0	0
Stage 1	288	288	-	1155	1155	-	-	-	-	-	-	-
Stage 2	1010	1155	-	136	306	-	-	-	-	-	-	-
Critical Hdwy	7.56	6.56	6.96	7.56	6.56	6.96	4.16	-	-	4.16	-	-
Critical Hdwy Stg 1	6.56	5.56	-	6.56	5.56	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.56	5.56	-	6.56	5.56	-	-	-	-	-	-	-
Follow-up Hdwy	3.53	4.03	3.33	3.53	4.03	3.33	2.23	-	-	2.23	-	-
Pot Cap-1 Maneuver	118	130	863	120	127	871	1244	-	-	1260	-	-
Stage 1	693	670	-	208	267	-	-	-	-	-	-	-
Stage 2	255	267	-	850	658	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	86	85	863	60	83	871	1244	-	-	1260	-	-
Mov Cap-2 Maneuver	86	85	-	60	83	-	-	-	-	-	-	-
Stage 1	453	670	-	136	174	-	-	-	-	-	-	-
Stage 2	166	174	-	589	658	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	14.9	0	5.6	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1244	-	-	86	863	-	1260	-	-
HCM Lane V/C Ratio	0.347	-	-	0.258	0.306	-	-	-	-
HCM Control Delay (s)	9.4	-	-	60.9	11	0	0	-	-
HCM Lane LOS	A	-	-	F	B	A	A	-	-
HCM 95th %tile Q(veh)	1.6	-	-	0.9	1.3	-	0	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	83	115	39	356	389	389	162	548	76	127	611	120
Future Volume (veh/h)	83	115	39	356	389	389	162	548	76	127	611	120
Number	3	8	18	7	4	14	1	6	16	5	2	12
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	94	131	35	405	442	142	184	623	77	144	694	122
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	120	344	92	200	537	455	128	886	109	186	939	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	0.07	0.24	0.24	0.11	0.29	0.29	0.07	0.28	0.28	0.11	0.31	0.31
Unsig. Movement Delay												
Ln Grp Delay, s/veh	58.7	0.0	23.6	508.6	27.5	20.7	269.3	25.4	25.4	38.6	24.4	24.4
Ln Grp LOS	E	A	C	F	C	C	F	C	C	D	C	C
Approach Vol, veh/h		260			989			884			960	
Approach Delay, s/veh		36.3			223.6			76.2			26.5	
Approach LOS		D			F			E			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	3.0	2.0	4.0	2.0	4.0
Phs Duration (G+Y+Rc), s	10.0	27.6	9.7	25.9	12.4	25.2	13.0	22.5
Change Period (Y+Rc), s	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7
Max Green (Gmax), s	* 5.3	* 53	* 5.3	* 37	* 27	* 31	* 8.3	* 34
Max Allow Headway (MAH), s	3.8	5.2	3.8	4.8	3.8	5.2	3.7	5.2
Max Q Clear (g_c+I1), s	7.3	17.2	5.8	18.3	7.8	15.0	10.3	7.7
Green Ext Time (g_e), s	0.0	5.8	0.0	2.9	0.3	3.9	0.0	0.9
Prob of Phs Call (p_c)	0.98	1.00	0.85	1.00	0.95	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.01	1.00	0.03	0.00	0.13	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1767		1767		1767		1767	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		2997		1856		3158		1411

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		526		1572		390		377

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

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	184	0	94	0	144	0	405	0
Grp Sat Flow (s), veh/h/ln	1767	0	1767	0	1767	0	1767	0
Q Serve Time (g_s), s	5.3	0.0	3.8	0.0	5.8	0.0	8.3	0.0
Cycle Q Clear Time (g_c), s	5.3	0.0	3.8	0.0	5.8	0.0	8.3	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	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)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	128	0	120	0	186	0	200	0
V/C Ratio (X)	1.44	0.00	0.78	0.00	0.77	0.00	2.02	0.00
Avail Cap (c_a), veh/h	128	0	128	0	659	0	200	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	33.9	0.0	33.6	0.0	31.9	0.0	32.4	0.0
Incr Delay (d2), s/veh	235.4	0.0	25.2	0.0	6.7	0.0	476.2	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	269.3	0.0	58.7	0.0	38.6	0.0	508.6	0.0
1st-Term Q (Q1), veh/ln	2.2	0.0	1.6	0.0	2.4	0.0	3.3	0.0
2nd-Term Q (Q2), veh/ln	8.4	0.0	0.8	0.0	0.3	0.0	26.5	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%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	10.5	0.0	2.4	0.0	2.7	0.0	29.8	0.0
%ile Storage Ratio (RQ%)	1.69	0.00	0.56	0.00	0.32	0.00	2.39	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	14.0	0.0	0.0	0.0	0.0	0.0	51.1	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	0.4	0.0	0.0	0.0	0.0	0.0	0.5	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		
Lanes in Grp	0	1	0	1	0	1	0	0
Grp Vol (v), veh/h	0	408	0	442	0	347	0	0
Grp Sat Flow (s), veh/h/ln	0	1763	0	1856	0	1763	0	0
Q Serve Time (g_s), s	0.0	15.1	0.0	16.3	0.0	12.9	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	15.1	0.0	16.3	0.0	12.9	0.0	0.0
Lane Grp Cap (c), veh/h	0	552	0	537	0	494	0	0
V/C Ratio (X)	0.00	0.74	0.00	0.82	0.00	0.70	0.00	0.00
Avail Cap (c_a), veh/h	0	1284	0	946	0	754	0	0
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	22.4	0.0	24.3	0.0	23.6	0.0	0.0
Incr Delay (d2), s/veh	0.0	2.0	0.0	3.2	0.0	1.8	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	24.4	0.0	27.5	0.0	25.4	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	5.8	0.0	6.4	0.0	5.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.5	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	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	6.1	0.0	6.9	0.0	5.2	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.25	0.00	0.42	0.00	0.20	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

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	408	0	142	0	353	0	166
Grp Sat Flow (s), veh/h/ln	0	1761	0	1572	0	1785	0	1788
Q Serve Time (g_s), s	0.0	15.2	0.0	5.2	0.0	13.0	0.0	5.7
Cycle Q Clear Time (g_c), s	0.0	15.2	0.0	5.2	0.0	13.0	0.0	5.7
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	0.30	0.00	1.00	0.00	0.22	0.00	0.21
Lane Grp Cap (c), veh/h	0	552	0	455	0	501	0	436
V/C Ratio (X)	0.00	0.74	0.00	0.31	0.00	0.70	0.00	0.38
Avail Cap (c_a), veh/h	0	1283	0	802	0	764	0	838
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	22.4	0.0	20.3	0.0	23.6	0.0	23.1
Incr Delay (d2), s/veh	0.0	2.0	0.0	0.4	0.0	1.8	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	24.4	0.0	20.7	0.0	25.4	0.0	23.6
1st-Term Q (Q1), veh/ln	0.0	5.8	0.0	1.8	0.0	5.1	0.0	2.2
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.0	0.0	0.3	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	6.1	0.0	1.8	0.0	5.3	0.0	2.3
%ile Storage Ratio (RQ%)	0.00	0.25	0.00	0.11	0.00	0.21	0.00	0.04
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	104.5
HCM 6th LOS	F

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	2.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	1	3	33	24	18	54	267	7	7	251	7
Future Vol, veh/h	2	1	3	33	24	18	54	267	7	7	251	7
Conflicting Peds, #/hr	8	0	6	6	0	8	10	0	10	10	0	10
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	0	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	2	1	3	36	26	20	59	293	8	8	276	8

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	752	735	296	729	735	315	294	0	0	311	0	0
Stage 1	306	306	-	425	425	-	-	-	-	-	-	-
Stage 2	446	429	-	304	310	-	-	-	-	-	-	-
Critical Hdwy	7.13	6.53	6.23	7.13	6.53	6.23	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.13	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.13	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.527	4.027	3.327	3.527	4.027	3.327	2.227	-	-	2.227	-	-
Pot Cap-1 Maneuver	325	346	741	337	346	723	1262	-	-	1244	-	-
Stage 1	702	660	-	605	585	-	-	-	-	-	-	-
Stage 2	590	582	-	703	657	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	277	317	730	313	317	711	1250	-	-	1232	-	-
Mov Cap-2 Maneuver	277	317	-	313	317	-	-	-	-	-	-	-
Stage 1	656	648	-	565	546	-	-	-	-	-	-	-
Stage 2	511	544	-	689	645	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13.2	17.8	1.3	0.2
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1250	-	-	277	730	363	1232	-	-
HCM Lane V/C Ratio	0.047	-	-	0.008	0.005	0.227	0.006	-	-
HCM Control Delay (s)	8	0	-	18.1	10	17.8	7.9	0	-
HCM Lane LOS	A	A	-	C	B	C	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0	0	0.9	0	-	-

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	9	42	52	208	149	7
Future Vol, veh/h	9	42	52	208	149	7
Conflicting Peds, #/hr	0	1	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	10	45	56	224	160	8

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	388	85	168	0	-	0
Stage 1	164	-	-	-	-	-
Stage 2	224	-	-	-	-	-
Critical Hdwy	6.86	6.96	4.16	-	-	-
Critical Hdwy Stg 1	5.86	-	-	-	-	-
Critical Hdwy Stg 2	5.86	-	-	-	-	-
Follow-up Hdwy	3.53	3.33	2.23	-	-	-
Pot Cap-1 Maneuver	585	954	1400	-	-	-
Stage 1	845	-	-	-	-	-
Stage 2	789	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	558	953	1400	-	-	-
Mov Cap-2 Maneuver	558	-	-	-	-	-
Stage 1	806	-	-	-	-	-
Stage 2	789	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.5	1.6	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1400	-	847	-	-
HCM Lane V/C Ratio	0.04	-	0.065	-	-
HCM Control Delay (s)	7.7	0.1	9.5	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	36	147	227	92	205	55	200	232	89	41	275	26
Future Volume (veh/h)	36	147	227	92	205	55	200	232	89	41	275	26
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		0.99	1.00		0.97	1.00		0.99
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	38	153	0	96	214	47	208	242	43	43	286	17
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	71	394		125	357	78	262	603	496	78	409	343
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	0.04	0.21	0.00	0.07	0.24	0.24	0.15	0.32	0.32	0.04	0.22	0.22
Unsig. Movement Delay												
Ln Grp Delay, s/veh	31.5	18.9	0.0	37.5	0.0	19.4	27.6	14.6	12.7	31.3	21.6	16.6
Ln Grp LOS	C	B		D	A	B	C	B	B	C	C	B
Approach Vol, veh/h		191			357			493			346	
Approach Delay, s/veh		21.4			24.3			19.9			22.5	
Approach LOS		C			C			B			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	4.0
Phs Duration (G+Y+Rc), s	7.1	22.2	8.5	16.2	12.7	16.6	6.9	17.8
Change Period (Y+Rc), s	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7
Max Green (Gmax), s	* 12	* 24	* 5.3	* 30	* 13	* 23	* 5	* 30
Max Allow Headway (MAH), s	3.9	5.0	3.8	5.1	3.8	5.3	3.8	5.3
Max Q Clear (g_c+I1), s	3.3	7.5	4.9	5.8	8.1	9.7	3.1	9.0
Green Ext Time (g_e), s	0.0	1.3	0.0	0.8	0.3	1.4	0.0	1.5
Prob of Phs Call (p_c)	0.48	1.00	0.76	1.00	0.96	1.00	0.43	1.00
Prob of Max Out (p_x)	0.00	0.01	1.00	0.00	0.34	0.06	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1767		1767		1767		1767	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1856		1856		1856		1470

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1527		1572		1555		323

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

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	43	0	96	0	208	0	38	0
Grp Sat Flow (s), veh/h/ln	1767	0	1767	0	1767	0	1767	0
Q Serve Time (g_s), s	1.3	0.0	2.9	0.0	6.1	0.0	1.1	0.0
Cycle Q Clear Time (g_c), s	1.3	0.0	2.9	0.0	6.1	0.0	1.1	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	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)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	78	0	125	0	262	0	71	0
V/C Ratio (X)	0.55	0.00	0.77	0.00	0.79	0.00	0.53	0.00
Avail Cap (c_a), veh/h	403	0	173	0	435	0	164	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	25.3	0.0	24.7	0.0	22.2	0.0	25.4	0.0
Incr Delay (d2), s/veh	6.0	0.0	12.8	0.0	5.4	0.0	6.1	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	31.3	0.0	37.5	0.0	27.6	0.0	31.5	0.0
1st-Term Q (Q1), veh/ln	0.5	0.0	1.1	0.0	2.3	0.0	0.4	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	0.4	0.0	0.4	0.0	0.1	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%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.6	0.0	1.6	0.0	2.7	0.0	0.6	0.0
%ile Storage Ratio (RQ%)	0.15	0.00	0.44	0.00	0.46	0.00	0.18	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		
Lanes in Grp	0	1	0	1	0	1	0	0
Grp Vol (v), veh/h	0	242	0	153	0	286	0	0
Grp Sat Flow (s), veh/h/ln	0	1856	0	1856	0	1856	0	0
Q Serve Time (g_s), s	0.0	5.5	0.0	3.8	0.0	7.7	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	5.5	0.0	3.8	0.0	7.7	0.0	0.0
Lane Grp Cap (c), veh/h	0	603	0	394	0	409	0	0
V/C Ratio (X)	0.00	0.40	0.00	0.39	0.00	0.70	0.00	0.00
Avail Cap (c_a), veh/h	0	811	0	1031	0	777	0	0
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	14.2	0.0	18.3	0.0	19.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.4	0.0	0.6	0.0	2.2	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	14.6	0.0	18.9	0.0	21.6	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	1.9	0.0	1.5	0.0	3.1	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.1	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	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	1.5	0.0	3.3	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.05	0.00	0.12	0.00	0.15	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

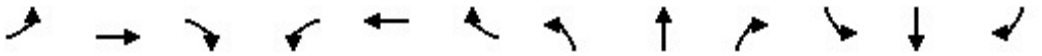
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	43	0	0	0	17	0	261
Grp Sat Flow (s), veh/h/ln	0	1527	0	1572	0	1555	0	1793
Q Serve Time (g_s), s	0.0	1.1	0.0	0.0	0.0	0.5	0.0	7.0
Cycle Q Clear Time (g_c), s	0.0	1.1	0.0	0.0	0.0	0.5	0.0	7.0
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	1.00	0.00	1.00	0.00	0.18
Lane Grp Cap (c), veh/h	0	496	0	334	0	343	0	435
V/C Ratio (X)	0.00	0.09	0.00	0.00	0.00	0.05	0.00	0.60
Avail Cap (c_a), veh/h	0	668	0	874	0	651	0	1006
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	12.7	0.0	0.0	0.0	16.6	0.0	18.1
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.0	0.0	0.1	0.0	1.3
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	12.7	0.0	0.0	0.0	16.6	0.0	19.4
1st-Term Q (Q1), veh/ln	0.0	0.3	0.0	0.0	0.0	0.2	0.0	2.6
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	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	0.3	0.0	0.0	0.0	0.2	0.0	2.7
%ile Storage Ratio (RQ%)	0.00	0.01	0.00	0.00	0.00	0.04	0.00	0.34
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	21.9
HCM 6th LOS	C

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	93	0	388	0	0	0	322	750	0	3	895	34
Future Volume (veh/h)	93	0	388	0	0	0	322	750	0	3	895	34
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)	0.92		0.95	1.00		1.00	1.00		1.00	1.00		0.98
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	96	0	81	0	0	0	332	773	0	3	923	35
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	250	0	293	0	1	0	388	2858	0	7	2428	92
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Prop Arrive On Green	0.08	0.00	0.08	0.00	0.00	0.00	0.23	1.00	0.00	0.00	0.70	0.70
Unsig. Movement Delay												
Ln Grp Delay, s/veh	58.0	0.0	45.6	0.0	0.0	0.0	57.7	0.2	0.0	101.4	8.8	8.8
Ln Grp LOS	E	A	D	A	A	A	E	A	A	F	A	A
Approach Vol, veh/h		177			0			1105			961	
Approach Delay, s/veh		52.3			0.0			17.5			9.1	
Approach LOS		D						B			A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	8	4	5	6		
Case No	2.0	4.0	12.0	9.0	2.0	4.0		
Phs Duration (G+Y+Rc), s	5.2	110.1	0.0	14.7	19.4	95.9		
Change Period (Y+Rc), s	* 4.7	* 4.7	4.7	* 4.7	* 4.7	* 4.7		
Max Green (Gmax), s	* 5	* 58	30.0	* 18	* 21	* 43		
Max Allow Headway (MAH), s	3.8	5.1	0.0	4.1	3.8	5.1		
Max Q Clear (g_c+I1), s	2.2	2.0	0.0	8.0	14.1	16.1		
Green Ext Time (g_e), s	0.0	6.3	0.0	0.4	0.6	6.6		
Prob of Phs Call (p_c)	0.10	1.00	0.00	1.00	1.00	1.00		
Prob of Max Out (p_x)	1.00	0.00	0.00	0.01	0.18	0.00		

Left-Turn Movement Data								
Assigned Mvmt	1		3	7	5			
Mvmt Sat Flow, veh/h	1767		0	3259	3428			

Through Movement Data								
Assigned Mvmt		2	8	4		6		
Mvmt Sat Flow, veh/h		3618	1856	0		3461		

Right-Turn Movement Data								
Assigned Mvmt		12	18	14		16		
Mvmt Sat Flow, veh/h		0	0	1499		131		

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

Lanes in Grp	1	0	0	2	2	0	0	0
Grp Vol (v), veh/h	3	0	0	96	332	0	0	0
Grp Sat Flow (s), veh/h/ln	1767	0	0	1629	1714	0	0	0
Q Serve Time (g_s), s	0.2	0.0	0.0	3.6	12.1	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.2	0.0	0.0	3.6	12.1	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	1629	0	0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	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)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	7	0	0	250	388	0	0	0
V/C Ratio (X)	0.43	0.00	0.00	0.38	0.86	0.00	0.00	0.00
Avail Cap (c_a), veh/h	68	0	0	446	541	0	0	0
Upstream Filter (I)	1.00	0.00	0.00	1.00	0.88	0.00	0.00	0.00
Uniform Delay (d1), s/veh	64.6	0.0	0.0	57.1	49.3	0.0	0.0	0.0
Incr Delay (d2), s/veh	36.8	0.0	0.0	1.0	8.5	0.0	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	101.4	0.0	0.0	58.0	57.7	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.1	0.0	0.0	1.5	4.6	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	0.0	0.0	0.5	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%)	1.00	0.00	1.00	1.00	1.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.2	0.0	0.0	1.5	5.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.09	0.00	0.00	0.66	0.64	0.00	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	8	4	0	6	0	0
Lane Assignment		T	T			T		
Lanes in Grp	0	2	1	0	0	1	0	0
Grp Vol (v), veh/h	0	773	0	0	0	470	0	0
Grp Sat Flow (s), veh/h/ln	0	1763	1856	0	0	1763	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	14.1	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	14.1	0.0	0.0
Lane Grp Cap (c), veh/h	0	2858	1	0	0	1237	0	0
V/C Ratio (X)	0.00	0.27	0.00	0.00	0.00	0.38	0.00	0.00
Avail Cap (c_a), veh/h	0	2858	428	0	0	1237	0	0
Upstream Filter (I)	0.00	0.88	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	7.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.0	0.0	0.9	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	0.2	0.0	0.0	0.0	8.8	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	4.9	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	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	0.1	0.0	0.0	0.0	5.2	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.27	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

Right Lane Group Data								
Assigned Mvmt	0	12	18	14	0	16	0	0
Lane Assignment				R		T+R		
Lanes in Grp	0	0	0	1	0	1	0	0
Grp Vol (v), veh/h	0	0	0	81	0	488	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1499	0	1829	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	6.0	0.0	14.1	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	6.0	0.0	14.1	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	1572.5	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	14.7	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	1.00	0.00	0.07	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	293	0	1283	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.28	0.00	0.38	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	383	0	1283	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	45.1	0.0	7.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.5	0.0	0.9	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	0.0	0.0	45.6	0.0	8.8	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	2.3	0.0	5.1	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	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	0.0	0.0	2.3	0.0	5.4	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.05	0.00	0.28	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

