

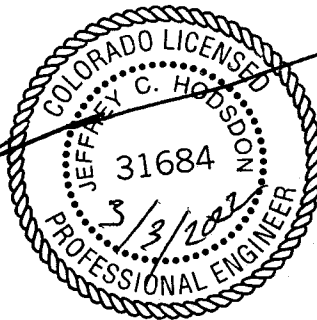


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Walden Preserve 2 Filing No. 5
Traffic Impact Study
(LSC #S214070)
March 1, 2022

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.



Developer's Statement

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

Matthew J. Dwyer

3/3/2022
Date

Walden Preserve 2 Filing No. 5

Traffic Impact Study

Mr. Matt Dunston
Walden Holdings 1, LLC
17145 Colonial Park Drive
Monument, CO 80132

MARCH 1, 2022

LSC Transportation Consultants
Prepared by: Kirstin D. Ferrin, P.E.
Reviewed by: Jeffrey C. Hodsdon, P.E.

LSC #S214070



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Excerpt of Pages from the July 2019 Traffic Memo for Filing No. 4



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March 1, 2022

Mr. Matt Dunston
Walden Holdings 1, LLC
17145 Colonial Park Drive
Monument, CO 80132

RE: Walden Preserve 2 Filing No. 5
El Paso County, Colorado
Traffic Impact Study
LSC #S214070

Dear Mr. Dunston:

LSC Transportation Consultants, Inc. has prepared this traffic impact study for Filing 5 of the Walden Preserve 2 development. As shown in Figure 1, the site is generally located east of State Highway (SH) 83 and north of Hodgen Road, north of Colorado Springs in unincorporated El Paso County, Colorado. More specifically, the site is located northeast of the intersection of Walden Way and Pinehurst Circle (south intersection).

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 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 site-generated 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: the traffic impacts have been quantified by determining the future levels of service at the key area intersections; and
- Recommendations for street functional classification, traffic controls, and auxiliary turn lanes.

RECENT TRAFFIC STUDIES

Appendix Table 1 includes a list of other recent traffic studies conducted by LSC in the vicinity of the site.

- LSC prepared a traffic impact study (TIS) for the entire Walden Preserve 2 PUD (dated September 14, 2014) and an addendum report for the Colorado Department of Transportation (dated November 3, 2014).
- A transportation memorandum was prepared for Filing No. 4 (dated March 14, 2019).
- A follow-up memo was prepared and submitted to CDOT. This was entitled "CDOT Access Permit Technical Memorandum" and was dated July 12, 2019.
- The most recent Monument Academy TIS report was dated April 7, 2020. This report accounted for this Filing No. 5 development in the background traffic estimates.

LSC also recently completed the traffic reports for the Rollin' Ridge development located southwest of State Highway 83/Hodgen Road, Settlers' View/Abert Ranch located generally northwest of Hodgen/Steppler, and Cherry Springs Ranch located north of Highway 105/Appaloosa. The current study is consistent with these reports.

SITE DEVELOPMENT, LAND USE, AND ACCESS

The site plan is shown in Figure 2. The 2014 PUD TIS assumed Walden Preserve 2 would be developed with lots for 116 single-family homes. Since completion of that report, 66 lots have been platted in Filings Nos. 1-4. Filing No. 5 is planned to be developed with 50 lots for single-family homes. This would bring the total number of lots within Walden Preserve 2 to 116, which matches the previous reports. Access to Filing No. 5 is proposed via Pinehurst Circle and is consistent with the access assumed in the previous reports.

As of early 2022, about 14 lots remain vacant in Filing No. 4 and nine homes are either built and occupied or under construction.

ROADWAY AND TRAFFIC CONDITIONS

Area Roadways

Figure 1 shows the roadways in the vicinity of the site. Copies of the *2016 El Paso County Major Transportation Corridors Plan (MTCP) 2040 Roadway Plan* and *2016 MTCP 2060 Corridor Preservation Plan*, with the site location identified on them, have been attached to this report. The major roadways are identified below followed by a brief description of each.

State Highway 83 (SH 83) extends from Colorado Springs north to Parker and areas of southeast Denver. Near the site, SH 83 is classified as a Regional Highway (R-A). At this location SH 83 is a two-lane rural highway with two- to four-foot shoulders and a speed limit of 60 miles per hour (mph). The intersections with Hodgen Road and Walker Road/Highway 105 are signalized.

Highway 105 is a Principal Arterial that extends east from Interstate 25 to State Highway 83. Highway 105 is currently a two-lane roadway east of Jackson Creek Parkway, but the *Major Transportation Corridors Plan (MTCP)* shows a future four-lane cross section.

Walker Road extends east from SH 83 and is shown as a 4-lane Minor Arterial roadway on the *2016 MTCP Update and 2040 Roadway Plan*. It has recently been improved between SH 83 and Jane Lundeen Road but remains a two-lane roadway east of Jane Lundeen Road.

Hodgen Road is a two-lane paved Rural Minor Arterial road that extends west from the intersection of Roller Coaster Road/Baptist Road to Eastonville Road. The speed limit on Hodgen Road is generally 55 mph east of SH 83.

Walden Way is a local roadway that extends southeast from SH 83 to the intersection of Timber Meadows Drive/Pond View Place.

Pinehurst Circle loops south of Walden Way and then extends north through the Walden Preserve 2 development and then west to SH 83. The segment through Filing No. 5 is currently a gravel/temporary road connection, but it is planned to be improved to the Rural Local standard (which is a paved roadway) with the currently proposed subdivision filing. The intersection with SH 83 is restricted to right-in only. The section of Pinehurst Circle between SH 83 and Jane Lundeen Drive was recently constructed as an Urban Non-Residential Collector. The section between Jane Lundeen Drive and the Monument Academy access was recently constructed as an Urban Local. The section between the Monument Academy access and Walden Way is currently gravel.

Timber Meadows Drive is a Rural Minor Collector roadway that extends south from the intersection of Walden Way/Pond View Place to just south of Hodgen Road. The posted speed limit is 30 mph.

Planned CDOT and County Projects

The Colorado Department of Transportation (CDOT) has indicated that a passing lane project is planned on SH 83 just north of Walker Road in both directions of SH 83. It is our understanding that the northbound right-turn acceleration lane north of Walker Road will be extended north as a second northbound through lane. The segment would also provide two southbound through lanes through the project segment. However, this second southbound through lane would not extend through the Highway 105/SH 83/Walker Road intersection.

The *Highway 105 Corridor Study Corridor Preservation Plan* for El Paso County Department of Public Services dated November 2012 (revised May 2013) shows future expansion of Highway 105 to one through lane per direction plus a center left-turn median area (painted) west of SH 83.

Existing Traffic Volumes

Figure 3a shows the recent traffic volumes at the intersections in the vicinity of the site. In addition to the typical morning and afternoon peak hours, the volumes shown in Figure 3 also include one-hour traffic volumes in the midafternoon that correspond to the dismissal time at Monument Academy located southeast of SH 83/Walker. These traffic volumes are based on traffic counts conducted by LSC in August, September, and December 2021. The traffic counts were conducted from 6:30 am to 8:30 am, 2:45 to 4:00 pm and from 4:00 to 6:00 pm. 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

Level of Service	Signalized Intersections	Unsignalized Intersections
	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 signal-controlled intersections of SH 83/Highway 105/Walker and SH 83/Hodgen were analyzed to determine the existing levels of service using Synchro. The stop-sign-controlled intersections of SH 83/Walden and Hodgen/Timber Meadows were analyzed to determine the existing levels of service based on the unsignalized method of analysis procedures found in the *Highway Capacity Manual*, 6th Edition by the Transportation Research Board. The intersection of Jane Lundeen/Walker was analyzed using Sidra. The peak-hour factors used for each approach are based on the traffic volumes for the peak fifteen minutes of the entire intersection. If the peak 15 minutes for an approach occurs during an interval other than the peak 15 minutes of the entire intersection, the suggested peak-hour value based on the total approach volume from Table 9-1 of the Synchro Studio 10 User Guide was used instead. Figure 3b shows the 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. The level of service (LOS) reports are attached.

Crash History

LSC obtained crash history data from the Colorado State Highway Patrol for the section of SH 83 in the vicinity of Walden Way for the time period beginning early February 2018 to January 2022. During that time period, there were four reported crashes. Three of the four crashes occurred in 2018 and one occurred in early 2020. No reported crashes occurred in 2019. No reported crashes occurred between early 2020 (following the one reported crash in early 2020) and January 2022. Three of the crashes involved a southbound vehicle turning left onto Walden Way and the fourth crash involved a northbound vehicle turning right onto Walden Way. Note: Monument Academy East opened in September 2020.

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.

Figure 4a shows the short-term background traffic volumes. The background volumes are estimates by LSC based on the existing traffic volumes shown in Figure 3a plus additional traffic projected to be generated by buildout of the approved Walden Preserve 2 Filing 4.

Figure 4b shows the lane geometry and traffic control assumed for the study-area intersections in the short-term analysis.

Figure 5a 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 three percent per year) on SH 83 and previous work completed by LSC in the area including work done for the Walden development and the Monument Academy.

Figure 5b shows the lane geometry and traffic control assumed for the study-area intersections in the 2040 analysis.

TRIP GENERATION

The site-generated vehicle trips were estimated using the nationally published trip-generation rates from *Trip Generation, 11th Edition, 2021* by the Institute of Transportation Engineers (ITE). Table 2 shows the current trip-generation estimate for the currently proposed Filing 5 and the entire Walden Preserve 2 development at buildout. Table 2 also shows the trip-generation

estimate from the PUD Plan TIS and amendment report for comparison. The trip-generation estimate from the previous report was based on the trip-generation rates from the Trip Generation 9th edition.

As shown in Table 2, the currently proposed filing is projected to generate about 472 new vehicle trips on the average weekday, with about one-half of the vehicles entering and one-half of the vehicles exiting in a 24-hour period. During the morning peak hour, about 9 vehicles would enter and 26 vehicles would exit the site. During the mid-afternoon peak hour of Monument Academy (2:45-3:45 pm), about 21 vehicles would enter and 15 vehicles would exit the site. During the afternoon peak hour, about 30 vehicles would enter and 17 vehicles would exit the site.

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. Figure 6 shows the trip-distribution estimates. The directional-distribution estimates have been based on the location of the site with respect to the regional residential employment, commercial, and activity centers; the land use proposed; the access/roadway connections assumed; the roadway network; and the most recent traffic counts.

When the distribution percentages (from Figure 5) are applied to the trip-generation estimates (from Table 2), the resulting site-generated traffic volumes can be determined. Figures 7 shows the site-generated traffic-volume estimates.

PROJECTED TOTAL TRAFFIC

Figure 8a shows the short-term total traffic volumes at all the study-area intersections. These volumes are the sum of the short-term background traffic volumes (from Figure 4a) plus the site-generated traffic volumes (from Figure 7).

Figure 8b shows the lane geometry and traffic control assumed for the study-area intersections in the short-term analysis.

Figure 9a shows the 2040 total traffic volumes. These volumes are the sum of the 2040 background traffic volumes (from Figure 5a) plus the site-generated traffic volumes (from Figure 7).

Figure 9b shows the lane geometry and traffic control assumed for the study-area intersections in the 2040 analysis.

PROJECTED LEVELS OF SERVICE

The key intersections in the vicinity of the site have been analyzed to determine the projected levels of service for the short-term and 2040 background and total traffic volumes, based on the signalized method of analysis from Synchro, the unsignalized method of analysis procedures outlined in the *Highway Capacity Manual, 6th Edition* by the Transportation Research Board and the roundabout method of analysis using Sidra. The level of service reports are attached.

SH 83/Walker/Highway 105

The intersection of SH 83/Walker/Highway 105 was recently improved to add protected phasing for the left-turn movements. All movements at this intersection are projected to operate at LOS D or better during the peak hours based on the short-term total traffic volumes. By 2040, it was assumed that SH 83, Highway 105, and Walker Road would be widened to provide two through lanes in each direction. Based on the 2040 total traffic volumes and the lane geometry shown in Figure 9b all movements are projected to operate at LOS D during the peak hours except for the westbound left-turn movement which is projected to operate at LOS E.

SH 83/Walden Way

The intersection of SH 83/Walden Way is currently a full-movement, stop-sign-controlled intersection. All movements are projected to operate at LOS C or better during the peak hours through 2040.

Pinehurst Circle/Walden Way

All movements at the stop-sign-controlled intersection of Pinehurst Circle/Walden Way are currently operating at LOS A during the peak hours and are projected to continue to operate at LOS A through 2040.

Walker/Jane Lundeen

The intersection of Walker/Jane Lundeen was recently constructed as a modern roundabout. This roundabout is being designed to be expandable to a multi-lane roundabout to accommodate a four-lane Walker Road in the future. All movements at this intersection are projected to operate at LOS D or better during the peak hours based on the projected 2025 and 2040 total traffic volumes.

Timber Meadows Drive/Hodgen Road

All movements at the stop-sign-controlled intersection of Timber Meadows Drive/Hodgen Road are projected to continue to operate at LOS D or better during the peak hours based on the projected short-term total traffic volumes. By 2040 the northbound approach is projected to

operate at LOS E during the peak hours. It is unlikely that a traffic-signal warrant would be met at this intersection.

SH 83/WALDEN WAY INTERSECTION

This section contains an update regarding the W traffic report entitled "CDOT Access Permit Techn link to this report (complete copy) is attached and is also attached for reference.

Contact the review engineer (Gilbert LaForce) to discuss.

Is the requirement to convert to RI/RO under CDOT or County's purview?

Current Recommendation:

If it's under the County's purview then a deviation request from the criteria is required for the County Engineer's determination.

Based on the existing traffic volumes and the criteria contained in the State of Colorado Highway Access Code, a southbound left-turn lane would be required on SH 83 approaching Walden Way or the intersection would need to be converted to a right-in/right-out by constructing a raised island to prohibit left-turn movements. However, given the updated volume data, crash history data, traffic projections and the Pinehurst Urban Local paved road connection with Filing No. 5, the findings and recommendations in the July 2019 memo remain valid and LSC recommends that Filing 5 be allowed to proceed with the Walden Way/SH 83 intersection remaining a full-movement intersection, as is, but with these conditions:

Key traffic volume and safety information will be updated, and this recommendation would be revisited with future development of the area adjacent to Monument Academy (located to the west and northwest). LSC recommends the following as part of the terms and conditions of the permit for Filing No. 5

- Obtain crash history for the intersection on a semi-annual basis and send these data along with a brief summary to CDOT.
- Conduct semi-annual PM peak-hour turning-movement count data at this intersection and send these results to CDOT.
- The applicant will provide financial assurances for mitigating traffic-safety problems at this intersection, should problems arise. This could involve the installation of signing, markings, and potentially the installation and maintenance of centerline flexible, plastic delineator posts/traffic separators. See Exhibit No. 1 for examples of potential interim mitigation measures.
- Permit terms and conditions related to the Walden Way/SH 83 intersection would be reevaluated with the future access permit(s) for those future development sites adjacent to Monument Academy.

Summary/Background:

- LSC and the applicant met with CDOT in 2019 as part of the Walden Preserve Filing No. 4 application and subsequently submitted a technical memorandum dated July 19, 2019. That report included analysis of Walden/SH 83 and summarized discussions at that time regarding options for the intersection including road closure at SH 83 or restriction to right-in/right-out. The applicant indicated to LSC that many of the residents were resistant to either closing off the intersection entirely or installing major improvements to it, for instance constructing a raised island to prohibit left-turn movements and converting the intersection to a right-in/right-out.
- This report contains recent volume counts at the intersection.
- Although based on the existing traffic volumes shown in Figure 3 and the criteria contained in the State of Colorado Highway Access Code, the turning-volume threshold for a southbound left-turn lane is met on SH 83 approaching Walden Way, the recorded volumes are generally consistent with projections contained in the July 2019 memo. The memo (pages attached for reference) documented the outcomes from meetings with CDOT regarding Walden Way with respect to future development and the connection to Walker Road (which has since been constructed, except for the paving of Pinehurst Circle through Filing 5).
- Updated crash history is included in this report (through January 2022), which indicates no reported crashes at the intersection since early 2020 (and since the opening of Monument Academy to the north).
- Based on previous discussions with CDOT (summarized in the July 2019 memo), the current and projected southbound left-turn volumes, the crash history, and the completion of a connection to Walker Road, the findings and recommendations in the July 2019 memo remain valid. Please refer to the attached excerpt of pages 10 and 11 of that report for details.

Details:

- The access code turning-volume threshold for a left-turn lane is 10 vehicles per hour. In 2019 LSC counted 11 southbound left-turn vehicles at the intersection of Walden/SH 83 during the afternoon peak hour. At the time of the 2019 traffic counts, there was no connection north of Pinehurst Road to Walker Road. The intersection was recounted in August 2021 following the opening of Monument Academy and the associated construction of Jane Lundeen Drive between Pinehurst Circle and Walker Road and construction of Pinehurst Circle to its final cross section from a right-in only access to US Hwy 24 to the Monument Academy access. Pinehurst Drive had also been constructed as a gravel road between the Monument Academy access and Walden Way at the time of the 2021 counts. During the afternoon peak hour, 12 southbound left-turning vehicles were counted. The 2021 traffic counts were also conducted during dismissal time for Monument Academy. From 2:50 to 3:30 p.m., 15 southbound left-turning vehicles were counted.

- As shown in Figure 4a, an additional 2 southbound left-turning vehicles are anticipated to be added to the intersection of Walden/SH 83 during both the school peak hour and the afternoon peak hour, due to development of vacant lots within the study area, including the approved Walden Preserve Filing No. 4. The currently proposed Walden Preserve Filing No. 5 is projected to add an average of less than one vehicle per hour to the southbound left-turn movement at this intersection. As shown in Figure 8a, the projected total short-term left-turn volume is 17 vehicles during the school peak hour and 12 vehicles during the afternoon peak hour. The 2019 technical memorandum projected 15 vehicles during the “intermediate-term” afternoon peak hour.
- LSC obtained crash history data from the Colorado State Highway Patrol for the section of SH 83 in the vicinity of Walden Way from early February 2018 to January 2022. During this time period, four crashes were reported. Three of the crashes occurred in 2018 and one occurred in early 2020. No reported crashes occurred in 2019. No reported crashes occurred between early 2020 and January 2022. Note: Monument Academy East opened in September 2020.

STREET CLASSIFICATIONS

Figure 10 shows the recommended street classifications in the vicinity of the site. Pinehurst Circle through Filing No. 5 should be classified as a Rural Local roadway. The following was a recommendation in the Monument Academy TIS report:

“Exiting traffic at the southeast school access to Pinehurst Circle will likely need to be restricted to right-out traffic turning movements only to prevent cut-through traffic on Pinehurst Circle to the south by motorists wishing to travel generally south and southwest (beyond the Walden area). Pinehurst Circle is a Rural Local road through the Walden Preserve 2 development to the south.”

CONCLUSIONS AND RECOMMENDATIONS

Trip Generation

Walden Preserve Filing 5 is projected to generate about 472 new vehicle trips on the average weekday, with about one-half of the vehicles entering and one-half of the vehicles exiting in a 24-hour period. During the morning peak hour, about 9 vehicles would enter and 26 vehicles would exit the site. During the mid-afternoon peak hour of Monument Academy (2:45-3:45 p.m.), about 21 vehicles would enter and 15 vehicles would exit the site. During the afternoon peak hour, about 30 vehicles would enter and 17 vehicles would exit the site.

Level of Service

- Based on the 2040 total traffic volumes and the lane geometry shown in Figure 9, all movements at the signal-controlled intersection of SH 83/Highway 105/Walker are projected to operate at LOS D during the peak hours except for the westbound left-turn movement, which is projected to operate at LOS E.
- All approaches at the recently constructed intersection of Walker/Jane Lundeen are projected to operate at LOS D or better during the peak hours through 2040.
- All movements at the stop-sign-controlled intersection of Timber Meadows Drive/Hodgen Road are projected to continue to operate at LOS D or better during the peak hours based on the projected short-term total traffic volumes. By 2040, the northbound approach is projected to operate at LOS E during the peak hours. It is unlikely that a traffic-signal warrant would be met at this intersection.
- All movements as the stop-sign-controlled intersections of SH 83/Walden Way and Walden Way/Pinehurst Circle are projected to operate at LOS C or better during the peak hours through 2040.

Transportation Improvement Fee Program

- The proposed subdivision filing will be required to participate in the Countywide Transportation Improvement Fee Program. The applicant will opt out of the PID options and the “full fee” will be paid at the building permit stage.

Recommended Road Improvements & Street Classification

- Pinehurst Circle through Filing No. 5 should be completed to County Rural Local standards.

CDOT Access Permit Items

- **Signal Contribution Per Access Permit No. 215017:** A CDOT access-permit application will need to be submitted to CDOT for this filing for purposes of (in addition to addressing the recent CDOT comments) processing both the amount guaranteed with the letter of credit originally provided to CDOT plus an amount due of \$14,597 for the previously identified fair-share contribution associated with this filing toward the traffic signal (now in place) at SH 83 and Walker Road. This amount represents the prorated amount for 50 lots (the original escrow table included in the Access Permit showed \$15,181.04 for 52 lots for this area, which was previously called Filings 4-6).
- **Findings and recommendations from the July 2019 Traffic Memo:** Based on previous discussions with CDOT (summarized in the July 2019 memo), the current and projected southbound left-turn volumes, the crash history and the completion of a connection to Walker Road, the findings and recommendations in the July 2019 memo remain valid. Please refer to the “Walden Way/SH 83 Intersection” section of this report and the attached excerpt of pages 10 and 11 from the July 2019 traffic memo.

* * * * *

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

Respectfully Submitted,

LSC TRANSPORTATION CONSULTANTS, INC.

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

JCH/KDF:jas

Enclosures: Tables 2-3
Figures 1-11
Traffic Counts
Level of Service Reports
Sidra Reports
MTCP Maps
Appendix Table 1
Crash History
Excerpt of Pages from the July 2019 Traffic Memo for Filing No. 4

Tables 2-3



**Table 2
Walden Preserve 2 Filing No. 5
Trip Generation Estimate**

Filing	ITE Land Use Code	Land Use Description	Trip Generation Units	Average Weekday Traffic	Trip Generation Rates ⁽¹⁾						Total Trips Generated						
					Morning Peak Hour		School Peak Hour		Afternoon Peak Hour		Morning Peak Hour		School Peak Hour		Afternoon Peak Hour		
					In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	
Currently Proposed Filing																	
5	210	Single-Family Detached Housing	50 DU ⁽²⁾	9.43	0.18	0.52	0.41	0.29	0.59	0.35	472	9	26	21	15	30	17
Recorded Plats																	
1	210	Single-Family Detached Housing	21 DU	9.43	0.18	0.52	0.41	0.29	0.59	0.35	198	4	11	9	6	12	7
2	210	Single-Family Detached Housing	18 DU	9.43	0.18	0.52	0.41	0.29	0.59	0.35	170	3	9	7	5	11	6
3	210	Single-Family Detached Housing	4 DU	9.43	0.18	0.52	0.41	0.29	0.59	0.35	38	1	2	2	1	2	1
4	210	Single-Family Detached Housing	23 DU	9.43	0.18	0.52	0.41	0.29	0.59	0.35	217	4	12	9	7	14	8
		Total Filings 1, 2 & 3	66 DU								622	12	34	27	19	39	23
		Total Filings 1-5	116 DU								1,094	21	60	48	34	69	40
Buildout Trip Generation Estimate from Walden Preserve 2 Preliminary Plan and Filings 1 and 2 Updated Traffic Impact Study by LSC dated 9/17/2014																	
---	210	Single-Family Detached Housing	116 DU ⁽²⁾	9.52	0.19	0.56	---	---	0.63	0.37	1,104	22	65	---	---	73	43

Update text to include Fil 4.

Notes:

(1) Source: "Trip Generation, 11th Edition, 2021" by the Institute of Transportation Engineers (ITE)

(2) DU = Dwelling Units

Table 3
Signal Escrow Analysis
SH 83/Walker/Highway 105
Walden Preserve Filing 5

Escrow Amount from CDOT Access Permit No. 215017			Currently Proposed Plan			
Filing	Number of Lots	Portion of total cost estimate of \$61,600	Filing	Number of Lots	Status	Portion of total cost estimate of \$61,600
Original Walden Preserve Filing 1	81	\$23,647.39	Original Walden Preserve Filing 1	81	Platted & Recorded	\$23,647.39
Original Walden Preserve Filing 1	14	\$4,087.20	Original Walden Preserve Filing 1	14	Platted & Recorded	\$4,087.20
Walden Preserve 2 Filing 1	22	\$6,422.75	Walden Preserve 2 Filing 1	21	Platted & Recorded	\$6,130.81
Walden Preserve 2 Filing 2	20	\$5,838.86	Walden Preserve 2 Filing 2	18	Platted & Recorded	\$5,254.98
Walden Preserve 2 Filing 3	22	\$6,422.75	Walden Preserve 2 Filing 3	4	Platted & Recorded	\$1,167.77
Walden Preserve 2 Filing 4	14	\$4,087.20	Walden Preserve 2 Filing 4	23	Platted & Recorded	\$6,714.69
Walden Preserve 2 Filing 5	13	\$3,795.26	Walden Preserve 2 Filing 5	50	Currently Proposed	\$14,597.16
Walden Preserve 2 Filing 6	25	\$7,298.58				
Total	211	\$61,600.00	Total	211		\$61,600.00

Source: LSC Transportation Consultants, Inc.

Dec-21

Figures 1-11



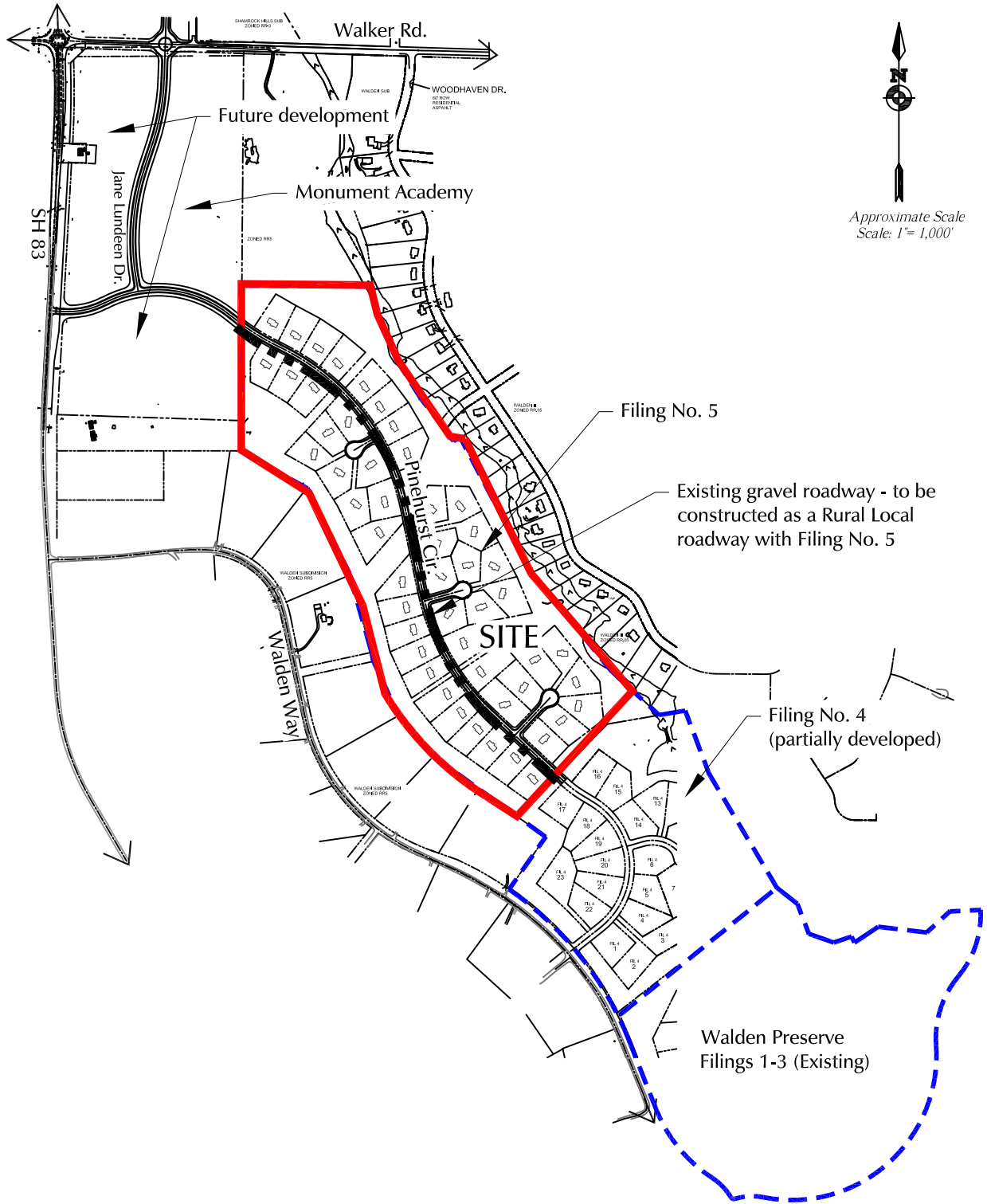


North Arrow
 Approximate Scale
 Scale: 1" = 2,000'

Figure 1

Vicinity Map

Walden Preserve Filing 5 (LSC #S214070)

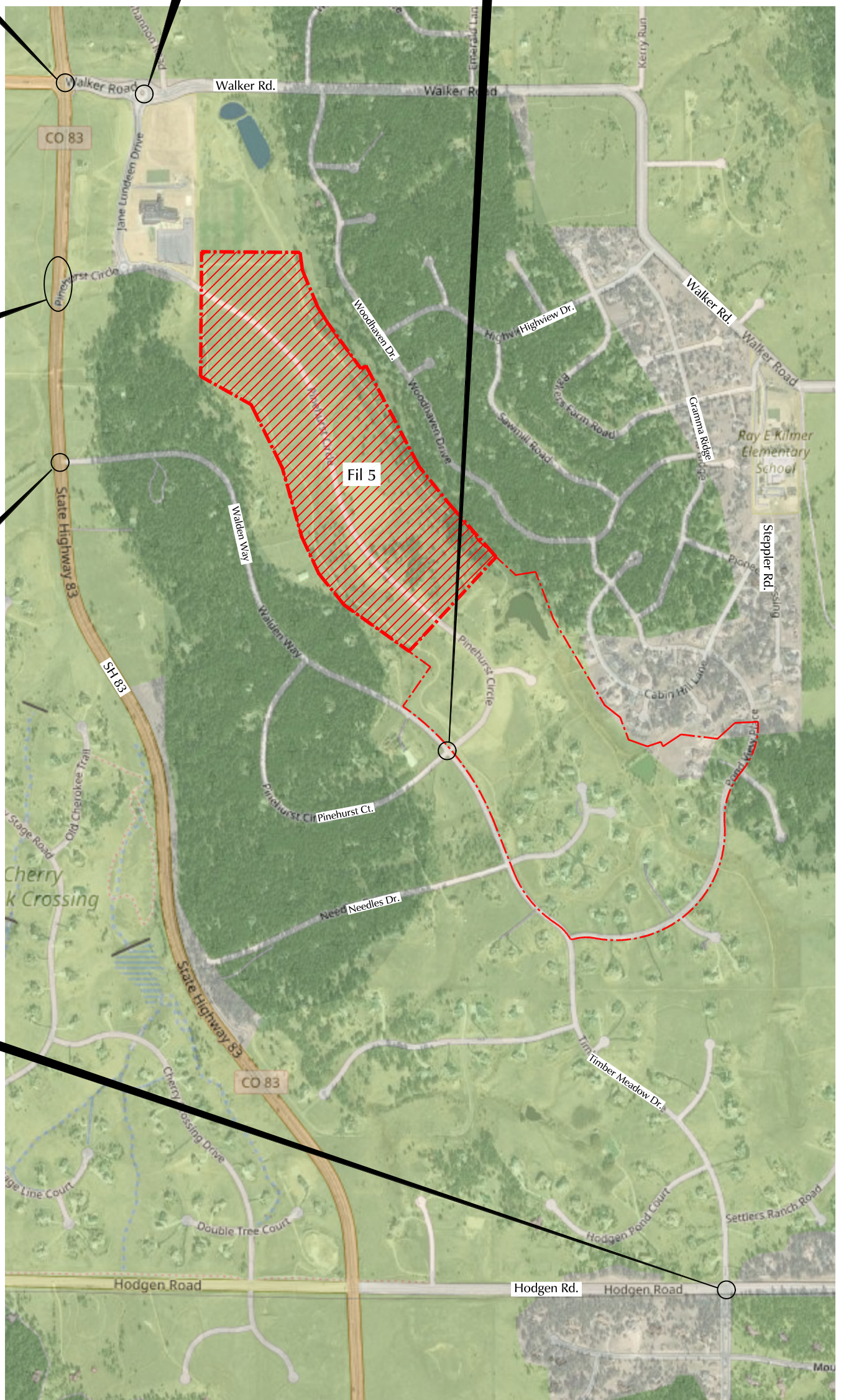
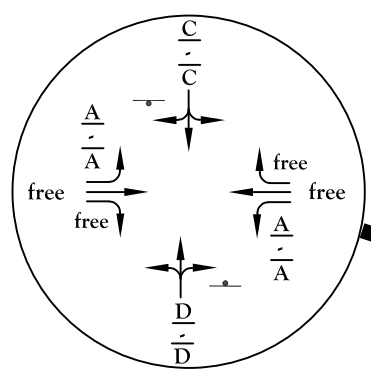
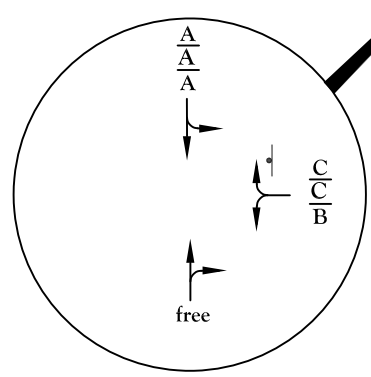
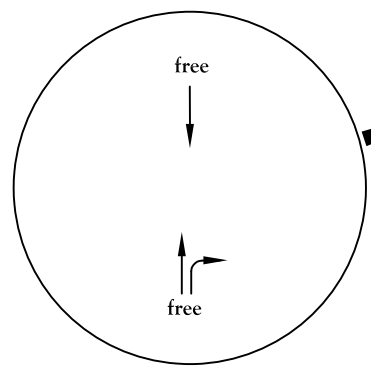
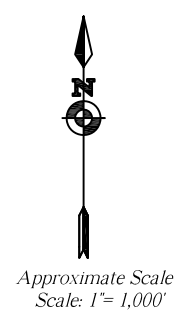
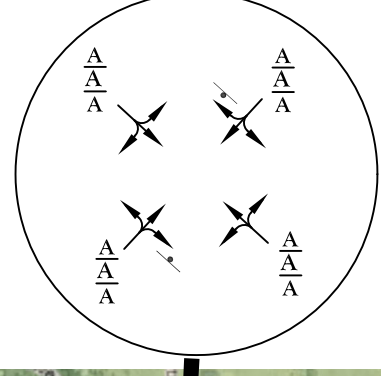
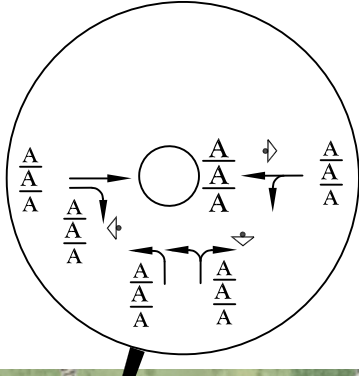
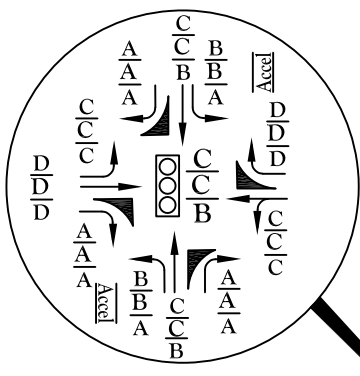


Approximate Scale
Scale: 1" = 1,000'

Figure 2
Site Plan

Walden Preserve Filing 5 (LSC #S214070)





LEGEND:

- $\frac{A}{B}$ = AM Individual Movement Peak-Hour Level of Service
- $\frac{B}{B}$ = PM Individual Movement Peak-Hour Level of Service
- $\frac{C}{C}$ = AM Entire Intersection Peak-Hour Level of Service
- $\frac{C}{C}$ = PM Entire Intersection Peak-Hour Level of Service
- = Stop Sign
- = Traffic Signal

