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Mountain View Academy
Traffic Impact Study
PCD Ref. No.: PPR208
(LSC #204140)
September 10, 2020

Traffic Engineer's Statement

This traffic report and supporting information were prepared under my responsible charge and they comport with the standard of care. So far as is consistent with the standard of care, said report was prepared in general conformance with the criteria established by the County for traffic reports.

COLORADO LICENSED
COLLEEN GUILLOTTE
43798
9-11-2020
PROFESSIONAL ENGINEER

Developer's Statement

I, the Developer, have read and will comply with all commitments made on my behalf within this report.

Jeff Chamberlain

9/11/20
Date

Mountain View Academy

Traffic Impact Study

PCD Ref. No.: PPR208

Prepared for:
National Heritage Academies, Inc
3850 Broadmoor SE
Grand Rapids, MI 49512

Contact: Mr. Jeff Chamberlain

SEPTEMBER 10, 2020

LSC Transportation Consultants
Prepared by: Colleen Guillotte, PE, PTOE, RSP
Reviewed by: Jeffrey C. Hodsdon, PE

LSC #204140

CONTENTS

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September 10, 2020

Mr. Jeff Chamberlain
National Heritage Academies, Inc
3850 Broadmoor SE
Grand Rapids, MI 49512

RE: Mountain View Academy
El Paso County, Colorado
Traffic Impact Study
PCD Ref. No.: PPR208
LSC #204140

Dear Mr. Chamberlain:

LSC Transportation Consultants, Inc. has prepared this traffic impact study for the proposed development to be located in Claremont Ranch, southwest of Meadowbrook Parkway and Pinyon Jay Drive in El Paso County, Colorado. The site location is shown in Figure 1.

REPORT CONTENTS

The report contains the following:

- Recent/current street and traffic conditions in the vicinity of the site for identification of existing and planned street widths, lane geometries, traffic controls, posted speed limits, street classification, etc.;
- Existing traffic volumes at the key intersections in the vicinity of the site and estimates of short-term and 2040 background traffic volumes;
- The projected average weekday and peak-hour vehicle trips to be generated by the proposed development;
- The assignment of the projected trips to the existing and planned street system;
- The resulting short-term and 2040 total traffic volumes on the street system;
- The resulting traffic impacts at the study intersections; and
- Recommendations for traffic controls and auxiliary turn lanes.

RECENT TRAFFIC STUDIES

The following traffic studies have been completed in the past few years in the vicinity of the site:

- *The Sand Industrial*, by LSC, November 5, 2019
- *Claremont Commercial Filing No. 2*, by LSC, April 15, 2020
- *Meadowbrook Parkway*, by LSC, June 8, 2017
- *Meadowbrook Crossing*, by LSC, May 5, 2017
- *The Sands*, by LSC, May 17, 2016

All of these studies were considered when developing background traffic projections. Additionally, LSC is currently working on updating the traffic study for the Villas at Claremont, which was also included in the background traffic.

SITE DEVELOPMENT, LAND USE, AND ACCESS

The site is located south of Meadowbrook Parkway and west of Pinyon Drive in the Claremont Ranch development. Access into the site is proposed off of Pinyon Jay Drive, approximately 200 feet north of the intersection with Hames Drive. The site exit is proposed to be the fourth leg of the existing Hames Drive/Lattern Court intersection. The site plan is shown in Figure 2.

Short-Term Land Use and Access

The short-term development is planned to include a charter school with the potential to ultimately serve up to 772 students. The school is expected to open in the fall of 2020 with 520 students in Kindergarten through 5th grade. The school will then add one grade per year until it reaches its max capacity in 2023. Faculty and staff are expected to total about 65. This school is not anticipated to have any buses providing transportation.

Site Circulation

Figure 3 shows the site circulation for the proposed school. As shown, all vehicles will enter off of Pinyon Jay Drive. After entering, a vehicle can turn right or left. A right turn will allow the vehicle to drive directly through the drop-off/pick-up loop in front of the school. A left turn winds the vehicle through the parking lot prior to entering the drop-off/pick-up loop.

<u>School Internal Queuing Estimates – Parent Pick up and Drop Off Periods</u>

The North Carolina Department of Transportation's (NCDOT) Municipal School Transportation Assistance (MSTA)-calculated requirement for "high traffic demand" queue distance is 4,269 feet. The duel lanes that wind through the parking lot prior to entering the drop-off/pick-up loop in front of the school provide approximately 4,315 feet, which allows for this length of queue.

Pedestrian and Bicycle Plan Facilities/Multi-Modal & TDM Opportunities

The developed properties through Claremont Ranch have existing detached sidewalks. Detached sidewalks will be constructed on Meadowbrook Parkway, Pinyon Jay Drive, and Hames Drive adjacent to the property. Figure 4 shows the existing and proposed sidewalk in the vicinity of the school.

The MTCP Multimodal Improvements plan shows a future bicycle route along Marksheffel Road extending north from US Highway 24 and along Constitution from Springside Drive east across US Highway 24 to the south side and future connecting trails.

In the future, connections to the Rock Island Regional Trail (future section) west and north of Claremont Ranch will likely be in place.

The US Highway 24 PEL Study shows a proposed multi-use path along the north side of the highway. Mountain Metro Transit does not currently provide service to the Claremont Ranch area. Transit service may expand to the east as growth continues to the east.

Sight Distance

The available sight distance at the site access on Hames Drive has been measured to exceed the require stopping sight distance criteria contained in Table 2-17 of the ECM. Based on a posted speed limit of 25 miles per hour (mph), 155 feet are required. The required driveway intersection sight distance is 250 feet for the site exit. There is currently a tree adjacent to the roadway to the north of the intersection that limits the sight distance to approximately 170 feet. With the removal of the tree, the intersection sight distance would meet the required 250 feet in both directions. Figure 5 shows the required stopping sight distance, as well as the intersection sight distance.

ROADWAY AND TRAFFIC CONDITIONS

Area Roadways

Figure 1 shows the roadways in the vicinity of the site. The major roadways are identified below followed by a brief description of each.

- **US Highway 24** (US Hwy 24) extends from Colorado Springs at State Highway (SH) 21 to Limon. Near the site, US Hwy 24 is classified as an Expressway (E-X). At this location, US Hwy 24 is a four-lane urban highway with a depressed median and a speed limit of 65 mph. The intersections with Marksheffel Road and Constitution Avenue are signalized.
- **Marksheffel Road** is a Principal Arterial that extends north from the City of Fountain to Woodmen Road. It is currently a four-lane roadway with a posted speed limit of 50 mph adjacent to the study area. The intersection with Meadowbrook Parkway was recently

signalized. Marksheffel Road is shown as a six-lane expressway in the *2016 Major Transportation Corridors Plan Update* (MTCP) for 2060 corridor preservation.

- **Constitution Avenue** is a Principal Arterial that extends west from US Hwy 24 to Paseo Road. It is currently a four-lane roadway adjacent to the site. The intersection with Meadowbrook Parkway was recently signalized. The speed limit is 50 mph adjacent to the study area.
- **Meadowbrook Parkway** is an Urban Residential Collector that extends from SH 94 to Constitution Avenue, running approximately parallel to US Hwy 24. The roadway has a posted speed limit of 25 mph.
- **Hames Drive** is a two-lane Urban Local road that extends between Meadowbrook Parkway and Pinyon Jay Drive.
- **Pinyon Jay Drive** is a two-lane Urban Local road that extends north from Woodpark Drive beyond Meadowbrook Drive.

Access Management Plans

The 2006 US Highway 24 Access Control Plan indicates that the right in/right out access at US Highway 24/Brookings Drive may be closed when the Constitution/Banning Lewis Parkway/US Highway 24 interchange is constructed. The recent *US Highway 24 PEL study* recommended revisions indicate the access "*may be closed with highway and/or Constitution or Marksheffel intersection improvements."*

The date of a possible future closure of this access is not known, but a future closure would have an effect on the local jurisdiction intersections - most notably, the intersection of Marksheffel/Meadowbrook. The analysis scenario in this report, representing potential long-term future closure, indicates the possible need for an additional westbound-to-southbound left-turn lane. This report includes two scenarios for the Meadowbrook/Marksheffel intersection in the long-term: 1) the access remaining open and 2) assuming future closure.

Planned CDOT and County Projects

Based on the US Hwy 24 PEL study, US Hwy 24 is planned to be widened to a six-lane roadway in the future. The timings of these improvements are not known. Both improvements have been included in the long-term analysis.

Existing Traffic Volumes

Study intersections identified by the County to be included in the study area include:

- US Hwy 24/Marksheffel Road
- US Hwy 24/Brookings Drive
- US Hwy 24/Constitution Avenue
- Constitution Avenue/Springside Drive
- Meadowbrook Parkway/Marksheffel Road

- Meadowbrook Parkway/Riverwalk Parkway
- Meadowbrook Parkway/Hames Drive
- Meadowbrook Parkway/Springside Drive
- Meadowbrook Parkway/Pinyon Jay Drive
- Meadowbrook Parkway/Constitution Avenue
- Hames Drive/Lattern Court
- Hames Drive/Pinyon Jay Drive

Traffic counts were conducted in January 2020 at the study intersections during the anticipated school start time (7 am to 9 am) and school dismissal time (2 pm to 4 pm). The afternoon count does not coincide with the evening peak hour of traffic on the adjacent roadway, but was chosen because it coincides with the school's afternoon peak hour.

Figure 6 shows the traffic volumes at study intersections. The traffic count reports are attached.

Existing Levels of Service

Level of service (LOS) is a quantitative measure of the level of congestion or delay at an intersection. Level of service is indicated on a scale from "A" to "F." LOS A represents control delay of less than 10 seconds for unsignalized and signalized intersections. LOS F represents control delay of more than 50 seconds for unsignalized intersections and more than 80 seconds for signalized intersections. Table 1 shows the level of service delay ranges.

Table 1: Intersection Levels of Service Delay Ranges

	Signalized Intersections	Unsignalized Intersections
Level of Service	Average Control Delay (seconds per vehicle)	Average Control Delay (seconds per vehicle)(1)
A	10.0 sec or less	10.0 sec or less
B	10.1-20.0 sec	10.1-15.0 sec
C	20.1-35.0 sec	15.1-25.0 sec
D	35.1-55.0 sec	25.1-35.0 sec
E	55.1-80.0 sec	35.1-50.0 sec
F	80.1 sec or more	50.1 sec or more

(1) For unsignalized intersections if V/C ratio is greater than 1.0 the level of service is LOS F regardless of the projected average control delay per vehicle.

The study intersections were analyzed to determine the existing levels of service using *Highway Capacity Manual* methodology. The peak-hour factors used for each approach are based on the peak fifteen minutes for that approach. Figure 7 shows the existing lane geometry, traffic control, and level of service analysis results. As shown in the figure, all movements at these intersections are level of service D or better during the peak hours with the following exceptions:

- US Hwy 24/Marksheffel Road – This intersection currently operates at LOS E during the morning peak hour and LOS D during the evening peak hour. Multiple movements operate at LOS E or F.
- US Hwy 24/Constitution Avenue – The southbound left turn operates at LOS E during both peak hours.

The level of service (LOS) reports are attached.

Crash History

Three years of crash data were collected at the study intersections. The intersection of Meadowbrook Parkway/Marksheffel Road experienced nine crashes with two resulting in injuries. Of the nine crashes, 5 were broadside type crashes between an eastbound left-turning vehicle and a southbound through vehicle. All of these crashes occurred prior to the signal installation. With the signal, the number of broadside crashes at this intersection should be reduced.

The intersection of US Hwy 24/Constitution Avenue had 16 crashes during the three-year study period, with one resulting in an injury. Eight of the crashes were rear-end type crashes. There were no correctable crash patterns detected at the intersection.

The intersection of US Hwy 24/Marksheffel Road had 43 crashes recorded during the study period with 13 crashes resulting in injuries. Of the 43 crashes, 12 were approach-turn crashes between a westbound left-turning vehicle and an eastbound through vehicle. Six of these crashes resulted in injuries. All but one of the westbound-left approach-turn crashes occurred in the afternoon evening period when there is a high volume of westbound left-turning vehicles against a high volume of eastbound through vehicles. Due to the projected increase in traffic volumes at this intersection, it is anticipated that these crashes will continue to occur if no countermeasures are taken. It is recommended that the westbound left-turn be converted to protected-only to reduce the approach-turn crashes.

The intersection of US Hwy 24/Marksheffel Road also had eight broadside crashes with no patterns and 13 rear-end crashes with no crash patterns.

No crashes were reported at the remaining study intersections during the study period.

BACKGROUND TRAFFIC

Background traffic is the traffic estimated to be on the adjacent roadways and at adjacent intersections without the proposed development's trip generation of site-generated traffic volumes. Background traffic includes the through traffic and the traffic generated by nearby developments but assumes zero traffic generated by the site.

Short-Term Traffic Volumes

Figure 8 shows the short-term (year 2023) background traffic volumes. The background volumes are estimates by LSC, based on the existing traffic volumes shown in Figure 9, with a yearly growth rate of two percent per year. In addition, planned developments that are anticipated to be constructed in the near future have been included in the background traffic, including Villas at Claremont and Claremont Business Park.

Long-Term Traffic Volumes

Figure 10 shows the projected 2040 background traffic volumes. The 2040 background traffic volumes are estimates by LSC, based on the Colorado Department of Transportation (CDOT) twenty-year growth factor (about one and a half percent per year) on US Hwy 24 adjacent to the site. The Pikes Peak Area Council of Governments (PPACG) travel demand model was also used in projecting traffic volumes. Additionally, traffic generated by planned adjacent developments has been included.

The 2040 background traffic volumes assume that the right-in/right-out intersection of US Hwy 24/Brookings Drive has been closed. The traffic turning at the intersection was rerouted through the development.

TRIP GENERATION

New trips expected to be generated by the proposed school were estimated, based on North Carolina Department of Transportation's (NCDOT) Municipal School Transportation Assistance (MSTA) *School Traffic Calculator,* which provides morning arrival and afternoon dismissal trips, based on the number of students as well as staff size. We have found that the trip generation at National Heritage Academies schools are very similar to the MSTA calculator. It was assumed that all trips to and from this proposed school would be from personal vehicles. The school will not have busing. No factor for pedestrian trips or bicycle trips were estimated for this analysis.

In order to validate the expected trip generation for the school, the trip-generation estimates provided by the NCDOT MSTA school calculator were compared to trip-generation estimates, based on information and procedures contained in the Institute of Transportation Engineer's (ITE) report *Trip Generation, Tenth Edition, 2017*. ITE Land Use Code 537 – Charter Elementary School was used for the estimates. The ITE *Trip Generation* method has been widely used for many years by traffic engineering professionals and has become an accepted forecasting practice. The ITE methodology was used to generate morning arrival and afternoon dismissal trips at full build out of 772 students.

Table 2 provides the trip-generation comparison between the MSTA school calculator and the ITE methodology. This data provides indication that the number of projected trips based on NCDOT MSTA school calculator provides a similar, but conservative, estimate of the number of expected

trips for the new school during the morning arrival peak hour and afternoon dismissal peak hour. The NCDOT MSTA school traffic calculator estimates are proposed to be used as the estimates for the traffic impact study. The average daily trips expected to be generated by the proposed school at 772 students is 1,600 vehicles per day, based on the MSTA school traffic calculator.

Table 2: Trip Generation Summary

	AM PEAK HOUR			PM PEAK HOUR		
	TOTAL TRIPS	INBOUND	OUTBOUND	TOTAL TRIPS	INBOUND	OUTBOUND
NCDOT MSTA School Traffic Calculator	929	497	432	671	303	368
ITE Trip Generation	876	464	412	501	230	271

Traffic for the proposed school is assumed to consist solely of new trips, whose only purpose is to visit the school. New Trips are those that are new to the study area and consist of motorists whose primary destination is the proposed school. Pass-by trips are typically associated with retail uses, as well as gas stations and restaurants. Pass-by trips are comprised of vehicles already travelling on the adjacent roads, which divert from their original path of travel to visit a use. The ultimate destination of a pass-by trip is directed elsewhere. Pass-by trips will not be accounted for in this study, as the proposed institutional use is typically not associated with pass-by trip making. However, it is likely that parents on the adjacent street network may very well drop-off and pick-up their child on their way to/from work, which would be considered pass-by traffic. However, in order to remain conservative, the potential pass-by traffic was not considered.

TRIP DISTRIBUTION AND ASSIGNMENT

The directional distribution of the site-generated traffic volumes on the street and roadway system serving the site is one of the most important factors in determining the site's traffic impacts. Trip distribution for the school was determined, based on census data within a twenty-two-minute drive time from the school site which is NHA's expected trade area to draw students. A drive-time analysis was completed to determine the drive-time boundary around the proposed school site. Once the drive-time boundary was formed, available travel routes to/from the school site within the boundary area were determined. Population data for ages 5-14 years were obtained from the U.S. Census Bureau and were reviewed to determine the percentage of this age population within the boundary area and the available travel routes to/from the site. The drive-time analysis and census data for the available travel routes to/from the school site are attached. Figure 12 shows the directional distribution estimates for site-generated traffic volumes.

When the distribution percentages (from Figure 12) were applied to the trip generation estimates (from Table 2), the site-generated traffic volumes on the area roadways were determined. Figure

13 and Figure 14 show the short-term and long-term site-generated traffic volumes. Both short-term and long-term site-generated traffic volumes assume school is at maximum capacity. The long-term traffic assignment assumes the intersection of US Hwy 24/Brookings Drive is closed.

PROJECTED TOTAL TRAFFIC

Short Term (2023)

Figure 15 shows the short-term total traffic volumes at all of the study area intersections. These volumes are the sum of the short-term background traffic volumes (from Figure 8) plus the short-term site-generated traffic volumes (from Figure 13).

Long Term (2040)

Figure 17 shows the 2040 total traffic volumes. These volumes are the sum of the 2040 background traffic volumes (from Figure 10) plus the long-term site-generated traffic volumes (from Figure 14). These volumes assume the closure of the US Hwy 24/Brookings Drive intersection.

PROJECTED TOTAL TRAFFIC LEVELS OF SERVICE

The study intersections have been analyzed to determine the projected levels of service for the short-term and 2040 background and total traffic volumes, based on the analysis procedures outlined in the *Highway Capacity Manual, 6th Edition* by the Transportation Research Board. The level of service reports are attached.

The peak-hour factor for school traffic was assumed to be 0.50 in the total traffic scenarios. Therefore, when the majority of traffic for a turning movement was site-generated traffic, the peak-hour factor for the movement was changed to 0.50. For all other movements, the peak-hour factor was calculated by assuming the school 15-minute peak coincided with the current movement's 15-minute peak.

It was assumed that the roadway network was unchanged in the short-term scenario. In the long-term scenario, the traffic volumes reflect an assumption of closure of the US Hwy 24/Brookings Drive intersection. However, for the intersection of Meadowbrook/Marksheffel, projected intersection volumes assuming US Hwy 24/Brookings Drive still open has also been included for comparison. It was also assumed that US Hwy 24 was widened to a six-lane roadway, based on improvements in the US Hwy 24 Environmental Assessment (EA).

Figure 9 and Figure 11 show the lane geometry, traffic control, and level of service analysis results for the short-term and long-term background volumes, respectively. Figure 16 and Figure 18 show the results for the short-term and long-term total traffic volumes, respectively. All turning movements and overall intersection levels of service are LOS D or better for the studied peak hours, with the exception discussed below.

Neighborhood Intersections

In the background conditions, all movements at this intersection operate at acceptable levels of service at all of the intersections within the Claremont Ranch Neighborhood. With the addition of the site-generated traffic, all neighborhood intersection turning movements are projected to operate at LOS D or better during the peak hours.

Based on ECM criteria, an eastbound right-turn lane is required based on the projected volume of right-turning vehicles at the intersection of Meadowbrook Parkway/Pinyon Jay Drive.

It is possible that striping for a southbound right-turn lane may become necessary at the intersection of Meadowbrook Parkway/Riverwalk Parkway in the future (to match the LOS analysis in this report). However, with school traffic added to this intersection, southbound left-turning/through motorists may naturally queue in a position that leaves sufficient space and a defacto right-turn lane. This is because the north leg of the intersection is wider than the south leg.

Constitution Avenue/Springside Drive

The northbound approach at this intersection is anticipated to operate at LOS E during both peak hours in the long-term background scenario. In the long-term total traffic scenario, this approach is projected to operate at LOS F, due to the increase in traffic. These poor levels of service are due to the high volume of traffic on Constitution Avenue in the long-term future. The northbound approach is forecast to have a V/C ratio at or below 1.0.

In the long-term, the site-generated traffic is expected to make up approximately 15 percent of the total intersection traffic during the morning peak hour. During the afternoon peak hour, 10 percent of the traffic at the intersection is projected to be site-generated. The weighted average of the peak hours is 12 percent.

Constitution Avenue/Meadowbrook Parkway

The turning movements at the intersection of Constitution Avenue/Meadowbrook Parkway are anticipated to operate at acceptable levels of service in the short-term total traffic scenario. Due to the background increase in traffic on Constitution Avenue in the long-term future, the northbound left is projected to operate at LOS E in the afternoon peak hour in the background scenario. With the addition of site-generated traffic in the long-term future, this intersection is expected to fail. It is recommended that the intersection be monitored for signalization. With a traffic signal, the overall intersection is expected to operate at LOS A during both peak hours.

In the long term, the site generated traffic is expected to make up approximately eight percent and seven percent of the total intersection traffic during the morning and afternoon peak hours, respectively. The weighted average of site generate traffic during the peak hours is eight percent.

Meadowbrook Parkway/Marksheffel Road

In the short-term future, all movements are expected to operate at LOS D or better, both with and without the site-generated traffic. In the long-term future, many of the through and left-turning movements are projected to operate at LOS E or F, due to the high volume of projected traffic on Marksheffel Road. With the addition of the site-generated traffic and future background traffic, a westbound dual left-turn may be required if the intersection of US Hwy 24/Brookings Drive is closed. In the long term, the site generated traffic is expected to make up approximately 10 percent of the total intersection traffic during the morning peak hour and seven percent during the afternoon peak hour. The weighted average of the site generated traffic as a percentage of total traffic during the peak hours is eight percent.

As mentioned previously, the timing of this potential closure is unknown and closure would result in a traffic volume shift to the Meadowbrook Parkway/Marksheffel Road intersection. A second scenario was run in which the intersection of US Hwy 24/Brookings Drive is not closed. The scenario analysis results project acceptable operations with a single westbound left-turn lane (current condition). The overall intersection is projected to continue to operate at LOS C during the morning peak hour and LOS E during the evening peak hour.

The scenario, in which the US Hwy 24/Brookings Drive remains open, has lower delay for several of the movements and none of the movements are above capacity. With US Hwy 24/Brookings Drive closed, the average delay would be higher and a few movements would be above capacity, even with dual westbound left-turn lanes. This is partly due to the analysis assumption of protected-only left-turn phasing for both eastbound and westbound approaches with dual left-turn lanes on both eastbound and westbound approaches.

US Hwy 24/Marksheffel Road

The intersection of US Hwy 24/Marksheffel Road is expected to operate at LOS F during both peak hours in the short-term future, without the addition of the site-generated traffic. The volume of traffic at the intersections is very close to the available capacity in existing conditions. Traffic volume growth on US Hwy 24 and Marksheffel Road will cause the volumes to exceed capacity in the near future. These poor levels of service are expected to occur with or without the site-generated traffic.

Per direction by CDOT, it has been assumed in the long-term future that the US Hwy 24/Marksheffel intersection will be widened to have three through lanes in each direction. Additionally, the eastbound left turn will be widened to be a triple left. In the long term, the site-generated traffic is expected to make up approximately five percent of the total intersection traffic during the morning peak hour. During the school peak hour, four percent of the traffic at the intersection is projected to be site-generated. The weighted average of the peak hours is approximately five percent.

US Hwy 24/Constitution Avenue

The southbound left-turning movement is anticipated to operate at LOS E during the peak hours in the short-term background and total traffic scenarios. In the long term, the widening of US Hwy 24 to 6-lanes improves the southbound left-turning movement. In the long-term background and total traffic scenarios, this movement is projected to operate at LOS D during the peak hours.

PHASING OF TRAFFIC CONTROL

US Hwy 24/Brookings Drive

In the US [Hwy] 24 Access Control Plan and US Highway 24 PEL study, the intersection of US Hwy 24/Brookings was recommended for closure. The timing of a planned future closure of this access is not known, but if/when the closure does occur, it will have an effect on the local jurisdiction intersections. The analysis scenario in this report, representing potential long-term future closure, indicates the possible need for an additional westbound-to-southbound left-turn lane at the intersection of Marksheffel/Meadowbrook.

Constitution Avenue/Meadowbrook Parkway

The intersection of Constitution Avenue/Meadowbrook Parkway is projected to need signalization in the long-term future with the addition of the site-generated traffic. The intersection should be monitored to determine when signalization is required.

Meadowbrook Parkway/Marksheffel Road

In the future, with the addition of the site-generated traffic and future background traffic, a westbound dual left-turn lane at the intersection of Meadowbrook Parkway/Marksheffel Road may be required (assuming the intersection of US Hwy 24/Brookings Drive will be closed, as is being required by CDOT).

SIGNING AND STRIPING

Figure 19 provides a conceptual school-related signing plan. School speed limit signs (20 mph) with programmable flashing beacons would be the best option, if a significant number of students from the neighborhood attend this school and walk/bike to school. Alternatively, LSC recommends a supplemental sign plate under the speed limit sign with the expected time periods when children would be walking to/from school. El Paso County also uses a supplemental sign plate reading “When Children are Present” in other applications.

There are currently mid-block ramps for a mid-block crossing located on Pinyon Jay Drive between Hames Drive and Meadowbrook Parkway. These ramps should be removed and crossings should be limited to intersections. Crossings at the school exit and Hames Drive will require fluorescent

yellow-green school pedestrian warning signs (S1-1) with a supplemental diagonal arrow (W16-7P) on each approach. It is not anticipated that there will be as many students walking, by comparison to a traditional, neighborhood public school. However, this should be monitored and, if necessary, the school should provide crossing guards during arrival and dismissal periods.

It is unlikely that the two intersections of Meadowbrook/Pinyon Jay and Hames/Lattern with recommendations for pedestrian crossing signs and markings would meet MUTCD all-way, stop sign-control (AWSC) warrants. Therefore, these have been shown to remain two-way, stop sign-controlled (TWSC). However, this would result in students crossing "uncontrolled" approaches (i.e. no stop signs for traffic on the "major street"). Depending on the number of children expected to walk to school from the neighborhood and other factors, consideration could be given to potentially changing to AWSC. If these remain TWSC, measures should be taken to ensure the safety of children crossing. These measures may include (but are not limited to) posting trained crossing guards, posting supplemental MUTCD standard pedestrian signs within the street during peak times or as permanent signs, staff/parent supervision, chokers/curb extensions, raised median islands with pedestrian refuge, and other potential measures.

Figure 20 provides a school route plan map showing the locations of crosswalks and stop signs in the vicinity of the school.

DEVIATION REQUEST

- A deviation request has been submitted (and was approved) for detached sidewalks along Pinyon Jay Drive and Hames Drive. A copy of this approved deviation is attached for reference.
- A deviation request has been submitted (and was approved) for removal of the mid-block pedestrian ped ramps on Pinyon Jay south of Meadowbrook Parkway.

COUNTY ROAD IMPACT FEE PROGRAM

Transportation Impact Fees

Per ECM Appendix B: *State what the current applicable Transportation Impact Fees are and what option the developer will be selecting for payment*.

The applicant intends to opt out of the PID options and will pay the full fee amount at the time of building permit. The fee schedule indicates a full fee amount of $3,372 per 1,000 square feet of building floor area. The total fee amount for the 42,374-square-foot school building is $142,885.

Reimbursable Improvements

There are no apparent reimbursable improvements programmed in the general vicinity of this site.

CONCLUSIONS AND RECOMMENDATIONS

Trip Generation

- During the morning peak hour, the site is projected to have approximately 497 vehicles entering and 432 vehicles exiting the site. During the afternoon peak hour of the school, approximately 303 vehicles would enter and 368 vehicles would exit the site.

Projected Levels of Service

- Please refer to the level of service section above for analysis results. Table 4 provides details on the internal neighborhood street intersections with results showing levels of service E or F with the addition of the school.

Traffic Circulation

- Figure 2 shows the circulation plan for the proposed school, based on 772 students. The site circulation plan allows for the projected 4,269 feet of high demand queueing.

Recommendations

Table 3: Recommended Improvements

Item #	Location	Improvement	Timing
1	Pinyon Jay Drive	Crosswalk striping and signing	With the construction of the school
2	Hames Drive	Crosswalk striping and signing	With the construction of the school
3	Hames Drive Pinyon Jay Drive	School zone speed reduction signage	With the construction of the school
4	Meadowbrook Parkway/Pinyon Jay Drive	EB right-turn lane	With the construction of the school
5	Meadowbrook Parkway/Riverside Parkway	SB right-turn lane	With the construction of the school
6	Constitution Avenue/Meadowbrook Parkway	Signalize	Should be monitored to identify when needed
7	Meadowbrook Parkway/Marksheffel Road	Recommend ROW to be reserved (and areas needed for potential widenitng for dual left free of site improvements that would be expensive to relocate) with adjacent development projects on the NE and SE corners.	With the construction of the Villas at Claremont
8	Meadowbrook Parkway/Marksheffel Road	Potential future widening for westbound dual lefts	Dependent on side street queuing and levels of service
9	per CDOT - US 24/Brookings Intersection	Closure of intersection - EPC will place a condition that the applicatnt work with CDOT on the details of the closure as part of the access permit process	CDOT has indicated a requirement to close this intersections upon school opening

Source: LSC Transportation Consultants, Inc.

- CDOT has indicated a requirement to close the US Highway 24/Brookings intersection with the school opening. It is our understanding that El Paso County will place a condition of approval requiring the applicant to work with CDOT on the details of the closure as part of the access permit process.

- The intersection of Meadowbrook Parkway/Pinyon Jay Drive will require an eastbound right-turn lane with the development of the school, based on ECM criteria.
- The intersection of Meadowbrook Parkway/Riverwalk Parkway may need striping added to formally define a southbound right-turn lane. Please refer to the "Neighborhood Intersections" section of the report for details.
- The intersection of Constitution Avenue/Meadowbrook Parkway should be monitored to determine when signalization is required.
- In the future, the intersection of Meadowbrook Parkway/Marksheffel Road may require westbound dual left-turn lanes, due to the closure of US Hwy 24/Brookings Drive access/intersection. CDOT has indicated a requirement to close the US Highway 24/Brookings intersection with the school opening.
- Appropriate school signs, per the discussion above, are recommended. Please refer to the section above, Figure 19, and the striping/signing plans prepared by Merrick & Co.

* * * * *

Please contact me if you have any questions regarding this report.

Respectfully Submitted,

LSC TRANSPORTATION CONSULTANTS, INC.

By: Jeffrey C. Hodsdon, P.E.
Principal

CRG:jas

Enclosures: Figures 1-20
Counts
Level of Service Reports
Drive Time Analysis
Census Data
MSTA School Traffic Calculations
A copy of an approved deviation for detached sidewalks
A copy of an approved deviation for removing mid-block crossing

Figures

TRANSPORTATION
CONSULTANTS, INC.

LSC TRANSPORTATION CONSULTANTS, INC.

Figure 1

Vicinity Map

Mountain View Academy (LSC # 204140)

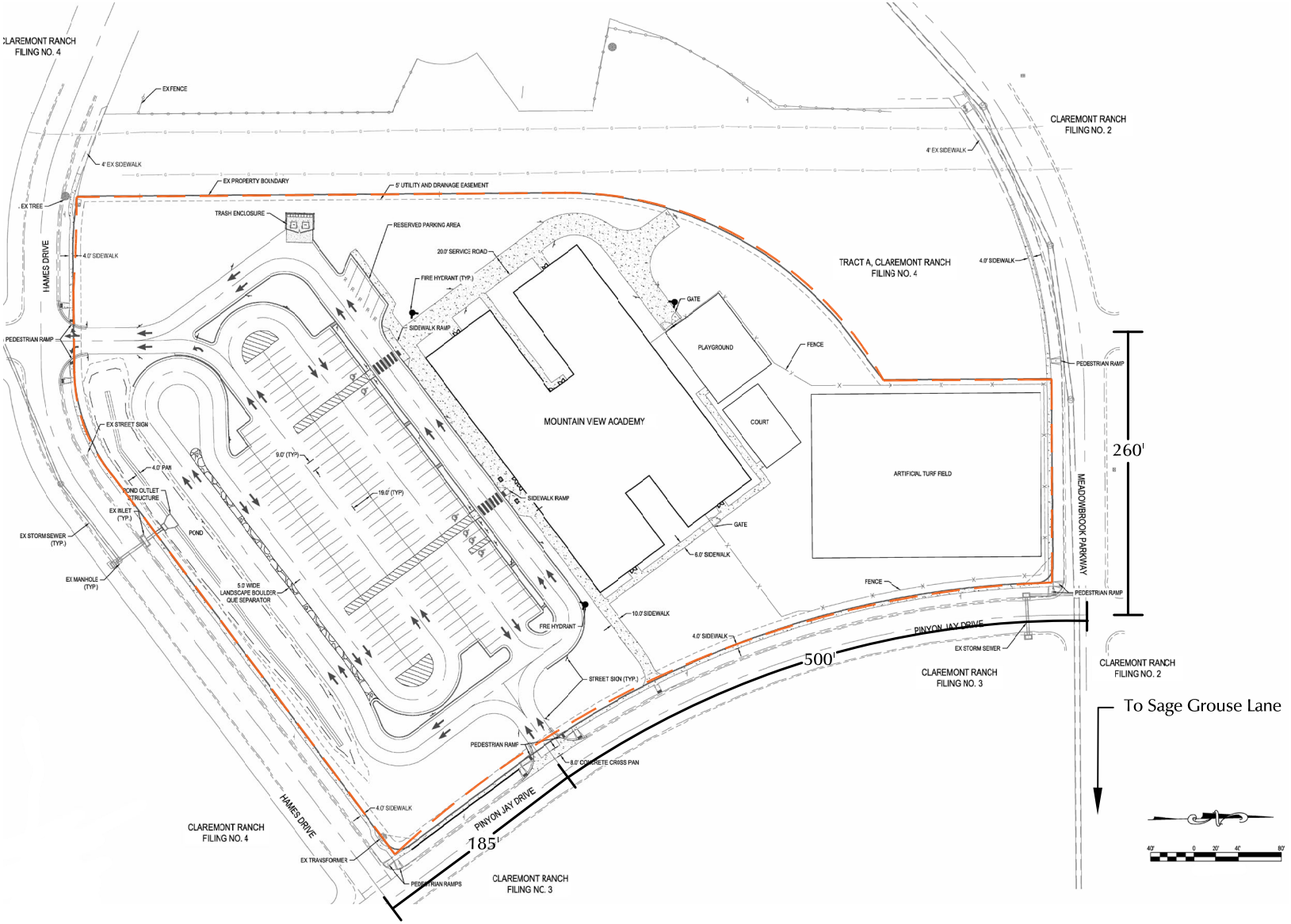


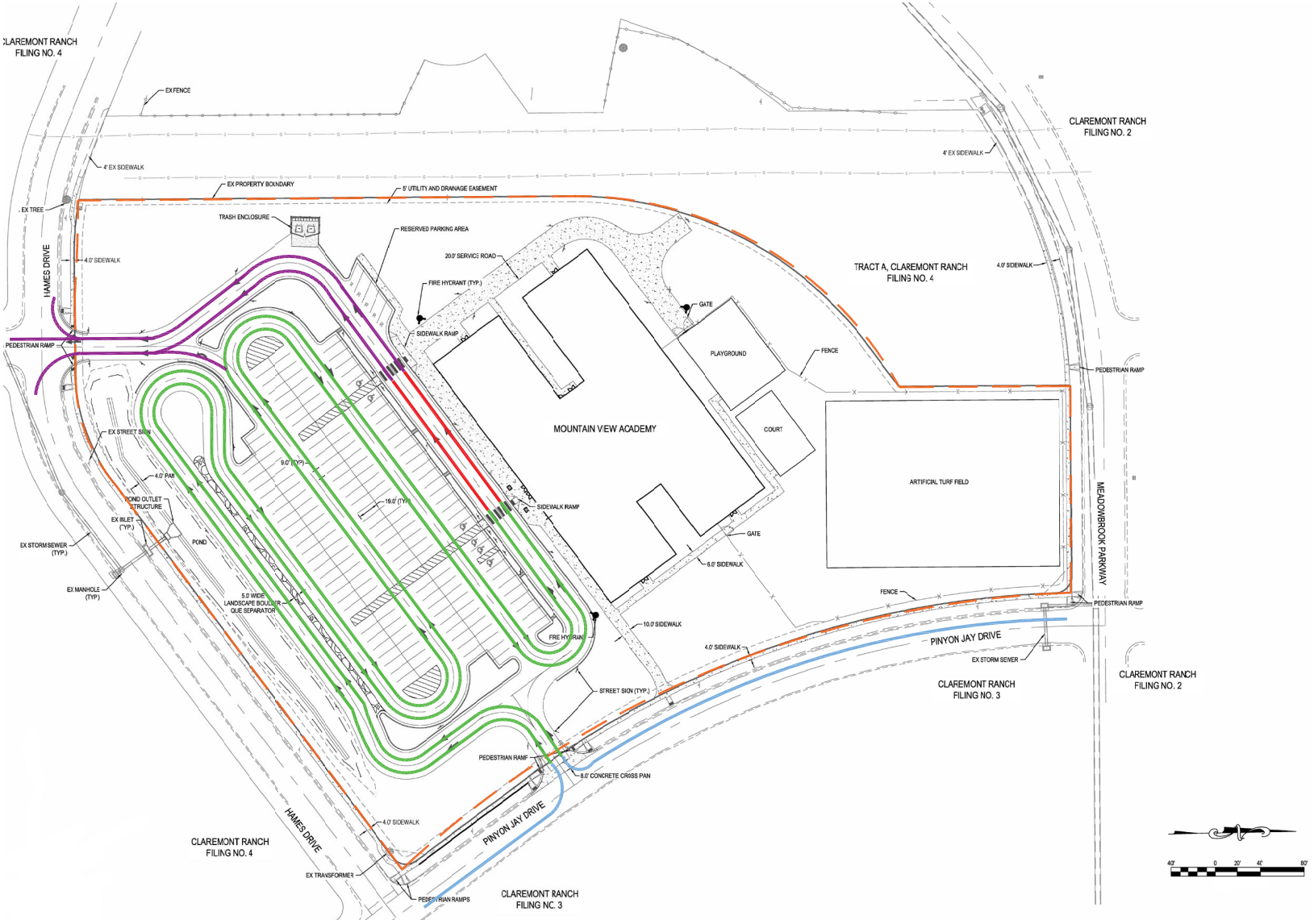
Figure 2

Site Plan

Mountain View Academy (LSC # 204140)

TRANSPORTATION CONSULTANTS, INC.

Note: Not to Scale



= Entering Path
= Drop-Off/Pick-up Zone
= Stacking
= Exiting Path

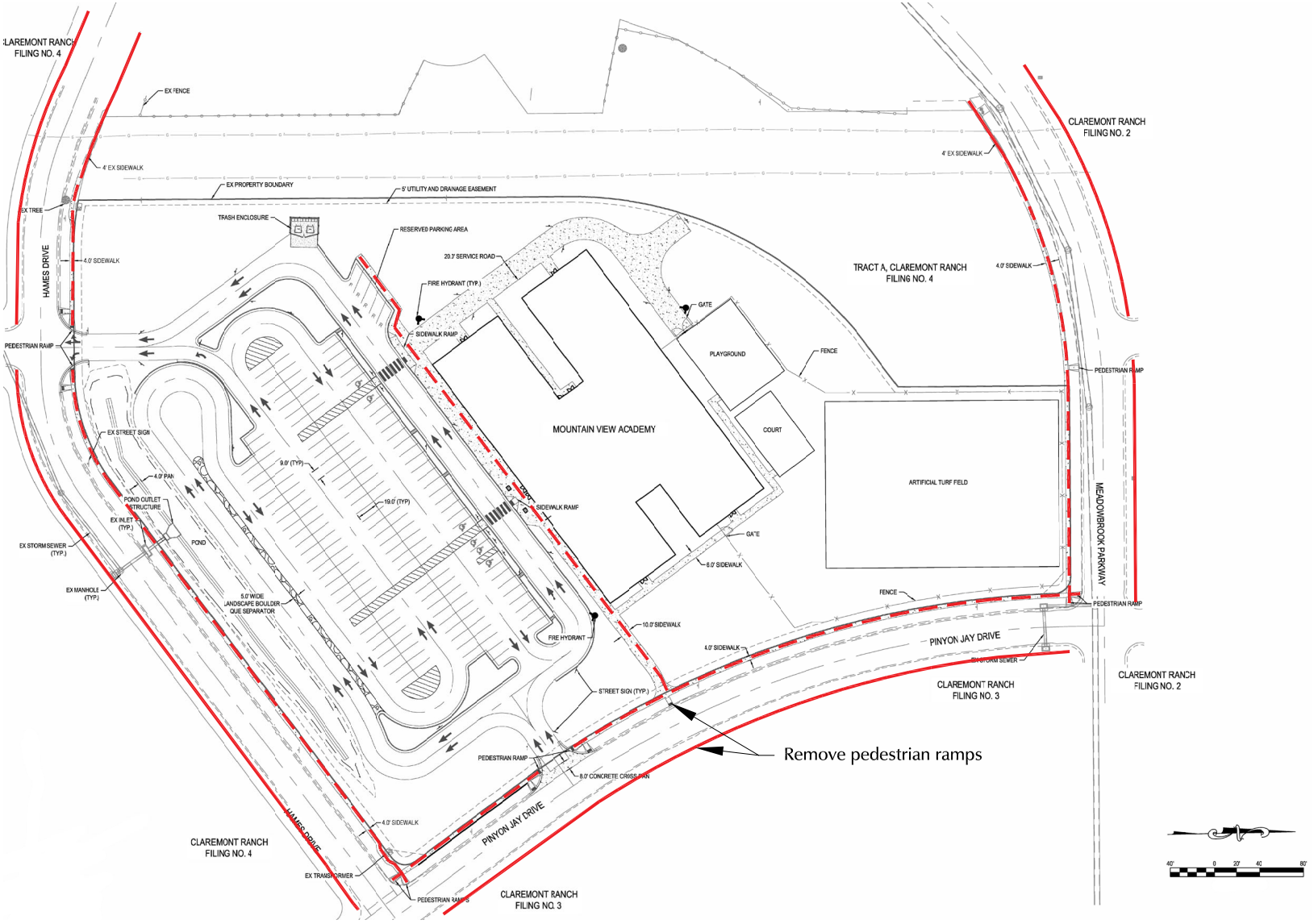
TRANSPORTATION CONSULTANTS, INC.

Note: Not to Scale

Figure 3

Circulation Plan

Mountain View Academy (LSC # 204140)



TRANSPORTATION CONSULTANTS, INC.

Note: Not to Scale

Figure 4

Pedestrian and Bicycle Plan

Mountain View Academy (LSC # 204140)

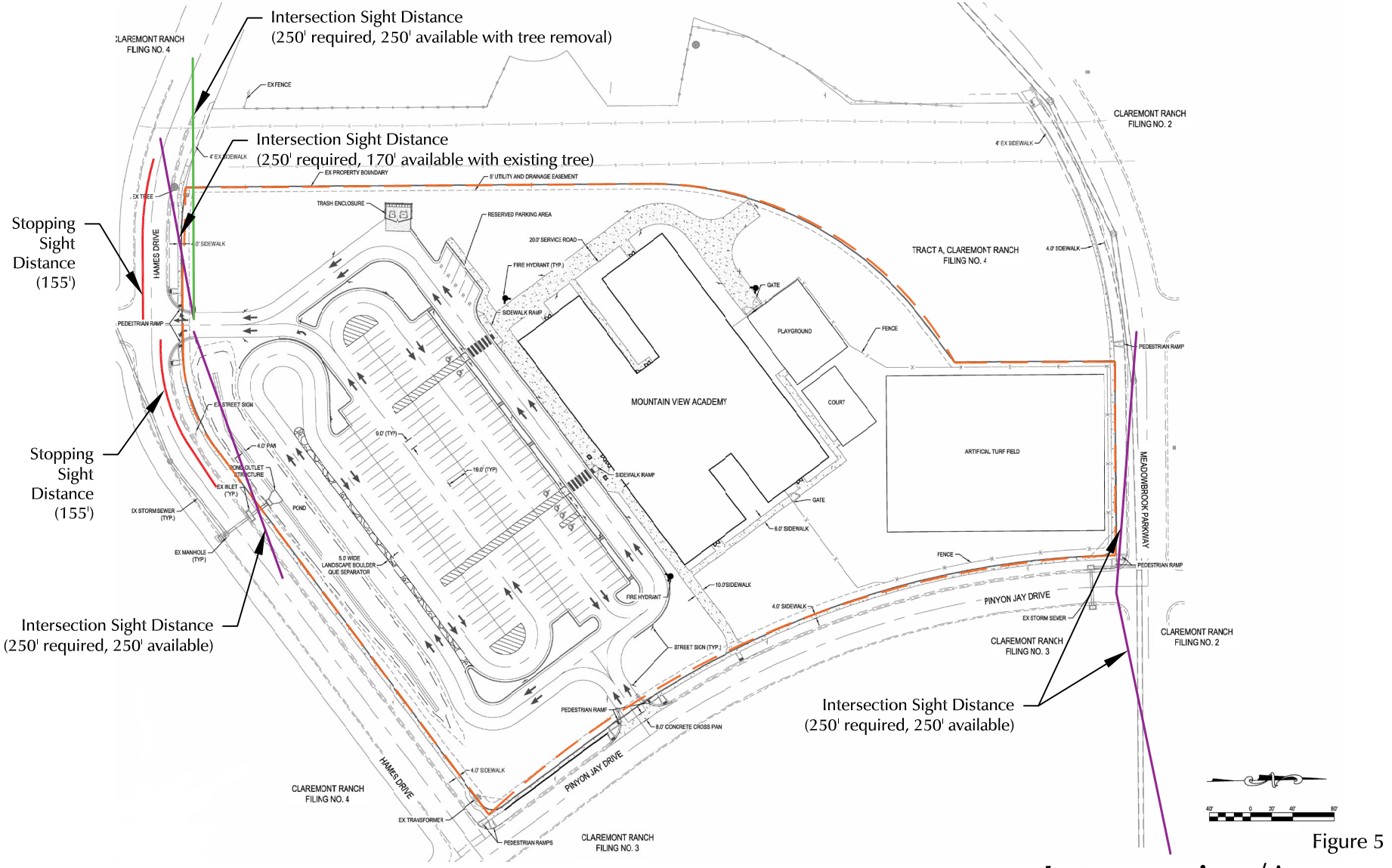


Figure 5

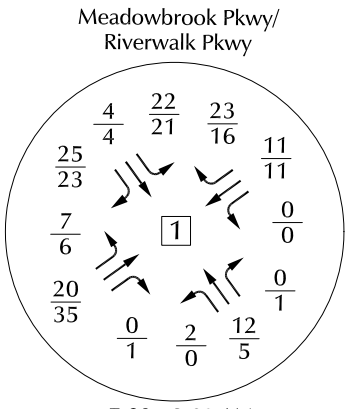
Intersection/Access Sight Distance Analysis

Mountain View Academy (LSC # 204140)

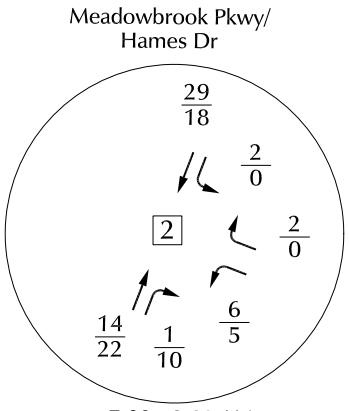
= Required Stopping Sight Distance
= Availabe Intersection Sight Distance
= Availabe Intersection Sight Distance with Tree Removal

TRANSPORTATION CONSULTANTS, INC.

Note: Not to Scale



7:00 - 8:00 AM
2:45 - 3:45 PM



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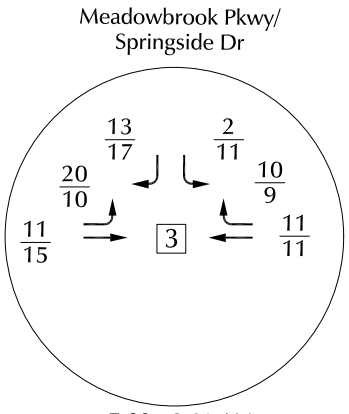
2:45 - 3:45 PM



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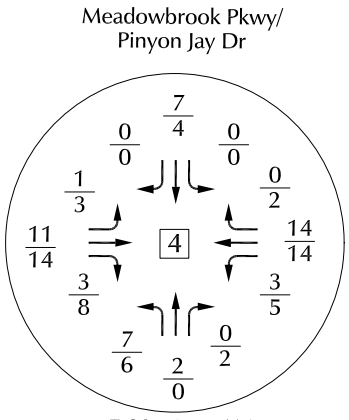
2:45 - 3:45 PM



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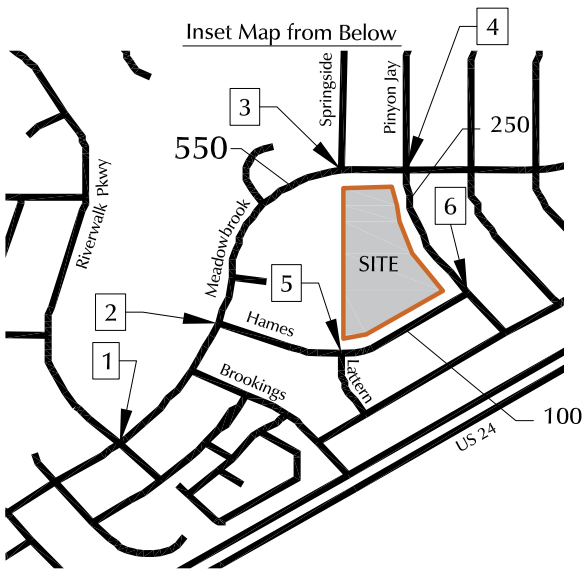

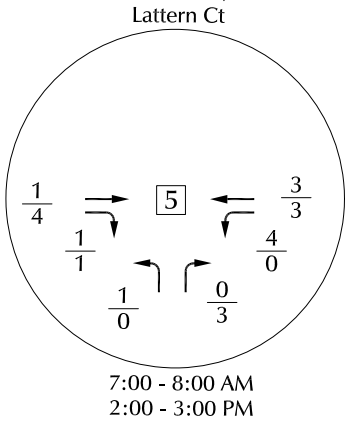

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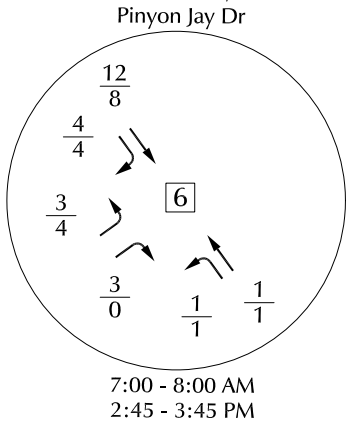
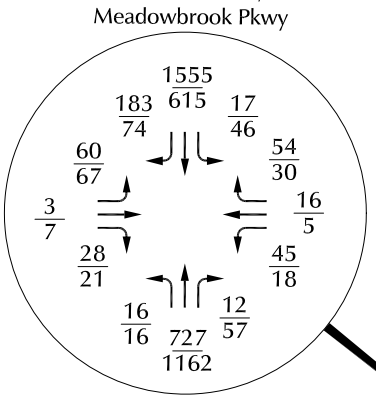
2:00 - 3:00 PM



7:00 - 8:00 AM
2:45 - 3:45 PM

7:00 - 8:00 AM
3:00 - 4:00 PM

7:00 - 8:00 AM
3:00 - 4:00 PM



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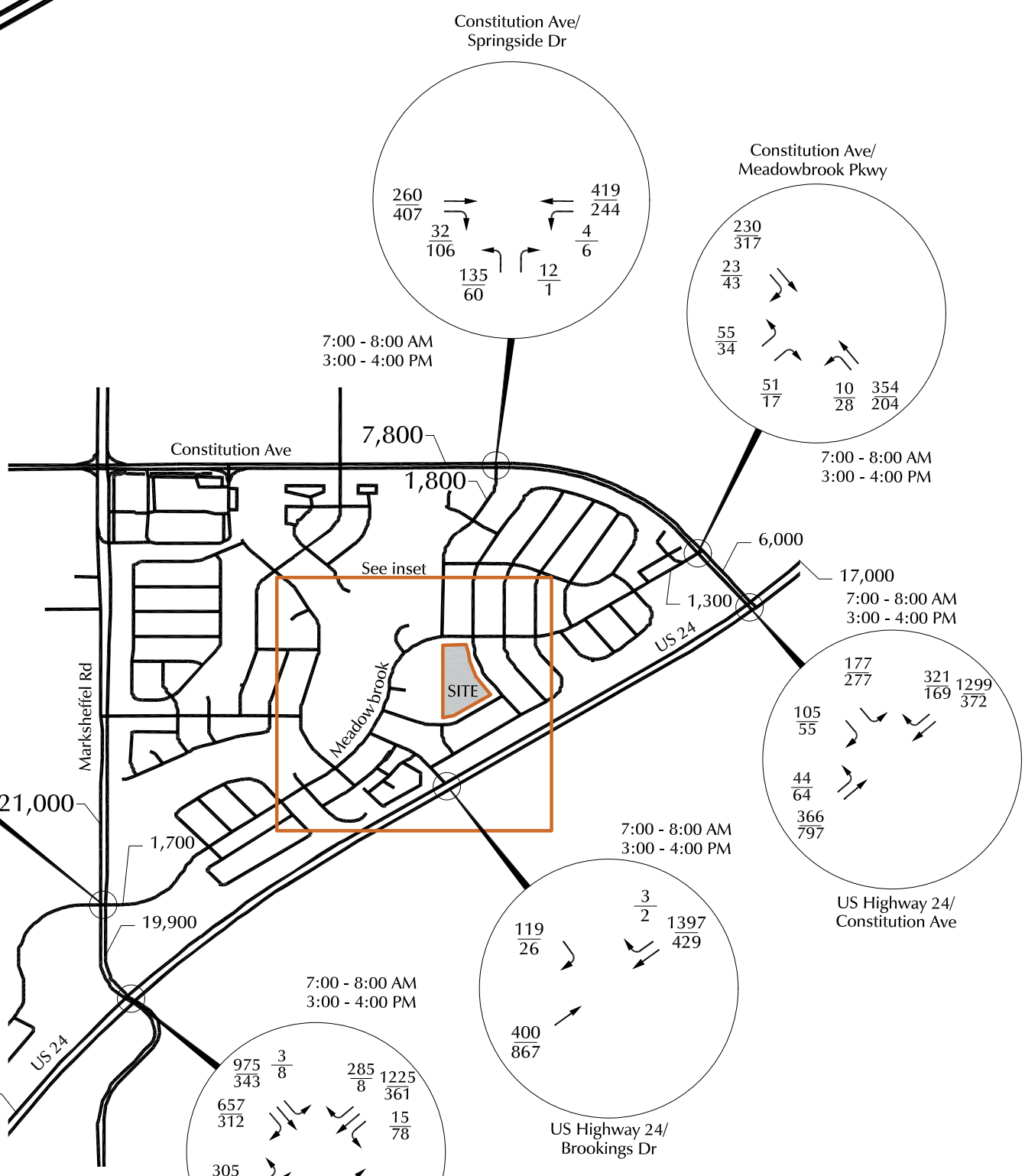
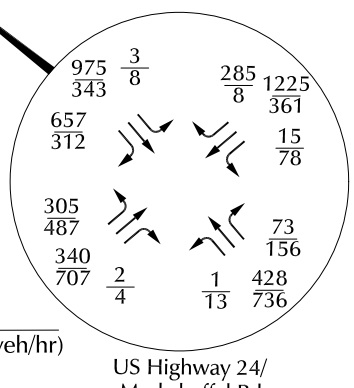


7:00 - 8:00 AM
3:00 - 4:00 PM

US Highway 24/
Constitution Ave

7:00 - 8:00 AM
3:00 - 4:00 PM

US Highway 24/
Brookings Dr



7:00 - 8:00 AM
3:00 - 4:00 PM

US Highway 24/
Marksheffel Rd

$$\frac{XX}{XX} = \frac{\text{AM Weekday Peak-Hour Traffic (veh/hr)}}{\text{PM School Weekday Peak-Hour Traffic (veh/hr)}}$$

XX,XXX = Average Daily Traffic Volumes (ADTs)

Based on counts by January 2020
Peak hour times noted for each intersection

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Figure 6

Existing Volume

Mountain View Academy (LSC # 204140)

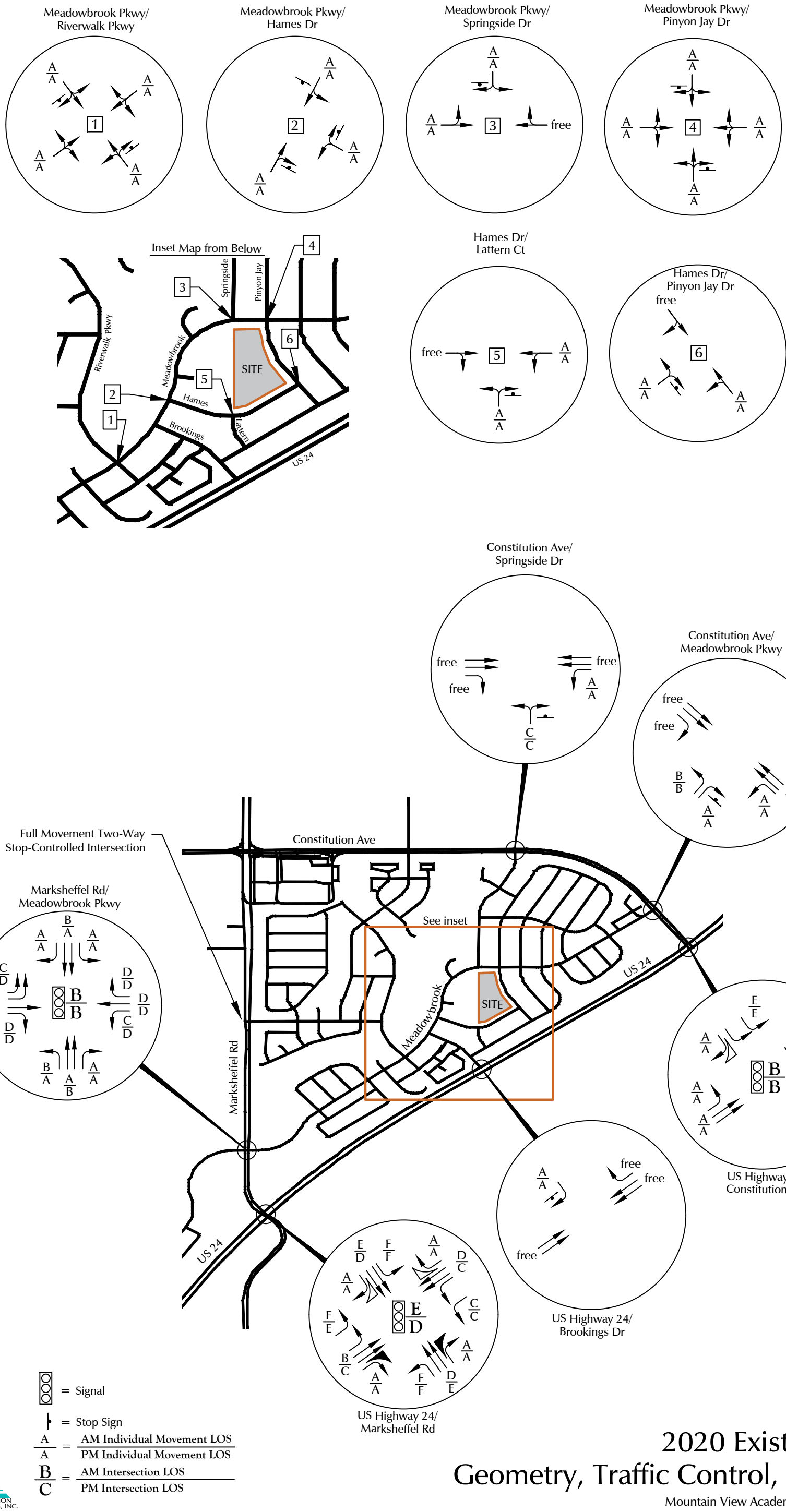
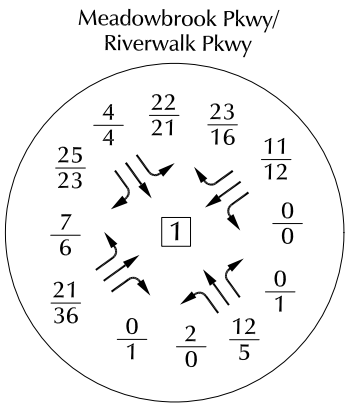
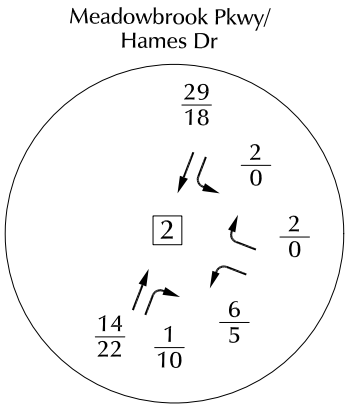