Intersection Summary	
HCM 6th Ctrl Delay	16.6
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	121	215	260	291	833	115	63	981	286
Future Volume (veh/h)	0	0	0	121	215	260	291	833	115	63	981	286
Number				3	8	18	5	2	12	1	6	16
Initial Q, veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)				1.00		0.99	1.00		0.94	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln				1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h				127	285	234	306	877	116	66	1033	0
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				3	3	3	3	3	3	3	3	3
Opposing Right Turn Influence				Yes			Yes			Yes		
Cap, veh/h				176	423	332	1127	2107	279	86	1402	
HCM Platoon Ratio				1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Prop Arrive On Green				0.16	0.16	0.16	0.11	0.22	0.22	0.05	0.40	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh				52.8	51.8	48.4	43.7	29.1	29.1	65.6	36.4	0.0
Ln Grp LOS				D	D	D	D	C	C	E	D	
Approach Vol, veh/h					646			1299			1099	
Approach Delay, s/veh					50.9			32.5			38.2	
Approach LOS					D			C			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	8		6	5		
Case No	2.0	4.0	11.0		3.0	2.0		
Phs Duration (G+Y+Rc), s	11.1	93.0	26.0		56.6	47.4		
Change Period (Y+Rc), s	* 4.7	* 4.7	4.7		* 4.9	4.7		
Max Green (Gmax), s	* 14	* 64	38.0		* 52	26.0		
Max Allow Headway (MAH), s	1.0	2.4	1.9		2.3	1.0		
Max Q Clear (g_c+I1), s	6.8	33.4	20.1		34.5	12.7		
Green Ext Time (g_e), s	0.0	1.0	0.3		1.4	0.0		
Prob of Phs Call (p_c)	0.91	1.00	1.00		1.00	1.00		
Prob of Max Out (p_x)	0.46	0.00	0.00		0.00	0.00		

Left-Turn Movement Data								
Assigned Mvmt	1		3			5		
Mvmt Sat Flow, veh/h	1767		1074			3428		

Through Movement Data								
Assigned Mvmt		2	8		6			
Mvmt Sat Flow, veh/h		3103	2583		3526			

Right-Turn Movement Data								
Assigned Mvmt		12	18		16			
Mvmt Sat Flow, veh/h		410	1561		1572			

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

Lanes in Grp	1	0	1	0	0	2	0	0
Grp Vol (v), veh/h	66	0	213	0	0	306	0	0
Grp Sat Flow (s), veh/h/ln	1767	0	1802	0	0	1714	0	0
Q Serve Time (g_s), s	4.8	0.0	14.6	0.0	0.0	10.7	0.0	0.0
Cycle Q Clear Time (g_c), s	4.8	0.0	14.6	0.0	0.0	10.7	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	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)	1.00	0.00	0.60	0.00	0.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	86	0	295	0	0	1127	0	0
V/C Ratio (X)	0.76	0.00	0.72	0.00	0.00	0.27	0.00	0.00
Avail Cap (c_a), veh/h	190	0	527	0	0	1127	0	0
Upstream Filter (I)	0.87	0.00	1.00	0.00	0.00	0.66	0.00	0.00
Uniform Delay (d1), s/veh	61.1	0.0	51.6	0.0	0.0	43.7	0.0	0.0
Incr Delay (d2), s/veh	4.5	0.0	1.3	0.0	0.0	0.0	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	65.6	0.0	52.8	0.0	0.0	43.7	0.0	0.0
1st-Term Q (Q1), veh/ln	2.1	0.0	6.5	0.0	0.0	4.9	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	0.1	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%)	1.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	2.2	0.0	6.6	0.0	0.0	4.9	0.0	0.0
%ile Storage Ratio (RQ%)	0.38	0.00	0.60	0.00	0.00	0.37	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	8	0	6	0	0	0
Lane Assignment		T	T		T			
Lanes in Grp	0	1	1	0	2	0	0	0
Grp Vol (v), veh/h	0	498	199	0	1033	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1763	1856	0	1763	0	0	0
Q Serve Time (g_s), s	0.0	31.4	13.1	0.0	32.5	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	31.4	13.1	0.0	32.5	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	1197	304	0	1402	0	0	0
V/C Ratio (X)	0.00	0.42	0.66	0.00	0.74	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	1197	542	0	1402	0	0	0
Upstream Filter (I)	0.00	0.66	1.00	0.00	0.87	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	28.4	50.9	0.0	33.4	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.7	0.9	0.0	3.0	0.0	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	29.1	51.8	0.0	36.4	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	14.9	6.0	0.0	13.6	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.1	0.0	0.6	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	1.00	0.00	1.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	15.1	6.1	0.0	14.2	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	1.15	0.55	0.00	0.32	0.00	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

Right Lane Group Data								
Assigned Mvmt	0	12	18	0	16	0	0	0
Lane Assignment		T+R	R		R			
Lanes in Grp	0	1	1	0	1	0	0	0
Grp Vol (v), veh/h	0	495	234	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1751	1561	0	1572	0	0	0
Q Serve Time (g_s), s	0.0	31.4	18.1	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	31.4	18.1	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	1572.5	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	6.4	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.23	1.00	0.00	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	1189	332	0	625	0	0	0
V/C Ratio (X)	0.00	0.42	0.70	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	1189	533	0	625	0	0	0
Upstream Filter (I)	0.00	0.66	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	28.4	47.4	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.7	1.0	0.0	0.0	0.0	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	29.1	48.4	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	14.8	7.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.1	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	1.00	0.00	1.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	15.0	7.1	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	1.14	1.20	0.00	0.00	0.00	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

Intersection Summary	
HCM 6th Ctrl Delay	38.5
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	415	0	421	0	0	0	0	824	587	443	659	0
Future Volume (veh/h)	415	0	421	0	0	0	0	824	587	443	659	0
Number	7	4	14				5	2	12	1	6	16
Initial Q, veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.97				1.00		0.93	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1856	1856	1856				0	1856	1856	1856	1856	0
Adj Flow Rate, veh/h	491	0	126				0	858	519	461	686	0
Peak Hour Factor	0.96	0.96	0.96				0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3				0	3	3	3	3	0
Opposing Right Turn Influence	Yes						No			Yes		
Cap, veh/h	672	0	288				0	1764	766	326	2601	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Prop Arrive On Green	0.19	0.00	0.19				0.00	0.52	0.52	0.37	1.00	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh	50.1	0.0	46.9				0.0	20.8	27.7	240.9	0.2	0.0
Ln Grp LOS	D	A	D				A	C	C	F	A	A
Approach Vol, veh/h		617						1377			1147	
Approach Delay, s/veh		49.4						23.4			96.9	
Approach LOS		D						C			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Case No	2.0	8.0		9.0		4.0		
Phs Duration (G+Y+Rc), s	28.0	72.6		29.4		100.6		
Change Period (Y+Rc), s	4.0	* 4.7		* 4.7		* 4.7		
Max Green (Gmax), s	24.0	* 55		* 38		* 83		
Max Allow Headway (MAH), s	2.8	6.3		2.8		6.1		
Max Q Clear (g_c+I1), s	26.0	36.0		19.0		2.0		
Green Ext Time (g_e), s	0.0	12.0		1.1		8.1		
Prob of Phs Call (p_c)	1.00	1.00		1.00		1.00		
Prob of Max Out (p_x)	1.00	0.00		0.00		0.00		

Left-Turn Movement Data								
Assigned Mvmt	1	5		7				
Mvmt Sat Flow, veh/h	1767	0		3534				

Through Movement Data								
Assigned Mvmt		2		4		6		
Mvmt Sat Flow, veh/h		3544		0		3618		

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		
Mvmt Sat Flow, veh/h		1467		1518		0		

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

Lanes in Grp	1	0	0	2	0	0	0	0
Grp Vol (v), veh/h	461	0	0	491	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1767	0	0	1767	0	0	0	0
Q Serve Time (g_s), s	24.0	0.0	0.0	17.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	24.0	0.0	0.0	17.0	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	1767	0	0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	67.9	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)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	326	0	0	672	0	0	0	0
V/C Ratio (X)	1.41	0.00	0.00	0.73	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	326	0	0	1033	0	0	0	0
Upstream Filter (I)	0.80	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	41.0	0.0	0.0	49.5	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	199.9	0.0	0.0	0.6	0.0	0.0	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	240.9	0.0	0.0	50.1	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	8.6	0.0	0.0	7.3	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	18.1	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%)	1.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	26.7	0.0	0.0	7.4	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	2.03	0.00	0.00	0.16	0.00	0.00	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	33.7	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	0.4	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	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	2	0	0
Grp Vol (v), veh/h	0	858	0	0	0	686	0	0
Grp Sat Flow (s), veh/h/ln	0	1689	0	0	0	1763	0	0
Q Serve Time (g_s), s	0.0	21.2	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	21.2	0.0	0.0	0.0	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	1764	0	0	0	2601	0	0
V/C Ratio (X)	0.00	0.49	0.00	0.00	0.00	0.26	0.00	0.00
Avail Cap (c_a), veh/h	0	1764	0	0	0	2601	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	0.80	0.00	0.00
Uniform Delay (d1), s/veh	0.0	19.9	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.0	0.0	0.0	0.0	0.2	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	20.8	0.0	0.0	0.0	0.2	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	8.1	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.2	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	0.00
%ile Back of Q (50%), veh/ln	0.0	8.4	0.0	0.0	0.0	0.1	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.89	0.00	0.00	0.00	0.01	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

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment		T+R		R				
Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	519	0	126	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1467	0	1518	0	0	0	0
Q Serve Time (g_s), s	0.0	34.0	0.0	9.5	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	34.0	0.0	9.5	0.0	0.0	0.0	0.0
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	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	766	0	288	0	0	0	0
V/C Ratio (X)	0.00	0.68	0.00	0.44	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	766	0	444	0	0	0	0
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	23.0	0.0	46.5	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	4.8	0.0	0.4	0.0	0.0	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	27.7	0.0	46.9	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	11.4	0.0	3.5	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	1.0	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	0.00
%ile Back of Q (50%), veh/ln	0.0	12.4	0.0	3.6	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	1.32	0.00	0.23	0.00	0.00	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

Intersection Summary	
HCM 6th Ctrl Delay	55.4
HCM 6th LOS	E

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	5.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	53	0	139	2	0	4	247	243	0	0	185	23
Future Vol, veh/h	53	0	139	2	0	4	247	243	0	0	185	23
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	120	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	55	0	143	2	0	4	255	251	0	0	191	24

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	839	964	108	857	976	126	215	0	0	251	0	0
Stage 1	203	203	-	761	761	-	-	-	-	-	-	-
Stage 2	636	761	-	96	215	-	-	-	-	-	-	-
Critical Hdwy	7.56	6.56	6.96	7.56	6.56	6.96	4.16	-	-	4.16	-	-
Critical Hdwy Stg 1	6.56	5.56	-	6.56	5.56	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.56	5.56	-	6.56	5.56	-	-	-	-	-	-	-
Follow-up Hdwy	3.53	4.03	3.33	3.53	4.03	3.33	2.23	-	-	2.23	-	-
Pot Cap-1 Maneuver	257	252	922	249	248	898	1345	-	-	1304	-	-
Stage 1	777	730	-	362	410	-	-	-	-	-	-	-
Stage 2	430	410	-	897	721	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	218	204	922	180	201	898	1345	-	-	1304	-	-
Mov Cap-2 Maneuver	218	204	-	180	201	-	-	-	-	-	-	-
Stage 1	629	730	-	293	332	-	-	-	-	-	-	-
Stage 2	347	332	-	758	721	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	14.4	14.5	4.2	0
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1345	-	-	218	922	385	1304	-	-
HCM Lane V/C Ratio	0.189	-	-	0.251	0.155	0.016	-	-	-
HCM Control Delay (s)	8.3	-	-	26.9	9.6	14.5	0	-	-
HCM Lane LOS	A	-	-	D	A	B	A	-	-
HCM 95th %tile Q(veh)	0.7	-	-	1	0.5	0	0	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	65	112	27	350	384	337	218	285	114	94	258	85
Future Volume (veh/h)	65	112	27	350	384	337	218	285	114	94	258	85
Number	3	8	18	7	4	14	1	6	16	5	2	12
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	69	119	23	372	409	136	232	303	78	100	274	58
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	105	353	68	206	539	457	206	632	160	132	537	112
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	0.06	0.23	0.23	0.12	0.29	0.29	0.12	0.23	0.23	0.07	0.19	0.19
Unsig. Movement Delay												
Ln Grp Delay, s/veh	31.5	0.0	17.7	404.9	19.7	15.2	124.5	19.0	19.1	32.9	21.0	21.1
Ln Grp LOS	C	A	B	F	B	B	F	B	B	C	C	C
Approach Vol, veh/h		211			917			613			432	
Approach Delay, s/veh		22.2			175.3			59.0			23.8	
Approach LOS		C			F			E			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	3.0	2.0	4.0	2.0	4.0
Phs Duration (G+Y+Rc), s	11.0	14.7	7.9	20.4	8.7	17.0	11.0	17.3
Change Period (Y+Rc), s	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7
Max Green (Gmax), s	* 6.3	* 51	* 5	* 39	* 24	* 33	* 6.3	* 38
Max Allow Headway (MAH), s	3.8	5.2	3.8	4.8	3.8	5.2	3.7	5.2
Max Q Clear (g_c+I1), s	8.3	6.7	4.1	12.8	5.0	7.2	8.3	5.5
Green Ext Time (g_e), s	0.0	2.0	0.0	2.9	0.2	2.2	0.0	0.8
Prob of Phs Call (p_c)	0.97	1.00	0.64	1.00	0.78	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.00	0.00	0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1767		1767		1767		1767	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		2904		1856		2786		1511

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		605		1572		706		292

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

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	232	0	69	0	100	0	372	0
Grp Sat Flow (s), veh/h/ln	1767	0	1767	0	1767	0	1767	0
Q Serve Time (g_s), s	6.3	0.0	2.1	0.0	3.0	0.0	6.3	0.0
Cycle Q Clear Time (g_c), s	6.3	0.0	2.1	0.0	3.0	0.0	6.3	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	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)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	206	0	105	0	132	0	206	0
V/C Ratio (X)	1.13	0.00	0.65	0.00	0.76	0.00	1.81	0.00
Avail Cap (c_a), veh/h	206	0	164	0	795	0	206	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	23.9	0.0	24.9	0.0	24.5	0.0	23.9	0.0
Incr Delay (d2), s/veh	100.6	0.0	6.7	0.0	8.4	0.0	381.0	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	124.5	0.0	31.5	0.0	32.9	0.0	404.9	0.0
1st-Term Q (Q1), veh/ln	2.4	0.0	0.8	0.0	1.1	0.0	2.3	0.0
2nd-Term Q (Q2), veh/ln	5.8	0.0	0.2	0.0	0.3	0.0	21.8	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%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	8.1	0.0	1.0	0.0	1.5	0.0	24.1	0.0
%ile Storage Ratio (RQ%)	1.30	0.00	0.23	0.00	0.17	0.00	1.93	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	6.5	0.0	0.0	0.0	0.0	0.0	41.5	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	0.3	0.0	0.0	0.0	0.0	0.0	0.5	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		
Lanes in Grp	0	1	0	1	0	1	0	0
Grp Vol (v), veh/h	0	165	0	409	0	190	0	0
Grp Sat Flow (s), veh/h/ln	0	1763	0	1856	0	1763	0	0
Q Serve Time (g_s), s	0.0	4.5	0.0	10.8	0.0	5.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	4.5	0.0	10.8	0.0	5.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	326	0	539	0	400	0	0
V/C Ratio (X)	0.00	0.50	0.00	0.76	0.00	0.48	0.00	0.00
Avail Cap (c_a), veh/h	0	1651	0	1350	0	1064	0	0
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	19.8	0.0	17.4	0.0	18.1	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.2	0.0	2.2	0.0	0.9	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	21.0	0.0	19.7	0.0	19.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	1.7	0.0	3.8	0.0	1.8	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.3	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	1.8	0.0	4.2	0.0	1.9	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.07	0.00	0.25	0.00	0.07	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

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	167	0	136	0	191	0	142
Grp Sat Flow (s), veh/h/ln	0	1747	0	1572	0	1729	0	1803
Q Serve Time (g_s), s	0.0	4.7	0.0	3.6	0.0	5.2	0.0	3.5
Cycle Q Clear Time (g_c), s	0.0	4.7	0.0	3.6	0.0	5.2	0.0	3.5
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	0.35	0.00	1.00	0.00	0.41	0.00	0.16
Lane Grp Cap (c), veh/h	0	323	0	457	0	392	0	421
V/C Ratio (X)	0.00	0.52	0.00	0.30	0.00	0.49	0.00	0.34
Avail Cap (c_a), veh/h	0	1636	0	1144	0	1043	0	1268
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	19.8	0.0	14.9	0.0	18.2	0.0	17.2
Incr Delay (d2), s/veh	0.0	1.3	0.0	0.4	0.0	0.9	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	21.1	0.0	15.2	0.0	19.1	0.0	17.7
1st-Term Q (Q1), veh/ln	0.0	1.7	0.0	1.1	0.0	1.8	0.0	1.3
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	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	1.8	0.0	1.2	0.0	1.9	0.0	1.3
%ile Storage Ratio (RQ%)	0.00	0.07	0.00	0.07	0.00	0.07	0.00	0.02
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	97.5
HCM 6th LOS	F

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	10.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	0	10	30	80	20	100	150	10	20	160	10
Future Vol, veh/h	10	0	10	30	80	20	100	150	10	20	160	10
Conflicting Peds, #/hr	13	0	45	45	0	13	43	0	20	20	0	43
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	0	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	76	76	76	76	76	76	76	76	76	76	76	76
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	13	0	13	39	105	26	132	197	13	26	211	13

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	859	-	306	809	807	237	267	0	0	230	0	0
Stage 1	313	-	-	488	488	-	-	-	-	-	-	-
Stage 2	546	-	-	321	319	-	-	-	-	-	-	-
Critical Hdwy	7.13	-	6.23	7.13	6.53	6.23	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.13	-	-	6.13	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.13	-	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.527	-	3.327	3.527	4.027	3.327	2.227	-	-	2.227	-	-
Pot Cap-1 Maneuver	275	0	732	298	314	800	1291	-	-	1332	-	-
Stage 1	696	0	-	559	548	-	-	-	-	-	-	-
Stage 2	520	0	-	689	651	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	153	-	672	245	254	775	1238	-	-	1307	-	-
Mov Cap-2 Maneuver	153	-	-	245	254	-	-	-	-	-	-	-
Stage 1	587	-	-	482	472	-	-	-	-	-	-	-
Stage 2	339	-	-	632	610	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	20.6	35.9	3.2	0.8
HCM LOS	C	E		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1238	-	-	153	672	281	1307	-	-
HCM Lane V/C Ratio	0.106	-	-	0.086	0.02	0.609	0.02	-	-
HCM Control Delay (s)	8.3	0	-	30.7	10.5	35.9	7.8	0	-
HCM Lane LOS	A	A	-	D	B	E	A	A	-
HCM 95th %tile Q(veh)	0.4	-	-	0.3	0.1	3.7	0.1	-	-

Intersection	
Int Delay, s/veh	3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	60	100	160	130	10
Future Vol, veh/h	0	60	100	160	130	10
Conflicting Peds, #/hr	0	1	4	0	0	4
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	66	66	66	66	66	66
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	0	91	152	242	197	15

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	634	111	216	0	-	0
Stage 1	209	-	-	-	-	-
Stage 2	425	-	-	-	-	-
Critical Hdwy	6.86	6.96	4.16	-	-	-
Critical Hdwy Stg 1	5.86	-	-	-	-	-
Critical Hdwy Stg 2	5.86	-	-	-	-	-
Follow-up Hdwy	3.53	3.33	2.23	-	-	-
Pot Cap-1 Maneuver	409	918	1344	-	-	-
Stage 1	803	-	-	-	-	-
Stage 2	624	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	353	914	1339	-	-	-
Mov Cap-2 Maneuver	353	-	-	-	-	-
Stage 1	695	-	-	-	-	-
Stage 2	622	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.4	3.2	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1339	-	914	-	-
HCM Lane V/C Ratio	0.113	-	0.099	-	-
HCM Control Delay (s)	8	0.2	9.4	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.4	-	0.3	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	180	210	60	350	50	180	260	70	140	180	70
Future Volume (veh/h)	10	180	210	60	350	50	180	260	70	140	180	70
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		0.98	1.00		0.98	1.00		0.97
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	11	207	0	69	402	49	207	299	29	161	207	31
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	25	500		103	508	62	259	416	347	207	361	297
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	0.01	0.27	0.00	0.06	0.31	0.31	0.15	0.22	0.22	0.12	0.19	0.19
Unsig. Movement Delay												
Ln Grp Delay, s/veh	39.8	17.6	0.0	33.5	0.0	20.3	29.1	22.7	17.5	30.6	22.2	19.0
Ln Grp LOS	D	B		C	A	C	C	C	B	C	C	B
Approach Vol, veh/h		218			520			535			399	
Approach Delay, s/veh		18.7			22.1			24.9			25.4	
Approach LOS		B			C			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	4.0
Phs Duration (G+Y+Rc), s	11.4	17.5	8.0	20.0	13.0	15.8	5.5	22.6
Change Period (Y+Rc), s	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7
Max Green (Gmax), s	* 12	* 24	* 5.3	* 30	* 13	* 23	* 5	* 30
Max Allow Headway (MAH), s	3.9	5.0	3.8	5.1	3.8	5.2	3.8	5.3
Max Q Clear (g_c+I1), s	7.0	10.5	4.2	7.2	8.4	7.8	2.4	14.9
Green Ext Time (g_e), s	0.2	1.4	0.0	1.1	0.2	1.1	0.0	2.6
Prob of Phs Call (p_c)	0.92	1.00	0.66	1.00	0.96	1.00	0.16	1.00
Prob of Max Out (p_x)	0.30	0.04	1.00	0.00	0.43	0.01	1.00	0.07