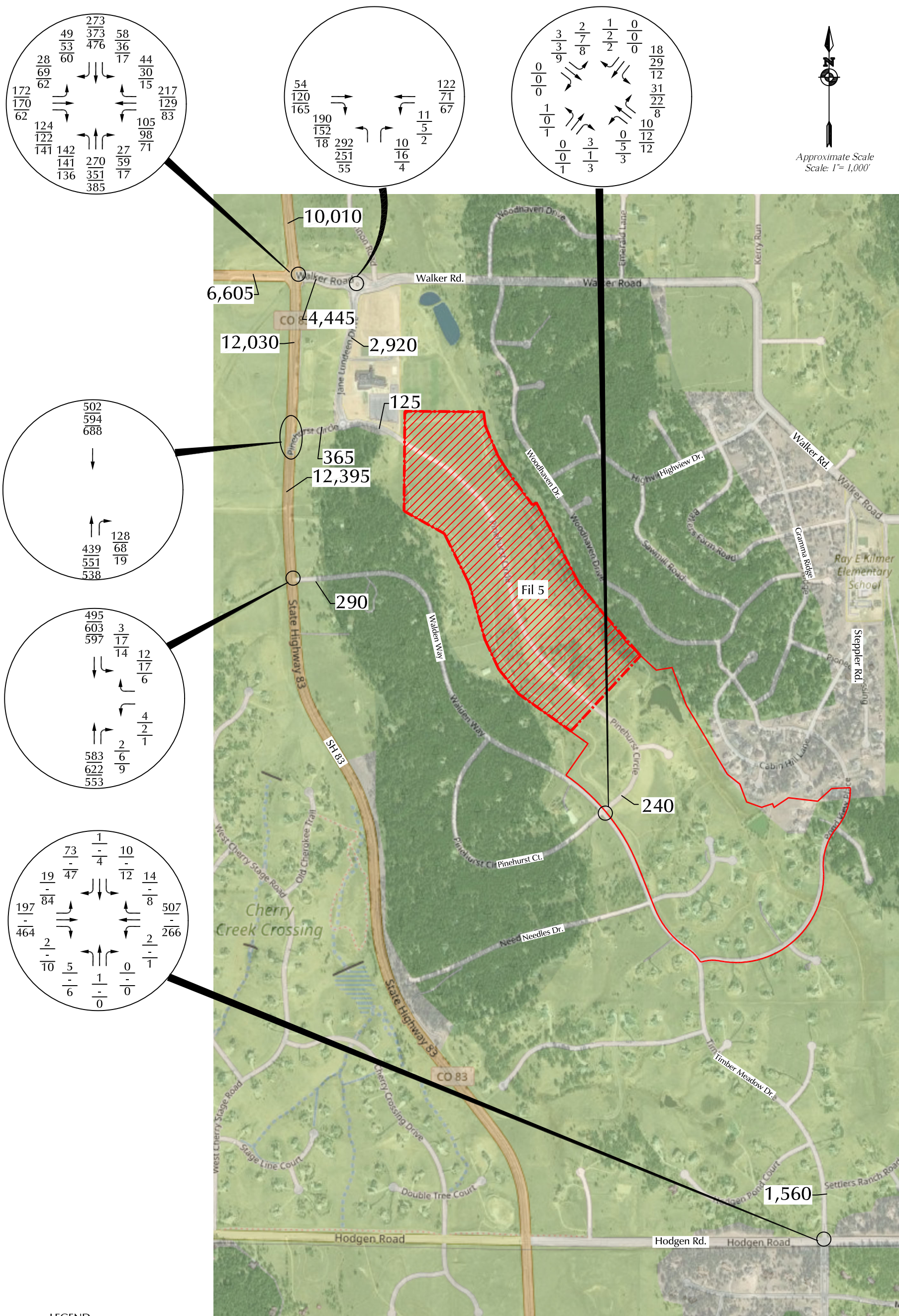
- = Modern Roundabout
- = Yield Sign

Existing Lane Geometry and Level of Service

Walden Preserve Filing 5 (LSC #S214070)



Figure 3b

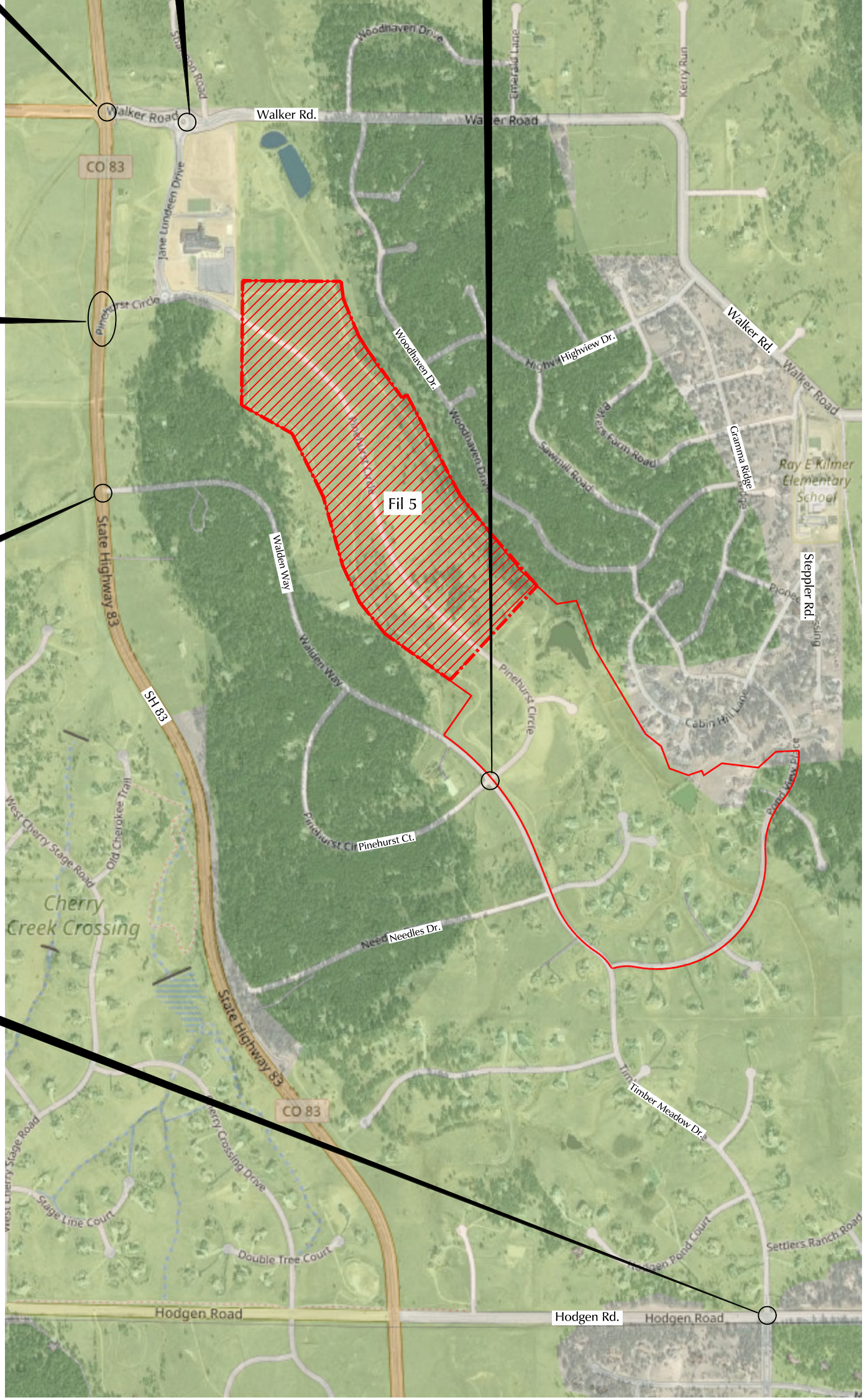
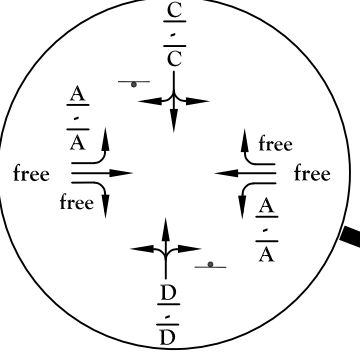
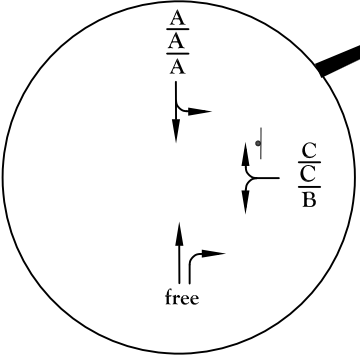
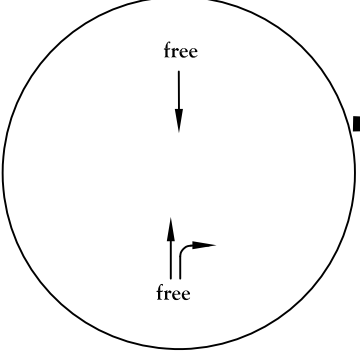
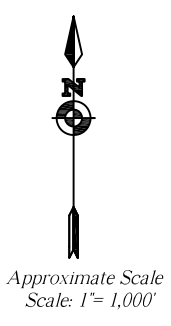
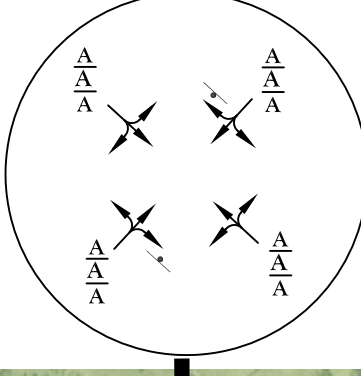
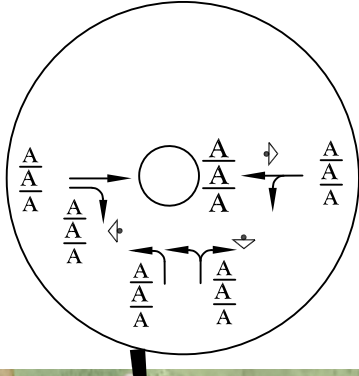
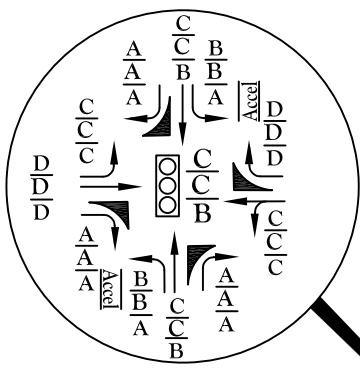


Approximate Scale
Scale: 1" = 1,000'

LEGEND:
 XX = AM Weekday Peak-Hour Traffic (7:15-8:15am)(vehicles per hour)
 XX = School Peak-Hour Traffic (2:15-3:15pm)
 XX = PM Weekday Peak-Hour Traffic (vehicles per hour)
 X,XXX= Average Daily Traffic (vehicles per day)



Figure 4a
 Short-Term Background Traffic
 Walden Preserve Filing 5 (LSC #S214070)



LEGEND:

- $\frac{A}{B}$ = AM Individual Movement Peak-Hour Level of Service
- $\frac{C}{C}$ = PM Individual Movement Peak-Hour Level of Service
- $\frac{C}{C}$ = AM Entire Intersection Peak-Hour Level of Service
- $\frac{C}{C}$ = PM Entire Intersection Peak-Hour Level of Service

- = Modern Roundabout
- ◊ = Yield Sign

- ⊥ = Stop Sign
- ⊞ = Traffic Signal

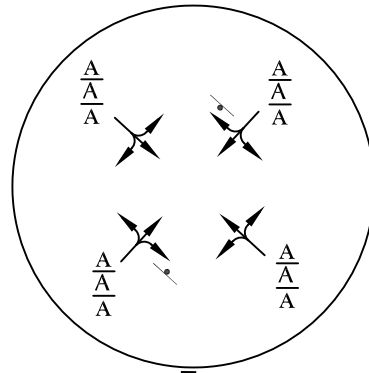
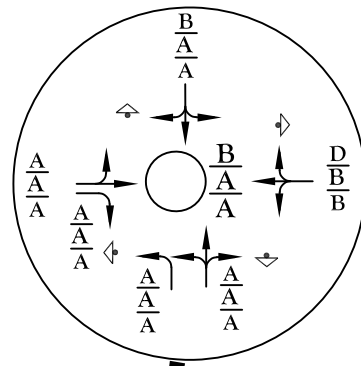
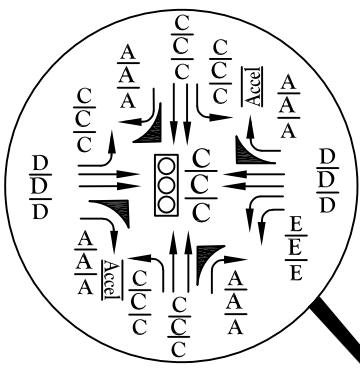
*RI/RO = "Right-in/right-out"
(left turns prohibited)



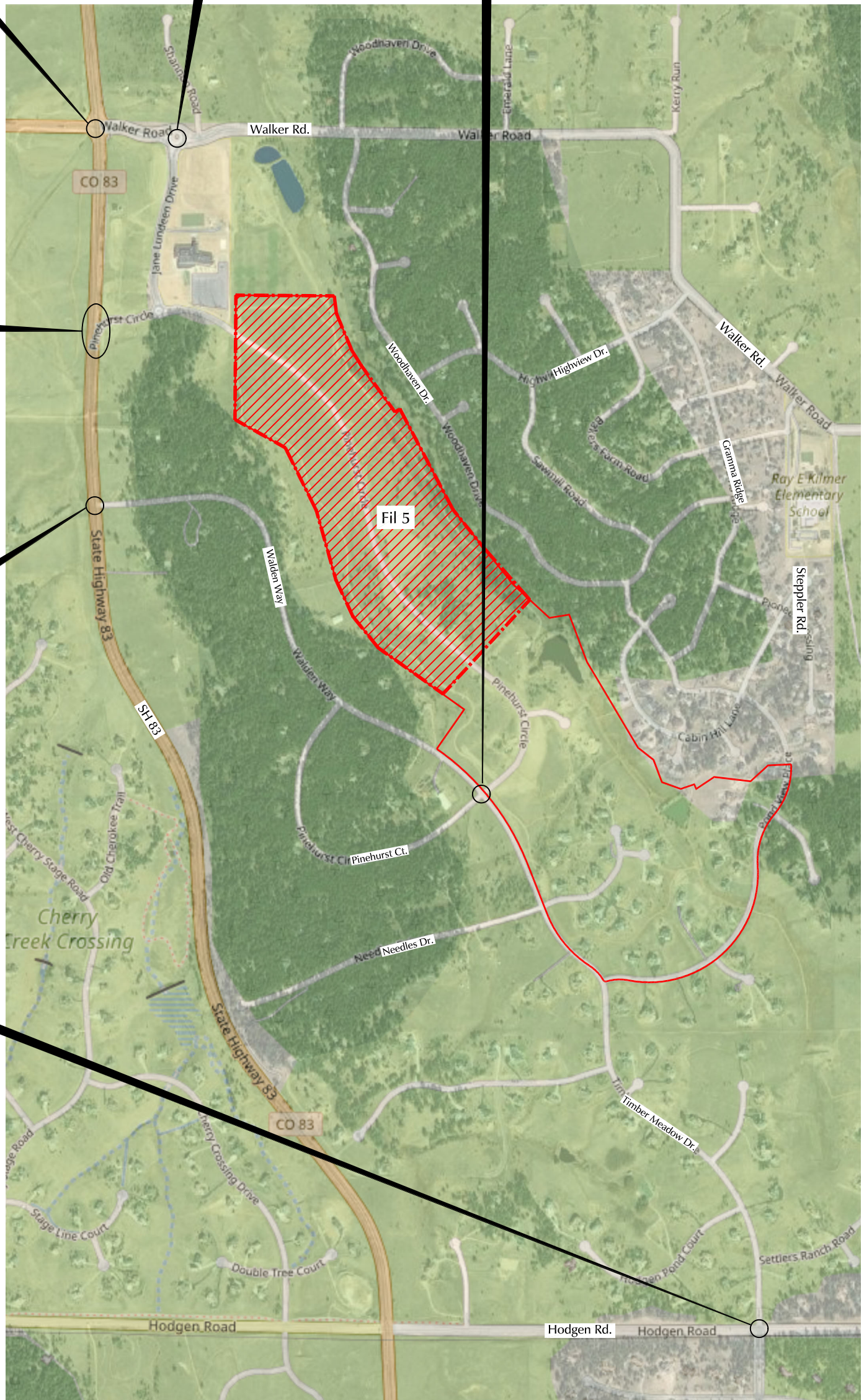
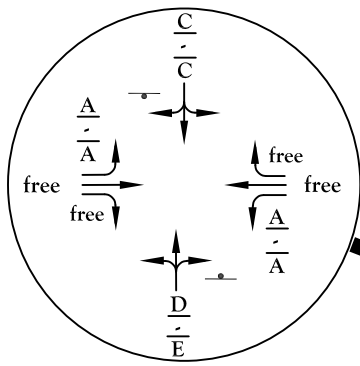
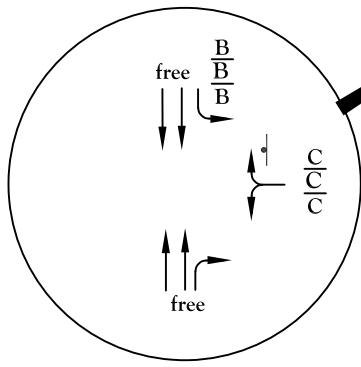
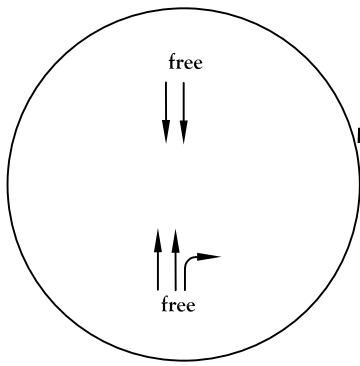
Short-Term Background Lane Geometry and Level of Service

Figure 4b

Walden Preserve Filing 5 (LSC #S214070)



Approximate Scale
Scale: 1"= 1,000'



LEGEND:

- $\frac{A}{B}$ = AM Individual Movement Peak-Hour Level of Service
- $\frac{B}{A}$ = PM Individual Movement Peak-Hour Level of Service
- $\frac{C}{C}$ = AM Entire Intersection Peak-Hour Level of Service
- $\frac{C}{C}$ = PM Entire Intersection Peak-Hour Level of Service
- \downarrow = Stop Sign
- \square = Traffic Signal

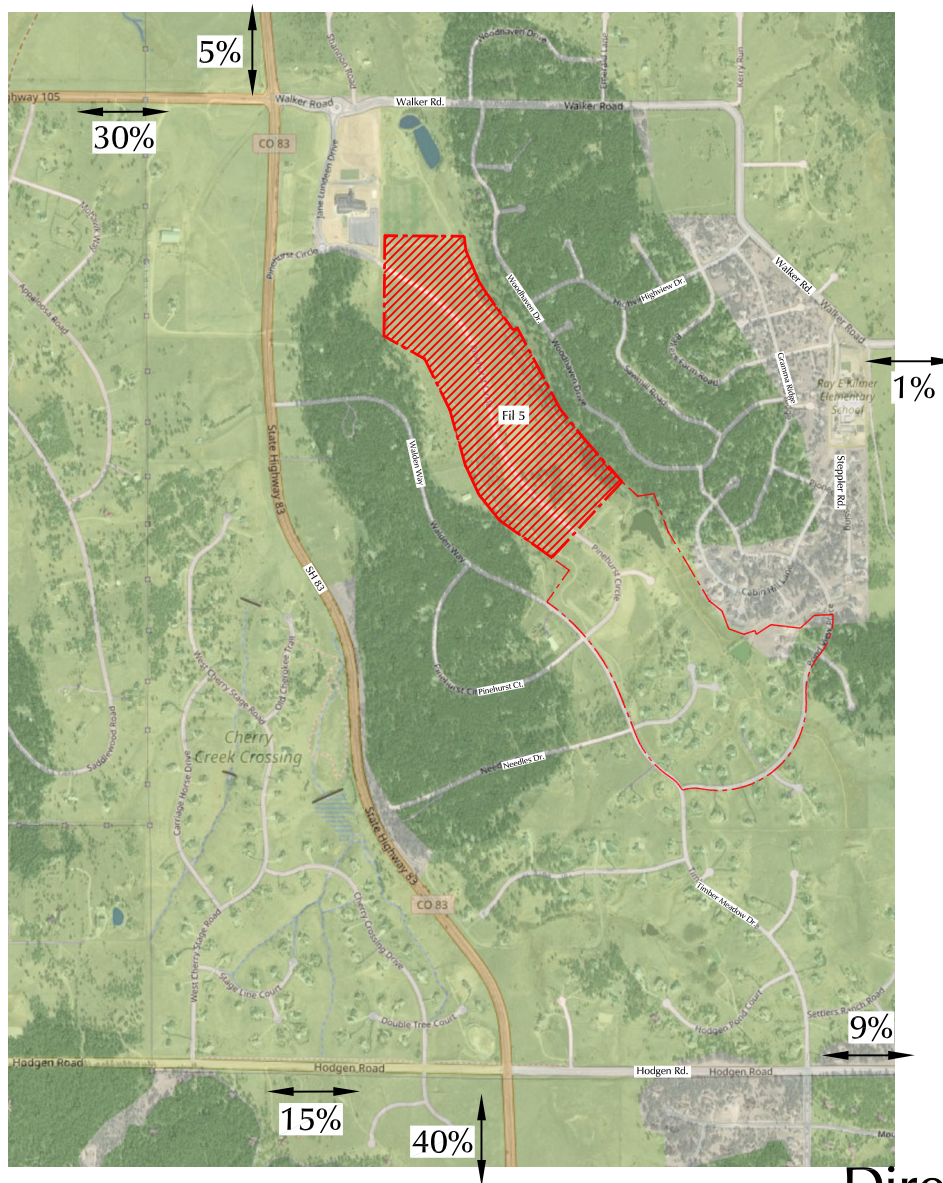
- \bigcirc = Modern Roundabout
- \triangleleft = Yield Sign




Long-Term Background Lane Geometry and Level of Service

Walden Preserve Filing 5 (LSC #S214070)

Figure 5b




 Approximate Scale
 Scale: 1" = 1,200'

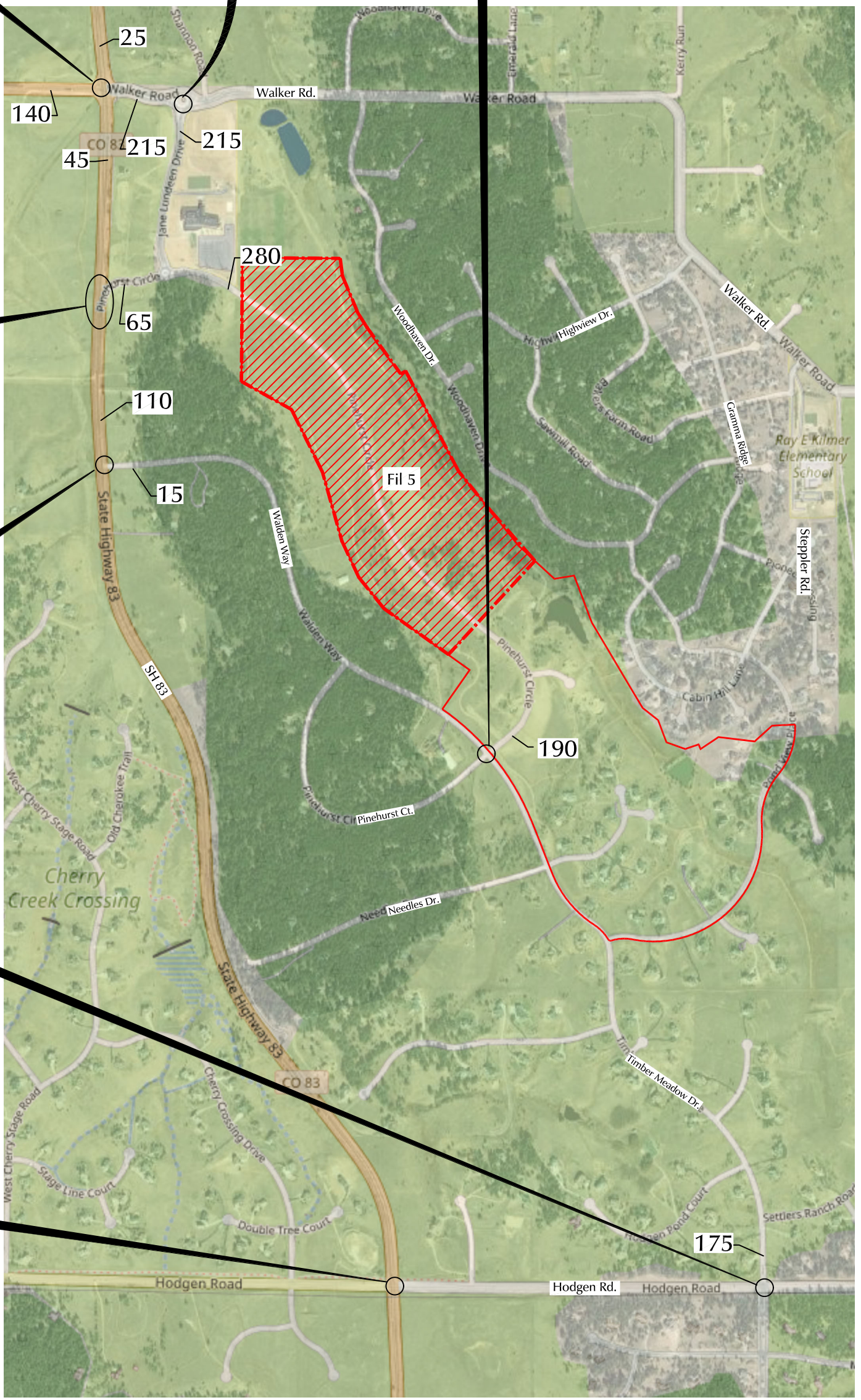
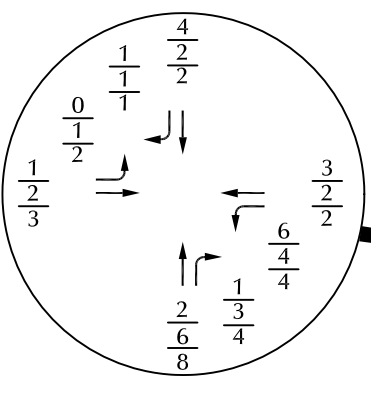
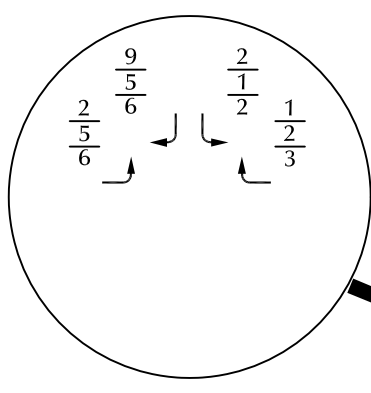
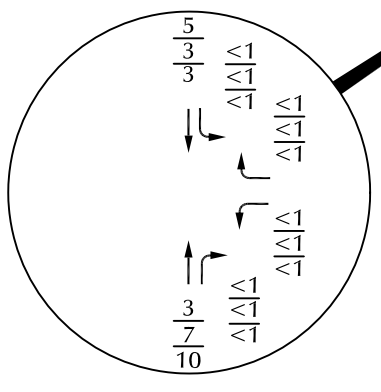
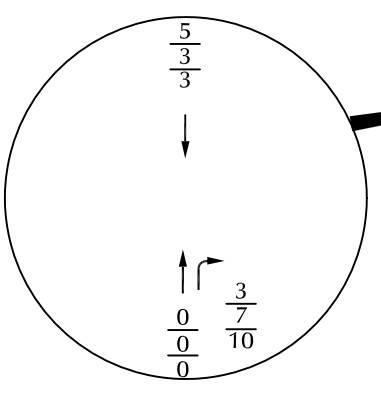
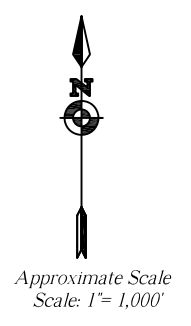
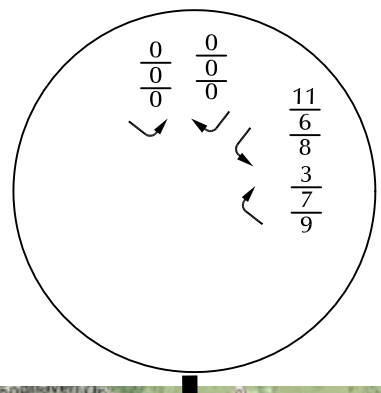
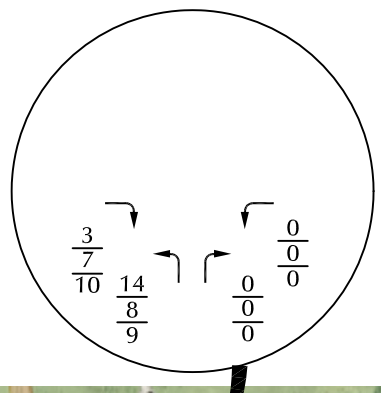
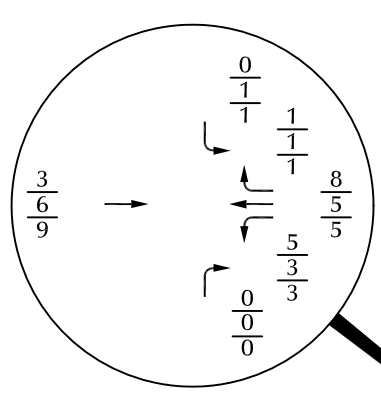
LEGEND:

 XX% = Percent Directional Distribution

Figure 6
**Directional Distribution
 of Site-Generated Traffic**

Walden Preserve Filing 5 (LSC #S214070)

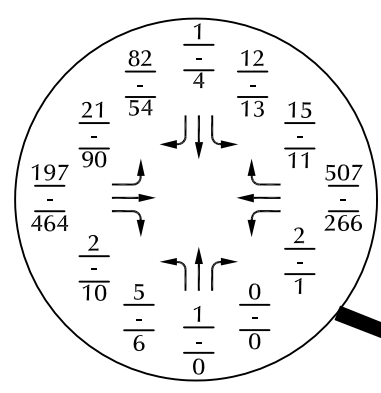
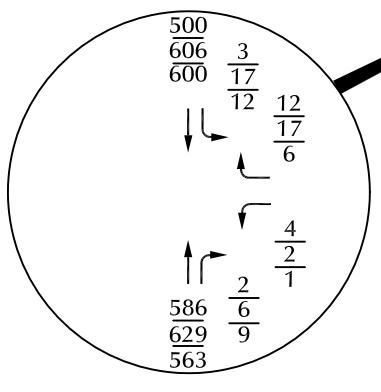
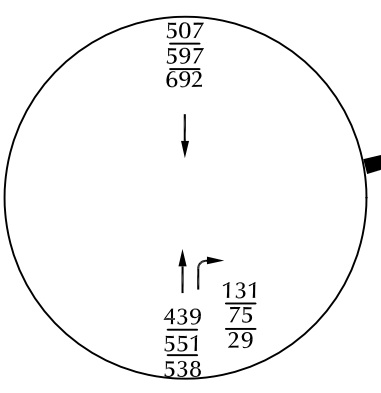
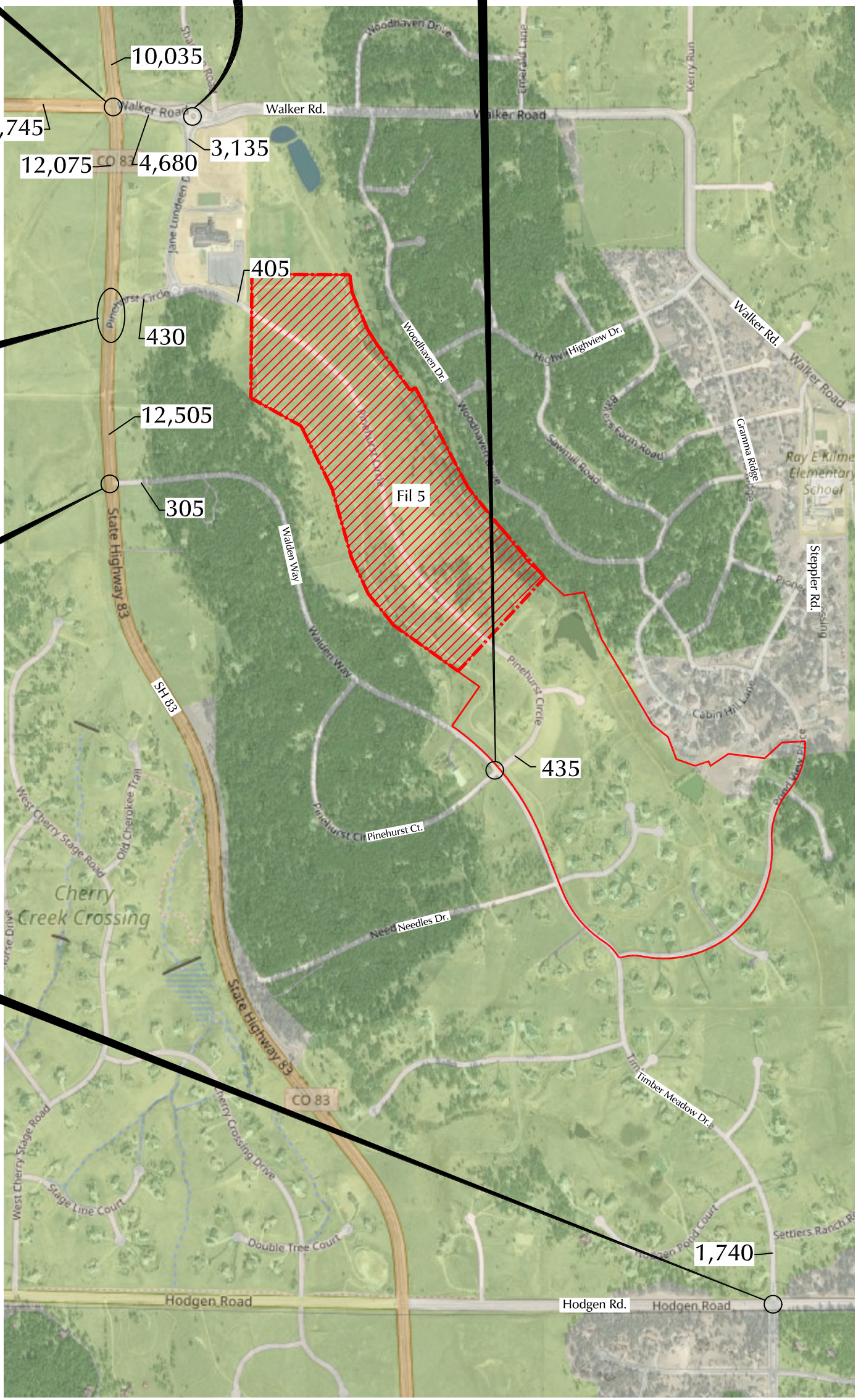
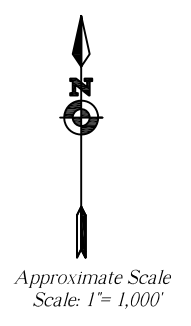
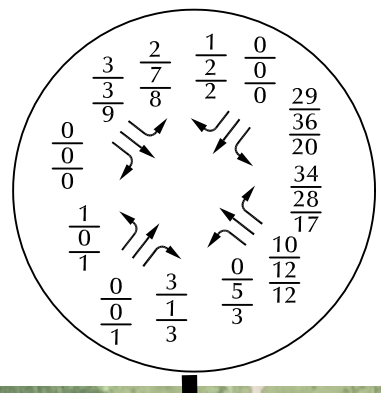
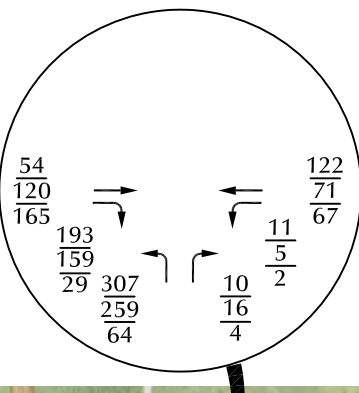
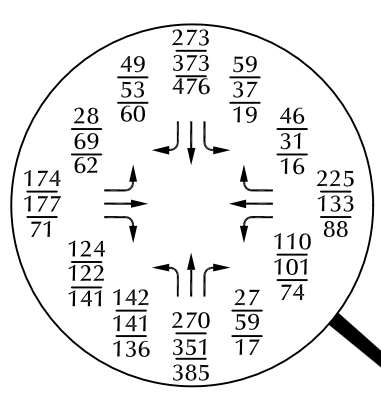