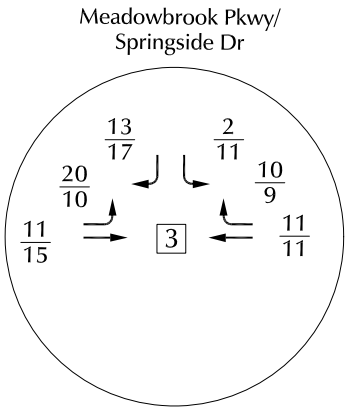
Figure 7

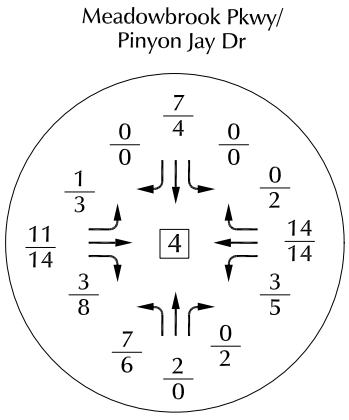
2020 Existing Lane Geometry, Traffic Control, and LOS

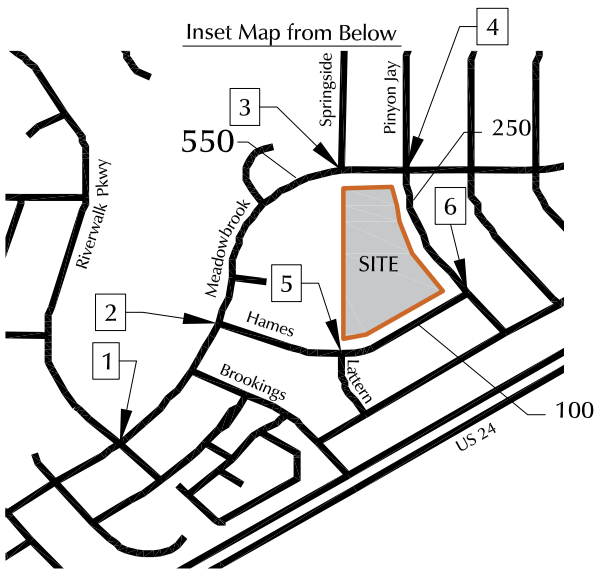
Mountain View Academy (LSC # 204140)

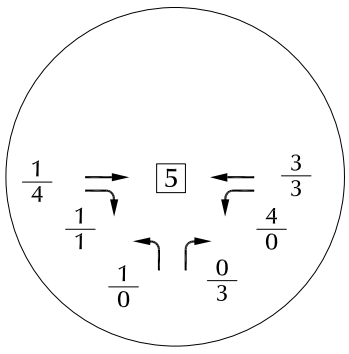


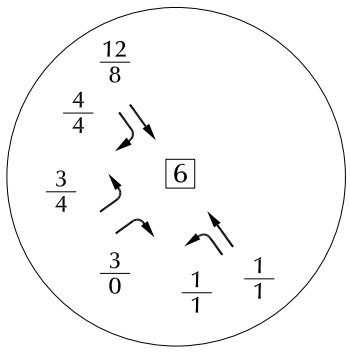


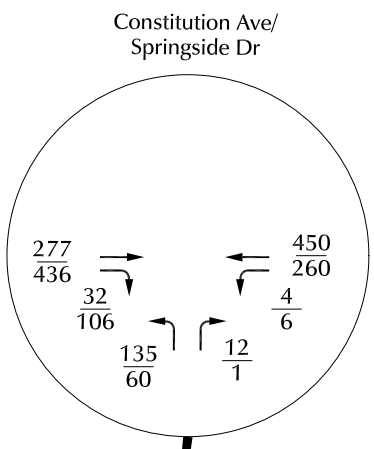


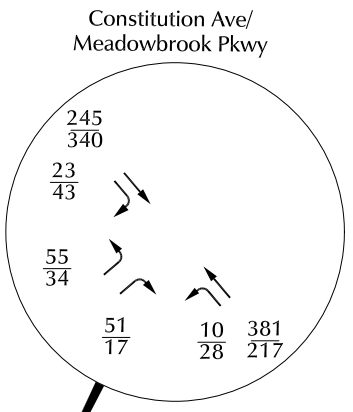


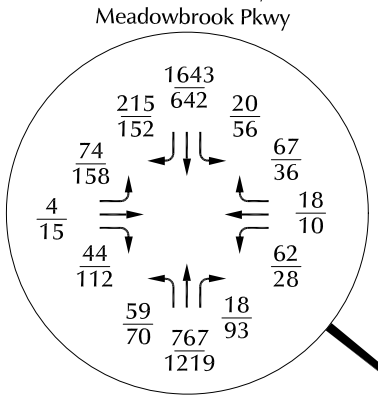


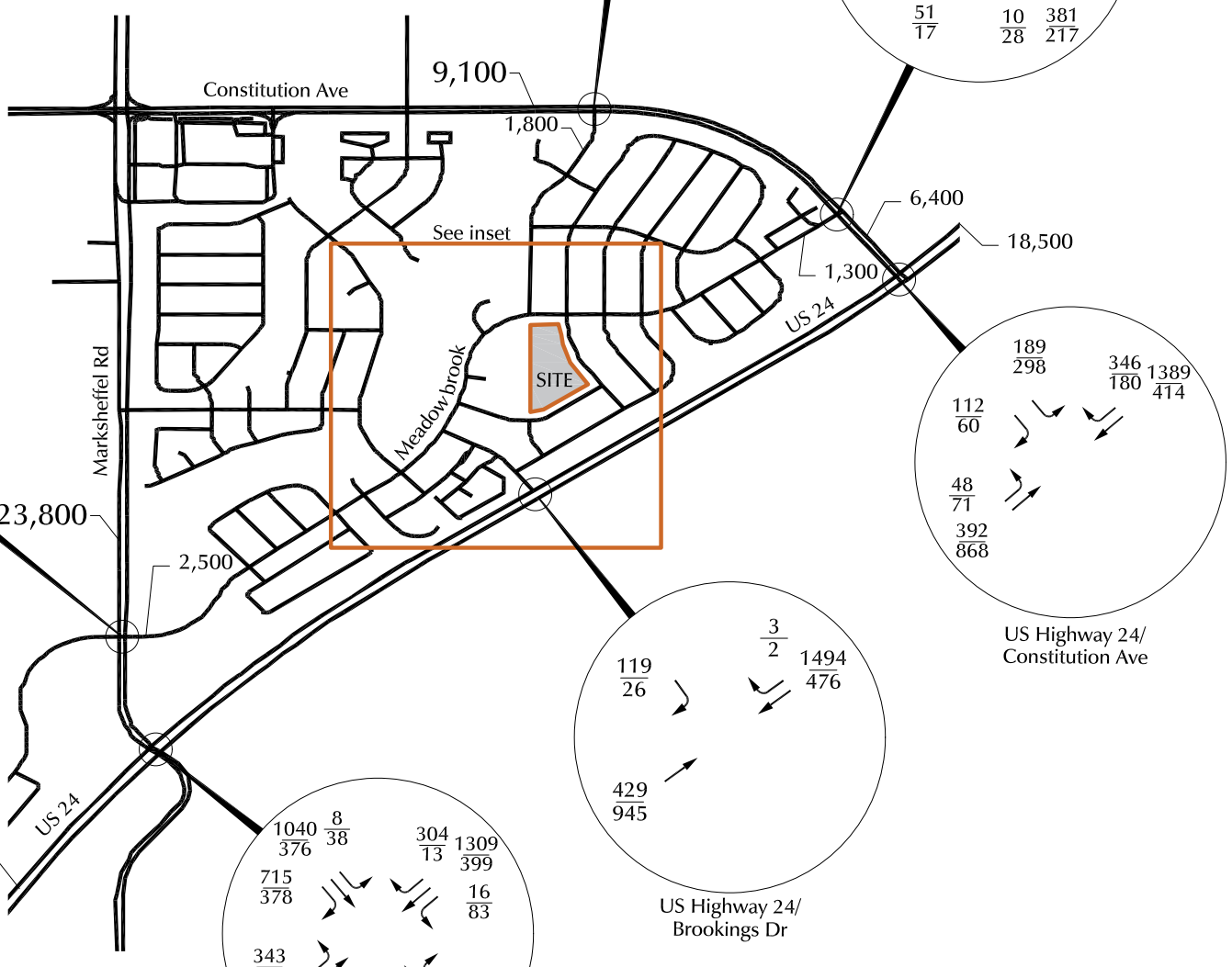






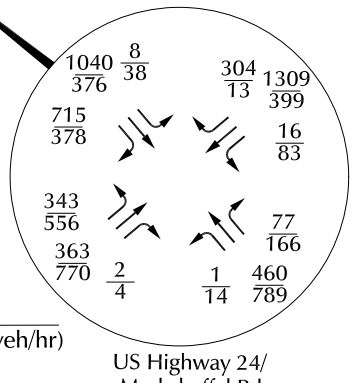






US Highway 24/
Constitution Ave

US Highway 24/
Brookings Dr



US Highway 24/
Marksheffel Rd

$$\frac{XX}{XX} = \frac{\text{AM Weekday Peak-Hour Traffic (veh/hr)}}{\text{PM School Weekday Peak-Hour Traffic (veh/hr)}}$$

XX,XXX = Average Daily Traffic Volumes (ADTs)

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Figure 8

Short-Term Background Volumes

Mountain View Academy (LSC # 204140)

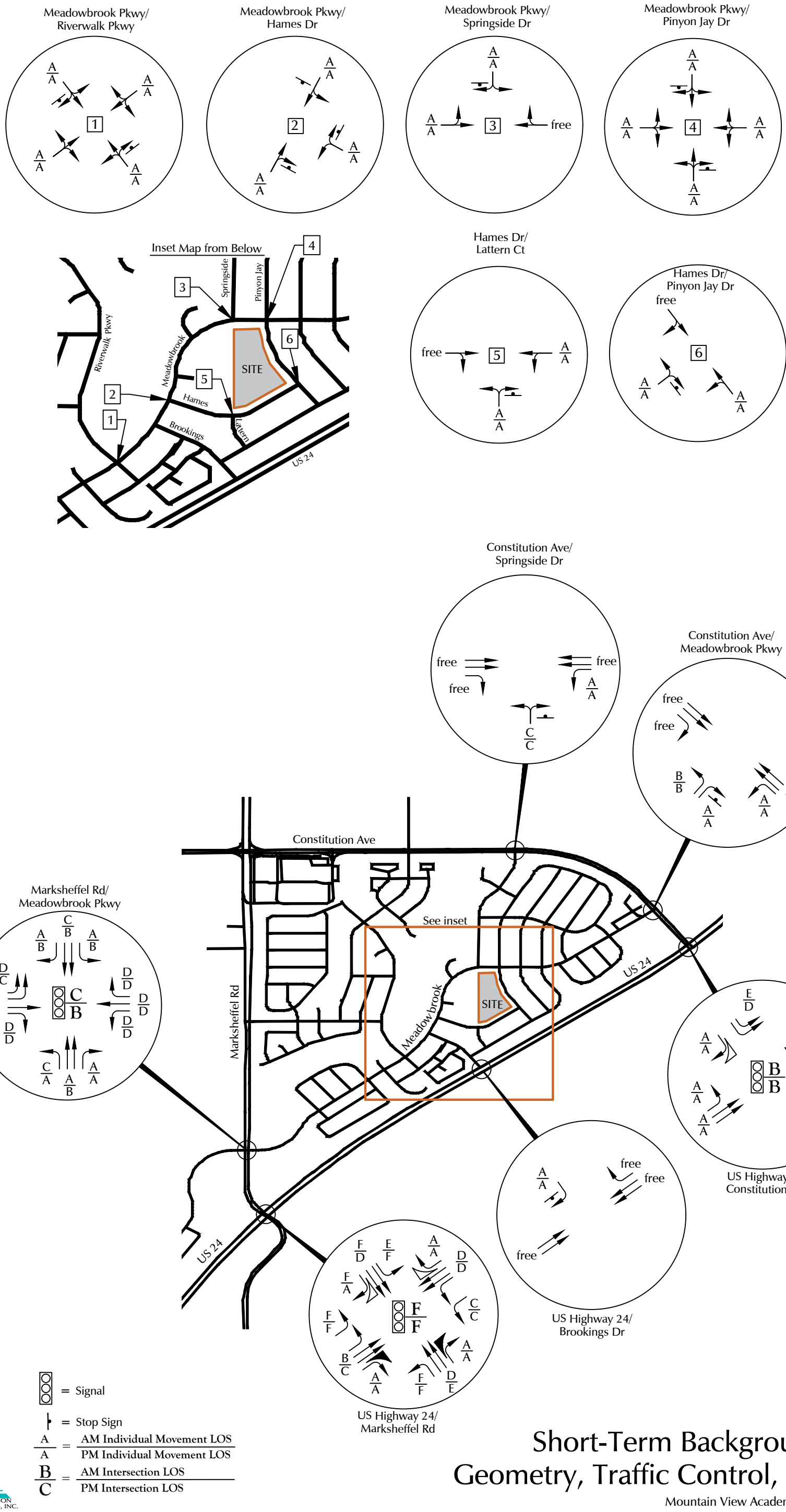
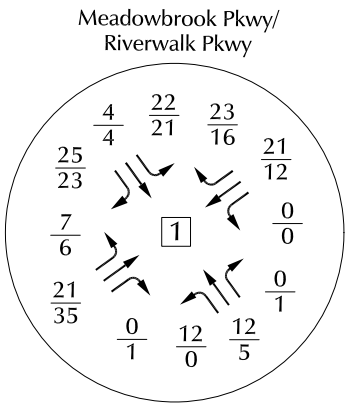
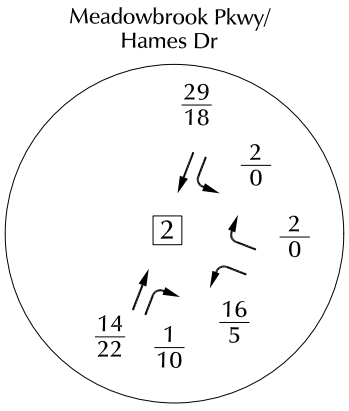


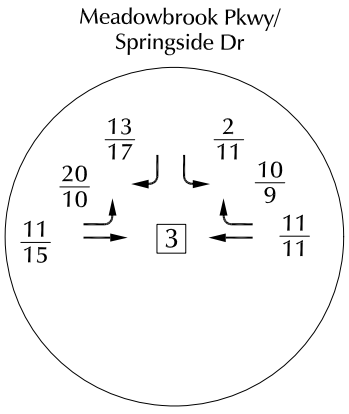
Figure 9

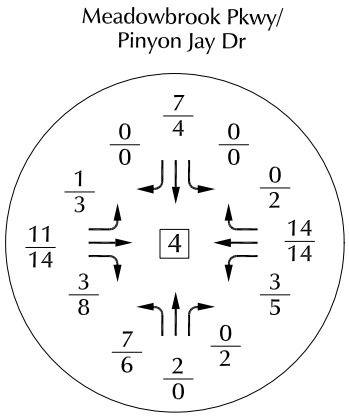
Short-Term Background Lane Geometry, Traffic Control, and LOS

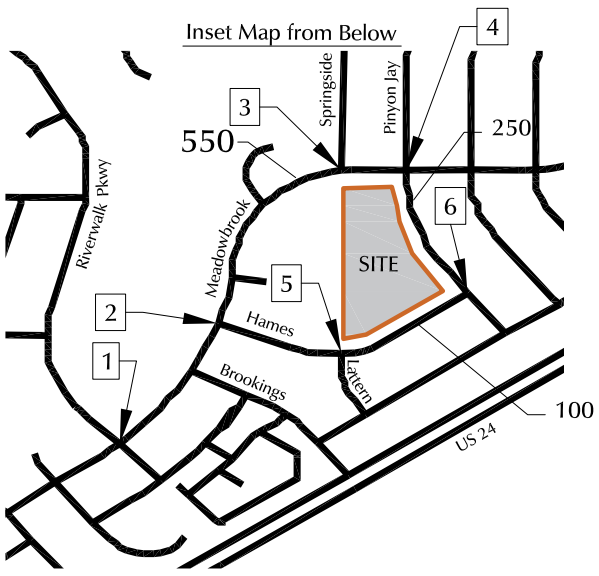
Mountain View Academy (LSC # 204140)

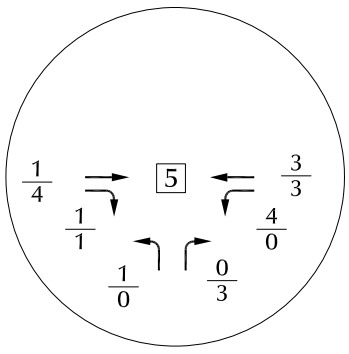


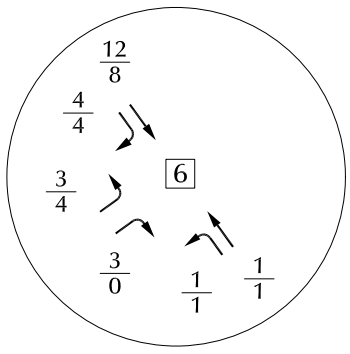


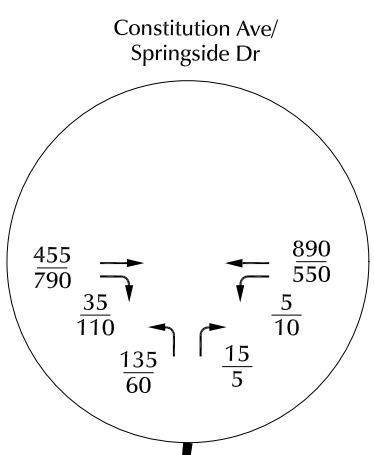


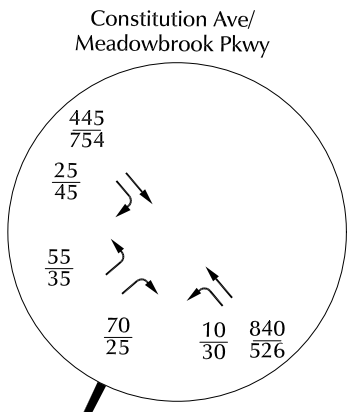


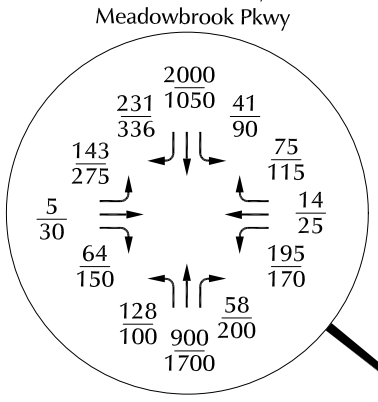


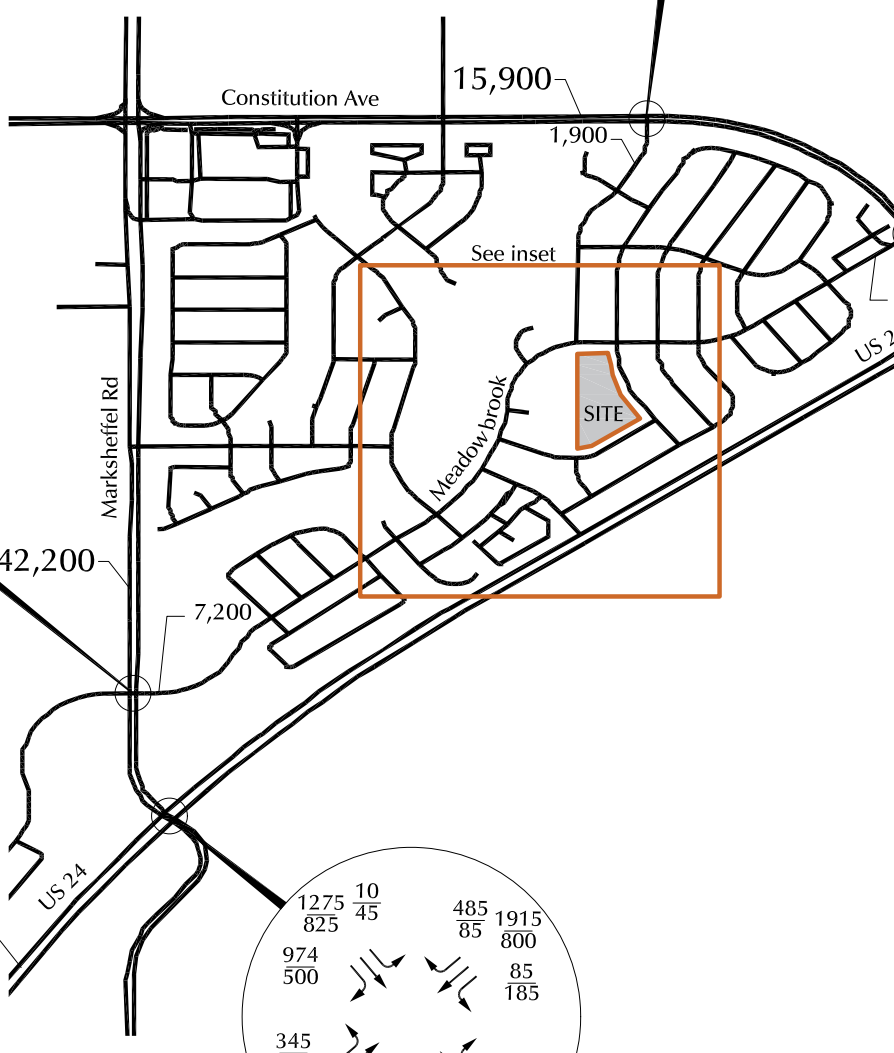


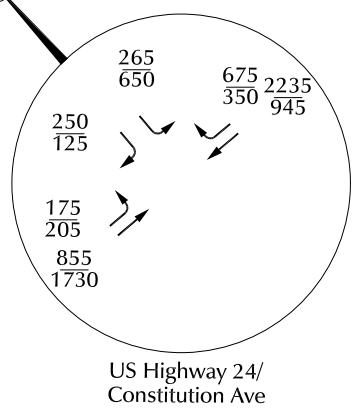




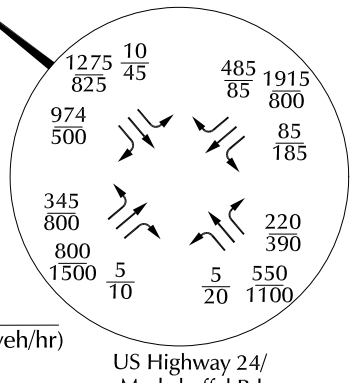








US Highway 24/
Constitution Ave



US Highway 24/
Marksheffel Rd

$$\frac{XX}{XX} = \frac{\text{AM Weekday Peak-Hour Traffic (veh/hr)}}{\text{PM School Weekday Peak-Hour Traffic (veh/hr)}}$$

XX,XXX = Average Daily Traffic Volumes (ADTs)

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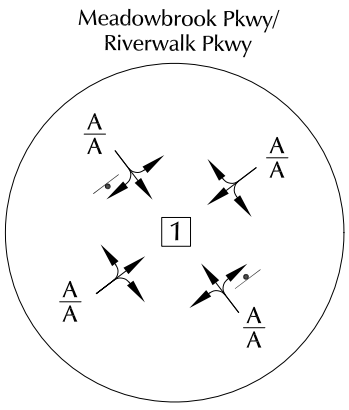
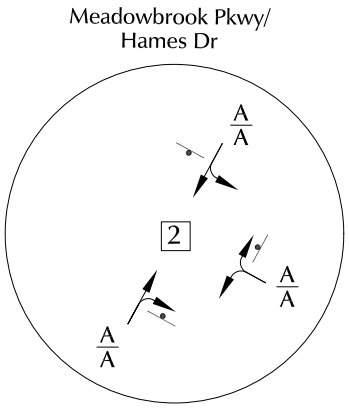
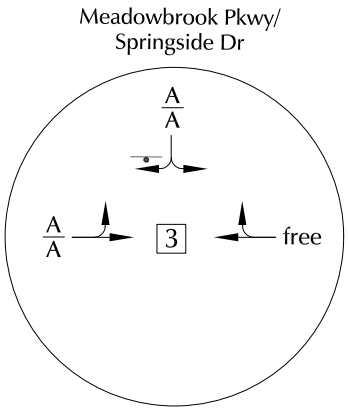
Figure 10

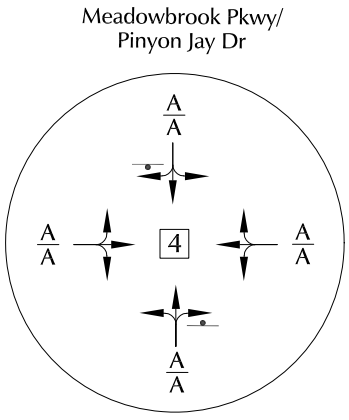
Long-Term Background Volumes

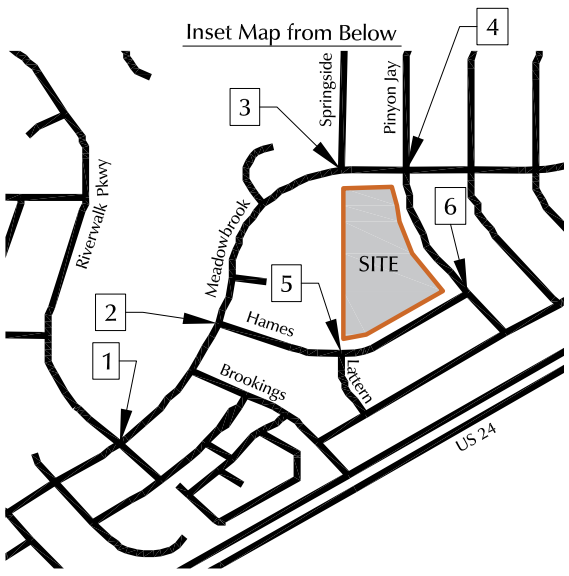
Mountain View Academy (LSC # 204140)

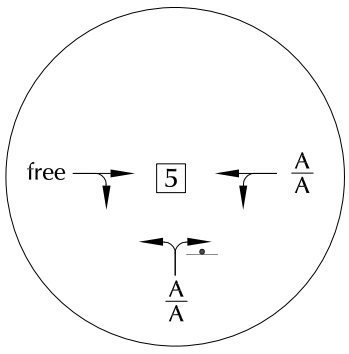


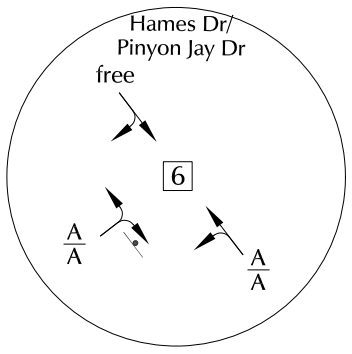


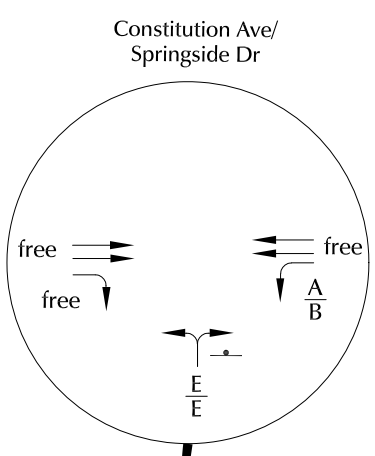


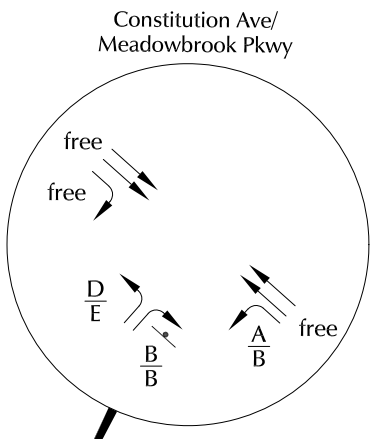


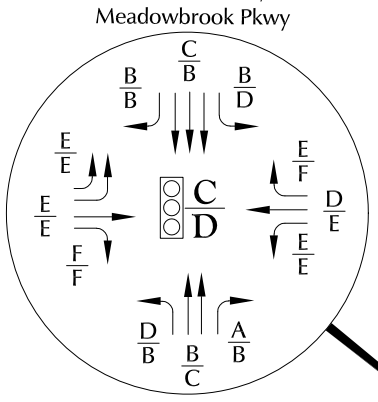


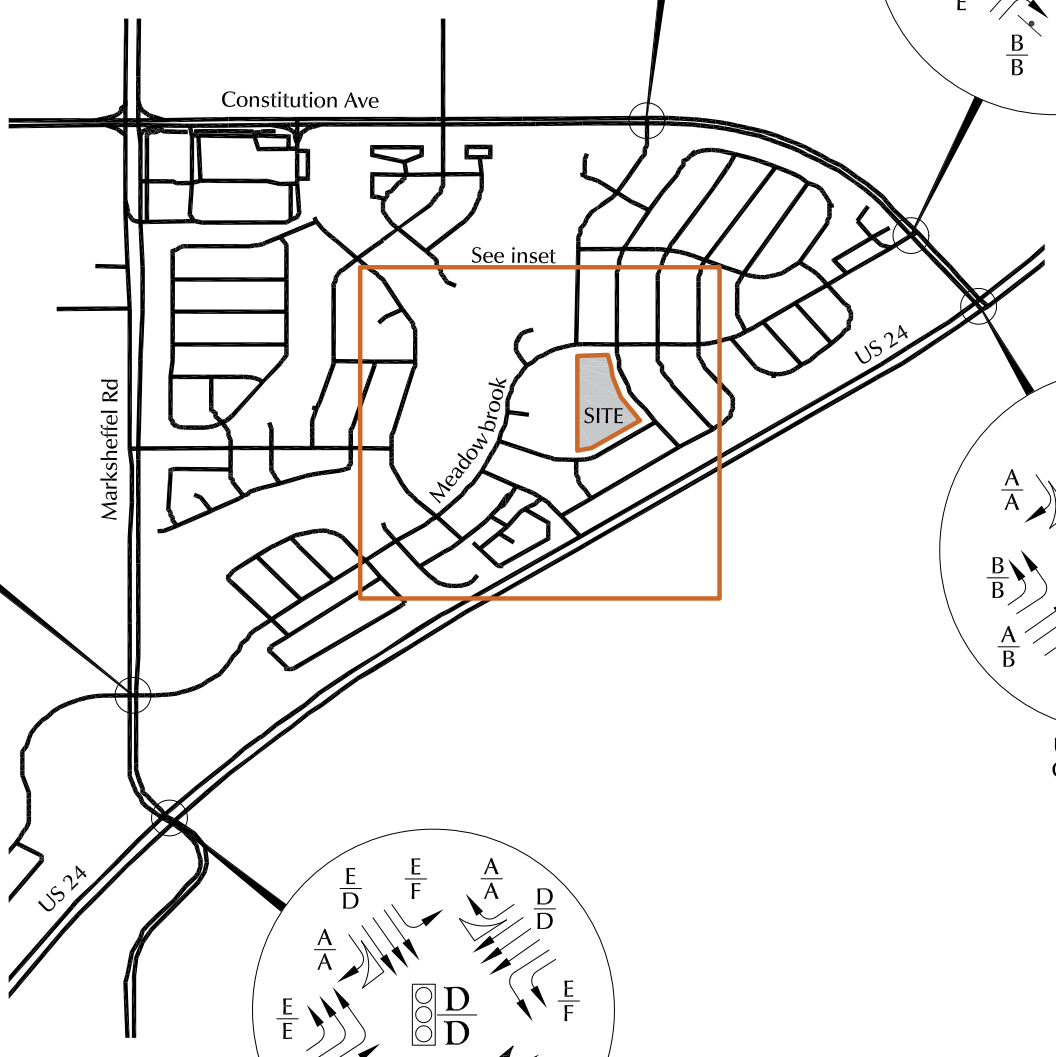


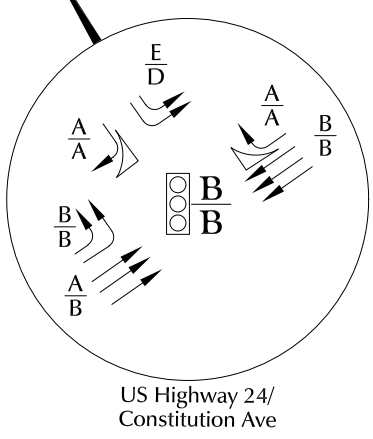




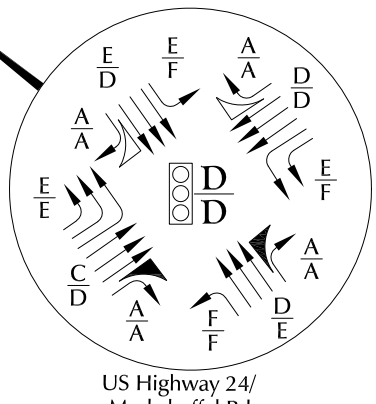








US Highway 24/
Constitution Ave



US Highway 24/
Marksheffel Rd

= Signal

= Stop Sign

$\frac{A}{A}$ = AM Individual Movement LOS / PM Individual Movement LOS

$\frac{B}{C}$ = AM Intersection LOS / PM Intersection LOS

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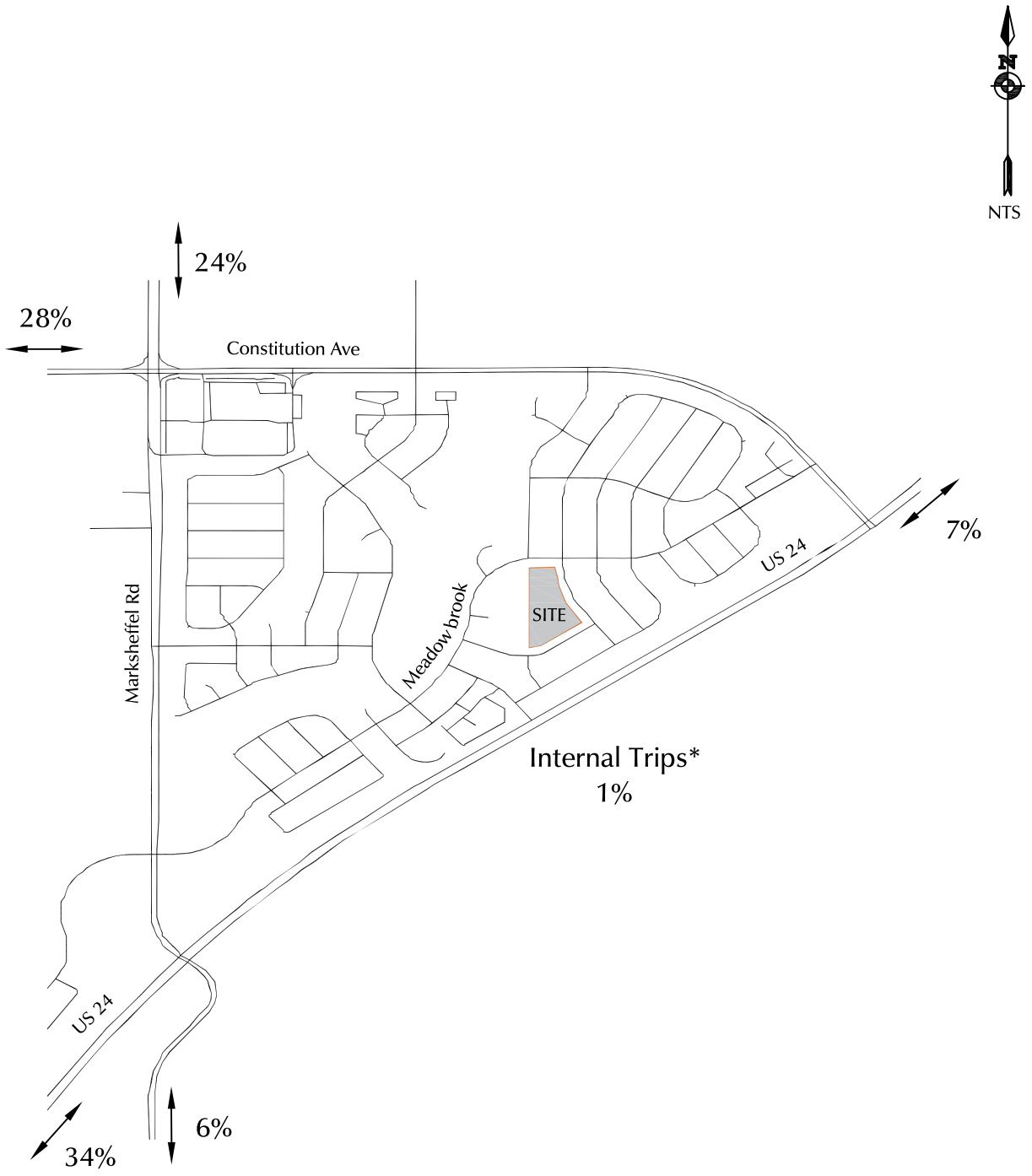
Figure 11

Long-Term Background Lane Geometry, Traffic Control, and LOS

Mountain View Academy (LSC # 204140)



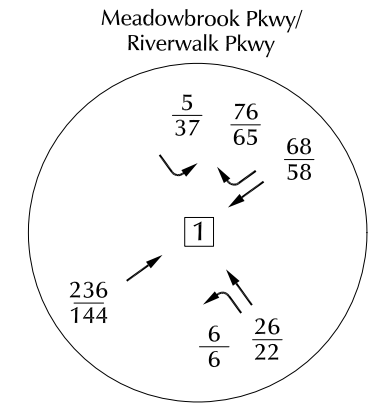
*Internal to the Claremont Ranch Neighborhood

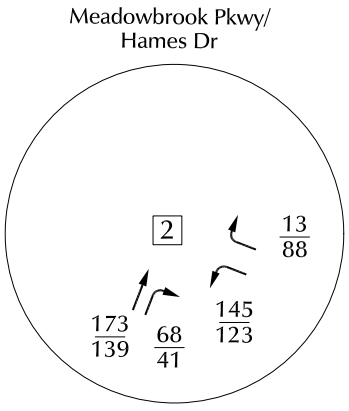
XX% = Percent Directional Distribution

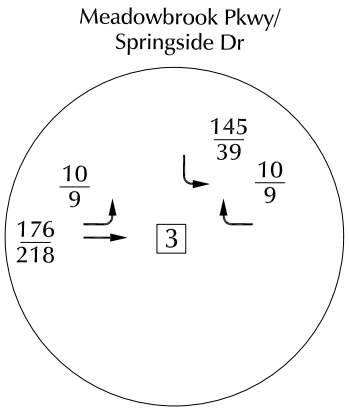
Figure 12

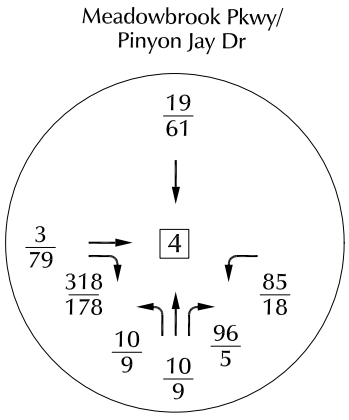
Directional Distribution

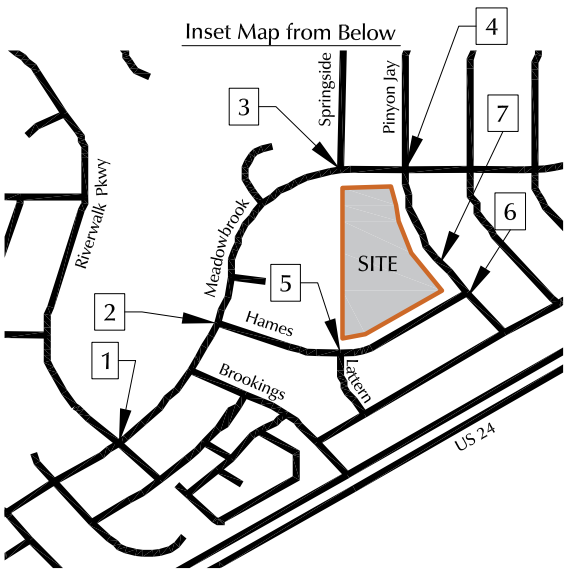
Mountain View Academy (LSC # 204140)

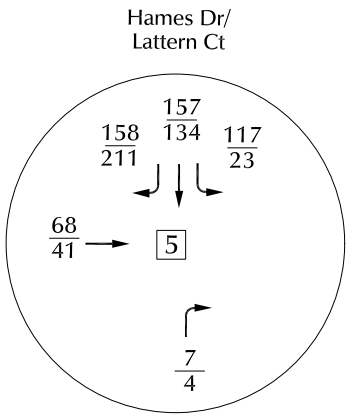


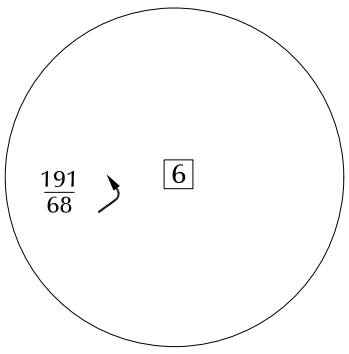


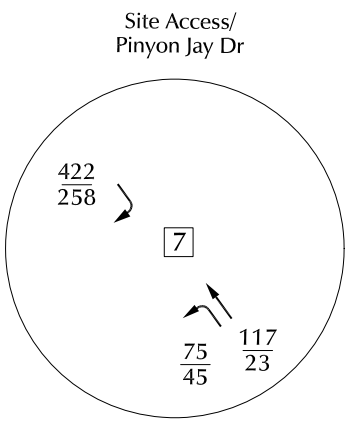


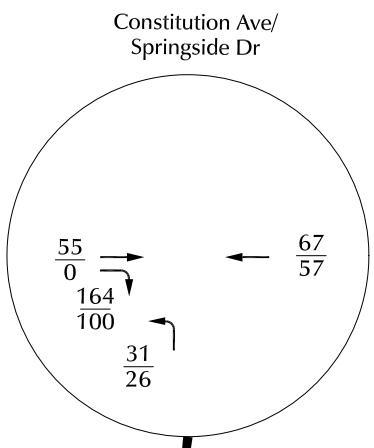


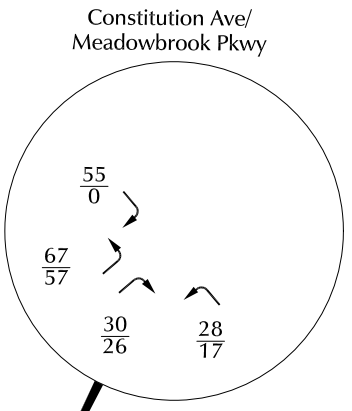


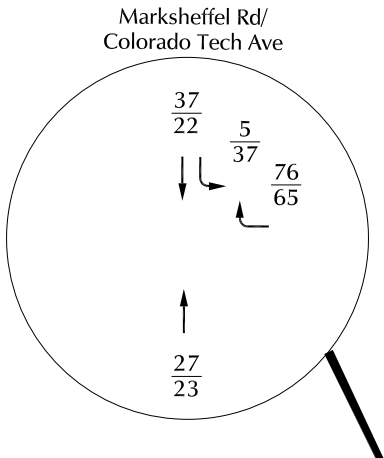


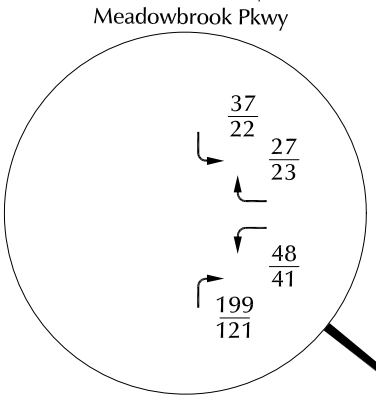


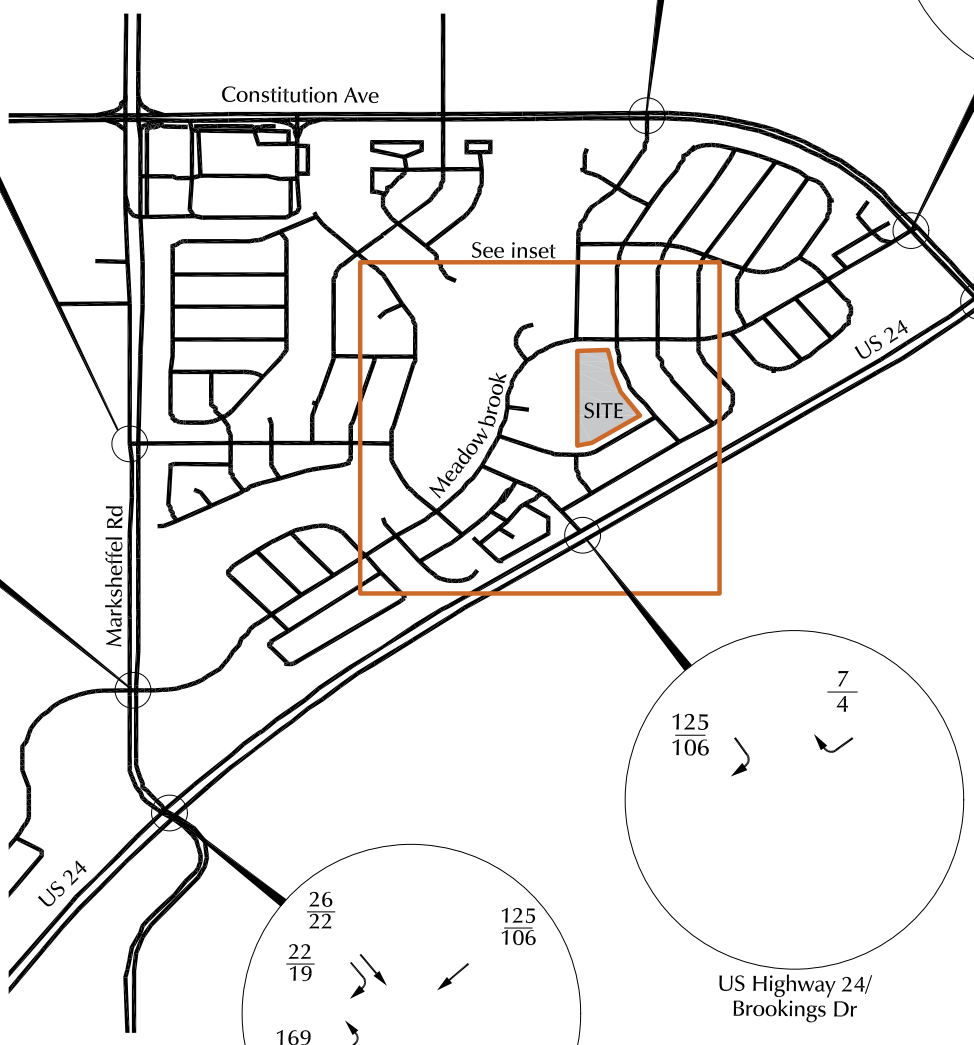


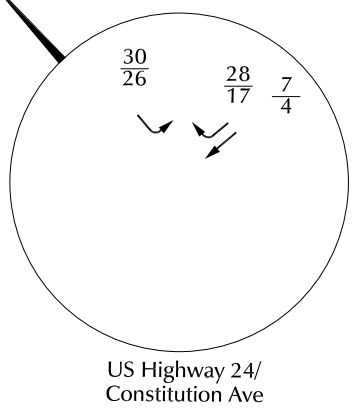






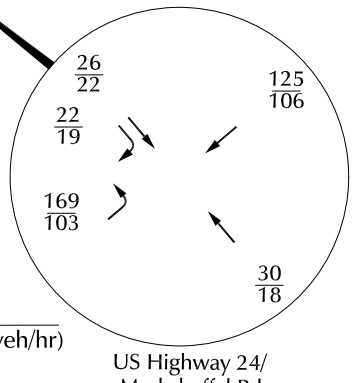






US Highway 24/
Constitution Ave

US Highway 24/
Brookings Dr



US Highway 24/
Marksheffel Rd

$$\frac{XX}{XX} = \frac{\text{AM Weekday Peak-Hour Traffic (veh/hr)}}{\text{PM School Weekday Peak-Hour Traffic (veh/hr)}}$$

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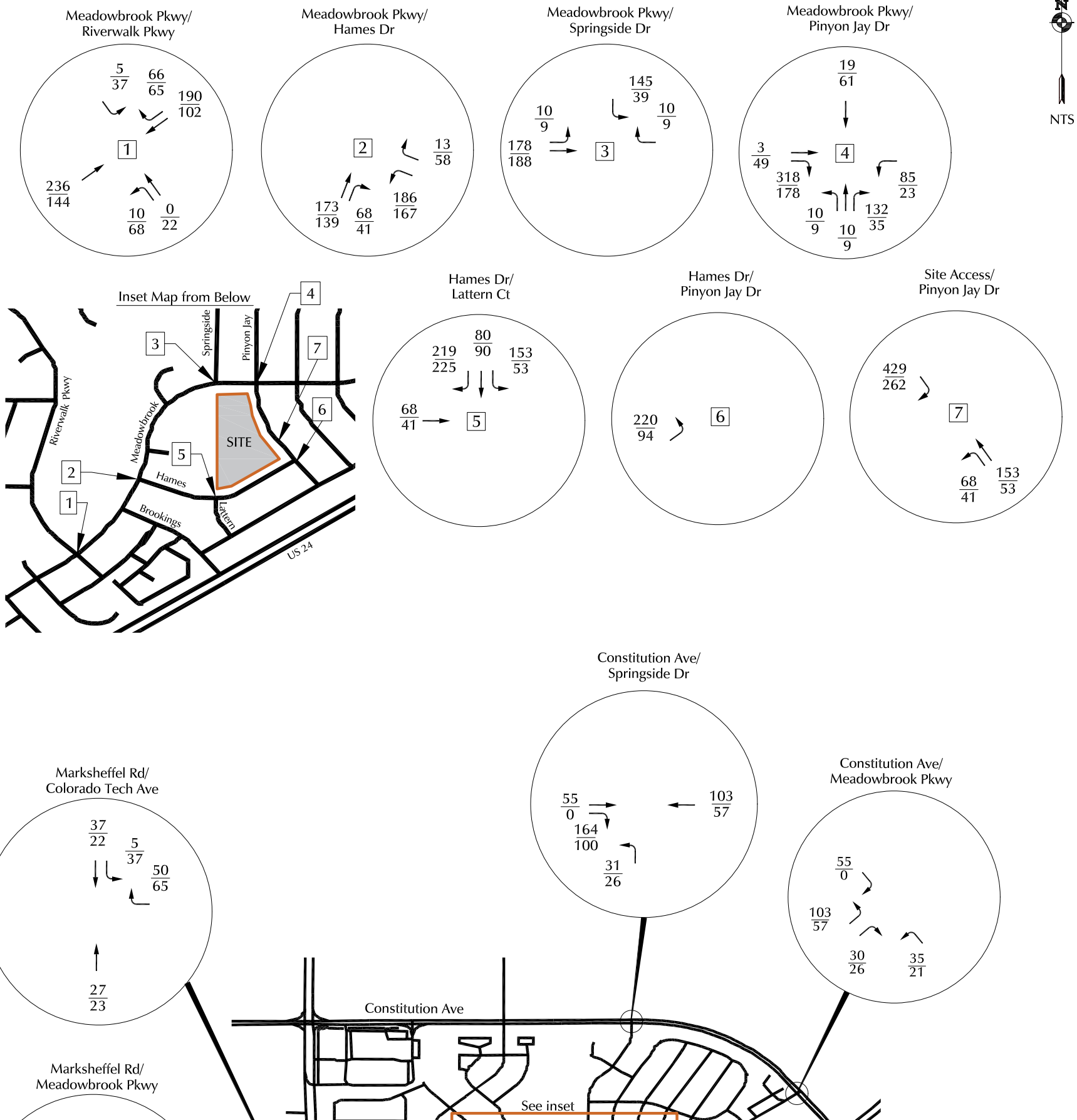
Figure 13

Short-Term Site Generated

Mountain View Academy (LSC # 204140)

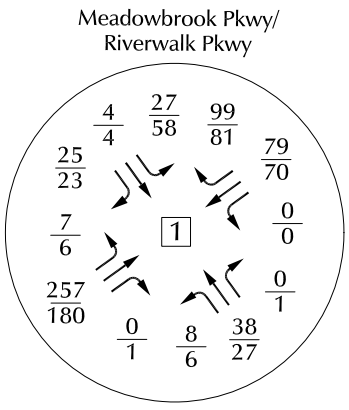


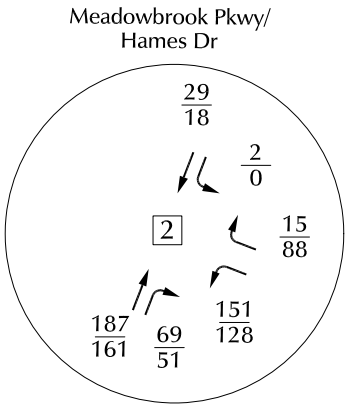
TRANSPORTATION CONSULTANTS, INC.