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1767		1767		1767		1767	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1856		1856		1856		1617

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1548		1572		1526		197

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

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	161	0	69	0	207	0	11	0
Grp Sat Flow (s), veh/h/ln	1767	0	1767	0	1767	0	1767	0
Q Serve Time (g_s), s	5.0	0.0	2.2	0.0	6.4	0.0	0.4	0.0
Cycle Q Clear Time (g_c), s	5.0	0.0	2.2	0.0	6.4	0.0	0.4	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	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)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	207	0	103	0	259	0	25	0
V/C Ratio (X)	0.78	0.00	0.67	0.00	0.80	0.00	0.44	0.00
Avail Cap (c_a), veh/h	382	0	165	0	413	0	155	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	24.4	0.0	26.2	0.0	23.4	0.0	27.8	0.0
Incr Delay (d2), s/veh	6.2	0.0	7.3	0.0	5.6	0.0	12.0	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	30.6	0.0	33.5	0.0	29.1	0.0	39.8	0.0
1st-Term Q (Q1), veh/ln	2.0	0.0	0.9	0.0	2.4	0.0	0.1	0.0
2nd-Term Q (Q2), veh/ln	0.4	0.0	0.2	0.0	0.4	0.0	0.1	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%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	2.4	0.0	1.1	0.0	2.8	0.0	0.2	0.0
%ile Storage Ratio (RQ%)	0.55	0.00	0.30	0.00	0.48	0.00	0.07	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		
Lanes in Grp	0	1	0	1	0	1	0	0
Grp Vol (v), veh/h	0	299	0	207	0	207	0	0
Grp Sat Flow (s), veh/h/ln	0	1856	0	1856	0	1856	0	0
Q Serve Time (g_s), s	0.0	8.5	0.0	5.2	0.0	5.8	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	8.5	0.0	5.2	0.0	5.8	0.0	0.0
Lane Grp Cap (c), veh/h	0	416	0	500	0	361	0	0
V/C Ratio (X)	0.00	0.72	0.00	0.41	0.00	0.57	0.00	0.00
Avail Cap (c_a), veh/h	0	770	0	979	0	738	0	0
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	20.4	0.0	17.1	0.0	20.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	2.3	0.0	0.5	0.0	1.4	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	22.7	0.0	17.6	0.0	22.2	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	3.3	0.0	2.0	0.0	2.3	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.1	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	3.5	0.0	2.0	0.0	2.5	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.09	0.00	0.16	0.00	0.11	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

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	29	0	0	0	31	0	451
Grp Sat Flow (s), veh/h/ln	0	1548	0	1572	0	1526	0	1814
Q Serve Time (g_s), s	0.0	0.8	0.0	0.0	0.0	0.9	0.0	12.9
Cycle Q Clear Time (g_c), s	0.0	0.8	0.0	0.0	0.0	0.9	0.0	12.9
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	1.00	0.00	1.00	0.00	0.11
Lane Grp Cap (c), veh/h	0	347	0	424	0	297	0	570
V/C Ratio (X)	0.00	0.08	0.00	0.00	0.00	0.10	0.00	0.79
Avail Cap (c_a), veh/h	0	642	0	830	0	607	0	967
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	17.4	0.0	0.0	0.0	18.8	0.0	17.8
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.0	0.0	0.2	0.0	2.5
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	17.5	0.0	0.0	0.0	19.0	0.0	20.3
1st-Term Q (Q1), veh/ln	0.0	0.3	0.0	0.0	0.0	0.3	0.0	4.8
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
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	0.3	0.0	0.0	0.0	0.3	0.0	5.2
%ile Storage Ratio (RQ%)	0.00	0.01	0.00	0.00	0.00	0.08	0.00	0.64
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	23.3
HCM 6th LOS	C

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	230	0	480	0	0	0	240	960	0	10	740	60
Future Volume (veh/h)	230	0	480	0	0	0	240	960	0	10	740	60
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)	0.58		1.00	1.00		1.00	1.00		1.00	1.00		0.96
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	250	0	130	0	0	0	261	1043	0	11	804	65
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	284	0	366	0	2	0	321	2575	0	23	2139	173
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Prop Arrive On Green	0.14	0.00	0.14	0.00	0.00	0.00	0.19	1.00	0.00	0.01	0.65	0.65
Unsig. Movement Delay												
Ln Grp Delay, s/veh	74.2	0.0	39.1	0.0	0.0	0.0	52.1	0.3	0.0	74.1	10.7	10.7
Ln Grp LOS	E	A	D	A	A	A	D	A	A	E	B	B
Approach Vol, veh/h		380			0			1304			880	
Approach Delay, s/veh		62.2			0.0			10.7			11.5	
Approach LOS		E						B			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	8	4	5	6		
Case No	2.0	4.0	12.0	9.0	2.0	4.0		
Phs Duration (G+Y+Rc), s	6.2	92.3	0.0	21.4	15.9	82.6		
Change Period (Y+Rc), s	* 4.7	* 4.7	4.7	* 4.7	* 4.7	* 4.7		
Max Green (Gmax), s	* 5	* 48	30.0	* 18	* 17	* 36		
Max Allow Headway (MAH), s	3.8	5.1	0.0	4.9	3.8	5.2		
Max Q Clear (g_c+I1), s	2.7	2.0	0.0	16.4	10.8	15.6		
Green Ext Time (g_e), s	0.0	9.4	0.0	0.3	0.5	5.4		
Prob of Phs Call (p_c)	0.31	1.00	0.00	1.00	1.00	1.00		
Prob of Max Out (p_x)	1.00	0.00	0.00	1.00	0.12	0.00		

Left-Turn Movement Data								
Assigned Mvmt	1		3	7	5			
Mvmt Sat Flow, veh/h	1767		0	2038	3428			

Through Movement Data								
Assigned Mvmt		2	8	4		6		
Mvmt Sat Flow, veh/h		3618	1856	0		3292		

Right-Turn Movement Data								
Assigned Mvmt		12	18	14		16		
Mvmt Sat Flow, veh/h		0	0	1572		266		

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

Lanes in Grp	1	0	0	2	2	0	0	0
Grp Vol (v), veh/h	11	0	0	250	261	0	0	0
Grp Sat Flow (s), veh/h/ln	1767	0	0	1019	1714	0	0	0
Q Serve Time (g_s), s	0.7	0.0	0.0	14.4	8.8	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.7	0.0	0.0	14.4	8.8	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	1019	0	0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	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)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	23	0	0	284	321	0	0	0
V/C Ratio (X)	0.49	0.00	0.00	0.88	0.81	0.00	0.00	0.00
Avail Cap (c_a), veh/h	74	0	0	302	494	0	0	0
Upstream Filter (I)	1.00	0.00	0.00	1.00	0.72	0.00	0.00	0.00
Uniform Delay (d1), s/veh	58.8	0.0	0.0	50.7	47.8	0.0	0.0	0.0
Incr Delay (d2), s/veh	15.3	0.0	0.0	23.6	4.4	0.0	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	74.1	0.0	0.0	74.2	52.1	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.3	0.0	0.0	3.7	3.4	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	0.0	0.9	0.2	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%)	1.00	0.00	1.00	1.00	1.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.4	0.0	0.0	4.6	3.6	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.22	0.00	0.00	1.96	0.46	0.00	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	8	4	0	6	0	0
Lane Assignment		T	T			T		
Lanes in Grp	0	2	1	0	0	1	0	0
Grp Vol (v), veh/h	0	1043	0	0	0	430	0	0
Grp Sat Flow (s), veh/h/ln	0	1763	1856	0	0	1763	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	13.6	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	13.6	0.0	0.0
Lane Grp Cap (c), veh/h	0	2575	2	0	0	1145	0	0
V/C Ratio (X)	0.00	0.41	0.00	0.00	0.00	0.38	0.00	0.00
Avail Cap (c_a), veh/h	0	2575	464	0	0	1145	0	0
Upstream Filter (I)	0.00	0.72	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	9.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.3	0.0	0.0	0.0	0.9	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	0.3	0.0	0.0	0.0	10.7	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	4.9	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	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	0.1	0.0	0.0	0.0	5.2	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.27	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

Right Lane Group Data								
Assigned Mvmt	0	12	18	14	0	16	0	0
Lane Assignment				R		T+R		
Lanes in Grp	0	0	0	1	0	1	0	0
Grp Vol (v), veh/h	0	0	0	130	0	439	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1572	0	1796	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	8.3	0.0	13.6	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	8.3	0.0	13.6	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	1572.5	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	11.2	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	1.00	0.00	0.15	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	366	0	1166	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.35	0.00	0.38	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	380	0	1166	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	38.5	0.0	9.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.6	0.0	0.9	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	0.0	0.0	39.1	0.0	10.7	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	3.2	0.0	5.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	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	0.0	0.0	3.3	0.0	5.3	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.07	0.00	0.27	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

Intersection Summary	
HCM 6th Ctrl Delay	18.6
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	300	140	360	160	980	170	110	960	130
Future Volume (veh/h)	0	0	0	300	140	360	160	980	170	110	960	130
Number				3	8	18	5	2	12	1	6	16
Initial Q, veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)				1.00		0.99	1.00		0.95	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln				1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h				326	217	348	174	1065	172	120	1043	0
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				3	3	3	3	3	3	3	3	3
Opposing Right Turn Influence				Yes			Yes			Yes		
Cap, veh/h				405	425	484	985	1721	277	145	1284	
HCM Platoon Ratio				1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Prop Arrive On Green				0.23	0.23	0.23	0.09	0.19	0.19	0.08	0.36	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh				47.8	40.7	38.5	41.3	38.6	38.7	63.3	38.7	0.0
Ln Grp LOS				D	D	D	D	D	D	E	D	
Approach Vol, veh/h					891			1411			1163	
Approach Delay, s/veh					42.4			39.0			41.3	
Approach LOS					D			D			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	8		6	5		
Case No	2.0	4.0	11.0		3.0	2.0		
Phs Duration (G+Y+Rc), s	14.6	73.2	32.2		48.6	39.2		
Change Period (Y+Rc), s	* 4.7	* 4.7	4.7		* 4.9	4.7		
Max Green (Gmax), s	* 14	* 54	38.0		* 44	24.0		
Max Allow Headway (MAH), s	1.0	2.4	1.9		2.3	1.0		
Max Q Clear (g_c+I1), s	10.0	41.1	25.9		34.1	7.6		
Green Ext Time (g_e), s	0.0	1.3	0.5		1.3	0.0		
Prob of Phs Call (p_c)	0.98	1.00	1.00		1.00	1.00		
Prob of Max Out (p_x)	0.57	0.00	0.00		0.00	0.00		

Left-Turn Movement Data								
Assigned Mvmt	1		3			5		
Mvmt Sat Flow, veh/h	1767		1767			3428		

Through Movement Data								
Assigned Mvmt		2	8		6			
Mvmt Sat Flow, veh/h		3014	1856		3526			

Right-Turn Movement Data								
Assigned Mvmt		12	18		16			
Mvmt Sat Flow, veh/h		485	1550		1572			

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

Lanes in Grp	1	0	1	0	0	2	0	0
Grp Vol (v), veh/h	120	0	326	0	0	174	0	0
Grp Sat Flow (s), veh/h/ln	1767	0	1767	0	0	1714	0	0
Q Serve Time (g_s), s	8.0	0.0	20.9	0.0	0.0	5.6	0.0	0.0
Cycle Q Clear Time (g_c), s	8.0	0.0	20.9	0.0	0.0	5.6	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	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)	1.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	145	0	405	0	0	985	0	0
V/C Ratio (X)	0.83	0.00	0.80	0.00	0.00	0.18	0.00	0.00
Avail Cap (c_a), veh/h	206	0	560	0	0	985	0	0
Upstream Filter (I)	0.74	0.00	1.00	0.00	0.00	0.68	0.00	0.00
Uniform Delay (d1), s/veh	54.2	0.0	43.7	0.0	0.0	41.2	0.0	0.0
Incr Delay (d2), s/veh	9.1	0.0	4.1	0.0	0.0	0.0	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	63.3	0.0	47.8	0.0	0.0	41.3	0.0	0.0
1st-Term Q (Q1), veh/ln	3.5	0.0	9.0	0.0	0.0	2.4	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.4	0.0	0.5	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%)	1.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	3.9	0.0	9.5	0.0	0.0	2.4	0.0	0.0
%ile Storage Ratio (RQ%)	0.67	0.00	0.85	0.00	0.00	0.19	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	8	0	6	0	0	0
Lane Assignment		T	T		T			
Lanes in Grp	0	1	1	0	2	0	0	0
Grp Vol (v), veh/h	0	622	217	0	1043	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1763	1856	0	1763	0	0	0
Q Serve Time (g_s), s	0.0	38.9	12.2	0.0	32.1	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	38.9	12.2	0.0	32.1	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	1007	425	0	1284	0	0	0
V/C Ratio (X)	0.00	0.62	0.51	0.00	0.81	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	1007	588	0	1284	0	0	0
Upstream Filter (I)	0.00	0.68	1.00	0.00	0.74	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	36.7	40.4	0.0	34.4	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.9	0.4	0.0	4.3	0.0	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	38.6	40.7	0.0	38.7	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	18.3	5.5	0.0	13.4	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.5	0.0	0.0	0.8	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	1.00	0.00	1.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	18.9	5.6	0.0	14.1	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	1.44	0.50	0.00	0.32	0.00	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

Right Lane Group Data								
Assigned Mvmt	0	12	18	0	16	0	0	0
Lane Assignment		T+R	R		R			
Lanes in Grp	0	1	1	0	1	0	0	0
Grp Vol (v), veh/h	0	615	348	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1736	1550	0	1572	0	0	0
Q Serve Time (g_s), s	0.0	39.1	23.9	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	39.1	23.9	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	1572.5	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	9.9	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.28	1.00	0.00	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	992	484	0	573	0	0	0
V/C Ratio (X)	0.00	0.62	0.72	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	992	620	0	573	0	0	0
Upstream Filter (I)	0.00	0.68	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	36.7	36.7	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	2.0	1.8	0.0	0.0	0.0	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	38.7	38.5	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	18.1	8.9	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.5	0.2	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	1.00	0.00	1.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	18.7	9.1	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	1.42	1.56	0.00	0.00	0.00	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

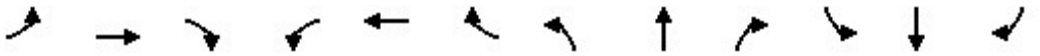
Intersection Summary	
HCM 6th Ctrl Delay	40.6
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	610	10	460	0	0	0	0	700	310	320	940	0
Future Volume (veh/h)	610	10	460	0	0	0	0	700	310	320	940	0
Number	7	4	14				5	2	12	1	6	16
Initial Q, veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.99				1.00		0.95	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1856	1856	1856				0	1856	1856	1856	1856	0
Adj Flow Rate, veh/h	793	0	258				0	769	286	352	1033	0
Peak Hour Factor	0.91	0.91	0.91				0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	3	3	3				0	3	3	3	3	0
Opposing Right Turn Influence	Yes						No			Yes		
Cap, veh/h	893	0	393				0	1519	558	376	2359	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.33	1.33	1.00
Prop Arrive On Green	0.25	0.00	0.25				0.00	0.42	0.42	0.28	0.89	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh	49.8	0.0	41.3				0.0	26.7	28.4	63.7	3.0	0.0
Ln Grp LOS	D	A	D				A	C	C	E	A	A
Approach Vol, veh/h		1051						1055			1385	
Approach Delay, s/veh		47.7						27.2			18.4	
Approach LOS		D						C			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Case No	2.0	8.0		9.0		4.0		
Phs Duration (G+Y+Rc), s	29.5	55.5		35.0		85.0		
Change Period (Y+Rc), s	4.0	* 4.7		* 4.7		* 4.7		
Max Green (Gmax), s	28.0	* 41		* 38		* 73		
Max Allow Headway (MAH), s	2.8	6.2		2.8		6.1		
Max Q Clear (g_c+I1), s	25.3	21.2		27.9		8.4		
Green Ext Time (g_e), s	0.2	9.4		1.7		14.6		
Prob of Phs Call (p_c)	1.00	1.00		1.00		1.00		
Prob of Max Out (p_x)	1.00	0.00		0.04		0.00		

Left-Turn Movement Data									
Assigned Mvmt	1	5		7					
Mvmt Sat Flow, veh/h	1767	0		3534					

Through Movement Data									
Assigned Mvmt		2		4		6			
Mvmt Sat Flow, veh/h		3756		0		3618			

Right-Turn Movement Data									
Assigned Mvmt		12		14		16			
Mvmt Sat Flow, veh/h		1318		1554		0			

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

Lanes in Grp	1	0	0	2	0	0	0	0
Grp Vol (v), veh/h	352	0	0	793	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1767	0	0	1767	0	0	0	0
Q Serve Time (g_s), s	23.3	0.0	0.0	25.9	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	23.3	0.0	0.0	25.9	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	1767	0	0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	50.8	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)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	376	0	0	893	0	0	0	0
V/C Ratio (X)	0.94	0.00	0.00	0.89	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	412	0	0	1119	0	0	0	0
Upstream Filter (I)	0.72	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	42.3	0.0	0.0	43.2	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	21.4	0.0	0.0	6.6	0.0	0.0	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	63.7	0.0	0.0	49.8	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	9.5	0.0	0.0	10.9	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	2.2	0.0	0.0	0.8	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%)	1.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	11.7	0.0	0.0	11.7	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.89	0.00	0.00	0.26	0.00	0.00	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	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	2	0	0
Grp Vol (v), veh/h	0	723	0	0	0	1033	0	0
Grp Sat Flow (s), veh/h/ln	0	1689	0	0	0	1763	0	0
Q Serve Time (g_s), s	0.0	18.9	0.0	0.0	0.0	6.4	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	18.9	0.0	0.0	0.0	6.4	0.0	0.0
Lane Grp Cap (c), veh/h	0	1429	0	0	0	2359	0	0
V/C Ratio (X)	0.00	0.51	0.00	0.00	0.00	0.44	0.00	0.00
Avail Cap (c_a), veh/h	0	1429	0	0	0	2359	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	0.72	0.00	0.00
Uniform Delay (d1), s/veh	0.0	25.4	0.0	0.0	0.0	2.5	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.3	0.0	0.0	0.0	0.4	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	26.7	0.0	0.0	0.0	3.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	7.4	0.0	0.0	0.0	1.5	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.3	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	0.00
%ile Back of Q (50%), veh/ln	0.0	7.7	0.0	0.0	0.0	1.7	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.82	0.00	0.00	0.00	0.13	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

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment		T+R		R				
Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	332	0	258	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1530	0	1554	0	0	0	0
Q Serve Time (g_s), s	0.0	19.2	0.0	17.9	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	19.2	0.0	17.9	0.0	0.0	0.0	0.0
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	0.86	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	647	0	393	0	0	0	0
V/C Ratio (X)	0.00	0.51	0.00	0.66	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	647	0	492	0	0	0	0
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	25.5	0.0	40.2	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	2.9	0.0	1.1	0.0	0.0	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	28.4	0.0	41.3	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	6.8	0.0	6.6	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.5	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	0.00
%ile Back of Q (50%), veh/ln	0.0	7.4	0.0	6.7	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.79	0.00	0.43	0.00	0.00	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

Intersection Summary	
HCM 6th Ctrl Delay	29.9
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