LEGEND:
 $\frac{XX}{XX}$ AM Weekday Peak-Hour Traffic (7:15-8:15am)(vehicles per hour)
 $\frac{XX}{XX}$ = School Peak-Hour Traffic (2:15-3:15pm)
 $\frac{XX}{XX}$ PM Weekday Peak-Hour Traffic (vehicles per hour)
 X,XXX= Average Daily Traffic (vehicles per day)



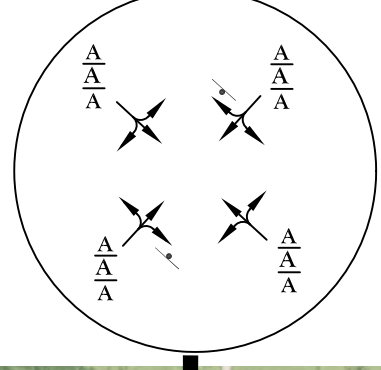
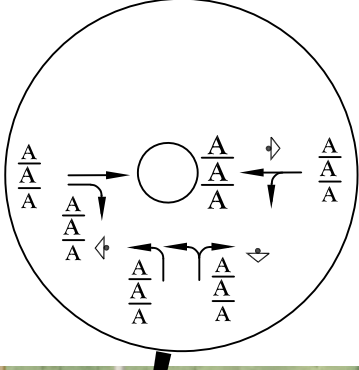
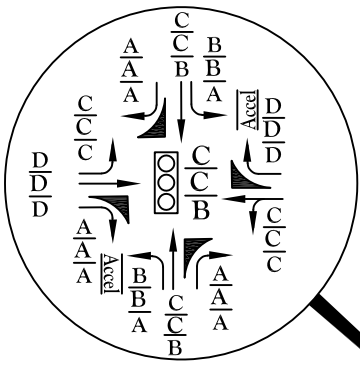
Figure 7
Site-Generated Traffic
 Walden Preserve Filing 5 (LSC #S214070)



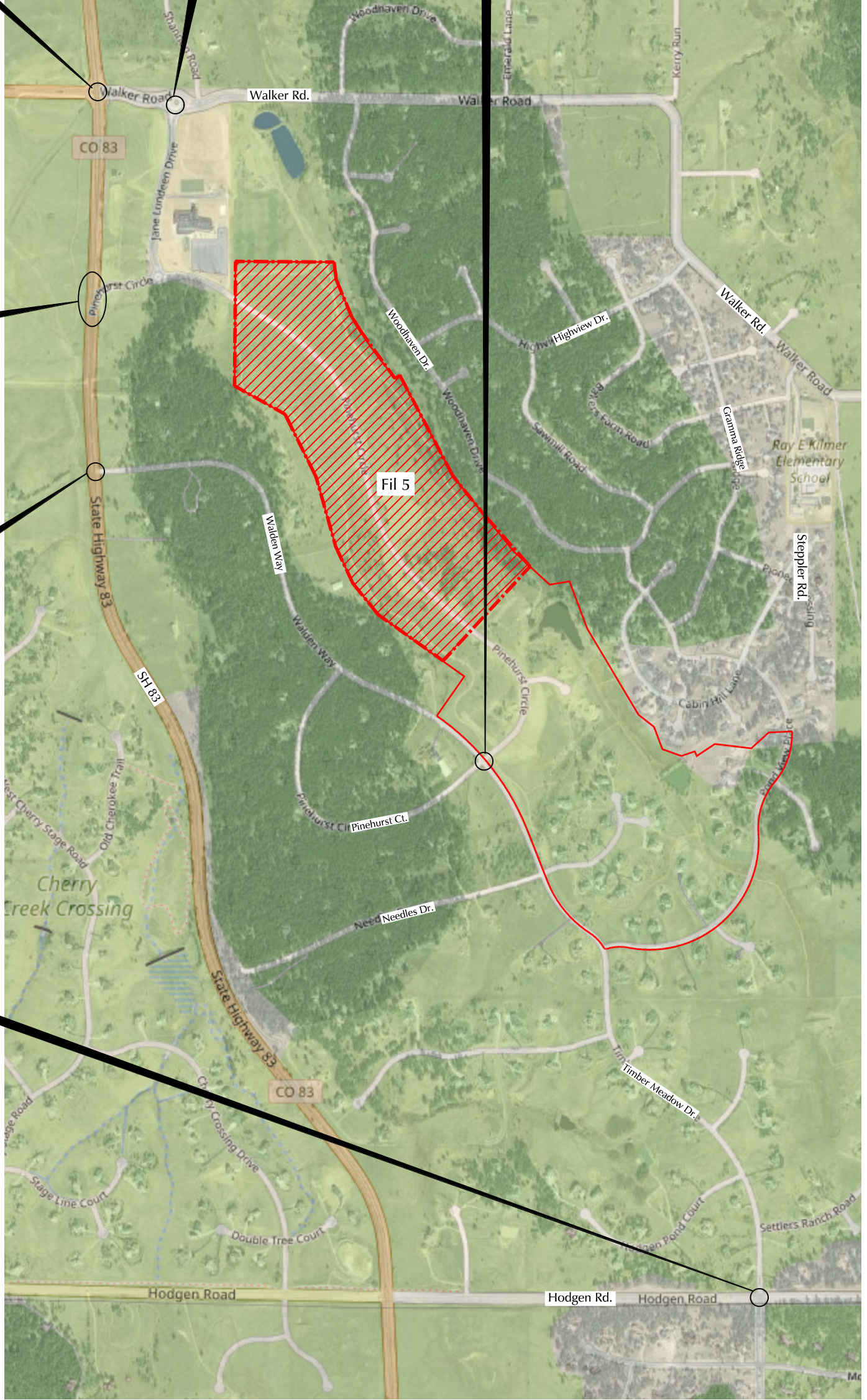
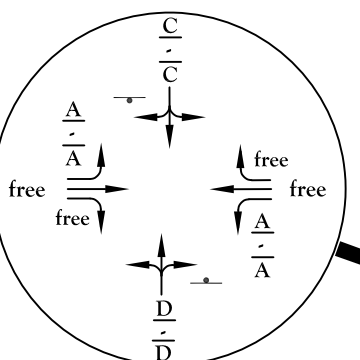
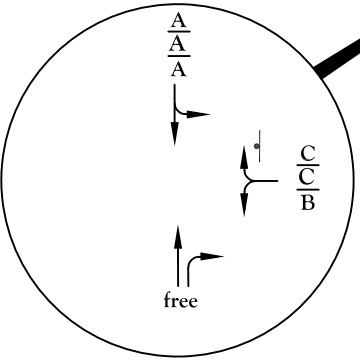
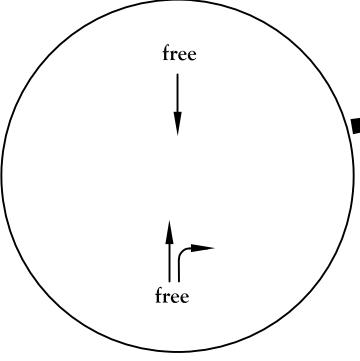
LEGEND:
 XX AM Weekday Peak-Hour Traffic (7:15-8:15am)(vehicles per hour)
 XX = School Peak-Hour Traffic (2:15-3:15pm)
 XX PM Weekday Peak-Hour Traffic (vehicles per hour)
 X,XXX= Average Daily Traffic (vehicles per day)



Figure 8a
 Short-Term Total Traffic
 Walden Preserve Filing 5 (LSC #S214070)



Approximate Scale
Scale: 1" = 1,000'



LEGEND:

- $\frac{A}{B}$ = AM Individual Movement Peak-Hour Level of Service
- $\frac{B}{B}$ = PM Individual Movement Peak-Hour Level of Service
- $\frac{C}{C}$ = AM Entire Intersection Peak-Hour Level of Service
- $\frac{C}{C}$ = PM Entire Intersection Peak-Hour Level of Service
- \downarrow = Stop Sign
- \square = Traffic Signal

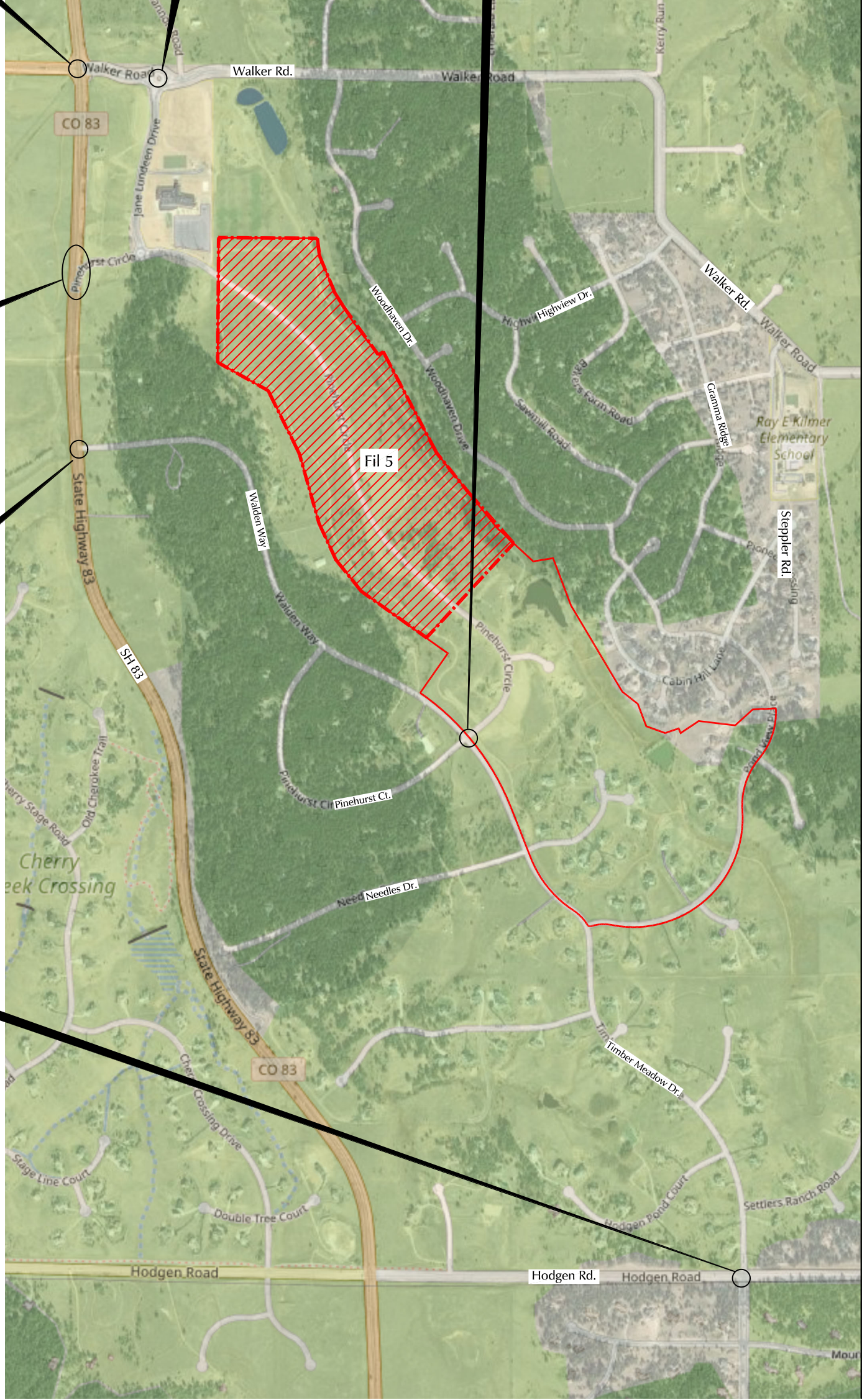
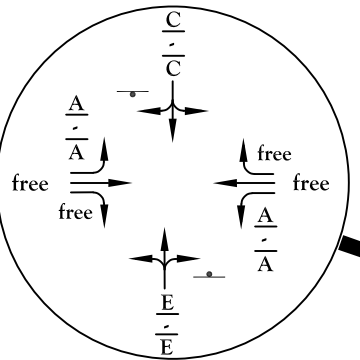
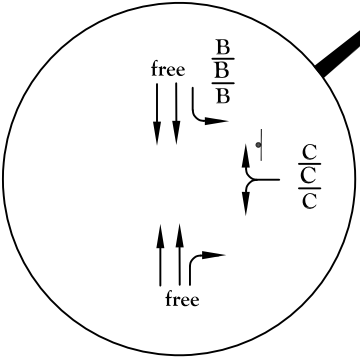
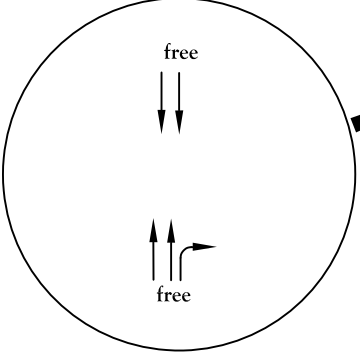
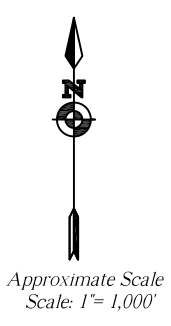
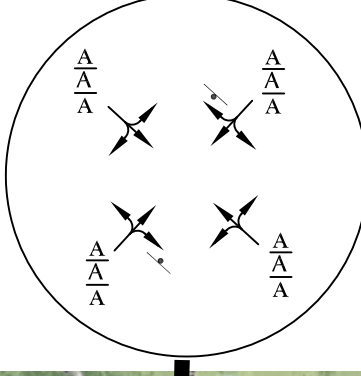
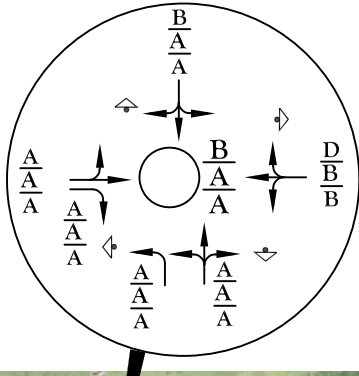
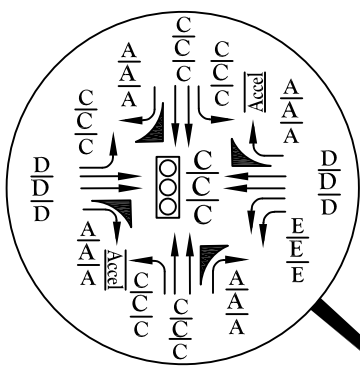
- \circ = Modern Roundabout
- \triangleleft = Yield Sign



Short-Term Total Lane Geometry and Level of Service

Walden Preserve Filing 5 (LSC #S214070)

Figure 8b



LEGEND:

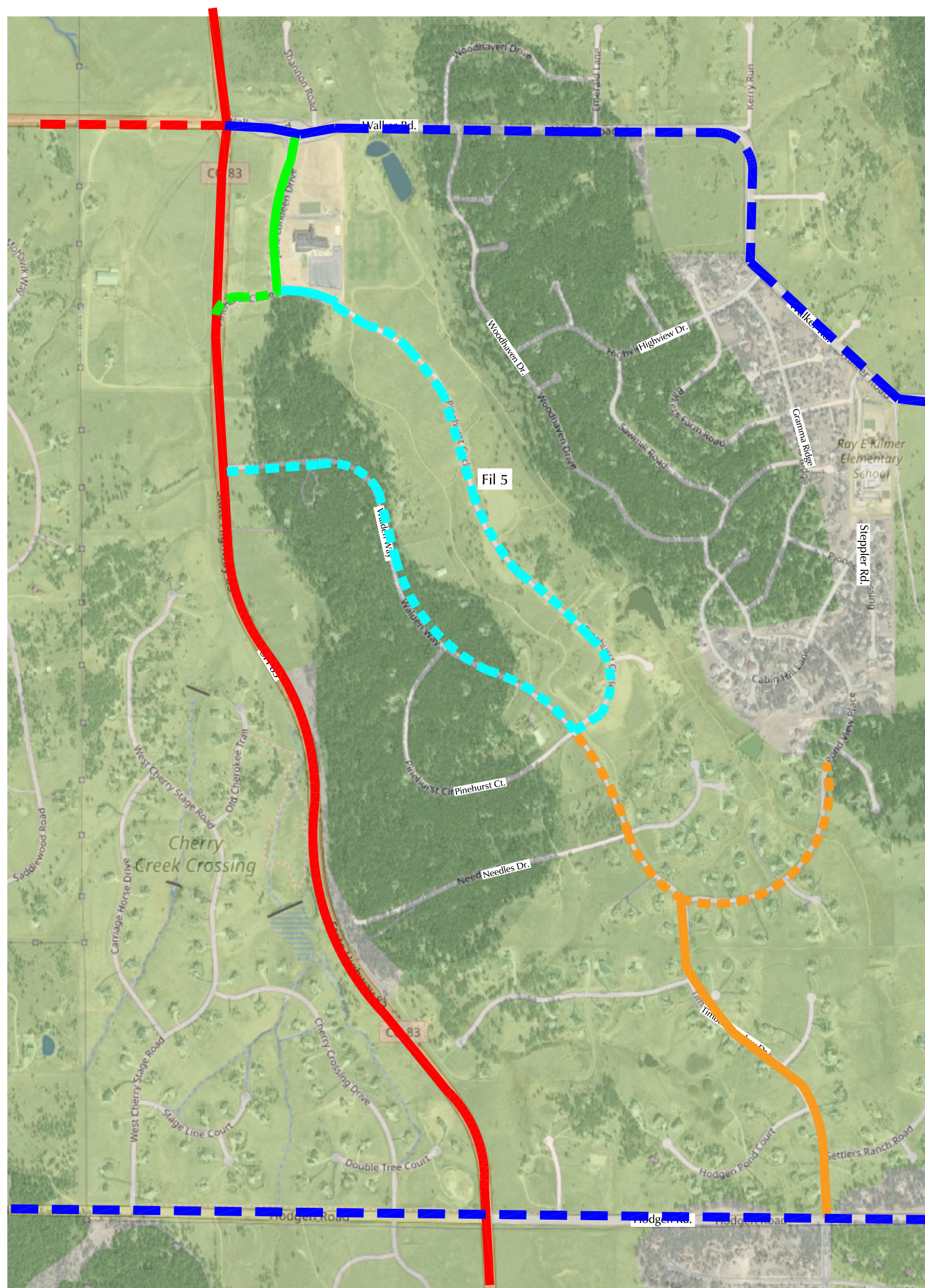
- $\frac{A}{B}$ = AM Individual Movement Peak-Hour Level of Service
- $\frac{B}{A}$ = PM Individual Movement Peak-Hour Level of Service
- $\frac{C}{C}$ = AM Entire Intersection Peak-Hour Level of Service
- $\frac{C}{C}$ = PM Entire Intersection Peak-Hour Level of Service
- \downarrow = Stop Sign
- \square = Traffic Signal
- \circ = Modern Roundabout
- \diamond = Yield Sign



Figure 9b
Long-Term Total Lane Geometry and Level of Service
 Walden Preserve Filing 5 (LSC #S214070)



Approximate Scale
Scale: 1"= 1,000'



- | | |
|---|----------------------|
| Regional Highway (CDOT R-A) | Urban Minor Arterial |
| Three Lane, Rural Principal Arterial | Rural Minor Arterial |
| Urban Non-Residential Collector | |
| Urban Non-Residential Collector (One-way/Modified) | |
| Minor Residential Collector with 80' R.O.W. (existing within Settlers' Ranch) | |
| Minor Residential Collector with 60' R.O.W. | |
| Urban Local | |
| Rural Local | |



Figure 10
Roadway Classifications

Walden Preserve Filing 5 (LSC #S214070)

Traffic Counts



LSC Transportation Consultants, Inc.

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

File Name : Hwy 83 - Walker Rd AM
 Site Code : S214070
 Start Date : 9/15/2021
 Page No : 1

Groups Printed- Unshifted

Start Time	Hwy 83 Southbound					Walker Rd Westbound					Hwy 83 Northbound					CR 105 Eastbound					Int. Total
	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	
06:30 AM	0	24	4	0	28	0	1	0	0	1	10	26	1	0	37	4	0	5	0	9	75
06:35 AM	0	16	3	0	19	4	5	2	0	11	10	34	1	0	45	0	0	10	0	10	85
06:40 AM	0	22	5	0	27	2	1	0	0	3	6	20	0	0	26	2	2	8	0	12	68
06:45 AM	0	16	4	0	20	2	2	1	0	5	15	26	0	0	41	4	4	7	0	15	81
06:50 AM	0	17	3	0	20	4	6	0	0	10	21	23	0	0	44	2	0	10	0	12	86
06:55 AM	0	9	1	0	10	1	5	0	0	6	20	27	0	0	47	3	2	2	0	7	70
Total	0	104	20	0	124	13	20	3	0	36	82	156	2	0	240	15	8	42	0	65	465
07:00 AM	1	29	0	0	30	1	7	2	0	10	17	22	0	0	39	1	1	9	0	11	90
07:05 AM	2	19	4	0	25	4	2	5	0	11	10	18	1	0	29	1	4	5	0	10	75
07:10 AM	1	30	3	0	34	3	8	4	0	15	12	22	2	0	36	5	8	11	0	24	109
07:15 AM	2	24	7	0	33	1	6	3	0	10	20	18	1	0	39	1	12	9	0	22	104
07:20 AM	8	25	3	0	36	7	13	2	0	22	8	26	1	0	35	1	18	12	0	31	124
07:25 AM	9	22	3	0	34	7	31	5	0	43	6	14	1	0	21	3	32	5	0	40	138
07:30 AM	12	24	9	0	45	7	24	6	0	37	14	19	1	0	34	1	32	10	0	43	159
07:35 AM	14	11	1	0	26	18	39	1	0	58	11	34	5	0	50	1	33	13	0	47	181
07:40 AM	4	19	3	0	26	27	33	6	0	66	9	19	2	0	30	5	10	13	0	28	150
07:45 AM	4	23	3	0	30	17	37	8	0	62	15	25	3	0	43	1	10	9	0	20	155
07:50 AM	1	31	6	0	38	4	11	1	0	16	11	34	5	0	50	2	7	9	0	18	122
07:55 AM	0	15	1	0	16	7	7	2	0	16	11	16	4	0	31	5	5	14	0	24	87
Total	58	272	43	0	373	103	218	45	0	366	144	267	26	0	437	27	172	119	0	318	1494
08:00 AM	1	30	6	0	37	3	3	1	0	7	14	25	1	0	40	2	0	13	0	15	99

LSC Transportation Consultants, Inc.

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

File Name : Hwy 83 - Walker Rd AM
 Site Code : S214070
 Start Date : 9/15/2021
 Page No : 2

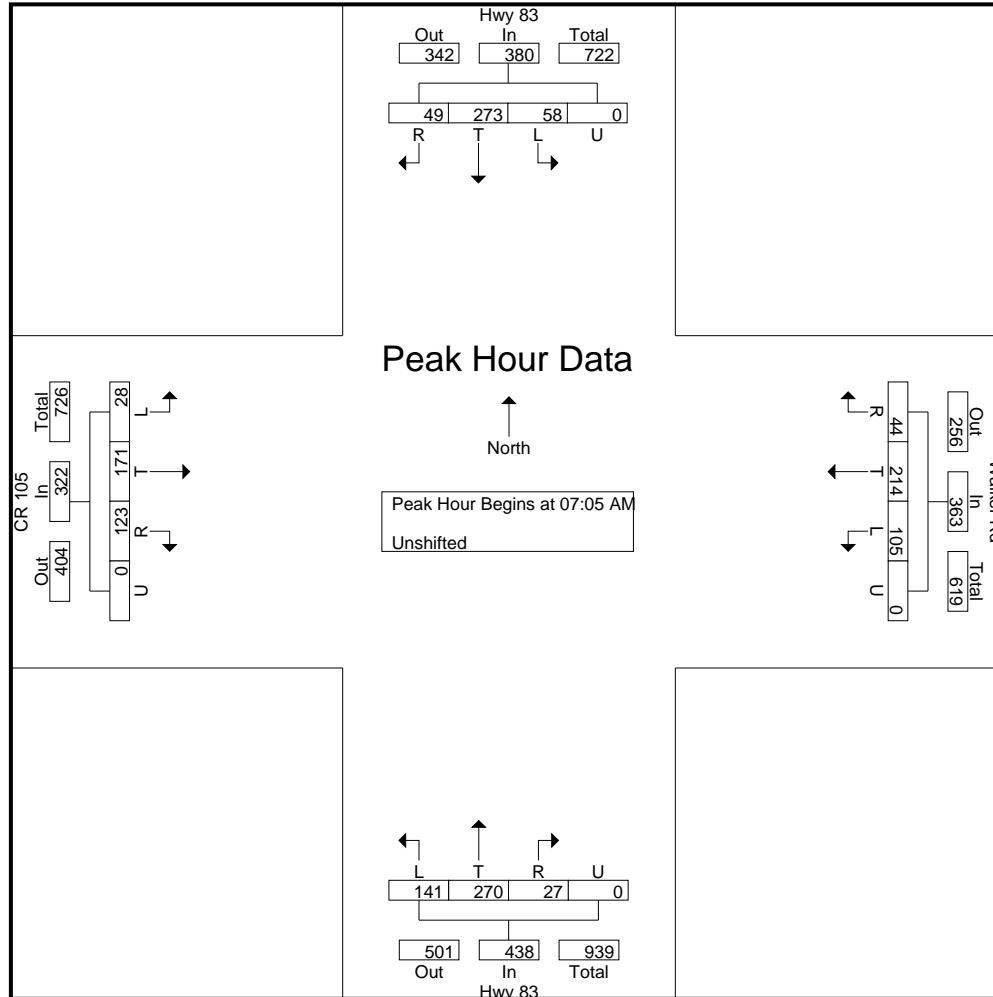
Groups Printed- Unshifted

Start Time	Hwy 83 Southbound					Walker Rd Westbound					Hwy 83 Northbound					CR 105 Eastbound					Int. Total
	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	
08:05 AM	0	14	4	0	18	2	5	2	0	9	10	12	2	0	24	6	3	12	0	21	72
08:10 AM	0	14	0	0	14	2	4	1	0	7	10	24	2	0	36	4	6	10	0	20	77
08:15 AM	0	17	3	0	20	1	4	0	0	5	9	16	3	0	28	1	5	4	0	10	63
08:20 AM	2	22	0	0	24	1	1	1	0	3	13	18	3	0	34	3	8	9	0	20	81
08:25 AM	1	26	1	0	28	2	2	0	0	4	6	23	1	0	30	2	2	9	0	13	75
Grand Total	62	499	77	0	638	127	257	53	0	437	288	541	40	0	869	60	204	218	0	482	2426
Apprch %	9.7	78.2	12.1	0		29.1	58.8	12.1	0		33.1	62.3	4.6	0		12.4	42.3	45.2	0		
Total %	2.6	20.6	3.2	0	26.3	5.2	10.6	2.2	0	18	11.9	22.3	1.6	0	35.8	2.5	8.4	9	0	19.9	

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File Name : Hwy 83 - Walker Rd AM
 Site Code : S214070
 Start Date : 9/15/2021
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File Name : Hwy 83 - Walker Rd Mid
 Site Code : S214070
 Start Date : 9/16/2021
 Page No : 1

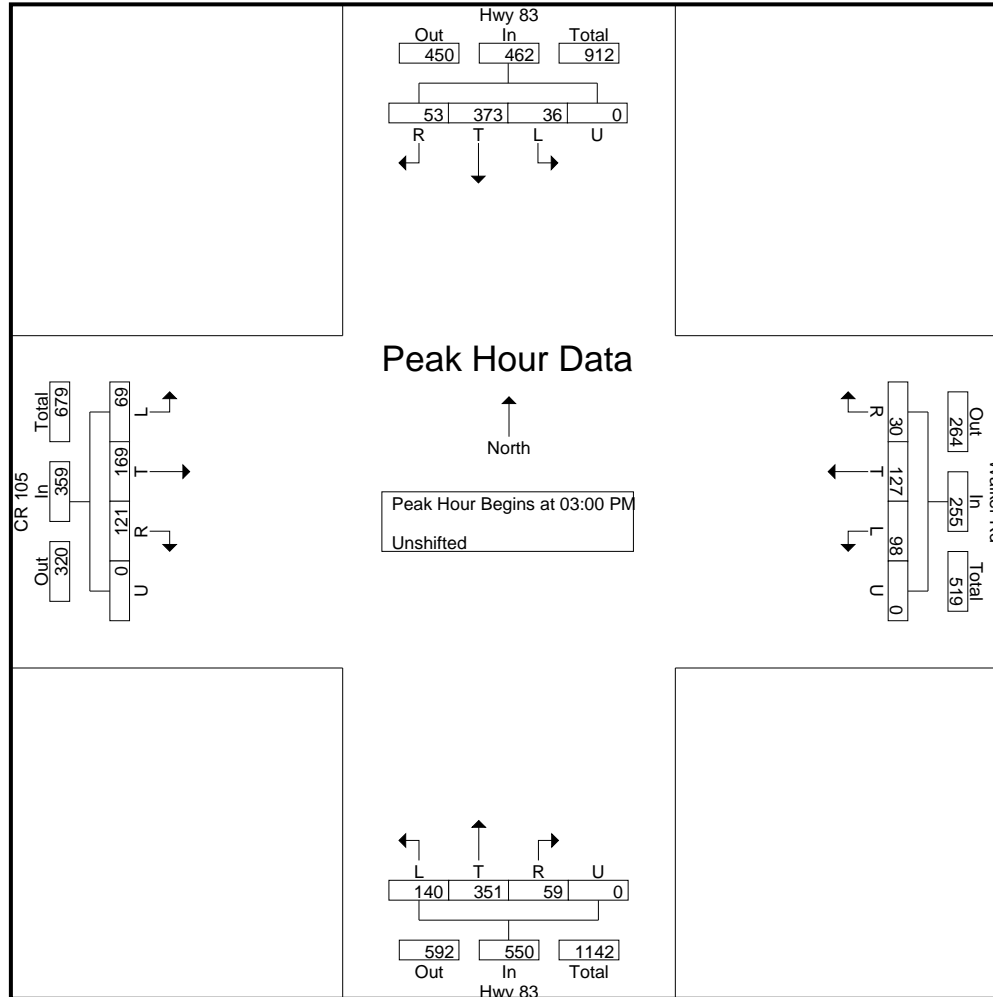
Groups Printed- Unshifted

Start Time	Hwy 83 Southbound					Walker Rd Westbound					Hwy 83 Northbound					CR 105 Eastbound					Int. Total
	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	
02:45 PM	1	30	2	0	33	0	9	0	0	9	8	35	0	0	43	6	5	7	0	18	103
02:50 PM	4	27	1	0	32	0	3	0	0	3	13	22	0	0	35	7	5	13	0	25	95
02:55 PM	3	30	4	0	37	3	11	0	0	14	9	16	0	0	25	5	17	11	0	33	109
Total	8	87	7	0	102	3	23	0	0	26	30	73	0	0	103	18	27	31	0	76	307
03:00 PM	0	42	7	0	49	4	6	5	0	15	8	21	4	0	33	4	8	4	0	16	113
03:05 PM	3	32	2	0	37	5	9	1	0	15	4	34	4	0	42	7	15	11	0	33	127
03:10 PM	6	19	0	0	25	1	1	0	0	2	15	33	1	0	49	6	21	13	0	40	116
03:15 PM	3	36	6	0	45	3	5	1	0	9	3	27	6	0	36	4	16	13	0	33	123
03:20 PM	4	15	5	0	24	7	4	2	0	13	19	27	4	0	50	2	9	11	0	22	109
03:25 PM	5	24	3	0	32	10	12	5	0	27	15	26	5	0	46	6	15	6	0	27	132
03:30 PM	1	30	7	0	38	14	19	3	0	36	5	22	12	0	39	10	33	12	0	55	168
03:35 PM	4	29	3	0	36	15	18	4	0	37	14	29	4	0	47	7	18	14	0	39	159
03:40 PM	5	25	3	0	33	10	25	6	0	41	13	31	6	0	50	7	17	12	0	36	160
03:45 PM	3	42	7	0	52	6	14	2	0	22	17	27	6	0	50	4	4	11	0	19	143
03:50 PM	2	53	5	0	60	8	5	0	0	13	13	36	5	0	54	9	10	3	0	22	149
03:55 PM	0	26	5	0	31	15	9	1	0	25	14	38	2	0	54	3	3	11	0	17	127
Total	36	373	53	0	462	98	127	30	0	255	140	351	59	0	550	69	169	121	0	359	1626
Grand Total	44	460	60	0	564	101	150	30	0	281	170	424	59	0	653	87	196	152	0	435	1933
Apprch %	7.8	81.6	10.6	0		35.9	53.4	10.7	0		26	64.9	9	0		20	45.1	34.9	0		
Total %	2.3	23.8	3.1	0	29.2	5.2	7.8	1.6	0	14.5	8.8	21.9	3.1	0	33.8	4.5	10.1	7.9	0	22.5	

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File Name : Hwy 83 - Walker Rd Mid
 Site Code : S214070
 Start Date : 9/16/2021
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File Name : Hwy 83 - Walker Rd PM
 Site Code : S214070
 Start Date : 9/16/2021
 Page No : 1

Groups Printed- Unshifted

Start Time	Hwy 83 Southbound					Walker Rd Westbound					Hwy 83 Northbound					CR 105 Eastbound					Int. Total
	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	
04:00 PM	1	48	4	0	53	15	14	5	0	34	14	39	2	0	55	5	6	10	0	21	163
04:05 PM	1	35	5	0	41	4	8	1	0	13	12	25	0	0	37	5	9	12	0	26	117
04:10 PM	1	34	7	0	42	6	5	0	0	11	10	16	1	0	27	4	3	11	0	18	98
04:15 PM	2	45	4	0	51	3	4	1	0	8	16	59	4	0	79	3	5	15	0	23	161
04:20 PM	2	34	3	0	39	5	4	2	0	11	11	33	0	0	44	7	6	6	0	19	113
04:25 PM	2	41	4	0	47	5	3	1	0	9	10	27	5	0	42	4	6	16	0	26	124
04:30 PM	0	33	1	0	34	16	13	2	0	31	6	23	0	0	29	4	9	10	0	23	117
04:35 PM	3	41	5	0	49	6	5	0	0	11	13	36	0	0	49	7	4	7	0	18	127
04:40 PM	2	34	2	0	38	3	7	0	0	10	10	45	1	0	56	5	5	14	0	24	128
04:45 PM	0	37	6	0	43	3	10	2	0	15	13	29	2	0	44	5	4	17	0	26	128
04:50 PM	2	63	9	0	74	2	2	0	0	4	12	28	1	0	41	6	3	14	0	23	142
04:55 PM	1	31	10	0	42	3	6	1	0	10	8	25	1	0	34	7	0	7	0	14	100
Total	17	476	60	0	553	71	81	15	0	167	135	385	17	0	537	62	60	139	0	261	1518
05:00 PM	1	36	5	0	42	1	3	1	0	5	12	39	1	0	52	6	6	11	0	23	122
05:05 PM	2	33	7	0	42	5	3	2	0	10	9	36	1	0	46	3	8	15	0	26	124
05:10 PM	5	57	7	0	69	1	4	0	0	5	8	27	2	0	37	2	4	13	0	19	130
05:15 PM	2	40	4	0	46	2	5	3	0	10	5	16	2	0	23	4	5	11	0	20	99
05:20 PM	0	38	4	0	42	4	5	3	0	12	17	29	1	0	47	3	5	14	0	22	123
05:25 PM	3	40	3	0	46	3	6	4	0	13	9	35	0	0	44	3	5	7	0	15	118
05:30 PM	1	45	7	0	53	5	0	0	0	5	15	40	2	0	57	8	8	18	0	34	149
05:35 PM	3	25	5	0	33	4	4	0	0	8	11	29	1	0	41	5	5	19	0	29	111
05:40 PM	2	41	5	0	48	4	3	0	0	7	11	40	1	0	52	0	8	14	0	22	129

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File Name : Hwy 83 - Walker Rd PM
 Site Code : S214070
 Start Date : 9/16/2021
 Page No : 2