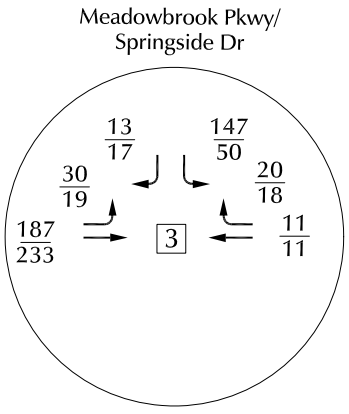
Figure 14

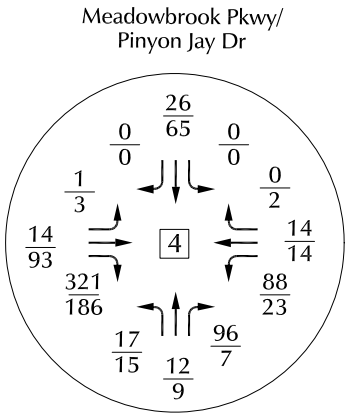
Long-Term Site Generated

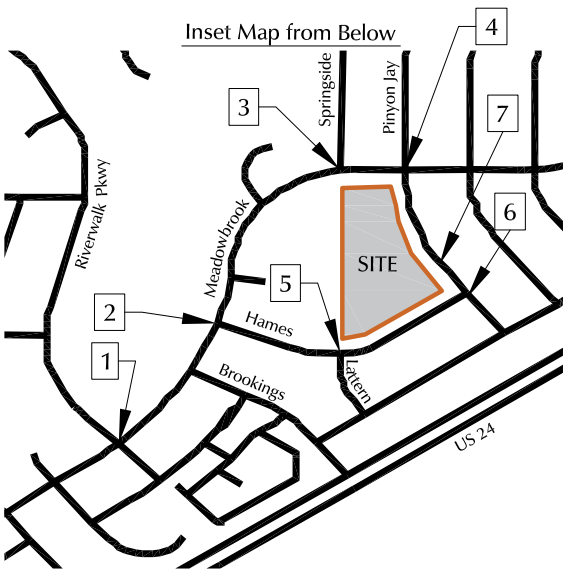
Mountain View Academy (LSC # 204140)

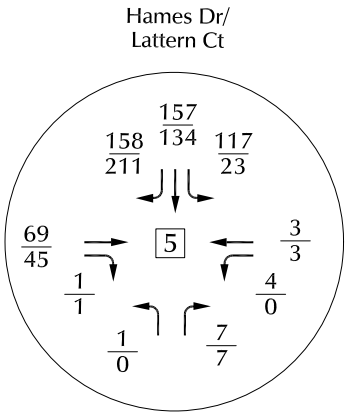


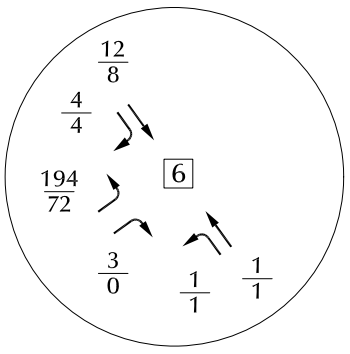


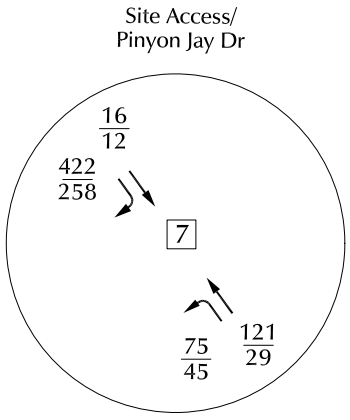


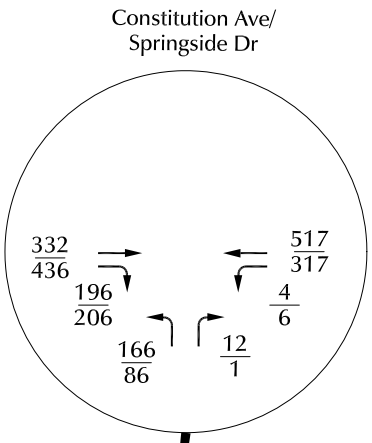


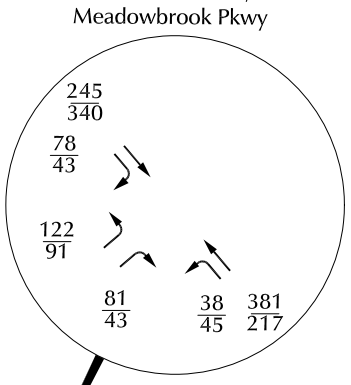


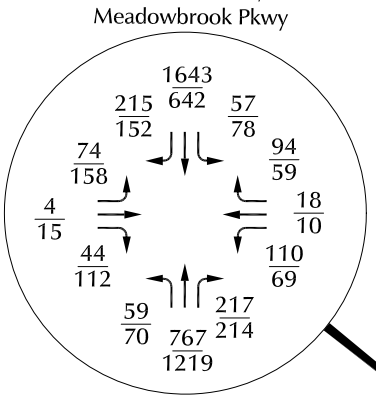


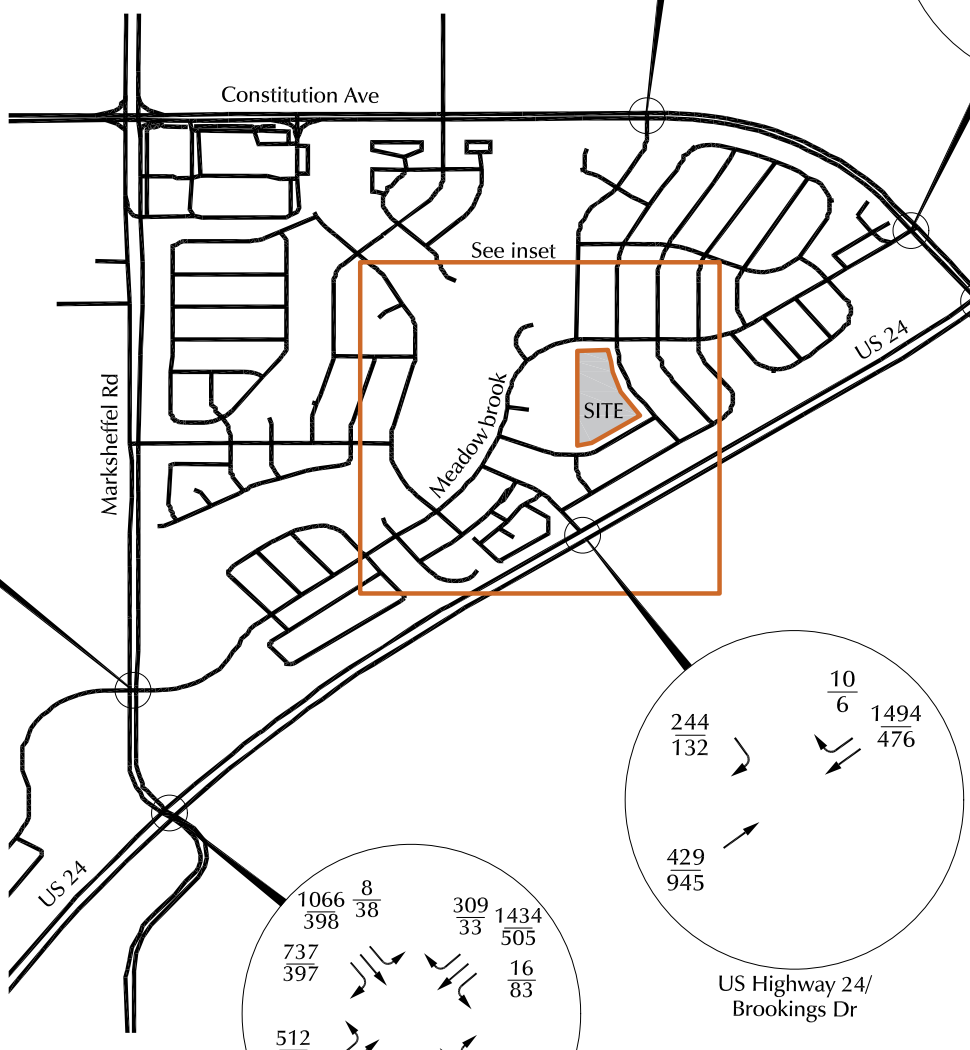


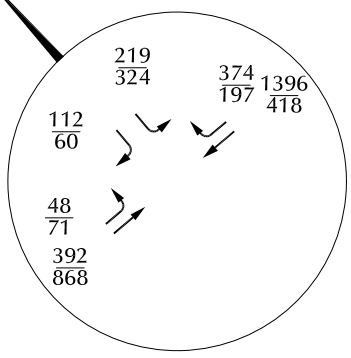






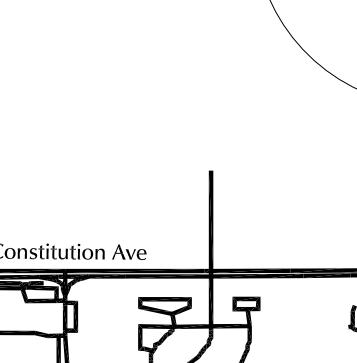






US Highway 24/
Constitution Ave

US Highway 24/
Brookings Dr



US Highway 24/
Marksheffel Rd

$$\frac{XX}{XX} = \frac{\text{AM Weekday Peak-Hour Traffic (veh/hr)}}{\text{PM School Weekday Peak-Hour Traffic (veh/hr)}}$$

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Figure 15

Short-Term Total Volumes

Mountain View Academy (LSC # 204140)

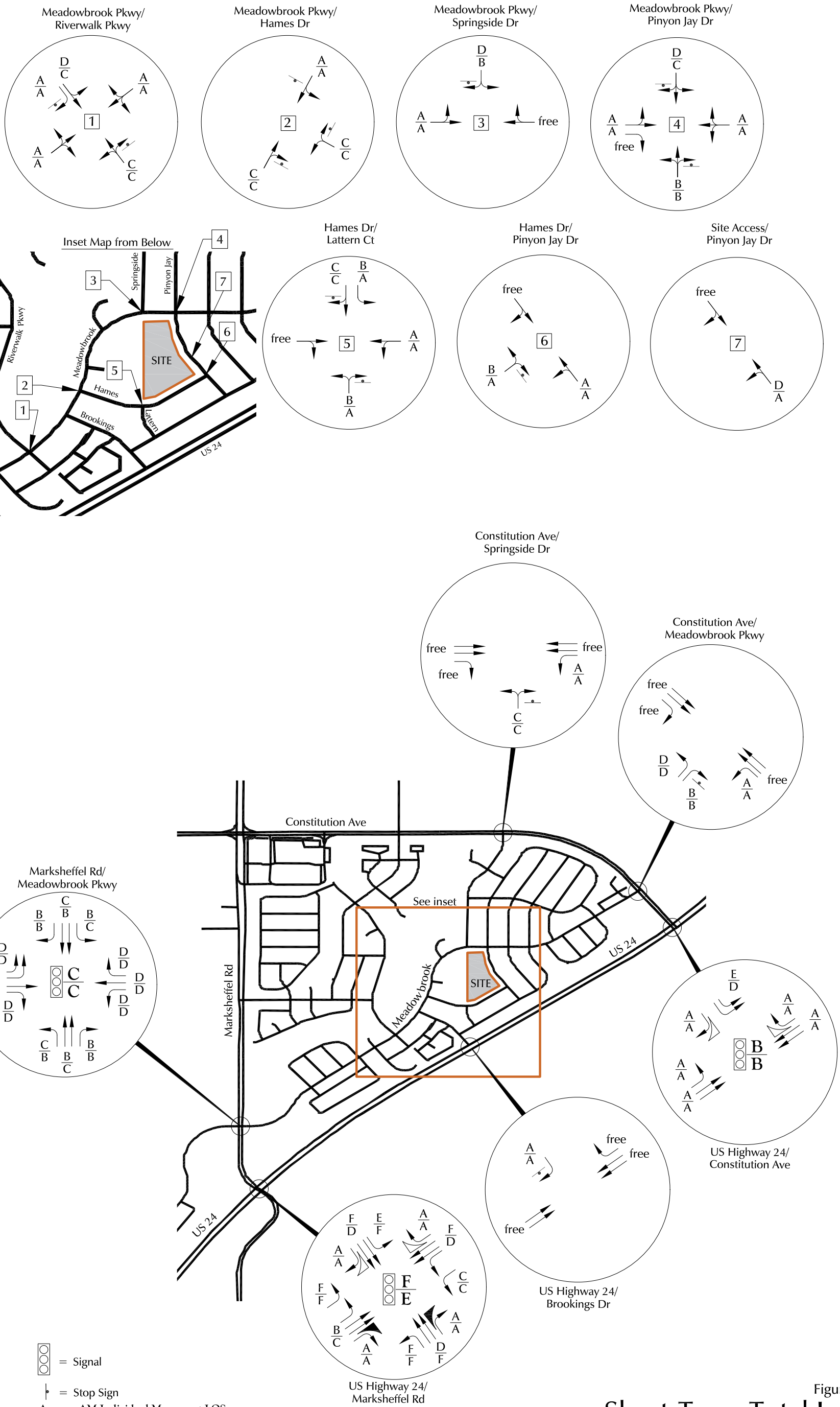
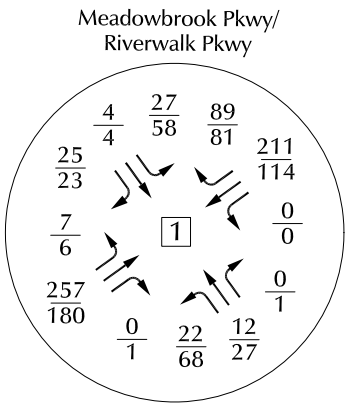
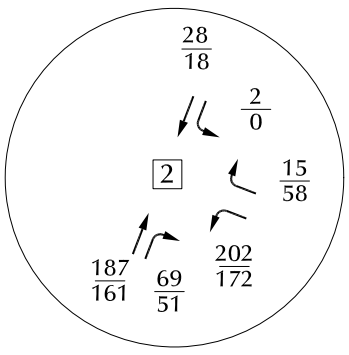


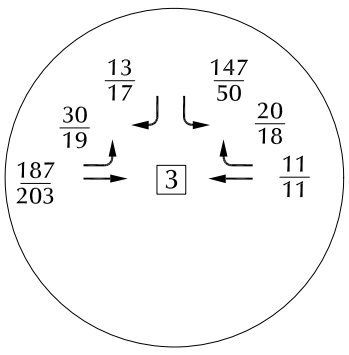
Figure 16

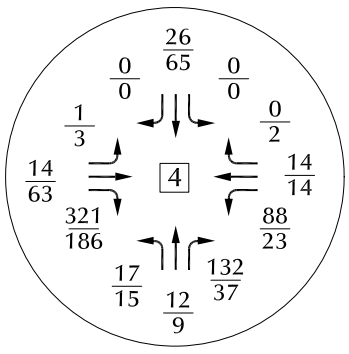
Short-Term Total Lane Geometry, Traffic Control, and LOS

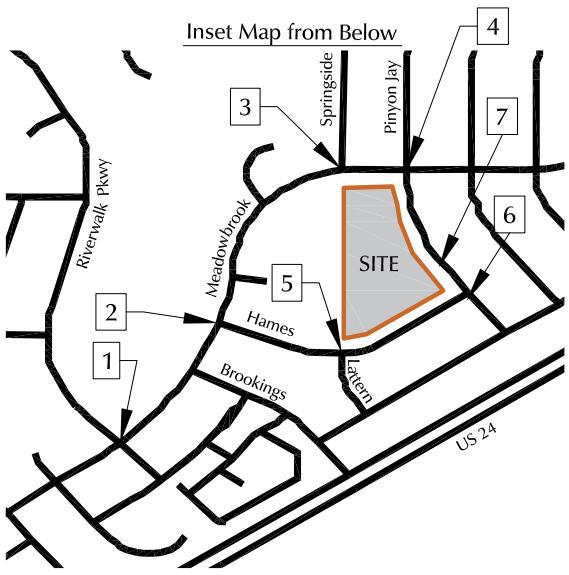
Mountain View Academy (LSC # 204140)

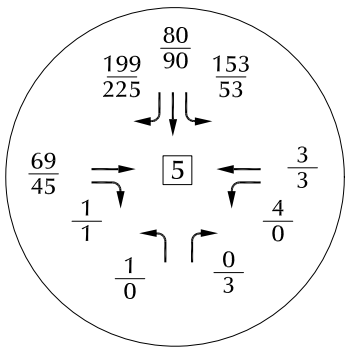


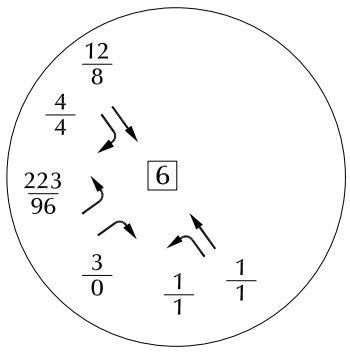


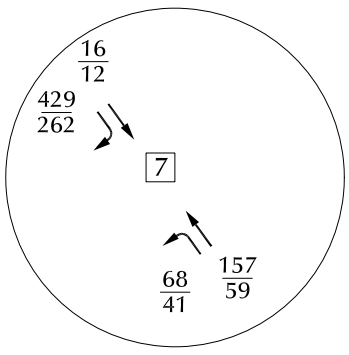




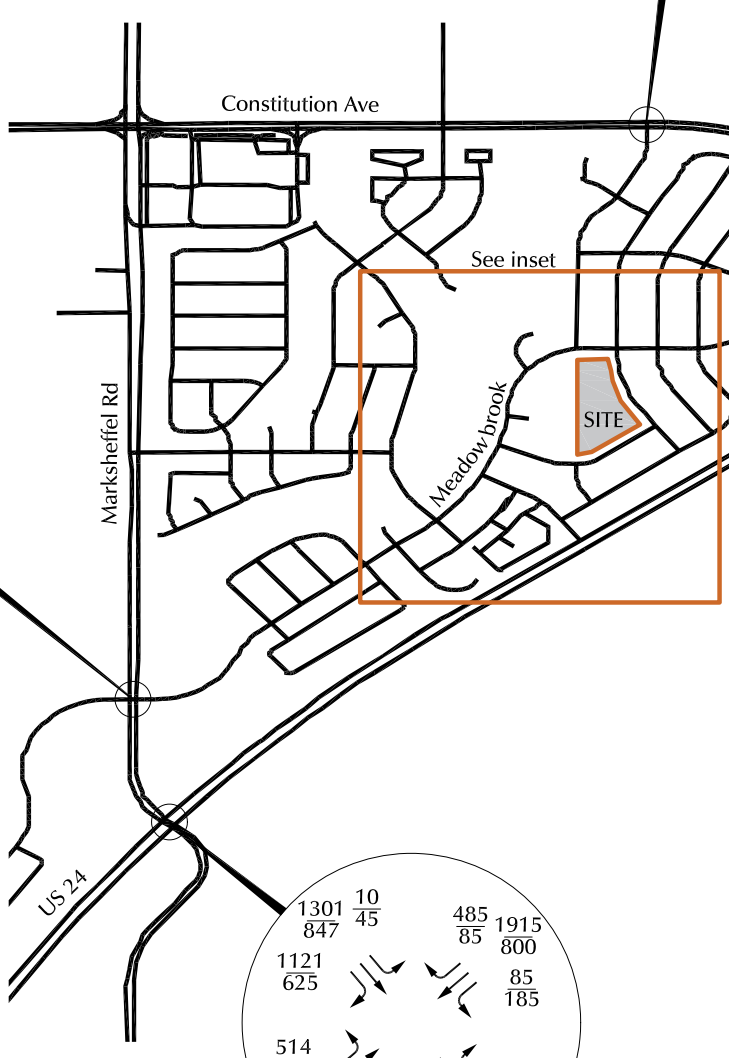


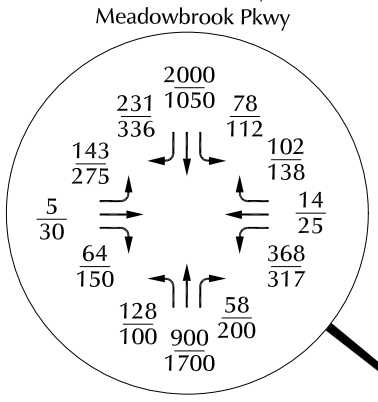


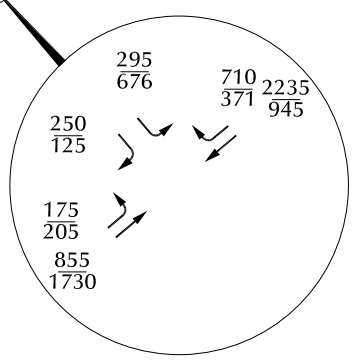




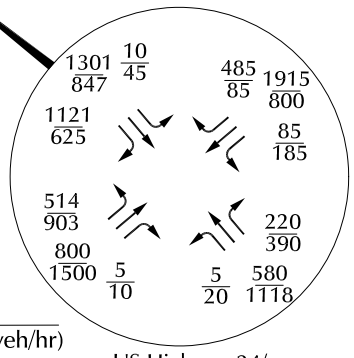
Note: All volumes assume the closure of the US 24/Brookings Avenue intersection







US Highway 24/
Constitution Ave



US Highway 24/
Marksheffel Rd

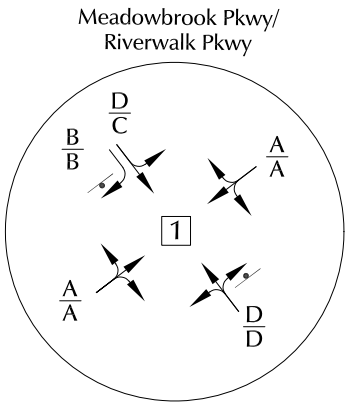
$$\frac{XX}{XX} = \frac{\text{AM Weekday Peak-Hour Traffic (veh/hr)}}{\text{PM School Weekday Peak-Hour Traffic (veh/hr)}}$$

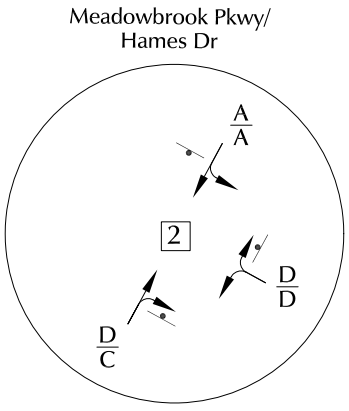
TRANSPORTATION CONSULTANTS, INC.

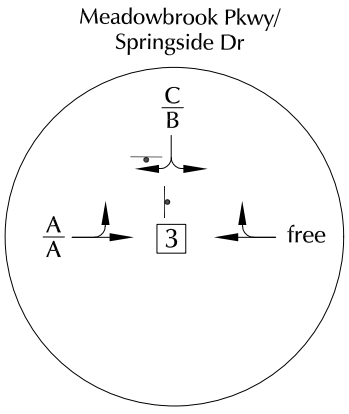
Figure 17

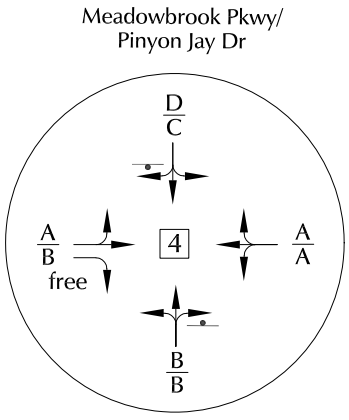
Long-Term Total Volumes

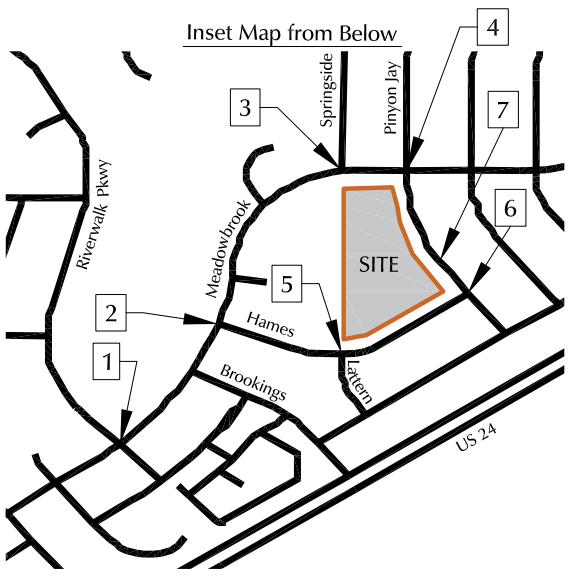
Mountain View Academy (LSC # 204140)

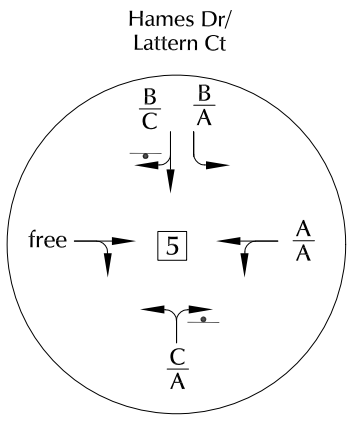


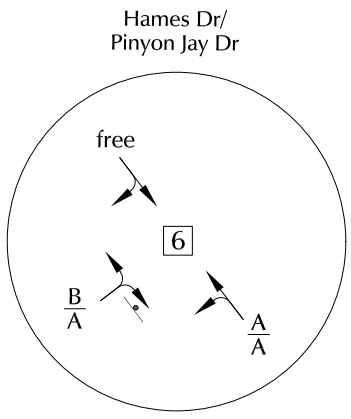


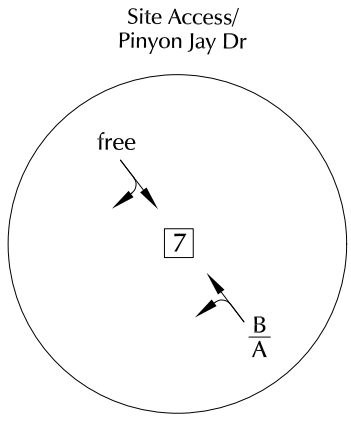




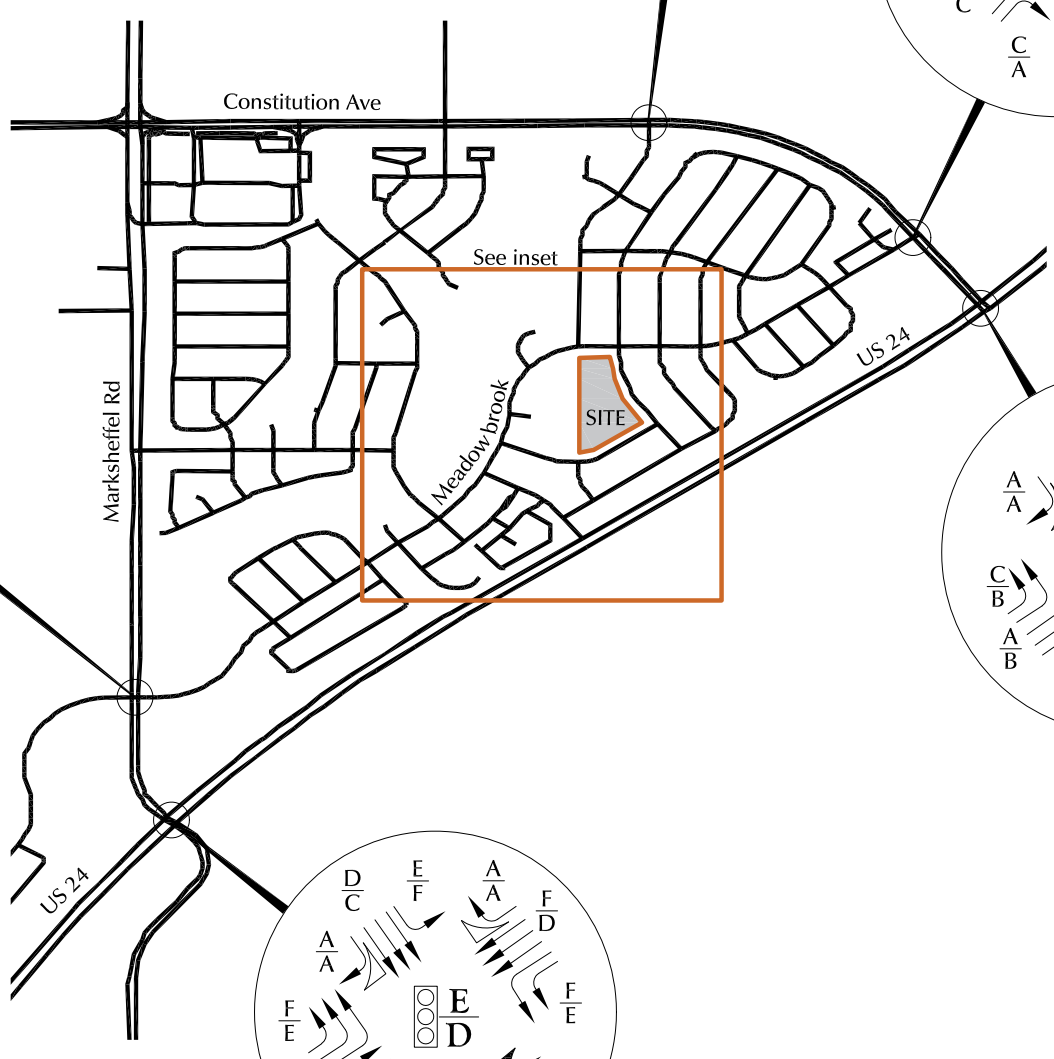


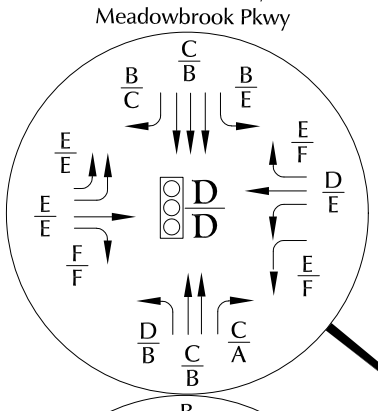


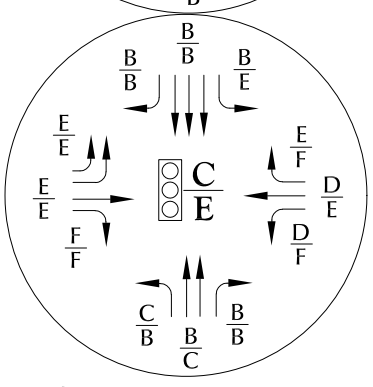




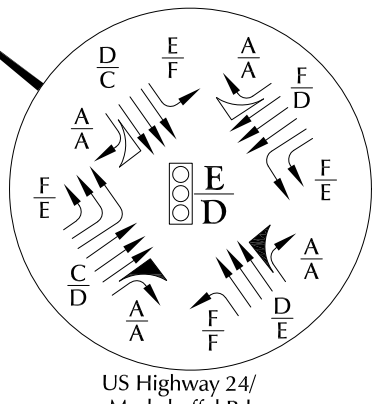
Note: All levels of service assume the closure of the US 24/Brookings Avenue intersection except where indicated



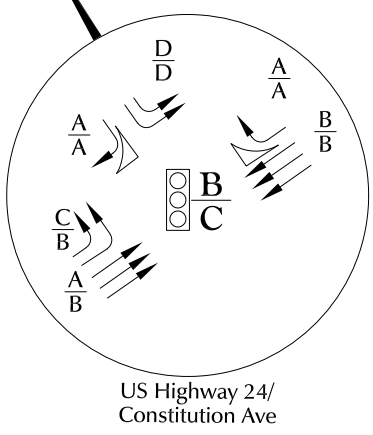




With US 24/Brookings Intersection remaining open



US Highway 24/
Marksheffel Rd



US Highway 24/
Constitution Ave

= Signal

= Stop Sign

$\frac{A}{A}$ = AM Individual Movement LOS / PM Individual Movement LOS

$\frac{B}{C}$ = AM Intersection LOS / PM Intersection LOS

TRANSPORTATION CONSULTANTS, INC.

Figure 18

Long-Term Total Lane Geometry, Traffic Control, and LOS

Mountain View Academy (LSC # 204140)

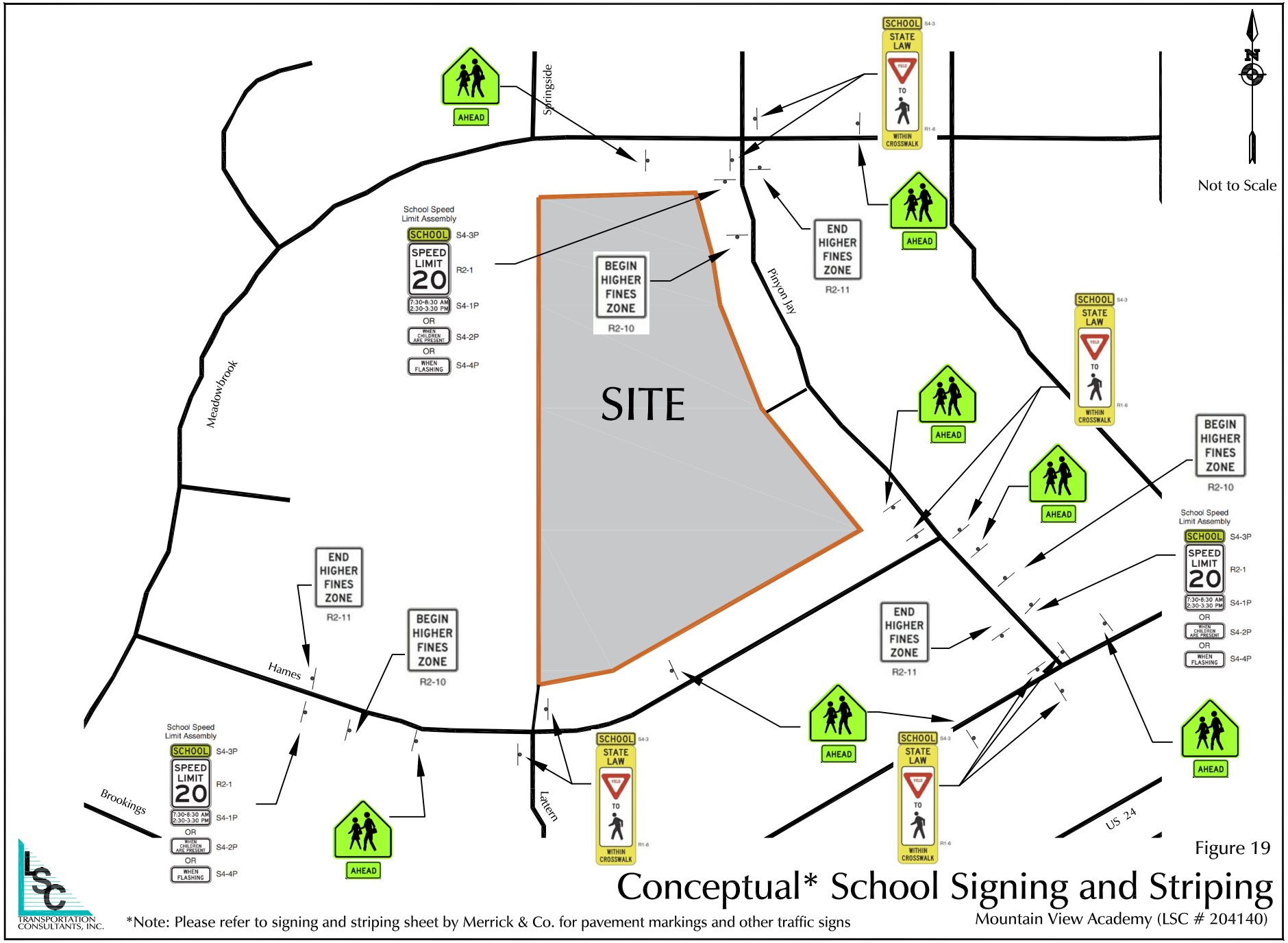


Figure 19

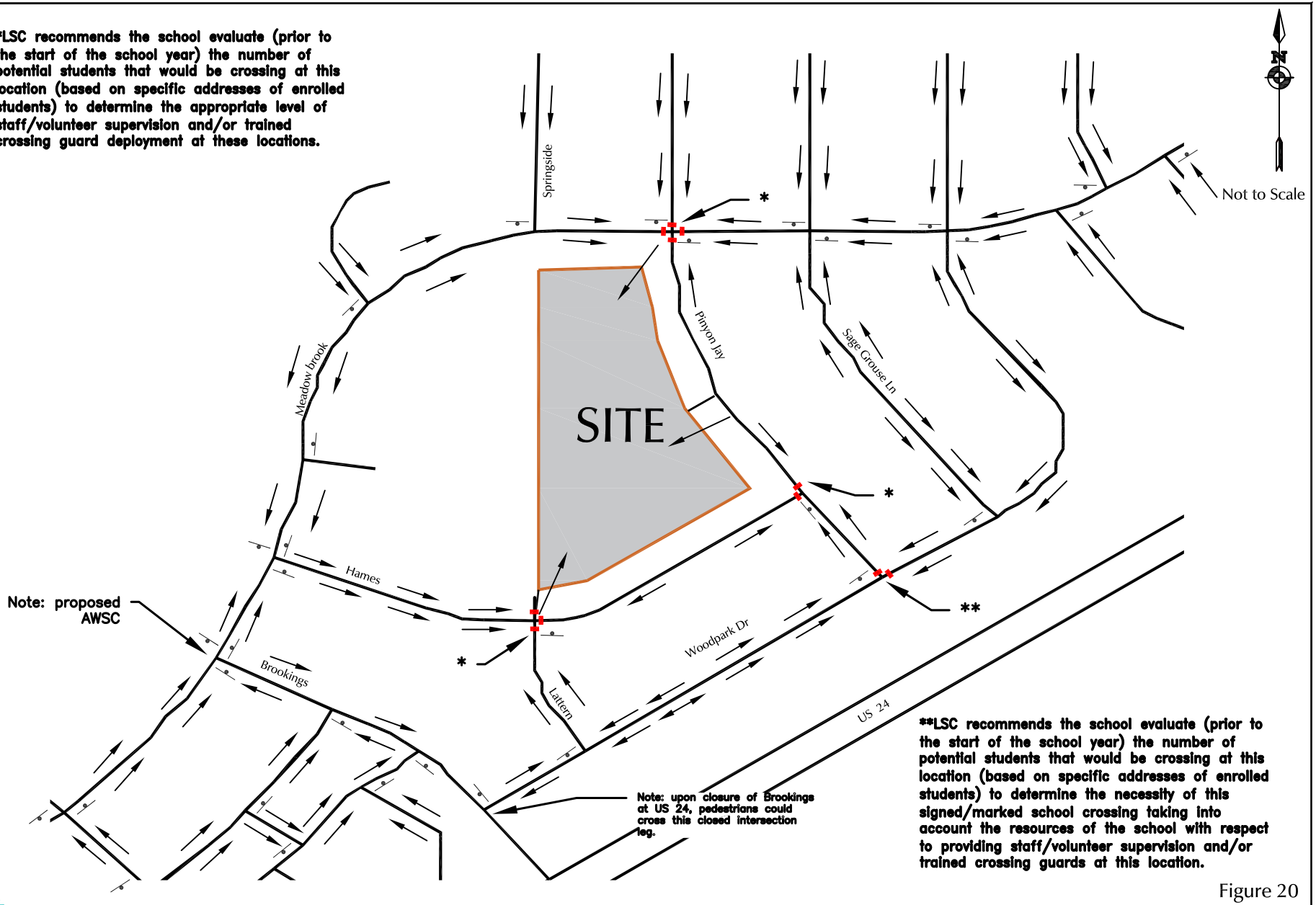
Conceptual* School Signing and Striping

Mountain View Academy (LSC # 204140)

*Note: Please refer to signing and striping sheet by Merrick & Co. for pavement markings and other traffic signs

LSC TRANSPORTATION CONSULTANTS, INC.

*LSC recommends the school evaluate (prior to the start of the school year) the number of potential students that would be crossing at this location (based on specific addresses of enrolled students) to determine the appropriate level of staff/volunteer supervision and/or trained crossing guard deployment at these locations.



**LSC recommends the school evaluate (prior to the start of the school year) the number of potential students that would be crossing at this location (based on specific addresses of enrolled students) to determine the necessity of this signed/marked school crossing taking into account the resources of the school with respect to providing staff/volunteer supervision and/or trained crossing guards at this location.

= Stop Sign
= Pedestrian Route
= Marked Crosswalk

LSC TRANSPORTATION CONSULTANTS, INC.

Figure 20

School Route Plan

Mountain View Academy (LSC # 204140)

Traffic Counts

TRANSPORTATION
CONSULTANTS, INC.

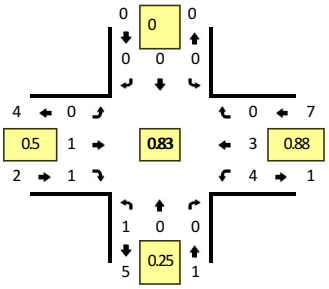
Type of peak hour being reported: Intersection Peak

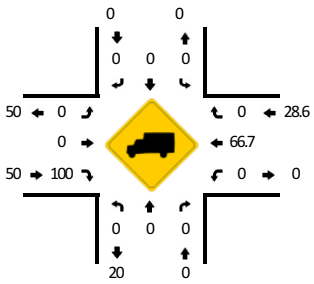
Method for determining peak hour: Total Entering Volume

LOCATION: Latern Ct -- Hames Dr
CITY/STATE: El Paso, CO

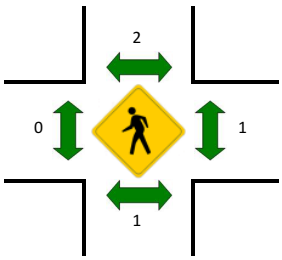
QC JOB #: 15171501
DATE: Tue, Jan 28 2020

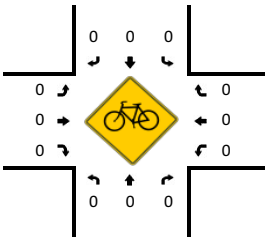
Peak-Hour: 7:00 AM -- 8:00 AM
Peak 15-Min: 7:30 AM -- 7:45 AM

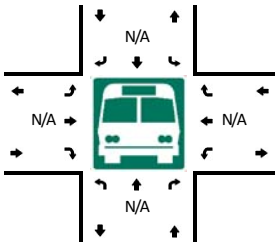


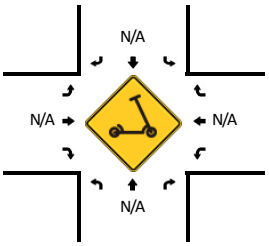


Quality Counts
DATA THAT DRIVES COMMUNITIES









15-Min Count Period Beginning At	Latern Ct (Northbound)				Latern Ct (Southbound)				Hames Dr (Eastbound)				Hames Dr (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2	
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	
7:30 AM	0	0	0	0	0	0	0	0	0	1	0	0	2	0	0	0	3	
7:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	3	10
8:00 AM	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2	10
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
8:30 AM	0	0	0	0	0	0	0	0	0	1	1	0	1	0	0	0	3	8
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	0	0	0	0	0	0	0	4	0	0	8	0	0	0	12
Heavy Trucks	0	0	0		0	0	0		0	0	0		0	0	0		0
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 2/18/2020 9:21 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

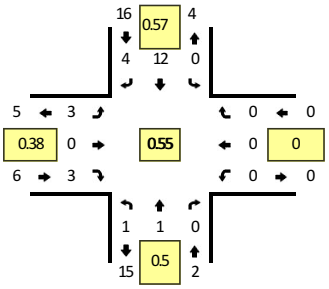
Type of peak hour being reported: Intersection Peak

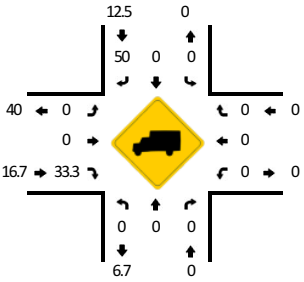
Method for determining peak hour: Total Entering Volume

LOCATION: Pinyon Jay Dr -- Hames Dr
CITY/STATE: El Paso, CO

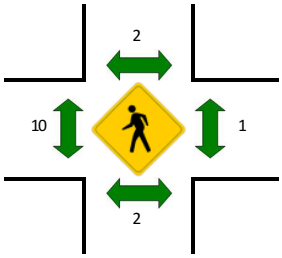
QC JOB #: 15171503
DATE: Tue, Jan 28 2020

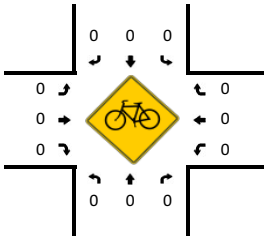
Peak-Hour: 7:00 AM -- 8:00 AM
Peak 15-Min: 7:30 AM -- 7:45 AM

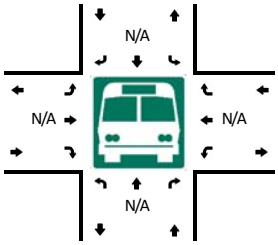


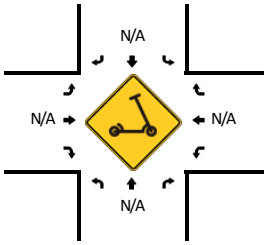


Quality Counts
DATA THAT DRIVES COMMUNITIES









15-Min Count Period Beginning At	Pinyon Jay Dr (Northbound)				Pinyon Jay Dr (Southbound)				Hames Dr (Eastbound)				Hames Dr (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	1	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	3	
7:15 AM	0	1	0	0	0	2	1	0	0	0	0	0	0	0	0	0	4	
7:30 AM	0	0	0	0	0	5	2	0	3	0	1	0	0	0	0	0	11	
7:45 AM	0	0	0	0	0	4	1	0	0	0	1	0	0	0	0	0	6	24
8:00 AM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2	23
8:15 AM	0	1	0	0	0	2	0	0	1	0	0	0	0	0	0	0	4	23
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
8:45 AM	0	0	0	0	0	2	0	0	1	0	0	0	0	0	0	0	3	9

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	0	0	0	20	8	0	12	0	4	0	0	0	0	0	44
Heavy Trucks	0	0	0		0	0	0		0	0	4		0	0	0		4
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 2/18/2020 9:21 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

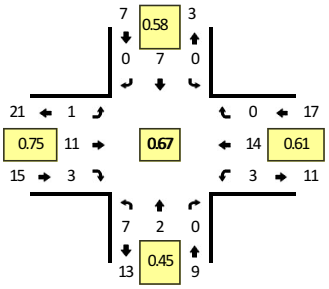
Type of peak hour being reported: Intersection Peak

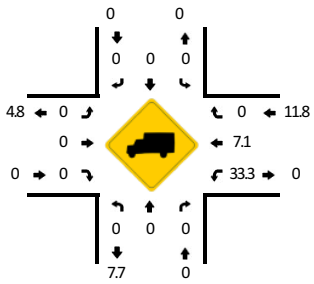
Method for determining peak hour: Total Entering Volume

LOCATION: Pinyon Jay Dr -- Meadowbrook Pkwy
CITY/STATE: El Paso, CO

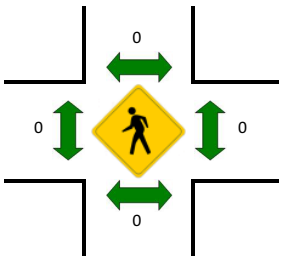
QC JOB #: 15171505
DATE: Tue, Jan 28 2020

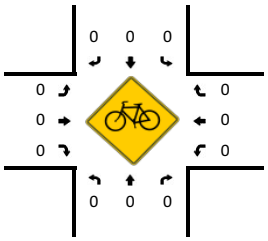
Peak-Hour: 7:30 AM -- 8:30 AM
Peak 15-Min: 7:30 AM -- 7:45 AM

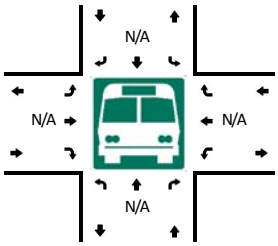


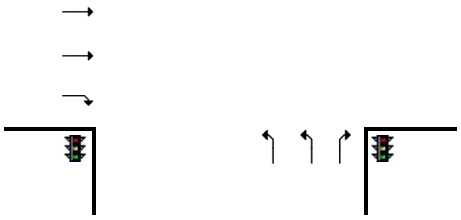


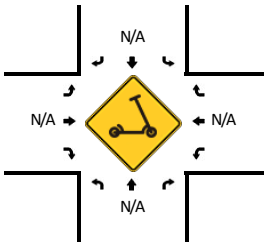
Quality Counts
DATA THAT DRIVES COMMUNITIES











15-Min Count Period Beginning At	Pinyon Jay Dr (Northbound)				Pinyon Jay Dr (Southbound)				Meadowbrook Pkwy (Eastbound)				Meadowbrook Pkwy (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	0	0	0	0	1	0	0	0	3	0	0	0	4	0	0	8	
7:15 AM	1	0	1	0	1	2	0	0	0	0	1	0	0	1	0	0	7	
7:30 AM	5	0	0	0	0	3	0	0	0	3	0	0	1	6	0	0	18	
7:45 AM	0	1	0	0	0	3	0	0	0	4	1	0	1	4	0	0	14	47
8:00 AM	1	1	0	0	0	1	0	0	0	1	1	0	0	2	0	0	7	46
8:15 AM	1	0	0	0	0	0	0	0	1	3	1	0	1	2	0	0	9	48
8:30 AM	1	0	0	0	0	0	1	0	0	1	0	0	0	2	0	0	5	35
8:45 AM	2	0	0	0	0	1	0	0	0	2	0	0	1	2	0	0	8	29

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	20	0	0	0	0	12	0	0	0	12	0	0	4	24	0	0	72
Heavy Trucks	0	0	0		0	0	0		0	0	0		0	0	0		0
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 2/18/2020 9:21 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

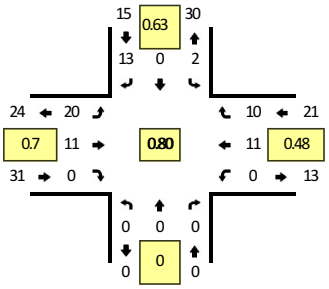
Type of peak hour being reported: Intersection Peak

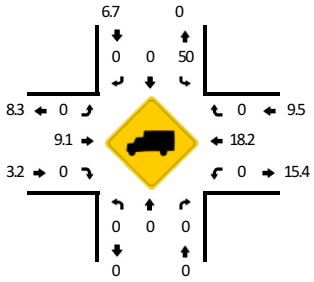
Method for determining peak hour: Total Entering Volume

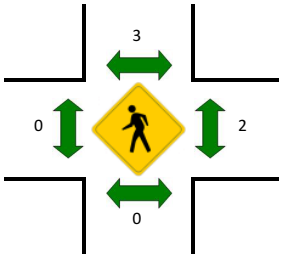
LOCATION: Springside Dr -- Meadowbrook Pkwy
CITY/STATE: El Paso, CO

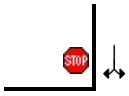
QC JOB #: 15171507
DATE: Tue, Jan 28 2020

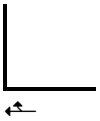
Peak-Hour: 7:00 AM -- 8:00 AM
Peak 15-Min: 7:30 AM -- 7:45 AM

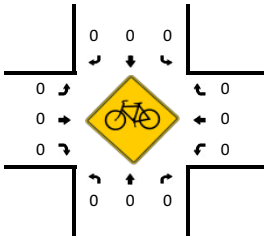


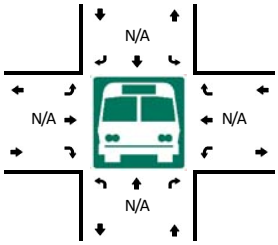


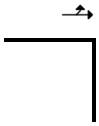


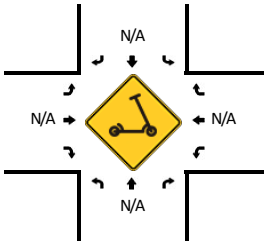












15-Min Count Period Beginning At	Springside Dr (Northbound)				Springside Dr (Southbound)				Meadowbrook Pkwy (Eastbound)				Meadowbrook Pkwy (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	0	0	0	0	0	2	0	7	3	0	0	0	2	2	0	16	
7:15 AM	0	0	0	0	1	0	5	0	3	0	0	0	0	2	0	0	11	
7:30 AM	0	0	0	0	0	0	3	0	4	3	0	0	0	4	7	0	21	
7:45 AM	0	0	0	0	1	0	3	0	6	5	0	0	0	3	1	0	19	67
8:00 AM	0	0	0	0	1	0	3	0	2	0	0	0	0	2	1	0	9	60
8:15 AM	0	0	0	0	2	0	2	0	1	3	0	0	0	0	3	0	11	60
8:30 AM	0	0	0	0	0	0	2	0	0	1	0	0	0	2	2	0	7	46
8:45 AM	0	0	0	0	0	0	2	0	2	2	0	0	0	1	3	0	10	37

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	0	0	0	0	12	0	16	12	0	0	0	16	28	0	84
Heavy Trucks	0	0	0		0	0	0		0	0	0		0	0	0		0
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 2/18/2020 9:21 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

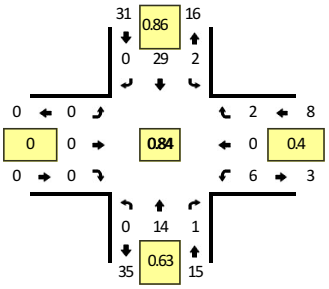
Type of peak hour being reported: Intersection Peak

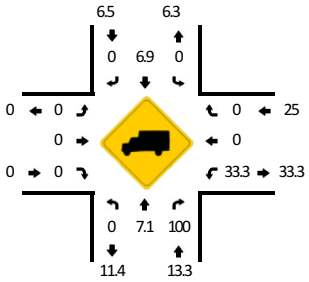
Method for determining peak hour: Total Entering Volume

LOCATION: Meadowbrook Pkwy -- Hames Dr
CITY/STATE: El Paso, CO

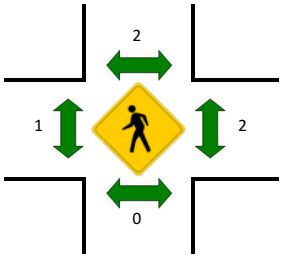
QC JOB #: 15171509
DATE: Tue, Jan 28 2020

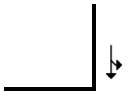
Peak-Hour: 7:00 AM -- 8:00 AM
Peak 15-Min: 7:00 AM -- 7:15 AM

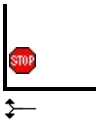


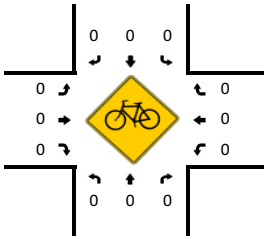


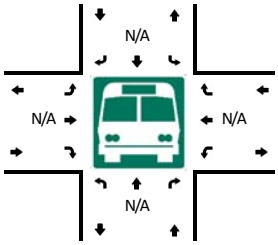
Quality Counts
DATA THAT DRIVES COMMUNITIES

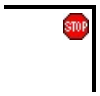


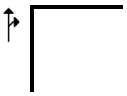


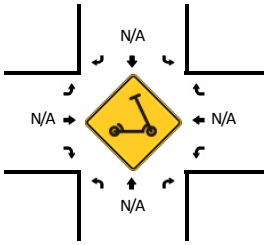












15-Min Count Period Beginning At	Meadowbrook Pkwy (Northbound)				Meadowbrook Pkwy (Southbound)				Hames Dr (Eastbound)				Hames Dr (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	4	0	0	0	7	0	0	0	0	0	0	4	0	1	0	16	
7:15 AM	0	2	0	0	0	7	0	0	0	0	0	0	1	0	1	0	11	
7:30 AM	0	3	0	0	1	8	0	0	0	0	0	0	0	0	0	0	12	
7:45 AM	0	5	1	0	1	7	0	0	0	0	0	0	1	0	0	0	15	54
8:00 AM	0	0	1	0	0	4	0	0	0	0	0	0	0	0	2	0	7	45
8:15 AM	0	4	0	0	1	0	0	0	0	0	0	0	0	0	0	0	5	39
8:30 AM	0	1	1	0	0	4	0	0	0	0	0	0	1	0	0	0	7	34
8:45 AM	0	3	0	0	0	2	0	0	0	0	0	0	0	0	0	0	5	24

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	16	0	0	0	28	0	0	0	0	0	0	16	0	4	0	64
Heavy Trucks	0	4	0		0	0	0		0	0	0		0	0	0		4
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 2/18/2020 9:21 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

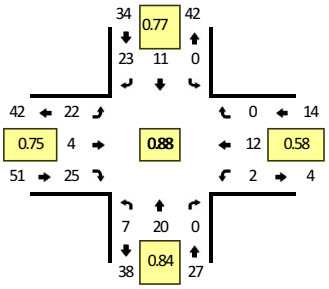
Type of peak hour being reported: Intersection Peak

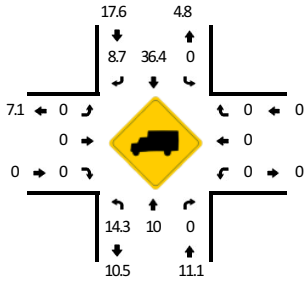
Method for determining peak hour: Total Entering Volume

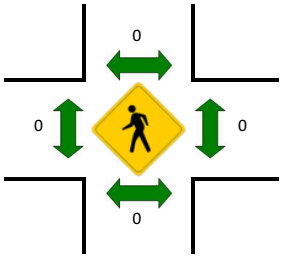
LOCATION: Meadowbrook Pkwy -- Riverwalk Pkwy
CITY/STATE: El Paso, CO

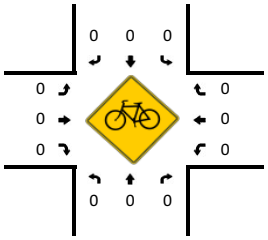
QC JOB #: 15171511
DATE: Tue, Jan 28 2020

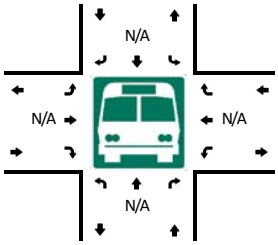
Peak-Hour: 7:00 AM -- 8:00 AM
Peak 15-Min: 7:00 AM -- 7:15 AM

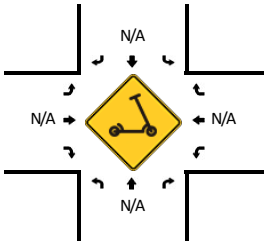












15-Min Count Period Beginning At	Meadowbrook Pkwy (Northbound)				Meadowbrook Pkwy (Southbound)				Riverwalk Pkwy (Eastbound)				Riverwalk Pkwy (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	1	4	0	0	0	3	8	0	7	2	8	0	0	3	0	0	36	
7:15 AM	1	5	0	0	0	2	6	0	3	1	4	0	0	5	0	0	27	
7:30 AM	2	6	0	0	0	2	2	0	7	1	8	0	0	0	0	0	28	
7:45 AM	3	5	0	0	0	4	7	0	5	0	5	0	2	4	0	0	35	126
8:00 AM	2	4	0	0	0	1	1	0	5	1	2	0	0	1	0	0	17	107
8:15 AM	1	2	1	0	0	0	1	0	2	3	1	0	0	2	0	0	13	93
8:30 AM	2	5	0	0	0	1	1	0	0	2	2	0	0	2	0	0	15	80
8:45 AM	1	4	0	0	0	1	1	0	1	1	0	0	0	1	0	0	10	55

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	4	16	0	0	0	12	32	0	28	8	32	0	0	12	0	0	144
Heavy Trucks	0	4	0		0	4	0		0	0	0		0	0	0		8
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 2/18/2020 9:21 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

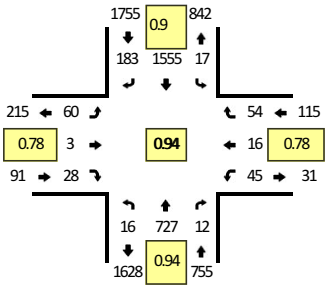
Type of peak hour being reported: Intersection Peak

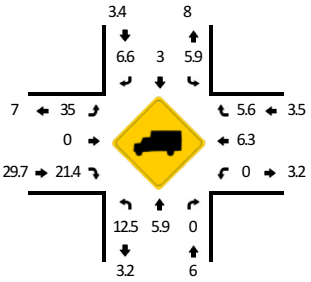
Method for determining peak hour: Total Entering Volume

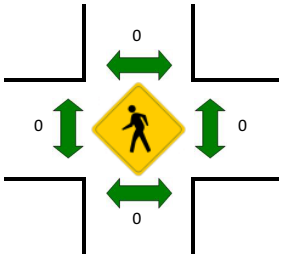
LOCATION: Marksheffel Rd -- Meadowbrook Pkwy
CITY/STATE: Cimarron Hills, CO

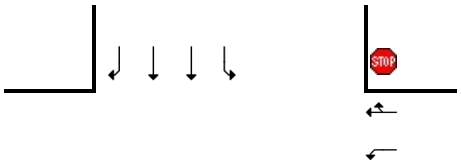
QC JOB #: 15171513
DATE: Tue, Jan 28 2020

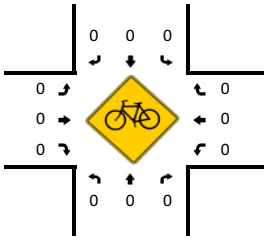
Peak-Hour: 7:00 AM -- 8:00 AM
Peak 15-Min: 7:15 AM -- 7:30 AM

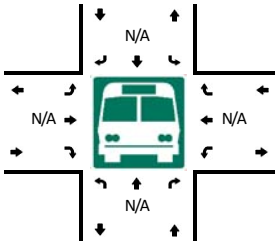


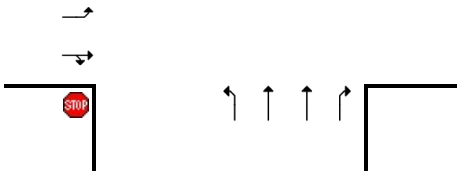


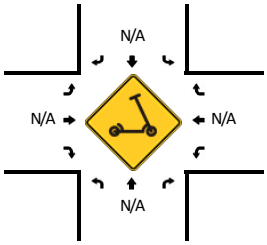












15-Min Count Period Beginning At	Marksheffel Rd (Northbound)				Marksheffel Rd (Southbound)				Meadowbrook Pkwy (Eastbound)				Meadowbrook Pkwy (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	5	172	0	0	4	435	34	0	19	0	8	0	16	2	16	0	711	
7:15 AM	3	194	4	0	5	438	43	0	11	0	3	0	10	1	8	0	720	
7:30 AM	3	191	4	0	1	375	57	1	10	2	9	0	8	9	20	0	690	
7:45 AM	5	170	4	0	6	307	49	0	20	1	8	0	11	4	10	0	595	2716
8:00 AM	6	121	4	0	4	299	19	0	18	2	3	0	4	0	10	0	490	2495
8:15 AM	4	113	3	0	7	247	16	0	13	1	3	0	7	0	10	0	424	2199
8:30 AM	1	133	3	0	3	238	27	0	24	1	3	0	5	0	9	0	447	1956
8:45 AM	5	94	2	0	1	176	27	0	12	1	2	0	3	1	10	0	334	1695

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	12	776	16	0	20	1752	172	0	44	0	12	0	40	4	32	0	2880
Heavy Trucks	0	28	0		0	60	12		16	0	4		0	0	8		128
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 2/18/2020 9:21 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

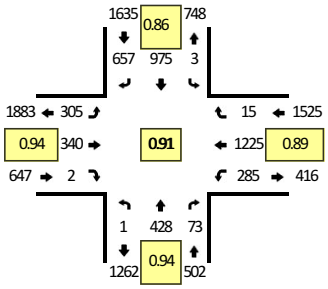
Type of peak hour being reported: Intersection Peak

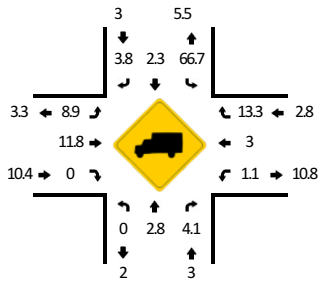
Method for determining peak hour: Total Entering Volume

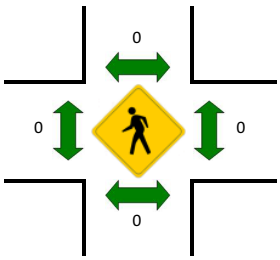
LOCATION: Marksheffel Rd -- Hwy 24
CITY/STATE: Colorado Springs, CO

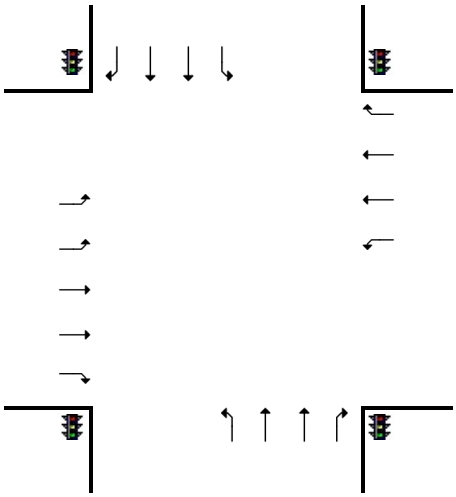
QC JOB #: 15171515
DATE: Tue, Jan 28 2020