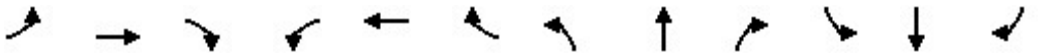
Intersection	
Int Delay, s/veh	9.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	10	220	10	0	10	400	220	0	0	180	20
Future Vol, veh/h	20	10	220	10	0	10	400	220	0	0	180	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	120	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	81	81	81	81	81	81	81	81	81	81	81	81
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	25	12	272	12	0	12	494	272	0	0	222	25

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1359	1495	124	1377	1507	136	247	0	0	272	0	0
Stage 1	235	235	-	1260	1260	-	-	-	-	-	-	-
Stage 2	1124	1260	-	117	247	-	-	-	-	-	-	-
Critical Hdwy	7.56	6.56	6.96	7.56	6.56	6.96	4.16	-	-	4.16	-	-
Critical Hdwy Stg 1	6.56	5.56	-	6.56	5.56	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.56	5.56	-	6.56	5.56	-	-	-	-	-	-	-
Follow-up Hdwy	3.53	4.03	3.33	3.53	4.03	3.33	2.23	-	-	2.23	-	-
Pot Cap-1 Maneuver	106	121	900	103	119	885	1309	-	-	1281	-	-
Stage 1	744	707	-	179	238	-	-	-	-	-	-	-
Stage 2	217	238	-	872	698	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	74	75	900	45	74	885	1309	-	-	1281	-	-
Mov Cap-2 Maneuver	74	75	-	45	74	-	-	-	-	-	-	-
Stage 1	464	707	-	112	148	-	-	-	-	-	-	-
Stage 2	133	148	-	598	698	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	20.8	62.9	6.1	0
HCM LOS	C	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1309	-	-	74	900	86	1281	-	-
HCM Lane V/C Ratio	0.377	-	-	0.501	0.302	0.287	-	-	-
HCM Control Delay (s)	9.4	-	-	94.8	10.7	62.9	0	-	-
HCM Lane LOS	A	-	-	F	B	F	A	-	-
HCM 95th %tile Q(veh)	1.8	-	-	2.1	1.3	1.1	0	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	120	40	420	400	520	210	590	80	130	630	110
Future Volume (veh/h)	80	120	40	420	400	520	210	590	80	130	630	110
Number	3	8	18	7	4	14	1	6	16	5	2	12
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	91	136	36	477	455	291	239	670	82	148	716	111
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	116	362	96	195	557	472	124	875	107	190	961	149
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	0.07	0.26	0.26	0.11	0.30	0.30	0.07	0.28	0.28	0.11	0.31	0.31
Unsig. Movement Delay												
Ln Grp Delay, s/veh	60.3	0.0	23.6	701.4	27.4	23.9	478.5	27.7	27.7	39.5	25.2	25.2
Ln Grp LOS	E	A	C	F	C	C	F	C	C	D	C	C
Approach Vol, veh/h		263			1223			991			975	
Approach Delay, s/veh		36.3			289.5			136.4			27.3	
Approach LOS		D			F			F			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	3.0	2.0	4.0	2.0	4.0
Phs Duration (G+Y+Rc), s	10.0	28.4	9.7	27.3	12.8	25.6	13.0	24.0
Change Period (Y+Rc), s	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7
Max Green (Gmax), s	* 5.3	* 53	* 5.3	* 37	* 27	* 31	* 8.3	* 34
Max Allow Headway (MAH), s	3.8	5.2	3.8	4.6	3.8	5.2	3.7	5.2
Max Q Clear (g_c+I1), s	7.3	17.8	5.8	19.1	8.1	16.7	10.3	8.0
Green Ext Time (g_e), s	0.0	5.9	0.0	3.5	0.3	4.0	0.0	0.9
Prob of Phs Call (p_c)	0.99	1.00	0.85	1.00	0.95	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.01	1.00	0.05	0.00	0.20	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1767		1767		1767		1767	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3059		1856		3162		1414

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		474		1572		387		374

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

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	239	0	91	0	148	0	477	0
Grp Sat Flow (s), veh/h/ln	1767	0	1767	0	1767	0	1767	0
Q Serve Time (g_s), s	5.3	0.0	3.8	0.0	6.1	0.0	8.3	0.0
Cycle Q Clear Time (g_c), s	5.3	0.0	3.8	0.0	6.1	0.0	8.3	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	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)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	124	0	116	0	190	0	195	0
V/C Ratio (X)	1.92	0.00	0.78	0.00	0.78	0.00	2.45	0.00
Avail Cap (c_a), veh/h	124	0	124	0	640	0	195	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	35.0	0.0	34.7	0.0	32.7	0.0	33.5	0.0
Incr Delay (d2), s/veh	443.4	0.0	25.7	0.0	6.7	0.0	667.9	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	478.5	0.0	60.3	0.0	39.5	0.0	701.4	0.0
1st-Term Q (Q1), veh/ln	2.2	0.0	1.6	0.0	2.5	0.0	3.3	0.0
2nd-Term Q (Q2), veh/ln	15.3	0.0	0.8	0.0	0.4	0.0	36.1	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%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	17.5	0.0	2.4	0.0	2.9	0.0	39.5	0.0
%ile Storage Ratio (RQ%)	2.80	0.00	0.56	0.00	0.33	0.00	3.16	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	28.7	0.0	0.0	0.0	0.0	0.0	70.6	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	0.5	0.0	0.0	0.0	0.0	0.0	0.6	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		
Lanes in Grp	0	1	0	1	0	1	0	0
Grp Vol (v), veh/h	0	412	0	455	0	373	0	0
Grp Sat Flow (s), veh/h/ln	0	1763	0	1856	0	1763	0	0
Q Serve Time (g_s), s	0.0	15.8	0.0	17.1	0.0	14.6	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	15.8	0.0	17.1	0.0	14.6	0.0	0.0
Lane Grp Cap (c), veh/h	0	554	0	557	0	488	0	0
V/C Ratio (X)	0.00	0.75	0.00	0.82	0.00	0.76	0.00	0.00
Avail Cap (c_a), veh/h	0	1247	0	919	0	732	0	0
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	23.1	0.0	24.4	0.0	25.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	2.0	0.0	3.0	0.0	2.7	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	25.2	0.0	27.4	0.0	27.7	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	6.0	0.0	6.8	0.0	5.7	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.5	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	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	7.3	0.0	6.1	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.26	0.00	0.44	0.00	0.23	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

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	415	0	291	0	379	0	172
Grp Sat Flow (s), veh/h/ln	0	1770	0	1572	0	1786	0	1788
Q Serve Time (g_s), s	0.0	15.8	0.0	12.0	0.0	14.7	0.0	6.0
Cycle Q Clear Time (g_c), s	0.0	15.8	0.0	12.0	0.0	14.7	0.0	6.0
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	0.27	0.00	1.00	0.00	0.22	0.00	0.21
Lane Grp Cap (c), veh/h	0	556	0	472	0	494	0	458
V/C Ratio (X)	0.00	0.75	0.00	0.62	0.00	0.77	0.00	0.38
Avail Cap (c_a), veh/h	0	1252	0	778	0	742	0	814
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	23.1	0.0	22.6	0.0	25.0	0.0	23.1
Incr Delay (d2), s/veh	0.0	2.0	0.0	1.3	0.0	2.7	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	25.2	0.0	23.9	0.0	27.7	0.0	23.6
1st-Term Q (Q1), veh/ln	0.0	6.1	0.0	4.1	0.0	5.8	0.0	2.4
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.2	0.0	0.4	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	4.3	0.0	6.1	0.0	2.4
%ile Storage Ratio (RQ%)	0.00	0.26	0.00	0.26	0.00	0.24	0.00	0.04
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	152.2
HCM 6th LOS	F

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	3.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	10	40	30	30	70	240	0	10	230	10
Future Vol, veh/h	0	0	10	40	30	30	70	240	0	10	230	10
Conflicting Peds, #/hr	8	0	6	6	0	8	10	0	10	10	0	10
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	0	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	0	0	11	44	33	33	77	264	0	11	253	11

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	750	-	275	720	724	282	274	0	0	274	0	0
Stage 1	291	-	-	428	428	-	-	-	-	-	-	-
Stage 2	459	-	-	292	296	-	-	-	-	-	-	-
Critical Hdwy	7.13	-	6.23	7.13	6.53	6.23	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.13	-	-	6.13	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.13	-	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.527	-	3.327	3.527	4.027	3.327	2.227	-	-	2.227	-	-
Pot Cap-1 Maneuver	326	0	761	342	351	755	1283	-	-	1283	-	-
Stage 1	715	0	-	603	583	-	-	-	-	-	-	-
Stage 2	580	0	-	714	666	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	265	-	749	312	316	742	1271	-	-	1271	-	-
Mov Cap-2 Maneuver	265	-	-	312	316	-	-	-	-	-	-	-
Stage 1	658	-	-	555	536	-	-	-	-	-	-	-
Stage 2	480	-	-	693	653	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.9	18.3	1.8	0.3
HCM LOS	A	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1271	-	-	-	749	379	1271	-	-
HCM Lane V/C Ratio	0.061	-	-	-	0.015	0.29	0.009	-	-
HCM Control Delay (s)	8	0	-	0	9.9	18.3	7.9	0	-
HCM Lane LOS	A	A	-	A	A	C	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	-	0	1.2	0	-	-

Intersection	
Int Delay, s/veh	2.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	10	60	70	150	130	10
Future Vol, veh/h	10	60	70	150	130	10
Conflicting Peds, #/hr	0	1	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	11	65	75	161	140	11

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	377	77	151	0	-	0
Stage 1	146	-	-	-	-	-
Stage 2	231	-	-	-	-	-
Critical Hdwy	6.86	6.96	4.16	-	-	-
Critical Hdwy Stg 1	5.86	-	-	-	-	-
Critical Hdwy Stg 2	5.86	-	-	-	-	-
Follow-up Hdwy	3.53	3.33	2.23	-	-	-
Pot Cap-1 Maneuver	595	965	1420	-	-	-
Stage 1	863	-	-	-	-	-
Stage 2	782	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	560	964	1420	-	-	-
Mov Cap-2 Maneuver	560	-	-	-	-	-
Stage 1	813	-	-	-	-	-
Stage 2	782	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.5	2.5	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1420	-	874	-	-
HCM Lane V/C Ratio	0.053	-	0.086	-	-
HCM Control Delay (s)	7.7	0.1	9.5	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.2	-	0.3	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	210	230	90	220	60	200	210	80	80	260	20
Future Volume (veh/h)	90	210	230	90	220	60	200	210	80	80	260	20
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		0.99	1.00		0.97	1.00		0.99
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	94	219	0	94	229	52	208	219	33	83	271	11
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	123	415		123	327	74	262	546	449	116	393	329
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	0.07	0.22	0.00	0.07	0.22	0.22	0.15	0.29	0.29	0.07	0.21	0.21
Unsig. Movement Delay												
Ln Grp Delay, s/veh	38.8	19.6	0.0	36.9	0.0	21.6	27.7	15.8	13.9	32.7	21.9	17.0
Ln Grp LOS	D	B		D	A	C	C	B	B	C	C	B
Approach Vol, veh/h		313			375			460			365	
Approach Delay, s/veh		25.4			25.4			21.0			24.2	
Approach LOS		C			C			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	4.0
Phs Duration (G+Y+Rc), s	8.3	20.7	8.5	16.9	12.8	16.2	8.5	16.9
Change Period (Y+Rc), s	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7
Max Green (Gmax), s	* 12	* 24	* 5.3	* 30	* 13	* 23	* 5	* 30
Max Allow Headway (MAH), s	3.9	5.0	3.8	5.1	3.8	5.3	3.8	5.3
Max Q Clear (g_c+I1), s	4.5	7.1	4.8	7.6	8.2	9.3	4.8	9.8
Green Ext Time (g_e), s	0.1	1.1	0.0	1.1	0.3	1.3	0.0	1.6
Prob of Phs Call (p_c)	0.71	1.00	0.76	1.00	0.96	1.00	0.76	1.00
Prob of Max Out (p_x)	0.01	0.00	1.00	0.00	0.35	0.05	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1767		1767		1767		1767	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1856		1856		1856		1460

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1526		1572		1554		332

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

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	83	0	94	0	208	0	94	0
Grp Sat Flow (s), veh/h/ln	1767	0	1767	0	1767	0	1767	0
Q Serve Time (g_s), s	2.5	0.0	2.8	0.0	6.2	0.0	2.8	0.0
Cycle Q Clear Time (g_c), s	2.5	0.0	2.8	0.0	6.2	0.0	2.8	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	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)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	116	0	123	0	262	0	123	0
V/C Ratio (X)	0.71	0.00	0.76	0.00	0.79	0.00	0.76	0.00
Avail Cap (c_a), veh/h	400	0	173	0	433	0	163	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	24.9	0.0	24.8	0.0	22.3	0.0	24.8	0.0
Incr Delay (d2), s/veh	7.9	0.0	12.1	0.0	5.4	0.0	14.0	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	32.7	0.0	36.9	0.0	27.7	0.0	38.8	0.0
1st-Term Q (Q1), veh/ln	1.0	0.0	1.1	0.0	2.3	0.0	1.1	0.0
2nd-Term Q (Q2), veh/ln	0.3	0.0	0.4	0.0	0.4	0.0	0.5	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%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	1.3	0.0	1.5	0.0	2.7	0.0	1.6	0.0
%ile Storage Ratio (RQ%)	0.29	0.00	0.43	0.00	0.46	0.00	0.50	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		
Lanes in Grp	0	1	0	1	0	1	0	0
Grp Vol (v), veh/h	0	219	0	219	0	271	0	0
Grp Sat Flow (s), veh/h/ln	0	1856	0	1856	0	1856	0	0
Q Serve Time (g_s), s	0.0	5.1	0.0	5.6	0.0	7.3	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	5.1	0.0	5.6	0.0	7.3	0.0	0.0
Lane Grp Cap (c), veh/h	0	546	0	415	0	393	0	0
V/C Ratio (X)	0.00	0.40	0.00	0.53	0.00	0.69	0.00	0.00
Avail Cap (c_a), veh/h	0	807	0	1025	0	772	0	0
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	15.3	0.0	18.5	0.0	19.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.5	0.0	1.0	0.0	2.2	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	15.8	0.0	19.6	0.0	21.9	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	1.9	0.0	2.1	0.0	2.9	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.1	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	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	2.3	0.0	3.2	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.05	0.00	0.18	0.00	0.14	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

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	33	0	0	0	11	0	281
Grp Sat Flow (s), veh/h/ln	0	1526	0	1572	0	1554	0	1791
Q Serve Time (g_s), s	0.0	0.8	0.0	0.0	0.0	0.3	0.0	7.8
Cycle Q Clear Time (g_c), s	0.0	0.8	0.0	0.0	0.0	0.3	0.0	7.8
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	1.00	0.00	1.00	0.00	1.00	0.00	0.19
Lane Grp Cap (c), veh/h	0	449	0	352	0	329	0	401
V/C Ratio (X)	0.00	0.07	0.00	0.00	0.00	0.03	0.00	0.70
Avail Cap (c_a), veh/h	0	663	0	869	0	647	0	1000
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	13.8	0.0	0.0	0.0	17.0	0.0	19.4
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.0	0.0	0.0	0.0	2.2
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	13.9	0.0	0.0	0.0	17.0	0.0	21.6
1st-Term Q (Q1), veh/ln	0.0	0.3	0.0	0.0	0.0	0.1	0.0	2.9
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	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	0.3	0.0	0.0	0.0	0.1	0.0	3.2
%ile Storage Ratio (RQ%)	0.00	0.01	0.00	0.00	0.00	0.02	0.00	0.40
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	23.8
HCM 6th LOS	C

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	0	460	0	0	0	330	730	0	10	880	40
Future Volume (veh/h)	110	0	460	0	0	0	330	730	0	10	880	40
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)	0.94		0.97	1.00		1.00	1.00		1.00	1.00		0.98
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	113	0	155	0	0	0	340	753	0	10	907	41
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	356	0	343	0	1	0	396	2726	0	21	2298	104
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Prop Arrive On Green	0.11	0.00	0.11	0.00	0.00	0.00	0.23	1.00	0.00	0.01	0.67	0.67
Unsig. Movement Delay												
Ln Grp Delay, s/veh	54.2	0.0	44.7	0.0	0.0	0.0	57.8	0.2	0.0	80.5	10.6	10.6
Ln Grp LOS	D	A	D	A	A	A	E	A	A	F	B	B
Approach Vol, veh/h		268			0			1093			958	
Approach Delay, s/veh		48.7			0.0			18.1			11.4	
Approach LOS		D						B			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	8	4	5	6		
Case No	2.0	4.0	12.0	9.0	2.0	4.0		
Phs Duration (G+Y+Rc), s	6.2	105.2	0.0	18.6	19.7	91.7		
Change Period (Y+Rc), s	* 4.7	* 4.7	4.7	* 4.7	* 4.7	* 4.7		
Max Green (Gmax), s	* 5	* 58	30.0	* 18	* 21	* 43		
Max Allow Headway (MAH), s	3.8	5.1	0.0	4.1	3.8	5.1		
Max Q Clear (g_c+I1), s	2.7	2.0	0.0	13.5	14.4	17.4		
Green Ext Time (g_e), s	0.0	6.0	0.0	0.4	0.6	6.5		
Prob of Phs Call (p_c)	0.30	1.00	0.00	1.00	1.00	1.00		
Prob of Max Out (p_x)	1.00	0.00	0.00	0.85	0.22	0.00		

Left-Turn Movement Data								
Assigned Mvmt	1		3	7	5			
Mvmt Sat Flow, veh/h	1767		0	3335	3428			

Through Movement Data								
Assigned Mvmt		2	8	4		6		
Mvmt Sat Flow, veh/h		3618	1856	0		3432		

Right-Turn Movement Data								
Assigned Mvmt		12	18	14		16		
Mvmt Sat Flow, veh/h		0	0	1519		155		

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

Lanes in Grp	1	0	0	2	2	0	0	0
Grp Vol (v), veh/h	10	0	0	113	340	0	0	0
Grp Sat Flow (s), veh/h/ln	1767	0	0	1668	1714	0	0	0
Q Serve Time (g_s), s	0.7	0.0	0.0	4.1	12.4	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.7	0.0	0.0	4.1	12.4	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	1668	0	0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	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)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	21	0	0	356	396	0	0	0
V/C Ratio (X)	0.49	0.00	0.00	0.32	0.86	0.00	0.00	0.00
Avail Cap (c_a), veh/h	68	0	0	457	541	0	0	0
Upstream Filter (I)	1.00	0.00	0.00	1.00	0.87	0.00	0.00	0.00
Uniform Delay (d1), s/veh	63.9	0.0	0.0	53.7	49.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	16.6	0.0	0.0	0.5	8.9	0.0	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	80.5	0.0	0.0	54.2	57.8	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.3	0.0	0.0	1.7	4.7	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	0.0	0.0	0.5	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%)	1.00	0.00	1.00	1.00	1.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.4	0.0	0.0	1.7	5.1	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.22	0.00	0.00	0.74	0.66	0.00	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	8	4	0	6	0	0
Lane Assignment		T	T			T		
Lanes in Grp	0	2	1	0	0	1	0	0
Grp Vol (v), veh/h	0	753	0	0	0	466	0	0
Grp Sat Flow (s), veh/h/ln	0	1763	1856	0	0	1763	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	15.4	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	15.4	0.0	0.0
Lane Grp Cap (c), veh/h	0	2726	1	0	0	1180	0	0
V/C Ratio (X)	0.00	0.28	0.00	0.00	0.00	0.39	0.00	0.00
Avail Cap (c_a), veh/h	0	2726	428	0	0	1180	0	0
Upstream Filter (I)	0.00	0.87	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	9.6	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.0	0.0	1.0	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	0.2	0.0	0.0	0.0	10.6	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	5.6	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	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	0.1	0.0	0.0	0.0	5.9	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.31	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

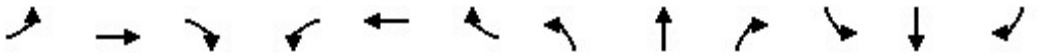
Right Lane Group Data								
Assigned Mvmt	0	12	18	14	0	16	0	0
Lane Assignment				R		T+R		
Lanes in Grp	0	0	0	1	0	1	0	0
Grp Vol (v), veh/h	0	0	0	155	0	482	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1519	0	1824	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	11.5	0.0	15.4	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	11.5	0.0	15.4	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	1572.5	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	15.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	1.00	0.00	0.09	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	343	0	1221	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.45	0.00	0.39	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	390	0	1221	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	43.8	0.0	9.6	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.9	0.0	1.0	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	0.0	0.0	44.7	0.0	10.6	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	4.4	0.0	5.8	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	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	0.0	0.0	4.5	0.0	6.1	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.10	0.00	0.32	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