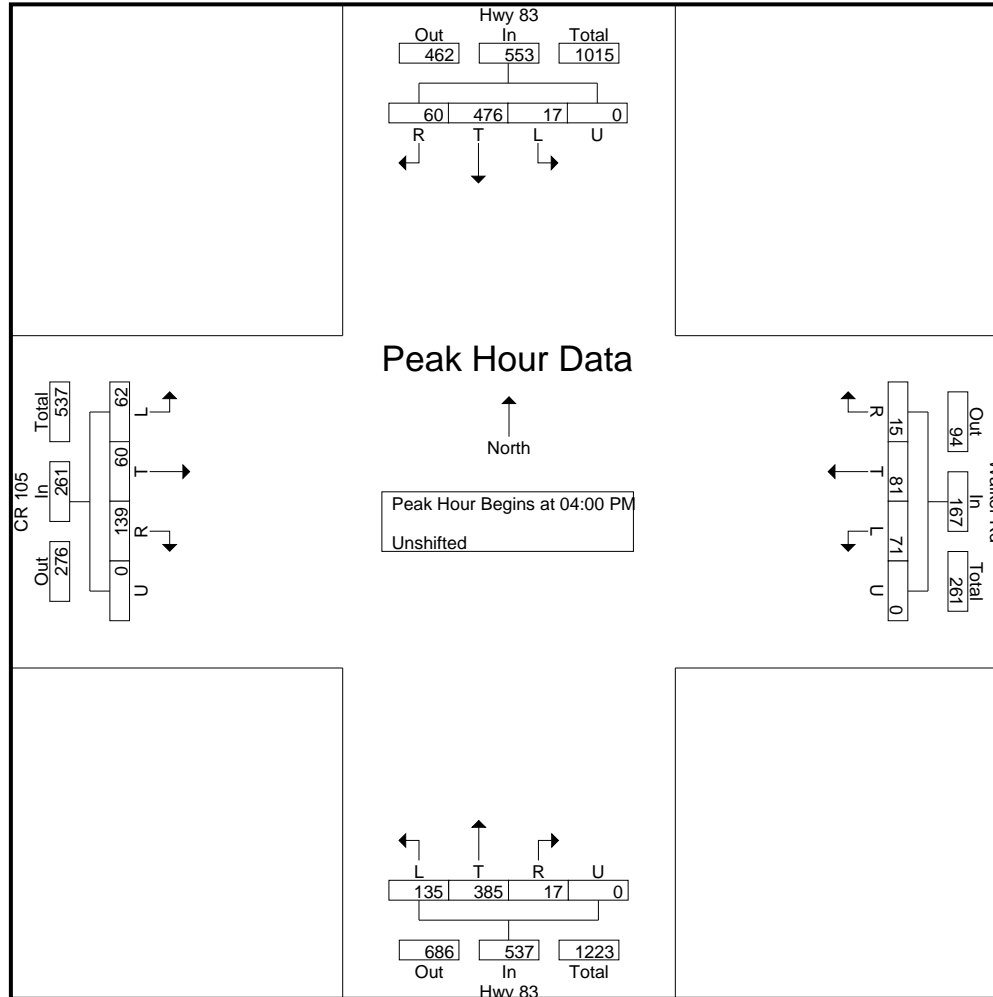
Groups Printed- Unshifted

Start Time	Hwy 83 Southbound					Walker Rd Westbound					Hwy 83 Northbound					CR 105 Eastbound					Int. Total
	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	
05:45 PM	1	28	6	0	35	1	4	1	0	6	12	18	2	0	32	9	6	11	0	26	99
05:50 PM	2	30	2	0	34	3	3	1	0	7	10	41	2	0	53	7	1	4	0	12	106
05:55 PM	3	27	6	0	36	4	2	1	0	7	6	36	5	0	47	2	3	7	0	12	102
Total	25	440	61	0	526	37	42	16	0	95	125	386	20	0	531	52	64	144	0	260	1412
Grand Total	42	916	121	0	1079	108	123	31	0	262	260	771	37	0	1068	114	124	283	0	521	2930
Apprch %	3.9	84.9	11.2	0		41.2	46.9	11.8	0		24.3	72.2	3.5	0		21.9	23.8	54.3	0		
Total %	1.4	31.3	4.1	0	36.8	3.7	4.2	1.1	0	8.9	8.9	26.3	1.3	0	36.5	3.9	4.2	9.7	0	17.8	

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File Name : Hwy 83 - Walker Rd PM
 Site Code : S214070
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File Name : Jane Lundeen - Walker Rd AM
 Site Code : S214070
 Start Date : 8/31/2021
 Page No : 1

Groups Printed- Unshifted

Start Time	Southbound					Walker Rd Westbound					Jane Lundeen Northbound					Walker Rd Eastbound					Int. Total
	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	
06:30 AM	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	0	2	0	0	2	9
06:35 AM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	1	0	1	3
06:40 AM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	3
06:45 AM	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	1	1	0	2	6
06:50 AM	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	0	3	0	0	3	9
06:55 AM	0	0	0	0	0	1	9	0	0	10	0	0	0	0	0	0	2	3	0	5	15
Total	0	0	0	0	0	1	30	0	0	31	0	0	0	0	0	0	9	5	0	14	45
07:00 AM	0	0	0	0	0	1	15	0	0	16	0	0	0	0	0	0	1	4	0	5	21
07:05 AM	0	0	0	0	0	0	15	0	0	15	1	0	0	0	1	0	1	3	0	4	20
07:10 AM	0	0	0	0	0	0	10	0	0	10	1	0	0	0	1	0	5	6	0	11	22
07:15 AM	0	0	0	0	0	0	10	0	0	10	6	0	0	0	6	0	2	9	0	11	27
07:20 AM	0	0	0	0	0	3	10	0	0	13	14	0	0	0	14	0	1	16	0	17	44
07:25 AM	0	0	0	0	0	3	9	0	0	12	32	0	2	0	34	0	3	37	0	40	86
07:30 AM	0	0	0	0	0	1	11	0	0	12	50	0	3	0	53	0	2	51	0	53	118
07:35 AM	0	0	0	0	0	2	16	0	0	18	56	0	1	0	57	0	3	29	0	32	107
07:40 AM	0	0	0	0	0	0	5	0	0	5	61	0	2	0	63	1	8	28	0	37	105
07:45 AM	0	0	0	0	0	1	8	0	0	9	59	0	2	0	61	0	13	4	0	17	87
07:50 AM	0	0	0	0	0	0	7	0	0	7	7	0	0	0	7	0	3	2	0	5	19
07:55 AM	0	0	0	0	0	0	6	0	0	6	2	0	0	0	2	0	12	0	0	12	20
Total	0	0	0	0	0	11	122	0	0	133	289	0	10	0	299	1	54	189	0	244	676
08:00 AM	0	0	0	0	0	0	7	0	0	7	2	0	0	0	2	0	6	3	0	9	18

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File Name : Jane Lundeen - Walker Rd AM
 Site Code : S214070
 Start Date : 8/31/2021
 Page No : 2

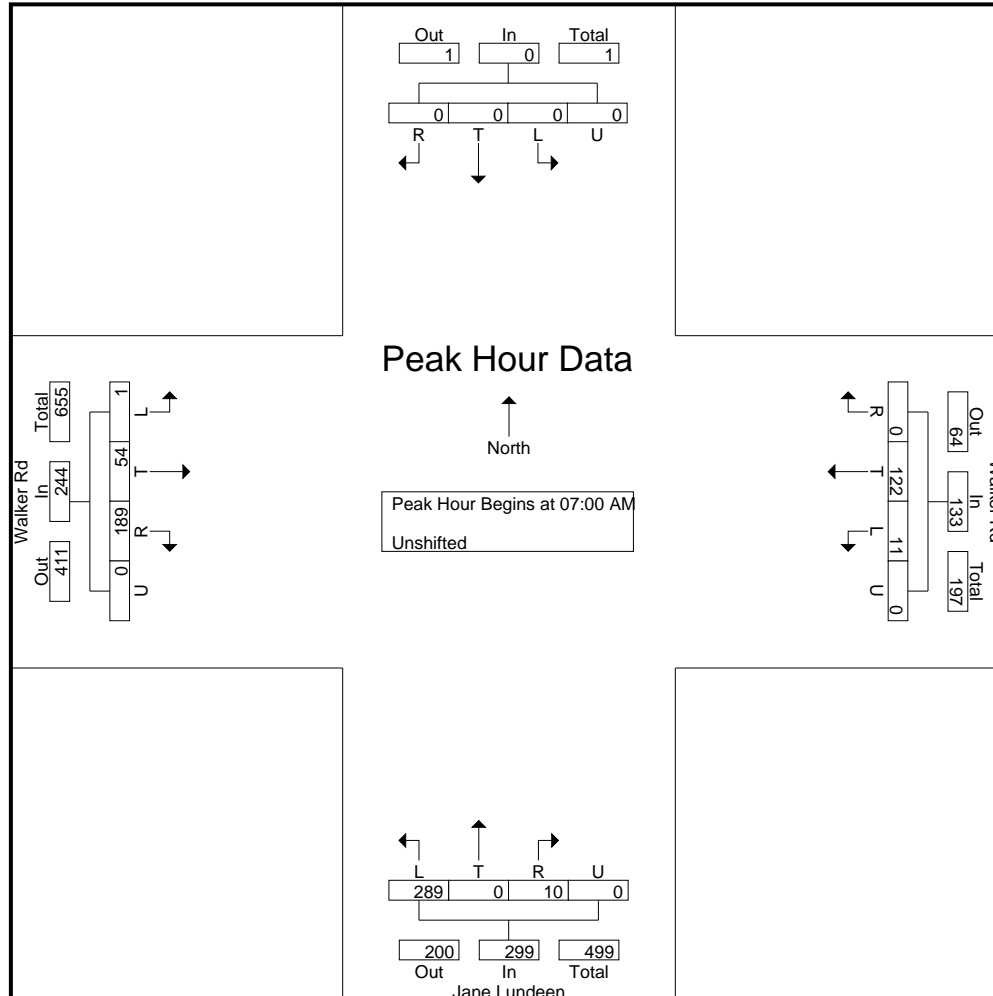
Groups Printed- Unshifted

Start Time	Southbound					Walker Rd Westbound					Jane Lundeen Northbound					Walker Rd Eastbound					Int. Total
	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	
08:05 AM	0	0	0	0	0	0	3	0	0	3	2	0	0	0	2	0	4	2	0	6	11
08:10 AM	0	0	0	0	0	0	8	0	0	8	1	0	0	0	1	0	11	0	0	11	20
08:15 AM	0	0	0	0	0	0	9	0	0	9	0	0	0	0	0	0	4	0	0	4	13
08:20 AM	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	7	1	0	8	12
08:25 AM	0	0	0	0	0	0	3	0	0	3	1	0	0	0	1	0	7	1	0	8	12
Grand Total	0	0	0	0	0	12	186	0	0	198	295	0	10	0	305	1	102	201	0	304	807
Apprch %	0	0	0	0		6.1	93.9	0	0		96.7	0	3.3	0		0.3	33.6	66.1	0		
Total %	0	0	0	0		1.5	23	0	0	24.5	36.6	0	1.2	0	37.8	0.1	12.6	24.9	0	37.7	

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File Name : Jane Lundeen - Walker Rd AM
 Site Code : S214070
 Start Date : 8/31/2021
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File Name : Jane Lundeen - Walker Rd Mid
 Site Code : S214070
 Start Date : 8/31/2021
 Page No : 1

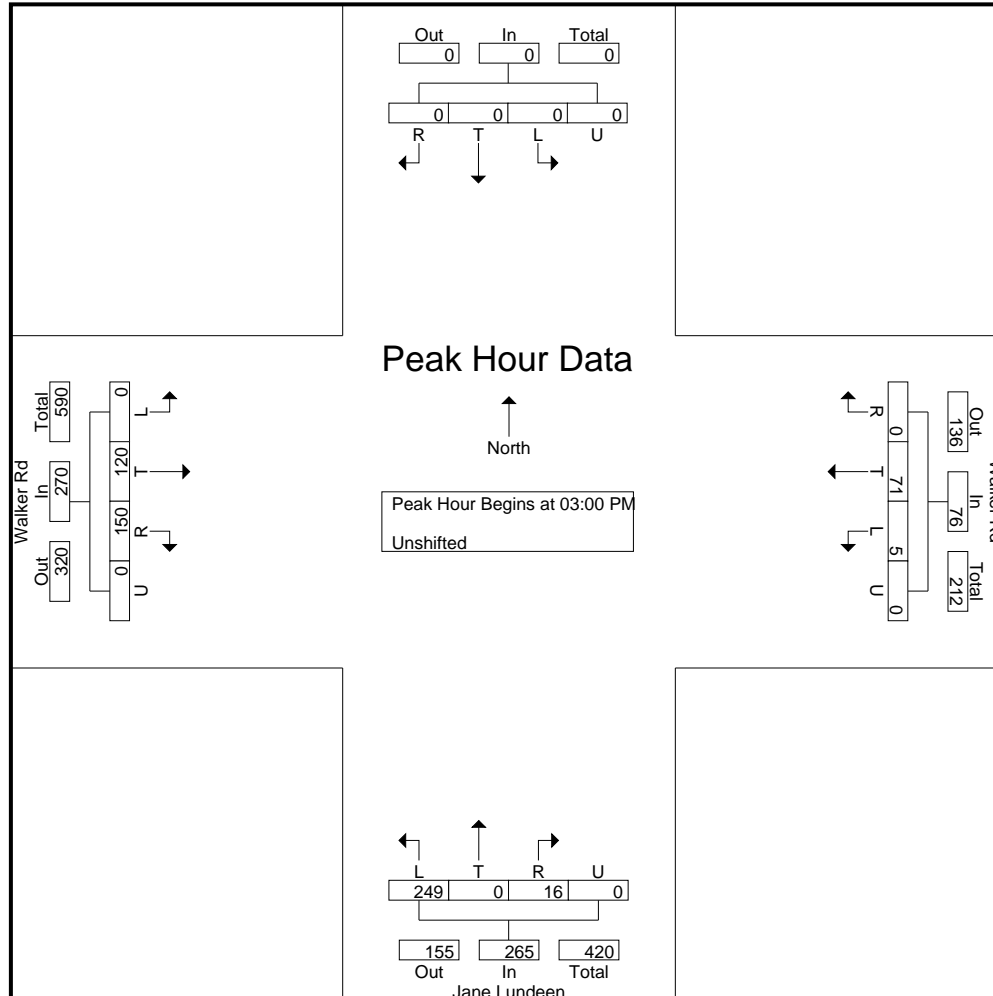
Groups Printed- Unshifted

Start Time	Southbound					Walker Rd Westbound					Jane Lundeen Northbound					Walker Rd Eastbound					Int. Total
	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	
02:45 PM	0	0	0	0	0	0	7	0	0	7	3	0	0	0	3	0	6	8	0	14	24
02:50 PM	0	0	0	0	0	1	3	0	0	4	1	0	0	0	1	0	5	9	0	14	19
02:55 PM	0	0	0	0	0	2	1	0	0	3	4	0	1	0	5	0	5	5	0	10	18
Total	0	0	0	0	0	3	11	0	0	14	8	0	1	0	9	0	16	22	0	38	61
03:00 PM	0	0	0	0	0	0	5	0	0	5	13	0	0	0	13	0	2	10	0	12	30
03:05 PM	0	0	0	0	0	1	4	0	0	5	13	0	1	0	14	0	7	14	0	21	40
03:10 PM	0	0	0	0	0	0	8	0	0	8	1	0	0	0	1	0	7	18	0	25	34
03:15 PM	0	0	0	0	0	0	3	0	0	3	7	0	0	0	7	0	6	17	0	23	33
03:20 PM	0	0	0	0	0	0	5	0	0	5	6	0	2	0	8	0	9	9	0	18	31
03:25 PM	0	0	0	0	0	0	4	0	0	4	26	0	0	0	26	0	14	12	0	26	56
03:30 PM	0	0	0	0	0	0	8	0	0	8	31	0	2	0	33	0	18	18	0	36	77
03:35 PM	0	0	0	0	0	0	7	0	0	7	33	0	2	0	35	0	12	24	0	36	78
03:40 PM	0	0	0	0	0	2	3	0	0	5	37	0	3	0	40	0	18	19	0	37	82
03:45 PM	0	0	0	0	0	2	3	0	0	5	39	0	4	0	43	0	15	4	0	19	67
03:50 PM	0	0	0	0	0	0	4	0	0	4	36	0	0	0	36	0	9	3	0	12	52
03:55 PM	0	0	0	0	0	0	17	0	0	17	7	0	2	0	9	0	3	2	0	5	31
Total	0	0	0	0	0	5	71	0	0	76	249	0	16	0	265	0	120	150	0	270	611
Grand Total	0	0	0	0	0	8	82	0	0	90	257	0	17	0	274	0	136	172	0	308	672
Apprch %	0	0	0	0	0	8.9	91.1	0	0	93.8	93.8	0	6.2	0	93.8	0	44.2	55.8	0	308	672
Total %	0	0	0	0	0	1.2	12.2	0	0	13.4	38.2	0	2.5	0	40.8	0	20.2	25.6	0	45.8	672

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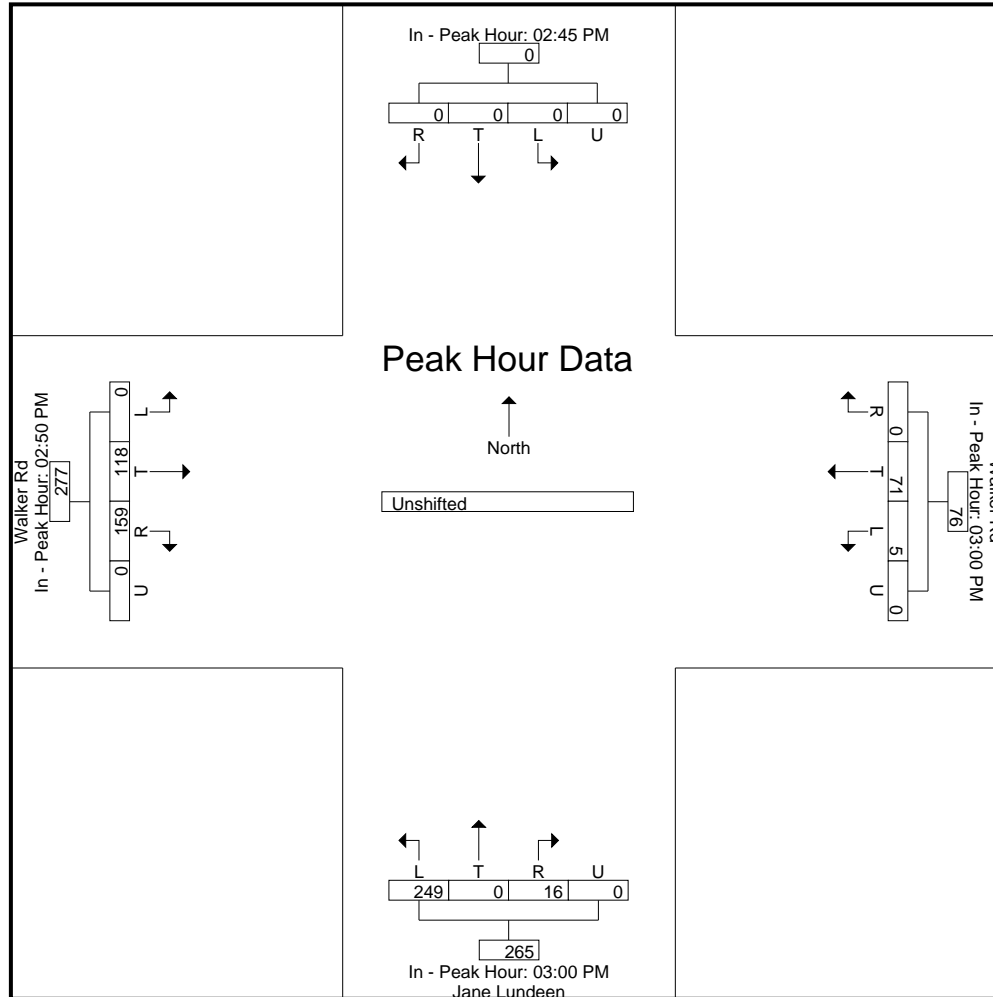
File Name : Jane Lundeen - Walker Rd Mid
 Site Code : S214070
 Start Date : 8/31/2021
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File Name : Jane Lundeen - Walker Rd Mid
 Site Code : S214070
 Start Date : 8/31/2021
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File Name : Jane Lundeen - Walker Rd PM
 Site Code : S214070
 Start Date : 8/31/2021
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Groups Printed- Unshifted

Start Time	Southbound					Walker Rd Westbound					Jane Lundeen Northbound					Walker Rd Eastbound					Int. Total
	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	
04:00 PM	0	0	0	0	0	0	35	0	0	35	13	0	1	0	14	0	7	1	0	8	57
04:05 PM	0	0	0	0	0	0	13	0	0	13	5	0	0	0	5	0	8	0	0	8	26
04:10 PM	0	0	0	0	0	0	6	0	0	6	2	0	0	0	2	0	6	0	0	6	14
04:15 PM	0	0	0	0	0	0	10	0	0	10	1	0	0	0	1	0	9	0	0	9	20
04:20 PM	0	0	0	0	0	1	11	0	0	12	2	0	0	0	2	0	10	0	0	10	24
04:25 PM	0	0	0	0	0	0	4	0	0	4	2	0	0	0	2	0	12	1	0	13	19
04:30 PM	0	0	0	0	0	0	8	0	0	8	1	0	0	0	1	0	9	2	0	11	20
04:35 PM	0	0	0	0	0	0	11	0	0	11	1	0	1	0	2	0	7	0	0	7	20
04:40 PM	0	0	0	0	0	1	11	0	0	12	3	0	0	0	3	0	9	1	0	10	25
04:45 PM	0	0	0	0	0	1	9	0	0	10	1	0	0	0	1	0	4	2	0	6	17
04:50 PM	0	0	0	0	0	0	4	0	0	4	1	0	0	0	1	0	8	2	0	10	15
04:55 PM	0	0	0	0	0	2	4	0	0	6	7	0	0	0	7	0	11	7	0	18	31
Total	0	0	0	0	0	5	126	0	0	131	39	0	2	0	41	0	100	16	0	116	288
05:00 PM	0	0	0	0	0	0	4	0	0	4	22	0	2	0	24	0	8	2	0	10	38
05:05 PM	0	0	0	0	0	0	6	0	0	6	9	0	1	0	10	0	8	2	0	10	26
05:10 PM	0	0	0	0	0	0	8	0	0	8	2	0	0	0	2	0	10	0	0	10	20
05:15 PM	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	0	4	1	0	5	12
05:20 PM	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	17	3	0	20	24
05:25 PM	0	0	0	0	0	0	2	0	0	2	1	0	0	0	1	0	10	0	0	10	13
05:30 PM	0	0	0	0	0	0	10	0	0	10	1	0	0	0	1	0	15	1	0	16	27
05:35 PM	0	0	0	0	0	0	7	0	0	7	2	0	0	0	2	0	17	0	0	17	26
05:40 PM	0	0	0	0	0	0	4	0	0	4	7	0	0	0	7	0	20	0	0	20	31

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

File Name : Jane Lundeen - Walker Rd PM
 Site Code : S214070
 Start Date : 8/31/2021
 Page No : 2

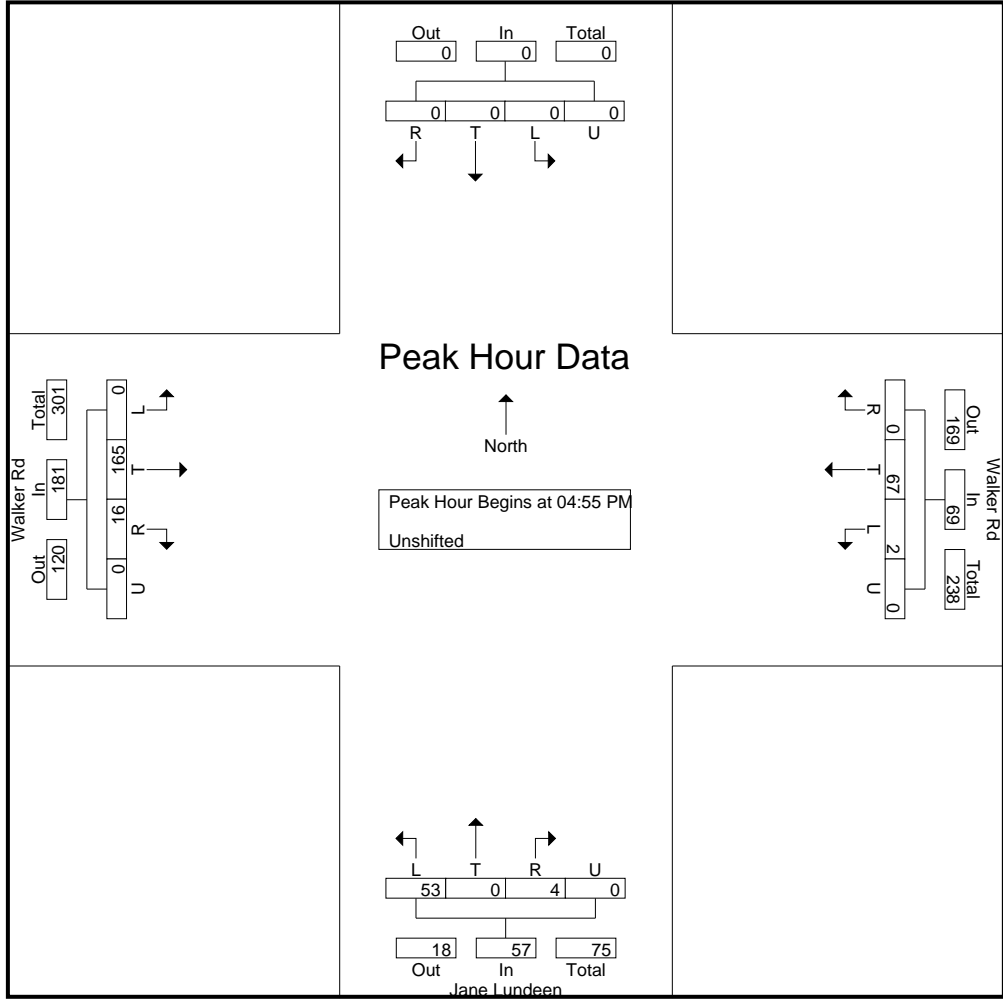
Groups Printed- Unshifted

Start Time	Southbound					Walker Rd Westbound					Jane Lundeen Northbound					Walker Rd Eastbound					Int. Total
	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	
05:45 PM	0	0	0	0	0	0	5	0	0	5	2	0	1	0	3	0	26	0	0	26	34
05:50 PM	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	0	19	0	0	19	25
05:55 PM	0	0	0	0	0	0	3	0	0	3	1	0	0	0	1	0	13	0	0	13	17
Total	0	0	0	0	0	0	66	0	0	66	47	0	4	0	51	0	167	9	0	176	293
Grand Total	0	0	0	0	0	5	192	0	0	197	86	0	6	0	92	0	267	25	0	292	581
Apprch %	0	0	0	0	0	2.5	97.5	0	0		93.5	0	6.5	0		0	91.4	8.6	0		
Total %	0	0	0	0	0	0.9	33	0	0	33.9	14.8	0	1	0	15.8	0	46	4.3	0	50.3	

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File Name : Jane Lundeen - Walker Rd PM
 Site Code : S214070
 Start Date : 8/31/2021
 Page No : 4



LSC Transportation Consultants, Inc.

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File Name : Hwy 83 - Pinehurst Cir AM
 Site Code : S214070
 Start Date : 8/26/2021
 Page No : 1

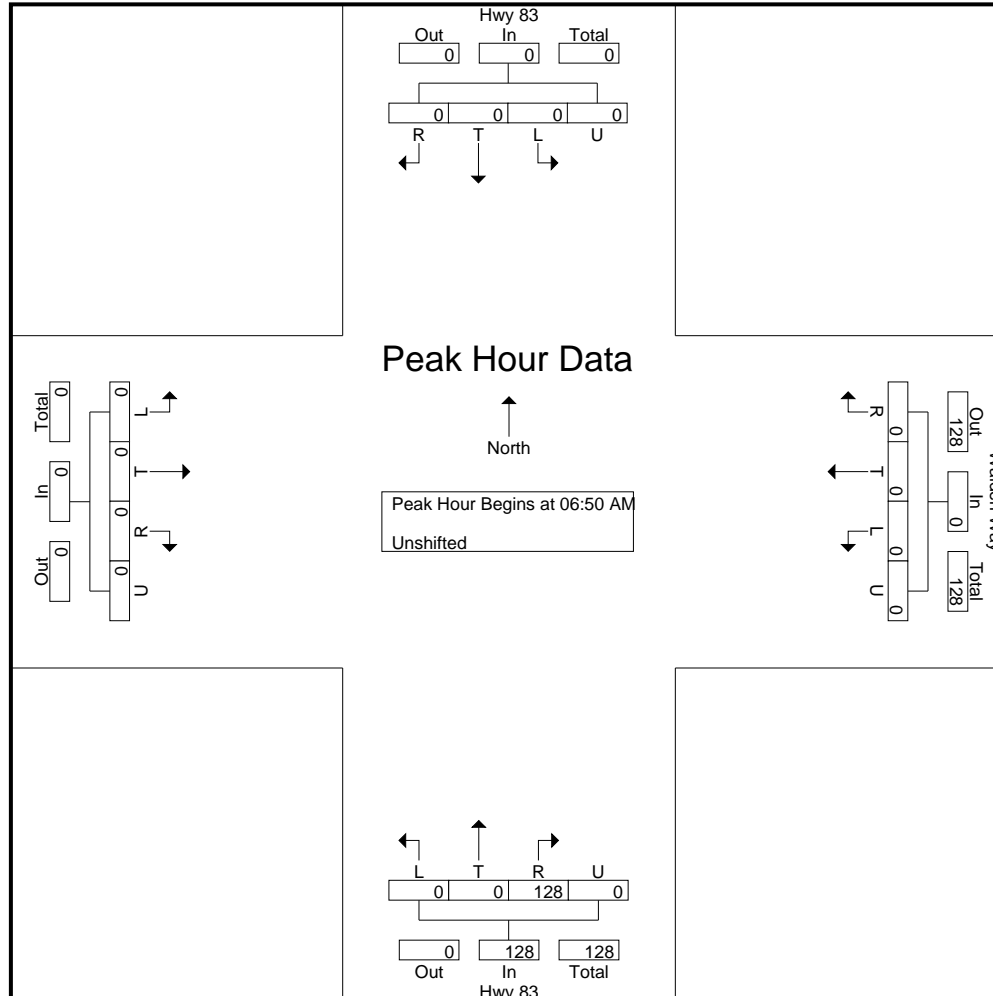
Groups Printed- Unshifted

Start Time	Hwy 83 Southbound					Walden Way Westbound					Hwy 83 Northbound					Eastbound					Int. Total
	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	
*** BREAK ***																					
06:40 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1
06:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	0	0	3
06:50 AM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	2
06:55 AM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	2
Total	0	0	0	0	0	0	0	0	0	0	0	0	8	0	8	0	0	0	0	0	8
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	4	0	4	0	0	0	0	0	4
07:05 AM	0	0	0	0	0	0	0	0	0	0	0	0	4	0	4	0	0	0	0	0	4
07:10 AM	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	0	0	3
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	8	0	8	0	0	0	0	0	8
07:20 AM	0	0	0	0	0	0	0	0	0	0	0	0	6	0	6	0	0	0	0	0	6
07:25 AM	0	0	0	0	0	0	0	0	0	0	0	0	18	0	18	0	0	0	0	0	18
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	32	0	32	0	0	0	0	0	32
07:35 AM	0	0	0	0	0	0	0	0	0	0	0	0	30	0	30	0	0	0	0	0	30
07:40 AM	0	0	0	0	0	0	0	0	0	0	0	0	14	0	14	0	0	0	0	0	14
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	5	0	5	0	0	0	0	0	5
*** BREAK ***																					
07:55 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1
Total	0	0	0	0	0	0	0	0	0	0	0	0	125	0	125	0	0	0	0	0	125
*** BREAK ***																					
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	133	0	133	0	0	0	0	0	133
Apprch %	0	0	0	0	0	0	0	0	0	0	0	0	100	0	100	0	0	0	0	0	
Total %	0	0	0	0	0	0	0	0	0	0	0	0	100	0	100	0	0	0	0	0	

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File Name : Hwy 83 - Pinehurst Cir AM
 Site Code : S214070
 Start Date : 8/26/2021
 Page No : 3



LSC Transportation Consultants, Inc.

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

File Name : Hwy 83 - Pinehurst Cir Mid
 Site Code : S214070
 Start Date : 8/25/2021
 Page No : 1

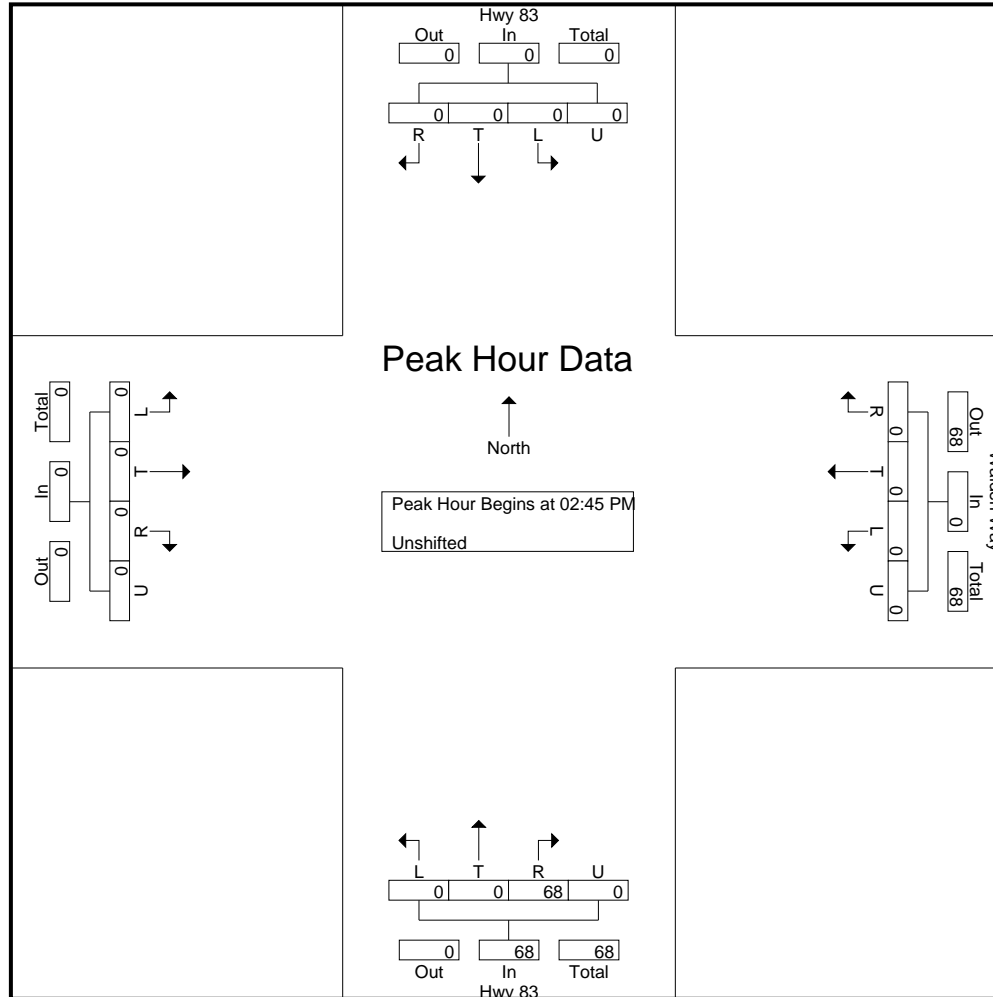
Groups Printed- Unshifted

Start Time	Hwy 83 Southbound					Walden Way Westbound					Hwy 83 Northbound					Eastbound					Int. Total
	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	
02:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	7	0	7	0	0	0	0	0	7
02:50 PM	0	0	0	0	0	0	0	0	0	0	0	0	6	0	6	0	0	0	0	0	6
02:55 PM	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	0	0	3
Total	0	0	0	0	0	0	0	0	0	0	0	0	16	0	16	0	0	0	0	0	16
03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	4	0	4	0	0	0	0	0	4
03:05 PM	0	0	0	0	0	0	0	0	0	0	0	0	9	0	9	0	0	0	0	0	9
03:10 PM	0	0	0	0	0	0	0	0	0	0	0	0	7	0	7	0	0	0	0	0	7
03:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	2
03:20 PM	0	0	0	0	0	0	0	0	0	0	0	0	5	0	5	0	0	0	0	0	5
03:25 PM	0	0	0	0	0	0	0	0	0	0	0	0	11	0	11	0	0	0	0	0	11
03:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	5	0	5	0	0	0	0	0	5
03:35 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1
03:40 PM	0	0	0	0	0	0	0	0	0	0	0	0	8	0	8	0	0	0	0	0	8
03:45 PM	0	0	0	0	0	1	0	0	0	1	0	0	1	0	1	0	0	0	0	0	2
03:50 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1
*** BREAK ***																					
Total	0	0	0	0	0	1	0	0	0	1	0	0	54	0	54	0	0	0	0	0	55
Grand Total	0	0	0	0	0	1	0	0	0	1	0	0	70	0	70	0	0	0	0	0	71
Apprch %	0	0	0	0	0	100	0	0	0	100	0	0	100	0	100	0	0	0	0	0	
Total %	0	0	0	0	0	1.4	0	0	0	1.4	0	0	98.6	0	98.6	0	0	0	0	0	

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File Name : Hwy 83 - Pinehurst Cir Mid
 Site Code : S214070
 Start Date : 8/25/2021
 Page No : 3



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545 E Pikes Peak Ave, Suite 210
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File Name : Hwy 83 - Pinehurst Cir PM
 Site Code : S214070
 Start Date : 8/24/2021
 Page No : 1

Groups Printed- Unshifted

Start Time	Southbound					Westbound					Northbound					Eastbound					Int. Total
	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	
03:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	2
*** BREAK ***																					
03:55 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1
Total	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	0	0	3
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1
*** BREAK ***																					
04:10 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1
*** BREAK ***																					
04:20 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1
*** BREAK ***																					
04:40 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	2
*** BREAK ***																					
04:55 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1
Total	0	0	0	0	0	0	0	0	0	0	0	0	7	0	7	0	0	0	0	0	7
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	5	0	5	0	0	0	0	0	5
05:05 PM	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	0	0	3
05:10 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	2
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1
05:20 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1
*** BREAK ***																					

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545 E Pikes Peak Ave, Suite 210
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File Name : Hwy 83 - Pinehurst Cir PM
 Site Code : S214070
 Start Date : 8/24/2021
 Page No : 2

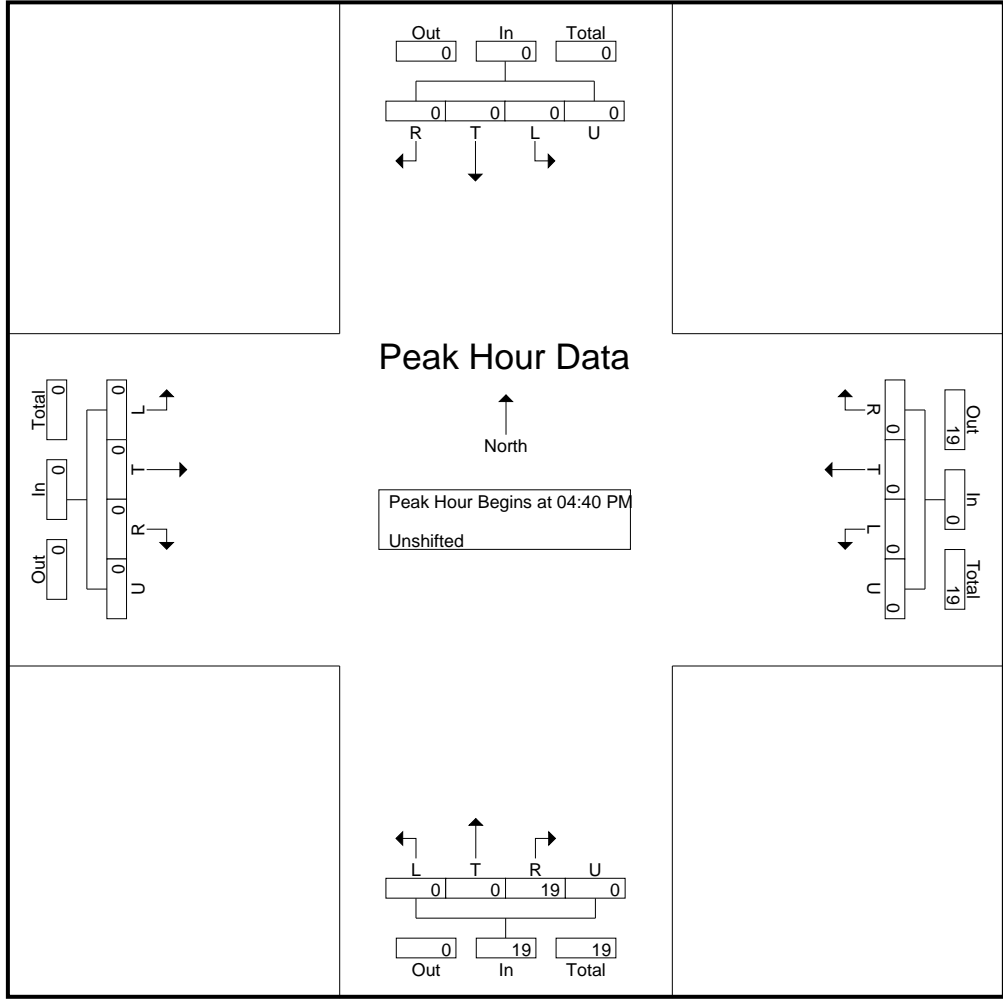
Groups Printed- Unshifted

Start Time	Southbound					Westbound					Northbound					Eastbound					Int. Total
	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	
05:35 PM	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	0	0	3
05:40 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	2
*** BREAK ***																					
Total	0	0	0	0	0	0	0	0	0	0	0	0	18	0	18	0	0	0	0	0	18
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	28	0	28	0	0	0	0	0	28
Apprch %	0	0	0	0	0	0	0	0	0	0	0	0	100	0	100	0	0	0	0	0	100
Total %	0	0	0	0	0	0	0	0	0	0	0	0	100	0	100	0	0	0	0	0	100

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File Name : Hwy 83 - Pinehurst Cir PM
 Site Code : S214070
 Start Date : 8/24/2021
 Page No : 4



LSC Transportation Consultants, Inc.