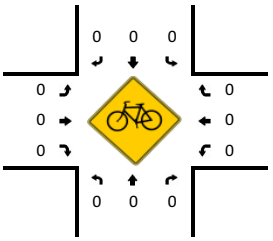
Peak-Hour: 7:00 AM -- 8:00 AM
Peak 15-Min: 7:15 AM -- 7:30 AM

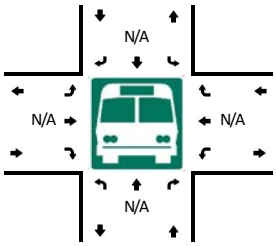


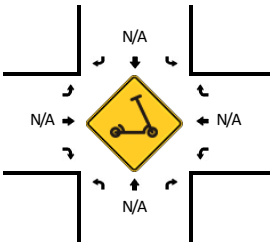












15-Min Count Period Beginning At	Marksheffel Rd (Northbound)				Marksheffel Rd (Southbound)				Hwy 24 (Eastbound)				Hwy 24 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	1	103	19	0	1	286	190	0	75	96	0	0	87	312	4	0	1174	
7:15 AM	0	111	23	0	0	255	187	0	81	90	1	0	73	355	2	0	1178	
7:30 AM	0	111	14	0	1	240	151	0	78	77	0	0	58	281	5	0	1016	
7:45 AM	0	103	17	0	1	194	129	0	71	77	1	0	67	277	4	0	941	4309
8:00 AM	0	70	6	0	0	162	165	0	57	94	1	0	57	222	3	1	838	3973
8:15 AM	2	75	12	0	2	135	130	0	43	75	0	0	32	193	2	1	702	3497
8:30 AM	0	80	11	0	0	100	130	0	51	83	1	0	30	191	4	0	681	3162
8:45 AM	3	47	7	0	1	104	91	0	50	64	2	0	17	144	4	0	534	2755

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	444	92	0	0	1020	748	0	324	360	4	0	292	1420	8	0	4712
Heavy Trucks	0	8	0		0	24	36		20	40	0		8	24	0		160
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 2/18/2020 9:21 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

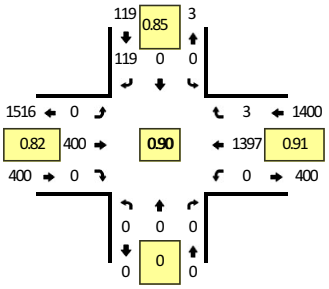
Type of peak hour being reported: Intersection Peak

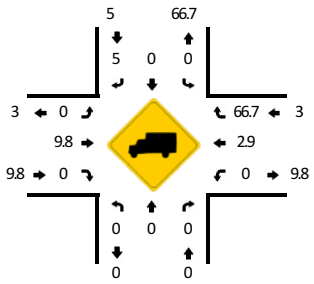
Method for determining peak hour: Total Entering Volume

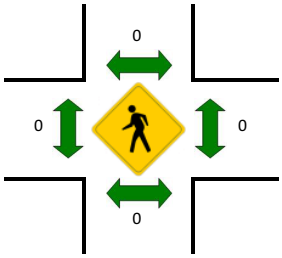
LOCATION: Brookings Dr -- Hwy 24
CITY/STATE: El Paso, CO

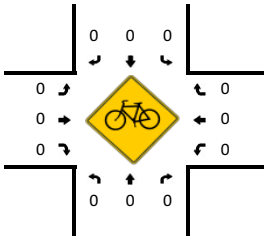
QC JOB #: 15171517
DATE: Tue, Jan 28 2020

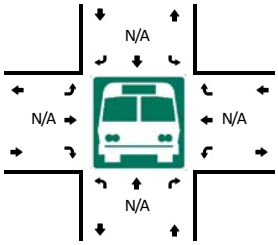
Peak-Hour: 7:00 AM -- 8:00 AM
Peak 15-Min: 7:15 AM -- 7:30 AM

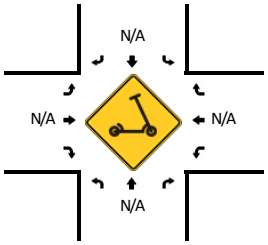












15-Min Count Period Beginning At	Brookings Dr (Northbound)				Brookings Dr (Southbound)				Hwy 24 (Eastbound)				Hwy 24 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	0	0	0	0	0	35	0	0	95	0	0	0	377	1	0	508	
7:15 AM	0	0	0	0	0	0	28	0	0	122	0	0	0	385	0	0	535	
7:30 AM	0	0	0	0	0	0	30	0	0	90	0	0	0	337	0	0	457	
7:45 AM	0	0	0	0	0	0	26	0	0	93	0	0	0	298	2	0	419	1919
8:00 AM	0	0	0	0	0	0	23	0	0	104	0	0	0	248	1	0	376	1787
8:15 AM	0	0	0	0	0	0	5	0	0	90	0	0	0	227	0	0	322	1574
8:30 AM	0	0	0	0	0	0	16	0	0	93	0	0	0	206	1	0	316	1433
8:45 AM	0	0	0	0	0	0	6	0	0	72	0	0	0	162	2	0	242	1256

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	0	0	0	0	112	0	0	488	0	0	0	1540	0	0	2140
Heavy Trucks	0	0	0		0	0	0		0	48	0		0	24	0		72
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 2/18/2020 9:21 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

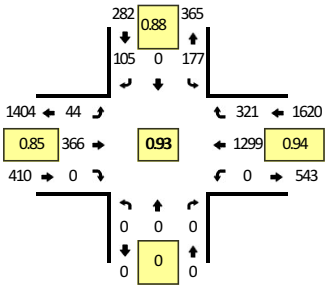
Type of peak hour being reported: Intersection Peak

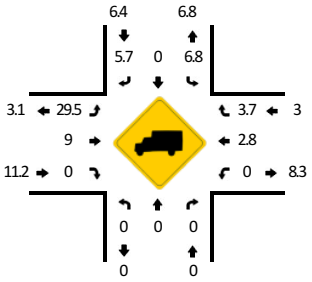
Method for determining peak hour: Total Entering Volume

LOCATION: Constitution Ave -- Hwy 24
CITY/STATE: Colorado Springs, CO

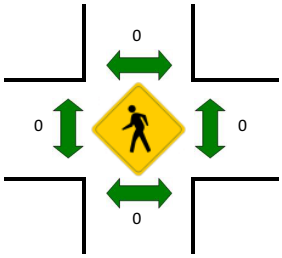
QC JOB #: 15171519
DATE: Tue, Jan 28 2020

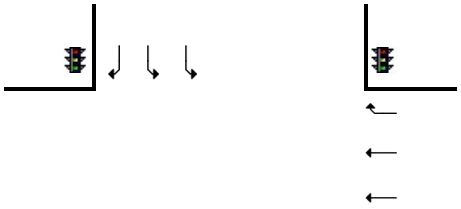
Peak-Hour: 7:00 AM -- 8:00 AM
Peak 15-Min: 7:15 AM -- 7:30 AM

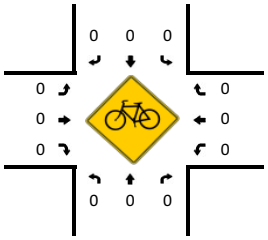


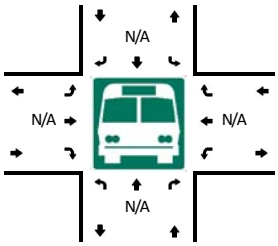


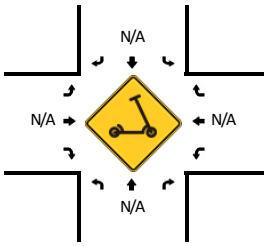
Quality Counts
DATA THAT DRIVES COMMUNITIES











15-Min Count Period Beginning At	Constitution Ave (Northbound)				Constitution Ave (Southbound)				Hwy 24 (Eastbound)				Hwy 24 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	0	0	0	43	0	34	0	12	85	0	0	0	349	69	0	592	
7:15 AM	0	0	0	0	39	0	31	0	11	110	0	0	0	350	80	0	621	
7:30 AM	0	0	0	0	59	0	21	0	10	97	0	0	0	304	93	0	584	
7:45 AM	0	0	0	0	36	0	19	0	11	74	0	0	0	296	79	0	515	2312
8:00 AM	0	0	0	0	37	0	18	0	15	91	0	0	0	232	66	0	459	2179
8:15 AM	0	0	0	0	31	0	16	0	9	79	0	1	0	211	62	0	409	1967
8:30 AM	0	0	0	0	27	0	22	0	8	92	0	0	0	175	52	0	376	1759
8:45 AM	0	0	0	0	26	0	14	0	11	59	0	0	0	149	67	0	326	1570

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	0	0	156	0	124	0	44	440	0	0	0	1400	320	0	2484
Heavy Trucks	0	0	0		16	0	8		20	32	0		0	20	4		100
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

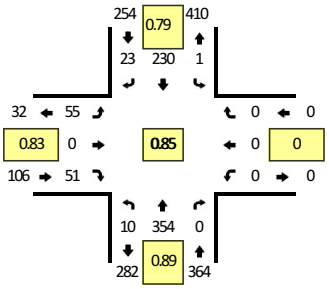
Report generated on 2/18/2020 9:21 AM

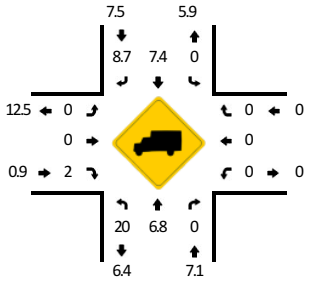
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

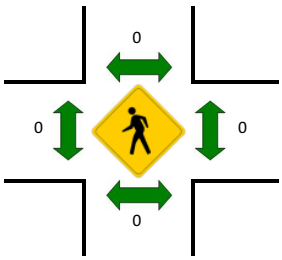
LOCATION: Constitution Ave -- Meadowbrook Pkwy | **QC JOB #:** 15171521
CITY/STATE: El Paso, CO | **DATE:** Tue, Jan 28 2020

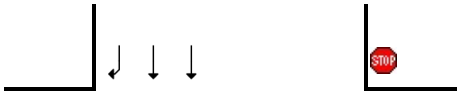
Peak-Hour: 7:00 AM -- 8:00 AM
Peak 15-Min: 7:30 AM -- 7:45 AM

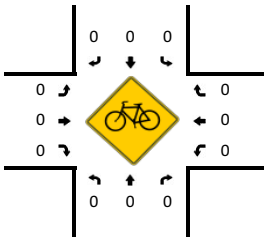


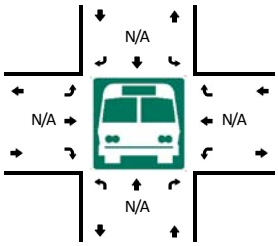


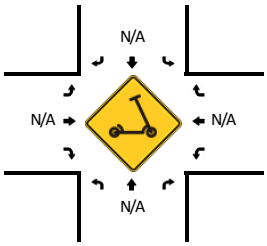
Quality Counts
DATA THAT DRIVES COMMUNITIES











15-Min Count Period Beginning At	Constitution Ave (Northbound)				Constitution Ave (Southbound)				Meadowbrook Pkwy (Eastbound)				Meadowbrook Pkwy (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	2	77	0	1	0	57	3	0	14	0	16	0	0	0	0	0	170	
7:15 AM	3	87	0	0	0	56	7	0	12	0	14	0	0	0	0	0	179	
7:30 AM	2	100	0	0	0	71	9	0	21	0	11	0	0	0	0	0	214	
7:45 AM	2	90	0	0	0	46	4	1	8	0	10	0	0	0	0	0	161	724
8:00 AM	3	77	0	0	0	52	7	0	7	0	7	0	0	0	0	0	153	707
8:15 AM	4	70	0	0	0	42	5	0	13	0	1	0	0	0	0	0	135	663
8:30 AM	5	55	0	0	0	45	1	0	4	0	3	0	0	0	0	0	113	562
8:45 AM	1	75	0	1	0	43	4	0	9	0	1	0	0	0	0	0	134	535

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	8	400	0	0	0	284	36	0	84	0	44	0	0	0	0	0	856
Heavy Trucks	0	16	0		0	12	4		0	0	0		0	0	0		32
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 2/18/2020 9:21 AM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

LSC Transportation Consultants, Inc.

545 E Pikes Peak Ave, Suite 210
Colorado Springs, CO 80905
719-633-2868

File Name : Springside Dr - Constitution Ave AM
Site Code : 00204140
Start Date : 2/26/2020
Page No : 1

Groups Printed- Unshifted

	Southbound					Constitution Ave Westbound					Springside Dr Northbound					Constitution Ave Eastbound					
Start Time	**L**	**T**	**R**	**U**	**App. Total**	**L**	**T**	**R**	**U**	**App. Total**	**L**	**T**	**R**	**U**	**App. Total**	**L**	**T**	**R**	**U**	**App. Total**	**Int. Total**
07:00 AM	0	0	0	0	0	0	102	0	0	102	34	0	5	0	39	0	77	5	1	83	224
07:15 AM	0	0	0	0	0	1	91	0	0	92	33	0	3	0	36	0	57	12	0	69	197
07:30 AM	0	0	0	0	0	2	111	0	0	113	37	0	1	0	38	0	61	7	0	68	219
07:45 AM	0	0	0	0	0	1	115	0	0	116	31	0	3	0	34	0	65	8	0	73	223
Total	0	0	0	0	0	4	419	0	0	423	135	0	12	0	147	0	260	32	1	293	863
08:00 AM	0	0	0	0	0	1	72	0	0	73	14	0	0	0	14	0	42	17	0	59	146
08:15 AM	0	0	0	0	0	0	67	0	0	67	13	0	1	0	14	0	48	15	0	63	144
08:30 AM	0	0	0	0	0	0	86	0	0	86	10	0	2	0	12	0	47	7	0	54	152
08:45 AM	0	0	0	0	0	0	61	0	0	61	14	0	1	0	15	0	45	7	0	52	128
Total	0	0	0	0	0	1	286	0	0	287	51	0	4	0	55	0	182	46	0	228	570
Grand Total	0	0	0	0	0	5	705	0	0	710	186	0	16	0	202	0	442	78	1	521	1433
Apprch %	0	0	0	0		0.7	99.3	0	0		92.1	0	7.9	0		0	84.8	15	0.2		
Total %	0	0	0	0	0	0.3	49.2	0	0	49.5	13	0	1.1	0	14.1	0	30.8	5.4	0.1	36.4	

LSC Transportation Consultants, Inc.

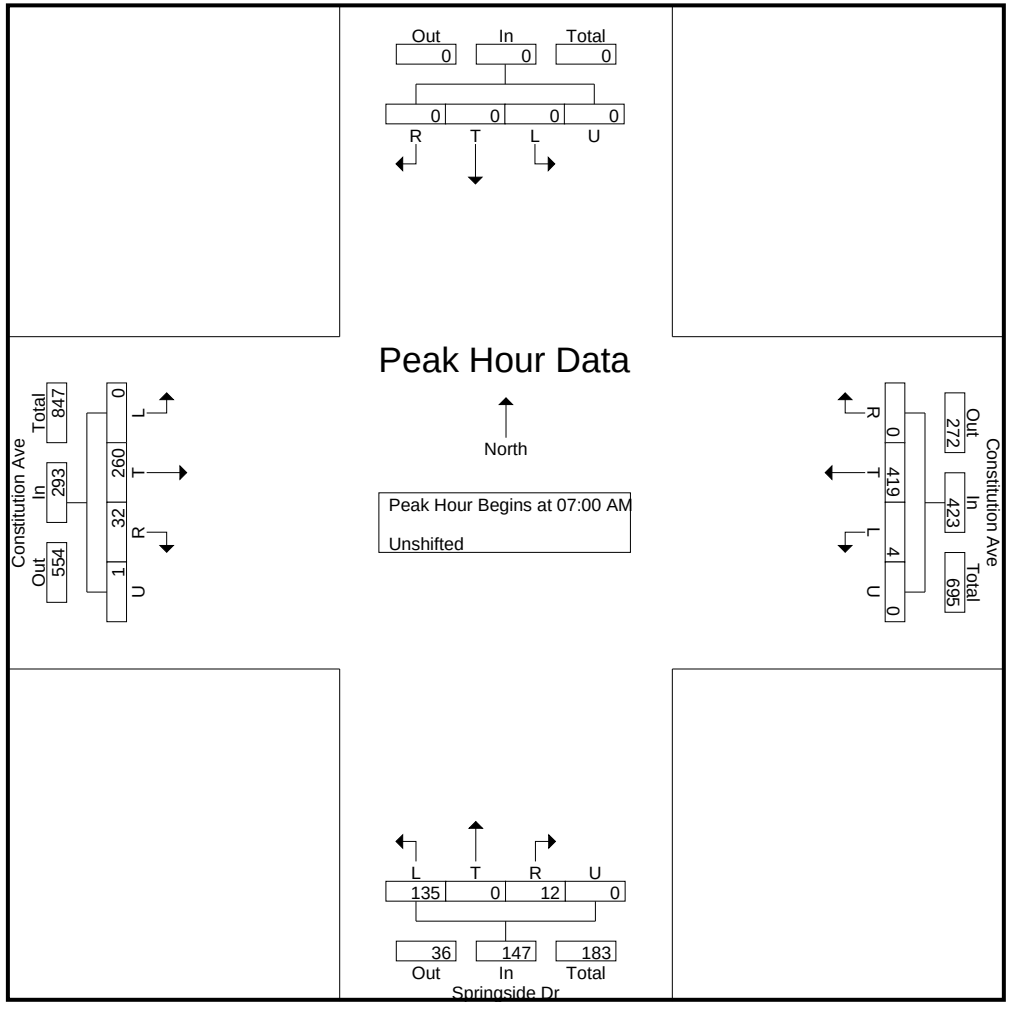
545 E Pikes Peak Ave, Suite 210
Colorado Springs, CO 80905
719-633-2868

File Name : Springside Dr - Constitution Ave AM
Site Code : 00204140
Start Date : 2/26/2020

	Southbound					Constitution Ave Westbound					Springside Dr Northbound					Constitution Ave Eastbound					
Start Time	**L**	**T**	**R**	**U**	**App. Total**	**L**	**T**	**R**	**U**	**App. Total**	**L**	**T**	**R**	**U**	**App. Total**	**L**	**T**	**R**	**U**	**App. Total**	**Int. Total**
Peak Hour Analysis From 7:00:00 AM to 8:45:00 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 7:00:00 AM																					
7:00:00 AM	0	0	0	0	0	0	102	0	0	102	34	0	**5**	0	**39**	0	**77**	5	**1**	**83**	**224**
7:15:00 AM	0	0	0	0	0	1	91	0	0	92	33	0	3	0	36	0	57	**12**	0	69	197
7:30:00 AM	0	0	0	0	0	**2**	111	0	0	113	**37**	0	1	0	38	0	61	7	0	68	219
7:45:00 AM	0	0	0	0	0	1	**115**	0	0	**116**	31	0	3	0	34	0	65	8	0	73	223
Total Volume	0	0	0	0	0	4	419	0	0	423	135	0	12	0	147	0	260	32	1	293	863
% App. Total	0	0	0	0		0.9	99.1	0	0		91.8	0	8.2	0		0	88.7	10.9	0.3		
PHF	.000	.000	.000	.000	.000	.500	.911	.000	.000	.912	.912	.000	.600	.000	.942	.000	.844	.667	.250	.883	.963

LSC Transportation Consultants, Inc.
545 E Pikes Peak Ave, Suite 210
Colorado Springs, CO 80905
719-633-2868

File Name : Springside Dr - Constitution Ave AM
Site Code : 00204140
Start Date : 2/26/2020
Page No : 3



LSC Transportation Consultants, Inc.

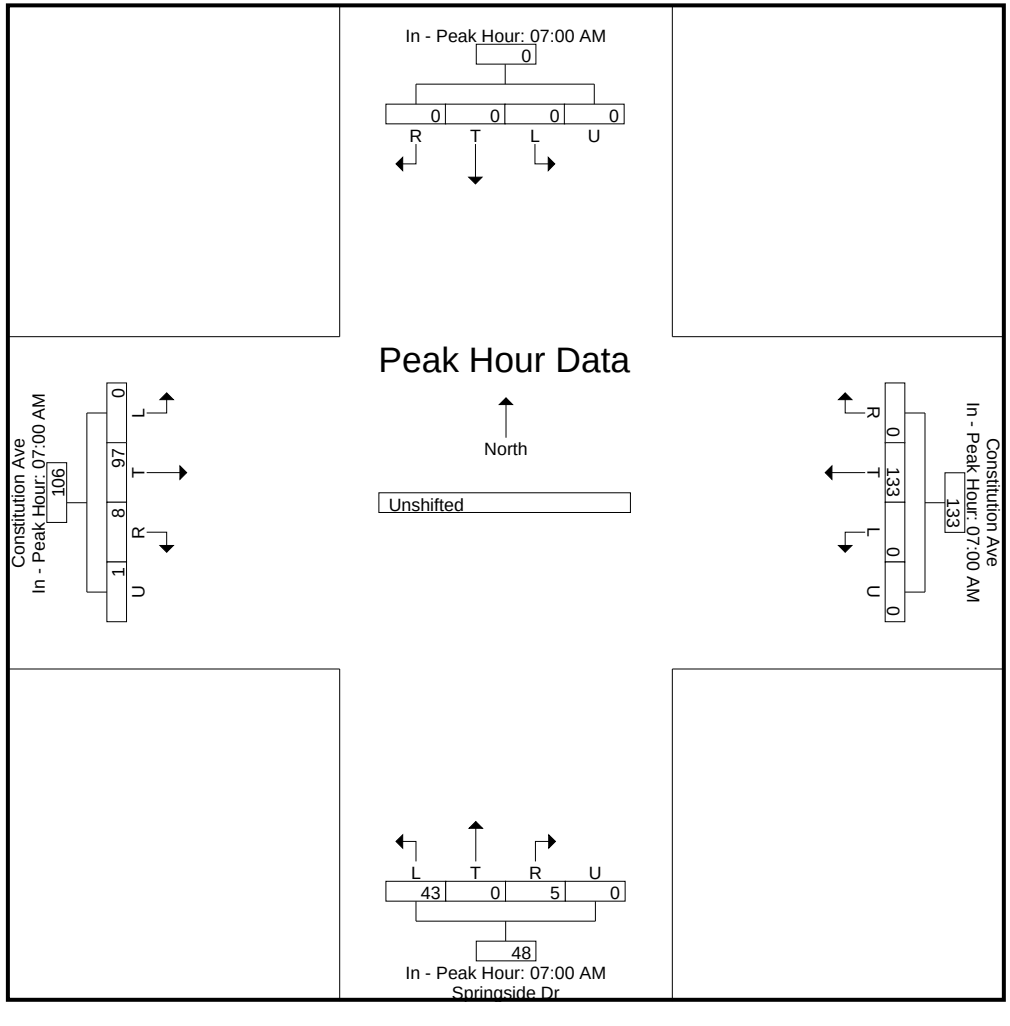
545 E Pikes Peak Ave, Suite 210
Colorado Springs, CO 80905
719-633-2868

File Name : Springside Dr - Constitution Ave AM
Site Code : 00204140
Start Date : 2/26/2020
Page No : 4

	Southbound					Constitution Ave Westbound					Springside Dr Northbound					Constitution Ave Eastbound					
Start Time	**L**	**T**	**R**	**U**	**App. Total**	**L**	**T**	**R**	**U**	**App. Total**	**L**	**T**	**R**	**U**	**App. Total**	**L**	**T**	**R**	**U**	**App. Total**	**Int. Total**
Peak Hour Analysis From 7:00:00 AM to 8:45:00 AM - Peak 1 of 1																					
Peak Hour for Each Approach Begins at:																					
	7:00:00 AM					7:00:00 AM					7:00:00 AM					7:00:00 AM					
+0 mins.	0	0	0	0	0	0	102	0	0	102	34	0	**5**	0	**39**	0	**77**	5	**1**	**83**	
+5 mins.	0	0	0	0	0	1	91	0	0	92	33	0	3	0	36	0	57	**12**	0	69	
+10 mins.	0	0	0	0	0	**2**	111	0	0	113	**37**	0	1	0	38	0	61	7	0	68	
+15 mins.	0	0	0	0	0	1	**115**	0	0	**116**	31	0	3	0	34	0	65	8	0	73	
Total Volume	0	0	0	0	0	4	419	0	0	423	135	0	12	0	147	0	260	32	1	293	
% App. Total	0	0	0	0		0.9	99.1	0	0		91.8	0	8.2	0		0	88.7	10.9	0.3		
PHF	.000	.000	.000	.000	.000	.500	.911	.000	.000	.912	.912	.000	.600	.000	.942	.000	.844	.667	.250	.883	

LSC Transportation Consultants, Inc.
545 E Pikes Peak Ave, Suite 210
Colorado Springs, CO 80905
719-633-2868

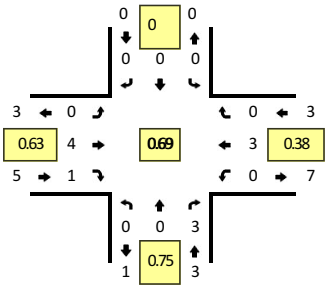
File Name : Springside Dr - Constitution Ave AM
Site Code : 00204140
Start Date : 2/26/2020
Page No : 5

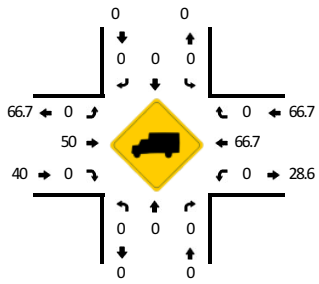


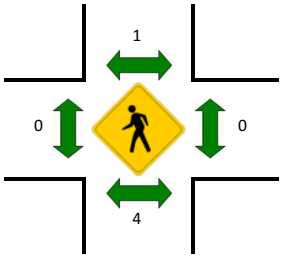
Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

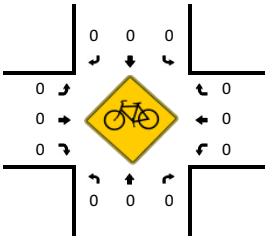
LOCATION: Latern Ct -- Hames Dr | **QC JOB #:** 15171502
CITY/STATE: El Paso, CO | **DATE:** Tue, Jan 28 2020

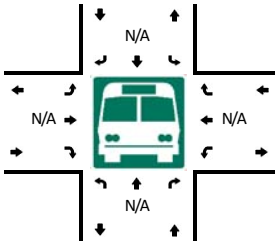
Peak-Hour: 2:00 PM -- 3:00 PM
Peak 15-Min: 2:15 PM -- 2:30 PM

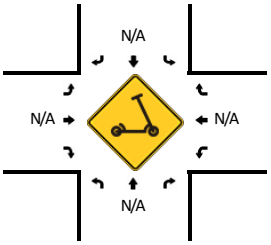












15-Min Count Period Beginning At	Latern Ct (Northbound)				Latern Ct (Southbound)				Hames Dr (Eastbound)				Hames Dr (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
2:00 PM	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	2	
2:15 PM	0	0	1	0	0	0	0	0	0	2	0	0	0	1	0	0	4	
2:30 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	
2:45 PM	0	0	1	0	0	0	0	0	0	1	0	0	0	2	0	0	4	11
3:00 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	10
3:15 PM	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	2	8
3:30 PM	0	0	0	0	0	0	0	0	0	1	1	0	0	1	0	0	3	10
3:45 PM	0	0	1	0	0	0	0	0	0	1	1	0	1	0	0	0	4	10

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	4	0	0	0	0	0	0	8	0	0	0	4	0	0	16
Heavy Trucks	0	0	0		0	0	0		0	4	0		0	4	0		8
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

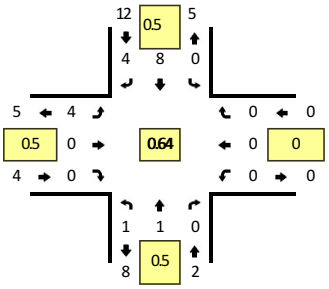
Comments:

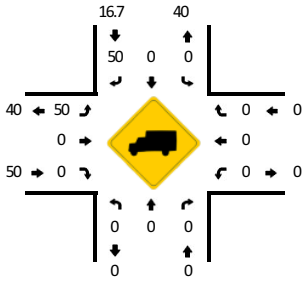
Report generated on 2/18/2020 9:25 AM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

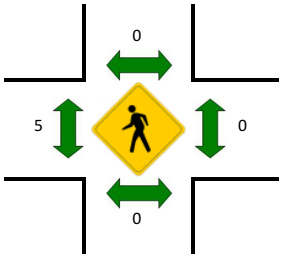
LOCATION: Pinyon Jay Dr -- Hames Dr | **QC JOB #:** 15171504
CITY/STATE: El Paso, CO | **DATE:** Tue, Jan 28 2020

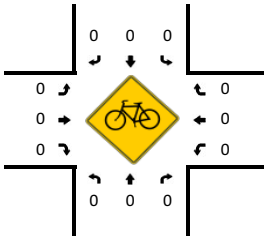
Peak-Hour: 2:45 PM -- 3:45 PM
Peak 15-Min: 3:30 PM -- 3:45 PM

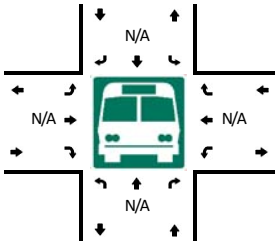


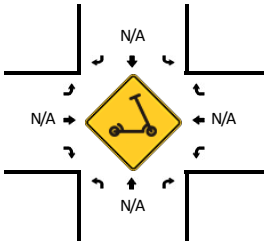


Quality Counts
DATA THAT DRIVES COMMUNITIES









15-Min Count Period Beginning At	Pinyon Jay Dr (Northbound)				Pinyon Jay Dr (Southbound)				Hames Dr (Eastbound)				Hames Dr (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
2:00 PM	0	1	0	0	0	3	0	0	0	0	0	0	0	0	0	0	4	
2:15 PM	0	0	0	0	0	2	0	0	1	0	0	0	0	0	0	0	3	
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2:45 PM	1	0	0	0	0	1	2	0	2	0	0	0	0	0	0	0	6	13
3:00 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	10
3:15 PM	0	1	0	0	0	2	0	0	1	0	0	0	0	0	0	0	4	11
3:30 PM	0	0	0	0	0	4	2	0	1	0	0	0	0	0	0	0	7	18
3:45 PM	1	0	0	0	0	2	0	0	1	0	1	0	0	0	0	0	5	17

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	0	0	0	16	8	0	4	0	0	0	0	0	0	0	28
Heavy Trucks	0	0	0		0	0	4		0	0	0		0	0	0		4
Buses																	
Pedestrians		0				0				4				0			4
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

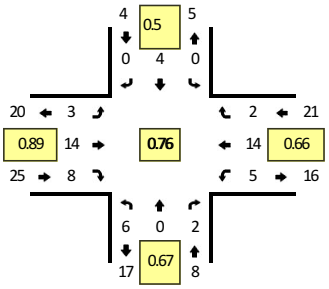
Comments:

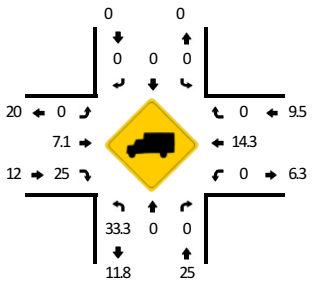
Report generated on 2/18/2020 9:25 AM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

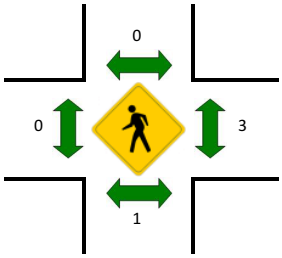
Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

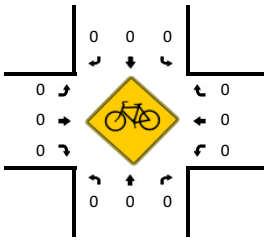
LOCATION: Pinyon Jay Dr -- Meadowbrook Pkwy | **QC JOB #:** 15171506
CITY/STATE: El Paso, CO | **DATE:** Tue, Jan 28 2020

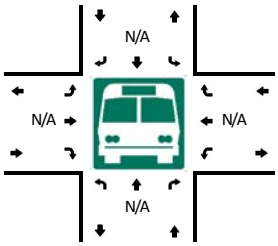
Peak-Hour: 2:45 PM -- 3:45 PM
Peak 15-Min: 3:30 PM -- 3:45 PM

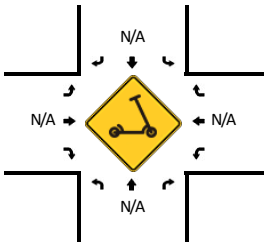












15-Min Count Period Beginning At	Pinyon Jay Dr (Northbound)				Pinyon Jay Dr (Southbound)				Meadowbrook Pkwy (Eastbound)				Meadowbrook Pkwy (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
2:00 PM	3	0	0	0	0	1	1	0	1	0	2	0	1	2	0	0	11	
2:15 PM	0	0	0	0	0	0	0	0	0	1	0	0	2	3	0	0	6	
2:30 PM	1	0	0	0	0	0	0	1	0	3	0	0	0	1	0	0	6	
2:45 PM	2	0	1	0	0	0	0	0	1	3	3	0	1	3	1	0	15	38
3:00 PM	1	0	0	0	0	1	0	0	1	2	1	0	0	6	1	0	13	40
3:15 PM	1	0	1	0	0	1	0	0	1	5	1	0	0	1	0	0	11	45
3:30 PM	2	0	0	0	0	2	0	0	0	4	3	0	4	4	0	0	19	58
3:45 PM	1	1	0	0	0	1	0	0	0	5	2	0	0	3	0	0	13	56

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	8	0	0	0	0	8	0	0	0	16	12	0	16	16	0	0	76
Heavy Trucks	0	0	0		0	0	0		0	0	4		0	0	0		4
Buses																	
Pedestrians		4				0				0				0			4
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

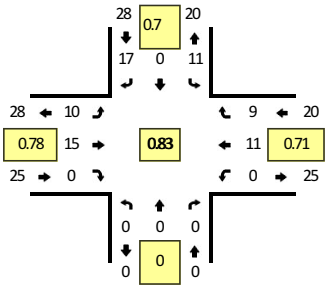
Comments:

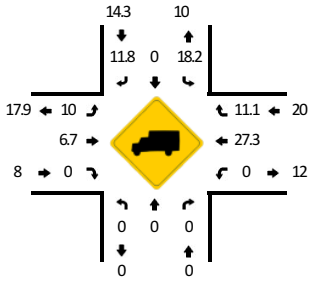
Report generated on 2/18/2020 9:25 AM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

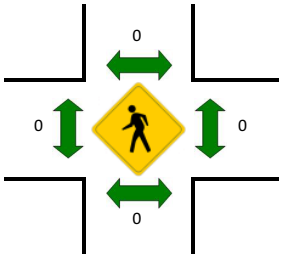
Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

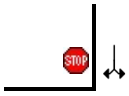
LOCATION: Springside Dr -- Meadowbrook Pkwy | **QC JOB #:** 15171508
CITY/STATE: El Paso, CO | **DATE:** Tue, Jan 28 2020

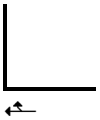
Peak-Hour: 2:45 PM -- 3:45 PM
Peak 15-Min: 3:30 PM -- 3:45 PM

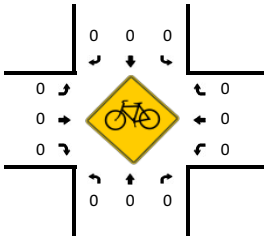


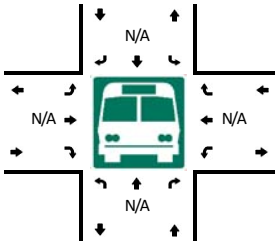


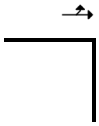


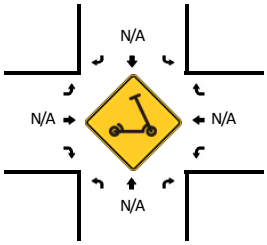












15-Min Count Period Beginning At	Springside Dr (Northbound)				Springside Dr (Southbound)				Meadowbrook Pkwy (Eastbound)				Meadowbrook Pkwy (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
2:00 PM	0	0	0	0	3	0	4	0	0	0	0	0	0	1	5	0	13	
2:15 PM	0	0	0	0	0	0	1	0	1	1	0	0	0	0	3	0	6	
2:30 PM	0	0	0	0	0	0	0	0	5	3	0	0	0	1	1	0	10	
2:45 PM	0	0	0	0	2	0	5	0	3	5	0	0	0	2	3	0	20	49
3:00 PM	0	0	0	0	2	0	5	0	2	2	0	0	0	3	4	0	18	54
3:15 PM	0	0	0	0	1	0	3	0	1	6	0	0	0	2	0	0	13	61
3:30 PM	0	0	0	0	5	0	4	1	4	2	0	0	0	4	2	0	22	73
3:45 PM	0	0	0	0	2	0	6	1	1	5	0	0	0	2	2	0	19	72

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	0	0	20	0	16	4	16	8	0	0	0	16	8	0	88
Heavy Trucks	0	0	0		4	0	4		0	0	0		0	0	0		8
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 2/18/2020 9:25 AM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

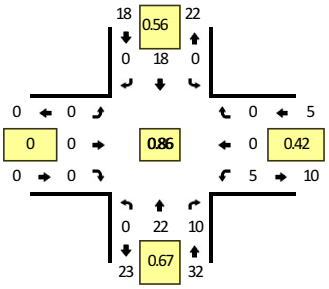
Type of peak hour being reported: Intersection Peak

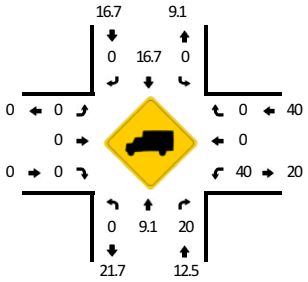
Method for determining peak hour: Total Entering Volume

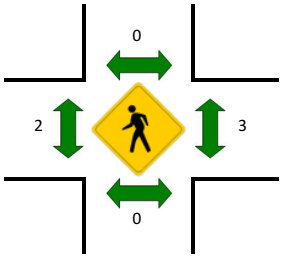
LOCATION: Meadowbrook Pkwy -- Hames Dr
CITY/STATE: El Paso, CO

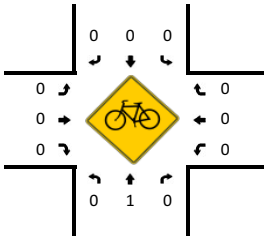
QC JOB #: 15171510
DATE: Tue, Jan 28 2020

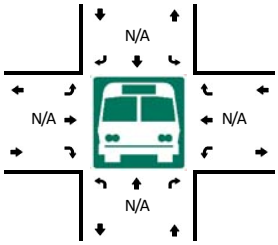
Peak-Hour: 2:45 PM -- 3:45 PM
Peak 15-Min: 3:15 PM -- 3:30 PM

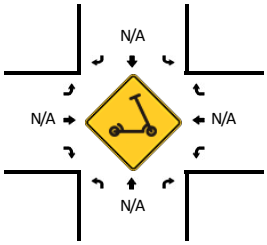












15-Min Count Period Beginning At	Meadowbrook Pkwy (Northbound)				Meadowbrook Pkwy (Southbound)				Hames Dr (Eastbound)				Hames Dr (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
2:00 PM	0	0	1	0	0	4	0	0	0	0	0	0	1	0	0	0	6	
2:15 PM	0	3	2	0	1	0	0	0	0	0	0	0	1	0	0	0	7	
2:30 PM	0	5	1	1	0	4	0	0	0	0	0	0	0	0	0	0	11	
2:45 PM	0	3	3	0	0	3	0	0	0	0	0	0	3	0	0	0	12	36
3:00 PM	0	4	0	0	0	8	0	0	0	0	0	0	0	0	0	0	12	42
3:15 PM	0	10	2	0	0	4	0	0	0	0	0	0	0	0	0	0	16	51
3:30 PM	0	5	5	0	0	3	0	0	0	0	0	0	2	0	0	0	15	55
3:45 PM	0	6	1	0	1	3	0	0	0	0	0	0	0	0	0	0	11	54

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	40	8	0	0	16	0	0	0	0	0	0	0	0	0	0	64
Heavy Trucks	0	0	0		0	4	0		0	0	0		0	0	0		4
Buses																	
Pedestrians		0				0				4				0			4
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 2/18/2020 9:25 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

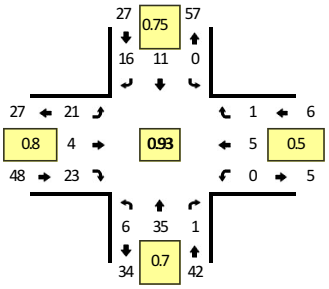
Type of peak hour being reported: Intersection Peak

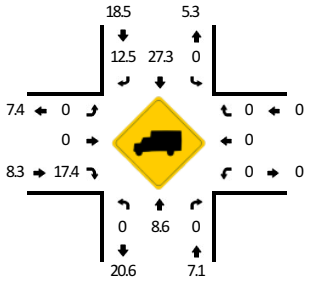
Method for determining peak hour: Total Entering Volume

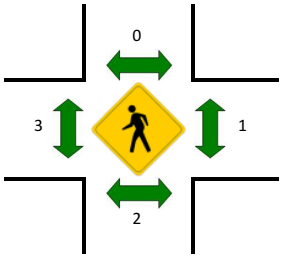
LOCATION: Meadowbrook Pkwy -- Riverwalk Pkwy
CITY/STATE: El Paso, CO

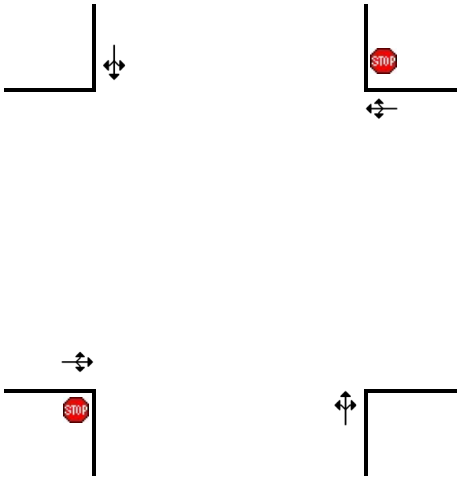
QC JOB #: 15171512
DATE: Tue, Jan 28 2020

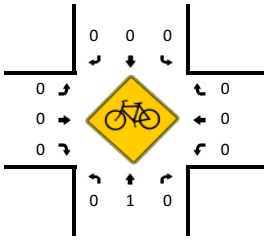
Peak-Hour: 2:45 PM -- 3:45 PM
Peak 15-Min: 3:00 PM -- 3:15 PM

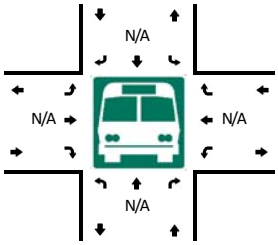


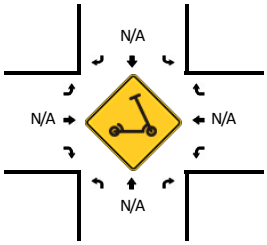












15-Min Count Period Beginning At	Meadowbrook Pkwy (Northbound)				Meadowbrook Pkwy (Southbound)				Riverwalk Pkwy (Eastbound)				Riverwalk Pkwy (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
2:00 PM	2	5	1	0	0	3	2	0	2	1	2	0	0	0	0	0	18	
2:15 PM	1	4	0	0	0	2	2	0	0	1	2	0	0	0	0	0	12	
2:30 PM	1	2	1	0	0	2	3	0	3	2	2	0	0	1	0	0	17	
2:45 PM	3	5	1	0	0	2	3	0	8	1	4	0	0	2	0	0	29	76
3:00 PM	2	4	0	0	0	4	5	0	5	2	8	0	0	2	1	0	33	91
3:15 PM	1	14	0	0	0	2	3	0	3	1	8	0	0	1	0	0	33	112
3:30 PM	0	12	0	0	0	3	5	0	5	0	3	0	0	0	0	0	28	123
3:45 PM	0	11	2	0	0	0	2	0	2	2	5	0	0	0	0	0	24	118

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	8	16	0	0	0	16	20	0	20	8	32	0	0	8	4	0	132
Heavy Trucks	0	0	0		0	0	4		0	0	4		0	0	0		8
Buses																	
Pedestrians		0				0				8				4			12
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 2/18/2020 9:25 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

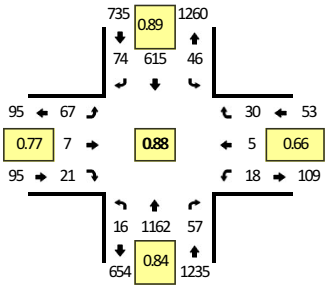
Type of peak hour being reported: Intersection Peak

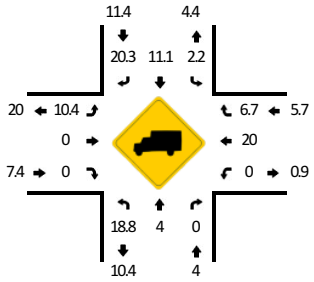
Method for determining peak hour: Total Entering Volume

LOCATION: Marksheffel Rd -- Meadowbrook Pkwy
CITY/STATE: Cimarron Hills, CO

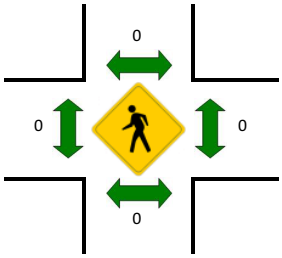
QC JOB #: 15171514
DATE: Tue, Jan 28 2020

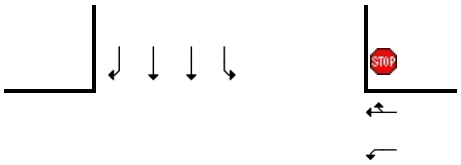
Peak-Hour: 3:00 PM -- 4:00 PM
Peak 15-Min: 3:45 PM -- 4:00 PM

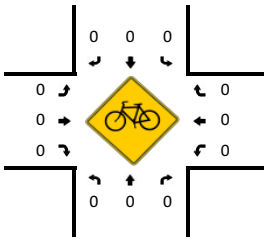


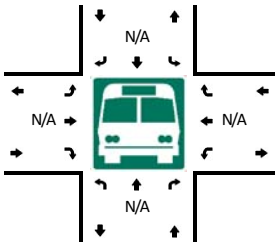


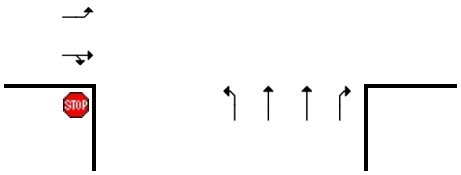
Quality Counts
DATA THAT DRIVES COMMUNITIES

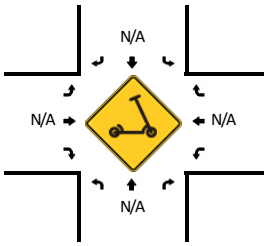












15-Min Count Period Beginning At	Marksheffel Rd (Northbound)				Marksheffel Rd (Southbound)				Meadowbrook Pkwy (Eastbound)				Meadowbrook Pkwy (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
2:00 PM	3	108	3	0	4	96	12	0	17	1	10	0	5	2	4	0	265	
2:15 PM	3	164	9	0	0	121	20	0	14	0	6	0	2	0	7	0	346	
2:30 PM	4	180	1	0	3	136	19	0	14	4	6	0	5	2	12	0	386	
2:45 PM	3	198	11	0	6	133	23	0	10	2	3	0	2	0	6	0	397	1394
3:00 PM	1	234	6	0	10	148	23	0	12	1	2	0	4	0	14	0	455	1584
3:15 PM	6	276	19	0	9	135	15	0	17	1	5	0	2	3	5	0	493	1731
3:30 PM	5	307	15	0	10	160	17	1	21	1	9	0	9	2	9	0	566	1911
3:45 PM	4	345	17	0	16	172	19	0	17	4	5	0	3	0	2	0	604	2118

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	16	1380	68	0	64	688	76	0	68	16	20	0	12	0	8	0	2416
Heavy Trucks	0	48	0		4	84	20		0	0	0		0	0	0		156
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 2/18/2020 9:25 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

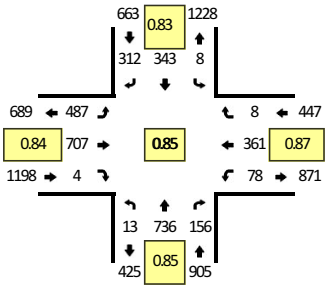
Type of peak hour being reported: Intersection Peak

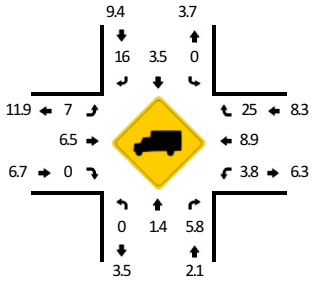
Method for determining peak hour: Total Entering Volume

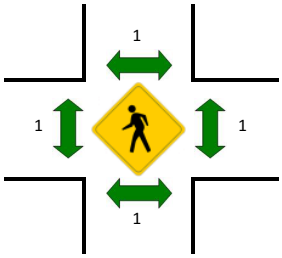
LOCATION: Marksheffel Rd -- Hwy 24
CITY/STATE: Colorado Springs, CO

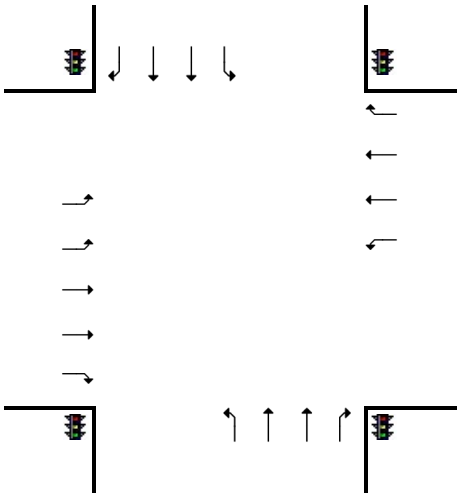
QC JOB #: 15171516
DATE: Tue, Jan 28 2020

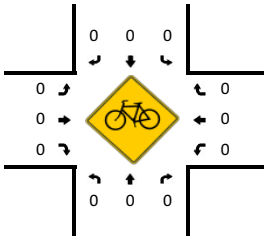
Peak-Hour: 3:00 PM -- 4:00 PM
Peak 15-Min: 3:45 PM -- 4:00 PM

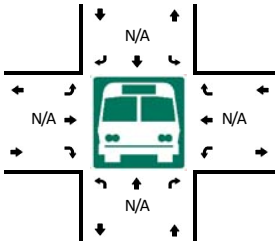


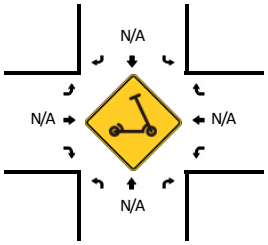












15-Min Count Period Beginning At	Marksheffel Rd (Northbound)				Marksheffel Rd (Southbound)				Hwy 24 (Eastbound)				Hwy 24 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
2:00 PM	1	59	18	0	1	54	45	0	53	117	0	0	18	77	4	0	447	
2:15 PM	1	118	22	0	3	66	73	0	76	111	0	0	25	87	3	0	585	
2:30 PM	1	98	25	0	1	65	68	0	65	124	0	0	15	83	1	0	546	
2:45 PM	1	119	18	0	0	74	76	0	92	147	2	0	19	89	2	0	639	2217
3:00 PM	1	128	31	0	1	71	73	0	111	155	1	3	18	77	2	0	672	2442
3:15 PM	2	177	38	0	3	81	73	0	120	160	1	0	17	97	2	0	771	2628
3:30 PM	5	215	43	0	2	92	68	0	105	186	1	0	22	81	3	0	823	2905
3:45 PM	5	216	44	0	2	99	98	0	148	206	1	0	21	106	1	0	947	3213

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	20	864	176	0	8	396	392	0	592	824	4	0	84	424	4	0	3788
Heavy Trucks	0	12	12		0	20	68		32	32	0		0	52	0		228
Buses																	
Pedestrians		4				4				4				4			16
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

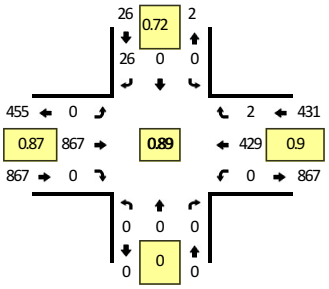
Report generated on 2/18/2020 9:25 AM

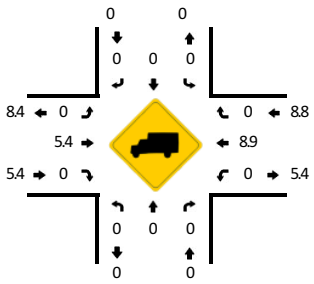
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

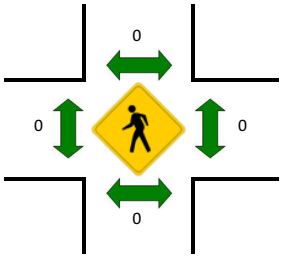
Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

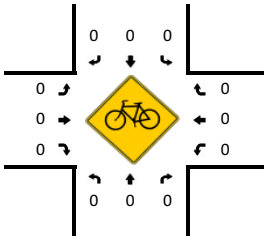
LOCATION: Brookings Dr -- Hwy 24 | **QC JOB #:** 15171518
CITY/STATE: El Paso, CO | **DATE:** Tue, Jan 28 2020

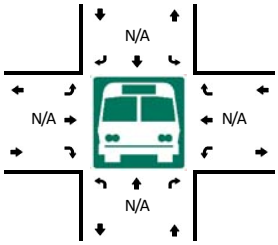
Peak-Hour: 3:00 PM -- 4:00 PM
Peak 15-Min: 3:45 PM -- 4:00 PM

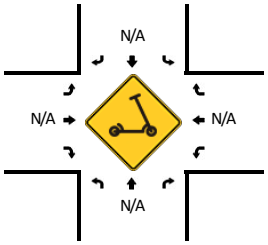












15-Min Count Period Beginning At	Brookings Dr (Northbound)				Brookings Dr (Southbound)				Hwy 24 (Eastbound)				Hwy 24 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
2:00 PM	0	0	0	0	0	0	8	0	0	139	0	0	0	98	0	0	245	
2:15 PM	0	0	0	0	0	0	4	0	0	136	0	0	0	118	0	0	258	
2:30 PM	0	0	0	0	0	0	8	0	0	136	0	0	0	85	1	0	230	
2:45 PM	0	0	0	0	0	0	4	0	0	159	0	0	0	101	0	0	264	997
3:00 PM	0	0	0	0	0	0	7	0	0	201	0	0	0	95	0	0	303	1055
3:15 PM	0	0	0	0	0	0	9	0	0	186	0	0	0	113	1	0	309	1106
3:30 PM	0	0	0	0	0	0	6	0	0	232	0	0	0	102	0	0	340	1216
3:45 PM	0	0	0	0	0	0	4	0	0	248	0	0	0	119	1	0	372	1324

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	0	0	0	0	16	0	0	992	0	0	0	476	4	0	1488
Heavy Trucks	0	0	0		0	0	0		0	36	0		0	48	0		84
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 2/18/2020 9:25 AM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

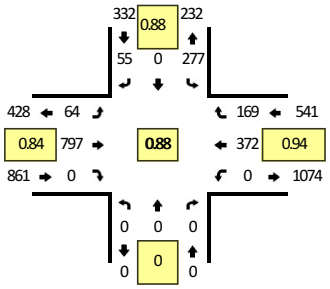
Type of peak hour being reported: Intersection Peak

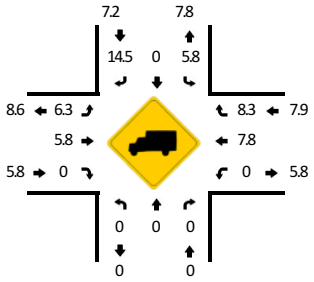
Method for determining peak hour: Total Entering Volume

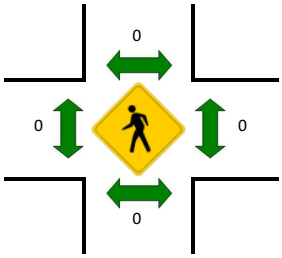
LOCATION: Constitution Ave -- Hwy 24
CITY/STATE: Colorado Springs, CO

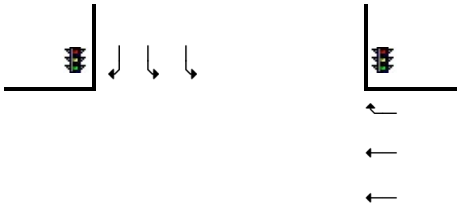
QC JOB #: 15171520
DATE: Tue, Jan 28 2020

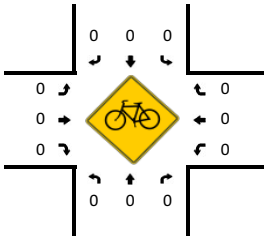
Peak-Hour: 3:00 PM -- 4:00 PM
Peak 15-Min: 3:45 PM -- 4:00 PM

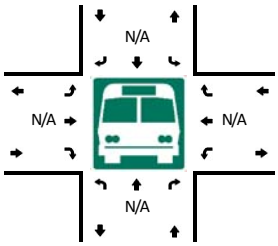


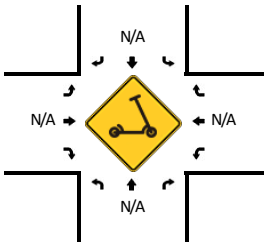












15-Min Count Period Beginning At	Constitution Ave (Northbound)				Constitution Ave (Southbound)				Hwy 24 (Eastbound)				Hwy 24 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
2:00 PM	0	0	0	0	53	0	14	0	16	109	0	1	0	93	34	0	320	
2:15 PM	0	0	0	0	38	0	18	0	13	134	0	4	0	87	41	0	335	
2:30 PM	0	0	0	0	53	0	12	0	13	120	0	0	0	75	31	0	304	
2:45 PM	0	0	0	0	65	0	11	0	21	145	0	1	0	83	41	0	367	1326
3:00 PM	0	0	0	0	67	0	11	0	9	172	0	0	0	86	44	0	389	1395
3:15 PM	0	0	0	0	72	0	16	0	18	180	0	0	0	93	32	0	411	1471
3:30 PM	0	0	0	0	63	0	9	0	22	204	0	1	0	94	50	0	443	1610
3:45 PM	0	0	0	0	75	0	19	0	14	241	0	0	0	99	43	0	491	1734

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	0	0	300	0	76	0	56	964	0	0	0	396	172	0	1964
Heavy Trucks	0	0	0		24	0	20		0	48	0		0	28	20		140
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

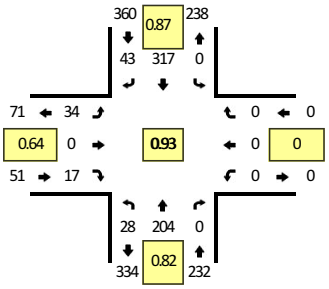
Report generated on 2/18/2020 9:25 AM

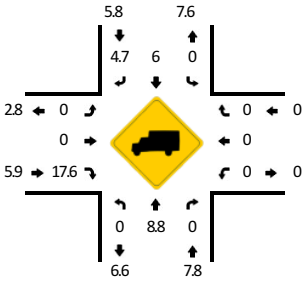
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

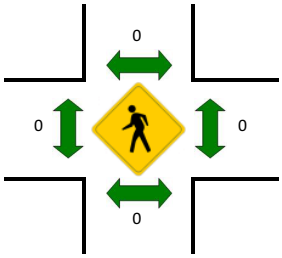
Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

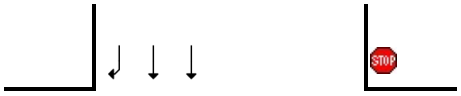
LOCATION: Constitution Ave -- Meadowbrook Pkwy | **QC JOB #:** 15171522
CITY/STATE: El Paso, CO | **DATE:** Tue, Jan 28 2020

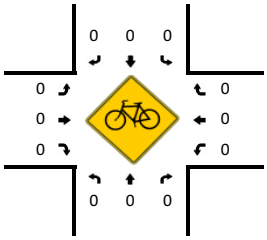
Peak-Hour: 3:00 PM -- 4:00 PM
Peak 15-Min: 3:45 PM -- 4:00 PM

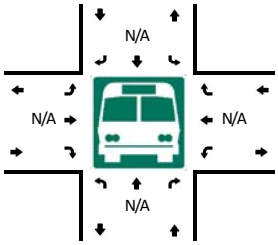


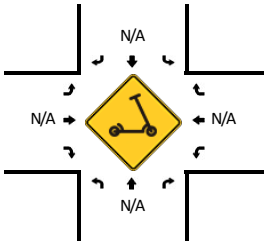












15-Min Count Period Beginning At	Constitution Ave (Northbound)				Constitution Ave (Southbound)				Meadowbrook Pkwy (Eastbound)				Meadowbrook Pkwy (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
2:00 PM	4	48	0	0	0	68	9	0	1	0	2	0	0	0	0	0	132	
2:15 PM	4	50	0	1	0	56	5	1	5	0	1	0	0	0	0	0	123	
2:30 PM	6	38	0	0	0	58	3	0	4	0	3	0	0	0	0	0	112	
2:45 PM	8	54	0	0	0	75	13	0	3	0	2	0	0	0	0	0	155	522
3:00 PM	4	47	0	0	0	72	9	0	13	0	7	0	0	0	0	0	152	542
3:15 PM	6	46	0	0	0	83	11	0	7	0	4	0	0	0	0	0	157	576
3:30 PM	7	64	0	0	0	71	11	0	7	0	1	0	0	0	0	0	161	625
3:45 PM	11	47	0	0	0	91	12	0	7	0	5	0	0	0	0	0	173	643

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	44	188	0	0	0	364	48	0	28	0	20	0	0	0	0	0	692
Heavy Trucks	0	20	0		0	32	4		0	0	8		0	0	0		64
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 2/18/2020 9:25 AM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

LSC Transportation Consultants, Inc.