Intersection Summary	
HCM 6th Ctrl Delay	18.9
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	120	220	270	440	810	140	80	970	350
Future Volume (veh/h)	0	0	0	120	220	270	440	810	140	80	970	350
Number				3	8	18	5	2	12	1	6	16
Initial Q, veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)				1.00		0.99	1.00		0.94	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln				1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h				126	288	247	463	853	142	84	1021	0
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				3	3	3	3	3	3	3	3	3
Opposing Right Turn Influence				Yes			Yes			Yes		
Cap, veh/h				180	440	358	1107	1983	330	105	1402	
HCM Platoon Ratio				1.00	1.00	1.00	0.33	0.33	0.33	0.67	0.67	0.67
Prop Arrive On Green				0.17	0.17	0.17	0.11	0.22	0.22	0.04	0.27	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh				52.0	51.1	46.8	46.7	30.1	30.1	66.1	44.2	0.0
Ln Grp LOS				D	D	D	D	C	C	E	D	
Approach Vol, veh/h					661			1458			1105	
Approach Delay, s/veh					49.8			35.4			45.8	
Approach LOS					D			D			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	8		6	5		
Case No	2.0	4.0	11.0		3.0	2.0		
Phs Duration (G+Y+Rc), s	12.4	90.8	26.7		56.6	46.7		
Change Period (Y+Rc), s	* 4.7	* 4.7	4.7		* 4.9	4.7		
Max Green (Gmax), s	* 14	* 64	38.0		* 52	26.0		
Max Allow Headway (MAH), s	1.0	2.4	1.9		2.3	1.0		
Max Q Clear (g_c+I1), s	8.1	34.0	20.8		36.3	18.4		
Green Ext Time (g_e), s	0.0	1.0	0.3		1.4	0.1		
Prob of Phs Call (p_c)	0.95	1.00	1.00		1.00	1.00		
Prob of Max Out (p_x)	0.49	0.00	0.00		0.00	0.00		

Left-Turn Movement Data								
Assigned Mvmt	1		3			5		
Mvmt Sat Flow, veh/h	1767		1061			3428		

Through Movement Data								
Assigned Mvmt		2	8		6			
Mvmt Sat Flow, veh/h		2993	2597		3526			

Right-Turn Movement Data								
Assigned Mvmt		12	18		16			
Mvmt Sat Flow, veh/h		498	1561		1572			

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

Lanes in Grp	1	0	1	0	0	2	0	0
Grp Vol (v), veh/h	84	0	214	0	0	463	0	0
Grp Sat Flow (s), veh/h/ln	1767	0	1802	0	0	1714	0	0
Q Serve Time (g_s), s	6.1	0.0	14.6	0.0	0.0	16.4	0.0	0.0
Cycle Q Clear Time (g_c), s	6.1	0.0	14.6	0.0	0.0	16.4	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	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)	1.00	0.00	0.59	0.00	0.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	105	0	305	0	0	1107	0	0
V/C Ratio (X)	0.80	0.00	0.70	0.00	0.00	0.42	0.00	0.00
Avail Cap (c_a), veh/h	190	0	527	0	0	1107	0	0
Upstream Filter (I)	0.86	0.00	1.00	0.00	0.00	0.44	0.00	0.00
Uniform Delay (d1), s/veh	61.6	0.0	50.9	0.0	0.0	46.6	0.0	0.0
Incr Delay (d2), s/veh	4.4	0.0	1.1	0.0	0.0	0.0	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	66.1	0.0	52.0	0.0	0.0	46.7	0.0	0.0
1st-Term Q (Q1), veh/ln	2.8	0.0	6.5	0.0	0.0	7.6	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	0.1	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%)	1.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	2.9	0.0	6.6	0.0	0.0	7.6	0.0	0.0
%ile Storage Ratio (RQ%)	0.50	0.00	0.59	0.00	0.00	0.58	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	8	0	6	0	0	0
Lane Assignment		T	T		T			
Lanes in Grp	0	1	1	0	2	0	0	0
Grp Vol (v), veh/h	0	502	200	0	1021	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1763	1856	0	1763	0	0	0
Q Serve Time (g_s), s	0.0	32.0	13.0	0.0	34.3	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	32.0	13.0	0.0	34.3	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	1168	314	0	1402	0	0	0
V/C Ratio (X)	0.00	0.43	0.64	0.00	0.73	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	1168	542	0	1402	0	0	0
Upstream Filter (I)	0.00	0.44	1.00	0.00	0.86	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	29.6	50.3	0.0	41.3	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.5	0.8	0.0	2.9	0.0	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	30.1	51.1	0.0	44.2	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	15.1	6.0	0.0	15.5	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.1	0.0	0.6	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	1.00	0.00	1.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	15.3	6.1	0.0	16.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	1.16	0.55	0.00	0.37	0.00	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

Right Lane Group Data								
Assigned Mvmt	0	12	18	0	16	0	0	0
Lane Assignment		T+R	R		R			
Lanes in Grp	0	1	1	0	1	0	0	0
Grp Vol (v), veh/h	0	493	247	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1728	1561	0	1572	0	0	0
Q Serve Time (g_s), s	0.0	32.0	18.8	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	32.0	18.8	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	1572.5	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	7.7	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.29	1.00	0.00	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	1145	358	0	625	0	0	0
V/C Ratio (X)	0.00	0.43	0.69	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	1145	550	0	625	0	0	0
Upstream Filter (I)	0.00	0.44	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	29.6	45.9	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.5	0.9	0.0	0.0	0.0	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	30.1	46.8	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	14.8	7.3	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.1	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	1.00	0.00	1.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	15.0	7.3	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	1.14	1.25	0.00	0.00	0.00	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

Intersection Summary	
HCM 6th Ctrl Delay	41.9
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	390	0	590	0	0	0	0	1000	680	440	650	0
Future Volume (veh/h)	390	0	590	0	0	0	0	1000	680	440	650	0
Number	7	4	14				5	2	12	1	6	16
Initial Q, veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.97				1.00		0.93	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1856	1856	1856				0	1856	1856	1856	1856	0
Adj Flow Rate, veh/h	520	0	243				0	1042	616	458	677	0
Peak Hour Factor	0.96	0.96	0.96				0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3				0	3	3	3	3	0
Opposing Right Turn Influence	Yes						No			Yes		
Cap, veh/h	724	0	312				0	1714	743	326	2548	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Prop Arrive On Green	0.20	0.00	0.20				0.00	0.51	0.51	0.37	1.00	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh	48.7	0.0	52.2				0.0	24.4	37.6	237.1	0.2	0.0
Ln Grp LOS	D	A	D				A	C	D	F	A	A
Approach Vol, veh/h		763						1658			1135	
Approach Delay, s/veh		49.8						29.3			95.8	
Approach LOS		D						C			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Case No	2.0	8.0		9.0		4.0		
Phs Duration (G+Y+Rc), s	28.0	70.7		31.3		98.7		
Change Period (Y+Rc), s	4.0	* 4.7		* 4.7		* 4.7		
Max Green (Gmax), s	24.0	* 55		* 38		* 83		
Max Allow Headway (MAH), s	2.8	6.3		2.8		6.1		
Max Q Clear (g_c+I1), s	26.0	48.5		21.6		2.0		
Green Ext Time (g_e), s	0.0	5.3		1.3		8.0		
Prob of Phs Call (p_c)	1.00	1.00		1.00		1.00		
Prob of Max Out (p_x)	1.00	0.00		0.00		0.00		

Left-Turn Movement Data								
Assigned Mvmt	1	5		7				
Mvmt Sat Flow, veh/h	1767	0		3534				

Through Movement Data								
Assigned Mvmt		2		4		6		
Mvmt Sat Flow, veh/h		3544		0		3618		

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		
Mvmt Sat Flow, veh/h		1465		1522		0		

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

Lanes in Grp	1	0	0	2	0	0	0	0
Grp Vol (v), veh/h	458	0	0	520	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1767	0	0	1767	0	0	0	0
Q Serve Time (g_s), s	24.0	0.0	0.0	17.8	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	24.0	0.0	0.0	17.8	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	1767	0	0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	66.0	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)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	326	0	0	724	0	0	0	0
V/C Ratio (X)	1.40	0.00	0.00	0.72	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	326	0	0	1033	0	0	0	0
Upstream Filter (I)	0.81	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	41.0	0.0	0.0	48.2	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	196.1	0.0	0.0	0.5	0.0	0.0	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	237.1	0.0	0.0	48.7	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	8.6	0.0	0.0	7.7	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	17.8	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%)	1.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	26.3	0.0	0.0	7.7	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	2.01	0.00	0.00	0.17	0.00	0.00	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	32.9	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	0.4	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	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	2	0	0
Grp Vol (v), veh/h	0	1042	0	0	0	677	0	0
Grp Sat Flow (s), veh/h/ln	0	1689	0	0	0	1763	0	0
Q Serve Time (g_s), s	0.0	28.6	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	28.6	0.0	0.0	0.0	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	1714	0	0	0	2548	0	0
V/C Ratio (X)	0.00	0.61	0.00	0.00	0.00	0.27	0.00	0.00
Avail Cap (c_a), veh/h	0	1714	0	0	0	2548	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	0.81	0.00	0.00
Uniform Delay (d1), s/veh	0.0	22.8	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.6	0.0	0.0	0.0	0.2	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	24.4	0.0	0.0	0.0	0.2	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	11.1	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.4	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	0.00
%ile Back of Q (50%), veh/ln	0.0	11.5	0.0	0.0	0.0	0.1	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	1.22	0.00	0.00	0.00	0.01	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

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment		T+R		R				
Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	616	0	243	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1465	0	1522	0	0	0	0
Q Serve Time (g_s), s	0.0	46.5	0.0	19.6	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	46.5	0.0	19.6	0.0	0.0	0.0	0.0
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	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	743	0	312	0	0	0	0
V/C Ratio (X)	0.00	0.83	0.00	0.78	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	743	0	445	0	0	0	0
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	27.2	0.0	48.9	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	10.3	0.0	3.3	0.0	0.0	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	37.6	0.0	52.2	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	15.6	0.0	7.3	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	2.1	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	0.00
%ile Back of Q (50%), veh/ln	0.0	17.7	0.0	7.6	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	1.89	0.00	0.48	0.00	0.00	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

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

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	6.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	40	10	150	10	0	10	250	190	0	0	160	20
Future Vol, veh/h	40	10	150	10	0	10	250	190	0	0	160	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	120	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	41	10	155	10	0	10	258	196	0	0	165	21

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	790	888	93	800	898	98	186	0	0	196	0	0
Stage 1	176	176	-	712	712	-	-	-	-	-	-	-
Stage 2	614	712	-	88	186	-	-	-	-	-	-	-
Critical Hdwy	7.56	6.56	6.96	7.56	6.56	6.96	4.16	-	-	4.16	-	-
Critical Hdwy Stg 1	6.56	5.56	-	6.56	5.56	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.56	5.56	-	6.56	5.56	-	-	-	-	-	-	-
Follow-up Hdwy	3.53	4.03	3.33	3.53	4.03	3.33	2.23	-	-	2.23	-	-
Pot Cap-1 Maneuver	279	279	943	274	276	936	1379	-	-	1367	-	-
Stage 1	806	750	-	387	432	-	-	-	-	-	-	-
Stage 2	443	432	-	907	742	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	236	227	943	190	224	936	1379	-	-	1367	-	-
Mov Cap-2 Maneuver	236	227	-	190	224	-	-	-	-	-	-	-
Stage 1	655	750	-	315	351	-	-	-	-	-	-	-
Stage 2	356	351	-	748	742	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13.4	17.2	4.7	0
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1379	-	-	234	943	316	1367	-	-
HCM Lane V/C Ratio	0.187	-	-	0.22	0.164	0.065	-	-	-
HCM Control Delay (s)	8.2	-	-	24.7	9.6	17.2	0	-	-
HCM Lane LOS	A	-	-	C	A	C	A	-	-
HCM 95th %tile Q(veh)	0.7	-	-	0.8	0.6	0.2	0	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	160	30	400	400	370	220	280	270	110	300	80
Future Volume (veh/h)	50	160	30	400	400	370	220	280	270	110	300	80
Number	3	8	18	7	4	14	1	6	16	5	2	12
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	53	170	26	426	426	171	234	298	244	117	319	53
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	88	374	57	192	552	468	192	449	358	155	666	110
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	0.05	0.24	0.24	0.11	0.30	0.30	0.11	0.24	0.24	0.09	0.22	0.22
Unsig. Movement Delay												
Ln Grp Delay, s/veh	33.6	0.0	19.6	590.0	20.9	16.5	161.6	21.6	22.1	33.0	20.6	20.7
Ln Grp LOS	C	A	B	F	C	B	F	C	C	C	C	C
Approach Vol, veh/h		249			1023			776			489	
Approach Delay, s/veh		22.6			257.1			64.0			23.6	
Approach LOS		C			F			E			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	3.0	2.0	4.0	2.0	4.0
Phs Duration (G+Y+Rc), s	11.0	17.4	7.6	21.9	9.8	18.7	11.0	18.5
Change Period (Y+Rc), s	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7
Max Green (Gmax), s	* 6.3	* 51	* 5	* 39	* 24	* 33	* 6.3	* 38
Max Allow Headway (MAH), s	3.8	5.2	3.8	4.7	3.8	5.3	3.7	5.2
Max Q Clear (g_c+I1), s	8.3	7.4	3.7	14.1	5.7	10.6	8.3	7.4
Green Ext Time (g_e), s	0.0	2.3	0.0	3.1	0.3	3.3	0.0	1.1
Prob of Phs Call (p_c)	0.98	1.00	0.57	1.00	0.85	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.01	0.00	0.02	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1767		1767		1767		1767	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3031		1856		1865		1572

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		498		1572		1486		240

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

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	234	0	53	0	117	0	426	0
Grp Sat Flow (s), veh/h/ln	1767	0	1767	0	1767	0	1767	0
Q Serve Time (g_s), s	6.3	0.0	1.7	0.0	3.7	0.0	6.3	0.0
Cycle Q Clear Time (g_c), s	6.3	0.0	1.7	0.0	3.7	0.0	6.3	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	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)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	192	0	88	0	155	0	192	0
V/C Ratio (X)	1.22	0.00	0.61	0.00	0.75	0.00	2.22	0.00
Avail Cap (c_a), veh/h	192	0	153	0	741	0	192	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	25.8	0.0	27.0	0.0	25.8	0.0	25.8	0.0
Incr Delay (d2), s/veh	135.8	0.0	6.6	0.0	7.2	0.0	564.1	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	161.6	0.0	33.6	0.0	33.0	0.0	590.0	0.0
1st-Term Q (Q1), veh/ln	2.4	0.0	0.7	0.0	1.4	0.0	2.4	0.0
2nd-Term Q (Q2), veh/ln	7.2	0.0	0.2	0.0	0.3	0.0	30.1	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%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	9.7	0.0	0.8	0.0	1.8	0.0	32.5	0.0
%ile Storage Ratio (RQ%)	1.55	0.00	0.19	0.00	0.20	0.00	2.60	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	10.5	0.0	0.0	0.0	0.0	0.0	58.5	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	0.3	0.0	0.0	0.0	0.0	0.0	0.6	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		
Lanes in Grp	0	1	0	1	0	1	0	0
Grp Vol (v), veh/h	0	184	0	426	0	281	0	0
Grp Sat Flow (s), veh/h/ln	0	1763	0	1856	0	1763	0	0
Q Serve Time (g_s), s	0.0	5.3	0.0	12.1	0.0	8.4	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	5.3	0.0	12.1	0.0	8.4	0.0	0.0
Lane Grp Cap (c), veh/h	0	388	0	552	0	424	0	0
V/C Ratio (X)	0.00	0.48	0.00	0.77	0.00	0.66	0.00	0.00
Avail Cap (c_a), veh/h	0	1540	0	1259	0	992	0	0
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	19.7	0.0	18.6	0.0	19.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.9	0.0	2.3	0.0	1.8	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	20.6	0.0	20.9	0.0	21.6	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	1.9	0.0	4.4	0.0	3.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.4	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	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	4.8	0.0	3.3	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.08	0.00	0.29	0.00	0.13	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

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	188	0	171	0	261	0	196
Grp Sat Flow (s), veh/h/ln	0	1766	0	1572	0	1588	0	1812
Q Serve Time (g_s), s	0.0	5.4	0.0	5.0	0.0	8.6	0.0	5.4
Cycle Q Clear Time (g_c), s	0.0	5.4	0.0	5.0	0.0	8.6	0.0	5.4
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	0.28	0.00	1.00	0.00	0.94	0.00	0.13
Lane Grp Cap (c), veh/h	0	388	0	468	0	382	0	432
V/C Ratio (X)	0.00	0.48	0.00	0.37	0.00	0.68	0.00	0.45
Avail Cap (c_a), veh/h	0	1542	0	1067	0	894	0	1189
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	19.7	0.0	16.0	0.0	20.0	0.0	18.9
Incr Delay (d2), s/veh	0.0	0.9	0.0	0.5	0.0	2.1	0.0	0.7
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	20.7	0.0	16.5	0.0	22.1	0.0	19.6
1st-Term Q (Q1), veh/ln	0.0	2.0	0.0	1.6	0.0	2.8	0.0	2.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.1	0.0	0.2	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	2.1	0.0	1.6	0.0	3.1	0.0	2.1
%ile Storage Ratio (RQ%)	0.00	0.09	0.00	0.10	0.00	0.12	0.00	0.03
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	130.0
HCM 6th LOS	F

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	12.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	11	0	10	37	81	20	100	161	12	20	195	12
Future Vol, veh/h	11	0	10	37	81	20	100	161	12	20	195	12
Conflicting Peds, #/hr	13	0	45	45	0	13	43	0	20	20	0	43
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	0	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	76	76	76	76	76	76	76	76	76	76	76	76
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	14	0	13	49	107	26	132	212	16	26	257	16

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	924	-	353	873	872	253	316	0	0	248	0	0
Stage 1	360	-	-	504	504	-	-	-	-	-	-	-
Stage 2	564	-	-	369	368	-	-	-	-	-	-	-
Critical Hdwy	7.13	-	6.23	7.13	6.53	6.23	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.13	-	-	6.13	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.13	-	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.527	-	3.327	3.527	4.027	3.327	2.227	-	-	2.227	-	-
Pot Cap-1 Maneuver	249	0	688	269	288	783	1239	-	-	1312	-	-
Stage 1	656	0	-	548	539	-	-	-	-	-	-	-
Stage 2	509	0	-	649	620	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	130	-	632	219	231	759	1188	-	-	1287	-	-
Mov Cap-2 Maneuver	130	-	-	219	231	-	-	-	-	-	-	-
Stage 1	549	-	-	469	461	-	-	-	-	-	-	-
Stage 2	326	-	-	594	580	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	24.1	48.6	3.1	0.7
HCM LOS	C	E		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1188	-	-	130	632	253	1287	-	-
HCM Lane V/C Ratio	0.111	-	-	0.111	0.021	0.718	0.02	-	-
HCM Control Delay (s)	8.4	0	-	36.1	10.8	48.6	7.9	0	-
HCM Lane LOS	A	A	-	E	B	E	A	A	-
HCM 95th %tile Q(veh)	0.4	-	-	0.4	0.1	4.9	0.1	-	-

Intersection	
Int Delay, s/veh	2.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	2	60	100	186	197	17
Future Vol, veh/h	2	60	100	186	197	17
Conflicting Peds, #/hr	0	1	4	0	0	4
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	66	66	66	66	66	66
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	3	91	152	282	298	26