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

File Name : Hwy 83 - Walden Way AM
 Site Code : S214070
 Start Date : 8/26/2021
 Page No : 1

Groups Printed- Unshifted

Start Time	Hwy 83 Southbound					Walden Way Westbound					Hwy 83 Northbound					Eastbound					Int. Total
	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	
06:30 AM	0	27	0	0	27	0	0	2	0	2	0	23	0	0	23	0	0	0	0	0	52
06:35 AM	0	22	0	0	22	0	0	1	0	1	0	37	0	0	37	0	0	0	0	0	60
06:40 AM	0	30	0	0	30	0	0	1	0	1	0	49	0	0	49	0	0	0	0	0	80
06:45 AM	0	26	0	0	26	1	0	1	0	2	0	36	0	0	36	0	0	0	0	0	64
06:50 AM	0	24	0	0	24	0	0	1	0	1	0	51	0	0	51	0	0	0	0	0	76
06:55 AM	0	24	0	0	24	0	0	3	0	3	0	49	0	0	49	0	0	0	0	0	76
Total	0	153	0	0	153	1	0	9	0	10	0	245	0	0	245	0	0	0	0	0	408
07:00 AM	0	25	0	0	25	0	0	2	0	2	0	50	0	0	50	0	0	0	0	0	77
07:05 AM	0	28	0	0	28	0	0	1	0	1	0	29	0	0	29	0	0	0	0	0	58
07:10 AM	0	42	0	0	42	1	0	1	0	2	0	48	1	0	49	0	0	0	0	0	93
07:15 AM	1	41	0	0	42	0	0	2	0	2	0	39	0	0	39	0	0	0	0	0	83
07:20 AM	0	23	0	0	23	1	0	1	0	2	0	42	0	0	42	0	0	0	0	0	67
07:25 AM	0	35	0	0	35	0	0	0	0	0	0	64	0	0	64	0	0	0	0	0	99
07:30 AM	0	35	0	0	35	1	0	1	0	2	0	61	0	0	61	0	0	0	0	0	98
07:35 AM	1	71	0	0	72	0	0	2	0	2	0	66	0	0	66	0	0	0	0	0	140
07:40 AM	0	48	0	0	48	0	0	0	0	0	0	58	0	0	58	0	0	0	0	0	106
07:45 AM	0	60	0	0	60	0	0	1	0	1	0	49	0	0	49	0	0	0	0	0	110
07:50 AM	0	40	0	0	40	1	0	0	0	1	0	39	0	0	39	0	0	0	0	0	80
07:55 AM	0	38	0	0	38	0	0	2	0	2	0	27	0	0	27	0	0	0	0	0	67
Total	2	486	0	0	488	4	0	13	0	17	0	572	1	0	573	0	0	0	0	0	1078
08:00 AM	0	36	0	0	36	0	0	1	0	1	0	48	0	0	48	0	0	0	0	0	85

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File Name : Hwy 83 - Walden Way AM
 Site Code : S214070
 Start Date : 8/26/2021
 Page No : 2

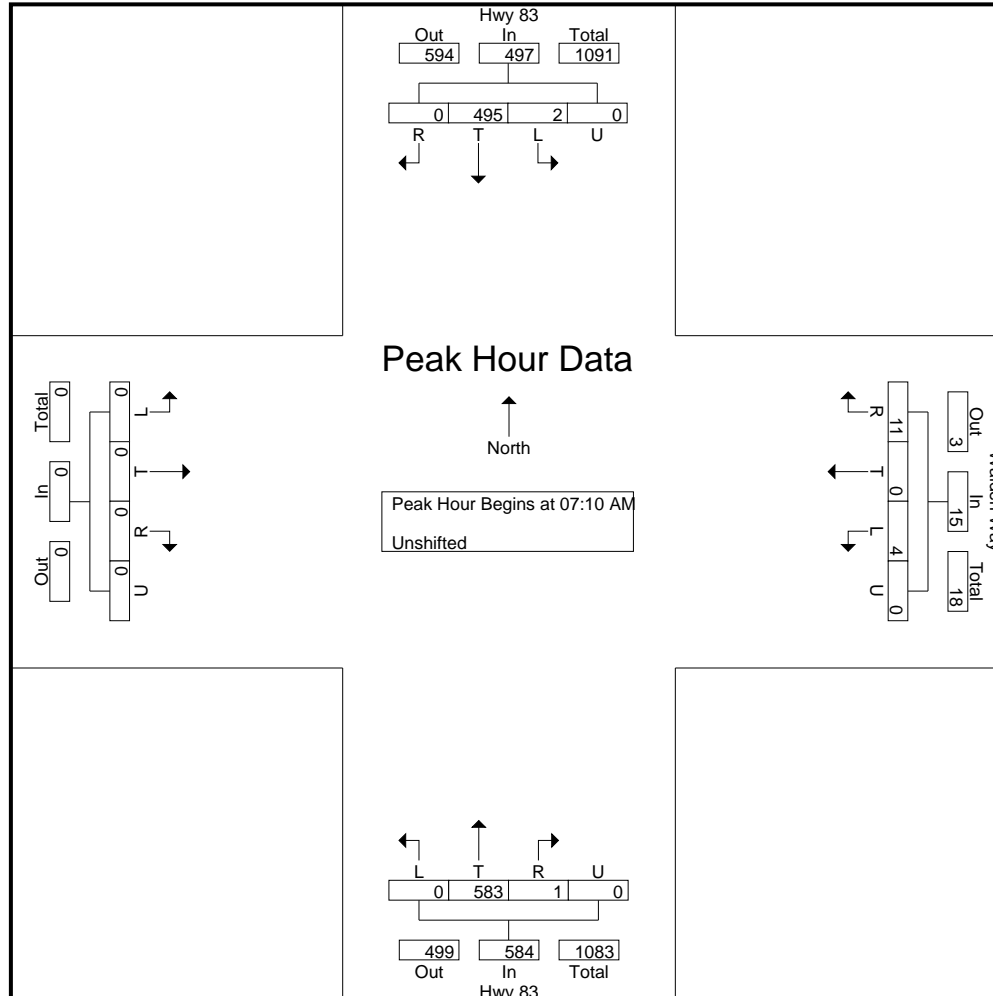
Groups Printed- Unshifted

Start Time	Hwy 83 Southbound					Walden Way Westbound					Hwy 83 Northbound					Eastbound					Int. Total
	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	
08:05 AM	0	26	0	0	26	0	0	0	0	0	0	42	0	0	42	0	0	0	0	0	68
08:10 AM	2	37	0	0	39	0	0	1	0	1	0	32	0	0	32	0	0	0	0	0	72
08:15 AM	0	37	0	0	37	0	0	0	0	0	0	45	0	0	45	0	0	0	0	0	82
08:20 AM	1	31	0	0	32	0	0	0	0	0	0	45	0	0	45	0	0	0	0	0	77
08:25 AM	0	33	0	0	33	0	0	2	0	2	0	38	0	0	38	0	0	0	0	0	73
Grand Total	5	839	0	0	844	5	0	26	0	31	0	1067	1	0	1068	0	0	0	0	0	1943
Apprch %	0.6	99.4	0	0		16.1	0	83.9	0		0	99.9	0.1	0		0	0	0	0	0	
Total %	0.3	43.2	0	0	43.4	0.3	0	1.3	0	1.6	0	54.9	0.1	0	55	0	0	0	0	0	

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File Name : Hwy 83 - Walden Way AM
 Site Code : S214070
 Start Date : 8/26/2021
 Page No : 4



LSC Transportation Consultants, Inc.

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

File Name : Hwy 83 - Walden Way Mid
 Site Code : S214070
 Start Date : 8/25/2021
 Page No : 1

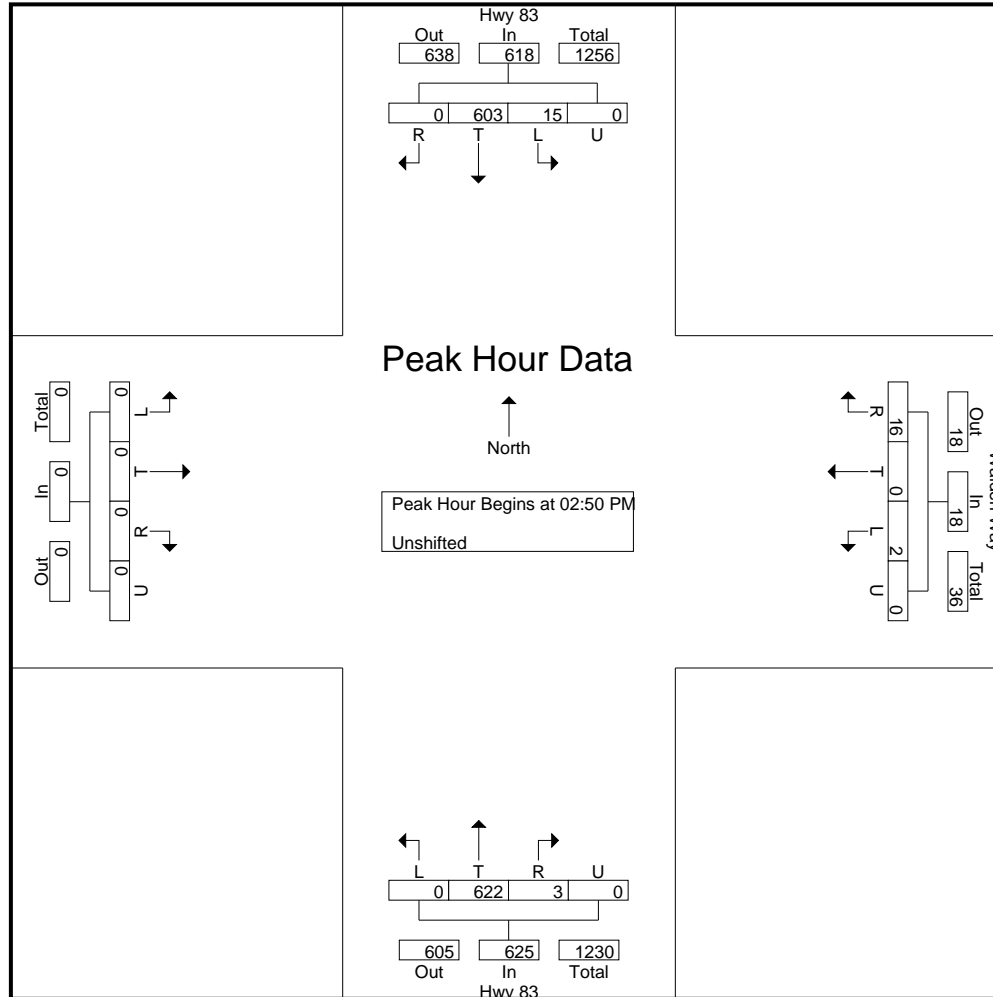
Groups Printed- Unshifted

Start Time	Hwy 83 Southbound					Walden Way Westbound					Hwy 83 Northbound					Eastbound					Int. Total
	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	
02:45 PM	1	31	0	0	32	0	0	0	0	0	0	75	0	0	75	0	0	0	0	0	107
02:50 PM	3	45	0	0	48	0	0	4	0	4	0	72	0	0	72	0	0	0	0	0	124
02:55 PM	0	51	0	0	51	1	0	0	0	1	0	49	0	0	49	0	0	0	0	0	101
Total	4	127	0	0	131	1	0	4	0	5	0	196	0	0	196	0	0	0	0	0	332
03:00 PM	0	54	0	0	54	0	0	2	0	2	0	45	0	0	45	0	0	0	0	0	101
03:05 PM	2	39	0	0	41	0	0	0	0	0	0	47	0	0	47	0	0	0	0	0	88
03:10 PM	2	33	0	0	35	0	0	2	0	2	0	42	1	0	43	0	0	0	0	0	80
03:15 PM	3	71	0	0	74	0	0	1	0	1	0	49	0	0	49	0	0	0	0	0	124
03:20 PM	2	41	0	0	43	0	0	4	0	4	0	73	1	0	74	0	0	0	0	0	121
03:25 PM	0	54	0	0	54	0	0	0	0	0	0	47	0	0	47	0	0	0	0	0	101
03:30 PM	0	50	0	0	50	0	0	0	0	0	0	43	1	0	44	0	0	0	0	0	94
03:35 PM	1	47	0	0	48	0	0	2	0	2	0	74	0	0	74	0	0	0	0	0	124
03:40 PM	2	48	0	0	50	0	0	0	0	0	0	38	0	0	38	0	0	0	0	0	88
03:45 PM	0	70	0	0	70	1	0	1	0	2	0	43	0	0	43	0	0	0	0	0	115
03:50 PM	0	42	0	0	42	0	0	0	0	0	0	57	0	0	57	0	0	0	0	0	99
03:55 PM	0	54	0	0	54	0	0	0	0	0	0	54	0	0	54	0	0	0	0	0	108
Total	12	603	0	0	615	1	0	12	0	13	0	612	3	0	615	0	0	0	0	0	1243
Grand Total	16	730	0	0	746	2	0	16	0	18	0	808	3	0	811	0	0	0	0	0	1575
Apprch %	2.1	97.9	0	0		11.1	0	88.9	0		0	99.6	0.4	0		0	0	0	0	0	
Total %	1	46.3	0	0	47.4	0.1	0	1	0	1.1	0	51.3	0.2	0	51.5	0	0	0	0	0	

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File Name : Hwy 83 - Walden Way Mid
 Site Code : S214070
 Start Date : 8/25/2021
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LSC Transportation Consultants, Inc.

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

File Name : Hwy 83 - Walden Way PM
 Site Code : S214070
 Start Date : 8/24/2021
 Page No : 1

Groups Printed- Unshifted

Start Time	Southbound					Westbound					Northbound					Eastbound					Int. Total
	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	
04:00 PM	0	59	0	0	59	0	0	0	0	0	0	43	0	0	43	0	0	0	0	0	102
04:05 PM	0	45	0	0	45	0	0	0	0	0	0	49	1	0	50	0	0	0	0	0	95
04:10 PM	3	49	0	0	52	0	0	0	0	0	0	51	0	0	51	0	0	0	0	0	103
04:15 PM	2	60	0	0	62	0	0	1	0	1	0	52	0	0	52	0	0	0	0	0	115
04:20 PM	1	54	0	0	55	1	0	1	0	2	0	24	0	0	24	0	0	0	0	0	81
04:25 PM	0	51	0	0	51	0	0	1	0	1	0	49	0	0	49	0	0	0	0	0	101
04:30 PM	1	38	0	0	39	0	0	1	0	1	0	47	1	0	48	0	0	0	0	0	88
04:35 PM	1	53	0	0	54	0	0	0	0	0	0	44	0	0	44	0	0	0	0	0	98
04:40 PM	0	52	0	0	52	0	0	0	0	0	0	46	0	0	46	0	0	0	0	0	98
04:45 PM	0	55	0	0	55	0	0	1	0	1	0	42	2	0	44	0	0	0	0	0	100
04:50 PM	1	20	0	0	21	0	0	0	0	0	0	38	0	0	38	0	0	0	0	0	59
04:55 PM	3	61	0	0	64	0	0	0	0	0	0	68	0	0	68	0	0	0	0	0	132
Total	12	597	0	0	609	1	0	5	0	6	0	553	4	0	557	0	0	0	0	0	1172
05:00 PM	0	51	0	0	51	0	0	0	0	0	0	38	1	0	39	0	0	0	0	0	90
05:05 PM	2	31	0	0	33	1	0	0	0	1	0	59	0	0	59	0	0	0	0	0	93
05:10 PM	1	68	0	0	69	0	0	1	0	1	0	40	0	0	40	0	0	0	0	0	110
05:15 PM	0	59	0	0	59	0	0	1	0	1	0	48	0	0	48	0	0	0	0	0	108
05:20 PM	0	43	0	0	43	0	0	1	0	1	0	41	0	0	41	0	0	0	0	0	85
05:25 PM	1	49	0	0	50	1	0	1	0	2	0	49	2	0	51	0	0	0	0	0	103
05:30 PM	1	43	0	0	44	0	0	0	0	0	0	32	0	0	32	0	0	0	0	0	76
05:35 PM	1	44	0	0	45	0	0	0	0	0	0	47	1	0	48	0	0	0	0	0	93
05:40 PM	3	50	0	0	53	0	0	1	0	1	0	40	0	0	40	0	0	0	0	0	94

LSC Transportation Consultants, Inc.

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

File Name : Hwy 83 - Walden Way PM
 Site Code : S214070
 Start Date : 8/24/2021
 Page No : 2

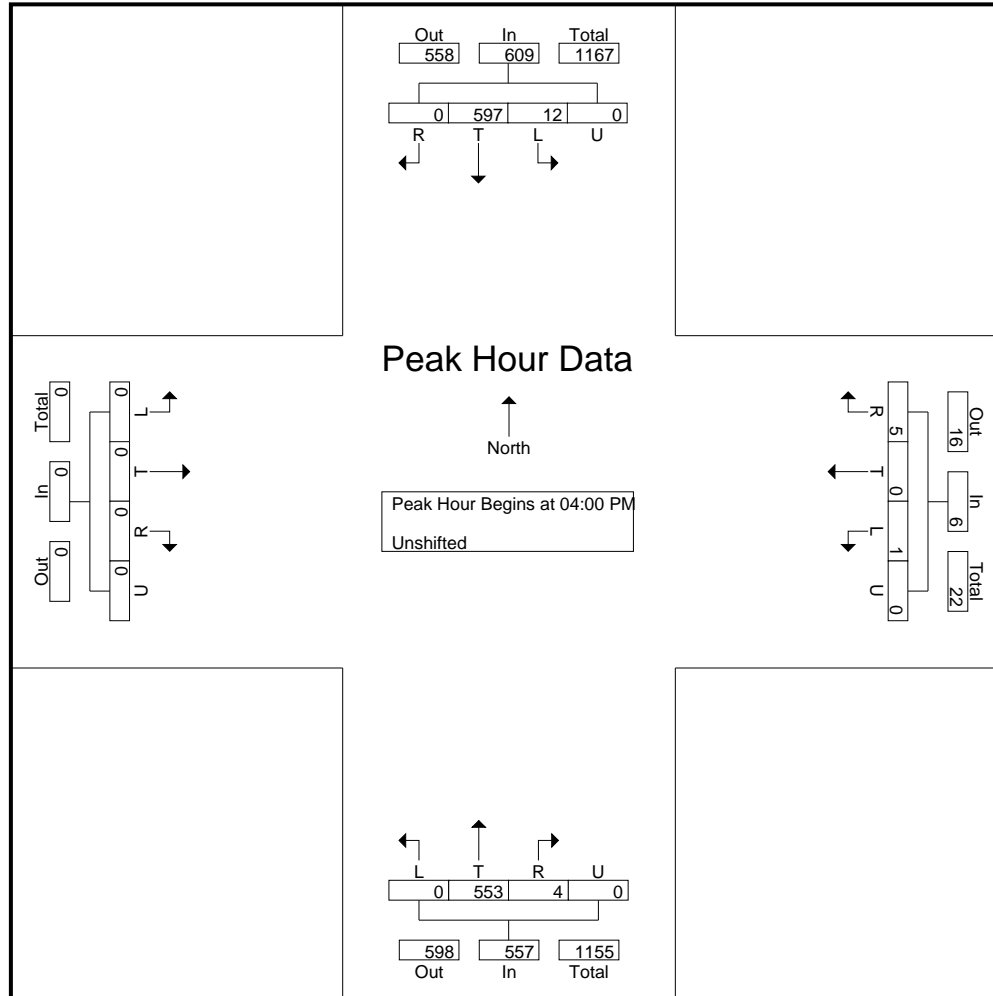
Groups Printed- Unshifted

Start Time	Southbound					Westbound					Northbound					Eastbound					Int. Total
	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	
05:45 PM	0	44	0	0	44	0	0	0	0	0	0	36	0	0	36	0	0	0	0	0	80
05:50 PM	1	49	0	0	50	0	0	0	0	0	0	38	1	0	39	0	0	0	0	0	89
05:55 PM	1	27	0	0	28	0	0	0	0	0	0	39	0	0	39	0	0	0	0	0	67
Total	11	558	0	0	569	2	0	5	0	7	0	507	5	0	512	0	0	0	0	0	1088
Grand Total	23	1155	0	0	1178	3	0	10	0	13	0	1060	9	0	1069	0	0	0	0	0	2260
Apprch %	2	98	0	0		23.1	0	76.9	0		0	99.2	0.8	0		0	0	0	0	0	
Total %	1	51.1	0	0	52.1	0.1	0	0.4	0	0.6	0	46.9	0.4	0	47.3	0	0	0	0	0	

LSC Transportation Consultants, Inc.

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

File Name : Hwy 83 - Walden Way PM
 Site Code : S214070
 Start Date : 8/24/2021
 Page No : 4



LSC Transportation Consultants, Inc.

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

File Name : Walden Way - Pinehurst Cir AM
 Site Code : S214070
 Start Date : 9/9/2021
 Page No : 1

Groups Printed- Unshifted

Start Time	Walden Way Southbound					Pinehurst Cir Westbound					Walden Way Northbound					Pinehurst Cir Eastbound					Int. Total
	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	
06:30 AM	0	1	0	0	1	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	2
06:35 AM	0	0	0	0	0	1	0	0	0	1	0	1	2	0	3	0	0	0	0	0	4
06:40 AM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	2
06:45 AM	0	0	0	0	0	1	0	0	0	1	0	0	2	0	2	0	0	0	0	0	3
06:50 AM	0	0	0	0	0	0	0	0	0	0	0	3	2	0	5	0	0	0	0	0	5
06:55 AM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	2
Total	0	1	0	0	1	2	0	0	0	2	0	6	9	0	15	0	0	0	0	0	18
07:00 AM	0	1	0	0	1	0	0	0	0	0	0	1	4	0	5	0	0	0	0	0	6
07:05 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	1	0	1	2
07:10 AM	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	2
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	2	2	0	4	0	0	0	0	0	4
07:20 AM	0	0	0	0	0	0	0	0	0	0	0	1	2	0	3	0	0	1	0	1	4
07:25 AM	0	0	0	0	0	0	0	0	0	0	0	1	5	0	6	0	0	1	0	1	7
07:30 AM	0	2	0	0	2	3	0	0	0	3	0	0	3	0	3	0	0	0	0	0	8
07:35 AM	0	0	0	0	0	4	0	0	0	4	0	0	2	0	2	1	0	0	0	1	7
07:40 AM	0	0	0	0	0	2	0	0	0	2	0	0	5	0	5	0	0	0	0	0	7
07:45 AM	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
07:50 AM	0	0	0	0	0	2	0	0	0	2	1	2	0	0	3	0	0	0	0	0	5
*** BREAK ***																					
Total	0	3	0	0	3	13	0	0	0	13	1	9	24	0	34	1	0	3	0	4	54
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	2

LSC Transportation Consultants, Inc.

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 Colorado Springs, CO 80905
 719-633-2868

File Name : Walden Way - Pinehurst Cir AM
 Site Code : S214070
 Start Date : 9/9/2021
 Page No : 2

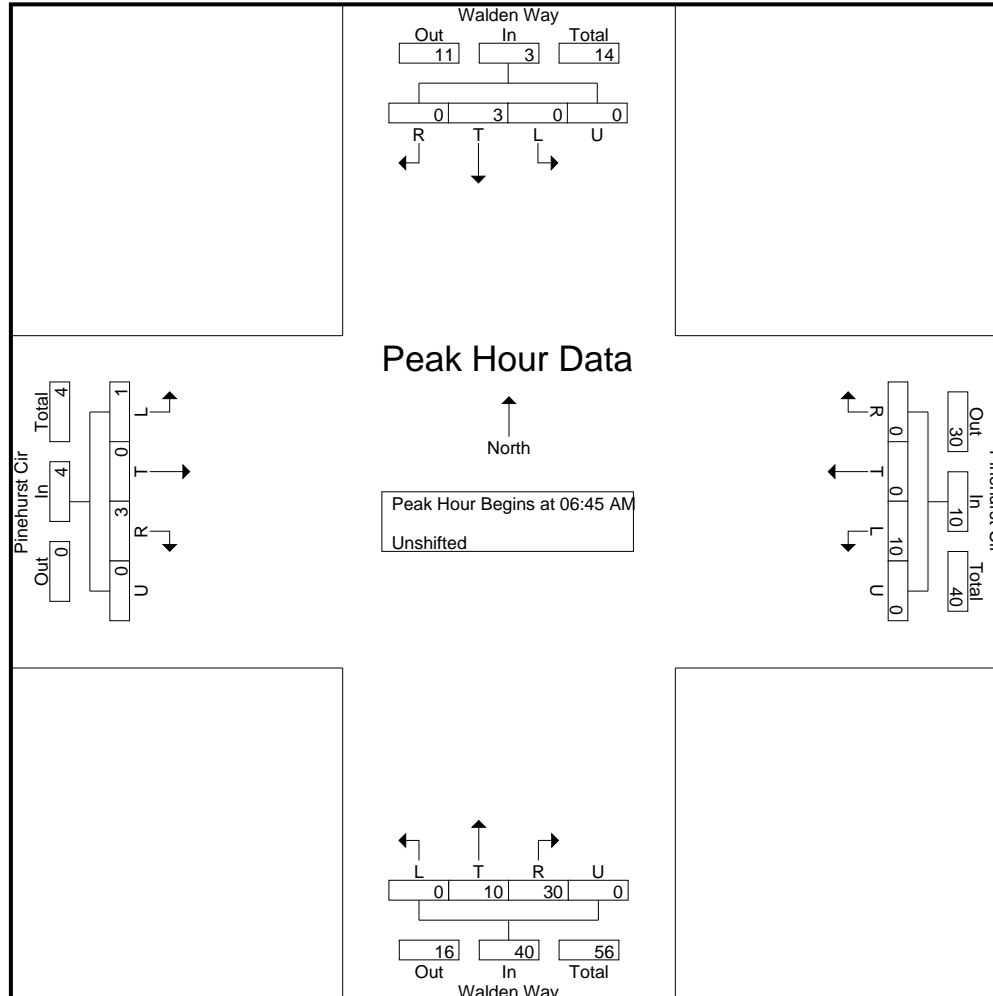
Groups Printed- Unshifted

Start Time	Walden Way Southbound					Pinehurst Cir Westbound					Walden Way Northbound					Pinehurst Cir Eastbound					Int. Total
	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	
08:05 AM	0	0	0	0	0	0	0	0	0	0	0	2	1	0	3	0	0	0	0	0	3
08:10 AM	0	1	0	0	1	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	2
08:15 AM	0	1	0	0	1	2	0	0	0	2	0	2	1	0	3	0	0	0	0	0	6
08:20 AM	0	0	0	0	0	0	0	0	0	0	0	1	3	0	4	0	0	0	0	0	4
*** BREAK ***																					
Grand Total	0	6	0	0	6	17	0	0	0	17	1	21	40	0	62	1	0	3	0	4	89
Apprch %	0	100	0	0		100	0	0	0		1.6	33.9	64.5	0		25	0	75	0		
Total %	0	6.7	0	0	6.7	19.1	0	0	0	19.1	1.1	23.6	44.9	0	69.7	1.1	0	3.4	0	4.5	

LSC Transportation Consultants, Inc.

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

File Name : Walden Way - Pinehurst Cir AM
 Site Code : S214070
 Start Date : 9/9/2021
 Page No : 4



LSC Transportation Consultants, Inc.

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

File Name : Walden Way - Pinehurst Cir Mid
 Site Code : S214070
 Start Date : 9/9/2021
 Page No : 1

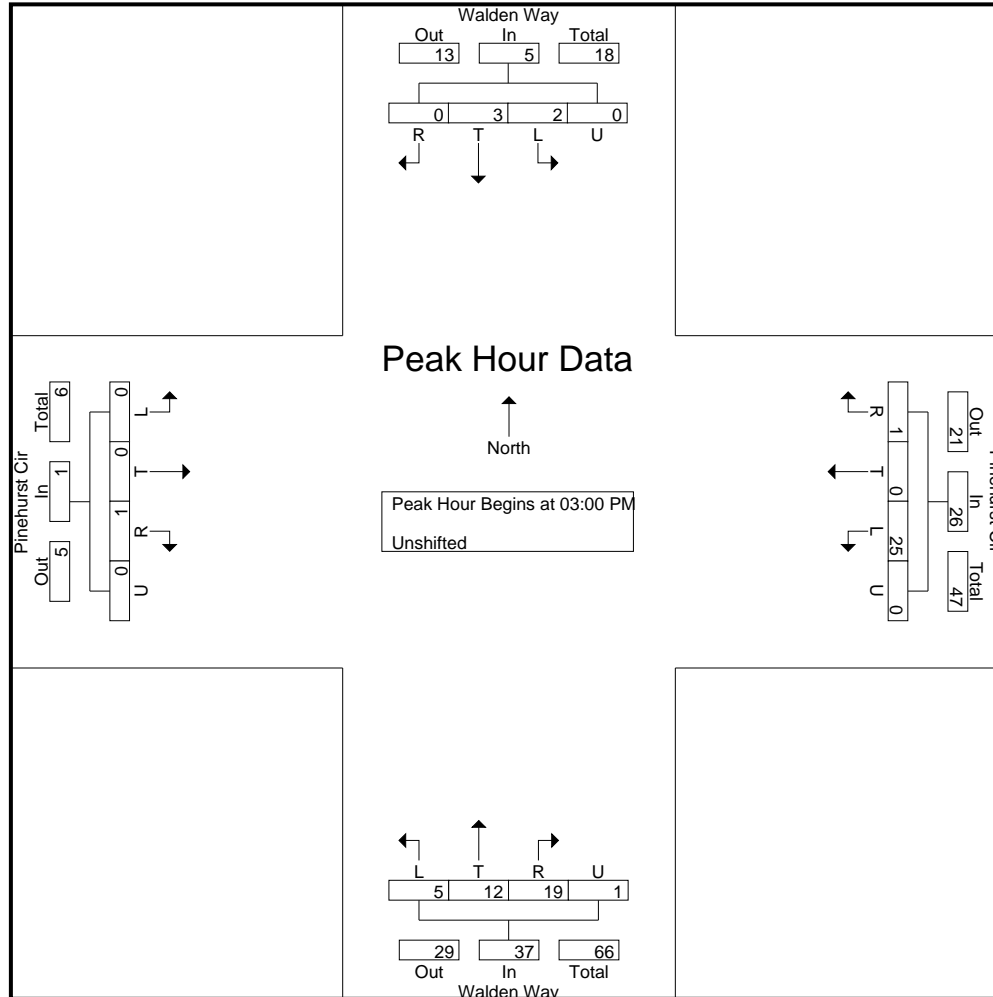
Groups Printed- Unshifted

Start Time	Walden Way Southbound					Pinehurst Cir Westbound					Walden Way Northbound					Pinehurst Cir Eastbound					Int. Total
	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	
02:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1
02:50 PM	0	1	0	0	1	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	0
02:55 PM	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	0	1	2	0	0	0	2	0	1	2	0	3	0	0	0	0	0	0
*** BREAK ***																					
03:05 PM	0	1	0	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
03:10 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0
03:15 PM	1	0	0	0	1	2	0	1	0	3	0	2	3	0	5	0	0	0	0	0	0
03:20 PM	0	0	0	0	0	6	0	0	0	6	0	4	1	0	5	0	0	0	0	0	0
03:25 PM	0	0	0	0	0	2	0	0	0	2	0	0	3	0	3	0	0	1	0	1	1
03:30 PM	0	0	0	0	0	3	0	0	0	3	2	1	5	0	8	0	0	0	0	0	0
03:35 PM	1	0	0	0	1	1	0	0	0	1	0	3	1	0	4	0	0	0	0	0	0
03:40 PM	0	1	0	0	1	1	0	0	0	1	1	1	1	0	3	0	0	0	0	0	0
03:45 PM	0	0	0	0	0	3	0	0	0	3	1	1	1	0	3	0	0	0	0	0	0
03:50 PM	0	1	0	0	1	4	0	0	0	4	1	0	2	0	3	0	0	0	0	0	0
03:55 PM	0	0	0	0	0	2	0	0	0	2	0	0	0	1	1	0	0	0	0	0	0
Total	2	3	0	0	5	25	0	1	0	26	5	12	19	1	37	0	0	1	0	1	1
Grand Total	2	4	0	0	6	27	0	1	0	28	5	13	21	1	40	0	0	1	0	1	75
Apprch %	33.3	66.7	0	0		96.4	0	3.6	0		12.5	32.5	52.5	2.5		0	0	100	0		
Total %	2.7	5.3	0	0	8	36	0	1.3	0	37.3	6.7	17.3	28	1.3	53.3	0	0	1.3	0	1.3	

LSC Transportation Consultants, Inc.