545 E Pikes Peak Ave, Suite 210
Colorado Springs, CO 80905
719-633-2868

File Name : Springside Dr - Constitution Ave PM
Site Code : 00204140
Start Date : 2/26/2020
Page No : 1

Groups Printed- Unshifted

	Southbound					Constitution Ave Westbound					Springside Dr Northbound					Constitution Ave Eastbound					
Start Time	**L**	**T**	**R**	**U**	**App. Total**	**L**	**T**	**R**	**U**	**App. Total**	**L**	**T**	**R**	**U**	**App. Total**	**L**	**T**	**R**	**U**	**App. Total**	**Int. Total**
02:00 PM	0	0	0	0	0	2	41	0	0	43	11	0	0	0	11	0	85	8	0	93	147
02:15 PM	0	0	0	0	0	0	59	0	0	59	11	0	0	0	11	0	62	9	0	71	141
02:30 PM	0	0	0	0	0	0	54	0	0	54	18	0	1	0	19	0	93	15	0	108	181
02:45 PM	0	0	0	0	0	2	49	0	0	51	16	0	0	0	16	0	85	18	0	103	170
Total	0	0	0	0	0	4	203	0	0	207	56	0	1	0	57	0	325	50	0	375	639
03:00 PM	0	0	0	0	0	0	56	0	0	56	15	0	0	0	15	0	98	26	1	125	196
03:15 PM	0	0	0	0	0	4	51	0	0	55	14	0	0	0	14	0	90	15	0	105	174
03:30 PM	0	0	0	0	0	1	68	0	0	69	13	0	0	0	13	0	115	38	0	153	235
03:45 PM	0	0	0	0	0	1	69	0	0	70	18	0	1	0	19	0	104	27	0	131	220
Total	0	0	0	0	0	6	244	0	0	250	60	0	1	0	61	0	407	106	1	514	825
Grand Total	0	0	0	0	0	10	447	0	0	457	116	0	2	0	118	0	732	156	1	889	1464
Apprch %	0	0	0	0		2.2	97.8	0	0		98.3	0	1.7	0		0	82.3	17.5	0.1		
Total %	0	0	0	0	0	0.7	30.5	0	0	31.2	7.9	0	0.1	0	8.1	0	50	10.7	0.1	60.7	

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	Southbound					Constitution Ave Westbound					Springside Dr Northbound					Constitution Ave Eastbound					
Start Time	**L**	**T**	**R**	**U**	**App. Total**	**L**	**T**	**R**	**U**	**App. Total**	**L**	**T**	**R**	**U**	**App. Total**	**L**	**T**	**R**	**U**	**App. Total**	**Int. Total**
Peak Hour Analysis From 2:00:00 PM to 3:45:00 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 3:00:00 PM																					
3:00:00 PM	0	0	0	0	0	0	56	0	0	56	15	0	0	0	15	0	98	26	**1**	125	196
3:15:00 PM	0	0	0	0	0	**4**	51	0	0	55	14	0	0	0	14	0	90	15	0	105	174
3:30:00 PM	0	0	0	0	0	1	68	0	0	69	13	0	0	0	13	0	**115**	**38**	0	**153**	**235**
3:45:00 PM	0	0	0	0	0	1	**69**	0	0	**70**	**18**	0	**1**	0	**19**	0	104	27	0	131	220
Total Volume	0	0	0	0	0	6	244	0	0	250	60	0	1	0	61	0	407	106	1	514	825
% App. Total	0	0	0	0		2.4	97.6	0	0		98.4	0	1.6	0		0	79.2	20.6	0.2		
PHF	.000	.000	.000	.000	.000	.375	.884	.000	.000	.893	.833	.000	.250	.000	.803	.000	.885	.697	.250	.840	.878

LSC Transportation Consultants, Inc.
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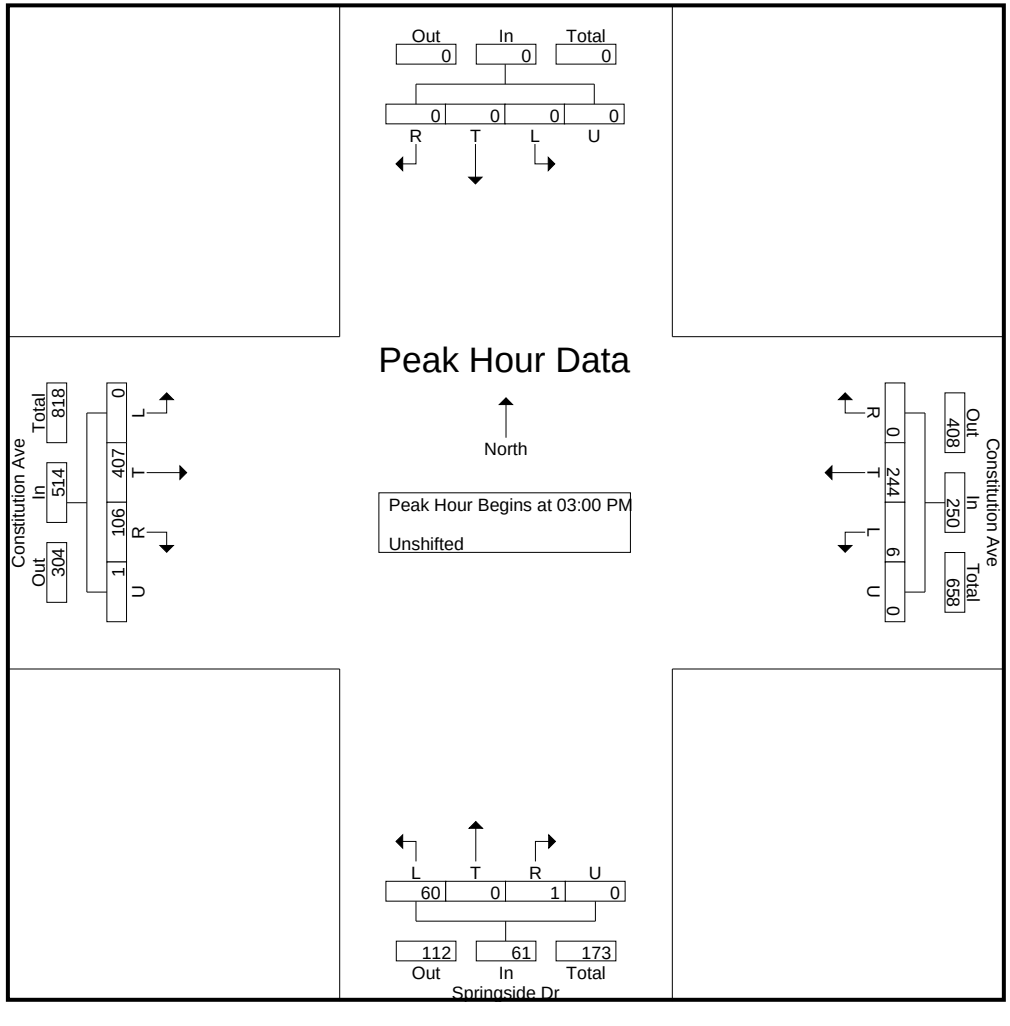
File Name : Springside Dr - Constitution Ave PM
Site Code : 00204140
Start Date : 2/26/2020
Page No : 3



LSC Transportation Consultants, Inc.

545 E Pikes Peak Ave, Suite 210
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719-633-2868

File Name : Springside Dr - Constitution Ave PM
Site Code : 00204140
Start Date : 2/26/2020
Page No : 4

	Southbound					Constitution Ave Westbound					Springside Dr Northbound					Constitution Ave Eastbound					
Start Time	**L**	**T**	**R**	**U**	**App. Total**	**L**	**T**	**R**	**U**	**App. Total**	**L**	**T**	**R**	**U**	**App. Total**	**L**	**T**	**R**	**U**	**App. Total**	**Int. Total**
Peak Hour Analysis From 2:00:00 PM to 3:45:00 PM - Peak 1 of 1																					
Peak Hour for Each Approach Begins at:																					
	2:00:00 PM					3:00:00 PM					2:30:00 PM					3:00:00 PM					
+0 mins.	0	0	0	0	0	0	56	0	0	56	**18**	0	**1**	0	**19**	0	98	26	**1**	125	
+5 mins.	0	0	0	0	0	**4**	51	0	0	55	16	0	0	0	16	0	90	15	0	105	
+10 mins.	0	0	0	0	0	1	68	0	0	69	15	0	0	0	15	0	**115**	**38**	0	**153**	
+15 mins.	0	0	0	0	0	1	**69**	0	0	**70**	14	0	0	0	14	0	104	27	0	131	
Total Volume	0	0	0	0	0	6	244	0	0	250	63	0	1	0	64	0	407	106	1	514	
% App. Total	0	0	0	0		2.4	97.6	0	0		98.4	0	1.6	0		0	79.2	20.6	0.2		
PHF	.000	.000	.000	.000	.000	.375	.884	.000	.000	.893	.875	.000	.250	.000	.842	.000	.885	.697	.250	.840	

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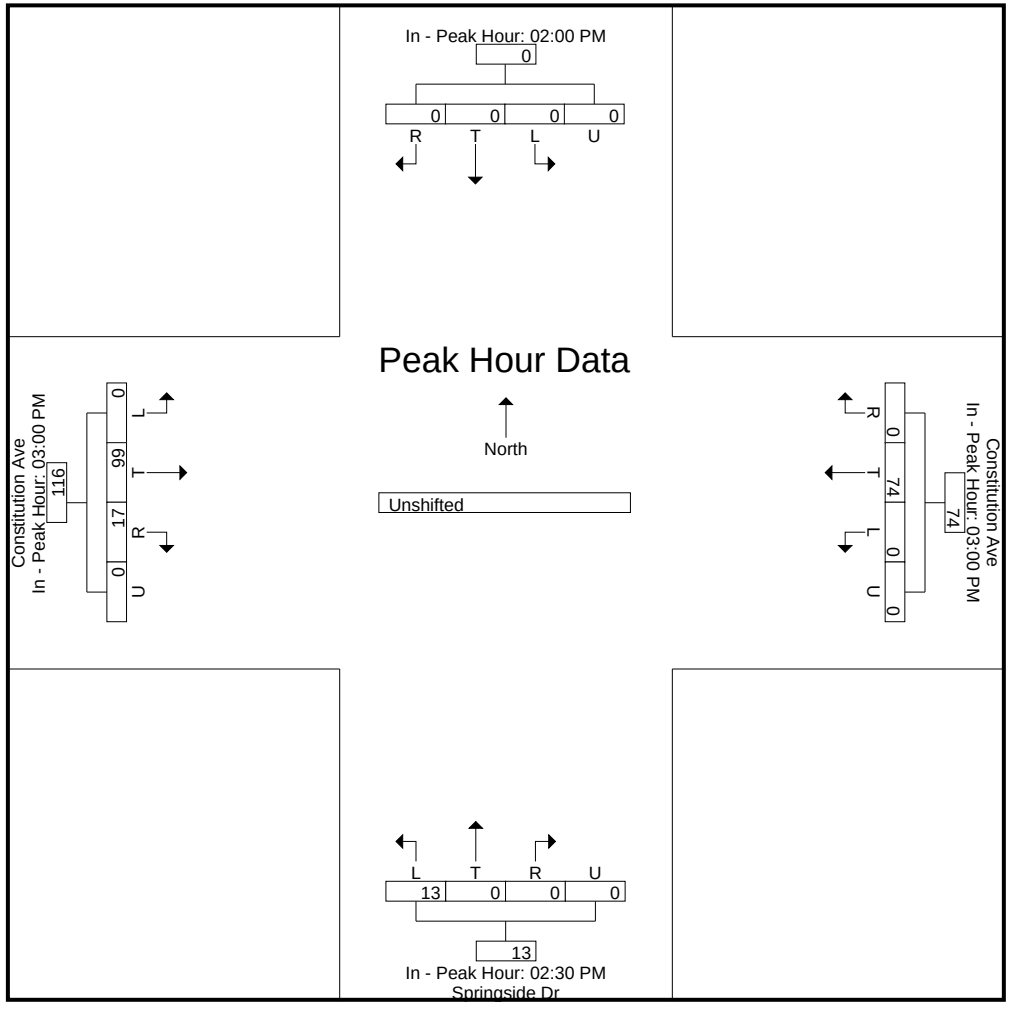
Start Date : 2/26/2020
Page No : 5



Levels of Service

TRANSPORTATION
CONSULTANTS, INC.

Intersection	
Int Delay, s/veh	5.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	22	4	25	2	12	0	7	20	0	0	11	23
Future Vol, veh/h	22	4	25	2	12	0	7	20	0	0	11	23
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	75	75	75	58	58	58	84	84	84	77	77	77
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	29	5	33	3	21	0	8	24	0	0	14	30

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	21	0	0	38	0	0	129	107	22	119	123	21
Stage 1	-	-	-	-	-	-	80	80	-	27	27	-
Stage 2	-	-	-	-	-	-	49	27	-	92	96	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1595	-	-	1572	-	-	844	783	1055	857	767	1056
Stage 1	-	-	-	-	-	-	929	828	-	990	873	-
Stage 2	-	-	-	-	-	-	964	873	-	915	815	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1595	-	-	1572	-	-	795	767	1055	824	751	1056
Mov Cap-2 Maneuver	-	-	-	-	-	-	795	767	-	824	751	-
Stage 1	-	-	-	-	-	-	911	812	-	971	871	-
Stage 2	-	-	-	-	-	-	920	871	-	871	800	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	3.1	1	9.9	9.1
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	774	1595	-	-	1572	-	-	933
HCM Lane V/C Ratio	0.042	0.018	-	-	0.002	-	-	0.047
HCM Control Delay (s)	9.9	7.3	0	-	7.3	0	-	9.1
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.1	0.1	-	-	0	-	-	0.1

Intersection	
Intersection Delay, s/veh	7.2
Intersection LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	6	2	14	1	2	29
Future Vol, veh/h	6	2	14	1	2	29
Peak Hour Factor	0.40	0.40	0.63	0.63	0.86	0.86
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	15	5	22	2	2	34
Number of Lanes	1	0	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay	7.2	7.1	7.2
HCM LOS	A	A	A

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	0%	75%	6%
Vol Thru, %	93%	0%	94%
Vol Right, %	7%	25%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	15	8	31
LT Vol	0	6	2
Through Vol	14	0	29
RT Vol	1	2	0
Lane Flow Rate	24	20	36
Geometry Grp	1	1	1
Degree of Util (X)	0.026	0.022	0.04
Departure Headway (Hd)	3.956	4.037	4
Convergence, Y/N	Yes	Yes	Yes
Cap	907	887	898
Service Time	1.971	2.062	2.012
HCM Lane V/C Ratio	0.026	0.023	0.04
HCM Control Delay	7.1	7.2	7.2
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.1	0.1	0.1

Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	20	11	11	10	2	13
Future Vol, veh/h	20	11	11	10	2	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	70	70	48	48	63	63
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	29	16	23	21	3	21

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	44	0	-	0	108	34
Stage 1	-	-	-	-	34	-
Stage 2	-	-	-	-	74	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1564	-	-	-	889	1039
Stage 1	-	-	-	-	988	-
Stage 2	-	-	-	-	949	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1564	-	-	-	872	1039
Mov Cap-2 Maneuver	-	-	-	-	872	-
Stage 1	-	-	-	-	969	-
Stage 2	-	-	-	-	949	-

Approach	EB	WB	SB
HCM Control Delay, s	4.7	0	8.6
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1564	-	-	-	1013
HCM Lane V/C Ratio	0.018	-	-	-	0.024
HCM Control Delay (s)	7.3	0	-	-	8.6
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1

Intersection	
Int Delay, s/veh	4.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	11	3	3	14	0	7	2	0	0	7	0
Future Vol, veh/h	1	11	3	3	14	0	7	2	0	0	7	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	75	75	75	61	61	61	45	45	45	58	58	58
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	15	4	5	23	0	16	4	0	0	12	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	23	0	0	19	0	0	58	52	17	54	54	23
Stage 1	-	-	-	-	-	-	19	19	-	33	33	-
Stage 2	-	-	-	-	-	-	39	33	-	21	21	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1592	-	-	1597	-	-	939	839	1062	944	837	1054
Stage 1	-	-	-	-	-	-	1000	880	-	983	868	-
Stage 2	-	-	-	-	-	-	976	868	-	998	878	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1592	-	-	1597	-	-	926	836	1062	937	834	1054
Mov Cap-2 Maneuver	-	-	-	-	-	-	926	836	-	937	834	-
Stage 1	-	-	-	-	-	-	999	879	-	982	865	-
Stage 2	-	-	-	-	-	-	959	865	-	992	877	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	1.3	9.1	9.4
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	904	1592	-	-	1597	-	-	834
HCM Lane V/C Ratio	0.022	0.001	-	-	0.003	-	-	0.014
HCM Control Delay (s)	9.1	7.3	0	-	7.3	0	-	9.4
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	4.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1	1	4	3	1	0
Future Vol, veh/h	1	1	4	3	1	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	50	50	88	88	25	25
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	2	5	3	4	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	4	0	16	3
Stage 1	-	-	-	-	3	-
Stage 2	-	-	-	-	13	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1618	-	1002	1081
Stage 1	-	-	-	-	1020	-
Stage 2	-	-	-	-	1010	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1618	-	999	1081
Mov Cap-2 Maneuver	-	-	-	-	999	-
Stage 1	-	-	-	-	1020	-
Stage 2	-	-	-	-	1007	-

Approach	EB	WB	NB
HCM Control Delay, s	0	4.1	8.6
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	999	-	-	1618	-
HCM Lane V/C Ratio	0.004	-	-	0.003	-
HCM Control Delay (s)	8.6	-	-	7.2	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	3	3	1	1	12	4
Future Vol, veh/h	3	3	1	1	12	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	38	38	50	50	57	57
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	8	2	2	21	7

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	31	25	28	0	-	0
Stage 1	25	-	-	-	-	-
Stage 2	6	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	983	1051	1585	-	-	-
Stage 1	998	-	-	-	-	-
Stage 2	1017	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	982	1051	1585	-	-	-
Mov Cap-2 Maneuver	982	-	-	-	-	-
Stage 1	997	-	-	-	-	-
Stage 2	1017	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.6	3.6	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1585	-	1015	-	-
HCM Lane V/C Ratio	0.001	-	0.016	-	-
HCM Control Delay (s)	7.3	0	8.6	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	2.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	260	32	4	419	135	12
Future Vol, veh/h	260	32	4	419	135	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	300	450	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	91	91	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	295	36	4	460	147	13

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	331	0	533	148
Stage 1	-	-	-	-	295	-
Stage 2	-	-	-	-	238	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	1225	-	477	872
Stage 1	-	-	-	-	730	-
Stage 2	-	-	-	-	779	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1225	-	476	872
Mov Cap-2 Maneuver	-	-	-	-	476	-
Stage 1	-	-	-	-	730	-
Stage 2	-	-	-	-	777	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	15.7
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	494	-	-	1225	-
HCM Lane V/C Ratio	0.323	-	-	0.004	-
HCM Control Delay (s)	15.7	-	-	7.9	-
HCM Lane LOS	C	-	-	A	-
HCM 95th %tile Q(veh)	1.4	-	-	0	-

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	55	51	10	354	230	23
Future Vol, veh/h	55	51	10	354	230	23
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	325	-	-	250
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	83	83	89	89	79	79
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	66	61	11	398	291	29

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	512	146	320	0	-	0
Stage 1	291	-	-	-	-	-
Stage 2	221	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	491	875	1237	-	-	-
Stage 1	733	-	-	-	-	-
Stage 2	795	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	487	875	1237	-	-	-
Mov Cap-2 Maneuver	487	-	-	-	-	-
Stage 1	726	-	-	-	-	-
Stage 2	795	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.6	0.2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1237	-	487	875	-	-
HCM Lane V/C Ratio	0.009	-	0.136	0.07	-	-
HCM Control Delay (s)	7.9	-	13.6	9.4	-	-
HCM Lane LOS	A	-	B	A	-	-
HCM 95th %tile Q(veh)	0	-	0.5	0.2	-	-

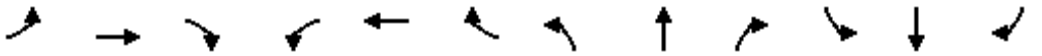
Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑	↱		↱
Traffic Vol, veh/h	0	400	1397	3	0	119
Future Vol, veh/h	0	400	1397	3	0	119
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Free
Storage Length	-	-	-	800	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	82	82	91	91	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	488	1535	3	0	140

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-
Pot Cap-1 Maneuver	0	-	-	-	0	0
Stage 1	0	-	-	-	0	0
Stage 2	0	-	-	-	0	0
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	-	-	0
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	3	28	45	16	54	16	727	12	17	1555	183
Future Volume (veh/h)	60	3	28	45	16	54	16	727	12	17	1555	183
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	77	4	36	58	21	69	17	790	13	19	1728	203
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78	0.92	0.92	0.92	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	458	128	108	249	129	109	165	2128	949	445	2133	952
Arrive On Green	0.04	0.07	0.07	0.04	0.07	0.07	0.02	0.60	0.60	0.02	0.60	0.60
Sat Flow, veh/h	3456	1870	1585	1781	1870	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	77	4	36	58	21	69	17	790	13	19	1728	203
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1781	1870	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	1.7	0.2	1.8	2.5	0.9	3.5	0.3	9.6	0.3	0.3	31.6	4.9
Cycle Q Clear(g_c), s	1.7	0.2	1.8	2.5	0.9	3.5	0.3	9.6	0.3	0.3	31.6	4.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	458	128	108	249	129	109	165	2128	949	445	2133	952
V/C Ratio(X)	0.17	0.03	0.33	0.23	0.16	0.63	0.10	0.37	0.01	0.04	0.81	0.21
Avail Cap(c_a), veh/h	817	672	570	433	672	570	393	2128	949	670	2133	952
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.0	36.3	37.1	34.3	36.6	37.9	12.7	8.6	6.8	6.8	13.0	7.6
Incr Delay (d2), s/veh	0.2	0.1	1.8	0.5	0.6	6.0	0.3	0.5	0.0	0.0	3.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.1	0.7	1.1	0.4	1.5	0.1	2.9	0.1	0.1	10.3	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.1	36.4	38.9	34.8	37.2	43.8	12.9	9.1	6.8	6.8	16.4	8.2
LnGrp LOS	C	D	D	C	D	D	B	A	A	A	B	A
Approach Vol, veh/h		117			148			820			1950	
Approach Delay, s/veh		35.7			39.3			9.2			15.5	
Approach LOS		D			D			A			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.4	57.0	8.4	11.7	6.3	57.1	8.3	11.7
Change Period (Y+Rc), s	5.0	7.0	5.0	6.0	5.0	7.0	5.0	6.0
Max Green Setting (Gmax), s	12.0	50.0	12.0	30.0	12.0	50.0	12.0	30.0
Max Q Clear Time (g_c+I1), s	2.3	11.6	4.5	3.8	2.3	33.6	3.7	5.5
Green Ext Time (p_c), s	0.0	5.5	0.1	0.1	0.0	11.2	0.1	0.3

Intersection Summary	
HCM 6th Ctrl Delay	15.7
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

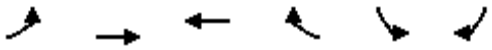
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	305	340	2	15	1225	285	1	428	73	3	975	657
Future Volume (veh/h)	305	340	2	15	1225	285	1	428	73	3	975	657
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	332	370	0	17	1376	0	1	465	0	3	1134	0
Peak Hour Factor	0.92	0.92	0.92	0.89	0.89	0.89	0.92	0.92	0.92	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	346	1865		521	1582		3	1126		8	1137	
Arrive On Green	0.10	0.52	0.00	0.02	0.45	0.00	0.00	0.32	0.00	0.00	0.32	0.00
Sat Flow, veh/h	3456	3554	1585	1781	3554	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	332	370	0	17	1376	0	1	465	0	3	1134	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1781	1777	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	14.3	8.3	0.0	0.8	52.6	0.0	0.1	15.4	0.0	0.3	47.8	0.0
Cycle Q Clear(g_c), s	14.3	8.3	0.0	0.8	52.6	0.0	0.1	15.4	0.0	0.3	47.8	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	346	1865		521	1582		3	1126		8	1137	
V/C Ratio(X)	0.96	0.20		0.03	0.87		0.34	0.41		0.36	1.00	
Avail Cap(c_a), veh/h	346	1865		663	1582		178	1137		178	1137	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.63	0.63	0.00
Uniform Delay (d), s/veh	67.2	18.9	0.0	22.7	37.7	0.0	74.8	40.3	0.0	74.4	50.9	0.0
Incr Delay (d2), s/veh	38.0	0.2	0.0	0.0	6.8	0.0	58.5	0.3	0.0	15.5	20.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.0	3.3	0.0	0.3	23.0	0.0	0.1	6.6	0.0	0.1	23.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	105.2	19.1	0.0	22.8	44.5	0.0	133.3	40.5	0.0	89.9	71.4	0.0
LnGrp LOS	F	B		C	D		F	D		F	E	
Approach Vol, veh/h		702	A		1393	A		466	A		1137	A
Approach Delay, s/veh		59.9			44.3			40.7			71.5	
Approach LOS		E			D			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.0	83.7	5.2	53.0	20.0	71.8	5.7	52.5
Change Period (Y+Rc), s	5.0	7.0	5.0	6.0	5.0	7.0	5.0	6.0
Max Green Setting (Gmax), s	15.0	50.0	15.0	47.0	15.0	50.0	15.0	47.0
Max Q Clear Time (g_c+I1), s	2.8	10.3	2.1	49.8	16.3	54.6	2.3	17.4
Green Ext Time (p_c), s	0.0	2.2	0.0	0.0	0.0	0.0	0.0	3.1

Intersection Summary	
HCM 6th Ctrl Delay	55.1
HCM 6th LOS	E

Notes

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



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	44	366	1299	321	177	105
Future Volume (veh/h)	44	366	1299	321	177	105
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	52	431	1382	0	201	0
Peak Hour Factor	0.85	0.85	0.94	0.94	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	367	2918	2592		273	
Arrive On Green	0.05	0.82	0.73	0.00	0.08	0.00
Sat Flow, veh/h	1781	3647	3647	1585	3456	1585
Grp Volume(v), veh/h	52	431	1382	0	201	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1585	1728	1585
Q Serve(g_s), s	0.7	3.0	20.7	0.0	6.8	0.0
Cycle Q Clear(g_c), s	0.7	3.0	20.7	0.0	6.8	0.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	367	2918	2592		273	
V/C Ratio(X)	0.14	0.15	0.53		0.74	
Avail Cap(c_a), veh/h	397	2918	2592		950	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	5.0	2.2	7.2	0.0	54.0	0.0
Incr Delay (d2), s/veh	0.2	0.1	0.8	0.0	3.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.5	5.9	0.0	3.1	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	5.2	2.3	8.0	0.0	57.9	0.0
LnGrp LOS	A	A	A		E	
Approach Vol, veh/h		483	1382	A	201	A
Approach Delay, s/veh		2.6	8.0		57.9	
Approach LOS		A	A		E	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		105.5		14.5	11.0	94.5
Change Period (Y+Rc), s		7.0		5.0	5.0	7.0
Max Green Setting (Gmax), s		75.0		33.0	8.0	62.0
Max Q Clear Time (g_c+I1), s		5.0		8.8	2.7	22.7
Green Ext Time (p_c), s		2.6		0.7	0.0	11.8

Intersection Summary	
HCM 6th Ctrl Delay	11.6
HCM 6th LOS	B

Notes

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

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	21	4	23	0	5	1	6	35	1	0	11	16
Future Vol, veh/h	21	4	23	0	5	1	6	35	1	0	11	16
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	50	50	50	70	70	70	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	26	5	29	0	10	2	9	50	1	0	15	21

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	12	0	0	34	0	0	101	84	20	108	97	11
Stage 1	-	-	-	-	-	-	72	72	-	11	11	-
Stage 2	-	-	-	-	-	-	29	12	-	97	86	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1607	-	-	1578	-	-	880	806	1058	871	793	1070
Stage 1	-	-	-	-	-	-	938	835	-	1010	886	-
Stage 2	-	-	-	-	-	-	988	886	-	910	824	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1607	-	-	1578	-	-	840	792	1058	817	780	1070
Mov Cap-2 Maneuver	-	-	-	-	-	-	840	792	-	817	780	-
Stage 1	-	-	-	-	-	-	922	821	-	993	886	-
Stage 2	-	-	-	-	-	-	952	886	-	839	810	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	3.2	0	9.8	9
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	803	1607	-	-	1578	-	-	929
HCM Lane V/C Ratio	0.075	0.016	-	-	-	-	-	0.039
HCM Control Delay (s)	9.8	7.3	0	-	0	-	-	9
HCM Lane LOS	A	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0.2	0.1	-	-	0	-	-	0.1

Intersection	
Intersection Delay, s/veh	7.1
Intersection LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	5	0	22	10	0	18
Future Vol, veh/h	5	0	22	10	0	18
Peak Hour Factor	0.42	0.42	0.67	0.67	0.56	0.56
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	12	0	33	15	0	32
Number of Lanes	1	0	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay	7.4	7	7.2
HCM LOS	A	A	A

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	0%	100%	0%
Vol Thru, %	69%	0%	100%
Vol Right, %	31%	0%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	32	5	18
LT Vol	0	5	0
Through Vol	22	0	18
RT Vol	10	0	0
Lane Flow Rate	48	12	32
Geometry Grp	1	1	1
Degree of Util (X)	0.05	0.014	0.036
Departure Headway (Hd)	3.792	4.272	3.991
Convergence, Y/N	Yes	Yes	Yes
Cap	947	837	900
Service Time	1.804	2.301	2.004
HCM Lane V/C Ratio	0.051	0.014	0.036
HCM Control Delay	7	7.4	7.2
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.2	0	0.1

Intersection	
Int Delay, s/veh	4.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	10	15	11	9	11	17
Future Vol, veh/h	10	15	11	9	11	17
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	78	78	71	71	70	70
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	13	19	15	13	16	24

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	28	0	-	0	67	22
Stage 1	-	-	-	-	22	-
Stage 2	-	-	-	-	45	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1585	-	-	-	938	1055
Stage 1	-	-	-	-	1001	-
Stage 2	-	-	-	-	977	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1585	-	-	-	930	1055
Mov Cap-2 Maneuver	-	-	-	-	930	-
Stage 1	-	-	-	-	993	-
Stage 2	-	-	-	-	977	-

Approach	EB	WB	SB
HCM Control Delay, s	2.9	0	8.7
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1585	-	-	-	1002
HCM Lane V/C Ratio	0.008	-	-	-	0.04
HCM Control Delay (s)	7.3	0	-	-	8.7
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	3.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	3	14	8	5	14	2	6	0	2	0	4	0
Future Vol, veh/h	3	14	8	5	14	2	6	0	2	0	4	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	66	66	66	67	67	67	50	50	50
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	16	9	8	21	3	9	0	3	0	8	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	24	0	0	25	0	0	70	67	21	67	70	23
Stage 1	-	-	-	-	-	-	27	27	-	39	39	-
Stage 2	-	-	-	-	-	-	43	40	-	28	31	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1591	-	-	1589	-	-	922	824	1056	926	821	1054
Stage 1	-	-	-	-	-	-	990	873	-	976	862	-
Stage 2	-	-	-	-	-	-	971	862	-	989	869	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1591	-	-	1589	-	-	910	818	1056	919	815	1054
Mov Cap-2 Maneuver	-	-	-	-	-	-	910	818	-	919	815	-
Stage 1	-	-	-	-	-	-	988	871	-	974	858	-
Stage 2	-	-	-	-	-	-	957	858	-	984	867	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.9	1.7	8.9	9.5
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	943	1591	-	-	1589	-	-	815
HCM Lane V/C Ratio	0.013	0.002	-	-	0.005	-	-	0.01
HCM Control Delay (s)	8.9	7.3	0	-	7.3	0	-	9.5
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	1.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	4	1	0	3	0	3
Future Vol, veh/h	4	1	0	3	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	63	63	38	38	75	75
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	6	2	0	8	0	4

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	8	0	15	7
Stage 1	-	-	-	-	7	-
Stage 2	-	-	-	-	8	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1612	-	1004	1075
Stage 1	-	-	-	-	1016	-
Stage 2	-	-	-	-	1015	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1612	-	1004	1075
Mov Cap-2 Maneuver	-	-	-	-	1004	-
Stage 1	-	-	-	-	1016	-
Stage 2	-	-	-	-	1015	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	8.4
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1075	-	-	1612	-
HCM Lane V/C Ratio	0.004	-	-	-	-
HCM Control Delay (s)	8.4	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	4	0	1	1	8	4
Future Vol, veh/h	4	0	1	1	8	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	50	50	50	50	50	50
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	0	2	2	16	8

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	26	20	24	0	-	0
Stage 1	20	-	-	-	-	-
Stage 2	6	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	989	1058	1591	-	-	-
Stage 1	1003	-	-	-	-	-
Stage 2	1017	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	988	1058	1591	-	-	-
Mov Cap-2 Maneuver	988	-	-	-	-	-
Stage 1	1002	-	-	-	-	-
Stage 2	1017	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.7	3.6	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1591	-	988	-	-
HCM Lane V/C Ratio	0.001	-	0.008	-	-
HCM Control Delay (s)	7.3	0	8.7	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	1.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	407	106	6	244	60	1
Future Vol, veh/h	407	106	6	244	60	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	300	450	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	84	84	89	89	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	485	126	7	274	75	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	611	0	636	243
Stage 1	-	-	-	-	485	-
Stage 2	-	-	-	-	151	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	964	-	410	758
Stage 1	-	-	-	-	585	-
Stage 2	-	-	-	-	861	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	964	-	407	758
Mov Cap-2 Maneuver	-	-	-	-	407	-
Stage 1	-	-	-	-	585	-
Stage 2	-	-	-	-	855	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	15.8
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	410	-	-	964	-
HCM Lane V/C Ratio	0.186	-	-	0.007	-
HCM Control Delay (s)	15.8	-	-	8.8	-
HCM Lane LOS	C	-	-	A	-
HCM 95th %tile Q(veh)	0.7	-	-	0	-

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	34	17	28	204	317	43
Future Vol, veh/h	34	17	28	204	317	43
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	325	-	-	250
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	64	64	82	82	87	87
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	53	27	34	249	364	49

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	557	182	413	0	-	0
Stage 1	364	-	-	-	-	-
Stage 2	193	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	460	829	1142	-	-	-
Stage 1	673	-	-	-	-	-
Stage 2	821	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	446	829	1142	-	-	-
Mov Cap-2 Maneuver	446	-	-	-	-	-
Stage 1	653	-	-	-	-	-
Stage 2	821	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.6	1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1142	-	446	829	-	-
HCM Lane V/C Ratio	0.03	-	0.119	0.032	-	-
HCM Control Delay (s)	8.2	-	14.2	9.5	-	-
HCM Lane LOS	A	-	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.4	0.1	-	-

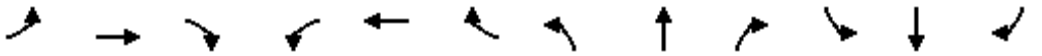
Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑	↱		↱
Traffic Vol, veh/h	0	867	429	2	0	26
Future Vol, veh/h	0	867	429	2	0	26
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Free
Storage Length	-	-	-	800	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	87	87	90	90	72	72
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	997	477	2	0	36

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-
Pot Cap-1 Maneuver	0	-	-	-	0	0
Stage 1	0	-	-	-	0	0
Stage 2	0	-	-	-	0	0
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	-	-	0
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	67	7	21	18	5	30	16	1162	57	46	615	74
Future Volume (veh/h)	67	7	21	18	5	30	16	1162	57	46	615	74
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	87	9	27	27	8	45	19	1383	68	52	691	83
Peak Hour Factor	0.77	0.77	0.77	0.66	0.66	0.66	0.84	0.84	0.84	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	438	130	111	194	93	79	481	2128	949	272	2187	975
Arrive On Green	0.04	0.07	0.07	0.02	0.05	0.05	0.02	0.60	0.60	0.03	0.62	0.62
Sat Flow, veh/h	3456	1870	1585	1781	1870	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	87	9	27	27	8	45	19	1383	68	52	691	83
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1781	1870	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	2.0	0.4	1.3	1.2	0.3	2.3	0.3	21.3	1.5	0.9	7.8	1.8
Cycle Q Clear(g_c), s	2.0	0.4	1.3	1.2	0.3	2.3	0.3	21.3	1.5	0.9	7.8	1.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	438	130	111	194	93	79	481	2128	949	272	2187	975
V/C Ratio(X)	0.20	0.07	0.24	0.14	0.09	0.57	0.04	0.65	0.07	0.19	0.32	0.09
Avail Cap(c_a), veh/h	789	672	570	410	672	570	706	2128	949	468	2187	975
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.3	36.3	36.8	36.5	37.9	38.8	6.5	11.0	7.0	9.0	7.7	6.5
Incr Delay (d2), s/veh	0.2	0.2	1.1	0.3	0.4	6.4	0.0	1.6	0.1	0.3	0.4	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.2	0.5	0.5	0.2	1.0	0.1	6.7	0.5	0.3	2.3	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.5	36.5	37.9	36.8	38.3	45.2	6.5	12.5	7.2	9.3	8.0	6.7
LnGrp LOS	D	D	D	D	D	D	A	B	A	A	A	A
Approach Vol, veh/h		123			80			1470			826	
Approach Delay, s/veh		36.1			41.7			12.2			8.0	
Approach LOS		D			D			B			A	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.8	57.0	6.9	11.8	6.4	58.4	8.5	10.1
Change Period (Y+Rc), s	5.0	7.0	5.0	6.0	5.0	7.0	5.0	6.0
Max Green Setting (Gmax), s	12.0	50.0	12.0	30.0	12.0	50.0	12.0	30.0
Max Q Clear Time (g_c+I1), s	2.9	23.3	3.2	3.3	2.3	9.8	4.0	4.3
Green Ext Time (p_c), s	0.0	11.0	0.0	0.1	0.0	4.9	0.1	0.1

Intersection Summary	
HCM 6th Ctrl Delay	12.9
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

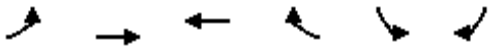
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	487	707	4	78	361	8	13	736	156	8	343	312
Future Volume (veh/h)	487	707	4	78	361	8	13	736	156	8	343	312
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	580	842	0	90	415	0	15	866	0	10	413	0
Peak Hour Factor	0.84	0.84	0.84	0.87	0.87	0.87	0.85	0.85	0.85	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	634	1932		380	1436		33	944		24	926	
Arrive On Green	0.18	0.54	0.00	0.04	0.40	0.00	0.02	0.27	0.00	0.01	0.26	0.00
Sat Flow, veh/h	3456	3554	1585	1781	3554	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	580	842	0	90	415	0	15	866	0	10	413	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1781	1777	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	24.7	21.3	0.0	4.5	11.8	0.0	1.3	35.5	0.0	0.8	14.6	0.0
Cycle Q Clear(g_c), s	24.7	21.3	0.0	4.5	11.8	0.0	1.3	35.5	0.0	0.8	14.6	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	634	1932		380	1436		33	944		24	926	
V/C Ratio(X)	0.92	0.44		0.24	0.29		0.45	0.92		0.41	0.45	
Avail Cap(c_a), veh/h	691	1932		658	1436		119	971		119	971	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.97	0.97	0.00
Uniform Delay (d), s/veh	60.1	20.5	0.0	25.3	30.1	0.0	72.9	53.5	0.0	73.4	46.4	0.0
Incr Delay (d2), s/veh	16.2	0.7	0.0	0.3	0.5	0.0	9.4	13.1	0.0	10.5	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.9	8.5	0.0	1.9	5.0	0.0	0.6	17.1	0.0	0.4	6.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	76.3	21.2	0.0	25.6	30.7	0.0	82.2	66.6	0.0	83.8	46.8	0.0
LnGrp LOS	E	C		C	C		F	E		F	D	
Approach Vol, veh/h		1422	A		505	A		881	A		423	A
Approach Delay, s/veh		43.7			29.8			66.9			47.6	
Approach LOS		D			C			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.6	86.6	7.8	44.1	32.5	65.6	7.0	44.8
Change Period (Y+Rc), s	5.0	7.0	5.0	6.0	5.0	7.0	5.0	6.0
Max Green Setting (Gmax), s	30.0	47.0	10.0	40.0	30.0	47.0	10.0	40.0
Max Q Clear Time (g_c+I1), s	6.5	23.3	3.3	16.6	26.7	13.8	2.8	37.5
Green Ext Time (p_c), s	0.2	5.2	0.0	2.5	0.8	2.4	0.0	1.3

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

Notes

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



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	64	797	372	169	277	55
Future Volume (veh/h)	64	797	372	169	277	55
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	76	949	404	0	315	0
Peak Hour Factor	0.84	0.84	0.92	0.92	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	791	2790	2464		397	
Arrive On Green	0.05	0.79	0.69	0.00	0.11	0.00
Sat Flow, veh/h	1781	3647	3647	1585	3456	1585
Grp Volume(v), veh/h	76	949	404	0	315	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1585	1728	1585
Q Serve(g_s), s	1.3	9.4	4.7	0.0	10.7	0.0
Cycle Q Clear(g_c), s	1.3	9.4	4.7	0.0	10.7	0.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	791	2790	2464		397	
V/C Ratio(X)	0.10	0.34	0.16		0.79	
Avail Cap(c_a), veh/h	895	2790	2464		1325	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	3.8	3.8	6.4	0.0	51.7	0.0
Incr Delay (d2), s/veh	0.1	0.3	0.1	0.0	3.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	2.2	1.5	0.0	4.8	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	3.9	4.1	6.5	0.0	55.3	0.0
LnGrp LOS	A	A	A		E	
Approach Vol, veh/h		1025	404	A	315	A
Approach Delay, s/veh		4.1	6.5		55.3	
Approach LOS		A	A		E	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		101.2		18.8	11.0	90.2
Change Period (Y+Rc), s		7.0		5.0	5.0	7.0
Max Green Setting (Gmax), s		62.0		46.0	13.0	44.0
Max Q Clear Time (g_c+I1), s		11.4		12.7	3.3	6.7
Green Ext Time (p_c), s		6.9		1.1	0.1	2.4

Intersection Summary	
HCM 6th Ctrl Delay	13.9
HCM 6th LOS	B

Notes

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

Intersection	
Int Delay, s/veh	5.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	7	21	0	0	11	23	2	12	0	22	4	25
Future Vol, veh/h	7	21	0	0	11	23	2	12	0	22	4	25
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	84	84	84	77	77	77	58	58	58	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	8	25	0	0	14	30	3	21	0	29	5	33

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	44	0	0	25	0	0	89	85	25	81	70	29
Stage 1	-	-	-	-	-	-	41	41	-	29	29	-
Stage 2	-	-	-	-	-	-	48	44	-	52	41	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1564	-	-	1589	-	-	896	805	1051	907	821	1046
Stage 1	-	-	-	-	-	-	974	861	-	988	871	-
Stage 2	-	-	-	-	-	-	965	858	-	961	861	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1564	-	-	1589	-	-	860	801	1051	886	817	1046
Mov Cap-2 Maneuver	-	-	-	-	-	-	860	801	-	886	817	-
Stage 1	-	-	-	-	-	-	969	857	-	983	871	-
Stage 2	-	-	-	-	-	-	929	858	-	933	857	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.8	0	9.6	9.1
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	809	1564	-	-	1589	-	-	951
HCM Lane V/C Ratio	0.03	0.005	-	-	-	-	-	0.072
HCM Control Delay (s)	9.6	7.3	0	-	0	-	-	9.1
HCM Lane LOS	A	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.2

Intersection	
Intersection Delay, s/veh	7.2
Intersection LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	6	2	14	1	2	29
Future Vol, veh/h	6	2	14	1	2	29
Peak Hour Factor	0.40	0.40	0.63	0.63	0.86	0.86
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	15	5	22	2	2	34
Number of Lanes	1	0	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay	7.2	7.1	7.2
HCM LOS	A	A	A

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	0%	75%	6%
Vol Thru, %	93%	0%	94%
Vol Right, %	7%	25%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	15	8	31
LT Vol	0	6	2
Through Vol	14	0	29
RT Vol	1	2	0
Lane Flow Rate	24	20	36
Geometry Grp	1	1	1
Degree of Util (X)	0.026	0.022	0.04
Departure Headway (Hd)	3.956	4.037	4
Convergence, Y/N	Yes	Yes	Yes
Cap	907	887	898
Service Time	1.971	2.062	2.012
HCM Lane V/C Ratio	0.026	0.023	0.04
HCM Control Delay	7.1	7.2	7.2
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.1	0.1	0.1

Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	20	11	11	10	2	13
Future Vol, veh/h	20	11	11	10	2	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	70	70	48	48	63	63
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	29	16	23	21	3	21

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	44	0	-	0	108	34
Stage 1	-	-	-	-	34	-
Stage 2	-	-	-	-	74	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1564	-	-	-	889	1039
Stage 1	-	-	-	-	988	-
Stage 2	-	-	-	-	949	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1564	-	-	-	872	1039
Mov Cap-2 Maneuver	-	-	-	-	872	-
Stage 1	-	-	-	-	969	-
Stage 2	-	-	-	-	949	-

Approach	EB	WB	SB
HCM Control Delay, s	4.7	0	8.6
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1564	-	-	-	1013
HCM Lane V/C Ratio	0.018	-	-	-	0.024
HCM Control Delay (s)	7.3	0	-	-	8.6
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1

Intersection	
Int Delay, s/veh	4.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	11	3	3	14	0	7	2	0	0	7	0
Future Vol, veh/h	1	11	3	3	14	0	7	2	0	0	7	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	75	75	75	61	61	61	45	45	45	58	58	58
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	15	4	5	23	0	16	4	0	0	12	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	23	0	0	19	0	0	58	52	17	54	54	23
Stage 1	-	-	-	-	-	-	19	19	-	33	33	-
Stage 2	-	-	-	-	-	-	39	33	-	21	21	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1592	-	-	1597	-	-	939	839	1062	944	837	1054
Stage 1	-	-	-	-	-	-	1000	880	-	983	868	-
Stage 2	-	-	-	-	-	-	976	868	-	998	878	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1592	-	-	1597	-	-	926	836	1062	937	834	1054
Mov Cap-2 Maneuver	-	-	-	-	-	-	926	836	-	937	834	-
Stage 1	-	-	-	-	-	-	999	879	-	982	865	-
Stage 2	-	-	-	-	-	-	959	865	-	992	877	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	1.3	9.1	9.4
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	904	1592	-	-	1597	-	-	834
HCM Lane V/C Ratio	0.022	0.001	-	-	0.003	-	-	0.014
HCM Control Delay (s)	9.1	7.3	0	-	7.3	0	-	9.4
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	4.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1	1	4	3	1	0
Future Vol, veh/h	1	1	4	3	1	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	50	50	88	88	25	25
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	2	5	3	4	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	4	0	16	3
Stage 1	-	-	-	-	3	-
Stage 2	-	-	-	-	13	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1618	-	1002	1081
Stage 1	-	-	-	-	1020	-
Stage 2	-	-	-	-	1010	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1618	-	999	1081
Mov Cap-2 Maneuver	-	-	-	-	999	-
Stage 1	-	-	-	-	1020	-
Stage 2	-	-	-	-	1007	-

Approach	EB	WB	NB
HCM Control Delay, s	0	4.1	8.6
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	999	-	-	1618	-
HCM Lane V/C Ratio	0.004	-	-	0.003	-
HCM Control Delay (s)	8.6	-	-	7.2	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	3	3	1	1	12	4
Future Vol, veh/h	3	3	1	1	12	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	38	38	50	50	57	57
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	8	2	2	21	7

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	31	25	28	0	-	0
Stage 1	25	-	-	-	-	-
Stage 2	6	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	983	1051	1585	-	-	-
Stage 1	998	-	-	-	-	-
Stage 2	1017	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	982	1051	1585	-	-	-
Mov Cap-2 Maneuver	982	-	-	-	-	-
Stage 1	997	-	-	-	-	-
Stage 2	1017	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.6	3.6	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1585	-	1015	-	-
HCM Lane V/C Ratio	0.001	-	0.016	-	-
HCM Control Delay (s)	7.3	0	8.6	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	2.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	277	32	4	450	135	12
Future Vol, veh/h	277	32	4	450	135	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	300	450	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	91	91	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	315	36	4	495	147	13

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	351	0	571	158
Stage 1	-	-	-	-	315	-
Stage 2	-	-	-	-	256	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	1204	-	451	859
Stage 1	-	-	-	-	713	-
Stage 2	-	-	-	-	763	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1204	-	450	859
Mov Cap-2 Maneuver	-	-	-	-	450	-
Stage 1	-	-	-	-	713	-
Stage 2	-	-	-	-	761	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	16.6
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	468	-	-	1204	-
HCM Lane V/C Ratio	0.341	-	-	0.004	-
HCM Control Delay (s)	16.6	-	-	8	-
HCM Lane LOS	C	-	-	A	-
HCM 95th %tile Q(veh)	1.5	-	-	0	-

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	55	51	10	381	245	23
Future Vol, veh/h	55	51	10	381	245	23
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	325	-	-	250
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	83	83	89	89	79	79
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	66	61	11	428	310	29

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	546	155	339	0	-	0
Stage 1	310	-	-	-	-	-
Stage 2	236	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	468	863	1217	-	-	-
Stage 1	717	-	-	-	-	-
Stage 2	781	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	464	863	1217	-	-	-
Mov Cap-2 Maneuver	464	-	-	-	-	-
Stage 1	711	-	-	-	-	-
Stage 2	781	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.8	0.2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1217	-	464	863	-	-
HCM Lane V/C Ratio	0.009	-	0.143	0.071	-	-
HCM Control Delay (s)	8	-	14	9.5	-	-
HCM Lane LOS	A	-	B	A	-	-
HCM 95th %tile Q(veh)	0	-	0.5	0.2	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑	↱		↱
Traffic Vol, veh/h	0	429	1494	3	0	119
Future Vol, veh/h	0	429	1494	3	0	119
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Free
Storage Length	-	-	-	800	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	82	82	91	91	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	523	1642	3	0	140

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-
Pot Cap-1 Maneuver	0	-	-	-	0	0
Stage 1	0	-	-	-	0	0
Stage 2	0	-	-	-	0	0
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	-	-	0
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	74	4	44	62	18	67	59	767	18	20	1643	215
Future Volume (veh/h)	74	4	44	62	18	67	59	767	18	20	1643	215
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	95	5	56	79	23	86	64	834	20	22	1826	239
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78	0.92	0.92	0.92	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	489	129	110	270	149	126	173	2105	939	419	2044	912
Arrive On Green	0.04	0.07	0.07	0.05	0.08	0.08	0.04	0.59	0.59	0.02	0.58	0.58
Sat Flow, veh/h	3456	1870	1585	1781	1870	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	95	5	56	79	23	86	64	834	20	22	1826	239
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1781	1870	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	2.2	0.2	3.0	3.5	1.0	4.6	1.3	10.9	0.5	0.4	39.0	6.6
Cycle Q Clear(g_c), s	2.2	0.2	3.0	3.5	1.0	4.6	1.3	10.9	0.5	0.4	39.0	6.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	489	129	110	270	149	126	173	2105	939	419	2044	912
V/C Ratio(X)	0.19	0.04	0.51	0.29	0.15	0.68	0.37	0.40	0.02	0.05	0.89	0.26
Avail Cap(c_a), veh/h	812	645	547	418	645	547	354	2105	939	631	2044	912
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.1	37.8	39.0	34.9	37.3	38.9	19.0	9.4	7.3	7.8	16.1	9.2
Incr Delay (d2), s/veh	0.2	0.1	3.6	0.6	0.5	6.4	1.3	0.6	0.0	0.1	6.5	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.1	1.2	1.5	0.5	2.0	0.7	3.5	0.2	0.1	14.0	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.3	37.9	42.7	35.5	37.8	45.3	20.3	10.0	7.4	7.8	22.6	9.9
LnGrp LOS	D	D	D	D	D	D	C	A	A	A	C	A
Approach Vol, veh/h		156			188			918			2087	
Approach Delay, s/veh		38.0			40.3			10.7			21.0	
Approach LOS		D			D			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.6	58.5	9.8	12.0	8.1	57.0	8.9	12.9
Change Period (Y+Rc), s	5.0	7.0	5.0	6.0	5.0	7.0	5.0	6.0
Max Green Setting (Gmax), s	12.0	50.0	12.0	30.0	12.0	50.0	12.0	30.0
Max Q Clear Time (g_c+I1), s	2.4	12.9	5.5	5.0	3.3	41.0	4.2	6.6
Green Ext Time (p_c), s	0.0	5.9	0.1	0.2	0.1	7.2	0.1	0.3

Intersection Summary	
HCM 6th Ctrl Delay	20.1
HCM 6th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

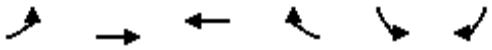
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	343	363	2	16	1309	316	1	460	77	8	1040	715
Future Volume (veh/h)	343	363	2	16	1309	316	1	460	77	8	1040	715
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	373	395	0	18	1471	0	1	500	0	9	1209	0
Peak Hour Factor	0.92	0.92	0.92	0.89	0.89	0.89	0.92	0.92	0.92	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	346	1862		513	1582		3	1099		22	1137	
Arrive On Green	0.10	0.52	0.00	0.02	0.45	0.00	0.00	0.31	0.00	0.01	0.32	0.00
Sat Flow, veh/h	3456	3554	1585	1781	3554	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	373	395	0	18	1471	0	1	500	0	9	1209	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1781	1777	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	15.0	8.9	0.0	0.8	58.8	0.0	0.1	17.0	0.0	0.8	48.0	0.0
Cycle Q Clear(g_c), s	15.0	8.9	0.0	0.8	58.8	0.0	0.1	17.0	0.0	0.8	48.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	346	1862		513	1582		3	1099		22	1137	
V/C Ratio(X)	1.08	0.21		0.04	0.93		0.34	0.46		0.40	1.06	
Avail Cap(c_a), veh/h	346	1862		653	1582		178	1137		178	1137	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.50	0.50	0.00
Uniform Delay (d), s/veh	67.5	19.1	0.0	22.7	39.4	0.0	74.8	41.7	0.0	73.5	51.0	0.0
Incr Delay (d2), s/veh	71.2	0.3	0.0	0.0	11.2	0.0	58.5	0.3	0.0	5.8	38.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.8	3.6	0.0	0.3	26.4	0.0	0.1	7.3	0.0	0.4	26.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	138.7	19.4	0.0	22.7	50.6	0.0	133.3	42.0	0.0	79.3	89.3	0.0
LnGrp LOS	F	B		C	D		F	D		E	F	
Approach Vol, veh/h		768	A		1489	A		501	A		1218	A
Approach Delay, s/veh		77.3			50.3			42.2			89.2	
Approach LOS		E			D			D			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.2	83.6	5.2	53.0	20.0	71.8	6.9	51.4
Change Period (Y+Rc), s	5.0	7.0	5.0	6.0	5.0	7.0	5.0	6.0
Max Green Setting (Gmax), s	15.0	50.0	15.0	47.0	15.0	50.0	15.0	47.0
Max Q Clear Time (g_c+I1), s	2.8	10.9	2.1	50.0	17.0	60.8	2.8	19.0
Green Ext Time (p_c), s	0.0	2.3	0.0	0.0	0.0	0.0	0.0	3.3

Intersection Summary	
HCM 6th Ctrl Delay	66.4
HCM 6th LOS	E

Notes

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



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	48	392	1389	346	189	112
Future Volume (veh/h)	48	392	1389	346	189	112
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	56	461	1478	0	215	0
Peak Hour Factor	0.85	0.85	0.94	0.94	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	338	2902	2576		288	
Arrive On Green	0.05	0.82	0.72	0.00	0.08	0.00
Sat Flow, veh/h	1781	3647	3647	1585	3456	1585
Grp Volume(v), veh/h	56	461	1478	0	215	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1585	1728	1585
Q Serve(g_s), s	0.8	3.3	23.5	0.0	7.3	0.0
Cycle Q Clear(g_c), s	0.8	3.3	23.5	0.0	7.3	0.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	338	2902	2576		288	
V/C Ratio(X)	0.17	0.16	0.57		0.75	
Avail Cap(c_a), veh/h	368	2902	2576		950	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	5.9	2.3	7.8	0.0	53.8	0.0
Incr Delay (d2), s/veh	0.2	0.1	0.9	0.0	3.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.6	6.9	0.0	3.3	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	6.1	2.4	8.7	0.0	57.6	0.0
LnGrp LOS	A	A	A		E	
Approach Vol, veh/h		517	1478	A	215	A
Approach Delay, s/veh		2.8	8.7		57.6	
Approach LOS		A	A		E	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		105.0		15.0	11.0	94.0
Change Period (Y+Rc), s		7.0		5.0	5.0	7.0
Max Green Setting (Gmax), s		75.0		33.0	8.0	62.0
Max Q Clear Time (g_c+I1), s		5.3		9.3	2.8	25.5
Green Ext Time (p_c), s		2.8		0.7	0.0	12.8

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

Notes

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

Intersection	
Int Delay, s/veh	4.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	6	36	1	0	12	16	0	5	1	21	4	23
Future Vol, veh/h	6	36	1	0	12	16	0	5	1	21	4	23
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	70	70	70	75	75	75	50	50	50	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	9	51	1	0	16	21	0	10	2	26	5	29

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	37	0	0	52	0	0	114	107	52	103	97	27
Stage 1	-	-	-	-	-	-	70	70	-	27	27	-
Stage 2	-	-	-	-	-	-	44	37	-	76	70	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1574	-	-	1554	-	-	863	783	1016	877	793	1048
Stage 1	-	-	-	-	-	-	940	837	-	990	873	-
Stage 2	-	-	-	-	-	-	970	864	-	933	837	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1574	-	-	1554	-	-	831	778	1016	863	788	1048
Mov Cap-2 Maneuver	-	-	-	-	-	-	831	778	-	863	788	-
Stage 1	-	-	-	-	-	-	934	832	-	984	873	-
Stage 2	-	-	-	-	-	-	938	864	-	914	832	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1	0	9.5	9.1
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	810	1574	-	-	1554	-	-	935
HCM Lane V/C Ratio	0.015	0.005	-	-	-	-	-	0.064
HCM Control Delay (s)	9.5	7.3	0	-	0	-	-	9.1
HCM Lane LOS	A	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.2