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	760	167	328	0	-	0
Stage 1	315	-	-	-	-	-
Stage 2	445	-	-	-	-	-
Critical Hdwy	6.86	6.96	4.16	-	-	-
Critical Hdwy Stg 1	5.86	-	-	-	-	-
Critical Hdwy Stg 2	5.86	-	-	-	-	-
Follow-up Hdwy	3.53	3.33	2.23	-	-	-
Pot Cap-1 Maneuver	340	845	1221	-	-	-
Stage 1	710	-	-	-	-	-
Stage 2	610	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	287	841	1216	-	-	-
Mov Cap-2 Maneuver	287	-	-	-	-	-
Stage 1	603	-	-	-	-	-
Stage 2	608	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.2	3.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1216	-	792	-	-
HCM Lane V/C Ratio	0.125	-	0.119	-	-
HCM Control Delay (s)	8.4	0.3	10.2	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.4	-	0.4	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	183	210	73	359	51	180	267	74	143	205	84
Future Volume (veh/h)	15	183	210	73	359	51	180	267	74	143	205	84
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		0.98	1.00		0.98	1.00		0.97
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	17	210	0	84	413	51	207	307	34	164	236	48
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	36	509		112	512	63	258	419	350	209	368	303
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	0.27	0.00	0.06	0.32	0.32	0.15	0.23	0.23	0.12	0.20	0.20
Unsig. Movement Delay												
Ln Grp Delay, s/veh	37.7	18.1	0.0	38.9	0.0	21.3	31.0	23.7	18.2	31.6	23.6	19.9
Ln Grp LOS	D	B		D	A	C	C	C	B	C	C	B
Approach Vol, veh/h		227			548			548			448	
Approach Delay, s/veh		19.6			24.0			26.1			26.2	
Approach LOS		B			C			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	4.0
Phs Duration (G+Y+Rc), s	11.7	18.1	8.4	20.9	13.3	16.4	5.9	23.5
Change Period (Y+Rc), s	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7
Max Green (Gmax), s	* 12	* 24	* 5.3	* 30	* 13	* 23	* 5	* 30
Max Allow Headway (MAH), s	3.9	5.0	3.8	5.1	3.8	5.2	3.8	5.3
Max Q Clear (g_c+I1), s	7.3	11.1	4.8	7.5	8.7	8.9	2.6	15.9
Green Ext Time (g_e), s	0.2	1.5	0.0	1.1	0.2	1.3	0.0	2.6
Prob of Phs Call (p_c)	0.93	1.00	0.75	1.00	0.97	1.00	0.24	1.00
Prob of Max Out (p_x)	0.39	0.06	1.00	0.00	0.53	0.03	1.00	0.09

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1767		1767		1767		1767	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1856		1856		1856		1615

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1548		1572		1526		199

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

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	164	0	84	0	207	0	17	0
Grp Sat Flow (s), veh/h/ln	1767	0	1767	0	1767	0	1767	0
Q Serve Time (g_s), s	5.3	0.0	2.8	0.0	6.7	0.0	0.6	0.0
Cycle Q Clear Time (g_c), s	5.3	0.0	2.8	0.0	6.7	0.0	0.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	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)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	209	0	112	0	258	0	36	0
V/C Ratio (X)	0.78	0.00	0.75	0.00	0.80	0.00	0.47	0.00
Avail Cap (c_a), veh/h	368	0	158	0	397	0	149	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	25.3	0.0	27.2	0.0	24.4	0.0	28.6	0.0
Incr Delay (d2), s/veh	6.3	0.0	11.6	0.0	6.6	0.0	9.0	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	31.6	0.0	38.9	0.0	31.0	0.0	37.7	0.0
1st-Term Q (Q1), veh/ln	2.1	0.0	1.1	0.0	2.6	0.0	0.2	0.0
2nd-Term Q (Q2), veh/ln	0.4	0.0	0.4	0.0	0.5	0.0	0.1	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%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	2.5	0.0	1.5	0.0	3.0	0.0	0.3	0.0
%ile Storage Ratio (RQ%)	0.58	0.00	0.42	0.00	0.52	0.00	0.10	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		
Lanes in Grp	0	1	0	1	0	1	0	0
Grp Vol (v), veh/h	0	307	0	210	0	236	0	0
Grp Sat Flow (s), veh/h/ln	0	1856	0	1856	0	1856	0	0
Q Serve Time (g_s), s	0.0	9.1	0.0	5.5	0.0	6.9	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	9.1	0.0	5.5	0.0	6.9	0.0	0.0
Lane Grp Cap (c), veh/h	0	419	0	509	0	368	0	0
V/C Ratio (X)	0.00	0.73	0.00	0.41	0.00	0.64	0.00	0.00
Avail Cap (c_a), veh/h	0	740	0	941	0	709	0	0
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	21.2	0.0	17.6	0.0	21.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	2.5	0.0	0.5	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	23.7	0.0	18.1	0.0	23.6	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	3.5	0.0	2.1	0.0	2.8	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.1	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	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	3.8	0.0	2.2	0.0	3.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.10	0.00	0.17	0.00	0.14	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

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	34	0	0	0	48	0	464
Grp Sat Flow (s), veh/h/ln	0	1548	0	1572	0	1526	0	1814
Q Serve Time (g_s), s	0.0	1.0	0.0	0.0	0.0	1.5	0.0	13.9
Cycle Q Clear Time (g_c), s	0.0	1.0	0.0	0.0	0.0	1.5	0.0	13.9
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	1.00	0.00	1.00	0.00	0.11
Lane Grp Cap (c), veh/h	0	350	0	431	0	303	0	575
V/C Ratio (X)	0.00	0.10	0.00	0.00	0.00	0.16	0.00	0.81
Avail Cap (c_a), veh/h	0	618	0	798	0	583	0	929
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	18.1	0.0	0.0	0.0	19.6	0.0	18.5
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.0	0.0	0.2	0.0	2.7
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	0.0	0.0	0.0	19.9	0.0	21.3
1st-Term Q (Q1), veh/ln	0.0	0.3	0.0	0.0	0.0	0.5	0.0	5.2
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
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	0.0	0.0	0.5	0.0	5.6
%ile Storage Ratio (RQ%)	0.00	0.01	0.00	0.00	0.00	0.12	0.00	0.70
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	24.6
HCM 6th LOS	C

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	230	0	480	0	0	0	240	968	0	10	771	60
Future Volume (veh/h)	230	0	480	0	0	0	240	968	0	10	771	60
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)	0.58		1.00	1.00		1.00	1.00		1.00	1.00		0.96
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	250	0	130	0	0	0	261	1052	0	11	838	65
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	284	0	366	0	2	0	321	2575	0	23	2146	166
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Prop Arrive On Green	0.14	0.00	0.14	0.00	0.00	0.00	0.19	1.00	0.00	0.01	0.65	0.65
Unsig. Movement Delay												
Ln Grp Delay, s/veh	74.2	0.0	39.1	0.0	0.0	0.0	52.1	0.3	0.0	74.1	10.9	10.9
Ln Grp LOS	E	A	D	A	A	A	D	A	A	E	B	B
Approach Vol, veh/h		380			0			1313			914	
Approach Delay, s/veh		62.2			0.0			10.6			11.6	
Approach LOS		E						B			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	8	4	5	6		
Case No	2.0	4.0	12.0	9.0	2.0	4.0		
Phs Duration (G+Y+Rc), s	6.2	92.3	0.0	21.4	15.9	82.6		
Change Period (Y+Rc), s	* 4.7	* 4.7	4.7	* 4.7	* 4.7	* 4.7		
Max Green (Gmax), s	* 5	* 48	30.0	* 18	* 17	* 36		
Max Allow Headway (MAH), s	3.8	5.1	0.0	4.9	3.8	5.1		
Max Q Clear (g_c+I1), s	2.7	2.0	0.0	16.4	10.8	16.3		
Green Ext Time (g_e), s	0.0	9.5	0.0	0.3	0.5	5.6		
Prob of Phs Call (p_c)	0.31	1.00	0.00	1.00	1.00	1.00		
Prob of Max Out (p_x)	1.00	0.00	0.00	1.00	0.12	0.00		

Left-Turn Movement Data								
Assigned Mvmt	1		3	7	5			
Mvmt Sat Flow, veh/h	1767		0	2038	3428			

Through Movement Data								
Assigned Mvmt		2	8	4		6		
Mvmt Sat Flow, veh/h		3618	1856	0		3304		

Right-Turn Movement Data								
Assigned Mvmt		12	18	14		16		
Mvmt Sat Flow, veh/h		0	0	1572		256		

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

Lanes in Grp	1	0	0	2	2	0	0	0
Grp Vol (v), veh/h	11	0	0	250	261	0	0	0
Grp Sat Flow (s), veh/h/ln	1767	0	0	1019	1714	0	0	0
Q Serve Time (g_s), s	0.7	0.0	0.0	14.4	8.8	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.7	0.0	0.0	14.4	8.8	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	1019	0	0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	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)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	23	0	0	284	321	0	0	0
V/C Ratio (X)	0.49	0.00	0.00	0.88	0.81	0.00	0.00	0.00
Avail Cap (c_a), veh/h	74	0	0	302	494	0	0	0
Upstream Filter (I)	1.00	0.00	0.00	1.00	0.71	0.00	0.00	0.00
Uniform Delay (d1), s/veh	58.8	0.0	0.0	50.7	47.8	0.0	0.0	0.0
Incr Delay (d2), s/veh	15.3	0.0	0.0	23.6	4.3	0.0	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	74.1	0.0	0.0	74.2	52.1	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.3	0.0	0.0	3.7	3.4	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	0.0	0.9	0.2	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%)	1.00	0.00	1.00	1.00	1.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.4	0.0	0.0	4.6	3.6	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.22	0.00	0.00	1.96	0.46	0.00	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	8	4	0	6	0	0
Lane Assignment		T	T			T		
Lanes in Grp	0	2	1	0	0	1	0	0
Grp Vol (v), veh/h	0	1052	0	0	0	447	0	0
Grp Sat Flow (s), veh/h/ln	0	1763	1856	0	0	1763	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	14.3	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	14.3	0.0	0.0
Lane Grp Cap (c), veh/h	0	2575	2	0	0	1145	0	0
V/C Ratio (X)	0.00	0.41	0.00	0.00	0.00	0.39	0.00	0.00
Avail Cap (c_a), veh/h	0	2575	464	0	0	1145	0	0
Upstream Filter (I)	0.00	0.71	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	9.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.3	0.0	0.0	0.0	1.0	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	0.3	0.0	0.0	0.0	10.9	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	5.1	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	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	0.1	0.0	0.0	0.0	5.4	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.28	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

Right Lane Group Data								
Assigned Mvmt	0	12	18	14	0	16	0	0
Lane Assignment				R		T+R		
Lanes in Grp	0	0	0	1	0	1	0	0
Grp Vol (v), veh/h	0	0	0	130	0	456	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1572	0	1798	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	8.3	0.0	14.3	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	8.3	0.0	14.3	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	1572.5	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	11.2	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	1.00	0.00	0.14	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	366	0	1168	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.35	0.00	0.39	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	380	0	1168	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	38.5	0.0	9.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.6	0.0	1.0	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	0.0	0.0	39.1	0.0	10.9	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	3.2	0.0	5.2	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	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	0.0	0.0	3.3	0.0	5.6	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.07	0.00	0.29	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

Intersection Summary	
HCM 6th Ctrl Delay	18.5
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	307	150	360	160	988	176	110	977	144
Future Volume (veh/h)	0	0	0	307	150	360	160	988	176	110	977	144
Number				3	8	18	5	2	12	1	6	16
Initial Q, veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)				1.00		0.99	1.00		0.95	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln				1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h				334	242	338	174	1074	178	120	1062	0
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				3	3	3	3	3	3	3	3	3
Opposing Right Turn Influence				Yes			Yes			Yes		
Cap, veh/h				397	417	477	1002	1728	286	145	1284	
HCM Platoon Ratio				1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Prop Arrive On Green				0.22	0.22	0.22	0.10	0.19	0.19	0.08	0.36	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh				50.3	42.0	38.4	40.9	38.5	38.6	63.1	39.3	0.0
Ln Grp LOS				D	D	D	D	D	D	E	D	
Approach Vol, veh/h					914			1426			1182	
Approach Delay, s/veh					43.7			38.8			41.7	
Approach LOS					D			D			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	8		6	5		
Case No	2.0	4.0	11.0		3.0	2.0		
Phs Duration (G+Y+Rc), s	14.6	73.8	31.6		48.6	39.8		
Change Period (Y+Rc), s	* 4.7	* 4.7	4.7		* 4.9	4.7		
Max Green (Gmax), s	* 14	* 54	38.0		* 44	24.0		
Max Allow Headway (MAH), s	1.0	2.4	2.0		2.3	1.0		
Max Q Clear (g_c+I1), s	10.0	41.6	25.2		34.9	7.6		
Green Ext Time (g_e), s	0.0	1.3	0.5		1.3	0.0		
Prob of Phs Call (p_c)	0.98	1.00	1.00		1.00	1.00		
Prob of Max Out (p_x)	0.57	0.00	0.00		0.00	0.00		

Left-Turn Movement Data								
Assigned Mvmt	1		3			5		
Mvmt Sat Flow, veh/h	1767		1767			3428		

Through Movement Data								
Assigned Mvmt		2	8		6			
Mvmt Sat Flow, veh/h		3001	1856		3526			

Right-Turn Movement Data								
Assigned Mvmt		12	18		16			
Mvmt Sat Flow, veh/h		496	1549		1572			

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

Lanes in Grp	1	0	1	0	0	2	0	0
Grp Vol (v), veh/h	120	0	334	0	0	174	0	0
Grp Sat Flow (s), veh/h/ln	1767	0	1767	0	0	1714	0	0
Q Serve Time (g_s), s	8.0	0.0	21.7	0.0	0.0	5.6	0.0	0.0
Cycle Q Clear Time (g_c), s	8.0	0.0	21.7	0.0	0.0	5.6	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	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)	1.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	145	0	397	0	0	1002	0	0
V/C Ratio (X)	0.83	0.00	0.84	0.00	0.00	0.17	0.00	0.00
Avail Cap (c_a), veh/h	206	0	560	0	0	1002	0	0
Upstream Filter (I)	0.72	0.00	1.00	0.00	0.00	0.67	0.00	0.00
Uniform Delay (d1), s/veh	54.2	0.0	44.5	0.0	0.0	40.9	0.0	0.0
Incr Delay (d2), s/veh	8.9	0.0	5.8	0.0	0.0	0.0	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	63.1	0.0	50.3	0.0	0.0	40.9	0.0	0.0
1st-Term Q (Q1), veh/ln	3.5	0.0	9.4	0.0	0.0	2.4	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.4	0.0	0.6	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%)	1.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	3.9	0.0	10.0	0.0	0.0	2.4	0.0	0.0
%ile Storage Ratio (RQ%)	0.67	0.00	0.90	0.00	0.00	0.19	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	8	0	6	0	0	0
Lane Assignment		T	T		T			
Lanes in Grp	0	1	1	0	2	0	0	0
Grp Vol (v), veh/h	0	629	242	0	1062	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1763	1856	0	1763	0	0	0
Q Serve Time (g_s), s	0.0	39.3	14.0	0.0	32.9	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	39.3	14.0	0.0	32.9	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	1015	417	0	1284	0	0	0
V/C Ratio (X)	0.00	0.62	0.58	0.00	0.83	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	1015	588	0	1284	0	0	0
Upstream Filter (I)	0.00	0.67	1.00	0.00	0.72	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	36.5	41.5	0.0	34.7	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.9	0.5	0.0	4.6	0.0	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	38.5	42.0	0.0	39.3	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	18.5	6.3	0.0	13.7	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.5	0.1	0.0	0.8	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	1.00	0.00	1.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	19.1	6.4	0.0	14.5	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	1.45	0.57	0.00	0.33	0.00	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

Right Lane Group Data								
Assigned Mvmt	0	12	18	0	16	0	0	0
Lane Assignment		T+R	R		R			
Lanes in Grp	0	1	1	0	1	0	0	0
Grp Vol (v), veh/h	0	623	338	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1734	1549	0	1572	0	0	0
Q Serve Time (g_s), s	0.0	39.6	23.2	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	39.6	23.2	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	1572.5	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	9.9	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.29	1.00	0.00	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	999	477	0	573	0	0	0
V/C Ratio (X)	0.00	0.62	0.71	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	999	620	0	573	0	0	0
Upstream Filter (I)	0.00	0.67	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	36.6	36.9	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	2.0	1.5	0.0	0.0	0.0	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	38.6	38.4	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	18.3	8.6	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.5	0.2	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	1.00	0.00	1.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	18.9	8.8	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	1.44	1.51	0.00	0.00	0.00	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

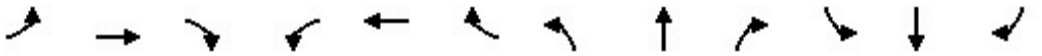
Intersection Summary	
HCM 6th Ctrl Delay	41.0
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	618	10	460	0	0	0	0	706	310	327	957	0
Future Volume (veh/h)	618	10	460	0	0	0	0	706	310	327	957	0
Number	7	4	14				5	2	12	1	6	16
Initial Q, veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.99				1.00		0.95	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1856	1856	1856				0	1856	1856	1856	1856	0
Adj Flow Rate, veh/h	802	0	258				0	776	286	359	1052	0
Peak Hour Factor	0.91	0.91	0.91				0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	3	3	3				0	3	3	3	3	0
Opposing Right Turn Influence	Yes						No			Yes		
Cap, veh/h	901	0	396				0	1501	547	382	2351	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.33	1.33	1.00
Prop Arrive On Green	0.25	0.00	0.25				0.00	0.42	0.42	0.29	0.89	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh	49.9	0.0	41.0				0.0	27.3	29.1	63.7	3.1	0.0
Ln Grp LOS	D	A	D				A	C	C	E	A	A
Approach Vol, veh/h		1060						1062			1411	
Approach Delay, s/veh		47.8						27.9			18.5	
Approach LOS		D						C			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Case No	2.0	8.0		9.0		4.0		
Phs Duration (G+Y+Rc), s	29.9	54.8		35.3		84.7		
Change Period (Y+Rc), s	4.0	* 4.7		* 4.7		* 4.7		
Max Green (Gmax), s	28.0	* 41		* 38		* 73		
Max Allow Headway (MAH), s	2.8	6.2		2.8		6.1		
Max Q Clear (g_c+I1), s	25.8	21.5		28.2		8.7		
Green Ext Time (g_e), s	0.2	9.3		1.7		15.0		
Prob of Phs Call (p_c)	1.00	1.00		1.00		1.00		
Prob of Max Out (p_x)	1.00	0.00		0.05		0.00		

Left-Turn Movement Data								
Assigned Mvmt	1	5		7				
Mvmt Sat Flow, veh/h	1767	0		3534				

Through Movement Data								
Assigned Mvmt		2		4		6		
Mvmt Sat Flow, veh/h		3765		0		3618		

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		
Mvmt Sat Flow, veh/h		1310		1554		0		

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

Lanes in Grp	1	0	0	2	0	0	0	0
Grp Vol (v), veh/h	359	0	0	802	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1767	0	0	1767	0	0	0	0
Q Serve Time (g_s), s	23.8	0.0	0.0	26.2	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	23.8	0.0	0.0	26.2	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	1767	0	0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	50.1	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)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	382	0	0	901	0	0	0	0
V/C Ratio (X)	0.94	0.00	0.00	0.89	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	412	0	0	1119	0	0	0	0
Upstream Filter (I)	0.70	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	42.0	0.0	0.0	43.1	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	21.7	0.0	0.0	6.8	0.0	0.0	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	63.7	0.0	0.0	49.9	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	9.6	0.0	0.0	11.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	2.3	0.0	0.0	0.9	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%)	1.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	11.9	0.0	0.0	11.9	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.91	0.00	0.00	0.27	0.00	0.00	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	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	2	0	0
Grp Vol (v), veh/h	0	728	0	0	0	1052	0	0
Grp Sat Flow (s), veh/h/ln	0	1689	0	0	0	1763	0	0
Q Serve Time (g_s), s	0.0	19.2	0.0	0.0	0.0	6.7	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	19.2	0.0	0.0	0.0	6.7	0.0	0.0
Lane Grp Cap (c), veh/h	0	1409	0	0	0	2351	0	0
V/C Ratio (X)	0.00	0.52	0.00	0.00	0.00	0.45	0.00	0.00
Avail Cap (c_a), veh/h	0	1409	0	0	0	2351	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	0.70	0.00	0.00
Uniform Delay (d1), s/veh	0.0	26.0	0.0	0.0	0.0	2.6	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.4	0.0	0.0	0.0	0.4	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	27.3	0.0	0.0	0.0	3.1	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	7.6	0.0	0.0	0.0	1.6	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.3	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	0.00
%ile Back of Q (50%), veh/ln	0.0	7.8	0.0	0.0	0.0	1.7	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.84	0.00	0.00	0.00	0.13	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

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment		T+R		R				
Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	334	0	258	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1530	0	1554	0	0	0	0
Q Serve Time (g_s), s	0.0	19.5	0.0	17.8	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	19.5	0.0	17.8	0.0	0.0	0.0	0.0
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	0.86	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	639	0	396	0	0	0	0
V/C Ratio (X)	0.00	0.52	0.00	0.65	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	639	0	492	0	0	0	0
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	26.1	0.0	40.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	3.1	0.0	1.1	0.0	0.0	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	29.1	0.0	41.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	7.0	0.0	6.6	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.5	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	0.00
%ile Back of Q (50%), veh/ln	0.0	7.5	0.0	6.7	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.80	0.00	0.43	0.00	0.00	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