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

File Name : Walden Way - Pinehurst Cir Mid
 Site Code : S214070
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LSC Transportation Consultants, Inc.

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

File Name : Walden Way - Pinehurst Cir PM
 Site Code : S214070
 Start Date : 9/9/2021
 Page No : 1

Groups Printed- Unshifted

Start Time	Walden Way Southbound					Pinehurst Cir Westbound					Walden Way Northbound					Pinehurst Cir Eastbound					Int. Total
	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	
04:00 PM	0	0	0	0	0	4	0	0	0	4	0	0	0	0	0	0	0	0	0	0	4
04:05 PM	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	2
04:10 PM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
04:15 PM	0	0	1	0	1	2	0	0	0	2	0	1	0	0	1	0	0	0	0	0	4
04:20 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
04:25 PM	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
04:30 PM	0	0	0	0	0	1	0	0	0	1	1	3	0	0	4	0	0	0	0	0	5
04:35 PM	0	1	0	0	1	0	0	1	0	1	0	2	0	0	2	0	0	0	0	0	4
04:40 PM	1	0	0	0	1	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	2
04:45 PM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
04:50 PM	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	1	0	0	0	1	4
04:55 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
Total	1	9	1	0	11	7	0	1	0	8	2	10	1	0	13	1	1	0	0	2	34
05:00 PM	0	1	0	0	1	1	0	0	0	1	0	1	2	0	3	0	0	1	0	1	6
05:05 PM	0	0	0	0	0	3	0	0	0	3	0	0	1	0	1	0	0	0	0	0	4
05:10 PM	0	0	0	0	0	1	0	0	0	1	1	2	0	0	3	0	0	0	0	0	4
05:15 PM	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	1	0	1	4
05:20 PM	0	0	0	0	0	1	0	0	0	1	0	0	1	0	1	0	0	1	0	1	3
05:25 PM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	4
05:35 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
05:40 PM	0	0	0	0	0	1	0	0	0	1	0	0	1	0	1	0	0	0	0	0	2

LSC Transportation Consultants, Inc.

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

File Name : Walden Way - Pinehurst Cir PM
 Site Code : S214070
 Start Date : 9/9/2021
 Page No : 2

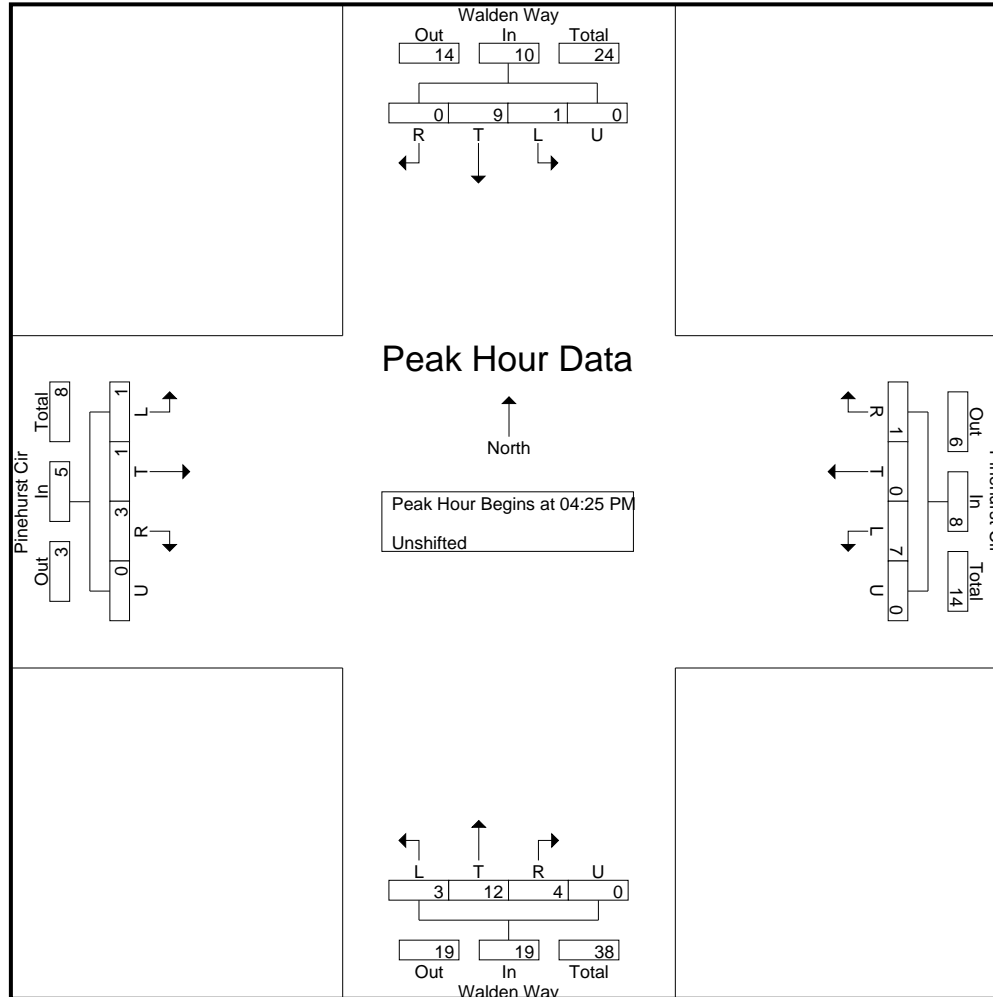
Groups Printed- Unshifted

Start Time	Walden Way Southbound					Pinehurst Cir Westbound					Walden Way Northbound					Pinehurst Cir Eastbound					Int. Total	
	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total		
05:45 PM	1	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
05:50 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
05:55 PM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	2	6	1	0	9	7	0	0	0	7	2	8	5	0	15	0	0	3	0	3	34	
Grand Total	3	15	2	0	20	14	0	1	0	15	4	18	6	0	28	1	1	3	0	5	68	
Apprch %	15	75	10	0		93.3	0	6.7	0		14.3	64.3	21.4	0		20	20	60	0			
Total %	4.4	22.1	2.9	0	29.4	20.6	0	1.5	0	22.1	5.9	26.5	8.8	0	41.2	1.5	1.5	4.4	0	7.4		

LSC Transportation Consultants, Inc.

545 E Pikes Peak Ave, Suite 210
 Colorado Springs, CO 80905
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File Name : Walden Way - Pinehurst Cir PM
 Site Code : S214070
 Start Date : 9/9/2021
 Page No : 4



LSC Transportation Consultants, Inc.

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

File Name : Timber Meadow Dr - Hodgen Rd AM
 Site Code : S214070
 Start Date : 12/7/2021
 Page No : 1

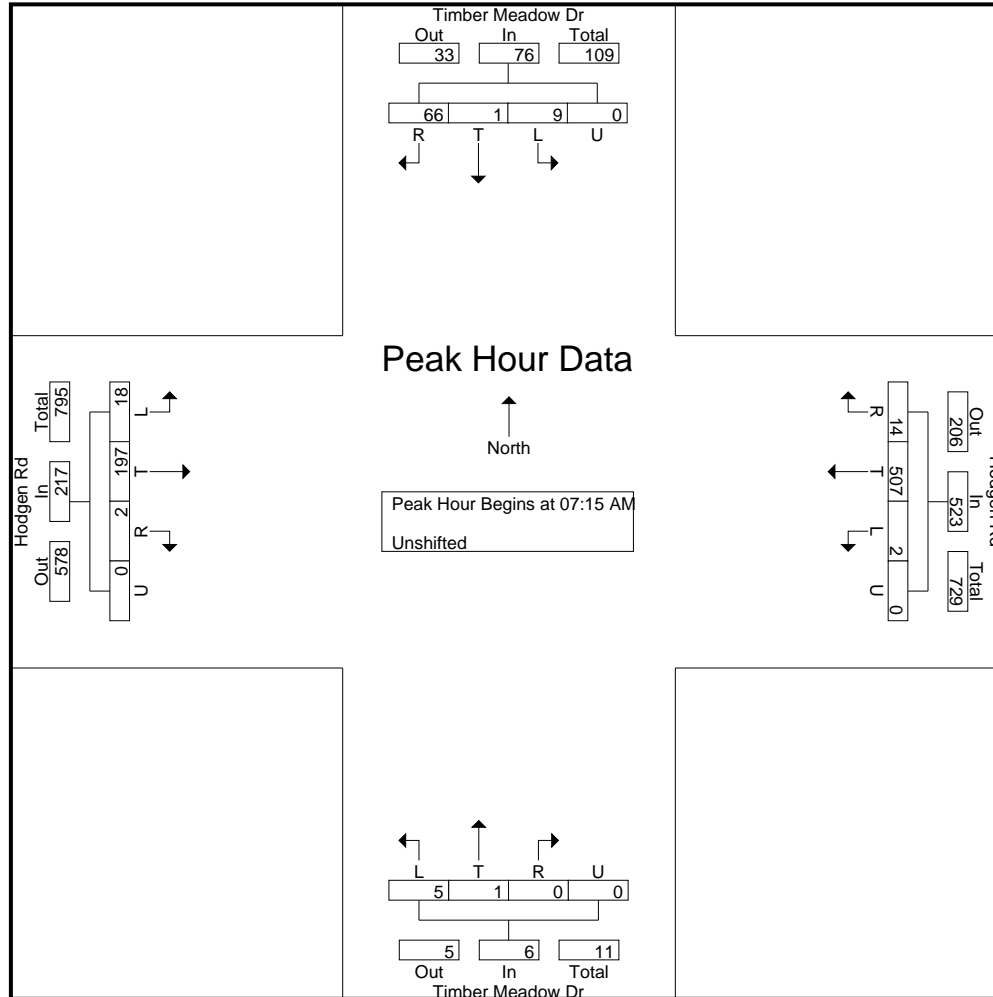
Groups Printed- Unshifted

Start Time	Timber Meadow Dr Southbound					Hodgen Rd Westbound					Timber Meadow Dr Northbound					Hodgen Rd Eastbound					Int. Total
	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	
06:30 AM	0	0	15	0	15	0	88	1	0	89	2	0	0	0	2	3	35	0	0	38	144
06:45 AM	1	0	16	0	17	0	109	1	0	110	3	0	1	0	4	1	29	0	0	30	161
Total	1	0	31	0	32	0	197	2	0	199	5	0	1	0	6	4	64	0	0	68	305
07:00 AM	1	0	12	0	13	0	116	0	0	116	0	0	0	0	0	2	30	0	0	32	161
07:15 AM	2	1	26	0	29	0	158	6	0	164	2	0	0	0	2	3	39	0	0	42	237
07:30 AM	2	0	20	0	22	0	120	5	0	125	2	1	0	0	3	5	51	0	0	56	206
07:45 AM	3	0	10	0	13	0	124	1	0	125	0	0	0	0	0	4	57	1	0	62	200
Total	8	1	68	0	77	0	518	12	0	530	4	1	0	0	5	14	177	1	0	192	804
08:00 AM	2	0	10	0	12	2	105	2	0	109	1	0	0	0	1	6	50	1	0	57	179
08:15 AM	0	0	7	0	7	0	92	0	0	92	0	0	0	0	0	5	63	2	0	70	169
Grand Total	11	1	116	0	128	2	912	16	0	930	10	1	1	0	12	29	354	4	0	387	1457
Apprch %	8.6	0.8	90.6	0		0.2	98.1	1.7	0		83.3	8.3	8.3	0		7.5	91.5	1	0		
Total %	0.8	0.1	8	0	8.8	0.1	62.6	1.1	0	63.8	0.7	0.1	0.1	0	0.8	2	24.3	0.3	0	26.6	

LSC Transportation Consultants, Inc.

545 E Pikes Peak Ave, Suite 210
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File Name : Timber Meadow Dr - Hodgen Rd AM
 Site Code : S214070
 Start Date : 12/7/2021
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LSC Transportation Consultants, Inc.

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

File Name : Timber Meadow Dr - Hodgen Rd PM
 Site Code : S214070
 Start Date : 12/7/2021
 Page No : 1

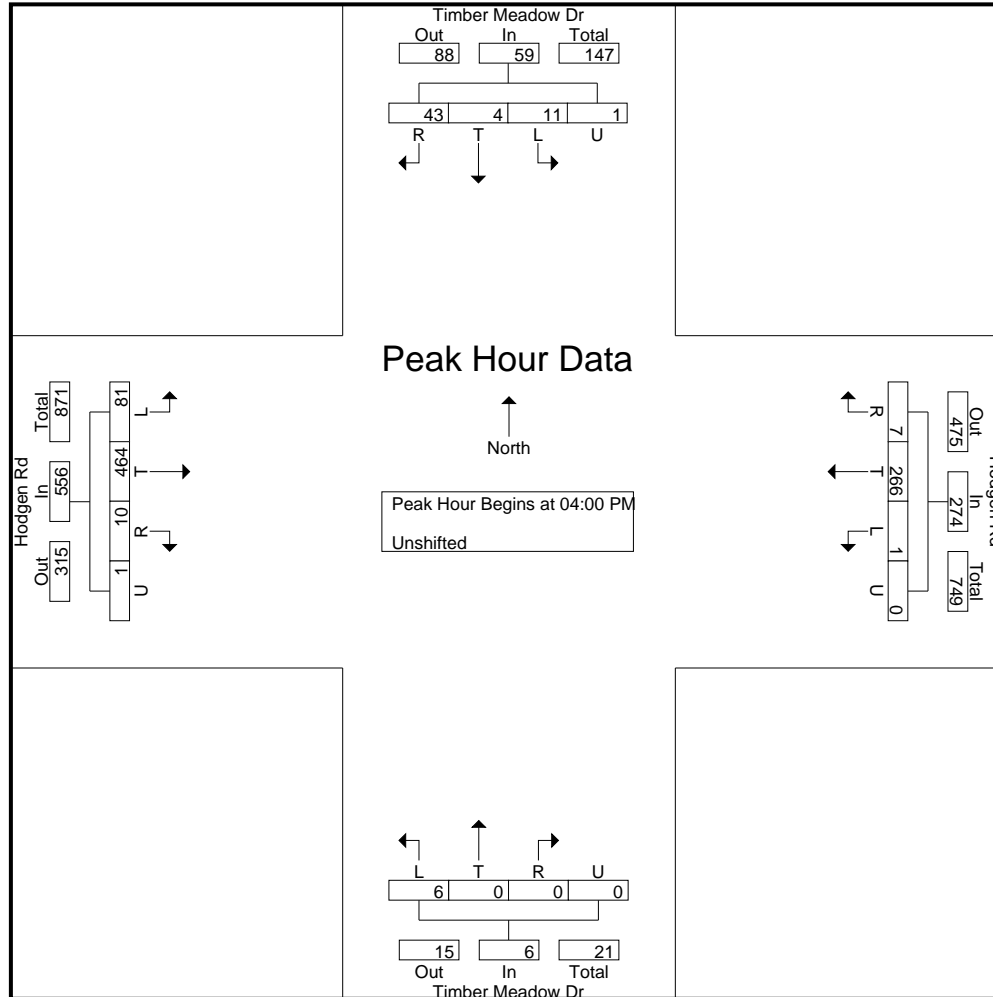
Groups Printed- Unshifted

Start Time	Timber Meadow Dr Southbound					Hodgen Rd Westbound					Timber Meadow Dr Northbound					Hodgen Rd Eastbound					Int. Total
	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	
04:00 PM	3	4	12	0	19	0	68	2	0	70	1	0	0	0	1	16	120	4	0	140	230
04:15 PM	1	0	14	0	15	0	71	2	0	73	2	0	0	0	2	24	115	0	0	139	229
04:30 PM	2	0	10	0	12	1	60	1	0	62	1	0	0	0	1	16	110	4	1	131	206
04:45 PM	5	0	7	1	13	0	67	2	0	69	2	0	0	0	2	25	119	2	0	146	230
Total	11	4	43	1	59	1	266	7	0	274	6	0	0	0	6	81	464	10	1	556	895
05:00 PM	3	1	14	0	18	0	67	4	0	71	1	0	0	0	1	18	104	3	0	125	215
05:15 PM	1	0	15	0	16	0	54	0	0	54	2	2	0	0	4	15	119	0	0	134	208
05:30 PM	1	0	8	0	9	0	72	2	0	74	1	0	0	0	1	13	93	3	0	109	193
05:45 PM	0	0	7	0	7	0	57	2	0	59	0	0	0	0	0	18	72	0	0	90	156
Total	5	1	44	0	50	0	250	8	0	258	4	2	0	0	6	64	388	6	0	458	772
Grand Total	16	5	87	1	109	1	516	15	0	532	10	2	0	0	12	145	852	16	1	1014	1667
Apprch %	14.7	4.6	79.8	0.9		0.2	97	2.8	0		83.3	16.7	0	0		14.3	84	1.6	0.1		
Total %	1	0.3	5.2	0.1	6.5	0.1	31	0.9	0	31.9	0.6	0.1	0	0	0.7	8.7	51.1	1	0.1	60.8	

LSC Transportation Consultants, Inc.

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 Colorado Springs, CO 80905
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File Name : Timber Meadow Dr - Hodgen Rd PM
 Site Code : S214070
 Start Date : 12/7/2021
 Page No : 3



Levels of Service



Timings
1: SH 83 & SH 105/Walker Rd

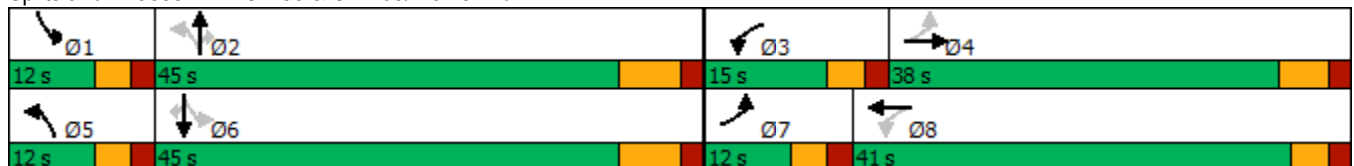
Existing Traffic
AM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations												
Traffic Volume (vph)	28	171	123	105	214	141	270	27	58	273	49	
Future Volume (vph)	28	171	123	105	214	141	270	27	58	273	49	
Turn Type	pm+pt	NA	Free	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	Perm	
Protected Phases	7	4		3	8	5	2		1	6		
Permitted Phases	4		Free	8		2		2	6		6	
Detector Phase	7	4		3	8	5	2	2	1	6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	10.0	11.0		10.0	10.0	10.0	12.0	12.0	10.0	12.0	12.0	
Total Split (s)	12.0	38.0		15.0	41.0	12.0	45.0	45.0	12.0	45.0	45.0	
Total Split (%)	10.9%	34.5%		13.6%	37.3%	10.9%	40.9%	40.9%	10.9%	40.9%	40.9%	
Yellow Time (s)	3.0	4.0		3.0	3.0	3.0	5.0	5.0	3.0	5.0	5.0	
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.0	6.0		5.0	5.0	5.0	7.0	7.0	5.0	7.0	7.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None		None	None	None	Max	Max	None	Max	Max	
Act Effct Green (s)	30.4	22.9	101.6	37.9	32.3	48.8	41.3	41.3	47.1	38.4	38.4	
Actuated g/C Ratio	0.30	0.23	1.00	0.37	0.32	0.48	0.41	0.41	0.46	0.38	0.38	
v/c Ratio	0.18	0.47	0.09	0.53	0.90	0.34	0.40	0.04	0.13	0.45	0.08	
Control Delay	20.8	36.7	0.1	26.5	53.7	17.9	26.8	0.1	16.0	28.2	0.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	20.8	36.7	0.1	26.5	53.7	17.9	26.8	0.1	16.0	28.2	0.2	
LOS	C	D	A	C	D	B	C	A	B	C	A	
Approach Delay		21.4			45.8		22.3			22.7		
Approach LOS		C			D		C			C		

Intersection Summary

Cycle Length: 110
 Actuated Cycle Length: 101.6
 Natural Cycle: 65
 Control Type: Semi Act-Uncoord
 Maximum v/c Ratio: 0.90
 Intersection Signal Delay: 30.8
 Intersection LOS: C
 Intersection Capacity Utilization 58.6%
 ICU Level of Service B
 Analysis Period (min) 15

Splits and Phases: 1: SH 83 & SH 105/Walker Rd



Intersection												
Int Delay, s/veh	3.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	0	3	10	0	0	0	10	30	0	3	0
Future Vol, veh/h	1	0	3	10	0	0	0	10	30	0	3	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	28	28	28	78	78	78	38	38	38
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	0	4	36	0	0	0	13	38	0	8	0

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	40	59	8	42	40	32	8	0	0	51	0	0
Stage 1	8	8	-	32	32	-	-	-	-	-	-	-
Stage 2	32	51	-	10	8	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	964	832	1074	961	852	1042	1612	-	-	1555	-	-
Stage 1	1013	889	-	984	868	-	-	-	-	-	-	-
Stage 2	984	852	-	1011	889	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	964	832	1074	957	852	1042	1612	-	-	1555	-	-
Mov Cap-2 Maneuver	964	832	-	957	852	-	-	-	-	-	-	-
Stage 1	1013	889	-	984	868	-	-	-	-	-	-	-
Stage 2	984	852	-	1007	889	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	8.5		8.9		0		0	
HCM LOS	A		A					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1612	-	-	1044	957	1555	-	-
HCM Lane V/C Ratio	-	-	-	0.005	0.037	-	-	-
HCM Control Delay (s)	0	-	-	8.5	8.9	0	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.1	0	-	-

Intersection												
Int Delay, s/veh	2.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑	↗	↖	↑	↗		↕			↕	
Traffic Vol, veh/h	18	197	2	2	507	14	5	1	0	9	1	66
Future Vol, veh/h	18	197	2	2	507	14	5	1	0	9	1	66
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	475	-	415	525	-	525	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	80	80	80	83	83	83	66	66	66
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	21	226	2	3	634	18	6	1	0	14	2	100

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	652	0	0	228	0	0	968	926	226	910	910	634
Stage 1	-	-	-	-	-	-	268	268	-	640	640	-
Stage 2	-	-	-	-	-	-	700	658	-	270	270	-
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	935	-	-	1340	-	-	233	269	813	255	275	479
Stage 1	-	-	-	-	-	-	738	687	-	464	470	-
Stage 2	-	-	-	-	-	-	430	461	-	736	686	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	935	-	-	1340	-	-	180	263	813	249	268	479
Mov Cap-2 Maneuver	-	-	-	-	-	-	180	263	-	249	268	-
Stage 1	-	-	-	-	-	-	722	672	-	454	469	-
Stage 2	-	-	-	-	-	-	338	460	-	718	671	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.7	0	24.7	16.5
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	190	935	-	-	1340	-	-	428
HCM Lane V/C Ratio	0.038	0.022	-	-	0.002	-	-	0.269
HCM Control Delay (s)	24.7	8.9	-	-	7.7	-	-	16.5
HCM Lane LOS	C	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.1	0.1	-	-	0	-	-	1.1

Intersection						
Int Delay, s/veh	0.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	4	11	583	1	2	495
Future Vol, veh/h	4	11	583	1	2	495
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	78	78	76	76	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	5	14	767	1	2	538

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1310	768	0	0	768
Stage 1	768	-	-	-	-
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	175	402	-	-	846
Stage 1	458	-	-	-	-
Stage 2	583	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	174	402	-	-	846
Mov Cap-2 Maneuver	174	-	-	-	-
Stage 1	458	-	-	-	-
Stage 2	581	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	298	846
HCM Lane V/C Ratio	-	-	0.065	0.003
HCM Control Delay (s)	-	-	17.9	9.3
HCM Lane LOS	-	-	C	A
HCM 95th %tile Q(veh)	-	-	0.2	0

Timings
1: SH 83 & SH 105/Walker Rd

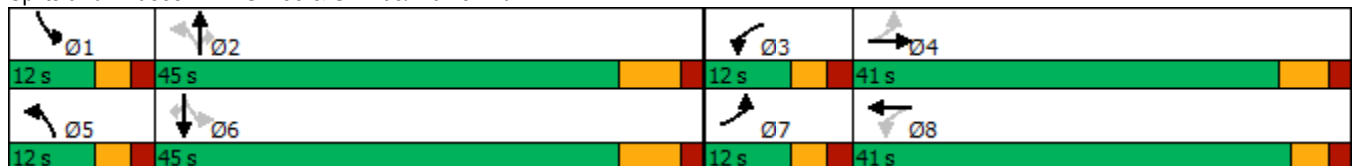
Existing Traffic
Midday Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations												
Traffic Volume (vph)	69	169	121	98	127	140	351	59	36	373	53	
Future Volume (vph)	69	169	121	98	127	140	351	59	36	373	53	
Turn Type	pm+pt	NA	Free	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	Perm	
Protected Phases	7	4		3	8	5	2		1	6		
Permitted Phases	4		Free	8		2		2	6		6	
Detector Phase	7	4		3	8	5	2	2	1	6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	10.0	11.0		10.0	10.0	10.0	12.0	12.0	10.0	12.0	12.0	
Total Split (s)	12.0	41.0		12.0	41.0	12.0	45.0	45.0	12.0	45.0	45.0	
Total Split (%)	10.9%	37.3%		10.9%	37.3%	10.9%	40.9%	40.9%	10.9%	40.9%	40.9%	
Yellow Time (s)	3.0	4.0		3.0	3.0	3.0	5.0	5.0	3.0	5.0	5.0	
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.0	6.0		5.0	5.0	5.0	7.0	7.0	5.0	7.0	7.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None		None	None	None	Max	Max	None	Max	Max	
Act Effct Green (s)	25.9	18.0	93.2	27.1	21.6	49.4	43.3	43.3	46.4	38.1	38.1	
Actuated g/C Ratio	0.28	0.19	1.00	0.29	0.23	0.53	0.46	0.46	0.50	0.41	0.41	
v/c Ratio	0.37	0.68	0.11	0.60	0.66	0.34	0.44	0.08	0.08	0.53	0.08	
Control Delay	25.7	44.8	0.1	33.3	39.9	13.4	21.5	0.2	11.3	25.0	0.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	25.7	44.8	0.1	33.3	39.9	13.4	21.5	0.2	11.3	25.0	0.2	
LOS	C	D	A	C	D	B	C	A	B	C	A	
Approach Delay		26.1			37.3		17.2			21.1		
Approach LOS		C			D		B			C		

Intersection Summary

Cycle Length: 110
 Actuated Cycle Length: 93.2
 Natural Cycle: 60
 Control Type: Semi Act-Uncoord
 Maximum v/c Ratio: 0.68
 Intersection Signal Delay: 24.8
 Intersection Capacity Utilization 60.9%
 Analysis Period (min) 15
 Intersection LOS: C
 ICU Level of Service B

Splits and Phases: 1: SH 83 & SH 105/Walker Rd



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	0	0	1	25	0	1	5	12	19	2	3	0
Future Vol, veh/h	0	0	1	25	0	1	5	12	19	2	3	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	59	59	59	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	1	42	0	2	6	15	24	3	4	0

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	50	61	4	50	49	27	4	0	0	39	0	0
Stage 1	10	10	-	39	39	-	-	-	-	-	-	-
Stage 2	40	51	-	11	10	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	950	830	1080	950	843	1048	1618	-	-	1571	-	-
Stage 1	1011	887	-	976	862	-	-	-	-	-	-	-
Stage 2	975	852	-	1010	887	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	944	825	1080	944	838	1048	1618	-	-	1571	-	-
Mov Cap-2 Maneuver	944	825	-	944	838	-	-	-	-	-	-	-
Stage 1	1007	885	-	972	859	-	-	-	-	-	-	-
Stage 2	970	849	-	1007	885	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	8.3	9	1	2.9
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1618	-	-	1080	948	1571	-	-
HCM Lane V/C Ratio	0.004	-	-	0.001	0.046	0.002	-	-
HCM Control Delay (s)	7.2	0	-	8.3	9	7.3	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0.1	0	-	-

Intersection						
Int Delay, s/veh	0.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	2	16	622	3	15	603
Future Vol, veh/h	2	16	622	3	15	603
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	78	78	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	21	676	3	16	655

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1365	678	0	0	679
Stage 1	678	-	-	-	-
Stage 2	687	-	-	-	-
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	162	452	-	-	913
Stage 1	504	-	-	-	-
Stage 2	499	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	157	452	-	-	913
Mov Cap-2 Maneuver	157	-	-	-	-
Stage 1	504	-	-	-	-
Stage 2	485	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	15.3	0	0.2
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	374	913
HCM Lane V/C Ratio	-	-	0.062	0.018
HCM Control Delay (s)	-	-	15.3	9
HCM Lane LOS	-	-	C	A
HCM 95th %tile Q(veh)	-	-	0.2	0.1

Timings
1: SH 83 & SH 105/Walker Rd

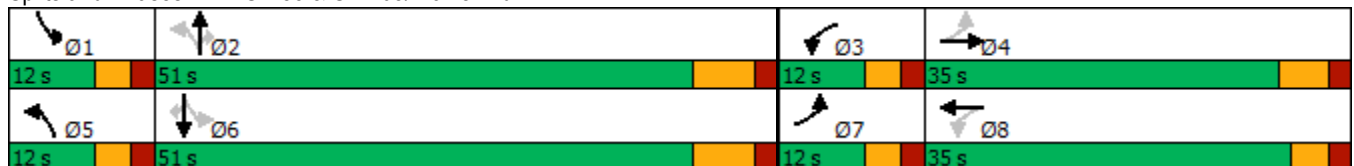
Existing Traffic
PM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations												
Traffic Volume (vph)	62	60	139	71	81	135	385	17	17	476	60	
Future Volume (vph)	62	60	139	71	81	135	385	17	17	476	60	
Turn Type	pm+pt	NA	Free	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	Perm	
Protected Phases	7	4		3	8	5	2		1	6		
Permitted Phases	4		Free	8		2		2	6		6	
Detector Phase	7	4		3	8	5	2	2	1	6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	10.0	11.0		10.0	10.0	10.0	12.0	12.0	10.0	12.0	12.0	
Total Split (s)	12.0	35.0		12.0	35.0	12.0	51.0	51.0	12.0	51.0	51.0	
Total Split (%)	10.9%	31.8%		10.9%	31.8%	10.9%	46.4%	46.4%	10.9%	46.4%	46.4%	
Yellow Time (s)	3.0	4.0		3.0	3.0	3.0	5.0	5.0	3.0	5.0	5.0	
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.0	6.0		5.0	5.0	5.0	7.0	7.0	5.0	7.0	7.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None		None	None	None	Max	Max	None	Max	Max	
Act Effct Green (s)	15.3	9.3	85.7	15.5	10.3	57.7	55.0	55.0	53.1	45.0	45.0	
Actuated g/C Ratio	0.18	0.11	1.00	0.18	0.12	0.67	0.64	0.64	0.62	0.53	0.53	
v/c Ratio	0.25	0.31	0.09	0.30	0.49	0.32	0.40	0.02	0.03	0.53	0.07	
Control Delay	28.9	41.4	0.1	29.7	42.1	8.5	13.7	0.1	6.9	18.5	0.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	28.9	41.4	0.1	29.7	42.1	8.5	13.7	0.1	6.9	18.5	0.1	
LOS	C	D	A	C	D	A	B	A	A	B	A	
Approach Delay		16.5			36.8		12.0			16.2		
Approach LOS		B			D		B			B		

Intersection Summary

Cycle Length: 110
 Actuated Cycle Length: 85.7
 Natural Cycle: 60
 Control Type: Semi Act-Uncoord
 Maximum v/c Ratio: 0.53
 Intersection Signal Delay: 16.9
 Intersection LOS: B
 Intersection Capacity Utilization 57.6%
 ICU Level of Service B
 Analysis Period (min) 15

Splits and Phases: 1: SH 83 & SH 105/Walker Rd



Intersection												
Int Delay, s/veh	3.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	1	3	7	0	1	3	12	4	1	9	0
Future Vol, veh/h	1	1	3	7	0	1	3	12	4	1	9	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	78	78	78	79	79	79	63	63	63
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	1	4	9	0	1	4	15	5	2	14	0

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	44	46	14	47	44	18	14	0	0	20	0	0
Stage 1	18	18	-	26	26	-	-	-	-	-	-	-
Stage 2	26	28	-	21	18	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	958	846	1066	954	848	1061	1604	-	-	1596	-	-
Stage 1	1001	880	-	992	874	-	-	-	-	-	-	-
Stage 2	992	872	-	998	880	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	954	843	1066	946	845	1061	1604	-	-	1596	-	-
Mov Cap-2 Maneuver	954	843	-	946	845	-	-	-	-	-	-	-
Stage 1	998	879	-	989	871	-	-	-	-	-	-	-
Stage 2	988	869	-	992	879	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	8.7		8.8		1.1		0.7	
HCM LOS	A		A					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1604	-	-	990	959	1596	-	-
HCM Lane V/C Ratio	0.002	-	-	0.006	0.011	0.001	-	-
HCM Control Delay (s)	7.2	0	-	8.7	8.8	7.3	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-

Intersection												
Int Delay, s/veh	2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗	↖	↖	↗	↖		↔			↔	
Traffic Vol, veh/h	81	464	10	1	266	7	6	0	0	11	4	43
Future Vol, veh/h	81	464	10	1	266	7	6	0	0	11	4	43
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	475	-	415	525	-	525	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	87	87	87	78	78	78	76	76	76
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	93	533	11	1	306	8	8	0	0	14	5	57

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	314	0	0	544	0	0	1062	1035	533	1033	1038	306
Stage 1	-	-	-	-	-	-	719	719	-	308	308	-
Stage 2	-	-	-	-	-	-	343	316	-	725	730	-
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	1246	-	-	1025	-	-	201	232	547	211	231	734
Stage 1	-	-	-	-	-	-	420	433	-	702	660	-
Stage 2	-	-	-	-	-	-	672	655	-	416	428	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1246	-	-	1025	-	-	171	214	547	199	213	734
Mov Cap-2 Maneuver	-	-	-	-	-	-	171	214	-	199	213	-
Stage 1	-	-	-	-	-	-	389	401	-	649	659	-
Stage 2	-	-	-	-	-	-	615	654	-	385	396	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.2	0	27	15
HCM LOS			D	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	171	1246	-	-	1025	-	-	437
HCM Lane V/C Ratio	0.045	0.075	-	-	0.001	-	-	0.175
HCM Control Delay (s)	27	8.1	-	-	8.5	-	-	15
HCM Lane LOS	D	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.1	0.2	-	-	0	-	-	0.6

Intersection						
Int Delay, s/veh	0.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	1	5	553	4	12	597
Future Vol, veh/h	1	5	553	4	12	597
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	78	78	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	6	601	4	13	649

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1278	603	0	0	605
Stage 1	603	-	-	-	-
Stage 2	675	-	-	-	-
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	183	499	-	-	973
Stage 1	546	-	-	-	-
Stage 2	506	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	179	499	-	-	973
Mov Cap-2 Maneuver	179	-	-	-	-
Stage 1	546	-	-	-	-
Stage 2	495	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	14.6	0	0.2
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	384	973
HCM Lane V/C Ratio	-	-	0.02	0.013
HCM Control Delay (s)	-	-	14.6	8.8
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.1	0