Intersection	
Intersection Delay, s/veh	7.1
Intersection LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	5	0	22	10	0	18
Future Vol, veh/h	5	0	22	10	0	18
Peak Hour Factor	0.42	0.42	0.67	0.67	0.56	0.56
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	12	0	33	15	0	32
Number of Lanes	1	0	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay	7.4	7	7.2
HCM LOS	A	A	A

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	0%	100%	0%
Vol Thru, %	69%	0%	100%
Vol Right, %	31%	0%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	32	5	18
LT Vol	0	5	0
Through Vol	22	0	18
RT Vol	10	0	0
Lane Flow Rate	48	12	32
Geometry Grp	1	1	1
Degree of Util (X)	0.05	0.014	0.036
Departure Headway (Hd)	3.792	4.272	3.991
Convergence, Y/N	Yes	Yes	Yes
Cap	947	837	900
Service Time	1.804	2.301	2.004
HCM Lane V/C Ratio	0.051	0.014	0.036
HCM Control Delay	7	7.4	7.2
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.2	0	0.1

Intersection	
Int Delay, s/veh	4.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	10	15	11	9	11	17
Future Vol, veh/h	10	15	11	9	11	17
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	78	78	71	71	70	70
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	13	19	15	13	16	24

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	28	0	-	0	67	22
Stage 1	-	-	-	-	22	-
Stage 2	-	-	-	-	45	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1585	-	-	-	938	1055
Stage 1	-	-	-	-	1001	-
Stage 2	-	-	-	-	977	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1585	-	-	-	930	1055
Mov Cap-2 Maneuver	-	-	-	-	930	-
Stage 1	-	-	-	-	993	-
Stage 2	-	-	-	-	977	-

Approach	EB	WB	SB
HCM Control Delay, s	2.9	0	8.7
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1585	-	-	-	1002
HCM Lane V/C Ratio	0.008	-	-	-	0.04
HCM Control Delay (s)	7.3	0	-	-	8.7
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	3.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	3	14	8	5	14	2	6	0	2	0	4	0
Future Vol, veh/h	3	14	8	5	14	2	6	0	2	0	4	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	66	66	66	67	67	67	50	50	50
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	16	9	8	21	3	9	0	3	0	8	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	24	0	0	25	0	0	70	67	21	67	70	23
Stage 1	-	-	-	-	-	-	27	27	-	39	39	-
Stage 2	-	-	-	-	-	-	43	40	-	28	31	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1591	-	-	1589	-	-	922	824	1056	926	821	1054
Stage 1	-	-	-	-	-	-	990	873	-	976	862	-
Stage 2	-	-	-	-	-	-	971	862	-	989	869	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1591	-	-	1589	-	-	910	818	1056	919	815	1054
Mov Cap-2 Maneuver	-	-	-	-	-	-	910	818	-	919	815	-
Stage 1	-	-	-	-	-	-	988	871	-	974	858	-
Stage 2	-	-	-	-	-	-	957	858	-	984	867	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.9	1.7	8.9	9.5
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	943	1591	-	-	1589	-	-	815
HCM Lane V/C Ratio	0.013	0.002	-	-	0.005	-	-	0.01
HCM Control Delay (s)	8.9	7.3	0	-	7.3	0	-	9.5
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	1.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	4	1	0	3	0	3
Future Vol, veh/h	4	1	0	3	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	63	63	38	38	75	75
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	6	2	0	8	0	4

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	8	0	15	7
Stage 1	-	-	-	-	7	-
Stage 2	-	-	-	-	8	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1612	-	1004	1075
Stage 1	-	-	-	-	1016	-
Stage 2	-	-	-	-	1015	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1612	-	1004	1075
Mov Cap-2 Maneuver	-	-	-	-	1004	-
Stage 1	-	-	-	-	1016	-
Stage 2	-	-	-	-	1015	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	8.4
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1075	-	-	1612	-
HCM Lane V/C Ratio	0.004	-	-	-	-
HCM Control Delay (s)	8.4	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	4	0	1	1	8	4
Future Vol, veh/h	4	0	1	1	8	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	50	50	50	50	50	50
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	0	2	2	16	8

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	26	20	24	0	-	0
Stage 1	20	-	-	-	-	-
Stage 2	6	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	989	1058	1591	-	-	-
Stage 1	1003	-	-	-	-	-
Stage 2	1017	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	988	1058	1591	-	-	-
Mov Cap-2 Maneuver	988	-	-	-	-	-
Stage 1	1002	-	-	-	-	-
Stage 2	1017	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.7	3.6	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1591	-	988	-	-
HCM Lane V/C Ratio	0.001	-	0.008	-	-
HCM Control Delay (s)	7.3	0	8.7	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	1.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	436	106	6	260	60	1
Future Vol, veh/h	436	106	6	260	60	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	300	450	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	84	84	89	89	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	519	126	7	292	75	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	645	0	679	260
Stage 1	-	-	-	-	519	-
Stage 2	-	-	-	-	160	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	936	-	385	739
Stage 1	-	-	-	-	562	-
Stage 2	-	-	-	-	852	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	936	-	382	739
Mov Cap-2 Maneuver	-	-	-	-	382	-
Stage 1	-	-	-	-	562	-
Stage 2	-	-	-	-	846	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	16.6
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	385	-	-	936	-
HCM Lane V/C Ratio	0.198	-	-	0.007	-
HCM Control Delay (s)	16.6	-	-	8.9	-
HCM Lane LOS	C	-	-	A	-
HCM 95th %tile Q(veh)	0.7	-	-	0	-

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	34	17	28	217	340	43
Future Vol, veh/h	34	17	28	217	340	43
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	325	-	-	250
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	64	64	82	82	87	87
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	53	27	34	265	391	49

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	592	196	440	0	-	0
Stage 1	391	-	-	-	-	-
Stage 2	201	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	437	812	1116	-	-	-
Stage 1	653	-	-	-	-	-
Stage 2	813	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	424	812	1116	-	-	-
Mov Cap-2 Maneuver	424	-	-	-	-	-
Stage 1	633	-	-	-	-	-
Stage 2	813	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13	1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1116	-	424	812	-	-
HCM Lane V/C Ratio	0.031	-	0.125	0.033	-	-
HCM Control Delay (s)	8.3	-	14.7	9.6	-	-
HCM Lane LOS	A	-	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.4	0.1	-	-

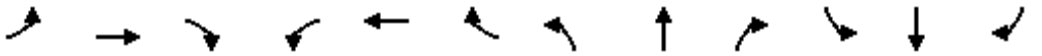
Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑	↱		↱
Traffic Vol, veh/h	0	945	476	2	0	26
Future Vol, veh/h	0	945	476	2	0	26
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Free
Storage Length	-	-	-	800	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	87	87	90	90	72	72
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1086	529	2	0	36

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-
Pot Cap-1 Maneuver	0	-	-	-	0	0
Stage 1	0	-	-	-	0	0
Stage 2	0	-	-	-	0	0
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	-	-	0
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	-



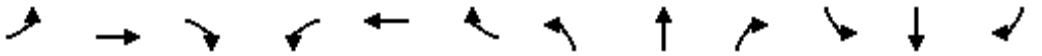
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	158	15	112	28	10	36	70	1219	93	56	642	152
Future Volume (veh/h)	158	15	112	28	10	36	70	1219	93	56	642	152
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	205	19	145	42	15	55	83	1451	111	63	721	171
Peak Hour Factor	0.77	0.77	0.77	0.66	0.66	0.66	0.84	0.84	0.84	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	586	219	185	215	127	107	428	1997	891	229	1984	885
Arrive On Green	0.08	0.12	0.12	0.03	0.07	0.07	0.04	0.56	0.56	0.04	0.56	0.56
Sat Flow, veh/h	3456	1870	1585	1781	1870	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	205	19	145	42	15	55	83	1451	111	63	721	171
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1781	1870	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	4.7	0.8	8.0	2.0	0.7	3.0	1.8	27.1	3.0	1.3	10.1	4.8
Cycle Q Clear(g_c), s	4.7	0.8	8.0	2.0	0.7	3.0	1.8	27.1	3.0	1.3	10.1	4.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	586	219	185	215	127	107	428	1997	891	229	1984	885
V/C Ratio(X)	0.35	0.09	0.78	0.20	0.12	0.51	0.19	0.73	0.12	0.28	0.36	0.19
Avail Cap(c_a), veh/h	779	627	531	402	627	531	597	1997	891	405	1984	885
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.5	35.3	38.4	37.4	39.2	40.3	8.3	14.5	9.2	12.6	11.0	9.8
Incr Delay (d2), s/veh	0.4	0.2	7.1	0.4	0.4	3.7	0.2	2.3	0.3	0.6	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	0.4	3.4	0.9	0.3	1.3	0.6	9.4	1.0	0.5	3.4	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.9	35.5	45.5	37.9	39.6	44.0	8.5	16.9	9.5	13.2	11.5	10.3
LnGrp LOS	C	D	D	D	D	D	A	B	A	B	B	B
Approach Vol, veh/h		369			112			1645			955	
Approach Delay, s/veh		38.5			41.1			15.9			11.4	
Approach LOS		D			D			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.2	57.3	7.6	16.5	8.5	57.0	12.0	12.1
Change Period (Y+Rc), s	5.0	7.0	5.0	6.0	5.0	7.0	5.0	6.0
Max Green Setting (Gmax), s	12.0	50.0	12.0	30.0	12.0	50.0	12.0	30.0
Max Q Clear Time (g_c+I1), s	3.3	29.1	4.0	10.0	3.8	12.1	6.7	5.0
Green Ext Time (p_c), s	0.1	10.6	0.0	0.5	0.1	5.5	0.3	0.2

Intersection Summary	
HCM 6th Ctrl Delay	18.1
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.



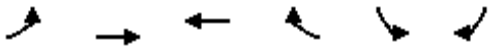
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	556	770	4	83	399	28	14	789	166	38	376	378
Future Volume (veh/h)	556	770	4	83	399	28	14	789	166	38	376	378
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	662	917	0	95	459	0	16	928	0	46	453	0
Peak Hour Factor	0.84	0.84	0.84	0.87	0.87	0.87	0.85	0.85	0.85	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	691	1817		333	1277		35	971		61	1023	
Arrive On Green	0.20	0.51	0.00	0.05	0.36	0.00	0.02	0.27	0.00	0.03	0.29	0.00
Sat Flow, veh/h	3456	3554	1585	1781	3554	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	662	917	0	95	459	0	16	928	0	46	453	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1781	1777	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	28.4	25.5	0.0	5.1	14.3	0.0	1.3	38.5	0.0	3.8	15.6	0.0
Cycle Q Clear(g_c), s	28.4	25.5	0.0	5.1	14.3	0.0	1.3	38.5	0.0	3.8	15.6	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	691	1817		333	1277		35	971		61	1023	
V/C Ratio(X)	0.96	0.50		0.29	0.36		0.46	0.96		0.76	0.44	
Avail Cap(c_a), veh/h	691	1817		604	1277		119	971		119	1023	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.93	0.93	0.00
Uniform Delay (d), s/veh	59.4	24.2	0.0	29.1	35.4	0.0	72.8	53.6	0.0	71.8	43.6	0.0
Incr Delay (d2), s/veh	24.3	1.0	0.0	0.5	0.8	0.0	9.3	19.0	0.0	16.1	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	14.3	10.4	0.0	2.2	6.1	0.0	0.7	19.2	0.0	2.0	6.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	83.7	25.2	0.0	29.6	36.2	0.0	82.0	72.6	0.0	88.0	43.9	0.0
LnGrp LOS	F	C		C	D		F	E		F	D	
Approach Vol, veh/h		1579	A		554	A		944	A		499	A
Approach Delay, s/veh		49.7			35.0			72.8			47.9	
Approach LOS		D			D			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.2	81.7	7.9	48.2	35.0	58.9	10.1	46.0
Change Period (Y+Rc), s	5.0	7.0	5.0	6.0	5.0	7.0	5.0	6.0
Max Green Setting (Gmax), s	30.0	47.0	10.0	40.0	30.0	47.0	10.0	40.0
Max Q Clear Time (g_c+I1), s	7.1	27.5	3.3	17.6	30.4	16.3	5.8	40.5
Green Ext Time (p_c), s	0.2	5.5	0.0	2.8	0.0	2.7	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	53.3
HCM 6th LOS	D

Notes

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



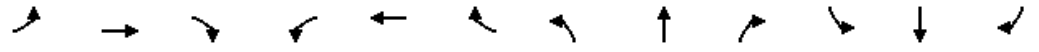
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	71	868	414	180	298	60
Future Volume (veh/h)	71	868	414	180	298	60
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	85	1033	450	0	339	0
Peak Hour Factor	0.84	0.84	0.92	0.92	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	751	2763	2438		423	
Arrive On Green	0.05	0.78	0.69	0.00	0.12	0.00
Sat Flow, veh/h	1781	3647	3647	1585	3456	1585
Grp Volume(v), veh/h	85	1033	450	0	339	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1585	1728	1585
Q Serve(g_s), s	1.5	10.9	5.5	0.0	11.5	0.0
Cycle Q Clear(g_c), s	1.5	10.9	5.5	0.0	11.5	0.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	751	2763	2438		423	
V/C Ratio(X)	0.11	0.37	0.18		0.80	
Avail Cap(c_a), veh/h	855	2763	2438		1325	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	4.1	4.2	6.8	0.0	51.2	0.0
Incr Delay (d2), s/veh	0.1	0.4	0.2	0.0	3.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	2.6	1.7	0.0	5.2	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	4.2	4.6	6.9	0.0	54.8	0.0
LnGrp LOS	A	A	A		D	
Approach Vol, veh/h		1118	450	A	339	A
Approach Delay, s/veh		4.5	6.9		54.8	
Approach LOS		A	A		D	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		100.3		19.7	11.0	89.3
Change Period (Y+Rc), s		7.0		5.0	5.0	7.0
Max Green Setting (Gmax), s		62.0		46.0	13.0	44.0
Max Q Clear Time (g_c+I1), s		12.9		13.5	3.5	7.5
Green Ext Time (p_c), s		7.8		1.2	0.1	2.7

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

Notes

Unsignalized Delay for [WBR, 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)	143	5	64	195	14	75	128	900	58	41	2000	231
Future Volume (veh/h)	143	5	64	195	14	75	128	900	58	41	2000	231
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	183	6	82	250	18	96	139	978	63	46	2222	257
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78	0.92	0.92	0.92	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	409	55	47	354	211	179	174	2226	993	359	3092	960
Arrive On Green	0.07	0.03	0.03	0.15	0.11	0.11	0.05	0.63	0.63	0.02	0.61	0.61
Sat Flow, veh/h	3456	1870	1585	1781	1870	1585	1781	3554	1585	1781	5106	1585
Grp Volume(v), veh/h	183	6	82	250	18	96	139	978	63	46	2222	257
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1781	1870	1585	1781	1777	1585	1781	1702	1585
Q Serve(g_s), s	6.8	0.4	4.0	17.8	1.2	7.7	4.0	19.2	2.1	1.3	41.0	10.3
Cycle Q Clear(g_c), s	6.8	0.4	4.0	17.8	1.2	7.7	4.0	19.2	2.1	1.3	41.0	10.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	409	55	47	354	211	179	174	2226	993	359	3092	960
V/C Ratio(X)	0.45	0.11	1.75	0.71	0.09	0.54	0.80	0.44	0.06	0.13	0.72	0.27
Avail Cap(c_a), veh/h	462	55	47	431	263	223	252	2226	993	369	3092	960
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.84	0.84	0.84	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.3	63.8	65.5	51.1	53.7	56.6	27.8	13.0	9.8	10.6	18.6	12.5
Incr Delay (d2), s/veh	0.8	0.9	409.3	4.1	0.2	2.5	9.2	0.5	0.1	0.2	1.5	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	0.2	7.0	8.3	0.6	3.2	3.1	7.1	0.8	0.5	14.9	3.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	59.0	64.6	474.8	55.1	53.8	59.1	37.0	13.5	9.9	10.7	20.1	13.2
LnGrp LOS	E	E	F	E	D	E	D	B	A	B	C	B
Approach Vol, veh/h		271			364			1180			2525	
Approach Delay, s/veh		185.0			56.1			16.1			19.2	
Approach LOS		F			E			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.3	91.6	25.2	10.0	11.1	88.7	13.9	21.2
Change Period (Y+Rc), s	5.0	7.0	5.0	6.0	5.0	7.0	5.0	6.0
Max Green Setting (Gmax), s	4.0	78.0	26.0	4.0	12.0	70.0	11.0	19.0
Max Q Clear Time (g_c+I1), s	3.3	21.2	19.8	6.0	6.0	43.0	8.8	9.7
Green Ext Time (p_c), s	0.0	7.8	0.4	0.0	0.1	19.6	0.1	0.2

Intersection Summary	
HCM 6th Ctrl Delay	31.8
HCM 6th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	345	800	5	85	1915	485	5	550	220	10	1275	974
Future Volume (veh/h)	345	800	5	85	1915	485	5	550	220	10	1275	974
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	375	870	0	96	2152	0	5	598	0	12	1483	0
Peak Hour Factor	0.92	0.92	0.92	0.89	0.89	0.89	0.92	0.92	0.92	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	465	2645		142	2382		13	1490		28	1532	
Arrive On Green	0.09	0.52	0.00	0.04	0.47	0.00	0.01	0.29	0.00	0.02	0.30	0.00
Sat Flow, veh/h	5023	5106	1585	3456	5106	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	375	870	0	96	2152	0	5	598	0	12	1483	0
Grp Sat Flow(s),veh/h/ln	1674	1702	1585	1728	1702	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	11.0	14.8	0.0	4.1	58.3	0.0	0.4	14.1	0.0	1.0	43.0	0.0
Cycle Q Clear(g_c), s	11.0	14.8	0.0	4.1	58.3	0.0	0.4	14.1	0.0	1.0	43.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	465	2645		142	2382		13	1490		28	1532	
V/C Ratio(X)	0.81	0.33		0.68	0.90		0.37	0.40		0.43	0.97	
Avail Cap(c_a), veh/h	703	2645		369	2382		404	1490		570	1532	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.55	0.55	0.00
Uniform Delay (d), s/veh	66.7	21.0	0.0	70.9	36.9	0.0	74.1	42.6	0.0	73.2	51.8	0.0
Incr Delay (d2), s/veh	4.4	0.3	0.0	6.0	6.2	0.0	16.3	0.2	0.0	5.6	10.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.8	5.7	0.0	1.9	24.0	0.0	0.2	5.8	0.0	0.5	19.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	71.1	21.3	0.0	76.9	43.1	0.0	90.4	42.8	0.0	78.7	62.5	0.0
LnGrp LOS	E	C		E	D		F	D		E	E	
Approach Vol, veh/h		1245	A		2248	A		603	A		1495	A
Approach Delay, s/veh		36.3			44.5			43.2			62.6	
Approach LOS		D			D			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.2	82.7	6.1	50.0	18.9	75.0	7.4	48.8
Change Period (Y+Rc), s	5.0	7.0	5.0	6.0	5.0	7.0	5.0	6.0
Max Green Setting (Gmax), s	16.0	33.0	34.0	44.0	21.0	28.0	48.0	30.0
Max Q Clear Time (g_c+I1), s	6.1	16.8	2.4	45.0	13.0	60.3	3.0	16.1
Green Ext Time (p_c), s	0.2	4.7	0.0	0.0	0.9	0.0	0.0	3.2

Intersection Summary	
HCM 6th Ctrl Delay	47.4
HCM 6th LOS	D

Notes

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

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	175	855	2235	675	265	250
Future Volume (veh/h)	175	855	2235	675	265	250
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	206	1006	2378	0	301	0
Peak Hour Factor	0.85	0.85	0.94	0.94	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	418	4034	3566		380	
Arrive On Green	0.05	0.79	0.70	0.00	0.11	0.00
Sat Flow, veh/h	3456	5274	5274	1585	3456	1585
Grp Volume(v), veh/h	206	1006	2378	0	301	0
Grp Sat Flow(s),veh/h/ln	1728	1702	1702	1585	1728	1585
Q Serve(g_s), s	1.8	6.2	31.5	0.0	10.2	0.0
Cycle Q Clear(g_c), s	1.8	6.2	31.5	0.0	10.2	0.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	418	4034	3566		380	
V/C Ratio(X)	0.49	0.25	0.67		0.79	
Avail Cap(c_a), veh/h	476	4034	3566		950	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	18.3	3.3	10.2	0.0	52.1	0.0
Incr Delay (d2), s/veh	0.9	0.1	1.0	0.0	3.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	1.3	9.3	0.0	4.6	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	19.2	3.4	11.2	0.0	55.8	0.0
LnGrp LOS	B	A	B		E	
Approach Vol, veh/h		1212	2378	A	301	A
Approach Delay, s/veh		6.1	11.2		55.8	
Approach LOS		A	B		E	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		101.8		18.2	11.0	90.8
Change Period (Y+Rc), s		7.0		5.0	5.0	7.0
Max Green Setting (Gmax), s		75.0		33.0	8.0	62.0
Max Q Clear Time (g_c+I1), s		8.2		12.2	3.8	33.5
Green Ext Time (p_c), s		7.4		1.0	0.2	20.4

Intersection Summary	
HCM 6th Ctrl Delay	13.1
HCM 6th LOS	B

Notes

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

Intersection	
Int Delay, s/veh	5.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	7	21	0	0	21	23	12	12	0	22	4	25
Future Vol, veh/h	7	21	0	0	21	23	12	12	0	22	4	25
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	84	84	84	77	77	77	58	58	58	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	8	25	0	0	27	30	21	21	0	29	5	33

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	57	0	0	25	0	0	102	98	25	94	83	42
Stage 1	-	-	-	-	-	-	41	41	-	42	42	-
Stage 2	-	-	-	-	-	-	61	57	-	52	41	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1547	-	-	1589	-	-	879	792	1051	889	807	1029
Stage 1	-	-	-	-	-	-	974	861	-	972	860	-
Stage 2	-	-	-	-	-	-	950	847	-	961	861	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1547	-	-	1589	-	-	843	788	1051	868	803	1029
Mov Cap-2 Maneuver	-	-	-	-	-	-	843	788	-	868	803	-
Stage 1	-	-	-	-	-	-	969	857	-	967	860	-
Stage 2	-	-	-	-	-	-	914	847	-	933	857	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.8	0	9.7	9.2
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	815	1547	-	-	1589	-	-	934
HCM Lane V/C Ratio	0.051	0.005	-	-	-	-	-	0.073
HCM Control Delay (s)	9.7	7.3	0	-	0	-	-	9.2
HCM Lane LOS	A	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	0.2

Intersection	
Intersection Delay, s/veh	7.3
Intersection LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	16	2	14	1	2	29
Future Vol, veh/h	16	2	14	1	2	29
Peak Hour Factor	0.40	0.40	0.63	0.63	0.86	0.86
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	40	5	22	2	2	34
Number of Lanes	1	0	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay	7.4	7.1	7.2
HCM LOS	A	A	A

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	0%	89%	6%
Vol Thru, %	93%	0%	94%
Vol Right, %	7%	11%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	15	18	31
LT Vol	0	16	2
Through Vol	14	0	29
RT Vol	1	2	0
Lane Flow Rate	24	45	36
Geometry Grp	1	1	1
Degree of Util (X)	0.026	0.052	0.04
Departure Headway (Hd)	4	4.148	4.044
Convergence, Y/N	Yes	Yes	Yes
Cap	893	864	885
Service Time	2.031	2.173	2.072
HCM Lane V/C Ratio	0.027	0.052	0.041
HCM Control Delay	7.1	7.4	7.2
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.1	0.2	0.1

Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	20	11	11	10	2	13
Future Vol, veh/h	20	11	11	10	2	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	70	70	48	48	63	63
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	29	16	23	21	3	21

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	44	0	-	0	108	34
Stage 1	-	-	-	-	34	-
Stage 2	-	-	-	-	74	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1564	-	-	-	889	1039
Stage 1	-	-	-	-	988	-
Stage 2	-	-	-	-	949	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1564	-	-	-	872	1039
Mov Cap-2 Maneuver	-	-	-	-	872	-
Stage 1	-	-	-	-	969	-
Stage 2	-	-	-	-	949	-

Approach	EB	WB	SB
HCM Control Delay, s	4.7	0	8.6
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1564	-	-	-	1013
HCM Lane V/C Ratio	0.018	-	-	-	0.024
HCM Control Delay (s)	7.3	0	-	-	8.6
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1

Intersection	
Int Delay, s/veh	4.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	11	3	3	14	0	7	2	0	0	7	0
Future Vol, veh/h	1	11	3	3	14	0	7	2	0	0	7	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	75	75	75	61	61	61	45	45	45	58	58	58
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	15	4	5	23	0	16	4	0	0	12	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	23	0	0	19	0	0	58	52	17	54	54	23
Stage 1	-	-	-	-	-	-	19	19	-	33	33	-
Stage 2	-	-	-	-	-	-	39	33	-	21	21	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1592	-	-	1597	-	-	939	839	1062	944	837	1054
Stage 1	-	-	-	-	-	-	1000	880	-	983	868	-
Stage 2	-	-	-	-	-	-	976	868	-	998	878	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1592	-	-	1597	-	-	926	836	1062	937	834	1054
Mov Cap-2 Maneuver	-	-	-	-	-	-	926	836	-	937	834	-
Stage 1	-	-	-	-	-	-	999	879	-	982	865	-
Stage 2	-	-	-	-	-	-	959	865	-	992	877	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	1.3	9.1	9.4
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	904	1592	-	-	1597	-	-	834
HCM Lane V/C Ratio	0.022	0.001	-	-	0.003	-	-	0.014
HCM Control Delay (s)	9.1	7.3	0	-	7.3	0	-	9.4
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	4.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1	1	4	3	1	0
Future Vol, veh/h	1	1	4	3	1	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	50	50	88	88	25	25
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	2	5	3	4	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	4	0	16	3
Stage 1	-	-	-	-	3	-
Stage 2	-	-	-	-	13	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1618	-	1002	1081
Stage 1	-	-	-	-	1020	-
Stage 2	-	-	-	-	1010	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1618	-	999	1081
Mov Cap-2 Maneuver	-	-	-	-	999	-
Stage 1	-	-	-	-	1020	-
Stage 2	-	-	-	-	1007	-

Approach	EB	WB	NB
HCM Control Delay, s	0	4.1	8.6
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	999	-	-	1618	-
HCM Lane V/C Ratio	0.004	-	-	0.003	-
HCM Control Delay (s)	8.6	-	-	7.2	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	3	3	1	1	12	4
Future Vol, veh/h	3	3	1	1	12	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	38	38	50	50	57	57
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	8	2	2	21	7

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	31	25	28	0	-	0
Stage 1	25	-	-	-	-	-
Stage 2	6	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	983	1051	1585	-	-	-
Stage 1	998	-	-	-	-	-
Stage 2	1017	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	982	1051	1585	-	-	-
Mov Cap-2 Maneuver	982	-	-	-	-	-
Stage 1	997	-	-	-	-	-
Stage 2	1017	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.6	3.6	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1585	-	1015	-	-
HCM Lane V/C Ratio	0.001	-	0.016	-	-
HCM Control Delay (s)	7.3	0	8.6	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	4.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	455	35	5	890	135	15
Future Vol, veh/h	455	35	5	890	135	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	300	450	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	91	91	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	517	40	5	978	147	16

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	557	0	1016	259
Stage 1	-	-	-	-	517	-
Stage 2	-	-	-	-	499	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	1010	-	234	740
Stage 1	-	-	-	-	563	-
Stage 2	-	-	-	-	575	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1010	-	233	740
Mov Cap-2 Maneuver	-	-	-	-	233	-
Stage 1	-	-	-	-	563	-
Stage 2	-	-	-	-	572	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	42.9
HCM LOS			E

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	250	-	-	1010	-
HCM Lane V/C Ratio	0.652	-	-	0.005	-
HCM Control Delay (s)	42.9	-	-	8.6	-
HCM Lane LOS	E	-	-	A	-
HCM 95th %tile Q(veh)	4.1	-	-	0	-

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	55	70	10	840	445	25
Future Vol, veh/h	55	70	10	840	445	25
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	-	-	-	250
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	83	83	89	89	79	79
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	66	84	11	944	563	32

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1057	282	595	0	-	0
Stage 1	563	-	-	-	-	-
Stage 2	494	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	220	715	977	-	-	-
Stage 1	534	-	-	-	-	-
Stage 2	579	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	218	715	977	-	-	-
Mov Cap-2 Maneuver	218	-	-	-	-	-
Stage 1	528	-	-	-	-	-
Stage 2	579	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	18.6	0.1	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	977	-	218	715	-	-
HCM Lane V/C Ratio	0.012	-	0.304	0.118	-	-
HCM Control Delay (s)	8.7	-	28.6	10.7	-	-
HCM Lane LOS	A	-	D	B	-	-
HCM 95th %tile Q(veh)	0	-	1.2	0.4	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	275	30	150	170	25	115	100	1700	200	90	1050	336
Future Volume (veh/h)	275	30	150	170	25	115	100	1700	200	90	1050	336
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	357	39	195	258	38	174	119	2024	238	101	1180	378
Peak Hour Factor	0.77	0.77	0.77	0.66	0.66	0.66	0.84	0.84	0.84	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	497	111	94	296	180	153	290	2218	989	137	3168	983
Arrive On Green	0.07	0.06	0.06	0.11	0.10	0.10	0.04	0.62	0.62	0.04	0.62	0.62
Sat Flow, veh/h	3456	1870	1585	1781	1870	1585	1781	3554	1585	1781	5106	1585
Grp Volume(v), veh/h	357	39	195	258	38	174	119	2024	238	101	1180	378
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1781	1870	1585	1781	1777	1585	1781	1702	1585
Q Serve(g_s), s	10.0	2.7	8.0	15.0	2.5	13.0	3.3	67.1	9.0	2.8	15.4	16.0
Cycle Q Clear(g_c), s	10.0	2.7	8.0	15.0	2.5	13.0	3.3	67.1	9.0	2.8	15.4	16.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	497	111	94	296	180	153	290	2218	989	137	3168	983
V/C Ratio(X)	0.72	0.35	2.08	0.87	0.21	1.14	0.41	0.91	0.24	0.74	0.37	0.38
Avail Cap(c_a), veh/h	497	111	94	296	180	153	300	2218	989	167	3168	983
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.46	0.46	0.46	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.8	61.0	63.5	53.6	56.3	61.0	9.8	22.1	11.2	32.7	12.7	12.8
Incr Delay (d2), s/veh	5.0	1.9	518.7	23.3	0.6	115.4	0.4	3.6	0.3	12.8	0.3	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.3	1.3	16.8	3.4	1.2	10.1	1.2	25.4	3.2	2.5	5.5	5.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.7	62.9	582.2	77.0	56.8	176.4	10.2	25.7	11.5	45.4	13.0	13.9
LnGrp LOS	E	E	F	E	E	F	B	C	B	D	B	B
Approach Vol, veh/h		591			470			2381			1659	
Approach Delay, s/veh		233.6			112.1			23.5			15.2	
Approach LOS		F			F			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.7	91.3	20.0	14.0	10.2	90.8	15.0	19.0
Change Period (Y+Rc), s	5.0	7.0	5.0	6.0	5.0	7.0	5.0	6.0
Max Green Setting (Gmax), s	7.0	82.0	15.0	8.0	6.0	83.0	10.0	13.0
Max Q Clear Time (g_c+I1), s	4.8	69.1	17.0	10.0	5.3	18.0	12.0	15.0
Green Ext Time (p_c), s	0.0	10.5	0.0	0.0	0.0	12.3	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	53.3
HCM 6th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	800	1500	10	185	800	85	20	1100	390	45	825	500
Future Volume (veh/h)	800	1500	10	185	800	85	20	1100	390	45	825	500
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	952	1786	0	213	920	0	24	1294	0	54	994	0
Peak Hour Factor	0.84	0.84	0.84	0.87	0.87	0.87	0.85	0.85	0.85	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	1068	2379		259	1676		45	1465		69	1534	
Arrive On Green	0.21	0.47	0.00	0.07	0.33	0.00	0.03	0.29	0.00	0.04	0.30	0.00
Sat Flow, veh/h	5023	5106	1585	3456	5106	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	952	1786	0	213	920	0	24	1294	0	54	994	0
Grp Sat Flow(s),veh/h/ln	1674	1702	1585	1728	1702	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	27.6	43.1	0.0	9.1	22.1	0.0	2.0	36.3	0.0	4.5	25.4	0.0
Cycle Q Clear(g_c), s	27.6	43.1	0.0	9.1	22.1	0.0	2.0	36.3	0.0	4.5	25.4	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	1068	2379		259	1676		45	1465		69	1534	
V/C Ratio(X)	0.89	0.75		0.82	0.55		0.53	0.88		0.78	0.65	
Avail Cap(c_a), veh/h	1206	2379		299	1676		119	1532		119	1534	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.84	0.84	0.00
Uniform Delay (d), s/veh	57.4	32.9	0.0	68.4	41.3	0.0	72.2	51.1	0.0	71.4	45.6	0.0
Incr Delay (d2), s/veh	8.0	2.2	0.0	15.1	1.3	0.0	9.4	6.3	0.0	14.5	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.1	17.2	0.0	4.5	9.2	0.0	1.0	15.8	0.0	2.3	10.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	65.4	35.1	0.0	83.5	42.6	0.0	81.7	57.4	0.0	85.9	46.4	0.0
LnGrp LOS	E	D		F	D		F	E		F	D	
Approach Vol, veh/h		2738	A		1133	A		1318	A		1048	A
Approach Delay, s/veh		45.7			50.3			57.9			48.4	
Approach LOS		D			D			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.2	74.9	8.8	50.1	36.9	54.2	10.8	48.0
Change Period (Y+Rc), s	5.0	7.0	5.0	6.0	5.0	7.0	5.0	6.0
Max Green Setting (Gmax), s	13.0	60.0	10.0	44.0	36.0	37.0	10.0	44.0
Max Q Clear Time (g_c+I1), s	11.1	45.1	4.0	27.4	29.6	24.1	6.5	38.3
Green Ext Time (p_c), s	0.1	9.6	0.0	6.1	2.3	4.5	0.0	3.7

Intersection Summary	
HCM 6th Ctrl Delay	49.5
HCM 6th LOS	D

Notes

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

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	205	1730	945	350	650	125
Future Volume (veh/h)	205	1730	945	350	650	125
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	244	2060	1027	0	739	0
Peak Hour Factor	0.84	0.84	0.92	0.92	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	776	3344	2876		847	
Arrive On Green	0.05	0.65	0.56	0.00	0.25	0.00
Sat Flow, veh/h	3456	5274	5274	1585	3456	1585
Grp Volume(v), veh/h	244	2060	1027	0	739	0
Grp Sat Flow(s),veh/h/ln	1728	1702	1702	1585	1728	1585
Q Serve(g_s), s	3.4	28.0	13.2	0.0	24.6	0.0
Cycle Q Clear(g_c), s	3.4	28.0	13.2	0.0	24.6	0.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	776	3344	2876		847	
V/C Ratio(X)	0.31	0.62	0.36		0.87	
Avail Cap(c_a), veh/h	977	3344	2876		1325	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	10.1	12.0	14.3	0.0	43.5	0.0
Incr Delay (d2), s/veh	0.2	0.9	0.3	0.0	4.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	8.9	4.6	0.0	11.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	10.3	12.8	14.7	0.0	47.6	0.0
LnGrp LOS	B	B	B		D	
Approach Vol, veh/h		2304	1027	A	739	A
Approach Delay, s/veh		12.6	14.7		47.6	
Approach LOS		B	B		D	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		85.6		34.4	11.0	74.6
Change Period (Y+Rc), s		7.0		5.0	5.0	7.0
Max Green Setting (Gmax), s		62.0		46.0	13.0	44.0
Max Q Clear Time (g_c+I1), s		30.0		26.6	5.4	15.2
Green Ext Time (p_c), s		18.5		2.8	0.5	7.0

Intersection Summary	
HCM 6th Ctrl Delay	19.5
HCM 6th LOS	B

Notes

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

Intersection	
Int Delay, s/veh	4.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	6	36	1	0	12	16	0	5	1	21	4	23
Future Vol, veh/h	6	36	1	0	12	16	0	5	1	21	4	23
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	70	70	70	75	75	75	50	50	50	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	9	51	1	0	16	21	0	10	2	26	5	29

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	37	0	0	52	0	0	114	107	52	103	97	27
Stage 1	-	-	-	-	-	-	70	70	-	27	27	-
Stage 2	-	-	-	-	-	-	44	37	-	76	70	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1574	-	-	1554	-	-	863	783	1016	877	793	1048
Stage 1	-	-	-	-	-	-	940	837	-	990	873	-
Stage 2	-	-	-	-	-	-	970	864	-	933	837	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1574	-	-	1554	-	-	831	778	1016	863	788	1048
Mov Cap-2 Maneuver	-	-	-	-	-	-	831	778	-	863	788	-
Stage 1	-	-	-	-	-	-	934	832	-	984	873	-
Stage 2	-	-	-	-	-	-	938	864	-	914	832	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1	0	9.5	9.1
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	810	1574	-	-	1554	-	-	935
HCM Lane V/C Ratio	0.015	0.005	-	-	-	-	-	0.064
HCM Control Delay (s)	9.5	7.3	0	-	0	-	-	9.1
HCM Lane LOS	A	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.2

Intersection	
Intersection Delay, s/veh	7.1
Intersection LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	5	0	22	10	0	18
Future Vol, veh/h	5	0	22	10	0	18
Peak Hour Factor	0.42	0.42	0.67	0.67	0.56	0.56
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	12	0	33	15	0	32
Number of Lanes	1	0	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay	7.4	7	7.2
HCM LOS	A	A	A

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	0%	100%	0%
Vol Thru, %	69%	0%	100%
Vol Right, %	31%	0%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	32	5	18
LT Vol	0	5	0
Through Vol	22	0	18
RT Vol	10	0	0
Lane Flow Rate	48	12	32
Geometry Grp	1	1	1
Degree of Util (X)	0.05	0.014	0.036
Departure Headway (Hd)	3.792	4.272	3.991
Convergence, Y/N	Yes	Yes	Yes
Cap	947	837	900
Service Time	1.804	2.301	2.004
HCM Lane V/C Ratio	0.051	0.014	0.036
HCM Control Delay	7	7.4	7.2
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.2	0	0.1

Intersection	
Int Delay, s/veh	4.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	10	15	11	9	11	17
Future Vol, veh/h	10	15	11	9	11	17
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	78	78	71	71	70	70
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	13	19	15	13	16	24

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	28	0	-	0	67	22
Stage 1	-	-	-	-	22	-
Stage 2	-	-	-	-	45	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1585	-	-	-	938	1055
Stage 1	-	-	-	-	1001	-
Stage 2	-	-	-	-	977	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1585	-	-	-	930	1055
Mov Cap-2 Maneuver	-	-	-	-	930	-
Stage 1	-	-	-	-	993	-
Stage 2	-	-	-	-	977	-

Approach	EB	WB	SB
HCM Control Delay, s	2.9	0	8.7
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1585	-	-	-	1002
HCM Lane V/C Ratio	0.008	-	-	-	0.04
HCM Control Delay (s)	7.3	0	-	-	8.7
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	3.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	3	14	8	5	14	2	6	0	2	0	4	0
Future Vol, veh/h	3	14	8	5	14	2	6	0	2	0	4	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	66	66	66	67	67	67	50	50	50
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	16	9	8	21	3	9	0	3	0	8	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	24	0	0	25	0	0	70	67	21	67	70	23
Stage 1	-	-	-	-	-	-	27	27	-	39	39	-
Stage 2	-	-	-	-	-	-	43	40	-	28	31	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1591	-	-	1589	-	-	922	824	1056	926	821	1054
Stage 1	-	-	-	-	-	-	990	873	-	976	862	-
Stage 2	-	-	-	-	-	-	971	862	-	989	869	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1591	-	-	1589	-	-	910	818	1056	919	815	1054
Mov Cap-2 Maneuver	-	-	-	-	-	-	910	818	-	919	815	-
Stage 1	-	-	-	-	-	-	988	871	-	974	858	-
Stage 2	-	-	-	-	-	-	957	858	-	984	867	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.9	1.7	8.9	9.5
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	943	1591	-	-	1589	-	-	815
HCM Lane V/C Ratio	0.013	0.002	-	-	0.005	-	-	0.01
HCM Control Delay (s)	8.9	7.3	0	-	7.3	0	-	9.5
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	1.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	4	1	0	3	0	3
Future Vol, veh/h	4	1	0	3	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	63	63	38	38	75	75
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	6	2	0	8	0	4

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	8	0	15	7
Stage 1	-	-	-	-	7	-
Stage 2	-	-	-	-	8	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1612	-	1004	1075
Stage 1	-	-	-	-	1016	-
Stage 2	-	-	-	-	1015	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1612	-	1004	1075
Mov Cap-2 Maneuver	-	-	-	-	1004	-
Stage 1	-	-	-	-	1016	-
Stage 2	-	-	-	-	1015	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	8.4
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1075	-	-	1612	-
HCM Lane V/C Ratio	0.004	-	-	-	-
HCM Control Delay (s)	8.4	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	4	0	1	1	8	4
Future Vol, veh/h	4	0	1	1	8	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	50	50	50	50	50	50
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	0	2	2	16	8

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	26	20	24	0	-	0
Stage 1	20	-	-	-	-	-
Stage 2	6	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	989	1058	1591	-	-	-
Stage 1	1003	-	-	-	-	-
Stage 2	1017	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	988	1058	1591	-	-	-
Mov Cap-2 Maneuver	988	-	-	-	-	-
Stage 1	1002	-	-	-	-	-
Stage 2	1017	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.7	3.6	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1591	-	988	-	-
HCM Lane V/C Ratio	0.001	-	0.008	-	-
HCM Control Delay (s)	7.3	0	8.7	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	2.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	790	110	10	550	60	5
Future Vol, veh/h	790	110	10	550	60	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	300	450	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	84	84	91	91	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	940	131	11	604	75	6

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1071	0	1264	470
Stage 1	-	-	-	-	940	-
Stage 2	-	-	-	-	324	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	647	-	161	540
Stage 1	-	-	-	-	340	-
Stage 2	-	-	-	-	705	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	647	-	158	540
Mov Cap-2 Maneuver	-	-	-	-	158	-
Stage 1	-	-	-	-	340	-
Stage 2	-	-	-	-	693	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	45.4
HCM LOS			E

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	167	-	-	647	-
HCM Lane V/C Ratio	0.487	-	-	0.017	-
HCM Control Delay (s)	45.4	-	-	10.7	-
HCM Lane LOS	E	-	-	B	-
HCM 95th %tile Q(veh)	2.3	-	-	0.1	-

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	35	25	30	526	754	45
Future Vol, veh/h	35	25	30	526	754	45
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	-	-	-	250
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	64	64	82	82	87	87
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	55	39	37	641	867	52

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1262	434	919	0	-	0
Stage 1	867	-	-	-	-	-
Stage 2	395	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	162	570	738	-	-	-
Stage 1	372	-	-	-	-	-
Stage 2	650	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	154	570	738	-	-	-
Mov Cap-2 Maneuver	154	-	-	-	-	-
Stage 1	353	-	-	-	-	-
Stage 2	650	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	28.7	0.5	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	738	-	154	570	-	-
HCM Lane V/C Ratio	0.05	-	0.355	0.069	-	-
HCM Control Delay (s)	10.1	-	40.7	11.8	-	-
HCM Lane LOS	B	-	E	B	-	-
HCM 95th %tile Q(veh)	0.2	-	1.5	0.2	-	-

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	7	257	0	0	79	99	8	38	0	27	4	25
Future Vol, veh/h	7	257	0	0	79	99	8	38	0	27	4	25
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	84	50	84	77	50	50	50	50	58	50	75	75
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	8	514	0	0	158	198	16	76	0	54	5	33

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	356	0	0	514	0	0	806	886	514	825	787	257
Stage 1	-	-	-	-	-	-	530	530	-	257	257	-
Stage 2	-	-	-	-	-	-	276	356	-	568	530	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1203	-	-	1052	-	-	300	284	560	292	324	782
Stage 1	-	-	-	-	-	-	533	527	-	748	695	-
Stage 2	-	-	-	-	-	-	730	629	-	508	527	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1203	-	-	1052	-	-	282	281	560	230	321	782
Mov Cap-2 Maneuver	-	-	-	-	-	-	282	281	-	230	321	-
Stage 1	-	-	-	-	-	-	528	522	-	741	695	-
Stage 2	-	-	-	-	-	-	694	629	-	430	522	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0	23.9	19.7
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	281	1203	-	-	1052	-	-	236	782
HCM Lane V/C Ratio	0.327	0.007	-	-	-	-	-	0.251	0.043
HCM Control Delay (s)	23.9	8	0	-	0	-	-	25.3	9.8
HCM Lane LOS	C	A	A	-	A	-	-	D	A
HCM 95th %tile Q(veh)	1.4	0	-	-	0	-	-	1	0.1

Intersection	
Intersection Delay, s/veh	18.8
Intersection LOS	C

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	151	15	187	69	2	29
Future Vol, veh/h	151	15	187	69	2	29
Peak Hour Factor	0.40	0.40	0.50	0.50	0.86	0.86
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	378	38	374	138	2	34
Number of Lanes	1	0	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay	17.8	20.3	9.4
HCM LOS	C	C	A

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	0%	91%	6%
Vol Thru, %	73%	0%	94%
Vol Right, %	27%	9%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	256	166	31
LT Vol	0	151	2
Through Vol	187	0	29
RT Vol	69	15	0
Lane Flow Rate	512	415	36
Geometry Grp	1	1	1
Degree of Util (X)	0.724	0.637	0.06
Departure Headway (Hd)	5.093	5.528	5.95
Convergence, Y/N	Yes	Yes	Yes
Cap	717	652	600
Service Time	3.093	3.565	4.004
HCM Lane V/C Ratio	0.714	0.637	0.06
HCM Control Delay	20.3	17.8	9.4
HCM Lane LOS	C	C	A
HCM 95th-tile Q	6.3	4.6	0.2

Intersection	
Int Delay, s/veh	11.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	30	242	11	20	147	13
Future Vol, veh/h	30	242	11	20	147	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	50	50	48	48	50	63
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	60	484	23	42	294	21

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	65	0	-	0	648	44
Stage 1	-	-	-	-	44	-
Stage 2	-	-	-	-	604	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1537	-	-	-	435	1026
Stage 1	-	-	-	-	978	-
Stage 2	-	-	-	-	546	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1537	-	-	-	412	1026
Mov Cap-2 Maneuver	-	-	-	-	412	-
Stage 1	-	-	-	-	926	-
Stage 2	-	-	-	-	546	-

Approach	EB	WB	SB
HCM Control Delay, s	0.8	0	33.2
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1537	-	-	-	429
HCM Lane V/C Ratio	0.039	-	-	-	0.733
HCM Control Delay (s)	7.4	0	-	-	33.2
HCM Lane LOS	A	A	-	-	D
HCM 95th %tile Q(veh)	0.1	-	-	-	5.9

Intersection	
Int Delay, s/veh	5.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	14	321	88	14	0	17	12	96	0	26	0
Future Vol, veh/h	1	14	321	88	14	0	17	12	96	0	26	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	50	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	75	50	50	50	61	61	45	45	45	58	50	58
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	28	642	176	23	0	38	27	213	0	52	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	23	0	0	670	0	0	431	405	28	846	1047	23
Stage 1	-	-	-	-	-	-	30	30	-	375	375	-
Stage 2	-	-	-	-	-	-	401	375	-	471	672	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1592	-	-	920	-	-	535	535	1047	282	228	1054
Stage 1	-	-	-	-	-	-	987	870	-	646	617	-
Stage 2	-	-	-	-	-	-	626	617	-	573	454	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1592	-	-	920	-	-	358	431	1047	182	184	1054
Mov Cap-2 Maneuver	-	-	-	-	-	-	358	431	-	182	184	-
Stage 1	-	-	-	-	-	-	986	869	-	645	497	-
Stage 2	-	-	-	-	-	-	452	497	-	442	454	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	8.7	12.6	32.1
HCM LOS			B	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	748	1592	-	-	920	-	-	184
HCM Lane V/C Ratio	0.371	0.001	-	-	0.191	-	-	0.283
HCM Control Delay (s)	12.6	7.3	0	-	9.8	0	-	32.1
HCM Lane LOS	B	A	A	-	A	A	-	D
HCM 95th %tile Q(veh)	1.7	0	-	-	0.7	-	-	1.1

Intersection	
Int Delay, s/veh	14.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	69	1	4	3	0	1	0	7	117	157	158
Future Vol, veh/h	0	69	1	4	3	0	1	0	7	117	157	158
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	50	50	50	88	88	88	25	25	25	50	50	50
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	138	2	5	3	0	4	0	28	234	314	316

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	140	0	0	467	152	139	166	153	3
Stage 1	-	-	-	-	-	-	139	139	-	13	13	-
Stage 2	-	-	-	-	-	-	328	13	-	153	140	-
Critical Hdwy	-	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	-	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	0	-	-	1443	-	0	506	740	909	798	739	1081
Stage 1	0	-	-	-	-	0	864	782	-	1007	885	-
Stage 2	0	-	-	-	-	0	685	885	-	849	781	-
Platoon blocked, %		-	-		-							
Mov Cap-1 Maneuver	-	-	-	1443	-	-	238	738	909	772	737	1081
Mov Cap-2 Maneuver	-	-	-	-	-	-	238	738	-	772	737	-
Stage 1	-	-	-	-	-	-	864	782	-	1007	882	-
Stage 2	-	-	-	-	-	-	311	882	-	823	781	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	4.3	10.6	16.9
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	672	-	-	1443	-	772	877
HCM Lane V/C Ratio	0.048	-	-	0.003	-	0.303	0.718
HCM Control Delay (s)	10.6	-	-	7.5	0	11.7	18.8
HCM Lane LOS	B	-	-	A	A	B	C
HCM 95th %tile Q(veh)	0.1	-	-	0	-	1.3	6.3

Intersection	
Int Delay, s/veh	12

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	194	3	1	1	12	4
Future Vol, veh/h	194	3	1	1	12	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	38	38	50	50	57	57
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	511	8	2	2	21	7

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	31	25	28	0	-	0
Stage 1	25	-	-	-	-	-
Stage 2	6	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	983	1051	1585	-	-	-
Stage 1	998	-	-	-	-	-
Stage 2	1017	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	982	1051	1585	-	-	-
Mov Cap-2 Maneuver	982	-	-	-	-	-
Stage 1	997	-	-	-	-	-
Stage 2	1017	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.7	3.6	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1585	-	983	-	-
HCM Lane V/C Ratio	0.001	-	0.527	-	-
HCM Control Delay (s)	7.3	0	12.7	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	3.2	-	-

Intersection	
Int Delay, s/veh	3.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	332	196	4	517	166	12
Future Vol, veh/h	332	196	4	517	166	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	300	450	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	50	91	82	80	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	377	392	4	630	208	13

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	769	0	700	189
Stage 1	-	-	-	-	377	-
Stage 2	-	-	-	-	323	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	841	-	374	821
Stage 1	-	-	-	-	663	-
Stage 2	-	-	-	-	706	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	841	-	372	821
Mov Cap-2 Maneuver	-	-	-	-	372	-
Stage 1	-	-	-	-	663	-
Stage 2	-	-	-	-	702	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	26.3
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	384	-	-	841	-
HCM Lane V/C Ratio	0.574	-	-	0.005	-
HCM Control Delay (s)	26.3	-	-	9.3	-
HCM Lane LOS	D	-	-	A	-
HCM 95th %tile Q(veh)	3.5	-	-	0	-

Intersection	
Int Delay, s/veh	7.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	122	81	38	381	245	78
Future Vol, veh/h	122	81	38	381	245	78
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	325	-	-	250
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	50	50	50	89	79	79
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	244	162	76	428	310	99

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	676	155	409	0	-	0
Stage 1	310	-	-	-	-	-
Stage 2	366	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	387	863	1146	-	-	-
Stage 1	717	-	-	-	-	-
Stage 2	672	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	361	863	1146	-	-	-
Mov Cap-2 Maneuver	361	-	-	-	-	-
Stage 1	670	-	-	-	-	-
Stage 2	672	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	24.1	1.3	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1146	-	361	863	-	-
HCM Lane V/C Ratio	0.066	-	0.676	0.188	-	-
HCM Control Delay (s)	8.4	-	33.4	10.1	-	-
HCM Lane LOS	A	-	D	B	-	-
HCM 95th %tile Q(veh)	0.2	-	4.7	0.7	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑	↱		↱
Traffic Vol, veh/h	0	429	1494	10	0	244
Future Vol, veh/h	0	429	1494	10	0	244
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Free
Storage Length	-	-	-	800	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	82	82	91	50	85	50
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	523	1642	20	0	488

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-
Pot Cap-1 Maneuver	0	-	-	-	0	0
Stage 1	0	-	-	-	0	0
Stage 2	0	-	-	-	0	0
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	-	-	0
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	-

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	75	121	16	422
Future Vol, veh/h	0	0	75	121	16	422
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	25	50	50	50	50
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	150	242	32	844

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	996	454	876	0	-	0
Stage 1	454	-	-	-	-	-
Stage 2	542	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	271	606	771	-	-	-
Stage 1	640	-	-	-	-	-
Stage 2	583	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	210	606	771	-	-	-
Mov Cap-2 Maneuver	210	-	-	-	-	-
Stage 1	496	-	-	-	-	-
Stage 2	583	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	4.1	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	771	-	-	-	-
HCM Lane V/C Ratio	0.195	-	-	-	-
HCM Control Delay (s)	10.8	0	0	-	-
HCM Lane LOS	B	A	A	-	-
HCM 95th %tile Q(veh)	0.7	-	-	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	74	4	44	110	18	94	59	767	217	57	1643	215
Future Volume (veh/h)	74	4	44	110	18	94	59	767	217	57	1643	215
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	95	5	56	220	23	140	64	834	434	114	1826	239
Peak Hour Factor	0.78	0.78	0.78	0.50	0.78	0.67	0.92	0.92	0.50	0.50	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	439	107	91	374	261	221	148	1869	833	329	1921	857
Arrive On Green	0.04	0.06	0.06	0.13	0.14	0.14	0.03	0.53	0.53	0.05	0.54	0.54
Sat Flow, veh/h	3456	1870	1585	1781	1870	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	95	5	56	220	23	140	64	834	434	114	1826	239
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1781	1870	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	2.4	0.2	3.3	10.7	1.0	7.9	1.6	13.8	17.0	2.8	46.2	7.8
Cycle Q Clear(g_c), s	2.4	0.2	3.3	10.7	1.0	7.9	1.6	13.8	17.0	2.8	46.2	7.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	439	107	91	374	261	221	148	1869	833	329	1921	857
V/C Ratio(X)	0.22	0.05	0.62	0.59	0.09	0.63	0.43	0.45	0.52	0.35	0.95	0.28
Avail Cap(c_a), veh/h	723	590	500	374	590	500	312	1869	833	467	1921	857
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.5	42.4	43.8	34.4	35.6	38.6	22.2	14.0	14.7	10.5	20.7	11.8
Incr Delay (d2), s/veh	0.2	0.2	6.7	2.4	0.1	3.0	2.0	0.8	2.3	0.6	11.8	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.1	1.4	4.8	0.5	3.2	0.7	5.0	6.3	1.0	18.8	2.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.8	42.6	50.5	36.8	35.8	41.6	24.2	14.7	17.0	11.2	32.5	12.6
LnGrp LOS	D	D	D	D	D	D	C	B	B	B	C	B
Approach Vol, veh/h		156			383			1332			2179	
Approach Delay, s/veh		43.7			38.5			15.9			29.2	
Approach LOS		D			D			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.7	57.0	17.0	11.4	8.3	58.4	9.2	19.3
Change Period (Y+Rc), s	5.0	7.0	5.0	6.0	5.0	7.0	5.0	6.0
Max Green Setting (Gmax), s	12.0	50.0	12.0	30.0	12.0	50.0	12.0	30.0
Max Q Clear Time (g_c+I1), s	4.8	19.0	12.7	5.3	3.6	48.2	4.4	9.9
Green Ext Time (p_c), s	0.1	7.7	0.0	0.2	0.1	1.6	0.1	0.5

Intersection Summary	
HCM 6th Ctrl Delay	26.3
HCM 6th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	512	363	2	16	1434	316	1	490	77	8	1066	737
Future Volume (veh/h)	512	363	2	16	1434	316	1	490	77	8	1066	737
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	711	395	0	18	1728	0	1	557	0	9	1254	0
Peak Hour Factor	0.72	0.92	0.92	0.89	0.83	0.89	0.92	0.88	0.92	0.86	0.85	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	346	1862		513	1582		3	1099		22	1137	
Arrive On Green	0.10	0.52	0.00	0.02	0.45	0.00	0.00	0.31	0.00	0.01	0.32	0.00
Sat Flow, veh/h	3456	3554	1585	1781	3554	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	711	395	0	18	1728	0	1	557	0	9	1254	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1781	1777	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	15.0	8.9	0.0	0.8	66.8	0.0	0.1	19.3	0.0	0.8	48.0	0.0
Cycle Q Clear(g_c), s	15.0	8.9	0.0	0.8	66.8	0.0	0.1	19.3	0.0	0.8	48.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	346	1862		513	1582		3	1099		22	1137	
V/C Ratio(X)	2.06	0.21		0.04	1.09		0.34	0.51		0.40	1.10	
Avail Cap(c_a), veh/h	346	1862		653	1582		178	1137		178	1137	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.32	0.32	0.00
Uniform Delay (d), s/veh	67.5	19.1	0.0	22.7	41.6	0.0	74.8	42.5	0.0	73.5	51.0	0.0
Incr Delay (d2), s/veh	485.8	0.3	0.0	0.0	52.4	0.0	58.5	0.4	0.0	3.7	51.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	29.7	3.6	0.0	0.3	38.7	0.0	0.1	8.3	0.0	0.4	28.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	553.3	19.4	0.0	22.7	94.0	0.0	133.3	42.8	0.0	77.2	102.1	0.0
LnGrp LOS	F	B		C	F		F	D		E	F	
Approach Vol, veh/h		1106	A		1746	A		558	A		1263	A
Approach Delay, s/veh		362.6			93.3			43.0			102.0	
Approach LOS		F			F			D			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.2	83.6	5.2	53.0	20.0	71.8	6.9	51.4
Change Period (Y+Rc), s	5.0	7.0	5.0	6.0	5.0	7.0	5.0	6.0
Max Green Setting (Gmax), s	15.0	50.0	15.0	47.0	15.0	50.0	15.0	47.0
Max Q Clear Time (g_c+I1), s	2.8	10.9	2.1	50.0	17.0	68.8	2.8	21.3
Green Ext Time (p_c), s	0.0	2.3	0.0	0.0	0.0	0.0	0.0	3.7

Intersection Summary	
HCM 6th Ctrl Delay	153.4
HCM 6th LOS	F

Notes

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

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	48	392	1396	374	219	112
Future Volume (veh/h)	48	392	1396	374	219	112
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	56	461	1485	0	274	0
Peak Hour Factor	0.85	0.85	0.94	0.88	0.80	0.88
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	325	2836	2511		352	
Arrive On Green	0.05	0.80	0.71	0.00	0.10	0.00
Sat Flow, veh/h	1781	3647	3647	1585	3456	1585
Grp Volume(v), veh/h	56	461	1485	0	274	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1585	1728	1585
Q Serve(g_s), s	0.9	3.6	25.3	0.0	9.3	0.0
Cycle Q Clear(g_c), s	0.9	3.6	25.3	0.0	9.3	0.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	325	2836	2511		352	
V/C Ratio(X)	0.17	0.16	0.59		0.78	
Avail Cap(c_a), veh/h	355	2836	2511		1037	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	6.9	2.8	8.9	0.0	52.6	0.0
Incr Delay (d2), s/veh	0.2	0.1	1.0	0.0	3.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.8	7.7	0.0	4.2	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	7.1	2.9	9.9	0.0	56.3	0.0
LnGrp LOS	A	A	A		E	
Approach Vol, veh/h		517	1485	A	274	A
Approach Delay, s/veh		3.4	9.9		56.3	
Approach LOS		A	A		E	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		102.8		17.2	11.0	91.8
Change Period (Y+Rc), s		7.0		5.0	5.0	7.0
Max Green Setting (Gmax), s		72.0		36.0	8.0	59.0
Max Q Clear Time (g_c+I1), s		5.6		11.3	2.9	27.3
Green Ext Time (p_c), s		2.8		0.9	0.0	12.3