Intersection Summary	
HCM 6th Ctrl Delay	30.1
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	11.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	27	10	222	10	0	10	400	239	0	0	225	42
Future Vol, veh/h	27	10	222	10	0	10	400	239	0	0	225	42
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	120	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	81	81	81	81	81	81	81	81	81	81	81	81
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	33	12	274	12	0	12	494	295	0	0	278	52

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1440	1587	165	1428	1613	148	330	0	0	295	0	0
Stage 1	304	304	-	1283	1283	-	-	-	-	-	-	-
Stage 2	1136	1283	-	145	330	-	-	-	-	-	-	-
Critical Hdwy	7.56	6.56	6.96	7.56	6.56	6.96	4.16	-	-	4.16	-	-
Critical Hdwy Stg 1	6.56	5.56	-	6.56	5.56	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.56	5.56	-	6.56	5.56	-	-	-	-	-	-	-
Follow-up Hdwy	3.53	4.03	3.33	3.53	4.03	3.33	2.23	-	-	2.23	-	-
Pot Cap-1 Maneuver	93	106	847	94	102	869	1219	-	-	1256	-	-
Stage 1	678	659	-	173	232	-	-	-	-	-	-	-
Stage 2	213	232	-	840	642	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	63	63	847	37	61	869	1219	-	-	1256	-	-
Mov Cap-2 Maneuver	63	63	-	37	61	-	-	-	-	-	-	-
Stage 1	403	659	-	103	138	-	-	-	-	-	-	-
Stage 2	125	138	-	558	642	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	31.1	80.6	6.2	0
HCM LOS	D	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1219	-	-	63	847	71	1256	-	-
HCM Lane V/C Ratio	0.405	-	-	0.725	0.324	0.348	-	-	-
HCM Control Delay (s)	9.9	-	-	150.2	11.3	80.6	0	-	-
HCM Lane LOS	A	-	-	F	B	F	A	-	-
HCM 95th %tile Q(veh)	2	-	-	3.2	1.4	1.3	0	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	86	120	40	420	401	524	210	594	80	130	641	126
Future Volume (veh/h)	86	120	40	420	401	524	210	594	80	130	641	126
Number	3	8	18	7	4	14	1	6	16	5	2	12
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	98	136	36	477	456	295	239	675	82	148	728	129
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	121	368	97	189	555	470	121	897	109	189	965	171
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	0.07	0.26	0.26	0.11	0.30	0.30	0.07	0.28	0.28	0.11	0.32	0.32
Unsig. Movement Delay												
Ln Grp Delay, s/veh	68.6	0.0	24.0	736.9	28.7	24.9	506.5	28.1	28.1	40.6	25.6	25.6
Ln Grp LOS	E	A	C	F	C	C	F	C	C	D	C	C
Approach Vol, veh/h		270			1228			996			1005	
Approach Delay, s/veh		40.2			302.9			142.9			27.8	
Approach LOS		D			F			F			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	3.0	2.0	4.0	2.0	4.0
Phs Duration (G+Y+Rc), s	10.0	29.8	10.0	27.9	13.0	26.7	13.0	24.9
Change Period (Y+Rc), s	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7
Max Green (Gmax), s	* 5.3	* 53	* 5.3	* 37	* 27	* 31	* 8.3	* 34
Max Allow Headway (MAH), s	3.8	5.2	3.8	4.6	3.8	5.2	3.7	5.2
Max Q Clear (g_c+I1), s	7.3	18.9	6.2	19.7	8.3	17.1	10.3	8.1
Green Ext Time (g_e), s	0.0	6.1	0.0	3.5	0.3	4.0	0.0	0.9
Prob of Phs Call (p_c)	0.99	1.00	0.88	1.00	0.96	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.02	1.00	0.06	0.00	0.22	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1767		1767		1767		1767	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		2993		1856		3165		1414

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		530		1572		384		374

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

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	239	0	98	0	148	0	477	0
Grp Sat Flow (s), veh/h/ln	1767	0	1767	0	1767	0	1767	0
Q Serve Time (g_s), s	5.3	0.0	4.2	0.0	6.3	0.0	8.3	0.0
Cycle Q Clear Time (g_c), s	5.3	0.0	4.2	0.0	6.3	0.0	8.3	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	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)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	121	0	121	0	189	0	189	0
V/C Ratio (X)	1.98	0.00	0.81	0.00	0.78	0.00	2.53	0.00
Avail Cap (c_a), veh/h	121	0	121	0	621	0	189	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	36.2	0.0	35.7	0.0	33.8	0.0	34.7	0.0
Incr Delay (d2), s/veh	470.3	0.0	32.9	0.0	6.8	0.0	702.3	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	506.5	0.0	68.6	0.0	40.6	0.0	736.9	0.0
1st-Term Q (Q1), veh/ln	2.2	0.0	1.8	0.0	2.6	0.0	3.4	0.0
2nd-Term Q (Q2), veh/ln	15.8	0.0	1.1	0.0	0.4	0.0	36.8	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%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	17.9	0.0	2.9	0.0	3.0	0.0	40.2	0.0
%ile Storage Ratio (RQ%)	2.87	0.00	0.67	0.00	0.35	0.00	3.22	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	29.6	0.0	0.0	0.0	0.0	0.0	72.0	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	0.5	0.0	0.0	0.0	0.0	0.0	0.6	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		
Lanes in Grp	0	1	0	1	0	1	0	0
Grp Vol (v), veh/h	0	429	0	456	0	376	0	0
Grp Sat Flow (s), veh/h/ln	0	1763	0	1856	0	1763	0	0
Q Serve Time (g_s), s	0.0	16.9	0.0	17.7	0.0	15.1	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	16.9	0.0	17.7	0.0	15.1	0.0	0.0
Lane Grp Cap (c), veh/h	0	569	0	555	0	500	0	0
V/C Ratio (X)	0.00	0.75	0.00	0.82	0.00	0.75	0.00	0.00
Avail Cap (c_a), veh/h	0	1209	0	891	0	710	0	0
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	23.6	0.0	25.3	0.0	25.3	0.0	0.0
Incr Delay (d2), s/veh	0.0	2.1	0.0	3.4	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	25.6	0.0	28.7	0.0	28.1	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	6.5	0.0	7.1	0.0	5.9	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.5	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	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	6.9	0.0	7.6	0.0	6.3	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.28	0.00	0.46	0.00	0.24	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

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	428	0	295	0	381	0	172
Grp Sat Flow (s), veh/h/ln	0	1760	0	1572	0	1786	0	1788
Q Serve Time (g_s), s	0.0	16.9	0.0	12.6	0.0	15.1	0.0	6.1
Cycle Q Clear Time (g_c), s	0.0	16.9	0.0	12.6	0.0	15.1	0.0	6.1
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	0.30	0.00	1.00	0.00	0.22	0.00	0.21
Lane Grp Cap (c), veh/h	0	568	0	470	0	506	0	466
V/C Ratio (X)	0.00	0.75	0.00	0.63	0.00	0.75	0.00	0.37
Avail Cap (c_a), veh/h	0	1208	0	755	0	720	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	23.6	0.0	23.5	0.0	25.4	0.0	23.5
Incr Delay (d2), s/veh	0.0	2.1	0.0	1.4	0.0	2.8	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	25.6	0.0	24.9	0.0	28.1	0.0	24.0
1st-Term Q (Q1), veh/ln	0.0	6.5	0.0	4.4	0.0	6.0	0.0	2.4
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.2	0.0	0.4	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	6.8	0.0	4.5	0.0	6.4	0.0	2.5
%ile Storage Ratio (RQ%)	0.00	0.28	0.00	0.27	0.00	0.25	0.00	0.04
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	158.1
HCM 6th LOS	F

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	4.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	1	10	45	31	30	70	273	7	10	253	12
Future Vol, veh/h	2	1	10	45	31	30	70	273	7	10	253	12
Conflicting Peds, #/hr	8	0	6	6	0	8	10	0	10	10	0	10
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	0	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	2	1	11	49	34	33	77	300	8	11	278	13

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	817	789	301	787	791	322	301	0	0	318	0	0
Stage 1	317	317	-	468	468	-	-	-	-	-	-	-
Stage 2	500	472	-	319	323	-	-	-	-	-	-	-
Critical Hdwy	7.13	6.53	6.23	7.13	6.53	6.23	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.13	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.13	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.527	4.027	3.327	3.527	4.027	3.327	2.227	-	-	2.227	-	-
Pot Cap-1 Maneuver	294	322	736	308	321	717	1254	-	-	1236	-	-
Stage 1	692	652	-	574	560	-	-	-	-	-	-	-
Stage 2	551	557	-	690	649	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	235	289	725	278	288	705	1242	-	-	1224	-	-
Mov Cap-2 Maneuver	235	289	-	278	288	-	-	-	-	-	-	-
Stage 1	634	638	-	526	513	-	-	-	-	-	-	-
Stage 2	450	510	-	667	635	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.8	21	1.6	0.3
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1242	-	-	235	725	340	1224	-	-
HCM Lane V/C Ratio	0.062	-	-	0.009	0.015	0.343	0.009	-	-
HCM Control Delay (s)	8.1	0	-	20.5	10	21	8	0	-
HCM Lane LOS	A	A	-	C	B	C	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0	0	1.5	0	-	-

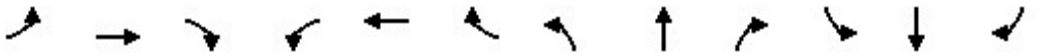
Intersection	
Int Delay, s/veh	2.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	18	60	70	233	176	15
Future Vol, veh/h	18	60	70	233	176	15
Conflicting Peds, #/hr	0	1	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	19	65	75	251	189	16

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	473	104	205	0	-	0
Stage 1	197	-	-	-	-	-
Stage 2	276	-	-	-	-	-
Critical Hdwy	6.86	6.96	4.16	-	-	-
Critical Hdwy Stg 1	5.86	-	-	-	-	-
Critical Hdwy Stg 2	5.86	-	-	-	-	-
Follow-up Hdwy	3.53	3.33	2.23	-	-	-
Pot Cap-1 Maneuver	518	927	1356	-	-	-
Stage 1	814	-	-	-	-	-
Stage 2	743	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	485	926	1356	-	-	-
Mov Cap-2 Maneuver	485	-	-	-	-	-
Stage 1	762	-	-	-	-	-
Stage 2	743	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.3	2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1356	-	765	-	-
HCM Lane V/C Ratio	0.056	-	0.11	-	-
HCM Control Delay (s)	7.8	0.2	10.3	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.2	-	0.4	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	106	220	230	98	226	62	200	232	91	82	276	30
Future Volume (veh/h)	106	220	230	98	226	62	200	232	91	82	276	30
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		0.99	1.00		0.97	1.00		0.99
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	110	229	0	102	235	55	208	242	45	85	288	21
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	140	429		130	327	77	260	557	458	115	404	339
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	0.08	0.23	0.00	0.07	0.23	0.23	0.15	0.30	0.30	0.06	0.22	0.22
Unsig. Movement Delay												
Ln Grp Delay, s/veh	46.7	20.2	0.0	43.3	0.0	22.8	29.3	16.6	14.5	35.2	23.0	17.8
Ln Grp LOS	D	C		D	A	C	C	B	B	D	C	B
Approach Vol, veh/h		339			392			495			394	
Approach Delay, s/veh		28.8			28.1			21.7			25.3	
Approach LOS		C			C			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	2.0	3.0	2.0	3.0	2.0	4.0
Phs Duration (G+Y+Rc), s	8.4	21.8	8.9	17.9	13.1	17.1	9.2	17.6
Change Period (Y+Rc), s	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7
Max Green (Gmax), s	* 12	* 24	* 5.3	* 30	* 13	* 23	* 5	* 30
Max Allow Headway (MAH), s	3.9	5.0	3.8	5.1	3.8	5.3	3.8	5.3
Max Q Clear (g_c+I1), s	4.7	8.0	5.2	8.2	8.5	10.2	5.5	10.5
Green Ext Time (g_e), s	0.1	1.3	0.0	1.2	0.2	1.4	0.0	1.7
Prob of Phs Call (p_c)	0.74	1.00	0.80	1.00	0.96	1.00	0.82	1.00
Prob of Max Out (p_x)	0.02	0.01	1.00	0.00	0.45	0.07	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1767		1767		1767		1767	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1856		1856		1856		1450

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1526		1572		1554		339

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

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	85	0	102	0	208	0	110	0
Grp Sat Flow (s), veh/h/ln	1767	0	1767	0	1767	0	1767	0
Q Serve Time (g_s), s	2.7	0.0	3.2	0.0	6.5	0.0	3.5	0.0
Cycle Q Clear Time (g_c), s	2.7	0.0	3.2	0.0	6.5	0.0	3.5	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	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)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	115	0	130	0	260	0	140	0
V/C Ratio (X)	0.74	0.00	0.78	0.00	0.80	0.00	0.78	0.00
Avail Cap (c_a), veh/h	381	0	164	0	412	0	155	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	26.2	0.0	26.0	0.0	23.5	0.0	25.8	0.0
Incr Delay (d2), s/veh	9.0	0.0	17.3	0.0	5.8	0.0	20.9	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	35.2	0.0	43.3	0.0	29.3	0.0	46.7	0.0
1st-Term Q (Q1), veh/ln	1.1	0.0	1.3	0.0	2.5	0.0	1.3	0.0
2nd-Term Q (Q2), veh/ln	0.3	0.0	0.6	0.0	0.4	0.0	0.8	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%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	1.4	0.0	1.9	0.0	2.9	0.0	2.2	0.0
%ile Storage Ratio (RQ%)	0.32	0.00	0.54	0.00	0.49	0.00	0.69	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		
Lanes in Grp	0	1	0	1	0	1	0	0
Grp Vol (v), veh/h	0	242	0	229	0	288	0	0
Grp Sat Flow (s), veh/h/ln	0	1856	0	1856	0	1856	0	0
Q Serve Time (g_s), s	0.0	6.0	0.0	6.2	0.0	8.2	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	6.0	0.0	6.2	0.0	8.2	0.0	0.0
Lane Grp Cap (c), veh/h	0	557	0	429	0	404	0	0
V/C Ratio (X)	0.00	0.43	0.00	0.53	0.00	0.71	0.00	0.00
Avail Cap (c_a), veh/h	0	768	0	976	0	735	0	0
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	16.0	0.0	19.2	0.0	20.6	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.5	0.0	1.0	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	16.6	0.0	20.2	0.0	23.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	2.2	0.0	2.4	0.0	3.3	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.1	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	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	2.3	0.0	2.5	0.0	3.6	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.06	0.00	0.20	0.00	0.16	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

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	45	0	0	0	21	0	290
Grp Sat Flow (s), veh/h/ln	0	1526	0	1572	0	1554	0	1790
Q Serve Time (g_s), s	0.0	1.2	0.0	0.0	0.0	0.6	0.0	8.5
Cycle Q Clear Time (g_c), s	0.0	1.2	0.0	0.0	0.0	0.6	0.0	8.5
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	1.00	0.00	1.00	0.00	0.19
Lane Grp Cap (c), veh/h	0	458	0	364	0	339	0	404
V/C Ratio (X)	0.00	0.10	0.00	0.00	0.00	0.06	0.00	0.72
Avail Cap (c_a), veh/h	0	632	0	827	0	616	0	951
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	14.4	0.0	0.0	0.0	17.7	0.0	20.4
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.0	0.0	0.1	0.0	2.4
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	14.5	0.0	0.0	0.0	17.8	0.0	22.8
1st-Term Q (Q1), veh/ln	0.0	0.4	0.0	0.0	0.0	0.2	0.0	3.2
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
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	0.0	0.0	0.2	0.0	3.5
%ile Storage Ratio (RQ%)	0.00	0.01	0.00	0.00	0.00	0.05	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	25.6
HCM 6th LOS	C

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	0	460	0	0	0	330	757	0	10	900	40
Future Volume (veh/h)	110	0	460	0	0	0	330	757	0	10	900	40
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)	0.94		0.97	1.00		1.00	1.00		1.00	1.00		0.98
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	113	0	155	0	0	0	340	780	0	10	928	41
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	356	0	343	0	1	0	396	2726	0	21	2300	102
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Prop Arrive On Green	0.11	0.00	0.11	0.00	0.00	0.00	0.23	1.00	0.00	0.01	0.67	0.67
Unsig. Movement Delay												
Ln Grp Delay, s/veh	54.2	0.0	44.7	0.0	0.0	0.0	57.7	0.2	0.0	80.5	10.8	10.7
Ln Grp LOS	D	A	D	A	A	A	E	A	A	F	B	B
Approach Vol, veh/h		268			0			1120			979	
Approach Delay, s/veh		48.7			0.0			17.7			11.4	
Approach LOS		D						B			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	8	4	5	6		
Case No	2.0	4.0	12.0	9.0	2.0	4.0		
Phs Duration (G+Y+Rc), s	6.2	105.2	0.0	18.6	19.7	91.7		
Change Period (Y+Rc), s	* 4.7	* 4.7	4.7	* 4.7	* 4.7	* 4.7		
Max Green (Gmax), s	* 5	* 58	30.0	* 18	* 21	* 43		
Max Allow Headway (MAH), s	3.8	5.1	0.0	4.1	3.8	5.1		
Max Q Clear (g_c+I1), s	2.7	2.0	0.0	13.5	14.4	17.9		
Green Ext Time (g_e), s	0.0	6.3	0.0	0.4	0.6	6.6		
Prob of Phs Call (p_c)	0.30	1.00	0.00	1.00	1.00	1.00		
Prob of Max Out (p_x)	1.00	0.00	0.00	0.85	0.22	0.00		

Left-Turn Movement Data								
Assigned Mvmt	1		3	7	5			
Mvmt Sat Flow, veh/h	1767		0	3335	3428			

Through Movement Data								
Assigned Mvmt		2	8	4		6		
Mvmt Sat Flow, veh/h		3618	1856	0		3436		

Right-Turn Movement Data								
Assigned Mvmt		12	18	14		16		
Mvmt Sat Flow, veh/h		0	0	1519		152		

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

Lanes in Grp	1	0	0	2	2	0	0	0
Grp Vol (v), veh/h	10	0	0	113	340	0	0	0
Grp Sat Flow (s), veh/h/ln	1767	0	0	1668	1714	0	0	0
Q Serve Time (g_s), s	0.7	0.0	0.0	4.1	12.4	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.7	0.0	0.0	4.1	12.4	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	1668	0	0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	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)	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	21	0	0	356	396	0	0	0
V/C Ratio (X)	0.49	0.00	0.00	0.32	0.86	0.00	0.00	0.00
Avail Cap (c_a), veh/h	68	0	0	457	541	0	0	0
Upstream Filter (I)	1.00	0.00	0.00	1.00	0.86	0.00	0.00	0.00
Uniform Delay (d1), s/veh	63.9	0.0	0.0	53.7	49.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	16.6	0.0	0.0	0.5	8.8	0.0	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	80.5	0.0	0.0	54.2	57.7	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.3	0.0	0.0	1.7	4.7	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	0.0	0.0	0.5	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%)	1.00	0.00	1.00	1.00	1.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.4	0.0	0.0	1.7	5.1	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.22	0.00	0.00	0.74	0.66	0.00	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	8	4	0	6	0	0
Lane Assignment		T	T			T		
Lanes in Grp	0	2	1	0	0	1	0	0
Grp Vol (v), veh/h	0	780	0	0	0	476	0	0
Grp Sat Flow (s), veh/h/ln	0	1763	1856	0	0	1763	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	15.9	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	15.9	0.0	0.0
Lane Grp Cap (c), veh/h	0	2726	1	0	0	1180	0	0
V/C Ratio (X)	0.00	0.29	0.00	0.00	0.00	0.40	0.00	0.00
Avail Cap (c_a), veh/h	0	2726	428	0	0	1180	0	0
Upstream Filter (I)	0.00	0.86	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	9.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.0	0.0	1.0	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	0.2	0.0	0.0	0.0	10.8	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	5.8	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	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	0.1	0.0	0.0	0.0	6.1	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.31	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