Timings
1: SH 83 & SH 105/Walker Rd

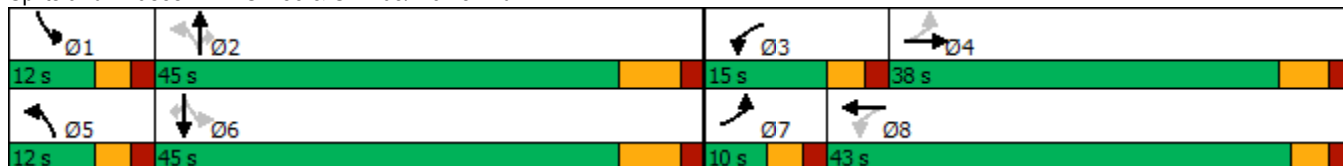
Short-Term Background
AM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations												
Traffic Volume (vph)	28	172	123	105	217	142	270	27	58	273	49	
Future Volume (vph)	28	172	123	105	217	142	270	27	58	273	49	
Turn Type	pm+pt	NA	Free	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	Perm	
Protected Phases	7	4		3	8	5	2		1	6		
Permitted Phases	4		Free	8		2		2	6		6	
Detector Phase	7	4		3	8	5	2	2	1	6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	10.0	11.0		10.0	10.0	10.0	12.0	12.0	10.0	12.0	12.0	
Total Split (s)	10.0	38.0		15.0	43.0	12.0	45.0	45.0	12.0	45.0	45.0	
Total Split (%)	9.1%	34.5%		13.6%	39.1%	10.9%	40.9%	40.9%	10.9%	40.9%	40.9%	
Yellow Time (s)	3.0	4.0		3.0	3.0	3.0	5.0	5.0	3.0	5.0	5.0	
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.0	6.0		5.0	5.0	5.0	7.0	7.0	5.0	7.0	7.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None		None	None	None	Max	Max	None	Max	Max	
Act Effct Green (s)	28.8	22.7	101.4	38.8	33.2	48.8	41.3	41.3	47.1	38.4	38.4	
Actuated g/C Ratio	0.28	0.22	1.00	0.38	0.33	0.48	0.41	0.41	0.46	0.38	0.38	
v/c Ratio	0.20	0.47	0.09	0.52	0.89	0.34	0.40	0.04	0.13	0.45	0.08	
Control Delay	21.8	36.9	0.1	26.1	50.2	17.9	26.7	0.1	15.9	28.1	0.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	21.8	36.9	0.1	26.1	50.2	17.9	26.7	0.1	15.9	28.1	0.2	
LOS	C	D	A	C	D	B	C	A	B	C	A	
Approach Delay		21.6			43.3		22.2			22.7		
Approach LOS		C			D		C			C		

Intersection Summary

Cycle Length: 110
 Actuated Cycle Length: 101.4
 Natural Cycle: 70
 Control Type: Semi Act-Uncoord
 Maximum v/c Ratio: 0.89
 Intersection Signal Delay: 29.9
 Intersection LOS: C
 Intersection Capacity Utilization 58.8%
 ICU Level of Service B
 Analysis Period (min) 15

Splits and Phases: 1: SH 83 & SH 105/Walker Rd



Intersection												
Int Delay, s/veh	5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	0	3	18	0	1	0	10	31	1	3	0
Future Vol, veh/h	1	0	3	18	0	1	0	10	31	1	3	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	28	28	28	78	78	78	38	38	38
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	0	4	64	0	4	0	13	40	3	8	0

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	49	67	8	49	47	33	8	0	0	53	0	0
Stage 1	14	14	-	33	33	-	-	-	-	-	-	-
Stage 2	35	53	-	16	14	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	951	824	1074	951	845	1041	1612	-	-	1553	-	-
Stage 1	1006	884	-	983	868	-	-	-	-	-	-	-
Stage 2	981	851	-	1004	884	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	946	822	1074	946	843	1041	1612	-	-	1553	-	-
Mov Cap-2 Maneuver	946	822	-	946	843	-	-	-	-	-	-	-
Stage 1	1006	882	-	983	868	-	-	-	-	-	-	-
Stage 2	978	851	-	998	882	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	8.5	9.1	0	1.8
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1612	-	-	1039	951	1553	-	-
HCM Lane V/C Ratio	-	-	-	0.005	0.071	0.002	-	-
HCM Control Delay (s)	0	-	-	8.5	9.1	7.3	0	-
HCM Lane LOS	A	-	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0.2	0	-	-

Intersection												
Int Delay, s/veh	2.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗	↖	↖	↗	↖		↕			↕	
Traffic Vol, veh/h	19	197	2	2	507	14	5	1	0	10	1	73
Future Vol, veh/h	19	197	2	2	507	14	5	1	0	10	1	73
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	475	-	415	525	-	525	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	80	80	80	83	83	83	66	66	66
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	22	226	2	3	634	18	6	1	0	15	2	111

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	652	0	0	228	0	0	976	928	226	912	912	634
Stage 1	-	-	-	-	-	-	270	270	-	640	640	-
Stage 2	-	-	-	-	-	-	706	658	-	272	272	-
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	935	-	-	1340	-	-	230	268	813	255	274	479
Stage 1	-	-	-	-	-	-	736	686	-	464	470	-
Stage 2	-	-	-	-	-	-	427	461	-	734	685	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	935	-	-	1340	-	-	173	261	813	249	267	479
Mov Cap-2 Maneuver	-	-	-	-	-	-	173	261	-	249	267	-
Stage 1	-	-	-	-	-	-	718	670	-	453	469	-
Stage 2	-	-	-	-	-	-	327	460	-	715	669	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.8	0	25.5	16.9
HCM LOS			D	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	183	935	-	-	1340	-	-	428
HCM Lane V/C Ratio	0.04	0.023	-	-	0.002	-	-	0.297
HCM Control Delay (s)	25.5	8.9	-	-	7.7	-	-	16.9
HCM Lane LOS	D	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.1	0.1	-	-	0	-	-	1.2

Intersection						
Int Delay, s/veh	0.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘↗		↑	↑		↙↘
Traffic Vol, veh/h	4	12	583	2	2	495
Future Vol, veh/h	4	12	583	2	2	495
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	-	-	205	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	78	78	76	76	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	5	15	767	3	2	538

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1309	767	0	0	770
Stage 1	767	-	-	-	-
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	176	402	-	-	844
Stage 1	458	-	-	-	-
Stage 2	583	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	175	402	-	-	844
Mov Cap-2 Maneuver	175	-	-	-	-
Stage 1	458	-	-	-	-
Stage 2	581	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	17.7	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	304	844
HCM Lane V/C Ratio	-	-	0.067	0.003
HCM Control Delay (s)	-	-	17.7	9.3
HCM Lane LOS	-	-	C	A
HCM 95th %tile Q(veh)	-	-	0.2	0

Timings
1: SH 83 & SH 105/Walker Rd

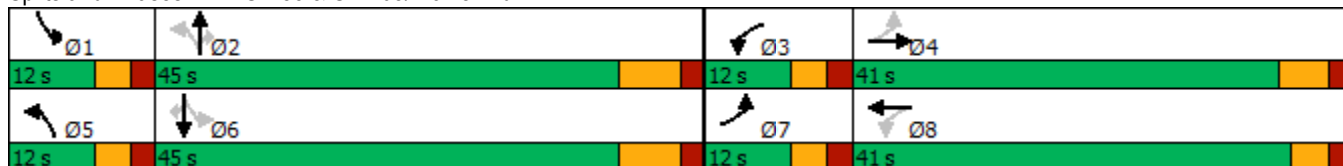
Short-Term Background
Midday Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	69	172	121	98	129	141	351	59	36	373	53
Future Volume (vph)	69	172	121	98	129	141	351	59	36	373	53
Turn Type	pm+pt	NA	Free	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8	5	2		1	6	
Permitted Phases	4		Free	8		2		2	6		6
Detector Phase	7	4		3	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	11.0		10.0	10.0	10.0	12.0	12.0	10.0	12.0	12.0
Total Split (s)	12.0	41.0		12.0	41.0	12.0	45.0	45.0	12.0	45.0	45.0
Total Split (%)	10.9%	37.3%		10.9%	37.3%	10.9%	40.9%	40.9%	10.9%	40.9%	40.9%
Yellow Time (s)	3.0	4.0		3.0	3.0	3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	6.0		5.0	5.0	5.0	7.0	7.0	5.0	7.0	7.0
Lead/Lag	Lead	Lag		Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None	None	Max	Max	None	Max	Max
Act Effct Green (s)	26.1	18.2	93.4	27.3	21.8	49.4	43.3	43.3	46.5	38.1	38.1
Actuated g/C Ratio	0.28	0.19	1.00	0.29	0.23	0.53	0.46	0.46	0.50	0.41	0.41
v/c Ratio	0.37	0.69	0.11	0.61	0.66	0.34	0.44	0.08	0.08	0.53	0.08
Control Delay	25.7	44.9	0.1	33.4	40.1	13.6	21.7	0.2	11.4	25.1	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	25.7	44.9	0.1	33.4	40.1	13.6	21.7	0.2	11.4	25.1	0.2
LOS	C	D	A	C	D	B	C	A	B	C	A
Approach Delay		26.3			37.5		17.3			21.2	
Approach LOS		C			D		B			C	

Intersection Summary

Cycle Length: 110
 Actuated Cycle Length: 93.4
 Natural Cycle: 60
 Control Type: Semi Act-Uncoord
 Maximum v/c Ratio: 0.69
 Intersection Signal Delay: 25.0
 Intersection LOS: C
 Intersection Capacity Utilization 61.1%
 ICU Level of Service B
 Analysis Period (min) 15

Splits and Phases: 1: SH 83 & SH 105/Walker Rd



Intersection												
Int Delay, s/veh	5.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	1	29	0	2	5	12	22	5	3	0
Future Vol, veh/h	0	0	1	29	0	2	5	12	22	5	3	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	59	59	59	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	1	49	0	3	6	15	28	6	4	0

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	59	71	4	58	57	29	4	0	0	43	0	0
Stage 1	16	16	-	41	41	-	-	-	-	-	-	-
Stage 2	43	55	-	17	16	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	937	819	1080	939	834	1046	1618	-	-	1566	-	-
Stage 1	1004	882	-	974	861	-	-	-	-	-	-	-
Stage 2	971	849	-	1002	882	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	929	812	1080	932	827	1046	1618	-	-	1566	-	-
Mov Cap-2 Maneuver	929	812	-	932	827	-	-	-	-	-	-	-
Stage 1	1000	878	-	970	858	-	-	-	-	-	-	-
Stage 2	964	846	-	997	878	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	8.3		9.1		0.9		4.6	
HCM LOS	A		A					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1618	-	-	1080	939	1566	-	-
HCM Lane V/C Ratio	0.004	-	-	0.001	0.056	0.004	-	-
HCM Control Delay (s)	7.2	0	-	8.3	9.1	7.3	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0.2	0	-	-

Intersection						
Int Delay, s/veh	0.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘↗		↑	↑		↙↘
Traffic Vol, veh/h	2	17	622	6	15	603
Future Vol, veh/h	2	17	622	6	15	603
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	-	-	205	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	78	78	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	22	676	7	16	655

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1363	676	0	0	683
Stage 1	676	-	-	-	-
Stage 2	687	-	-	-	-
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	163	453	-	-	910
Stage 1	505	-	-	-	-
Stage 2	499	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	158	453	-	-	910
Mov Cap-2 Maneuver	158	-	-	-	-
Stage 1	505	-	-	-	-
Stage 2	485	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	15.2	0	0.2
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	379	910
HCM Lane V/C Ratio	-	-	0.064	0.018
HCM Control Delay (s)	-	-	15.2	9
HCM Lane LOS	-	-	C	A
HCM 95th %tile Q(veh)	-	-	0.2	0.1

Timings
1: SH 83 & SH 105/Walker Rd

Short-Term Background
PM Peak Hour

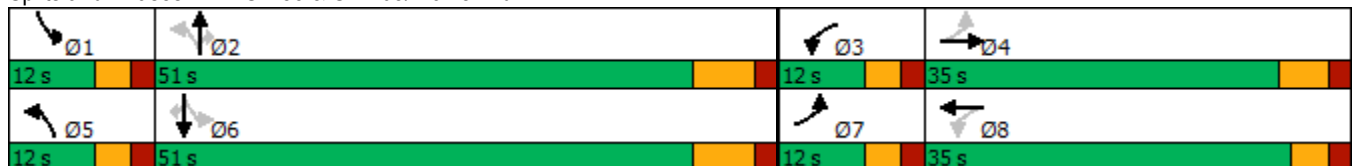
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	62	64	139	71	83	136	385	17	18	476	60
Future Volume (vph)	62	64	139	71	83	136	385	17	18	476	60
Turn Type	pm+pt	NA	Free	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8	5	2		1	6	
Permitted Phases	4		Free	8		2		2	6		6
Detector Phase	7	4		3	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	11.0		10.0	10.0	10.0	12.0	12.0	10.0	12.0	12.0
Total Split (s)	12.0	35.0		12.0	35.0	12.0	51.0	51.0	12.0	51.0	51.0
Total Split (%)	10.9%	31.8%		10.9%	31.8%	10.9%	46.4%	46.4%	10.9%	46.4%	46.4%
Yellow Time (s)	3.0	4.0		3.0	3.0	3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	6.0		5.0	5.0	5.0	7.0	7.0	5.0	7.0	7.0
Lead/Lag	Lead	Lag		Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None	None	Max	Max	None	Max	Max
Act Effct Green (s)	15.4	9.4	85.8	15.5	10.4	57.7	55.0	55.0	53.1	45.0	45.0
Actuated g/C Ratio	0.18	0.11	1.00	0.18	0.12	0.67	0.64	0.64	0.62	0.52	0.52
v/c Ratio	0.25	0.33	0.09	0.30	0.49	0.33	0.40	0.02	0.03	0.53	0.07
Control Delay	28.8	41.7	0.1	29.6	42.2	8.6	13.8	0.1	7.0	18.6	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	28.8	41.7	0.1	29.6	42.2	8.6	13.8	0.1	7.0	18.6	0.2
LOS	C	D	A	C	D	A	B	A	A	B	A
Approach Delay		16.9			36.9		12.1			16.2	
Approach LOS		B			D		B			B	

Intersection Summary

Cycle Length: 110
 Actuated Cycle Length: 85.8
 Natural Cycle: 60
 Control Type: Semi Act-Uncoord
 Maximum v/c Ratio: 0.53
 Intersection Signal Delay: 17.0
 Intersection Capacity Utilization 57.7%
 Analysis Period (min) 15

Intersection LOS: B
 ICU Level of Service B

Splits and Phases: 1: SH 83 & SH 105/Walker Rd



Intersection												
Int Delay, s/veh	4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	1	3	12	0	2	3	12	8	6	9	0
Future Vol, veh/h	1	1	3	12	0	2	3	12	8	6	9	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	78	78	78	79	79	79	63	63	63
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	1	4	15	0	3	4	15	10	10	14	0

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	64	67	14	65	62	20	14	0	0	25	0	0
Stage 1	34	34	-	28	28	-	-	-	-	-	-	-
Stage 2	30	33	-	37	34	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	930	824	1066	929	829	1058	1604	-	-	1589	-	-
Stage 1	982	867	-	989	872	-	-	-	-	-	-	-
Stage 2	987	868	-	978	867	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	922	817	1066	918	822	1058	1604	-	-	1589	-	-
Mov Cap-2 Maneuver	922	817	-	918	822	-	-	-	-	-	-	-
Stage 1	979	862	-	986	869	-	-	-	-	-	-	-
Stage 2	982	865	-	967	862	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	8.7	8.9	0.9	2.9
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1604	-	-	976	936	1589	-	-
HCM Lane V/C Ratio	0.002	-	-	0.007	0.019	0.006	-	-
HCM Control Delay (s)	7.2	0	-	8.7	8.9	7.3	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0.1	0	-	-

Intersection												
Int Delay, s/veh	2.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗	↖	↖	↗	↖		↕			↕	
Traffic Vol, veh/h	84	464	10	1	266	8	6	0	0	12	4	47
Future Vol, veh/h	84	464	10	1	266	8	6	0	0	12	4	47
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	475	-	415	525	-	525	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	87	87	87	78	78	78	76	76	76
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	97	533	11	1	306	9	8	0	0	16	5	62

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	315	0	0	544	0	0	1073	1044	533	1041	1046	306
Stage 1	-	-	-	-	-	-	727	727	-	308	308	-
Stage 2	-	-	-	-	-	-	346	317	-	733	738	-
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	1245	-	-	1025	-	-	198	229	547	208	228	734
Stage 1	-	-	-	-	-	-	415	429	-	702	660	-
Stage 2	-	-	-	-	-	-	670	654	-	412	424	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1245	-	-	1025	-	-	167	211	547	196	210	734
Mov Cap-2 Maneuver	-	-	-	-	-	-	167	211	-	196	210	-
Stage 1	-	-	-	-	-	-	383	396	-	647	659	-
Stage 2	-	-	-	-	-	-	608	653	-	380	391	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.2	0	27.6	15.2
HCM LOS			D	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	167	1245	-	-	1025	-	-	437
HCM Lane V/C Ratio	0.046	0.078	-	-	0.001	-	-	0.19
HCM Control Delay (s)	27.6	8.1	-	-	8.5	-	-	15.2
HCM Lane LOS	D	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.1	0.3	-	-	0	-	-	0.7

Intersection						
Int Delay, s/veh	0.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘↗		↑	↑		↙↘
Traffic Vol, veh/h	1	6	553	9	12	597
Future Vol, veh/h	1	6	553	9	12	597
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	-	-	205	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	78	78	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	8	601	10	13	649

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1276	601	0	0	611
Stage 1	601	-	-	-	-
Stage 2	675	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	184	500	-	-	968
Stage 1	547	-	-	-	-
Stage 2	506	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	180	500	-	-	968
Mov Cap-2 Maneuver	180	-	-	-	-
Stage 1	547	-	-	-	-
Stage 2	495	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	14.2	0	0.2
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	399	968
HCM Lane V/C Ratio	-	-	0.022	0.013
HCM Control Delay (s)	-	-	14.2	8.8
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.1	0

Timings
1: SH 83 & SH 105/Walker Rd

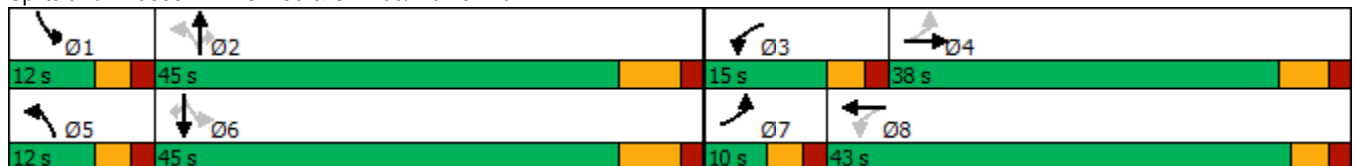
Short-Term Total
AM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations												
Traffic Volume (vph)	28	174	124	110	225	142	270	27	59	273	49	
Future Volume (vph)	28	174	124	110	225	142	270	27	59	273	49	
Turn Type	pm+pt	NA	Free	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	Perm	
Protected Phases	7	4		3	8	5	2		1	6		
Permitted Phases	4		Free	8		2		2	6		6	
Detector Phase	7	4		3	8	5	2	2	1	6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	10.0	11.0		10.0	10.0	10.0	12.0	12.0	10.0	12.0	12.0	
Total Split (s)	10.0	38.0		15.0	43.0	12.0	45.0	45.0	12.0	45.0	45.0	
Total Split (%)	9.1%	34.5%		13.6%	39.1%	10.9%	40.9%	40.9%	10.9%	40.9%	40.9%	
Yellow Time (s)	3.0	4.0		3.0	3.0	3.0	5.0	5.0	3.0	5.0	5.0	
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.0	6.0		5.0	5.0	5.0	7.0	7.0	5.0	7.0	7.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None		None	None	None	Max	Max	None	Max	Max	
Act Effct Green (s)	29.4	23.3	102.0	39.4	33.8	48.7	41.3	41.3	47.0	38.4	38.4	
Actuated g/C Ratio	0.29	0.23	1.00	0.39	0.33	0.48	0.40	0.40	0.46	0.38	0.38	
v/c Ratio	0.21	0.47	0.09	0.54	0.91	0.34	0.40	0.04	0.14	0.45	0.08	
Control Delay	21.8	36.7	0.1	26.5	53.0	18.1	27.0	0.1	16.1	28.4	0.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	21.8	36.7	0.1	26.5	53.0	18.1	27.0	0.1	16.1	28.4	0.2	
LOS	C	D	A	C	D	B	C	A	B	C	A	
Approach Delay		21.5			45.4		22.5			22.9		
Approach LOS		C			D		C			C		

Intersection Summary

Cycle Length: 110
 Actuated Cycle Length: 102
 Natural Cycle: 70
 Control Type: Semi Act-Uncoord
 Maximum v/c Ratio: 0.91
 Intersection Signal Delay: 30.9
 Intersection LOS: C
 Intersection Capacity Utilization 59.4%
 ICU Level of Service B
 Analysis Period (min) 15

Splits and Phases: 1: SH 83 & SH 105/Walker Rd



Intersection												
Int Delay, s/veh	5.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	0	3	29	0	1	0	10	34	2	3	0
Future Vol, veh/h	1	0	3	29	0	1	0	10	34	2	3	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	28	28	28	78	78	78	38	38	38
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	0	4	104	0	4	0	13	44	5	8	0

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	55	75	8	55	53	35	8	0	0	57	0	0
Stage 1	18	18	-	35	35	-	-	-	-	-	-	-
Stage 2	37	57	-	20	18	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	943	815	1074	943	838	1038	1612	-	-	1547	-	-
Stage 1	1001	880	-	981	866	-	-	-	-	-	-	-
Stage 2	978	847	-	999	880	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	937	813	1074	937	835	1038	1612	-	-	1547	-	-
Mov Cap-2 Maneuver	937	813	-	937	835	-	-	-	-	-	-	-
Stage 1	1001	877	-	981	866	-	-	-	-	-	-	-
Stage 2	975	847	-	992	877	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	8.5		9.3		0		2.9	
HCM LOS	A		A					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1612	-	-	1036	940	1547	-	-
HCM Lane V/C Ratio	-	-	-	0.005	0.114	0.003	-	-
HCM Control Delay (s)	0	-	-	8.5	9.3	7.3	0	-
HCM Lane LOS	A	-	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0.4	0	-	-

Intersection												
Int Delay, s/veh	2.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗	↖	↖	↗	↖		↕			↕	
Traffic Vol, veh/h	21	197	2	2	507	15	5	1	0	12	1	82
Future Vol, veh/h	21	197	2	2	507	15	5	1	0	12	1	82
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	475	-	415	525	-	525	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	80	80	80	83	83	83	66	66	66
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	24	226	2	3	634	19	6	1	0	18	2	124

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	653	0	0	228	0	0	987	933	226	916	916	634
Stage 1	-	-	-	-	-	-	274	274	-	640	640	-
Stage 2	-	-	-	-	-	-	713	659	-	276	276	-
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	934	-	-	1340	-	-	226	266	813	253	272	479
Stage 1	-	-	-	-	-	-	732	683	-	464	470	-
Stage 2	-	-	-	-	-	-	423	461	-	730	682	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	934	-	-	1340	-	-	163	259	813	247	264	479
Mov Cap-2 Maneuver	-	-	-	-	-	-	163	259	-	247	264	-
Stage 1	-	-	-	-	-	-	713	665	-	452	469	-
Stage 2	-	-	-	-	-	-	312	460	-	710	664	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.9	0	26.6	17.7
HCM LOS			D	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	174	934	-	-	1340	-	-	425
HCM Lane V/C Ratio	0.042	0.026	-	-	0.002	-	-	0.339
HCM Control Delay (s)	26.6	9	-	-	7.7	-	-	17.7
HCM Lane LOS	D	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.1	0.1	-	-	0	-	-	1.5

Intersection						
Int Delay, s/veh	0.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘↗		↑	↑		↙↘
Traffic Vol, veh/h	4	12	586	2	3	500
Future Vol, veh/h	4	12	586	2	3	500
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	-	-	205	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	78	78	76	76	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	5	15	771	3	3	543

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1320	771	0	0	774
Stage 1	771	-	-	-	-
Stage 2	549	-	-	-	-
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	173	400	-	-	842
Stage 1	456	-	-	-	-
Stage 2	579	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	172	400	-	-	842
Mov Cap-2 Maneuver	172	-	-	-	-
Stage 1	456	-	-	-	-
Stage 2	576	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	17.9	0	0.1
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	300	842
HCM Lane V/C Ratio	-	-	0.068	0.004
HCM Control Delay (s)	-	-	17.9	9.3
HCM Lane LOS	-	-	C	A
HCM 95th %tile Q(veh)	-	-	0.2	0

Timings
1: SH 83 & SH 105/Walker Rd

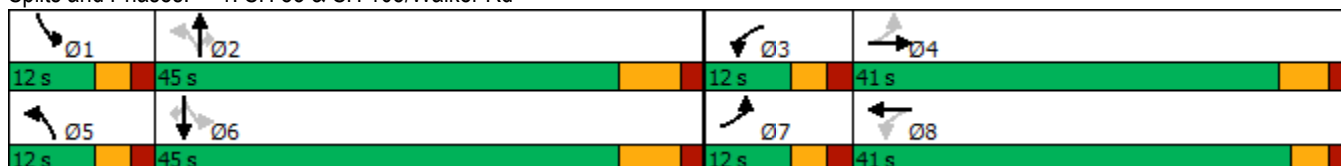
Short-Term Total
Midday Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations												
Traffic Volume (vph)	69	177	122	101	133	141	351	59	37	373	53	
Future Volume (vph)	69	177	122	101	133	141	351	59	37	373	53	
Turn Type	pm+pt	NA	Free	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	Perm	
Protected Phases	7	4		3	8	5	2		1	6		
Permitted Phases	4		Free	8		2		2	6		6	
Detector Phase	7	4		3	8	5	2	2	1	6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	10.0	11.0		10.0	10.0	10.0	12.0	12.0	10.0	12.0	12.0	
Total Split (s)	12.0	41.0		12.0	41.0	12.0	45.0	45.0	12.0	45.0	45.0	
Total Split (%)	10.9%	37.3%		10.9%	37.3%	10.9%	40.9%	40.9%	10.9%	40.9%	40.9%	
Yellow Time (s)	3.0	4.0		3.0	3.0	3.0	5.0	5.0	3.0	5.0	5.0	
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.0	6.0		5.0	5.0	5.0	7.0	7.0	5.0	7.0	7.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None		None	None	None	Max	Max	None	Max	Max	
Act Effct Green (s)	26.6	18.7	94.0	27.9	22.3	49.4	43.3	43.3	46.5	38.1	38.1	
Actuated g/C Ratio	0.28	0.20	1.00	0.30	0.24	0.53	0.46	0.46	0.49	0.41	0.41	
v/c Ratio	0.38	0.69	0.11	0.63	0.67	0.34	0.44	0.08	0.08	0.54	0.08	
Control Delay	25.7	45.0	0.1	34.4	40.2	13.9	22.0	0.2	11.6	25.5	0.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	25.7	45.0	0.1	34.4	40.2	13.9	22.0	0.2	11.6	25.5	0.2	
LOS	C	D	A	C	D	B	C	A	B	C	A	
Approach Delay		26.5			38.0		17.6			21.5		
Approach LOS		C			D		B			C		

Intersection Summary

Cycle Length: 110
 Actuated Cycle Length: 94
 Natural Cycle: 60
 Control Type: Semi Act-Uncoord
 Maximum v/c Ratio: 0.69
 Intersection Signal Delay: 25.3
 Intersection LOS: C
 Intersection Capacity Utilization 61.5%
 ICU Level of Service B
 Analysis Period (min) 15

Splits and Phases: 1: SH 83 & SH 105/Walker Rd



Intersection												
Int Delay, s/veh	5.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	1	36	0	2	5	12	28	7	3	0
Future Vol, veh/h	0	0	1	36	0	2	5	12	28	7	3	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	59	59	59	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	1	61	0	3	6	15	36	9	4	0

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	69	85	4	68	67	33	4	0	0	51	0	0
Stage 1	22	22	-	45	45	-	-	-	-	-	-	-
Stage 2	47	63	-	23	22	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	923	805	1080	925	824	1041	1618	-	-	1555	-	-
Stage 1	996	877	-	969	857	-	-	-	-	-	-	-
Stage 2	967	842	-	995	877	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	913	797	1080	917	816	1041	1618	-	-	1555	-	-
Mov Cap-2 Maneuver	913	797	-	917	816	-	-	-	-	-	-	-
Stage 1	992	872	-	965	854	-	-	-	-	-	-	-
Stage 2	960	839	-	988	872	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	8.3	9.2	0.8	5.1
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1618	-	-	1080	923	1555	-	-
HCM Lane V/C Ratio	0.004	-	-	0.001	0.07	0.006	-	-
HCM Control Delay (s)	7.2	0	-	8.3	9.2	7.3	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0.2	0	-	-

Intersection						
Int Delay, s/veh	0.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	Y		↑	↑		↓
Traffic Vol, veh/h	2	17	629	6	17	606
Future Vol, veh/h	2	17	629	6	17	606
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	-	-	205	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	78	78	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	22	684	7	18	659

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1379	684	0	0	691
Stage 1	684	-	-	-	-
Stage 2	695	-	-	-	-
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	159	449	-	-	904
Stage 1	501	-	-	-	-
Stage 2	495	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	154	449	-	-	904
Mov Cap-2 Maneuver	154	-	-	-	-
Stage 1	501	-	-	-	-
Stage 2	480	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	15.3	0	0.2
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	374	904
HCM Lane V/C Ratio	-	-	0.065	0.02
HCM Control Delay (s)	-	-	15.3	9.1
HCM Lane LOS	-	-	C	A
HCM 95th %tile Q(veh)	-	-	0.2	0.1

Timings
1: SH 83 & SH 105/Walker Rd

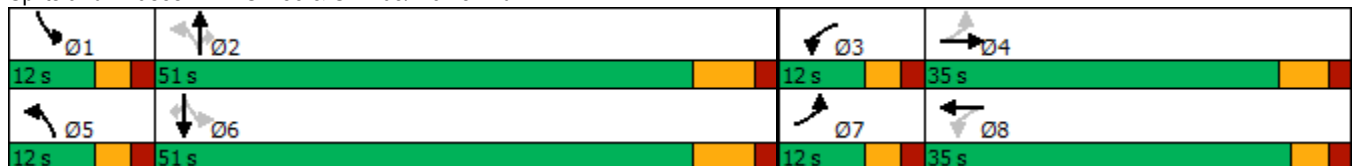
Short-Term Total
PM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations												
Traffic Volume (vph)	62	71	141	74	88	136	385	17	19	476	60	
Future Volume (vph)	62	71	141	74	88	136	385	17	19	476	60	
Turn Type	pm+pt	NA	Free	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	Perm	
Protected Phases	7	4		3	8	5	2		1	6		
Permitted Phases	4		Free	8		2		2	6		6	
Detector Phase	7	4		3	8	5	2	2	1	6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	10.0	11.0		10.0	10.0	10.0	12.0	12.0	10.0	12.0	12.0	
Total Split (s)	12.0	35.0		12.0	35.0	12.0	51.0	51.0	12.0	51.0	51.0	
Total Split (%)	10.9%	31.8%		10.9%	31.8%	10.9%	46.4%	46.4%	10.9%	46.4%	46.4%	
Yellow Time (s)	3.0	4.0		3.0	3.0	3.0	5.0	5.0	3.0	5.0	5.0	
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.0	6.0		5.0	5.0	5.0	7.0	7.0	5.0	7.0	7.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None		None	None	None	Max	Max	None	Max	Max	
Act Effct Green (s)	16.2	9.8	88.5	16.2	10.8	56.7	52.1	52.1	52.3	44.3	44.3	
Actuated g/C Ratio	0.18	0.11	1.00	0.18	0.12	0.64	0.59	0.59	0.59	0.50	0.50	
v/c Ratio	0.25	0.36	0.09	0.31	0.52	0.35	0.43	0.02	0.04	0.55	0.08	
Control Delay	28.8	42.3	0.1	29.7	43.1	9.1	14.5	0.1	7.2	19.5	0.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	28.8	42.3	0.1	29.7	43.1	9.1	14.5	0.1	7.2	19.5	0.2	
LOS	C	D	A	C	D	A	B	A	A	B	A	
Approach Delay		17.5			37.5		12.7			17.0		
Approach LOS		B			D		B			B		

Intersection Summary

Cycle Length: 110
 Actuated Cycle Length: 88.5
 Natural Cycle: 60
 Control Type: Semi Act-Uncoord
 Maximum v/c Ratio: 0.55
 Intersection Signal Delay: 17.8
 Intersection LOS: B
 Intersection Capacity Utilization 57.7%
 ICU Level of Service B
 Analysis Period (min) 15

Splits and Phases: 1: SH 83 & SH 105/Walker Rd



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	1	1	3	20	0	2	3	12	17	8	9	0
Future Vol, veh/h	1	1	3	20	0	2	3	12	17	8	9	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	78	78	78	79	79	79	63	63	63
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	1	4	26	0	3	4	15	22	13	14	0

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	76	85	14	77	74	26	14	0	0	37	0	0
Stage 1	40	40	-	34	34	-	-	-	-	-	-	-
Stage 2	36	45	-	43	40	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	914	805	1066	912	816	1050	1604	-	-	1574	-	-
Stage 1	975	862	-	982	867	-	-	-	-	-	-	-
Stage 2	980	857	-	971	862	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	904	796	1066	900	807	1050	1604	-	-	1574	-	-
Mov Cap-2 Maneuver	904	796	-	900	807	-	-	-	-	-	-	-
Stage 1	972	855	-	979	864	-	-	-	-	-	-	-
Stage 2	975	854	-	958	855	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	8.8		9.1		0.7		3.4	
HCM LOS	A		A					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1604	-	-	966	912	1574	-	-
HCM Lane V/C Ratio	0.002	-	-	0.007	0.031	0.008	-	-
HCM Control Delay (s)	7.2	0	-	8.8	9.1	7.3	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0.1	0	-	-

Intersection												
Int Delay, s/veh	2.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗	↖	↖	↗	↖		↔			↔	
Traffic Vol, veh/h	90	464	10	1	266	11	6	0	0	13	4	54
Future Vol, veh/h	90	464	10	1	266	11	6	0	0	13	4	54
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	475	-	415	525	-	525	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	87	87	87	78	78	78	76	76	76
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	103	533	11	1	306	13	8	0	0	17	5	71

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	319	0	0	544	0	0	1092	1060	533	1053	1058	306
Stage 1	-	-	-	-	-	-	739	739	-	308	308	-
Stage 2	-	-	-	-	-	-	353	321	-	745	750	-
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	1241	-	-	1025	-	-	192	224	547	204	225	734
Stage 1	-	-	-	-	-	-	409	424	-	702	660	-
Stage 2	-	-	-	-	-	-	664	652	-	406	419	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1241	-	-	1025	-	-	159	205	547	191	206	734
Mov Cap-2 Maneuver	-	-	-	-	-	-	159	205	-	191	206	-
Stage 1	-	-	-	-	-	-	375	389	-	644	659	-
Stage 2	-	-	-	-	-	-	594	651	-	372	384	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.3	0	28.8	15.3
HCM LOS			D	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	159	1241	-	-	1025	-	-	441
HCM Lane V/C Ratio	0.048	0.083	-	-	0.001	-	-	0.212
HCM Control Delay (s)	28.8	8.2	-	-	8.5	-	-	15.3
HCM Lane LOS	D	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.2	0.3	-	-	0	-	-	0.8

Intersection						
Int Delay, s/veh	0.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘↗		↑	↑		↙↘
Traffic Vol, veh/h	1	6	563	9	14	600
Future Vol, veh/h	1	6	563	9	14	600
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	-	-	205	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	78	78	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	8	612	10	15	652

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1294	612	0	0	622
Stage 1	612	-	-	-	-
Stage 2	682	-	-	-	-
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	179	493	-	-	959
Stage 1	541	-	-	-	-
Stage 2	502	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	175	493	-	-	959
Mov Cap-2 Maneuver	175	-	-	-	-
Stage 1	541	-	-	-	-
Stage 2	489	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	14.4	0	0.2
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	391	959
HCM Lane V/C Ratio	-	-	0.023	0.016
HCM Control Delay (s)	-	-	14.4	8.8
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.1	0

Timings
1: SH 83 & SH 105/Walker Rd

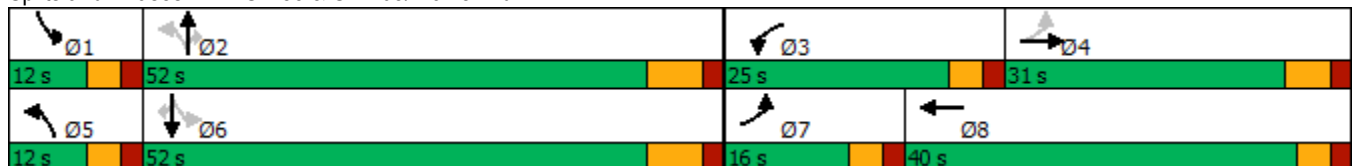
2040 Background Traffic
AM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	45	440	168	431	596	188	202	485	169	194	418	81
Future Volume (vph)	45	440	168	431	596	188	202	485	169	194	418	81
Turn Type	pm+pt	NA	Free	Prot	NA	Free	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		Free			Free	2		2	6		6
Detector Phase	7	4		3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	11.0		10.0	10.0		10.0	12.0	12.0	10.0	12.0	12.0
Total Split (s)	16.0	31.0		25.0	40.0		12.0	52.0	52.0	12.0	52.0	52.0
Total Split (%)	13.3%	25.8%		20.8%	33.3%		10.0%	43.3%	43.3%	10.0%	43.3%	43.3%
Yellow Time (s)	3.0	4.0		3.0	3.0		3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	6.0		5.0	5.0		5.0	7.0	7.0	5.0	7.0	7.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	Max	Max	None	Max	Max
Act Effct Green (s)	29.3	20.9	114.8	18.7	35.5	114.8	54.1	45.1	45.1	54.1	45.1	45.1
Actuated g/C Ratio	0.26	0.18	1.00	0.16	0.31	1.00	0.47	0.39	0.39	0.47	0.39	0.39
v/c Ratio	0.19	0.78	0.13	0.83	0.59	0.13	0.56	0.38	0.25	0.51	0.33	0.12
Control Delay	24.0	53.8	0.2	60.3	36.7	0.2	24.4	26.5	4.4	22.7	25.8	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	24.0	53.8	0.2	60.3	36.7	0.2	24.4	26.5	4.4	22.7	25.8	0.3
LOS	C	D	A	E	D	A	C	C	A	C	C	A
Approach Delay		37.1			39.4			21.7			22.0	
Approach LOS		D			D			C			C	