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

Notes

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

Intersection	
Int Delay, s/veh	4.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↰	↱
Traffic Vol, veh/h	6	180	1	0	70	81	6	27	1	58	4	23
Future Vol, veh/h	6	180	1	0	70	81	6	27	1	58	4	23
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	70	50	70	75	50	50	50	50	50	50	80	80
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	9	360	1	0	140	162	12	54	2	116	5	29

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	302	0	0	361	0	0	617	681	361	628	600	221
Stage 1	-	-	-	-	-	-	379	379	-	221	221	-
Stage 2	-	-	-	-	-	-	238	302	-	407	379	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1259	-	-	1198	-	-	402	373	684	395	415	819
Stage 1	-	-	-	-	-	-	643	615	-	781	720	-
Stage 2	-	-	-	-	-	-	765	664	-	621	615	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1259	-	-	1198	-	-	381	370	684	348	411	819
Mov Cap-2 Maneuver	-	-	-	-	-	-	381	370	-	348	411	-
Stage 1	-	-	-	-	-	-	637	609	-	774	720	-
Stage 2	-	-	-	-	-	-	733	664	-	559	609	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0	16.6	18.5
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	377	1259	-	-	1198	-	-	350	819
HCM Lane V/C Ratio	0.18	0.007	-	-	-	-	-	0.346	0.035
HCM Control Delay (s)	16.6	7.9	0	-	0	-	-	20.6	9.6
HCM Lane LOS	C	A	A	-	A	-	-	C	A
HCM 95th %tile Q(veh)	0.6	0	-	-	0	-	-	1.5	0.1

Intersection	
Intersection Delay, s/veh	18.2
Intersection LOS	C

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	128	88	161	51	0	18
Future Vol, veh/h	128	88	161	51	0	18
Peak Hour Factor	0.42	0.42	0.50	0.50	0.56	0.56
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	305	210	322	102	0	32
Number of Lanes	1	0	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay	20.3	16.4	9.4
HCM LOS	C	C	A

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	0%	59%	0%
Vol Thru, %	76%	0%	100%
Vol Right, %	24%	41%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	212	216	18
LT Vol	0	128	0
Through Vol	161	0	18
RT Vol	51	88	0
Lane Flow Rate	424	514	32
Geometry Grp	1	1	1
Degree of Util (X)	0.618	0.724	0.054
Departure Headway (Hd)	5.247	5.069	6.022
Convergence, Y/N	Yes	Yes	Yes
Cap	687	715	594
Service Time	3.278	3.097	4.068
HCM Lane V/C Ratio	0.617	0.719	0.054
HCM Control Delay	16.4	20.3	9.4
HCM Lane LOS	C	C	A
HCM 95th-tile Q	4.3	6.3	0.2

Intersection	
Int Delay, s/veh	3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	19	233	11	18	50	17
Future Vol, veh/h	19	233	11	18	50	17
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	50	50	71	50	50	70
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	38	466	15	36	100	24

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	51	0	-	0	575	33
Stage 1	-	-	-	-	33	-
Stage 2	-	-	-	-	542	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1555	-	-	-	480	1041
Stage 1	-	-	-	-	989	-
Stage 2	-	-	-	-	583	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1555	-	-	-	464	1041
Mov Cap-2 Maneuver	-	-	-	-	464	-
Stage 1	-	-	-	-	956	-
Stage 2	-	-	-	-	583	-

Approach	EB	WB	SB
HCM Control Delay, s	0.6	0	14.1
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1555	-	-	-	520
HCM Lane V/C Ratio	0.024	-	-	-	0.239
HCM Control Delay (s)	7.4	0	-	-	14.1
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.9

Intersection	
Int Delay, s/veh	4.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	93	186	23	14	2	15	9	7	0	65	0
Future Vol, veh/h	3	93	186	23	14	2	15	9	7	0	65	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	50	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	50	50	50	66	66	50	50	50	50	50	50
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	186	372	46	21	3	30	18	14	0	130	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	24	0	0	558	0	0	372	308	186	509	679	23
Stage 1	-	-	-	-	-	-	192	192	-	115	115	-
Stage 2	-	-	-	-	-	-	180	116	-	394	564	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1591	-	-	1013	-	-	585	606	856	475	374	1054
Stage 1	-	-	-	-	-	-	810	742	-	890	800	-
Stage 2	-	-	-	-	-	-	822	800	-	631	508	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1591	-	-	1013	-	-	404	576	856	439	356	1054
Mov Cap-2 Maneuver	-	-	-	-	-	-	404	576	-	439	356	-
Stage 1	-	-	-	-	-	-	808	740	-	887	763	-
Stage 2	-	-	-	-	-	-	651	763	-	604	506	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	5.7	13.1	20.8
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	509	1591	-	-	1013	-	-	356
HCM Lane V/C Ratio	0.122	0.002	-	-	0.045	-	-	0.365
HCM Control Delay (s)	13.1	7.3	0	-	8.7	0	-	20.8
HCM Lane LOS	B	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0.4	0	-	-	0.1	-	-	1.6

Intersection	
Int Delay, s/veh	15.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	45	1	0	3	0	0	0	7	23	134	211
Future Vol, veh/h	0	45	1	0	3	0	0	0	7	23	134	211
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	63	50	63	38	38	38	75	75	50	50	50	50
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	90	2	0	8	0	0	0	14	46	268	422

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	92	0	0	444	99	91	106	100	8
Stage 1	-	-	-	-	-	-	91	91	-	8	8	-
Stage 2	-	-	-	-	-	-	353	8	-	98	92	-
Critical Hdwy	-	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	-	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	0	-	-	1503	-	0	524	791	967	873	790	1074
Stage 1	0	-	-	-	-	0	916	820	-	1013	889	-
Stage 2	0	-	-	-	-	0	664	889	-	908	819	-
Platoon blocked, %		-	-		-							
Mov Cap-1 Maneuver	-	-	-	1503	-	-	234	791	967	861	790	1074
Mov Cap-2 Maneuver	-	-	-	-	-	-	234	791	-	861	790	-
Stage 1	-	-	-	-	-	-	916	820	-	1013	889	-
Stage 2	-	-	-	-	-	-	282	889	-	895	819	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	8.8	17.9
HCM LOS			A	C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	967	-	-	1503	-	861	942
HCM Lane V/C Ratio	0.014	-	-	-	-	0.053	0.732
HCM Control Delay (s)	8.8	-	-	0	-	9.4	18.5
HCM Lane LOS	A	-	-	A	-	A	C
HCM 95th %tile Q(veh)	0	-	-	0	-	0.2	6.8

Intersection	
Int Delay, s/veh	7.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	72	0	1	1	8	4
Future Vol, veh/h	72	0	1	1	8	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	50	50	50	50	50	50
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	144	0	2	2	16	8

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	26	20	24	0	-	0
Stage 1	20	-	-	-	-	-
Stage 2	6	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	989	1058	1591	-	-	-
Stage 1	1003	-	-	-	-	-
Stage 2	1017	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	988	1058	1591	-	-	-
Mov Cap-2 Maneuver	988	-	-	-	-	-
Stage 1	1002	-	-	-	-	-
Stage 2	1017	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.3	3.6	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1591	-	988	-	-
HCM Lane V/C Ratio	0.001	-	0.146	-	-
HCM Control Delay (s)	7.3	0	9.3	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.5	-	-

Intersection	
Int Delay, s/veh	1.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	436	206	6	317	86	1
Future Vol, veh/h	436	206	6	317	86	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	300	450	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	84	50	89	78	68	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	519	412	7	406	126	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	931	0	736	260
Stage 1	-	-	-	-	519	-
Stage 2	-	-	-	-	217	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	731	-	354	739
Stage 1	-	-	-	-	562	-
Stage 2	-	-	-	-	798	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	731	-	350	739
Mov Cap-2 Maneuver	-	-	-	-	350	-
Stage 1	-	-	-	-	562	-
Stage 2	-	-	-	-	790	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	20.9
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	352	-	-	731	-
HCM Lane V/C Ratio	0.363	-	-	0.009	-
HCM Control Delay (s)	20.9	-	-	10	-
HCM Lane LOS	C	-	-	A	-
HCM 95th %tile Q(veh)	1.6	-	-	0	-

Intersection	
Int Delay, s/veh	6.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	91	43	45	217	340	43
Future Vol, veh/h	91	43	45	217	340	43
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	325	-	-	250
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	50	50	50	82	87	87
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	182	86	90	265	391	49

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	704	196	440	0	-	0
Stage 1	391	-	-	-	-	-
Stage 2	313	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	371	812	1116	-	-	-
Stage 1	653	-	-	-	-	-
Stage 2	715	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	341	812	1116	-	-	-
Mov Cap-2 Maneuver	341	-	-	-	-	-
Stage 1	600	-	-	-	-	-
Stage 2	715	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	21.5	2.2	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1116	-	341	812	-	-
HCM Lane V/C Ratio	0.081	-	0.534	0.106	-	-
HCM Control Delay (s)	8.5	-	27	10	-	-
HCM Lane LOS	A	-	D	B	-	-
HCM 95th %tile Q(veh)	0.3	-	3	0.4	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑	↱		↱
Traffic Vol, veh/h	0	945	476	6	0	132
Future Vol, veh/h	0	945	476	6	0	132
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Free
Storage Length	-	-	-	800	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	87	87	90	50	72	50
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1086	529	12	0	264

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-
Pot Cap-1 Maneuver	0	-	-	-	0	0
Stage 1	0	-	-	-	0	0
Stage 2	0	-	-	-	0	0
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	-	-	0
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	-

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	45	28	12	258
Future Vol, veh/h	0	0	45	28	12	258
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	25	50	50	50	50
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	90	56	24	516

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	518	282	540	0	-	0
Stage 1	282	-	-	-	-	-
Stage 2	236	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	518	757	1028	-	-	-
Stage 1	766	-	-	-	-	-
Stage 2	803	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	471	757	1028	-	-	-
Mov Cap-2 Maneuver	471	-	-	-	-	-
Stage 1	697	-	-	-	-	-
Stage 2	803	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	5.4	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1028	-	-	-	-
HCM Lane V/C Ratio	0.088	-	-	-	-
HCM Control Delay (s)	8.8	0	0	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.3	-	-	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	158	15	112	69	10	59	70	1219	214	78	642	152
Future Volume (veh/h)	158	15	112	69	10	59	70	1219	214	78	642	152
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	205	19	145	138	15	118	83	1451	428	107	721	171
Peak Hour Factor	0.77	0.77	0.77	0.50	0.66	0.50	0.84	0.84	0.50	0.73	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	664	212	180	338	226	191	405	1912	853	204	1940	865
Arrive On Green	0.07	0.11	0.11	0.08	0.12	0.12	0.04	0.54	0.54	0.04	0.55	0.55
Sat Flow, veh/h	3456	1870	1585	1781	1870	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	205	19	145	138	15	118	83	1451	428	107	721	171
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1781	1870	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	5.3	0.9	9.1	6.9	0.7	7.2	2.1	32.6	17.5	2.7	11.8	5.6
Cycle Q Clear(g_c), s	5.3	0.9	9.1	6.9	0.7	7.2	2.1	32.6	17.5	2.7	11.8	5.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	664	212	180	338	226	191	405	1912	853	204	1940	865
V/C Ratio(X)	0.31	0.09	0.81	0.41	0.07	0.62	0.20	0.76	0.50	0.53	0.37	0.20
Avail Cap(c_a), veh/h	688	549	465	338	549	465	531	1912	853	315	1940	865
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.1	40.6	44.2	36.2	39.8	42.7	10.4	18.4	14.9	18.7	13.2	11.8
Incr Delay (d2), s/veh	0.3	0.2	8.2	0.8	0.1	3.2	0.2	2.9	2.1	2.1	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	0.4	4.0	3.1	0.3	3.0	0.7	12.2	6.5	1.1	4.3	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.4	40.7	52.4	37.0	40.0	45.9	10.6	21.3	17.0	20.8	13.8	12.3
LnGrp LOS	D	D	D	D	D	D	B	C	B	C	B	B
Approach Vol, veh/h		369			271			1962			999	
Approach Delay, s/veh		42.9			41.0			19.9			14.3	
Approach LOS		D			D			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.6	62.0	13.0	17.6	8.8	62.8	12.3	18.3
Change Period (Y+Rc), s	5.0	7.0	5.0	6.0	5.0	7.0	5.0	6.0
Max Green Setting (Gmax), s	11.0	55.0	8.0	30.0	11.0	55.0	8.0	30.0
Max Q Clear Time (g_c+I1), s	4.7	34.6	8.9	11.1	4.1	13.8	7.3	9.2
Green Ext Time (p_c), s	0.1	11.7	0.0	0.5	0.1	5.6	0.1	0.4

Intersection Summary	
HCM 6th Ctrl Delay	22.3
HCM 6th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	659	770	4	83	505	28	14	807	166	38	398	397
Future Volume (veh/h)	659	770	4	83	505	28	14	807	166	38	398	397
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	867	917	0	95	673	0	16	961	0	46	498	0
Peak Hour Factor	0.76	0.84	0.84	0.87	0.75	0.87	0.85	0.84	0.85	0.83	0.80	0.80
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	691	1817		333	1277		35	971		61	1023	
Arrive On Green	0.20	0.51	0.00	0.05	0.36	0.00	0.02	0.27	0.00	0.03	0.29	0.00
Sat Flow, veh/h	3456	3554	1585	1781	3554	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	867	917	0	95	673	0	16	961	0	46	498	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1781	1777	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	30.0	25.5	0.0	5.1	22.5	0.0	1.3	40.4	0.0	3.8	17.4	0.0
Cycle Q Clear(g_c), s	30.0	25.5	0.0	5.1	22.5	0.0	1.3	40.4	0.0	3.8	17.4	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	691	1817		333	1277		35	971		61	1023	
V/C Ratio(X)	1.25	0.50		0.29	0.53		0.46	0.99		0.76	0.49	
Avail Cap(c_a), veh/h	691	1817		604	1277		119	971		119	1023	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.91	0.91	0.00
Uniform Delay (d), s/veh	60.0	24.2	0.0	29.1	38.0	0.0	72.8	54.3	0.0	71.8	44.2	0.0
Incr Delay (d2), s/veh	126.2	1.0	0.0	0.5	1.6	0.0	9.3	26.2	0.0	15.8	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	24.8	10.4	0.0	2.2	9.7	0.0	0.7	21.0	0.0	2.0	7.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	186.2	25.2	0.0	29.6	39.6	0.0	82.0	80.5	0.0	87.7	44.6	0.0
LnGrp LOS	F	C		C	D		F	F		F	D	
Approach Vol, veh/h		1784	A		768	A		977	A		544	A
Approach Delay, s/veh		103.4			38.3			80.5			48.2	
Approach LOS		F			D			F			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.2	81.7	7.9	48.2	35.0	58.9	10.1	46.0
Change Period (Y+Rc), s	5.0	7.0	5.0	6.0	5.0	7.0	5.0	6.0
Max Green Setting (Gmax), s	30.0	47.0	10.0	40.0	30.0	47.0	10.0	40.0
Max Q Clear Time (g_c+I1), s	7.1	27.5	3.3	19.4	32.0	24.5	5.8	42.4
Green Ext Time (p_c), s	0.2	5.5	0.0	3.0	0.0	3.9	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	78.3
HCM 6th LOS	E

Notes

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

Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			↰	↱
Traffic Vol, veh/h	7	257	0	0	211	89	22	12	0	27	4	25
Future Vol, veh/h	7	257	0	0	211	89	22	12	0	27	4	25
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	84	50	84	77	50	50	50	50	58	50	75	75
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	8	514	0	0	422	178	44	24	0	54	5	33

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	600	0	0	514	0	0	1060	1130	514	1053	1041	511
Stage 1	-	-	-	-	-	-	530	530	-	511	511	-
Stage 2	-	-	-	-	-	-	530	600	-	542	530	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	977	-	-	1052	-	-	202	204	560	204	230	563
Stage 1	-	-	-	-	-	-	533	527	-	545	537	-
Stage 2	-	-	-	-	-	-	533	490	-	525	527	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	977	-	-	1052	-	-	185	202	560	184	227	563
Mov Cap-2 Maneuver	-	-	-	-	-	-	185	202	-	184	227	-
Stage 1	-	-	-	-	-	-	527	521	-	539	537	-
Stage 2	-	-	-	-	-	-	496	490	-	495	521	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0	33.9	25.4
HCM LOS			D	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	191	977	-	-	1052	-	-	187	563
HCM Lane V/C Ratio	0.356	0.009	-	-	-	-	-	0.317	0.059
HCM Control Delay (s)	33.9	8.7	0	-	0	-	-	33	11.8
HCM Lane LOS	D	A	A	-	A	-	-	D	B
HCM 95th %tile Q(veh)	1.5	0	-	-	0	-	-	1.3	0.2

Intersection	
Intersection Delay, s/veh	28.4
Intersection LOS	D

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	202	15	187	69	2	28
Future Vol, veh/h	202	15	187	69	2	28
Peak Hour Factor	0.40	0.40	0.50	0.50	0.86	0.86
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	505	38	374	138	2	33
Number of Lanes	1	0	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay	32.6	25.1	10
HCM LOS	D	D	A

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	0%	93%	7%
Vol Thru, %	73%	0%	93%
Vol Right, %	27%	7%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	256	217	30
LT Vol	0	202	2
Through Vol	187	0	28
RT Vol	69	15	0
Lane Flow Rate	512	542	35
Geometry Grp	1	1	1
Degree of Util (X)	0.778	0.851	0.063
Departure Headway (Hd)	5.47	5.646	6.475
Convergence, Y/N	Yes	Yes	Yes
Cap	660	640	549
Service Time	3.524	3.69	4.557
HCM Lane V/C Ratio	0.776	0.847	0.064
HCM Control Delay	25.1	32.6	10
HCM Lane LOS	D	D	A
HCM 95th-tile Q	7.4	9.5	0.2

Intersection	
Int Delay, s/veh	9.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	30	187	11	20	147	13
Future Vol, veh/h	30	187	11	20	147	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	50	50	48	48	50	63
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	60	374	23	42	294	21

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	65	0	-	0	538	44
Stage 1	-	-	-	-	44	-
Stage 2	-	-	-	-	494	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1537	-	-	-	504	1026
Stage 1	-	-	-	-	978	-
Stage 2	-	-	-	-	613	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1537	-	-	-	479	1026
Mov Cap-2 Maneuver	-	-	-	-	479	-
Stage 1	-	-	-	-	930	-
Stage 2	-	-	-	-	613	-

Approach	EB	WB	SB
HCM Control Delay, s	1	0	24
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1537	-	-	-	496
HCM Lane V/C Ratio	0.039	-	-	-	0.634
HCM Control Delay (s)	7.4	0	-	-	24
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	4.4

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	1	14	336	33	14	0	17	12	96	0	66	0
Future Vol, veh/h	1	14	336	33	14	0	17	12	96	0	66	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	50	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	75	50	50	50	61	61	45	45	45	58	50	58
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	28	672	66	23	0	38	27	213	0	132	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	23	0	0	700	0	0	251	185	28	641	857	23
Stage 1	-	-	-	-	-	-	30	30	-	155	155	-
Stage 2	-	-	-	-	-	-	221	155	-	486	702	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1592	-	-	897	-	-	702	709	1047	388	295	1054
Stage 1	-	-	-	-	-	-	987	870	-	847	769	-
Stage 2	-	-	-	-	-	-	781	769	-	563	440	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1592	-	-	897	-	-	412	655	1047	282	273	1054
Mov Cap-2 Maneuver	-	-	-	-	-	-	412	655	-	282	273	-
Stage 1	-	-	-	-	-	-	986	869	-	846	711	-
Stage 2	-	-	-	-	-	-	588	711	-	434	440	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	6.9	11.6	29.9
HCM LOS			B	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	826	1592	-	-	897	-	-	273
HCM Lane V/C Ratio	0.336	0.001	-	-	0.074	-	-	0.484
HCM Control Delay (s)	11.6	7.3	0	-	9.3	0	-	29.9
HCM Lane LOS	B	A	A	-	A	A	-	D
HCM 95th %tile Q(veh)	1.5	0	-	-	0.2	-	-	2.5

Intersection	
Int Delay, s/veh	11.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	69	1	4	3	0	1	0	0	153	80	199
Future Vol, veh/h	0	69	1	4	3	0	1	0	0	153	80	199
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	0	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	50	50	50	88	88	88	25	25	25	50	50	50
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	138	2	5	3	0	4	0	0	306	160	398

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	140	0	0	431	-	-	152	153	3
Stage 1	-	-	-	-	-	-	139	-	-	13	13	-
Stage 2	-	-	-	-	-	-	292	-	-	139	140	-
Critical Hdwy	-	-	-	4.12	-	-	7.12	-	-	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	-	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	-	-	6.12	5.52	-
Follow-up Hdwy	-	-	-	2.218	-	-	3.518	-	-	3.518	4.018	3.318
Pot Cap-1 Maneuver	0	-	-	1443	-	0	535	0	0	815	739	1081
Stage 1	0	-	-	-	-	0	864	0	0	1007	885	-
Stage 2	0	-	-	-	-	0	716	0	0	864	781	-
Platoon blocked, %		-	-		-				-			
Mov Cap-1 Maneuver	-	-	-	1443	-	-	281	-	-	813	737	1081
Mov Cap-2 Maneuver	-	-	-	-	-	-	281	-	-	813	737	-
Stage 1	-	-	-	-	-	-	864	-	-	1007	882	-
Stage 2	-	-	-	-	-	-	369	-	-	864	781	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	4.3	18	13.3
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	281	-	-	1443	-	813	953
HCM Lane V/C Ratio	0.014	-	-	0.003	-	0.376	0.586
HCM Control Delay (s)	18	-	-	7.5	0	12.1	14
HCM Lane LOS	C	-	-	A	A	B	B
HCM 95th %tile Q(veh)	0	-	-	0	-	1.8	3.9

Intersection	
Int Delay, s/veh	13.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	223	3	1	1	12	4
Future Vol, veh/h	223	3	1	1	12	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	38	38	50	50	57	57
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	587	8	2	2	21	7

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	31	25	28	0	-	0
Stage 1	25	-	-	-	-	-
Stage 2	6	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	983	1051	1585	-	-	-
Stage 1	998	-	-	-	-	-
Stage 2	1017	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	982	1051	1585	-	-	-
Mov Cap-2 Maneuver	982	-	-	-	-	-
Stage 1	997	-	-	-	-	-
Stage 2	1017	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	14.1	3.6	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1585	-	983	-	-
HCM Lane V/C Ratio	0.001	-	0.605	-	-
HCM Control Delay (s)	7.3	0	14.1	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	4.2	-	-

Intersection	
Int Delay, s/veh	14.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	510	199	5	993	166	15
Future Vol, veh/h	510	199	5	993	166	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	300	450	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	50	91	86	80	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	580	398	5	1155	208	16

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	978	0	1168	290
Stage 1	-	-	-	-	580	-
Stage 2	-	-	-	-	588	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	701	-	~ 186	707
Stage 1	-	-	-	-	523	-
Stage 2	-	-	-	-	518	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	701	-	~ 185	707
Mov Cap-2 Maneuver	-	-	-	-	~ 185	-
Stage 1	-	-	-	-	523	-
Stage 2	-	-	-	-	514	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	157.5
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	196	-	-	701	-
HCM Lane V/C Ratio	1.142	-	-	0.008	-
HCM Control Delay (s)	157.5	-	-	10.2	-
HCM Lane LOS	F	-	-	B	-
HCM 95th %tile Q(veh)	11.1	-	-	0	-

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

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	68	157	16	429
Future Vol, veh/h	0	0	68	157	16	429
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	25	25	50	50	50	50
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	136	314	32	858

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1047	461	890	0	-	0
Stage 1	461	-	-	-	-	-
Stage 2	586	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	253	600	761	-	-	-
Stage 1	635	-	-	-	-	-
Stage 2	556	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	198	600	761	-	-	-
Mov Cap-2 Maneuver	330	-	-	-	-	-
Stage 1	498	-	-	-	-	-
Stage 2	556	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	3.3	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	761	-	-	-	-
HCM Lane V/C Ratio	0.179	-	-	-	-
HCM Control Delay (s)	10.8	0	0	-	-
HCM Lane LOS	B	A	A	-	-
HCM 95th %tile Q(veh)	0.6	-	-	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	143	5	64	368	14	102	128	900	257	78	2000	231
Future Volume (veh/h)	143	5	64	368	14	102	128	900	257	78	2000	231
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	183	6	82	736	18	150	139	978	514	156	2222	257
Peak Hour Factor	0.78	0.78	0.78	0.50	0.78	0.68	0.92	0.92	0.50	0.50	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	230	50	42	793	355	300	162	1909	851	271	2761	857
Arrive On Green	0.07	0.03	0.03	0.23	0.19	0.19	0.05	0.54	0.54	0.05	0.54	0.54
Sat Flow, veh/h	3456	1870	1585	3456	1870	1585	1781	3554	1585	1781	5106	1585
Grp Volume(v), veh/h	183	6	82	736	18	150	139	978	514	156	2222	257
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1728	1870	1585	1781	1777	1585	1781	1702	1585
Q Serve(g_s), s	7.8	0.5	4.0	31.3	1.2	12.7	5.4	26.4	33.3	5.9	53.1	13.3
Cycle Q Clear(g_c), s	7.8	0.5	4.0	31.3	1.2	12.7	5.4	26.4	33.3	5.9	53.1	13.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	230	50	42	793	355	300	162	1909	851	271	2761	857
V/C Ratio(X)	0.80	0.12	1.94	0.93	0.05	0.50	0.86	0.51	0.60	0.58	0.80	0.30
Avail Cap(c_a), veh/h	299	50	42	852	355	300	204	1909	851	318	2761	857
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.71	0.71	0.71	1.00	1.00	1.00
Uniform Delay (d), s/veh	69.0	71.3	73.0	56.6	49.7	54.4	33.8	22.2	23.8	17.9	28.0	18.9
Incr Delay (d2), s/veh	10.6	1.1	497.7	15.6	0.1	1.3	18.7	0.7	2.3	1.9	2.6	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	0.2	7.5	15.4	0.6	5.2	3.4	10.7	13.0	2.4	20.8	5.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	79.6	72.3	570.7	72.1	49.8	55.7	52.5	22.9	26.0	19.9	30.6	19.8
LnGrp LOS	E	E	F	E	D	E	D	C	C	B	C	B
Approach Vol, veh/h		271			904			1631			2635	
Approach Delay, s/veh		228.0			69.0			26.4			28.9	
Approach LOS		F			E			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.0	87.6	39.4	10.0	12.5	88.1	15.0	34.4
Change Period (Y+Rc), s	5.0	7.0	5.0	6.0	5.0	7.0	5.0	6.0
Max Green Setting (Gmax), s	12.0	74.0	37.0	4.0	11.0	75.0	13.0	28.0
Max Q Clear Time (g_c+I1), s	7.9	35.3	33.3	6.0	7.4	55.1	9.8	14.7
Green Ext Time (p_c), s	0.1	10.2	1.1	0.0	0.1	15.5	0.2	0.4

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

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	514	800	5	85	1915	485	5	580	220	10	1301	1121
Future Volume (veh/h)	514	800	5	85	1915	485	5	580	220	10	1301	1121
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	714	870	0	96	2152	0	5	659	0	12	1531	0
Peak Hour Factor	0.72	0.92	0.92	0.89	0.89	0.89	0.92	0.88	0.92	0.86	0.85	0.79
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	703	2685		127	2140		13	1490		28	1532	
Arrive On Green	0.14	0.53	0.00	0.04	0.42	0.00	0.01	0.29	0.00	0.03	0.60	0.00
Sat Flow, veh/h	5023	5106	1585	3456	5106	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	714	870	0	96	2152	0	5	659	0	12	1531	0
Grp Sat Flow(s),veh/h/ln	1674	1702	1585	1728	1702	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	21.0	14.6	0.0	4.1	62.9	0.0	0.4	15.7	0.0	1.0	44.9	0.0
Cycle Q Clear(g_c), s	21.0	14.6	0.0	4.1	62.9	0.0	0.4	15.7	0.0	1.0	44.9	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	703	2685		127	2140		13	1490		28	1532	
V/C Ratio(X)	1.02	0.32		0.76	1.01		0.37	0.44		0.43	1.00	
Avail Cap(c_a), veh/h	703	2685		127	2140		119	1600		95	1532	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.40	0.40	0.00
Uniform Delay (d), s/veh	64.5	20.3	0.0	71.6	43.6	0.0	74.1	43.2	0.0	72.0	30.0	0.0
Incr Delay (d2), s/veh	37.8	0.3	0.0	22.8	20.8	0.0	16.3	0.2	0.0	4.1	14.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.1	5.6	0.0	2.2	28.9	0.0	0.2	6.5	0.0	0.5	13.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	102.3	20.6	0.0	94.4	64.4	0.0	90.4	43.4	0.0	76.1	44.4	0.0
LnGrp LOS	F	C		F	F		F	D		E	D	
Approach Vol, veh/h		1584	A		2248	A		664	A		1543	A
Approach Delay, s/veh		57.5			65.6			43.8			44.6	
Approach LOS		E			E			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	83.9	6.1	50.0	26.0	67.9	7.4	48.8
Change Period (Y+Rc), s	4.5	7.0	5.0	6.0	5.0	7.0	5.0	6.0
Max Green Setting (Gmax), s	5.5	68.0	10.0	44.0	21.0	52.0	8.0	46.0
Max Q Clear Time (g_c+I1), s	6.1	16.6	2.4	46.9	23.0	64.9	3.0	17.7
Green Ext Time (p_c), s	0.0	6.1	0.0	0.0	0.0	0.0	0.0	4.6

Intersection Summary	
HCM 6th Ctrl Delay	55.7
HCM 6th LOS	E

Notes

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

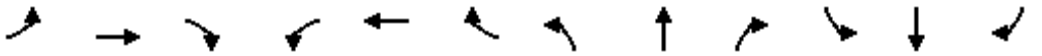
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	175	855	2235	710	295	250
Future Volume (veh/h)	175	855	2235	710	295	250
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	206	1006	2378	0	360	0
Peak Hour Factor	0.85	0.85	0.94	0.90	0.82	0.88
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	408	3942	3473		443	
Arrive On Green	0.05	0.77	0.68	0.00	0.13	0.00
Sat Flow, veh/h	3456	5274	5274	1585	3456	1585
Grp Volume(v), veh/h	206	1006	2378	0	360	0
Grp Sat Flow(s),veh/h/ln	1728	1702	1702	1585	1728	1585
Q Serve(g_s), s	1.9	6.7	33.4	0.0	12.2	0.0
Cycle Q Clear(g_c), s	1.9	6.7	33.4	0.0	12.2	0.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	408	3942	3473		443	
V/C Ratio(X)	0.50	0.26	0.68		0.81	
Avail Cap(c_a), veh/h	466	3942	3473		950	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	0.95	0.00
Uniform Delay (d), s/veh	19.7	3.9	11.5	0.0	50.9	0.0
Incr Delay (d2), s/veh	1.0	0.2	1.1	0.0	3.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	1.5	10.2	0.0	5.5	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	20.7	4.0	12.6	0.0	54.4	0.0
LnGrp LOS	C	A	B		D	
Approach Vol, veh/h		1212	2378	A	360	A
Approach Delay, s/veh		6.9	12.6		54.4	
Approach LOS		A	B		D	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		99.6		20.4	11.0	88.6
Change Period (Y+Rc), s		7.0		5.0	5.0	7.0
Max Green Setting (Gmax), s		75.0		33.0	8.0	62.0
Max Q Clear Time (g_c+I1), s		8.7		14.2	3.9	35.4
Green Ext Time (p_c), s		7.4		1.2	0.2	19.4

Intersection Summary	
HCM 6th Ctrl Delay	14.7
HCM 6th LOS	B

Notes

Unsignalized Delay for [WBR, 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)	143	5	64	143	14	102	128	900	257	78	2000	231
Future Volume (veh/h)	143	5	64	143	14	102	128	900	257	78	2000	231
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	183	6	82	207	18	150	139	978	514	156	2222	257
Peak Hour Factor	0.78	0.78	0.78	0.69	0.78	0.68	0.92	0.92	0.50	0.50	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	391	83	70	326	216	183	175	2222	991	290	3157	980
Arrive On Green	0.05	0.04	0.04	0.12	0.12	0.12	0.04	0.63	0.63	0.04	0.62	0.62
Sat Flow, veh/h	3456	1870	1585	1781	1870	1585	1781	3554	1585	1781	5106	1585
Grp Volume(v), veh/h	183	6	82	207	18	150	139	978	514	156	2222	257
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1781	1870	1585	1781	1777	1585	1781	1702	1585
Q Serve(g_s), s	6.8	0.4	6.0	14.5	1.2	12.5	3.9	19.2	24.3	4.5	39.7	10.0
Cycle Q Clear(g_c), s	6.8	0.4	6.0	14.5	1.2	12.5	3.9	19.2	24.3	4.5	39.7	10.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	391	83	70	326	216	183	175	2222	991	290	3157	980
V/C Ratio(X)	0.47	0.07	1.16	0.63	0.08	0.82	0.79	0.44	0.52	0.54	0.70	0.26
Avail Cap(c_a), veh/h	391	83	70	345	236	200	229	2222	991	290	3157	980
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.52	0.52	0.52	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.2	61.8	64.5	51.1	53.3	58.3	27.3	13.1	14.0	11.0	17.4	11.7
Incr Delay (d2), s/veh	0.9	0.4	158.3	3.5	0.2	21.5	7.3	0.3	1.0	2.0	1.3	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	0.2	5.5	6.8	0.6	6.1	3.1	7.0	8.8	1.7	14.2	3.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	59.1	62.2	222.8	54.6	53.5	79.8	34.6	13.4	15.0	13.0	18.8	12.4
LnGrp LOS	E	E	F	D	D	E	C	B	B	B	B	B
Approach Vol, veh/h		271			375			1631			2635	
Approach Delay, s/veh		108.7			64.6			15.7			17.8	
Approach LOS		F			E			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	91.4	21.6	12.0	10.9	90.5	12.0	21.6
Change Period (Y+Rc), s	5.0	7.0	5.0	6.0	5.0	7.0	5.0	6.0
Max Green Setting (Gmax), s	5.0	83.0	18.0	6.0	10.0	78.0	7.0	17.0
Max Q Clear Time (g_c+I1), s	6.5	26.3	16.5	8.0	5.9	41.7	8.8	14.5
Green Ext Time (p_c), s	0.0	10.7	0.1	0.0	0.1	24.2	0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	25.7
HCM 6th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

Intersection	
Int Delay, s/veh	8.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↕	↱
Traffic Vol, veh/h	6	180	1	0	114	81	68	27	1	58	4	23
Future Vol, veh/h	6	180	1	0	114	81	68	27	1	58	4	23
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	70	50	70	75	50	50	50	50	50	50	80	80
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	9	360	1	0	228	162	136	54	2	116	5	29

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	390	0	0	361	0	0	705	769	361	716	688	309
Stage 1	-	-	-	-	-	-	379	379	-	309	309	-
Stage 2	-	-	-	-	-	-	326	390	-	407	379	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1169	-	-	1198	-	-	351	332	684	345	369	731
Stage 1	-	-	-	-	-	-	643	615	-	701	660	-
Stage 2	-	-	-	-	-	-	687	608	-	621	615	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1169	-	-	1198	-	-	331	329	684	298	365	731
Mov Cap-2 Maneuver	-	-	-	-	-	-	331	329	-	298	365	-
Stage 1	-	-	-	-	-	-	637	609	-	694	660	-
Stage 2	-	-	-	-	-	-	655	608	-	559	609	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0	29.7	22.1
HCM LOS			D	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	332	1169	-	-	1198	-	-	300	731
HCM Lane V/C Ratio	0.578	0.007	-	-	-	-	-	0.403	0.039
HCM Control Delay (s)	29.7	8.1	0	-	0	-	-	24.9	10.1
HCM Lane LOS	D	A	A	-	A	-	-	C	B
HCM 95th %tile Q(veh)	3.4	0	-	-	0	-	-	1.9	0.1

Intersection	
Intersection Delay, s/veh	21.5
Intersection LOS	C

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	172	58	161	51	0	18
Future Vol, veh/h	172	58	161	51	0	18
Peak Hour Factor	0.42	0.42	0.50	0.50	0.56	0.56
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	410	138	322	102	0	32
Number of Lanes	1	0	1	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay	25.4	17.3	9.6
HCM LOS	D	C	A

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	0%	75%	0%
Vol Thru, %	76%	0%	100%
Vol Right, %	24%	25%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	212	230	18
LT Vol	0	172	0
Through Vol	161	0	18
RT Vol	51	58	0
Lane Flow Rate	424	548	32
Geometry Grp	1	1	1
Degree of Util (X)	0.634	0.795	0.055
Departure Headway (Hd)	5.382	5.223	6.188
Convergence, Y/N	Yes	Yes	Yes
Cap	670	695	577
Service Time	3.42	3.254	4.246
HCM Lane V/C Ratio	0.633	0.788	0.055
HCM Control Delay	17.3	25.4	9.6
HCM Lane LOS	C	D	A
HCM 95th-tile Q	4.5	8	0.2

Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	19	203	11	18	50	17
Future Vol, veh/h	19	203	11	18	50	17
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	50	50	71	50	50	70
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	38	406	15	36	100	24

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	51	0	-	0	515	33
Stage 1	-	-	-	-	33	-
Stage 2	-	-	-	-	482	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1555	-	-	-	520	1041
Stage 1	-	-	-	-	989	-
Stage 2	-	-	-	-	621	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1555	-	-	-	503	1041
Mov Cap-2 Maneuver	-	-	-	-	503	-
Stage 1	-	-	-	-	957	-
Stage 2	-	-	-	-	621	-

Approach	EB	WB	SB
HCM Control Delay, s	0.6	0	13.3
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1555	-	-	-	560
HCM Lane V/C Ratio	0.024	-	-	-	0.222
HCM Control Delay (s)	7.4	0	-	-	13.3
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.8

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	3	63	186	28	14	2	15	9	37	0	65	0
Future Vol, veh/h	3	63	186	28	14	2	15	9	37	0	65	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	50	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	50	50	50	66	66	50	50	50	50	50	50
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	126	372	56	21	3	30	18	74	0	130	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	24	0	0	498	0	0	332	268	126	499	639	23
Stage 1	-	-	-	-	-	-	132	132	-	135	135	-
Stage 2	-	-	-	-	-	-	200	136	-	364	504	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1591	-	-	1066	-	-	621	638	924	482	394	1054
Stage 1	-	-	-	-	-	-	871	787	-	868	785	-
Stage 2	-	-	-	-	-	-	802	784	-	655	541	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1591	-	-	1066	-	-	435	602	924	415	372	1054
Mov Cap-2 Maneuver	-	-	-	-	-	-	435	602	-	415	372	-
Stage 1	-	-	-	-	-	-	868	785	-	865	743	-
Stage 2	-	-	-	-	-	-	627	742	-	587	539	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	6	11.4	19.8
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	682	1591	-	-	1066	-	-	372
HCM Lane V/C Ratio	0.179	0.002	-	-	0.053	-	-	0.349
HCM Control Delay (s)	11.4	7.3	0	-	8.6	0	-	19.8
HCM Lane LOS	B	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0.6	0	-	-	0.2	-	-	1.5

Intersection	
Int Delay, s/veh	12.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	45	1	0	3	0	0	0	3	53	90	225
Future Vol, veh/h	0	45	1	0	3	0	0	0	3	53	90	225
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	63	50	63	38	38	38	75	75	75	50	50	50
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	90	2	0	8	0	0	0	4	106	180	450

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	92	0	0	414	99	91	101	100	8
Stage 1	-	-	-	-	-	-	91	91	-	8	8	-
Stage 2	-	-	-	-	-	-	323	8	-	93	92	-
Critical Hdwy	-	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	-	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	0	-	-	1503	-	0	549	791	967	880	790	1074
Stage 1	0	-	-	-	-	0	916	820	-	1013	889	-
Stage 2	0	-	-	-	-	0	689	889	-	914	819	-
Platoon blocked, %		-	-		-							
Mov Cap-1 Maneuver	-	-	-	1503	-	-	263	791	967	876	790	1074
Mov Cap-2 Maneuver	-	-	-	-	-	-	263	791	-	876	790	-
Stage 1	-	-	-	-	-	-	916	820	-	1013	889	-
Stage 2	-	-	-	-	-	-	319	889	-	910	819	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	8.7	14.4
HCM LOS			A	B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	967	-	-	1503	-	876	974
HCM Lane V/C Ratio	0.004	-	-	-	-	0.121	0.647
HCM Control Delay (s)	8.7	-	-	0	-	9.7	15.2
HCM Lane LOS	A	-	-	A	-	A	C
HCM 95th %tile Q(veh)	0	-	-	0	-	0.4	4.9

Intersection	
Int Delay, s/veh	8.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	98	0	1	1	8	4
Future Vol, veh/h	98	0	1	1	8	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	50	50	50	50	50	50
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	196	0	2	2	16	8

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	26	20	24	0	-	0
Stage 1	20	-	-	-	-	-
Stage 2	6	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	989	1058	1591	-	-	-
Stage 1	1003	-	-	-	-	-
Stage 2	1017	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	988	1058	1591	-	-	-
Mov Cap-2 Maneuver	988	-	-	-	-	-
Stage 1	1002	-	-	-	-	-
Stage 2	1017	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.5	3.6	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1591	-	988	-	-
HCM Lane V/C Ratio	0.001	-	0.198	-	-
HCM Control Delay (s)	7.3	0	9.5	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.7	-	-

Intersection	
Int Delay, s/veh	6.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	790	210	10	607	86	5
Future Vol, veh/h	790	210	10	607	86	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	300	450	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	84	50	91	84	68	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	940	420	11	723	126	6

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1360	0	1324	470
Stage 1	-	-	-	-	940	-
Stage 2	-	-	-	-	384	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	501	-	147	540
Stage 1	-	-	-	-	340	-
Stage 2	-	-	-	-	658	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	501	-	144	540
Mov Cap-2 Maneuver	-	-	-	-	144	-
Stage 1	-	-	-	-	340	-
Stage 2	-	-	-	-	644	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	106
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	149	-	-	501	-
HCM Lane V/C Ratio	0.891	-	-	0.022	-
HCM Control Delay (s)	106	-	-	12.3	-
HCM Lane LOS	F	-	-	B	-
HCM 95th %tile Q(veh)	6.1	-	-	0.1	-

Intersection	
Int Delay, s/veh	62.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	92	51	51	526	754	45
Future Vol, veh/h	92	51	51	526	754	45
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	250
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	50	50	50	82	87	87
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	184	102	102	641	867	52

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1392	434	919	0	-	0
Stage 1	867	-	-	-	-	-
Stage 2	525	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	~ 133	570	738	-	-	-
Stage 1	372	-	-	-	-	-
Stage 2	558	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 115	570	738	-	-	-
Mov Cap-2 Maneuver	~ 115	-	-	-	-	-
Stage 1	321	-	-	-	-	-
Stage 2	558	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	$ 422	1.5	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	738	-	161	-	-
HCM Lane V/C Ratio	0.138	-	1.776	-	-
HCM Control Delay (s)	10.7	-	$ 422	-	-
HCM Lane LOS	B	-	F	-	-
HCM 95th %tile Q(veh)	0.5	-	20.8	-	-

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

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	41	58	12	262
Future Vol, veh/h	0	0	41	58	12	262
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	25	50	50	50	50
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	82	116	24	524

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	566	286	548	0	-	0
Stage 1	286	-	-	-	-	-
Stage 2	280	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	486	753	1021	-	-	-
Stage 1	763	-	-	-	-	-
Stage 2	767	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	444	753	1021	-	-	-
Mov Cap-2 Maneuver	444	-	-	-	-	-
Stage 1	697	-	-	-	-	-
Stage 2	767	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	3.7	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1021	-	-	-	-
HCM Lane V/C Ratio	0.08	-	-	-	-
HCM Control Delay (s)	8.8	0	0	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.3	-	-	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	275	30	150	317	25	138	100	1700	321	112	1050	336
Future Volume (veh/h)	275	30	150	317	25	138	100	1700	321	112	1050	336
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	357	39	195	634	38	219	119	2024	465	145	1180	378
Peak Hour Factor	0.77	0.77	0.77	0.50	0.66	0.63	0.84	0.84	0.69	0.77	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	412	125	106	530	201	258	617	2719	1213	168	2893	898
Arrive On Green	0.12	0.07	0.07	0.15	0.11	0.11	0.24	0.77	0.77	0.06	0.57	0.57
Sat Flow, veh/h	3456	1870	1585	3456	1870	1585	1781	3554	1585	1781	5106	1585
Grp Volume(v), veh/h	357	39	195	634	38	219	119	2024	465	145	1180	378
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1728	1870	1585	1781	1777	1585	1781	1702	1585
Q Serve(g_s), s	15.2	3.0	10.0	23.0	2.8	16.1	0.0	46.6	12.2	6.2	19.5	20.4
Cycle Q Clear(g_c), s	15.2	3.0	10.0	23.0	2.8	16.1	0.0	46.6	12.2	6.2	19.5	20.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	412	125	106	530	201	258	617	2719	1213	168	2893	898
V/C Ratio(X)	0.87	0.31	1.85	1.20	0.19	0.85	0.19	0.74	0.38	0.86	0.41	0.42
Avail Cap(c_a), veh/h	530	125	106	530	201	258	617	2719	1213	176	2893	898
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.42	0.42	0.42	1.00	1.00	1.00
Uniform Delay (d), s/veh	64.9	66.7	70.0	63.5	61.0	61.0	13.2	9.6	4.1	34.2	18.3	18.6
Incr Delay (d2), s/veh	11.6	1.4	414.5	105.7	0.5	22.3	0.1	0.8	0.4	32.0	0.4	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.4	1.5	16.2	17.9	1.4	9.7	1.9	14.4	3.6	4.0	7.4	7.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	76.5	68.1	484.5	169.2	61.4	83.2	13.3	10.4	4.4	66.2	18.7	20.1
LnGrp LOS	E	E	F	F	E	F	B	B	A	E	B	C
Approach Vol, veh/h		591			891			2608			1703	
Approach Delay, s/veh		210.6			143.5			9.5			23.1	
Approach LOS		F			F			A			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.3	122.1	29.0	16.0	43.3	92.0	22.9	22.1
Change Period (Y+Rc), s	5.0	7.0	6.0	* 6	7.0	* 7	5.0	6.0
Max Green Setting (Gmax), s	9.0	85.0	23.0	* 10	9.0	* 85	23.0	10.0
Max Q Clear Time (g_c+I1), s	8.2	48.6	25.0	12.0	2.0	22.4	17.2	18.1
Green Ext Time (p_c), s	0.0	24.5	0.0	0.0	0.1	12.2	0.7	0.0

Intersection Summary	
HCM 6th Ctrl Delay	54.6
HCM 6th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th 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)	903	1500	10	185	800	85	20	1118	390	45	847	625
Future Volume (veh/h)	903	1500	10	185	800	85	20	1118	390	45	847	625
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1158	1786	0	213	920	0	24	1331	0	54	1033	0
Peak Hour Factor	0.78	0.84	0.84	0.87	0.87	0.87	0.85	0.84	0.85	0.83	0.82	0.73
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	1206	2356		262	1517		45	1485		69	1554	
Arrive On Green	0.24	0.46	0.00	0.08	0.30	0.00	0.03	0.29	0.00	0.08	0.61	0.00
Sat Flow, veh/h	5023	5106	1585	3456	5106	1585	1781	5106	1585	1781	5106	1585
Grp Volume(v), veh/h	1158	1786	0	213	920	0	24	1331	0	54	1033	0
Grp Sat Flow(s),veh/h/ln	1674	1702	1585	1728	1702	1585	1781	1702	1585	1781	1702	1585
Q Serve(g_s), s	34.2	43.5	0.0	9.1	23.2	0.0	2.0	37.5	0.0	4.5	19.9	0.0
Cycle Q Clear(g_c), s	34.2	43.5	0.0	9.1	23.2	0.0	2.0	37.5	0.0	4.5	19.9	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	1206	2356		262	1517		45	1485		69	1554	
V/C Ratio(X)	0.96	0.76		0.81	0.61		0.53	0.90		0.78	0.66	
Avail Cap(c_a), veh/h	1206	2356		346	1517		202	1532		202	1554	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.70	0.70	0.00
Uniform Delay (d), s/veh	56.3	33.5	0.0	68.3	45.2	0.0	72.2	51.0	0.0	68.5	24.3	0.0
Incr Delay (d2), s/veh	17.3	2.3	0.0	11.0	1.8	0.0	9.4	7.3	0.0	12.4	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	15.8	17.4	0.0	4.3	9.7	0.0	1.0	16.5	0.0	2.2	5.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	73.6	35.8	0.0	79.3	47.0	0.0	81.7	58.3	0.0	80.9	25.1	0.0
LnGrp LOS	E	D		E	D		F	E		F	C	
Approach Vol, veh/h		2944	A		1133	A		1355	A		1087	A
Approach Delay, s/veh		50.7			53.1			58.7			27.9	
Approach LOS		D			D			E			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.4	74.2	8.8	50.7	41.0	49.6	10.8	48.6
Change Period (Y+Rc), s	5.0	7.0	5.0	6.0	5.0	7.0	5.0	6.0
Max Green Setting (Gmax), s	15.0	51.0	17.0	44.0	36.0	30.0	17.0	44.0
Max Q Clear Time (g_c+I1), s	11.1	45.5	4.0	21.9	36.2	25.2	6.5	39.5
Green Ext Time (p_c), s	0.2	4.3	0.0	7.2	0.0	2.3	0.1	3.1

Intersection Summary	
HCM 6th Ctrl Delay	49.0
HCM 6th LOS	D

Notes

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

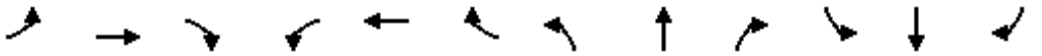
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	205	1730	945	371	676	125
Future Volume (veh/h)	205	1730	945	371	676	125
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	244	2060	1027	0	786	0
Peak Hour Factor	0.84	0.84	0.92	0.88	0.86	0.88
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	757	3272	2804		896	
Arrive On Green	0.05	0.64	0.55	0.00	0.26	0.00
Sat Flow, veh/h	3456	5274	5274	1585	3456	1585
Grp Volume(v), veh/h	244	2060	1027	0	786	0
Grp Sat Flow(s),veh/h/ln	1728	1702	1702	1585	1728	1585
Q Serve(g_s), s	3.5	29.2	13.6	0.0	26.2	0.0
Cycle Q Clear(g_c), s	3.5	29.2	13.6	0.0	26.2	0.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	757	3272	2804		896	
V/C Ratio(X)	0.32	0.63	0.37		0.88	
Avail Cap(c_a), veh/h	958	3272	2804		1325	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	10.8	13.0	15.3	0.0	42.6	0.0
Incr Delay (d2), s/veh	0.2	0.9	0.4	0.0	4.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	9.5	4.8	0.0	11.7	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	11.1	13.9	15.6	0.0	47.4	0.0
LnGrp LOS	B	B	B		D	
Approach Vol, veh/h		2304	1027	A	786	A
Approach Delay, s/veh		13.6	15.6		47.4	
Approach LOS		B	B		D	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		83.9		36.1	11.0	72.9
Change Period (Y+Rc), s		7.0		5.0	5.0	7.0
Max Green Setting (Gmax), s		62.0		46.0	13.0	44.0
Max Q Clear Time (g_c+I1), s		31.2		28.2	5.5	15.6
Green Ext Time (p_c), s		18.1		2.9	0.4	7.0

Intersection Summary	
HCM 6th Ctrl Delay	20.6
HCM 6th LOS	C

Notes

Unsignalized Delay for [WBR, 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)	275	30	150	191	25	138	100	1700	321	112	1050	336
Future Volume (veh/h)	275	30	150	191	25	138	100	1700	321	112	1050	336
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	357	39	195	308	38	219	119	2024	465	145	1180	378
Peak Hour Factor	0.77	0.77	0.77	0.62	0.66	0.63	0.84	0.84	0.69	0.77	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	511	83	70	318	166	239	291	2097	935	170	3116	967
Arrive On Green	0.09	0.04	0.04	0.13	0.09	0.09	0.04	0.59	0.59	0.06	0.61	0.61
Sat Flow, veh/h	3456	1870	1585	1781	1870	1585	1781	3554	1585	1781	5106	1585
Grp Volume(v), veh/h	357	39	195	308	38	219	119	2024	465	145	1180	378
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1781	1870	1585	1781	1777	1585	1781	1702	1585
Q Serve(g_s), s	12.0	2.7	6.0	18.0	2.6	12.0	3.6	73.2	23.0	6.3	15.8	16.5
Cycle Q Clear(g_c), s	12.0	2.7	6.0	18.0	2.6	12.0	3.6	73.2	23.0	6.3	15.8	16.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	511	83	70	318	166	239	291	2097	935	170	3116	967
V/C Ratio(X)	0.70	0.47	2.77	0.97	0.23	0.92	0.41	0.97	0.50	0.85	0.38	0.39
Avail Cap(c_a), veh/h	511	83	70	318	166	239	362	2097	935	205	3116	967
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.09	0.09	0.09	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.6	62.9	64.5	54.2	57.2	56.5	10.8	26.4	16.1	41.6	13.3	13.5
Incr Delay (d2), s/veh	4.2	4.1	833.8	41.5	0.7	36.5	0.1	1.9	0.2	24.5	0.4	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.2	1.4	18.7	5.4	1.2	9.8	1.3	27.8	8.3	5.9	5.7	6.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.8	67.0	898.3	95.7	57.9	93.0	10.9	28.3	16.2	66.1	13.7	14.6
LnGrp LOS	E	E	F	F	E	F	B	C	B	E	B	B
Approach Vol, veh/h		591			565			2608			1703	
Approach Delay, s/veh		337.5			92.1			25.3			18.4	
Approach LOS		F			F			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.3	86.7	23.0	12.0	10.6	89.4	17.0	18.0
Change Period (Y+Rc), s	5.0	7.0	5.0	6.0	5.0	7.0	5.0	6.0
Max Green Setting (Gmax), s	11.0	77.0	18.0	6.0	11.0	77.0	12.0	12.0
Max Q Clear Time (g_c+I1), s	8.3	75.2	20.0	8.0	5.6	18.5	14.0	14.0
Green Ext Time (p_c), s	0.1	1.7	0.0	0.0	0.1	12.2	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	63.8
HCM 6th LOS	E

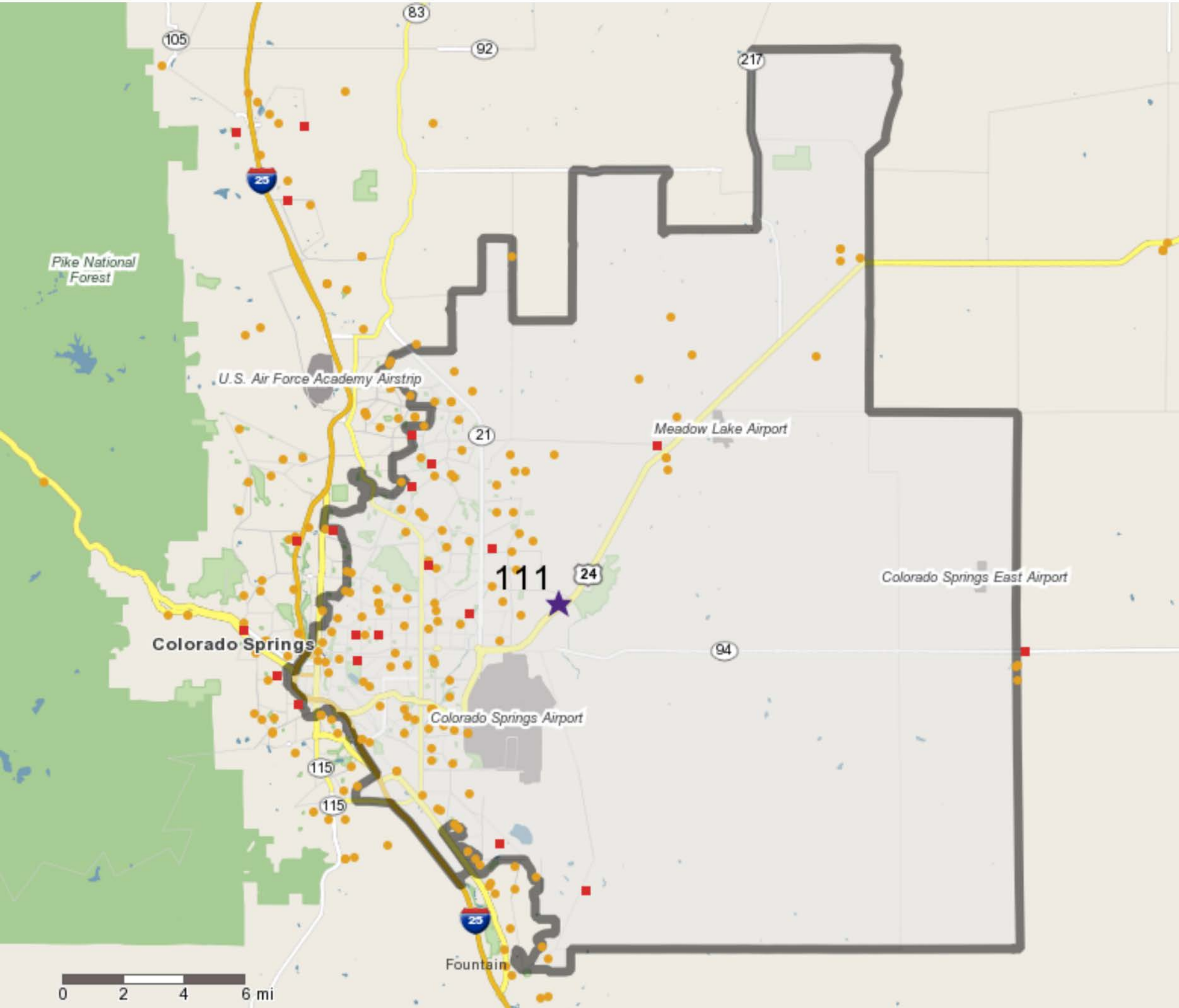
Notes

User approved pedestrian interval to be less than phase max green.

Drive-Time Analysis and Census Data

TRANSPORTATION
CONSULTANTS, INC.

TRADE AREA MAP



Ranking Areas - My Areas | Variable

Benchmark: Colorado

Area	Variable: Age 5-14 yrs	%	Base Count	Base %	% Pen	Index
1 - Internal to Claremont	853	1.40	4,889	1.17	17.45	120
2 - To/From the North on Hwy 24	4,254	6.96	27,730	6.62	15.34	105
3 - To/From the South on Marksheffel Rd	3,919	6.41	24,849	5.93	15.77	108
4 - To/From the South on Hwy 24	20,777	33.99	143,814	34.34	14.45	99
5 - To/From the West on Constitution Ave	16,915	27.67	129,150	30.84	13.10	90
6 - To/From the North on Marksheffel Rd	14,416	23.58	88,383	21.10	16.31	112

MSTA School Traffic Calculations

TRANSPORTATION
CONSULTANTS, INC.