Right Lane Group Data								
Assigned Mvmt	0	12	18	14	0	16	0	0
Lane Assignment				R		T+R		
Lanes in Grp	0	0	0	1	0	1	0	0
Grp Vol (v), veh/h	0	0	0	155	0	493	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1519	0	1825	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	11.5	0.0	15.9	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	11.5	0.0	15.9	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	1572.5	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	15.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.00	0.00	1.00	0.00	0.08	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	343	0	1222	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.45	0.00	0.40	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	390	0	1222	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	43.8	0.0	9.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.9	0.0	1.0	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	0.0	0.0	44.7	0.0	10.7	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	4.4	0.0	6.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	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	0.0	0.0	4.5	0.0	6.3	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.10	0.00	0.32	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

Intersection Summary	
HCM 6th Ctrl Delay	18.6
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	125	226	270	440	837	158	80	982	358
Future Volume (veh/h)	0	0	0	125	226	270	440	837	158	80	982	358
Number				3	8	18	5	2	12	1	6	16
Initial Q, veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)				1.00		0.99	1.00		0.94	1.00		1.00
Parking Bus Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln				1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h				132	302	241	463	881	161	84	1034	0
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				3	3	3	3	3	3	3	3	3
Opposing Right Turn Influence				Yes			Yes			Yes		
Cap, veh/h				176	432	353	1118	1960	358	105	1402	
HCM Platoon Ratio				1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Prop Arrive On Green				0.17	0.17	0.17	0.11	0.22	0.22	0.06	0.40	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh				53.0	51.9	47.0	46.4	30.6	30.6	64.8	36.4	0.0
Ln Grp LOS				D	D	D	D	C	C	E	D	
Approach Vol, veh/h					675			1505			1118	
Approach Delay, s/veh					50.5			35.5			38.5	
Approach LOS					D			D			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	8		6	5		
Case No	2.0	4.0	11.0		3.0	2.0		
Phs Duration (G+Y+Rc), s	12.4	91.3	26.3		56.6	47.1		
Change Period (Y+Rc), s	* 4.7	* 4.7	4.7		* 4.9	4.7		
Max Green (Gmax), s	* 14	* 64	38.0		* 52	26.0		
Max Allow Headway (MAH), s	1.0	2.4	1.9		2.3	1.0		
Max Q Clear (g_c+I1), s	8.1	35.7	20.4		34.5	18.4		
Green Ext Time (g_e), s	0.0	1.1	0.4		1.4	0.1		
Prob of Phs Call (p_c)	0.95	1.00	1.00		1.00	1.00		
Prob of Max Out (p_x)	0.49	0.00	0.00		0.00	0.00		

Left-Turn Movement Data								
Assigned Mvmt	1		3			5		
Mvmt Sat Flow, veh/h	1767		1060			3428		

Through Movement Data								
Assigned Mvmt		2	8		6			
Mvmt Sat Flow, veh/h		2943	2598		3526			

Right-Turn Movement Data								
Assigned Mvmt		12	18		16			
Mvmt Sat Flow, veh/h		538	1561		1572			

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

Lanes in Grp	1	0	1	0	0	2	0	0
Grp Vol (v), veh/h	84	0	224	0	0	463	0	0
Grp Sat Flow (s), veh/h/ln	1767	0	1803	0	0	1714	0	0
Q Serve Time (g_s), s	6.1	0.0	15.4	0.0	0.0	16.4	0.0	0.0
Cycle Q Clear Time (g_c), s	6.1	0.0	15.4	0.0	0.0	16.4	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	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)	1.00	0.00	0.59	0.00	0.00	1.00	0.00	0.00
Lane Grp Cap (c), veh/h	105	0	300	0	0	1118	0	0
V/C Ratio (X)	0.80	0.00	0.75	0.00	0.00	0.41	0.00	0.00
Avail Cap (c_a), veh/h	190	0	527	0	0	1118	0	0
Upstream Filter (I)	0.85	0.00	1.00	0.00	0.00	0.41	0.00	0.00
Uniform Delay (d1), s/veh	60.4	0.0	51.6	0.0	0.0	46.4	0.0	0.0
Incr Delay (d2), s/veh	4.5	0.0	1.4	0.0	0.0	0.0	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	64.8	0.0	53.0	0.0	0.0	46.4	0.0	0.0
1st-Term Q (Q1), veh/ln	2.7	0.0	6.9	0.0	0.0	7.6	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	0.1	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%)	1.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	2.9	0.0	7.0	0.0	0.0	7.6	0.0	0.0
%ile Storage Ratio (RQ%)	0.49	0.00	0.63	0.00	0.00	0.58	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	8	0	6	0	0	0
Lane Assignment		T	T		T			
Lanes in Grp	0	1	1	0	2	0	0	0
Grp Vol (v), veh/h	0	528	210	0	1034	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1763	1856	0	1763	0	0	0
Q Serve Time (g_s), s	0.0	33.7	13.8	0.0	32.5	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	33.7	13.8	0.0	32.5	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	1174	308	0	1402	0	0	0
V/C Ratio (X)	0.00	0.45	0.68	0.00	0.74	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	1174	542	0	1402	0	0	0
Upstream Filter (I)	0.00	0.41	1.00	0.00	0.85	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	30.1	50.9	0.0	33.4	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.5	1.0	0.0	3.0	0.0	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	30.6	51.9	0.0	36.4	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	15.9	6.4	0.0	13.6	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.1	0.0	0.6	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	1.00	0.00	1.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	16.1	6.5	0.0	14.2	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	1.23	0.58	0.00	0.32	0.00	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

Right Lane Group Data								
Assigned Mvmt	0	12	18	0	16	0	0	0
Lane Assignment		T+R	R		R			
Lanes in Grp	0	1	1	0	1	0	0	0
Grp Vol (v), veh/h	0	514	241	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1718	1561	0	1572	0	0	0
Q Serve Time (g_s), s	0.0	33.7	18.4	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	33.7	18.4	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	1572.5	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	7.7	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.31	1.00	0.00	1.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	1144	353	0	625	0	0	0
V/C Ratio (X)	0.00	0.45	0.68	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	1144	550	0	625	0	0	0
Upstream Filter (I)	0.00	0.41	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	30.1	46.1	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.5	0.9	0.0	0.0	0.0	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	30.6	47.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	15.5	7.1	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.1	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	1.00	0.00	1.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	15.7	7.2	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	1.20	1.22	0.00	0.00	0.00	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

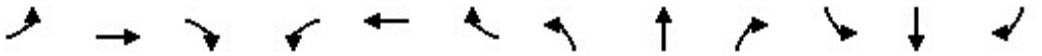
Intersection Summary	
HCM 6th Ctrl Delay	39.6
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	416	0	590	0	0	0	0	1019	680	445	662	0
Future Volume (veh/h)	416	0	590	0	0	0	0	1019	680	445	662	0
Number	7	4	14				5	2	12	1	6	16
Initial Q, veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		0.97				1.00		0.93	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1856	1856	1856				0	1856	1856	1856	1856	0
Adj Flow Rate, veh/h	547	0	243				0	1061	616	464	690	0
Peak Hour Factor	0.96	0.96	0.96				0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3				0	3	3	3	3	0
Opposing Right Turn Influence	Yes						No			Yes		
Cap, veh/h	725	0	312				0	1713	743	326	2547	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Prop Arrive On Green	0.21	0.00	0.21				0.00	0.51	0.51	0.37	1.00	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh	49.6	0.0	52.1				0.0	24.7	37.6	244.9	0.2	0.0
Ln Grp LOS	D	A	D				A	C	D	F	A	A
Approach Vol, veh/h		790						1677			1154	
Approach Delay, s/veh		50.4						29.5			98.6	
Approach LOS		D						C			F	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Case No	2.0	8.0		9.0		4.0		
Phs Duration (G+Y+Rc), s	28.0	70.6		31.4		98.6		
Change Period (Y+Rc), s	4.0	* 4.7		* 4.7		* 4.7		
Max Green (Gmax), s	24.0	* 55		* 38		* 83		
Max Allow Headway (MAH), s	2.8	6.3		2.8		6.1		
Max Q Clear (g_c+I1), s	26.0	48.5		21.6		2.0		
Green Ext Time (g_e), s	0.0	5.3		1.4		8.2		
Prob of Phs Call (p_c)	1.00	1.00		1.00		1.00		
Prob of Max Out (p_x)	1.00	0.00		0.00		0.00		

Left-Turn Movement Data									
Assigned Mvmt	1	5		7					
Mvmt Sat Flow, veh/h	1767	0		3534					

Through Movement Data									
Assigned Mvmt		2		4		6			
Mvmt Sat Flow, veh/h		3544		0		3618			

Right-Turn Movement Data									
Assigned Mvmt		12		14		16			
Mvmt Sat Flow, veh/h		1465		1522		0			

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

Lanes in Grp	1	0	0	2	0	0	0	0
Grp Vol (v), veh/h	464	0	0	547	0	0	0	0
Grp Sat Flow (s), veh/h/ln	1767	0	0	1767	0	0	0	0
Q Serve Time (g_s), s	24.0	0.0	0.0	18.9	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	24.0	0.0	0.0	18.9	0.0	0.0	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	1767	0	0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	65.9	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)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	326	0	0	725	0	0	0	0
V/C Ratio (X)	1.42	0.00	0.00	0.75	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	326	0	0	1033	0	0	0	0
Upstream Filter (I)	0.80	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	41.0	0.0	0.0	48.6	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	203.9	0.0	0.0	1.0	0.0	0.0	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	244.9	0.0	0.0	49.6	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	8.6	0.0	0.0	8.1	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	18.5	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%)	1.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00
%ile Back of Q (50%), veh/ln	27.0	0.0	0.0	8.2	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	2.06	0.00	0.00	0.18	0.00	0.00	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	34.4	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	0.4	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	0
Lane Assignment		T				T		
Lanes in Grp	0	2	0	0	0	2	0	0
Grp Vol (v), veh/h	0	1061	0	0	0	690	0	0
Grp Sat Flow (s), veh/h/ln	0	1689	0	0	0	1763	0	0
Q Serve Time (g_s), s	0.0	29.4	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	29.4	0.0	0.0	0.0	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	1713	0	0	0	2547	0	0
V/C Ratio (X)	0.00	0.62	0.00	0.00	0.00	0.27	0.00	0.00
Avail Cap (c_a), veh/h	0	1713	0	0	0	2547	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	0.80	0.00	0.00
Uniform Delay (d1), s/veh	0.0	23.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.7	0.0	0.0	0.0	0.2	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	24.7	0.0	0.0	0.0	0.2	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	11.4	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.4	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	0.00
%ile Back of Q (50%), veh/ln	0.0	11.8	0.0	0.0	0.0	0.1	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	1.25	0.00	0.00	0.00	0.01	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

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	0
Lane Assignment		T+R		R				
Lanes in Grp	0	1	0	1	0	0	0	0
Grp Vol (v), veh/h	0	616	0	243	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1465	0	1522	0	0	0	0
Q Serve Time (g_s), s	0.0	46.5	0.0	19.6	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	46.5	0.0	19.6	0.0	0.0	0.0	0.0
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	1.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	743	0	312	0	0	0	0
V/C Ratio (X)	0.00	0.83	0.00	0.78	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	743	0	445	0	0	0	0
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	27.2	0.0	48.9	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	10.4	0.0	3.2	0.0	0.0	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	37.6	0.0	52.1	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	15.6	0.0	7.3	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	2.1	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	0.00
%ile Back of Q (50%), veh/ln	0.0	17.8	0.0	7.6	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	1.89	0.00	0.48	0.00	0.00	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

Intersection Summary	
HCM 6th Ctrl Delay	56.0
HCM 6th LOS	E

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

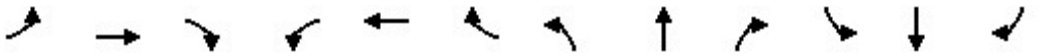
Intersection	
Int Delay, s/veh	6.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	64	10	151	10	0	10	250	249	0	0	191	35
Future Vol, veh/h	64	10	151	10	0	10	250	249	0	0	191	35
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	120	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	66	10	156	10	0	10	258	257	0	0	197	36

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	860	988	117	877	1006	129	233	0	0	257	0	0
Stage 1	215	215	-	773	773	-	-	-	-	-	-	-
Stage 2	645	773	-	104	233	-	-	-	-	-	-	-
Critical Hdwy	7.56	6.56	6.96	7.56	6.56	6.96	4.16	-	-	4.16	-	-
Critical Hdwy Stg 1	6.56	5.56	-	6.56	5.56	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.56	5.56	-	6.56	5.56	-	-	-	-	-	-	-
Follow-up Hdwy	3.53	4.03	3.33	3.53	4.03	3.33	2.23	-	-	2.23	-	-
Pot Cap-1 Maneuver	248	244	910	241	238	894	1324	-	-	1298	-	-
Stage 1	764	721	-	356	405	-	-	-	-	-	-	-
Stage 2	425	405	-	888	708	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	208	196	910	163	192	894	1324	-	-	1298	-	-
Mov Cap-2 Maneuver	208	196	-	163	192	-	-	-	-	-	-	-
Stage 1	615	721	-	287	326	-	-	-	-	-	-	-
Stage 2	338	326	-	726	708	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	17.2	19.1	4.2	0
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1324	-	-	206	910	276	1298	-	-
HCM Lane V/C Ratio	0.195	-	-	0.37	0.171	0.075	-	-	-
HCM Control Delay (s)	8.4	-	-	32.4	9.8	19.1	0	-	-
HCM Lane LOS	A	-	-	D	A	C	A	-	-
HCM 95th %tile Q(veh)	0.7	-	-	1.6	0.6	0.2	0	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	68	160	30	400	401	383	220	293	270	110	308	90
Future Volume (veh/h)	68	160	30	400	401	383	220	293	270	110	308	90
Number	3	8	18	7	4	14	1	6	16	5	2	12
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	72	170	26	426	427	184	234	312	244	117	328	64
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	103	392	60	186	550	466	186	462	353	155	664	128
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	0.06	0.25	0.25	0.11	0.30	0.30	0.11	0.24	0.24	0.09	0.23	0.23
Unsig. Movement Delay												
Ln Grp Delay, s/veh	35.8	0.0	19.5	622.2	21.6	17.3	177.9	22.3	22.8	33.9	21.1	21.2
Ln Grp LOS	D	A	B	F	C	B	F	C	C	C	C	C
Approach Vol, veh/h		268			1037			790			509	
Approach Delay, s/veh		23.9			267.6			68.6			24.1	
Approach LOS		C			F			E			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	2.0	3.0	2.0	4.0	2.0	4.0
Phs Duration (G+Y+Rc), s	11.0	18.2	8.2	22.4	9.9	19.2	11.0	19.6
Change Period (Y+Rc), s	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7	* 4.7
Max Green (Gmax), s	* 6.3	* 51	* 5	* 39	* 24	* 33	* 6.3	* 38
Max Allow Headway (MAH), s	3.8	5.2	3.8	4.7	3.8	5.3	3.7	5.2
Max Q Clear (g_c+I1), s	8.3	7.9	4.4	14.6	5.9	11.1	8.3	7.4
Green Ext Time (g_e), s	0.0	2.4	0.0	3.1	0.3	3.4	0.0	1.1
Prob of Phs Call (p_c)	0.98	1.00	0.70	1.00	0.86	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.01	0.00	0.02	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1767		1767		1767		1767	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		2948		1856		1904		1572

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		568		1572		1453		240

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

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	234	0	72	0	117	0	426	0
Grp Sat Flow (s), veh/h/ln	1767	0	1767	0	1767	0	1767	0
Q Serve Time (g_s), s	6.3	0.0	2.4	0.0	3.9	0.0	6.3	0.0
Cycle Q Clear Time (g_c), s	6.3	0.0	2.4	0.0	3.9	0.0	6.3	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	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)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	186	0	103	0	155	0	186	0
V/C Ratio (X)	1.26	0.00	0.70	0.00	0.75	0.00	2.29	0.00
Avail Cap (c_a), veh/h	186	0	148	0	719	0	186	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	26.7	0.0	27.6	0.0	26.6	0.0	26.7	0.0
Incr Delay (d2), s/veh	151.2	0.0	8.2	0.0	7.3	0.0	595.5	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	177.9	0.0	35.8	0.0	33.9	0.0	622.2	0.0
1st-Term Q (Q1), veh/ln	2.4	0.0	0.9	0.0	1.5	0.0	2.4	0.0
2nd-Term Q (Q2), veh/ln	7.8	0.0	0.2	0.0	0.3	0.0	30.8	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%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	10.3	0.0	1.2	0.0	1.8	0.0	33.2	0.0
%ile Storage Ratio (RQ%)	1.64	0.00	0.27	0.00	0.21	0.00	2.66	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	11.9	0.0	0.0	0.0	0.0	0.0	59.9	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	0.3	0.0	0.0	0.0	0.0	0.0	0.6	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		
Lanes in Grp	0	1	0	1	0	1	0	0
Grp Vol (v), veh/h	0	195	0	427	0	288	0	0
Grp Sat Flow (s), veh/h/ln	0	1763	0	1856	0	1763	0	0
Q Serve Time (g_s), s	0.0	5.7	0.0	12.6	0.0	8.8	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	5.7	0.0	12.6	0.0	8.8	0.0	0.0
Lane Grp Cap (c), veh/h	0	397	0	550	0	428	0	0
V/C Ratio (X)	0.00	0.49	0.00	0.78	0.00	0.67	0.00	0.00
Avail Cap (c_a), veh/h	0	1493	0	1221	0	962	0	0
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	20.2	0.0	19.2	0.0	20.5	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.9	0.0	2.4	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	21.1	0.0	21.6	0.0	22.3	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	2.1	0.0	4.6	0.0	3.3	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.4	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	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	2.2	0.0	5.0	0.0	3.5	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.09	0.00	0.30	0.00	0.13	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

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	197	0	184	0	268	0	196
Grp Sat Flow (s), veh/h/ln	0	1753	0	1572	0	1594	0	1812
Q Serve Time (g_s), s	0.0	5.9	0.0	5.6	0.0	9.1	0.0	5.4
Cycle Q Clear Time (g_c), s	0.0	5.9	0.0	5.6	0.0	9.1	0.0	5.4
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	0.32	0.00	1.00	0.00	0.91	0.00	0.13
Lane Grp Cap (c), veh/h	0	395	0	466	0	387	0	452
V/C Ratio (X)	0.00	0.50	0.00	0.39	0.00	0.69	0.00	0.43
Avail Cap (c_a), veh/h	0	1485	0	1034	0	870	0	1153
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	20.2	0.0	16.7	0.0	20.6	0.0	18.9
Incr Delay (d2), s/veh	0.0	1.0	0.0	0.5	0.0	2.2	0.0	0.7
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	21.2	0.0	17.3	0.0	22.8	0.0	19.5
1st-Term Q (Q1), veh/ln	0.0	2.2	0.0	1.8	0.0	3.0	0.0	2.1
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.1	0.0	0.2	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	2.3	0.0	1.8	0.0	3.3	0.0	2.1
%ile Storage Ratio (RQ%)	0.00	0.09	0.00	0.11	0.00	0.13	0.00	0.04
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	134.5
HCM 6th LOS	F

Notes

* HCM 6th Edition computational engine requires equal clearance times for the phases crossing the barrier.

Appendix C: Approved Projects Trip Generation

Near-Term Project Trip Generation

Approved Project	Land-Use	Code	Units	Quantity	Daily	Weekday					
						AM			PM		
						In	Out	Total	In	Out	Total
Residential											
Burlessas Building Rehabilitation	Multifamily Housing (Low-Rise)	220	DU	8	54	0	4	4	3	2	5
Veterans Square Housing	Multifamily Housing (Low-Rise)	220	DU	30	203	2	10	12	10	6	16
Galloway Multiplex (172 West 10th Street)	Multifamily Housing (Low-Rise)	220	DU	4	27	0	2	2	1	2	3
Galloway Multiplex (345 West 10th Street)	Multifamily Housing (Low-Rise)	220	DU	4	27	0	2	2	1	2	3
Galloway Multiplex (463 West 10th Street)	Multifamily Housing (Low-Rise)	220	DU	4	27	0	2	2	1	2	3
Beacon Villas	Multifamily Housing (Low-Rise)	220	DU	57	385	5	18	23	18	12	30
The Atchison Mixed-Use Development	Multifamily Housing (Low-Rise)	220	DU	202	1362	19	62	81	65	39	104
Commercial/Institutional											
Fishermen's Catch	Fast Casual Restaurant	930	KSF	8.807	856	6	7	13	61	50	111
Courtyard by Marriott	Hotel	310	RMS	125	999	32	26	58	33	32	65
The Atchison Mixed-Use Development	Strip Retail Plaza (<40k)	822	KSF	13.669	745	19	14	33	45	46	91
			Total New Vehicle Trips		*4685*	*83*	*147*	*230*	*238*	*193*	*431*