MSTA School Traffic Calculations

AM and PM Peak Traffic Estimates

(These numbers do not reflect peak hour traffic volumes)

School Name: MVA

Type: **Urban Charter**

Version: 102816

AM Cars / Student	PM Cars / Student	Avg. Car Length	PM At one Time
55.94%	39.15%	22.19	48.67%
52.91%	47.50%	22.19	46.12%
50.08%	47.58%	22.83	55.71%

MSTA School Queue Input / Calculations

Grade Level	Student Population	Number of Buses	Staff Members	Student Drivers	PM Total Vehicles	PM Peak Vehicles	Average Queue Length	Total AM Trips	Total PM Trips	High Demand Length
										30%
K - 10	772		65		303	148	3284	929	671	4269
		11								
11th										
12th										
Sum >>	772		65		303	148	3284	929	671	4269
										985

Grade K-10

Direction	AM Trips Generated: Parents	Buses	Staff	Trips	PM Trips Generated: Parents	Buses	Staff	Trips
IN	432		65	497	303			303
OUT	432			432	303		65	368
		AM K-10 Trips		**929**		PM K-10 Trips		**671**

ADT
1600

AM 11th Trips / PM 11th Trips

Direction	AM Trips Generated: Parents	Buses	Staff		Trips	PM Trips Generated: Parents	Buses	Staff		Trips
IN										
OUT										
			AM 11th Trips					PM 11th Trips		

AM 12th Trips / PM 12th Trips

Direction	AM Trips Generated: Parents	Buses	Staff		Trips	PM Trips Generated: Parents	Buses	Staff		Trips
IN										
OUT										
			AM 12th Trips					PM 12th Trips		

All AM TRIPS	In	497	**All PM TRIPS**	In	303
	Out	432		Out	368
	Total	929		Total	671

ADT
1600

NOTES

- **Average Queue Length does not** include an alternative traffic pattern required for high traffic demand days which is usually 30% additional length.
- **Average Queue Length does not** include the Student Loading Zone.
- Peak traffic volumes at schools normally occur within a 30-minute time period. (justifying a PHF of 0.5)

Calculated 2/13/2020 By:_____

Additional Attachments

Copy of approved deviation for detached sidewalks

TRANSPORTATION
CONSULTANTS, INC.

Planning and Community Development Department
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Colorado Springs, Colorado 80910
Phone: 719.520.6300
Fax: 719.520.6695
Website www.elpasoco.com

DEVIATION REQUEST AND DECISION FORM

Updated: 6/26/2019

April 24, 2020

PROJECT INFORMATION

Project Name:	Mountain View Academy
Schedule No.(s):	
Legal Description:	Tract H, Claremont Ranch Filing No. 4 as recorded under Reception No. 204062712 of the records of the El Paso County Clerk and Recorder, County of El Paso, State of Colorado, containing 7.884 Acres or 343,420 Square Feet, more or less.

APPLICANT INFORMATION

Company:	Charter Development Company, LLC
Name:	Joe Sprys
Mailing Address:	c/o National Heritage Academies 3850 Broadmoor SE Grand Rapids, MI 49512
Phone Number:	(616) 929-1290
FAX Number:	N/A
Email Address:	JSprys@nhaschools.com

ENGINEER INFORMATION

Company:	Merrick & Company
Name:	Kristofer K. Wiest PE
Mailing Address:	5970 Greenwood Plaza Blvd. Greenwood Village, CO 80111
Phone Number:	(303) 353-3695
FAX Number:	N/A
Email Address:	kris.wiest@merrick.com

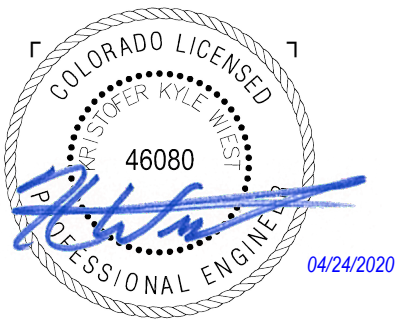
OWNER, APPLICANT, AND ENGINEER DECLARATION

To the best of my knowledge, the information on this application and all additional or supplemental documentation is true, factual and complete. I am fully aware that any misrepresentation of any information on this application may be grounds for denial. I have familiarized myself with the rules, regulations and procedures with respect to preparing and filing this application. I also understand that an incorrect submittal will be cause to have the project removed from the agenda of the Planning Commission, Board of County Commissioners and/or Board of Adjustment or delay review until corrections are made, and that any approval of this application is based on the representations made in the application and may be revoked on any breach of representation or condition(s) of approval.

(signed) Kristofer K. Wiest, P.E. — **April 24, 2020**

Signature of owner (or authorized representative) — Date

Engineer's Seal, Signature and Date of Signature



DEVIATION REQUEST (Attach diagrams, figures, and other documentation to clarify request)

A deviation from the standards of or in Section 2.2.4.B.5 and Section 2.2.4.B.6 of the Engineering Criteria Manual (ECM) is requested.

Identify the specific ECM standard which a deviation is requested:

The project is requesting the following:
1) A deviation from Section 2.2.4.B.6 (Typical Ubrban Local Cross Section) requiring an attached sidewalk to a detached sidewalk along Pinyon Jay Drive and Hames Drive frontages.
2) A deviation from Section 2.2.4.B.5 (Typical Urban Residential Collector Cross Section) requiring a detached sidewalk within the Right-of-Way, to a detached sidewalk situated within the Utility & Sidewalk easement as shown within the standard cross sections specified within PCD File No. PUD02005.

State the reason for the requested deviation:

The streets surrounding Tract H were all previously designed and constructed with Claremont Ranch Filings 2, 3, & 4. The street sections designed and constructed as part of Filing 2, 3, and 4 call for a 4-ft detached sidewalk. The sidewalks along Hames and Pinyon Jay call for the 4-ft sidewalk, with the back of sidewalk being at the Right-of-Way line. The sidewalk along Meadowbrook Parkway call for the 4-ft sidewalk to be within a 5-ft utility & sidewalk easement, with the front of walk on the Right-of-Way line.

The existing sidewalks that have been installed throughout the subdivision and directly adjacent to Tract H generally follow the detached walk configuration approved with PCD File No. PUD02005 and the Development Plan for Claremont Ranch (Reception No. 202163124).

Explain the proposed alternative and compare to the ECM standards (May provide applicable regional or national standards used as basis):

The Mountain View Academy project proposes to follow the general concept of the detached walk as shown in the approved plans for Claremont Ranch Filings 2, 3, and 4, with a modification to change the sidewalk width from 4-ft to 5-ft to adhere to current Americans with Disabilities Act guidelines. The 5-ft sidewalk width will meet the minimum requirements as shown in EPC Std Dwg SD2-2 and SD2-4, while still achieving a cohesive look with the rest of the subdivision. Refer to attached exhibit for proposed typical cross-sections.

LIMITS OF CONSIDERATION

(At least one of the conditions listed below must be met for this deviation request to be considered.)

☐ The ECM standard is inapplicable to the particular situation.
☐ Topography, right-of-way, or other geographical conditions or impediments impose an undue hardship and an equivalent alternative that can accomplish the same design objective is available and does not compromise public safety or accessibility.
X A change to a standard is required to address a specific design or construction problem, and if not modified, the standard will impose an undue hardship on the applicant with little or no material benefit to the public.

Provide justification:

As previously stated, the existing sidewalks throughout the adjacent neighborhood are 4-ft detached walks, which is consistent with both the approved construction documents (PCD File No SF01033, SF02014 and SF03012) and Development Plan for Claremont Ranch (PCD File No. PUD02005). The developer is proposing to install a 5-ft detached to meet the minimum sidewalk width required by the Americans with Disabilities guidelines while still adhering to the character of the surrounding area.

CRITERIA FOR APPROVAL

Per ECM section 5.8.7 the request for a deviation may be considered if the request is not based exclusively on financial considerations. The deviation must not be detrimental to public safety or surrounding property. The applicant must include supporting information demonstrating compliance with all of the following criteria A) through F):

A) The deviation will achieve the intended result with a comparable or superior design and quality of improvement.

The approved Development Plan for Claremont Ranch (and subsequent Construction Documents for Filings 2, 3, an 4) call for a 4-ft detached walk as stated above. The deviation will keep with the character of the previously approved street sections, with the modification of increasing the sidewalk width to 5-ft.

B) The deviation will not adversely affect safety or operations

Existing sidewalks throughout the subdivision are all detached. The new proposed detached sidewalk is consistent with the existing infrastructure and will not adversely affect the safety or operations of the community sidewalk network.

C) The deviation will not adversely affect maintenance and its associated cost.

Since sidewalk are already detached, keeping the proposed sidewalk as attached will not increase maintenance.

D) The deviation will not adversely affect aesthetic appearance.

The proposed detached sidewalks will keep the same aesthetic appearance of the surrounding community.

E) The deviation meets the design intent and purpose of the ECM standards.

By increasing the sidewalk to 5-ft (as opposed to a 4-ft sidewalk with a bump out every 200-ft to meet current ADA requirements) the proposed deviation meets the intent of the ECM standards while also adhering to current ADA requirements and the previously approved Construction Documents and Development Plan.

F) The deviation meets the control measure requirements of Part I.E.3 and Part I.E.4 of the County's MS4 permit, as applicable.

The requested deviation does not affect Part I.E.3 (construction sites). No waiver or variance is requested in this regard. The developer intends to comply with all applicable environmental requirements. The requirements of Part I.E.4 is similarly not affected. The developer intends to meet the WQCV standard for the entire site, with no deviations or variances therefrom.

REVIEW AND RECOMMENDATION:

Approved by the ECM Administrator

This request has been determined to have met the criteria for approval. A deviation from Section 2.2.4.B.5/6 of the ECM is hereby granted based on the justification provided.

Approved
By: Elizabeth Nijkamp
Date:04/28/2020
El Paso County Planning & Community Development

Denied by the ECM Administrator

This request has been determined not to have met criteria for approval. A deviation from Section _____ of the ECM is hereby denied.

ECM ADMINISTRATOR COMMENTS / CONDITIONS:

1.1. PURPOSE

The purpose of this resource is to provide a form for documenting the findings and decision by the ECM Administrator concerning a deviation request. The form is used to document the review and decision concerning a requested deviation. The request and decision concerning each deviation from a specific section of the ECM shall be recorded on a separate form.

1.2 BACKGROUND

A deviation is a critical aspect of the review process and needs to be documented to ensure that the deviations granted are applied to a specific development application in conformance with the criteria for approval and that the action is documented as such requests can point to potential needed revisions to the ECM.

1.3 APPLICABLE STATUTES AND REGULATIONS

Section 5.8 of the ECM establishes a mechanism whereby an engineering design standard can be modified when if strictly adhered to, would cause unnecessary hardship or unsafe design because of topographical or other conditions particular to the site, and that a departure may be made without destroying the intent of such provision.

1.4 APPLICABILITY

All provisions of the ECM are subject to deviation by the ECM Administrator provided that one of the following conditions is met:

- The ECM standard is inapplicable to a particular situation.
- Topography, right-of-way, or other geographical conditions or impediments impose an undue hardship on the applicant, and an equivalent alternative that can accomplish the same design objective is available and does not compromise public safety or accessibility.
- A change to a standard is required to address a specific design or construction problem, and if not modified, the standard will impose an undue hardship on the applicant with little or no material benefit to the public.

1.5 TECHNICAL GUIDANCE

The review shall ensure all criteria for approval are adequately considered and that justification for the deviation is properly documented.

1.6 LIMITS OF APPROVAL

Whether a request for deviation is approved as proposed or with conditions, the approval is for project-specific use and shall not constitute a precedent or general deviation from these Standards.

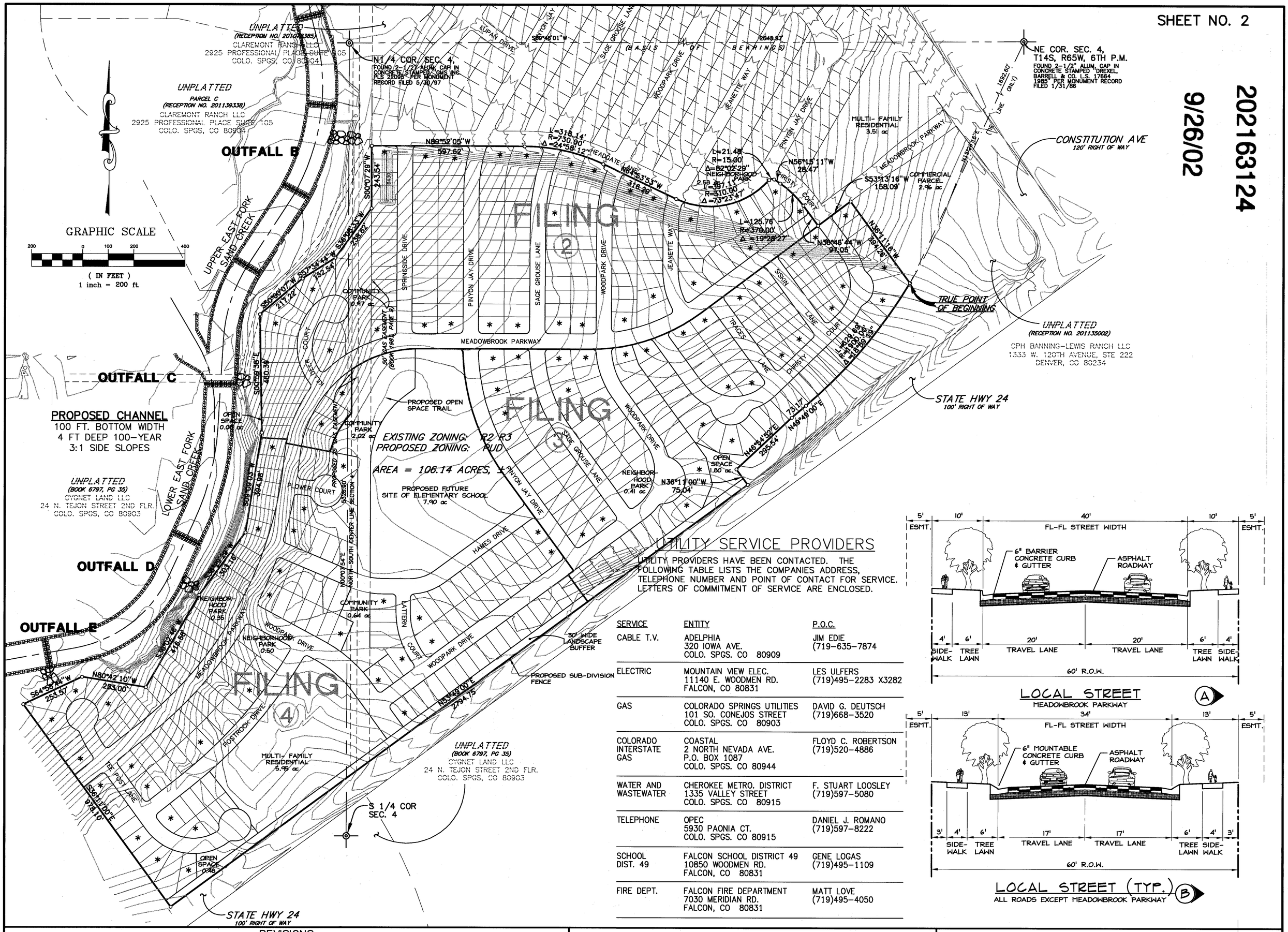
1.7 REVIEW FEES

A Deviation Review Fee shall be paid in full at the time of submission of a request for deviation. The fee for Deviation Review shall be as determined by resolution of the BoCC

SHEET NO. 2

202163124

9/26/02



UTILITY SERVICE PROVIDERS

UTILITY PROVIDERS HAVE BEEN CONTACTED. THE FOLLOWING TABLE LISTS THE COMPANIES ADDRESS, TELEPHONE NUMBER AND POINT OF CONTACT FOR SERVICE. LETTERS OF COMMITMENT OF SERVICE ARE ENCLOSED.

SERVICE	ENTITY	P.O.C.
CABLE T.V.	ADELPHIA 320 IOWA AVE. COLO. SPGS. CO 80909	JIM EDIE (719-635-7874
ELECTRIC	MOUNTAIN VIEW ELEC. 11140 E. WOODMEN RD. FALCON, CO 80831	LES ULFERS (719)495-2283 X3282
GAS	COLORADO SPRINGS UTILITIES 101 SO. CONEJOS STREET COLO. SPGS. CO 80903	DAVID G. DEUTSCH (719)668-3520
COLORADO INTERSTATE GAS	COASTAL 2 NORTH NEVADA AVE. P.O. BOX 1087 COLO. SPGS. CO 80944	FLOYD C. ROBERTSON (719)520-4886
WATER AND WASTEWATER	CHEROKEE METRO. DISTRICT 1335 VALLEY STREET COLO. SPGS. CO 80915	F. STUART LOOSLEY (719)597-5080
TELEPHONE	OPEC 5930 PAONIA CT. COLO. SPGS. CO 80915	DANIEL J. ROMANO (719)597-8222
SCHOOL DIST. 49	FALCON SCHOOL DISTRICT 49 10850 WOODMEN RD. FALCON, CO 80831	GENE LOGAS (719)495-1109
FIRE DEPT.	FALCON FIRE DEPARTMENT 7030 MERIDIAN RD. FALCON, CO 80831	MATT LOVE (719)495-4050

REVISIONS

NO.	DATE	BY	DESCRIPTION	APPROVED BY:	DATE
1	5-02-02	JCH	COUNTY REVISIONS PER LETTER DATED 4-04-02	IC	5-02-02
2	7-02-02	AMH	COUNTY REVISIONS PER LETTER DATED 5-29-02	IC	7-02-02

Drawing Name/Location:

Matrix Design Group, Inc.
Integrated Design Solutions
2925 Professional Place, Suite 202
Colorado Springs, CO 80904
Phone 719-575-0100
Fax 719-575-0208

CLAREMONT RANCH

CLAREMONT RANCH, LLC

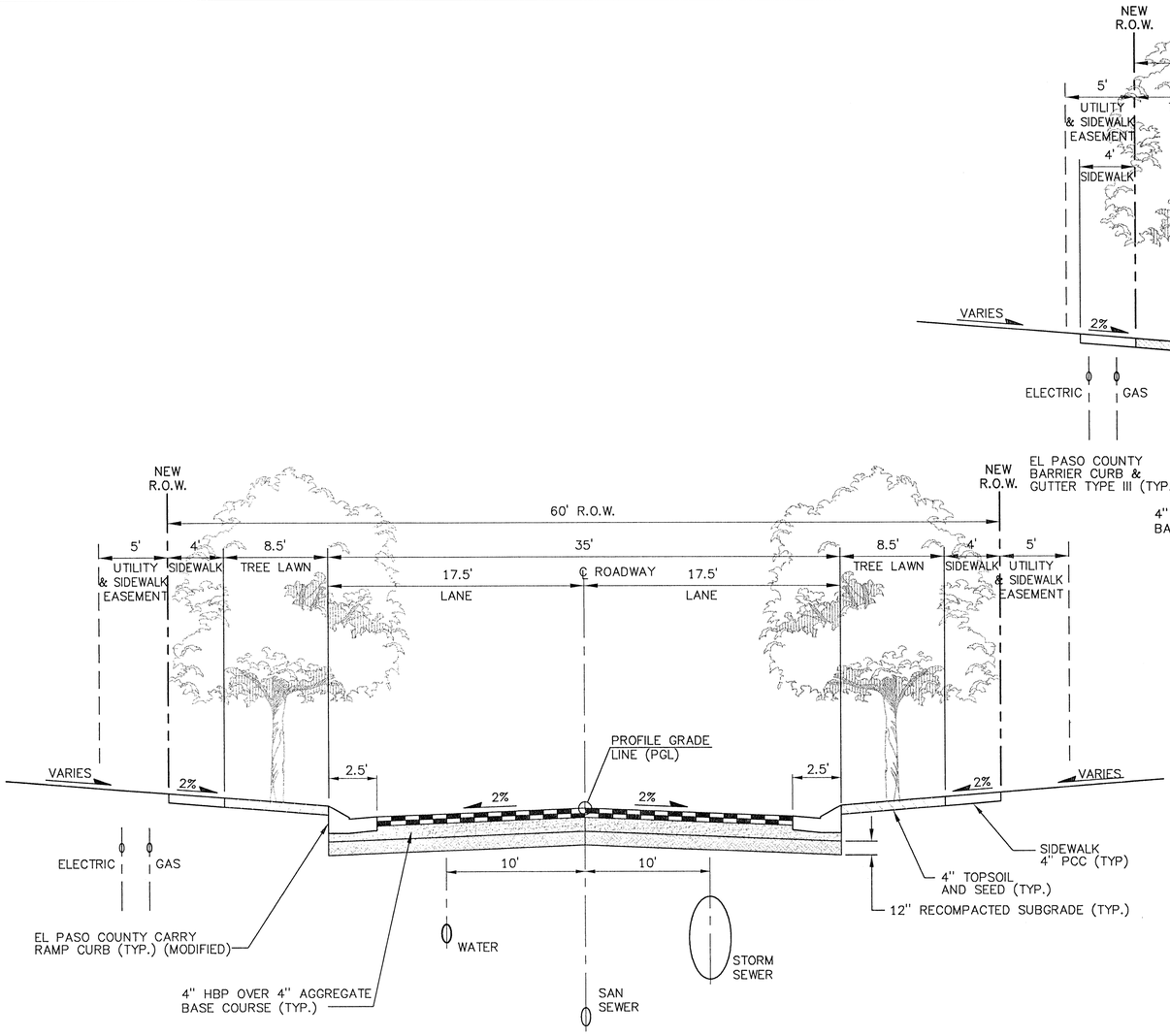
DEVELOPMENT PLAN

DESIGNED BY: IC	SCALE	DATE ISSUED: MARCH 15, 2002	DP-02
DRAWN BY: JCH	HORIZ: 1" = 200		
CHECKED BY: IC	VERT: N/A	SHEET NO. 2 OF 2 SHEETS	

PCD File No. PUD02005

Deviation attachment

PCD File No. PPR-20-008



TYPICAL SECTION

DESIGN SPEED = 30 MPH, LESS THAN 1,250 AADT

KILLDEER COURT
SPRINGSIDE DRIVE
PINYON JAY DRIVE
SAGE GROUSE LANE
WOODPARK DRIVE
JEANETTE WAY

NOT TO SCALE

TYPICAL SECTION

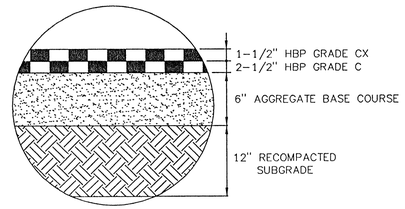
DESIGN SPEED = 30 MPH, LESS THAN 1,250 AADT

MEADOW BROOK PARKWAY STA 26+15.78 TO STA 49+88.19

NOT TO SCALE

* EL PASO COUNTY CARRY RAMP CURB (MODIFIED) AT STATIONS:
26+15.78 TO 30+15.00

** EL PASO COUNTY CARRY RAMP CURB (MODIFIED) AT STATIONS:
26+15.78 TO 28+45.00
45+25.00 TO 49+78.00



TYPICAL PAVEMENT SECTION *

NOT TO SCALE

*ACTUAL PAVEMENT SECTION TO BE DETERMINED BY THE EL PASO COUNTY APPROVED GEOTECHNICAL REPORT.

PCD File No. SF01033

REVISIONS					
NO.	DATE	BY	DESCRIPTION	APPROVED BY:	DATE
A	2/18/02	JPL	COUNTY COMMENTS		

Drawing Name/Location:
S:\00.030.006\DWG\ROAD-STORM\TY1.dwg

FOR AND ON BEHALF OF MATRIX DESIGN GROUP, INC.

Matrix Design Group, Inc.
Integrated Design Solutions
2925 Professional Place, Suite 202
Colorado Springs, CO 80904
Phone 719-575-0100
Fax 719-575-0208

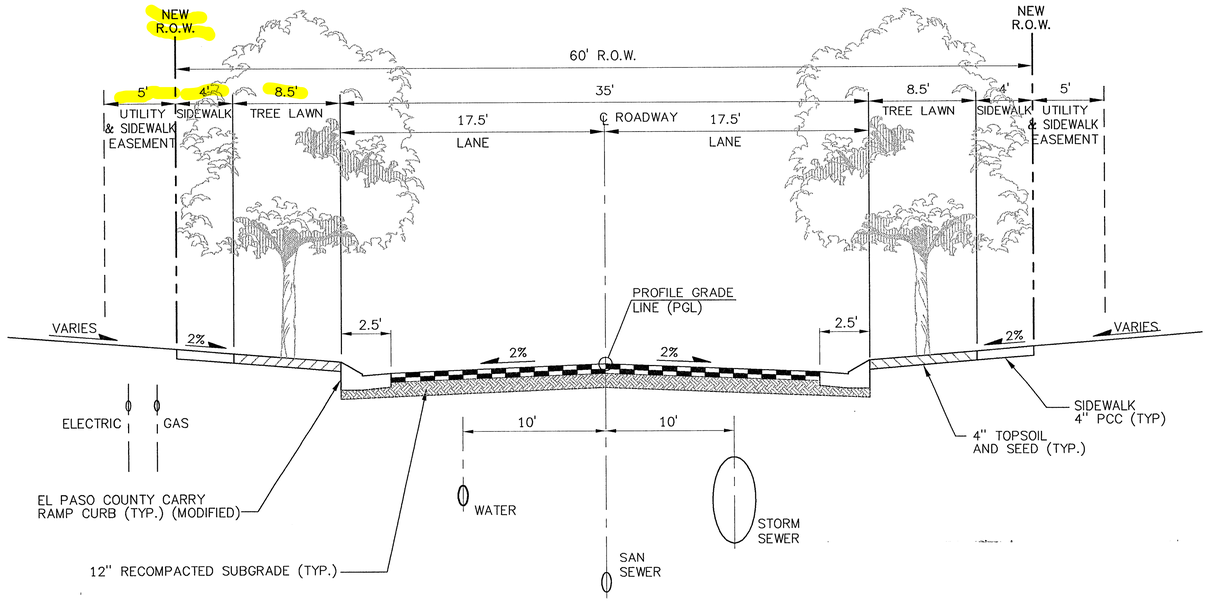
CLAREMONT RANCH – FILING NO. 2

ROADWAY & STORM DRAIN IMPROVEMENTS

TYPICAL ROADWAY SECTIONS

DESIGNED BY: RJM	SCALE	DATE ISSUED: APRIL, 2002	TY1
DRAWN BY: BE	HORIZ: NONE		
CHECKED BY: JPL	VERT: NONE	MDG PROJECT NO.: 00.030.006	

Deviation attachment
PCD File No. PPR-20-008

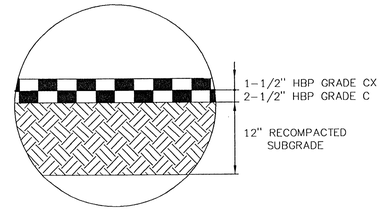


TYPICAL SECTION

DESIGN SPEED = 30 MPH, LESS THAN 1,250 AADT

WOODPARK DRIVE
CHRISTY COURT
PINYON JAY DRIVE
SAGE GROUSE LANE
TRACES LANE
SISKIN LANE

NOT TO SCALE



TYPICAL PAVEMENT SECTION *

NOT TO SCALE

*ACTUAL PAVEMENT SECTION TO BE DETERMINED BY THE EL PASO COUNTY APPROVED GEOTECHNICAL REPORT.

PCD File No. SF02014

REVISIONS

NO.	DATE	BY	DESCRIPTION	APPROVED BY:	DATE

COLORADO REGISTERED WILLIAM C. MOORE 34944 11/16/02 PROFESSIONAL ENGINEER

FOR AND ON BEHALF OF MATRIX DESIGN GROUP, INC.

Matrix Design Group, Inc.
Integrated Design Solutions
2925 Professional Place, Suite 202
Colorado Springs, CO 80904
Phone 719-575-0100
Fax 719-575-0208

CLAREMONT RANCH FILING No. 3

ROADWAY & STORM DRAIN IMPROVEMENTS

TYPICAL ROADWAY SECTION

DESIGNED BY:
DRAWN BY: JLB
CHECKED BY:

SCALE
HORIZ: N/A
VERT: N/A

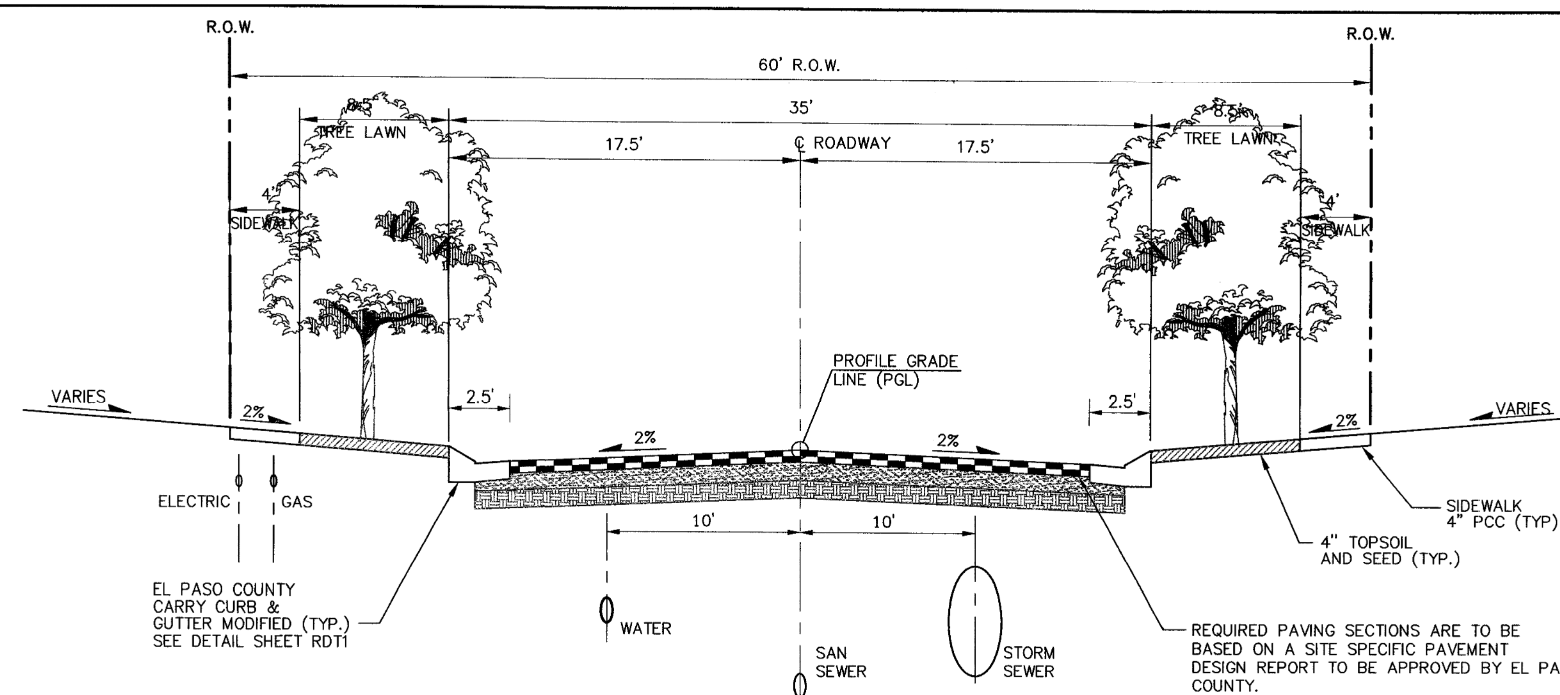
DATE ISSUED: NOVEMBER, 2002
MDG PROJECT NO.: 02.030.015

TY1

Deviation attachment

PCD File No. PPR-20-008

SHEET NO. 4

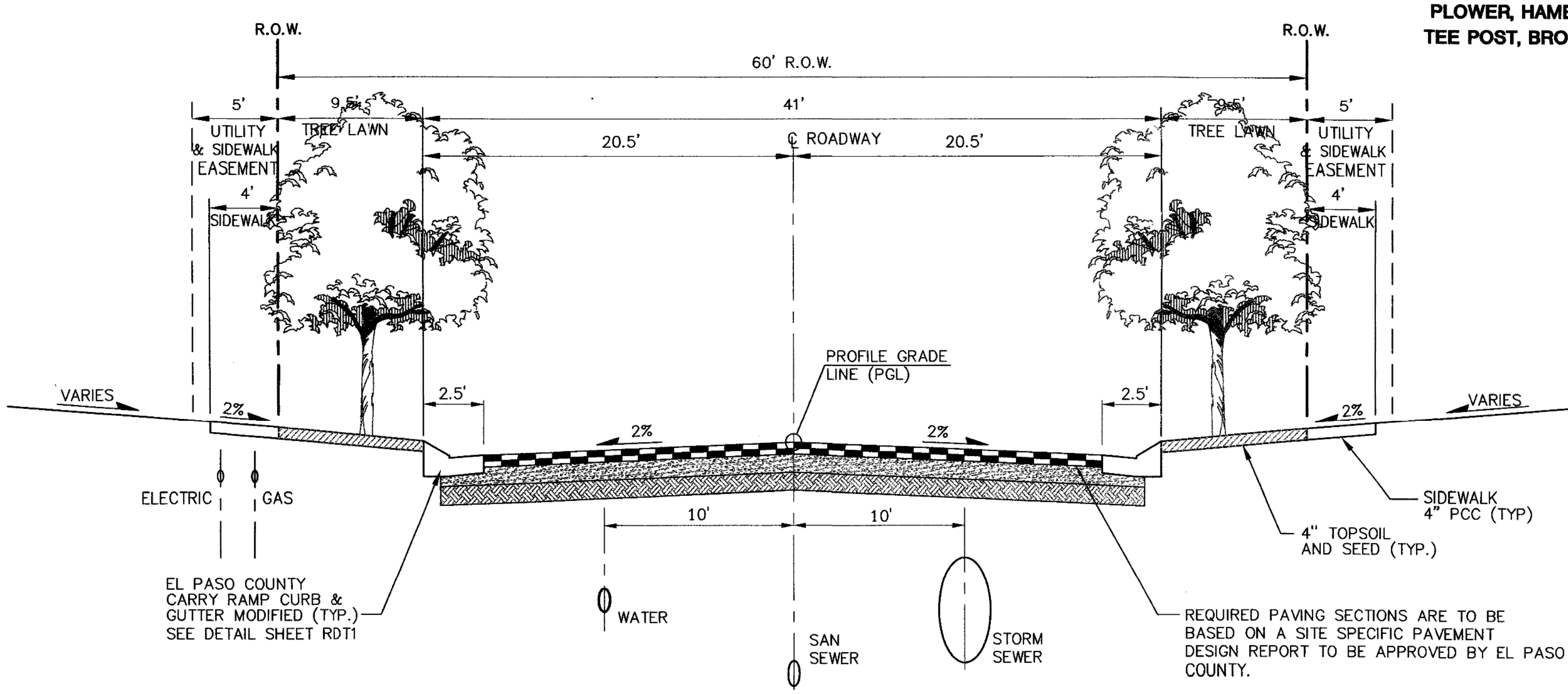


TYPICAL SECTION - RESIDENTIAL STREETS

DESIGN SPEED = 30 MPH

PLOWER, HAMES, LATTERN, WOODPARK, POSTROCK
TEE POST, BROOKINGS, RIVERWALK STA 7+40 to 10+00

NOT TO SCALE



TYPICAL SECTION - RESIDENTIAL

DESIGN SPEED = 30 MPH

MEADOWBROOK PARKWAY

NOT TO SCALE

Deviation attachment
PCD File No. PPR-20-008

PCD File No. SF03012

REVISIONS

NO.	DATE	BY	DESCRIPTION	APPROVED BY:	DATE
1	10/3/03	AMH	STORM SEWER REVISIONS		

Drawing name: S:\02.030.019((4-SF)\dwg\Roadway & Storm\TY1.dwg

SUBDIVIDER:
CLAREMONT RANCH, LLC
20 Boulder Crescent, 2nd Floor
Colorado Springs, CO. 80903

FOR AND ON BEHALF OF MATRIX DESIGN GROUP, INC.

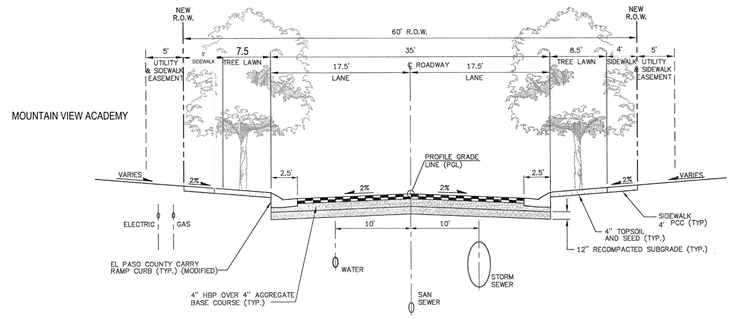
Matrix Design Group, Inc.
Integrated Design Solutions
2925 Professional Place, Suite 202
Colorado Springs, CO 80904
Phone 719-575-0100
Fax 719-575-0208

CLAREMONT RANCH – FILING NO. 4

ROADWAY & STORM DRAIN IMPROVEMENTS

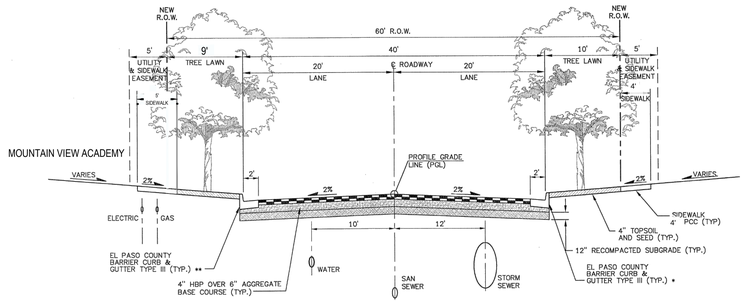
TYPICAL ROADWAY SECTIONS

DESIGNED BY: AMH	SCALE	DATE ISSUED: JUNE 2003	TY1
DRAWN BY: MEM	HORIZ: N/A		
CHECKED BY: RGG	VERT: N/A	MDG PROJECT NO.: 02.030.019	



URBAN LOCAL TYPICAL SECTION

PINYON JAY DRIVE
HAMES DRIVE
Section based PCD File No. PUD02005



URBAN COLLECTOR TYPICAL SECTION

MEADOWBROOK PARKWAY
Section based PCD File No. PUD02005

Deviation attachment

PCD File No. PPR-20-008

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REV	REVISION DESCRIPTION	DATE	CHND	CHKD	APPR

TITLE:
MOUNTAIN VIEW ACADEMY
CIVIL CONSTRUCTION DOCUMENTS
ROAD WAY SECTIONS

PE STAMP

ISSUED FOR REVIEW
FOR AND ON BEHALF OF MERRICK & COMPANY

JOB NUMBER 65120399
DATE ----
SHEET C2.6
10 of 26

Additional Attachments

Copy of approved deviation for removing mid-block crossing

TRANSPORTATION
CONSULTANTS, INC.

Planning and Community Development Department
2880 International Circle
Colorado Springs, Colorado 80910

Phone: 719.520.6300
Fax: 719.520.6695
Website www.elpasoco.com

DEVIATION REQUEST AND DECISION FORM

Updated: 6/17/2019

PPR 20-008

PROJECT INFORMATION

Project Name :	Mountain View Academy
Schedule No.(s) :	5404121002
Legal Description :	TR H CLAREMONT RANCH FIL NO 4

APPLICANT INFORMATION

Company :	National Heritage Academies, Inc
Name :	Jeff Chamberlain
	☒ Owner ☐ Consultant ☐ Contractor
Mailing Address :	3850 Broadmoor SE
	Grand Rapids, MI 49512
Phone Number :	616-954-6381
FAX Number :	
Email Address :	JCHAMBERLAIN@NHASCHOOLS.COM

ENGINEER INFORMATION

Company :	LSC Transportation Consultants	
Name :	Jeffrey C. Hodsdon	Colorado P.E. Number :
Mailing Address :	2504 East Pikes Peak Avenue, Suite 304	
	Colorado Springs, CO 80909	
Phone Number :	719-633-2868	
FAX Number :	719-633-5430	
Email Address :	jeff@lsctrans.com	

OWNER, APPLICANT, AND ENGINEER DECLARATION

To the best of my knowledge, the information on this application and all additional or supplemental documentation is true, factual and complete. I am fully aware that any misrepresentation of any information on this application may be grounds for denial. I have familiarized myself with the rules, regulations and procedures with respect to preparing and filing this application. I also understand that an incorrect submittal will be cause to have the project removed from the agenda of the Planning Commission, Board of County Commissioners and/or Board of Adjustment or delay review until corrections are made, and that any approval of this application is based on the representations made in the application and may be revoked on any breach of representation or condition(s) of approval.

Jeff Chamberlain — 9/1/20

Signature of owner (or authorized representative) — Date

Engineer's Seal, Signature
And Date of Signature

COLORADO LICENSED
JEFFREY C. HODSDON
31684
8-24-20
PROFESSIONAL ENGINEER

PCD File No. PPR208

DEVIATION REQUEST (Attach diagrams, figures, and other documentation to clarify request)

A deviation from the standards of or in Section **2.5.2.C.4** of the Engineering Criteria Manual (ECM) is requested. The existing pedestrian ramp on Pinyon Jay Drive between Meadowbrook Parkway and Hames Drive is proposed to be removed with this project. Please refer to the attached Deviation Exhibit.

Identify the specific ECM standard which a deviation is requested:

Section 2.5.2.C.4 Pedestrian Facilities - Handicap and Access Ramps - Mid-Block Ramps on Local Roadways.
The criteria in this section requires access ramps on local roadways to be spaced no greater than 600 feet apart, providing mid-block crossings if necessary.

State the reason for the requested deviation:

The deviation is required as the distance on Pinyon Jay Drive between Meadowbrook Parkway and Hames Drive is approximately 665 feet (pedestrian crossing to pedestrian crossing). If the ramps are removed, the the minimum 600 foot distance in the ECM criteria would no longer be met. Thus, this deviation has been required.

Explain the proposed alternative and compare to the ECM standards (May provide applicable regional or national standards used as basis):

It is proposed that mid-block pedestrian ramps be removed (and no designated crossing be provided) on Pinyon Jay Drive between Meadowbrook Parkway and Hames Drive. As a result, the access ramps would be spaced approximately 665 feet apart rather than the 600-foot minimum in the ECM standards. The resulting distance would exceed the minimum distance in the ECM by 65 feet. Applicable figures from the TIS report are attached which show the pedestrian routing plan absent this crossing location.

LIMITS OF CONSIDERATION
(At least one of the conditions listed below must be met for this deviation request to be considered.)

☐ The ECM standard is inapplicable to the particular situation.
☐ Topography, right-of-way, or other geographical conditions or impediments impose an undue hardship and an equivalent alternative that can accomplish the same design objective is available and does not compromise public safety or accessibility.
☒ A change to a standard is required to address a specific design or construction problem, and if not modified, the standard will impose an undue hardship on the applicant with little or no material benefit to the public.

Provide justification:

Removal of this particular set of mid-block ramps and utilizing the access ramps at the intersections identified in the attached figures would result in the minimum distance in the ECM distance being exceed by 65 feet. If these ramps were to remain, it would result in the need for another formal crossing location, which would be unnecessary. A crossing at this location would likely add the need for school supervision or to be staffed by trained crossing guards. Based on the school routing plan, this change would only impact students that live in the houses on Pinyon Jay Drive directly across from the school. All other pedestrians would have an opportunity to cross at Meadowbrook Parkway or Hames Drive without having to travel out-of-direction. Because this is a charter school and not a local school, it is anticipated this would have little to no impact on those potential pedestrians (if any).

PCD File No. _____

CRITERIA FOR APPROVAL

Per ECM section 5.8.7 the request for a deviation may be considered if the request is **not based exclusively on financial considerations**. The deviation must not be detrimental to public safety or surrounding property. The applicant must include supporting information demonstrating compliance with **all of the following criteria**:

The deviation will achieve the intended result with a comparable or superior design and quality of improvement.

The intention of providing a mid-block crossing a minimum of every 600 feet is to limit out-of-direction travel for pedestrians, therefore increasing the number of pedestrians that cross at crosswalks. The applicable TIS figures showing the school pedestrian routing plan are attached, which demonstrate an effective plan without this crossing. It is anticipated that a mid-block crossing on Pinyon Jay Drive would not be useful for many pedestrians walking to Mountain View Academy. Very few, if any, pedestrians would be required to walk out-of-direction without a mid-block crossing on Pinyon Jay Drive. As a result, it is not expected to have an impact on pedestrians. While at the same time, it removes an unnecessary mid-block crossing, reducing potential driver confusion and issues with the planned Mountain View Academy access on Pinyon Jay Drive.

The deviation will not adversely affect safety or operations.

It is anticipated that only providing pedestrian crossings at intersections will not lower the safety of the roadway because there is no out-of-direction travel for likely most (if not all) pedestrians. It will be safer to have designated pedestrian crossing locations at nearby intersections, rather than mid-block on a curved roadway.

The deviation will not adversely affect maintenance and its associated cost.

The lack of a mid-block crossing will not adversely affect maintenance or maintenance costs as markings and signs will not need to be maintained in this location.

The deviation will not adversely affect aesthetic appearance.

A lack of a mid-block crossing will not adversely affect aesthetic appearance, but rather improve the appearance because there will not be pavement markings and fluorescent traffic signs at this location.

The deviation meets the design intent and purpose of the ECM standards.

This deviation meets the intent and purpose of the ECM standards. It would not have a negative impact on pedestrian safety.

PCD File No. _____

REVIEW AND RECOMMENDATION:

Approved by the ECM Administrator
This request has been determined to have met the criteria for approval. A deviation from Section 2.5.2.C.4 of the ECM is hereby granted based on the justification provided.

Approved
By: Elizabeth Nijkamp
Date:09/09/2020
El Paso County Planning & Community Development

Denied by the ECM Administrator
This request has been determined not to have met criteria for approval. A deviation from Section _____ of the ECM is hereby denied.

ECM ADMINISTRATOR COMMENTS/CONDITIONS:

PCD File No. _____

1.1. PURPOSE

The purpose of this resource is to provide a form for documenting the findings and decision by the ECM Administrator concerning a deviation request. The form is used to document the review and decision concerning a requested deviation. The request and decision concerning each deviation from a specific section of the ECM shall be recorded on a separate form.

1.2. BACKGROUND

A deviation is a critical aspect of the review process and needs to be documented to ensure that the deviations granted are applied to a specific development application in conformance with the criteria for approval and that the action is documented as such requests can point to potential needed revisions to the ECM.

1.3. APPLICABLE STATUTES AND REGULATIONS

Section 5.8 of the ECM establishes a mechanism whereby an engineering design standard can be modified when if strictly adhered to, would cause unnecessary hardship or unsafe design because of topographical or other conditions particular to the site, and that a departure may be made without destroying the intent of such provision.

1.4. APPLICABILITY

All provisions of the ECM are subject to deviation by the ECM Administrator provided that one of the following conditions is met:

- The ECM standard is inapplicable to a particular situation.
- Topography, right-of-way, or other geographical conditions or impediments impose an undue hardship on the applicant, and an equivalent alternative that can accomplish the same design objective is available and does not compromise public safety or accessibility.
- A change to a standard is required to address a specific design or construction problem, and if not modified, the standard will impose an undue hardship on the applicant with little or no material benefit to the public.

1.5. TECHNICAL GUIDANCE

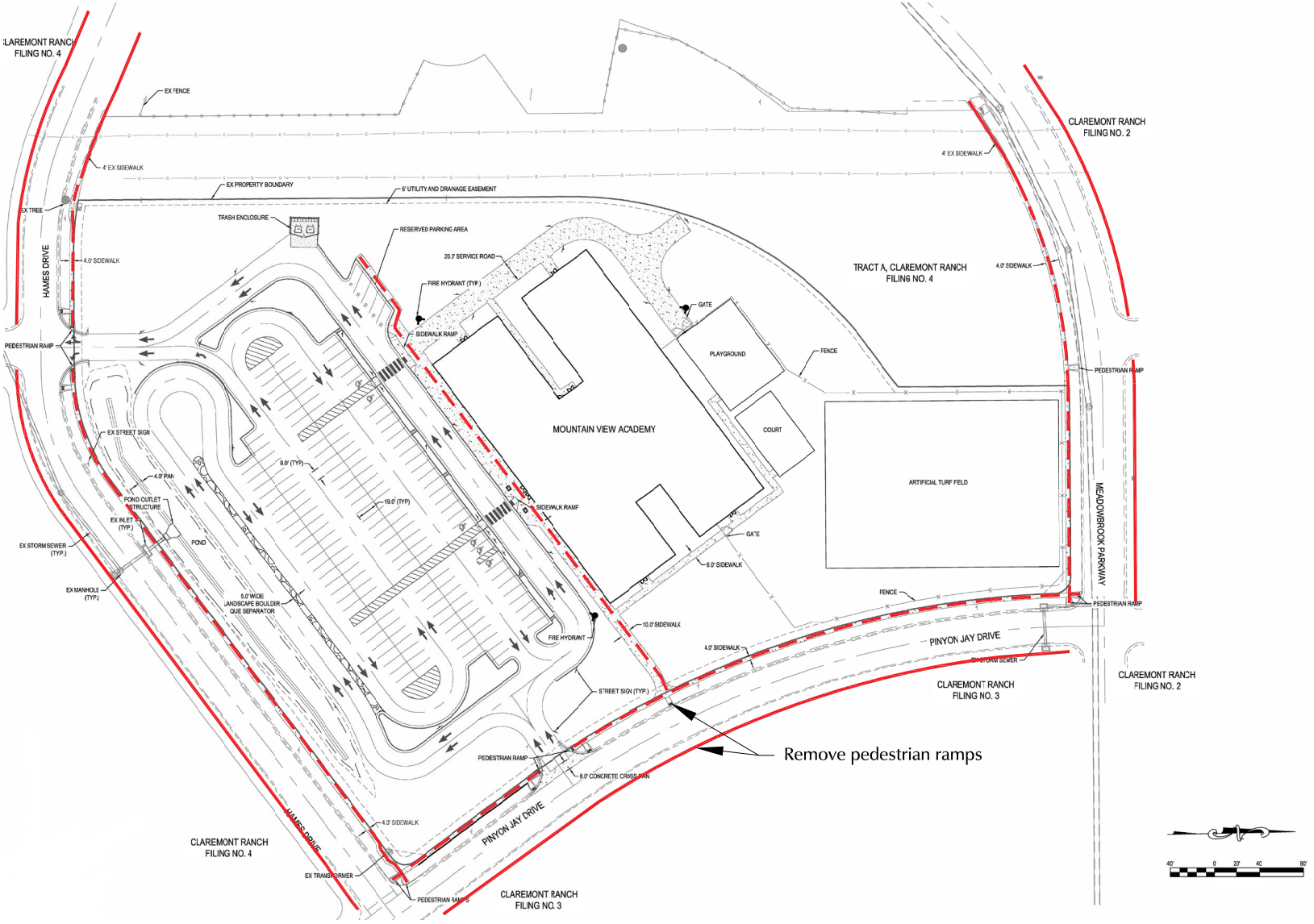
The review shall ensure all criteria for approval are adequately considered and that justification for the deviation is properly documented.

1.6. LIMITS OF APPROVAL

Whether a request for deviation is approved as proposed or with conditions, the approval is for project-specific use and shall not constitute a precedent or general deviation from these Standards.

1.7. REVIEW FEES

A Deviation Review Fee shall be paid in full at the time of submission of a request for deviation. The fee for Deviation Review shall be as determined by resolution of the BoCC.



= Proposed Sidewalk
= Existing Sidewalk

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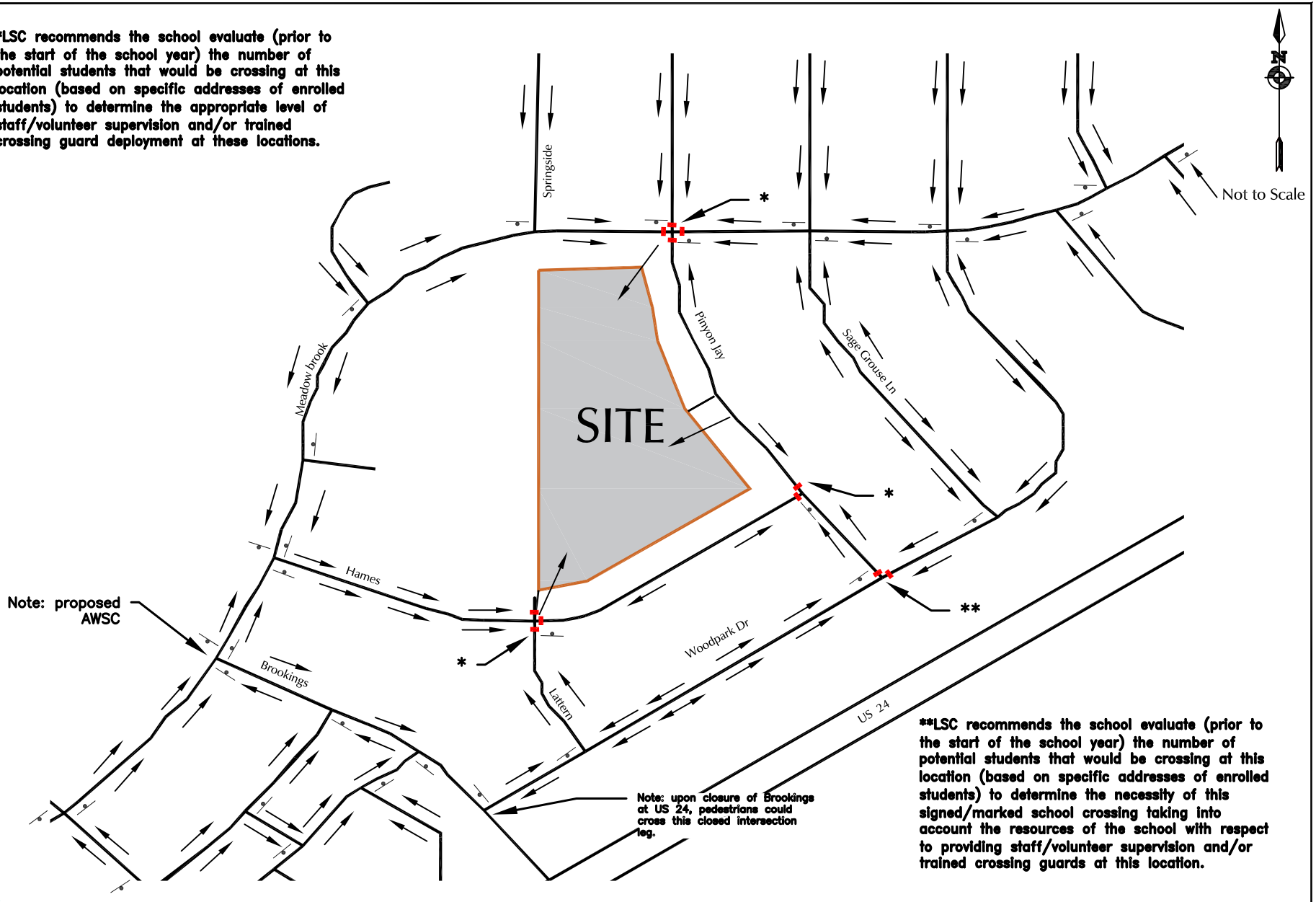
Note: Not to Scale

Deviation Exhibit

Mountain View Academy (LSC # 204140)

*LSC recommends the school evaluate (prior to the start of the school year) the number of potential students that would be crossing at this location (based on specific addresses of enrolled students) to determine the appropriate level of staff/volunteer supervision and/or trained crossing guard deployment at these locations.



**LSC recommends the school evaluate (prior to the start of the school year) the number of potential students that would be crossing at this location (based on specific addresses of enrolled students) to determine the necessity of this signed/marked school crossing taking into account the resources of the school with respect to providing staff/volunteer supervision and/or trained crossing guards at this location.

= Stop Sign

= Marked Crosswalk

= Pedestrian Route

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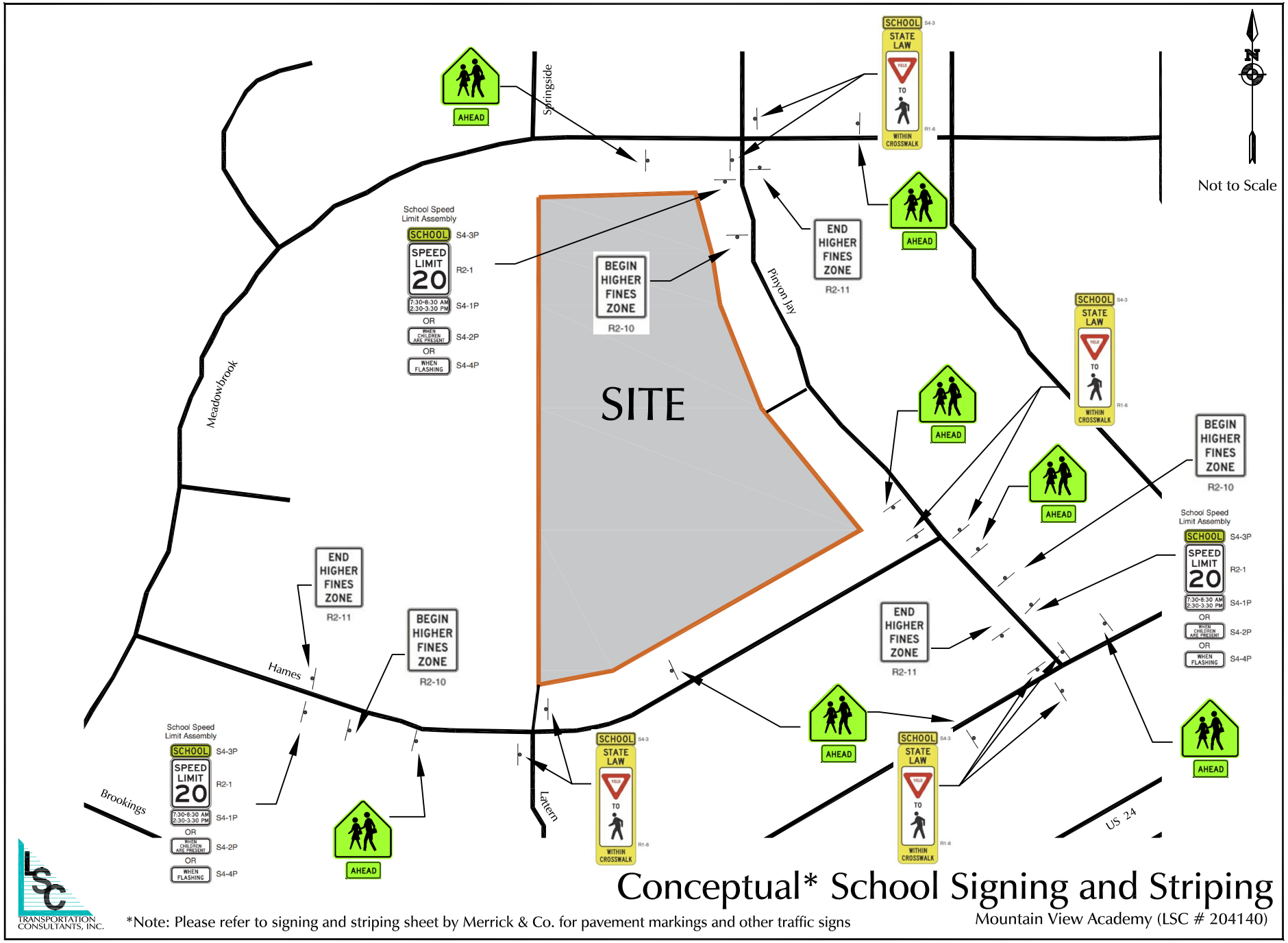
School Route Plan

Mountain View Academy (LSC # 204140)



Conceptual* School Signing and Striping

Mountain View Academy (LSC # 204140)

*Note: Please refer to signing and striping sheet by Merrick & Co. for pavement markings and other traffic signs

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