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 114.8
 Natural Cycle: 60
 Control Type: Semi Act-Uncoord
 Maximum v/c Ratio: 0.83
 Intersection Signal Delay: 31.0
 Intersection Capacity Utilization 67.8%
 Analysis Period (min) 15
 Intersection LOS: C
 ICU Level of Service C

Splits and Phases: 1: SH 83 & SH 105/Walker Rd



Intersection												
Int Delay, s/veh	3.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	5	1	6	26	2	1	1	10	48	1	3	0
Future Vol, veh/h	5	1	6	26	2	1	1	10	48	1	3	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	6	1	7	31	2	1	1	12	56	1	4	0

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	50	76	4	52	48	40	4	0	0	68	0	0
Stage 1	6	6	-	42	42	-	-	-	-	-	-	-
Stage 2	44	70	-	10	6	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	950	814	1080	947	844	1031	1618	-	-	1533	-	-
Stage 1	1016	891	-	972	860	-	-	-	-	-	-	-
Stage 2	970	837	-	1011	891	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	945	812	1080	938	842	1031	1618	-	-	1533	-	-
Mov Cap-2 Maneuver	945	812	-	938	842	-	-	-	-	-	-	-
Stage 1	1015	890	-	971	859	-	-	-	-	-	-	-
Stage 2	965	836	-	1002	890	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	8.7	9	0.1	1.8
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1618	-	-	994	934	1533	-	-
HCM Lane V/C Ratio	0.001	-	-	0.014	0.037	0.001	-	-
HCM Control Delay (s)	7.2	0	-	8.7	9	7.3	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0.1	0	-	-

Intersection												
Int Delay, s/veh	2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗	↖	↖	↗	↖		↔			↔	
Traffic Vol, veh/h	21	303	2	2	747	22	5	1	0	13	1	80
Future Vol, veh/h	21	303	2	2	747	22	5	1	0	13	1	80
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	475	-	415	525	-	525	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	22	319	2	2	786	23	5	1	0	14	1	84

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	809	0	0	321	0	0	1207	1176	319	1155	1155	786
Stage 1	-	-	-	-	-	-	363	363	-	790	790	-
Stage 2	-	-	-	-	-	-	844	813	-	365	365	-
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	817	-	-	1239	-	-	160	191	722	174	197	392
Stage 1	-	-	-	-	-	-	656	625	-	383	402	-
Stage 2	-	-	-	-	-	-	358	392	-	654	623	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	817	-	-	1239	-	-	122	185	722	169	191	392
Mov Cap-2 Maneuver	-	-	-	-	-	-	122	185	-	169	191	-
Stage 1	-	-	-	-	-	-	638	608	-	373	401	-
Stage 2	-	-	-	-	-	-	280	391	-	635	606	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.6	0	34.3	20.6
HCM LOS			D	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	129	817	-	-	1239	-	-	328
HCM Lane V/C Ratio	0.049	0.027	-	-	0.002	-	-	0.302
HCM Control Delay (s)	34.3	9.5	-	-	7.9	-	-	20.6
HCM Lane LOS	D	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.2	0.1	-	-	0	-	-	1.2

Intersection						
Int Delay, s/veh	0.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘↗		↑↑	↗	↘	↑↑
Traffic Vol, veh/h	4	16	1189	2	2	1029
Future Vol, veh/h	4	16	1189	2	2	1029
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	-	-	205	230	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	95	85	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	5	19	1252	2	2	1083

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1798	626	0	0	1254
Stage 1	1252	-	-	-	-
Stage 2	546	-	-	-	-
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	71	427	-	-	551
Stage 1	233	-	-	-	-
Stage 2	544	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	71	427	-	-	551
Mov Cap-2 Maneuver	71	-	-	-	-
Stage 1	233	-	-	-	-
Stage 2	542	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	213	551
HCM Lane V/C Ratio	-	-	0.11	0.004
HCM Control Delay (s)	-	-	24	11.6
HCM Lane LOS	-	-	C	B
HCM 95th %tile Q(veh)	-	-	0.4	0

Timings
1: SH 83 & SH 105/Walker Rd

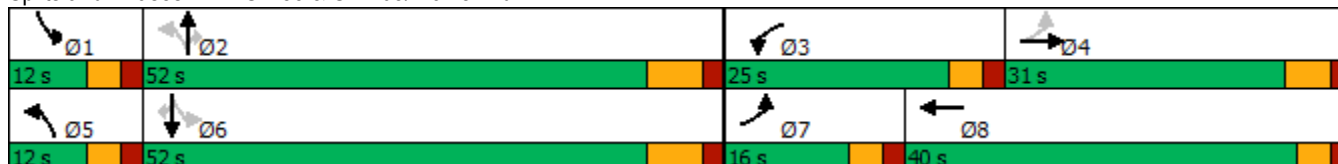
2040 Background Traffic
Miday Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	89	424	153	453	464	175	175	468	231	181	509	71
Future Volume (vph)	89	424	153	453	464	175	175	468	231	181	509	71
Turn Type	pm+pt	NA	Free	Prot	NA	Free	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		Free			Free	2		2	6		6
Detector Phase	7	4		3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	11.0		10.0	10.0		10.0	12.0	12.0	10.0	12.0	12.0
Total Split (s)	16.0	31.0		25.0	40.0		12.0	52.0	52.0	12.0	52.0	52.0
Total Split (%)	13.3%	25.8%		20.8%	33.3%		10.0%	43.3%	43.3%	10.0%	43.3%	43.3%
Yellow Time (s)	3.0	4.0		3.0	3.0		3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	6.0		5.0	5.0		5.0	7.0	7.0	5.0	7.0	7.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	Max	Max	None	Max	Max
Act Effct Green (s)	31.1	20.9	115.3	19.3	32.0	115.3	54.1	45.1	45.1	54.1	45.1	45.1
Actuated g/C Ratio	0.27	0.18	1.00	0.17	0.28	1.00	0.47	0.39	0.39	0.47	0.39	0.39
v/c Ratio	0.32	0.78	0.10	0.86	0.51	0.12	0.48	0.37	0.33	0.47	0.40	0.11
Control Delay	25.5	54.1	0.1	62.8	37.2	0.2	21.8	26.6	4.3	21.7	27.0	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	25.5	54.1	0.1	62.8	37.2	0.2	21.8	26.6	4.3	21.7	27.0	0.3
LOS	C	D	A	E	D	A	C	C	A	C	C	A
Approach Delay		38.7			42.0			19.8			23.3	
Approach LOS		D			D			B			C	

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 115.3
 Natural Cycle: 60
 Control Type: Semi Act-Uncoord
 Maximum v/c Ratio: 0.86
 Intersection Signal Delay: 31.5
 Intersection LOS: C
 Intersection Capacity Utilization 67.6%
 ICU Level of Service C
 Analysis Period (min) 15

Splits and Phases: 1: SH 83 & SH 105/Walker Rd



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	4	1	3	42	7	2	9	12	34	5	3	0
Future Vol, veh/h	4	1	3	42	7	2	9	12	34	5	3	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	1	4	49	8	2	11	14	40	6	4	0

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	77	92	4	75	72	34	4	0	0	54	0	0
Stage 1	16	16	-	56	56	-	-	-	-	-	-	-
Stage 2	61	76	-	19	16	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	912	798	1080	915	818	1039	1618	-	-	1551	-	-
Stage 1	1004	882	-	956	848	-	-	-	-	-	-	-
Stage 2	950	832	-	1000	882	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	896	789	1080	903	809	1039	1618	-	-	1551	-	-
Mov Cap-2 Maneuver	896	789	-	903	809	-	-	-	-	-	-	-
Stage 1	997	878	-	949	842	-	-	-	-	-	-	-
Stage 2	932	826	-	991	878	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	8.9		9.3		1.2		4.6	
HCM LOS	A		A					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1618	-	-	940	893	1551	-	-
HCM Lane V/C Ratio	0.007	-	-	0.01	0.067	0.004	-	-
HCM Control Delay (s)	7.2	0	-	8.9	9.3	7.3	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0.2	0	-	-

Intersection						
Int Delay, s/veh	0.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘↗		↑↑	↗	↘	↑↑
Traffic Vol, veh/h	2	20	1114	6	15	1121
Future Vol, veh/h	2	20	1114	6	15	1121
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	-	-	205	230	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	95	85	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	24	1173	7	16	1180

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1795	587	0	0	1180
Stage 1	1173	-	-	-	-
Stage 2	622	-	-	-	-
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	72	453	-	-	588
Stage 1	256	-	-	-	-
Stage 2	498	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	70	453	-	-	588
Mov Cap-2 Maneuver	70	-	-	-	-
Stage 1	256	-	-	-	-
Stage 2	485	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	18	0	0.1
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	303	588
HCM Lane V/C Ratio	-	-	0.085	0.027
HCM Control Delay (s)	-	-	18	11.3
HCM Lane LOS	-	-	C	B
HCM 95th %tile Q(veh)	-	-	0.3	0.1

Timings
1: SH 83 & SH 105/Walker Rd

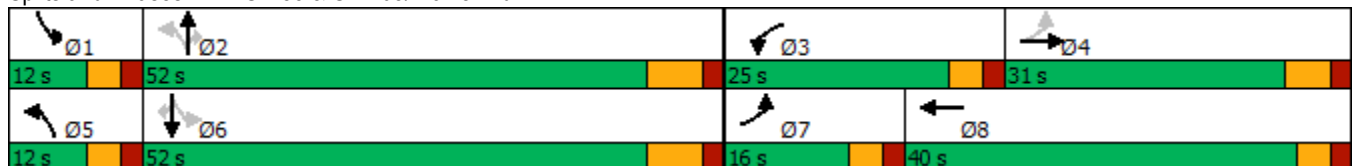
2040 Background Traffic
PM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	90	359	189	435	417	159	184	570	229	215	697	94
Future Volume (vph)	90	359	189	435	417	159	184	570	229	215	697	94
Turn Type	pm+pt	NA	Free	Prot	NA	Free	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		Free			Free	2		2	6		6
Detector Phase	7	4		3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	11.0		10.0	10.0		10.0	12.0	12.0	10.0	12.0	12.0
Total Split (s)	16.0	31.0		25.0	40.0		12.0	52.0	52.0	12.0	52.0	52.0
Total Split (%)	13.3%	25.8%		20.8%	33.3%		10.0%	43.3%	43.3%	10.0%	43.3%	43.3%
Yellow Time (s)	3.0	4.0		3.0	3.0		3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	6.0		5.0	5.0		5.0	7.0	7.0	5.0	7.0	7.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	Max	Max	None	Max	Max
Act Effct Green (s)	28.1	17.9	111.7	18.7	28.4	111.7	54.1	45.1	45.1	54.1	45.1	45.1
Actuated g/C Ratio	0.25	0.16	1.00	0.17	0.25	1.00	0.48	0.40	0.40	0.48	0.40	0.40
v/c Ratio	0.33	0.71	0.14	0.82	0.49	0.12	0.65	0.47	0.31	0.67	0.52	0.14
Control Delay	26.3	52.0	0.2	57.7	37.6	0.2	27.8	26.6	4.1	28.3	27.6	1.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	26.3	52.0	0.2	57.7	37.6	0.2	27.8	26.6	4.1	28.3	27.6	1.1
LOS	C	D	A	E	D	A	C	C	A	C	C	A
Approach Delay		32.7			39.9			22.0			25.2	
Approach LOS		C			D			C			C	

Intersection Summary

Cycle Length: 120	
Actuated Cycle Length: 111.7	
Natural Cycle: 60	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 0.82	
Intersection Signal Delay: 29.6	Intersection LOS: C
Intersection Capacity Utilization 71.0%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 1: SH 83 & SH 105/Walker Rd



Intersection												
Int Delay, s/veh	5.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	4	2	5	23	7	2	7	12	17	6	9	0
Future Vol, veh/h	4	2	5	23	7	2	7	12	17	6	9	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	2	6	27	8	2	8	14	20	7	11	0

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	70	75	11	69	65	24	11	0	0	34	0	0
Stage 1	25	25	-	40	40	-	-	-	-	-	-	-
Stage 2	45	50	-	29	25	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	922	815	1070	923	826	1052	1608	-	-	1578	-	-
Stage 1	993	874	-	975	862	-	-	-	-	-	-	-
Stage 2	969	853	-	988	874	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	906	808	1070	910	819	1052	1608	-	-	1578	-	-
Mov Cap-2 Maneuver	906	808	-	910	819	-	-	-	-	-	-	-
Stage 1	988	871	-	970	858	-	-	-	-	-	-	-
Stage 2	953	849	-	976	871	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	8.8		9.2		1.4		2.9	
HCM LOS	A		A					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1608	-	-	951	896	1578	-	-
HCM Lane V/C Ratio	0.005	-	-	0.014	0.042	0.004	-	-
HCM Control Delay (s)	7.2	0	-	8.8	9.2	7.3	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0.1	0	-	-

Intersection												
Int Delay, s/veh	2.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑	↗	↘	↑	↗		↔			↔	
Traffic Vol, veh/h	93	701	10	1	422	13	6	0	0	17	4	53
Future Vol, veh/h	93	701	10	1	422	13	6	0	0	17	4	53
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	475	-	415	525	-	525	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	98	738	11	1	444	14	6	0	0	18	4	56

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	458	0	0	749	0	0	1417	1394	738	1386	1391	444
Stage 1	-	-	-	-	-	-	934	934	-	446	446	-
Stage 2	-	-	-	-	-	-	483	460	-	940	945	-
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	1103	-	-	860	-	-	115	141	418	120	142	614
Stage 1	-	-	-	-	-	-	319	345	-	591	574	-
Stage 2	-	-	-	-	-	-	565	566	-	316	340	-
Platoon blocked, %		-	-	-	-	-						
Mov Cap-1 Maneuver	1103	-	-	860	-	-	95	128	418	112	129	614
Mov Cap-2 Maneuver	-	-	-	-	-	-	95	128	-	112	129	-
Stage 1	-	-	-	-	-	-	291	314	-	538	573	-
Stage 2	-	-	-	-	-	-	509	565	-	288	310	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1	0	45.6	23.2
HCM LOS			E	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	95	1103	-	-	860	-	-	275
HCM Lane V/C Ratio	0.066	0.089	-	-	0.001	-	-	0.283
HCM Control Delay (s)	45.6	8.6	-	-	9.2	-	-	23.2
HCM Lane LOS	E	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.2	0.3	-	-	0	-	-	1.1

Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘↗		↑↑	↗	↘	↑↑
Traffic Vol, veh/h	1	9	1162	9	12	1344
Future Vol, veh/h	1	9	1162	9	12	1344
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	-	-	205	230	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	95	85	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	11	1223	11	13	1415

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1957	612	0	0	1234
Stage 1	1223	-	-	-	-
Stage 2	734	-	-	-	-
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	56	436	-	-	560
Stage 1	241	-	-	-	-
Stage 2	436	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	55	436	-	-	560
Mov Cap-2 Maneuver	55	-	-	-	-
Stage 1	241	-	-	-	-
Stage 2	426	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	19.6	0	0.1
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	258	560
HCM Lane V/C Ratio	-	-	0.046	0.023
HCM Control Delay (s)	-	-	19.6	11.6
HCM Lane LOS	-	-	C	B
HCM 95th %tile Q(veh)	-	-	0.1	0.1

Timings
1: SH 83 & SH 105/Walker Rd

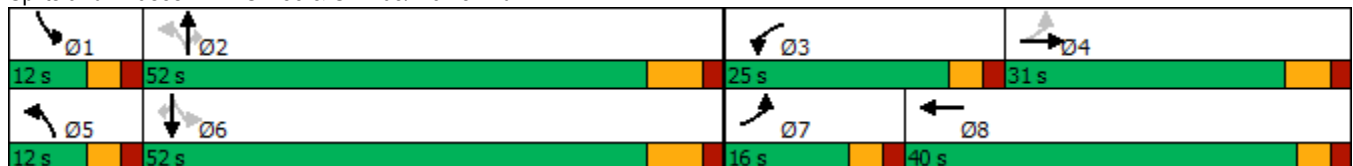
2040 Total Traffic
AM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	45	442	169	437	604	189	202	485	169	195	418	81
Future Volume (vph)	45	442	169	437	604	189	202	485	169	195	418	81
Turn Type	pm+pt	NA	Free	Prot	NA	Free	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		Free			Free	2		2	6		6
Detector Phase	7	4		3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	11.0		10.0	10.0		10.0	12.0	12.0	10.0	12.0	12.0
Total Split (s)	16.0	31.0		25.0	40.0		12.0	52.0	52.0	12.0	52.0	52.0
Total Split (%)	13.3%	25.8%		20.8%	33.3%		10.0%	43.3%	43.3%	10.0%	43.3%	43.3%
Yellow Time (s)	3.0	4.0		3.0	3.0		3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	6.0		5.0	5.0		5.0	7.0	7.0	5.0	7.0	7.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	Max	Max	None	Max	Max
Act Effct Green (s)	29.6	21.2	115.2	18.9	35.9	115.2	54.1	45.1	45.1	54.1	45.1	45.1
Actuated g/C Ratio	0.26	0.18	1.00	0.16	0.31	1.00	0.47	0.39	0.39	0.47	0.39	0.39
v/c Ratio	0.20	0.77	0.13	0.84	0.59	0.13	0.56	0.38	0.25	0.52	0.33	0.12
Control Delay	23.9	53.5	0.2	61.2	36.6	0.2	24.6	26.7	4.5	23.1	26.0	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	23.9	53.5	0.2	61.2	36.6	0.2	24.6	26.7	4.5	23.1	26.0	0.3
LOS	C	D	A	E	D	A	C	C	A	C	C	A
Approach Delay		36.9			39.8			21.9			22.2	
Approach LOS		D			D			C			C	

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 115.2
 Natural Cycle: 60
 Control Type: Semi Act-Uncoord
 Maximum v/c Ratio: 0.84
 Intersection Signal Delay: 31.2
 Intersection LOS: C
 Intersection Capacity Utilization 68.1%
 ICU Level of Service C
 Analysis Period (min) 15

Splits and Phases: 1: SH 83 & SH 105/Walker Rd



Intersection												
Int Delay, s/veh	4.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	5	1	6	37	2	1	1	10	51	2	3	0
Future Vol, veh/h	5	1	6	37	2	1	1	10	51	2	3	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	6	1	7	44	2	1	1	12	60	2	4	0

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	54	82	4	56	52	42	4	0	0	72	0	0
Stage 1	8	8	-	44	44	-	-	-	-	-	-	-
Stage 2	46	74	-	12	8	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	944	808	1080	941	839	1029	1618	-	-	1528	-	-
Stage 1	1013	889	-	970	858	-	-	-	-	-	-	-
Stage 2	968	833	-	1009	889	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	939	806	1080	933	837	1029	1618	-	-	1528	-	-
Mov Cap-2 Maneuver	939	806	-	933	837	-	-	-	-	-	-	-
Stage 1	1012	888	-	969	857	-	-	-	-	-	-	-
Stage 2	963	832	-	1000	888	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	8.7		9.1		0.1		2.9	
HCM LOS	A		A					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1618	-	-	990	930	1528	-	-
HCM Lane V/C Ratio	0.001	-	-	0.014	0.051	0.002	-	-
HCM Control Delay (s)	7.2	0	-	8.7	9.1	7.4	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0.2	0	-	-

Intersection												
Int Delay, s/veh	2.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑	↗	↘	↑	↗		↕			↕	
Traffic Vol, veh/h	23	303	2	2	747	23	5	1	0	15	1	89
Future Vol, veh/h	23	303	2	2	747	23	5	1	0	15	1	89
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	475	-	415	525	-	525	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	24	319	2	2	786	24	5	1	0	16	1	94

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	810	0	0	321	0	0	1217	1181	319	1159	1159	786
Stage 1	-	-	-	-	-	-	367	367	-	790	790	-
Stage 2	-	-	-	-	-	-	850	814	-	369	369	-
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	816	-	-	1239	-	-	158	190	722	173	196	392
Stage 1	-	-	-	-	-	-	653	622	-	383	402	-
Stage 2	-	-	-	-	-	-	355	391	-	651	621	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	816	-	-	1239	-	-	117	184	722	168	190	392
Mov Cap-2 Maneuver	-	-	-	-	-	-	117	184	-	168	190	-
Stage 1	-	-	-	-	-	-	634	604	-	372	401	-
Stage 2	-	-	-	-	-	-	269	390	-	631	603	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.7	0	35.3	21.5
HCM LOS			E	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	125	816	-	-	1239	-	-	327
HCM Lane V/C Ratio	0.051	0.03	-	-	0.002	-	-	0.338
HCM Control Delay (s)	35.3	9.5	-	-	7.9	-	-	21.5
HCM Lane LOS	E	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.2	0.1	-	-	0	-	-	1.5

Intersection						
Int Delay, s/veh	0.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘↗		↑↑	↗	↘	↑↑
Traffic Vol, veh/h	4	16	1192	2	3	1035
Future Vol, veh/h	4	16	1192	2	3	1035
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	-	-	205	230	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	95	85	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	5	19	1255	2	3	1089

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1806	628	0	0	1257
Stage 1	1255	-	-	-	-
Stage 2	551	-	-	-	-
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	70	426	-	-	549
Stage 1	232	-	-	-	-
Stage 2	541	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	70	426	-	-	549
Mov Cap-2 Maneuver	70	-	-	-	-
Stage 1	232	-	-	-	-
Stage 2	538	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	211	549
HCM Lane V/C Ratio	-	-	0.112	0.006
HCM Control Delay (s)	-	-	24.2	11.6
HCM Lane LOS	-	-	C	B
HCM 95th %tile Q(veh)	-	-	0.4	0

Timings
1: SH 83 & SH 105/Walker Rd

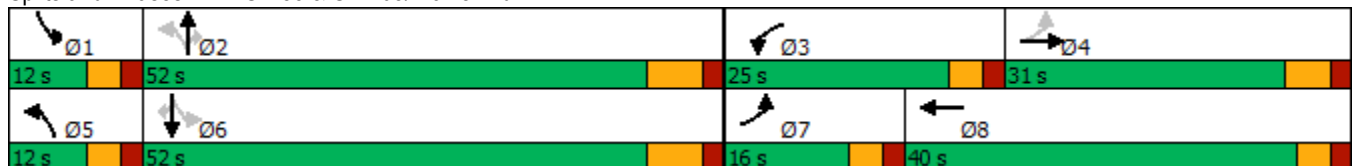
2040 Total Traffic
Miday Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	89	431	153	456	469	176	175	468	231	182	509	71
Future Volume (vph)	89	431	153	456	469	176	175	468	231	182	509	71
Turn Type	pm+pt	NA	Free	Prot	NA	Free	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		Free			Free	2		2	6		6
Detector Phase	7	4		3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	11.0		10.0	10.0		10.0	12.0	12.0	10.0	12.0	12.0
Total Split (s)	16.0	31.0		25.0	40.0		12.0	52.0	52.0	12.0	52.0	52.0
Total Split (%)	13.3%	25.8%		20.8%	33.3%		10.0%	43.3%	43.3%	10.0%	43.3%	43.3%
Yellow Time (s)	3.0	4.0		3.0	3.0		3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	6.0		5.0	5.0		5.0	7.0	7.0	5.0	7.0	7.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	Max	Max	None	Max	Max
Act Effct Green (s)	31.5	21.3	115.7	19.3	32.5	115.7	54.1	45.1	45.1	54.1	45.1	45.1
Actuated g/C Ratio	0.27	0.18	1.00	0.17	0.28	1.00	0.47	0.39	0.39	0.47	0.39	0.39
v/c Ratio	0.32	0.78	0.10	0.87	0.51	0.12	0.48	0.37	0.33	0.48	0.40	0.11
Control Delay	25.4	54.0	0.1	63.8	37.2	0.2	22.1	26.8	4.3	22.0	27.2	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	25.4	54.0	0.1	63.8	37.2	0.2	22.1	26.8	4.3	22.0	27.2	0.3
LOS	C	D	A	E	D	A	C	C	A	C	C	A
Approach Delay		38.8			42.4			20.0			23.5	
Approach LOS		D			D			B			C	

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 115.7
 Natural Cycle: 60
 Control Type: Semi Act-Uncoord
 Maximum v/c Ratio: 0.87
 Intersection Signal Delay: 31.7
 Intersection LOS: C
 Intersection Capacity Utilization 67.9%
 ICU Level of Service C
 Analysis Period (min) 15

Splits and Phases: 1: SH 83 & SH 105/Walker Rd



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	4	1	3	48	7	2	9	12	41	7	3	0
Future Vol, veh/h	4	1	3	48	7	2	9	12	41	7	3	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	1	4	56	8	2	11	14	48	8	4	0

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	85	104	4	83	80	38	4	0	0	62	0	0
Stage 1	20	20	-	60	60	-	-	-	-	-	-	-
Stage 2	65	84	-	23	20	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	901	786	1080	904	810	1034	1618	-	-	1541	-	-
Stage 1	999	879	-	951	845	-	-	-	-	-	-	-
Stage 2	946	825	-	995	879	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	884	777	1080	891	800	1034	1618	-	-	1541	-	-
Mov Cap-2 Maneuver	884	777	-	891	800	-	-	-	-	-	-	-
Stage 1	992	875	-	944	839	-	-	-	-	-	-	-
Stage 2	928	819	-	985	875	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	8.9	9.4	1.1	5.1
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1618	-	-	931	883	1541	-	-
HCM Lane V/C Ratio	0.007	-	-	0.01	0.076	0.005	-	-
HCM Control Delay (s)	7.2	0	-	8.9	9.4	7.3	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0.2	0	-	-

Intersection						
Int Delay, s/veh	0.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘↗		↑↑	↗	↘	↑↑
Traffic Vol, veh/h	2	20	1121	6	15	1124
Future Vol, veh/h	2	20	1121	6	15	1124
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	-	-	205	230	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	95	85	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	24	1180	7	16	1183

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1804	590	0	0	1187
Stage 1	1180	-	-	-	-
Stage 2	624	-	-	-	-
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	71	451	-	-	584
Stage 1	254	-	-	-	-
Stage 2	496	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	69	451	-	-	584
Mov Cap-2 Maneuver	69	-	-	-	-
Stage 1	254	-	-	-	-
Stage 2	483	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	18.1	0	0.1
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	300	584
HCM Lane V/C Ratio	-	-	0.086	0.027
HCM Control Delay (s)	-	-	18.1	11.3
HCM Lane LOS	-	-	C	B
HCM 95th %tile Q(veh)	-	-	0.3	0.1

Timings
1: SH 83 & SH 105/Walker Rd

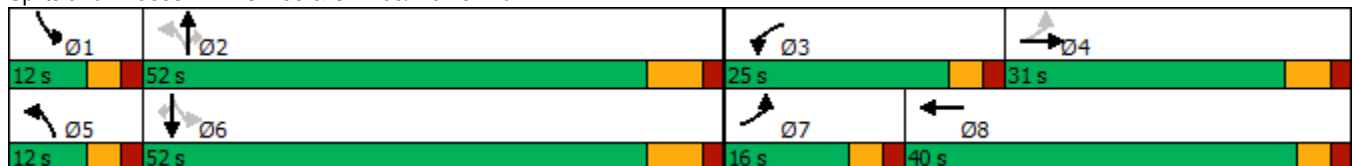
2040 Total Traffic
PM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	90	365	191	438	422	160	184	570	229	216	697	94
Future Volume (vph)	90	365	191	438	422	160	184	570	229	216	697	94
Turn Type	pm+pt	NA	Free	Prot	NA	Free	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		Free			Free	2		2	6		6
Detector Phase	7	4		3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	11.0		10.0	10.0		10.0	12.0	12.0	10.0	12.0	12.0
Total Split (s)	16.0	31.0		25.0	40.0		12.0	52.0	52.0	12.0	52.0	52.0
Total Split (%)	13.3%	25.8%		20.8%	33.3%		10.0%	43.3%	43.3%	10.0%	43.3%	43.3%
Yellow Time (s)	3.0	4.0		3.0	3.0		3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	6.0		5.0	5.0		5.0	7.0	7.0	5.0	7.0	7.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None		None	None		None	Max	Max	None	Max	Max
Act Effct Green (s)	28.3	18.1	112.0	18.7	28.7	112.0	54.1	45.1	45.1	54.1	45.1	45.1
Actuated g/C Ratio	0.25	0.16	1.00	0.17	0.26	1.00	0.48	0.40	0.40	0.48	0.40	0.40
v/c Ratio	0.33	0.72	0.14	0.82	0.50	0.12	0.65	0.47	0.31	0.67	0.53	0.14
Control Delay	26.2	52.1	0.2	58.2	37.6	0.1	28.1	26.7	4.1	28.8	27.7	1.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	26.2	52.1	0.2	58.2	37.6	0.1	28.1	26.7	4.1	28.8	27.7	1.1
LOS	C	D	A	E	D	A	C	C	A	C	C	A
Approach Delay		32.9			40.1			22.1			25.4	
Approach LOS		C			D			C			C	

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 112
 Natural Cycle: 60
 Control Type: Semi Act-Uncoord
 Maximum v/c Ratio: 0.82
 Intersection Signal Delay: 29.8
 Intersection LOS: C
 Intersection Capacity Utilization 71.2%
 ICU Level of Service C
 Analysis Period (min) 15

Splits and Phases: 1: SH 83 & SH 105/Walker Rd



Intersection												
Int Delay, s/veh	5.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	4	2	5	31	7	2	7	12	26	8	9	0
Future Vol, veh/h	4	2	5	31	7	2	7	12	26	8	9	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	2	6	36	8	2	8	14	31	9	11	0

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	80	90	11	79	75	30	11	0	0	45	0	0
Stage 1	29	29	-	46	46	-	-	-	-	-	-	-
Stage 2	51	61	-	33	29	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	908	800	1070	910	815	1044	1608	-	-	1563	-	-
Stage 1	988	871	-	968	857	-	-	-	-	-	-	-
Stage 2	962	844	-	983	871	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	892	791	1070	895	806	1044	1608	-	-	1563	-	-
Mov Cap-2 Maneuver	892	791	-	895	806	-	-	-	-	-	-	-
Stage 1	983	866	-	963	853	-	-	-	-	-	-	-
Stage 2	946	840	-	969	866	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	8.9		9.3		1.1		3.4	
HCM LOS	A		A					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1608	-	-	941	884	1563	-	-
HCM Lane V/C Ratio	0.005	-	-	0.014	0.053	0.006	-	-
HCM Control Delay (s)	7.2	0	-	8.9	9.3	7.3	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0.2	0	-	-

Intersection												
Int Delay, s/veh	2.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗	↖	↖	↗	↖		↕			↕	
Traffic Vol, veh/h	99	701	10	1	422	15	6	0	0	18	4	59
Future Vol, veh/h	99	701	10	1	422	15	6	0	0	18	4	59
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	475	-	415	525	-	525	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	104	738	11	1	444	16	6	0	0	19	4	62

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	460	0	0	749	0	0	1433	1408	738	1398	1403	444
Stage 1	-	-	-	-	-	-	946	946	-	446	446	-
Stage 2	-	-	-	-	-	-	487	462	-	952	957	-
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	1101	-	-	860	-	-	112	139	418	118	140	614
Stage 1	-	-	-	-	-	-	314	340	-	591	574	-
Stage 2	-	-	-	-	-	-	562	565	-	312	336	-
Platoon blocked, %		-	-	-	-	-						
Mov Cap-1 Maneuver	1101	-	-	860	-	-	91	126	418	109	127	614
Mov Cap-2 Maneuver	-	-	-	-	-	-	91	126	-	109	127	-
Stage 1	-	-	-	-	-	-	284	308	-	535	573	-
Stage 2	-	-	-	-	-	-	501	564	-	283	304	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.1	0	47.5	23.7
HCM LOS			E	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	91	1101	-	-	860	-	-	277
HCM Lane V/C Ratio	0.069	0.095	-	-	0.001	-	-	0.308
HCM Control Delay (s)	47.5	8.6	-	-	9.2	-	-	23.7
HCM Lane LOS	E	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.2	0.3	-	-	0	-	-	1.3

Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘↗		↑↑	↗	↘	↑↑
Traffic Vol, veh/h	1	9	1172	9	14	1347
Future Vol, veh/h	1	9	1172	9	14	1347
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	-	-	205	230	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	95	85	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	11	1234	11	15	1418

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1973	617	0	0	1245
Stage 1	1234	-	-	-	-
Stage 2	739	-	-	-	-
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	54	433	-	-	555
Stage 1	238	-	-	-	-
Stage 2	433	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	53	433	-	-	555
Mov Cap-2 Maneuver	53	-	-	-	-
Stage 1	238	-	-	-	-
Stage 2	421	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	20	0	0.1
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	252	555
HCM Lane V/C Ratio	-	-	0.047	0.027
HCM Control Delay (s)	-	-	20	11.7
HCM Lane LOS	-	-	C	B
HCM 95th %tile Q(veh)	-	-	0.1	0.1

Sidra Reports



MOVEMENT SUMMARY

Site: 101 [Jane Lundeen & Walker - Ex AM (Site Folder: General)]

Existing AM Peak Hour
 Site Category: (None)
 Roundabout

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist ft				
South: Jane Lundeen														
3	L2	289	2.0	672	2.0	0.282	5.5	LOS A	1.4	34.4	0.27	0.15	0.27	32.5
18	R2	10	2.0	23	2.0	0.282	5.4	LOS A	1.3	33.5	0.26	0.14	0.26	31.6
Approach		299	2.0	695	2.0	0.282	5.5	LOS A	1.4	34.4	0.27	0.15	0.27	32.5
East: Walker Rd														
1	L2	11	2.0	13	2.0	0.238	8.2	LOS A	1.0	25.3	0.64	0.64	0.64	33.5
6	T1	122	2.0	147	2.0	0.238	8.2	LOS A	1.0	25.3	0.64	0.64	0.64	33.4
Approach		133	2.0	160	2.0	0.238	8.2	LOS A	1.0	25.3	0.64	0.64	0.64	33.4
West: Walker Rd														
2	T1	54	2.0	108	2.0	0.079	3.2	LOS A	0.3	8.1	0.07	0.01	0.07	36.3
12	R2	189	2.0	378	2.0	0.275	5.0	LOS A	1.4	35.9	0.08	0.02	0.08	34.0
Approach		243	2.0	486	2.0	0.275	4.6	LOS A	1.4	35.9	0.08	0.02	0.08	34.5
All Vehicles		675	2.0	1342	2.0	0.282	5.5	LOS A	1.4	35.9	0.25	0.16	0.25	33.3

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Sign Control.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Geometric Delay is not included).

Queue Model: HCM Queue Formula.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [Jane Lundeen & Walker - Ex Mid (Site Folder: General)]

Existing Midday Hour
 Site Category: (None)
 Roundabout

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] ft				
South: Jane Lundeen														
3	L2	249	2.0	408	2.0	0.190	4.9	LOS A	0.8	20.4	0.33	0.22	0.33	32.8
18	R2	16	2.0	26	2.0	0.190	4.7	LOS A	0.8	20.0	0.32	0.21	0.32	32.0
Approach		265	2.0	434	2.0	0.190	4.9	LOS A	0.8	20.4	0.33	0.22	0.33	32.8
East: Walker Rd														
1	L2	5	2.0	6	2.0	0.099	5.0	LOS A	0.4	10.3	0.49	0.39	0.49	35.2
6	T1	71	2.0	82	2.0	0.099	5.0	LOS A	0.4	10.3	0.49	0.39	0.49	35.1
Approach		76	2.0	87	2.0	0.099	5.0	LOS A	0.4	10.3	0.49	0.39	0.49	35.1
West: Walker Rd														
2	T1	120	2.0	194	2.0	0.140	3.7	LOS A	0.6	15.5	0.04	0.01	0.04	36.0
12	R2	150	2.0	242	2.0	0.175	4.0	LOS A	0.8	20.2	0.04	0.01	0.04	34.5
Approach		270	2.0	435	2.0	0.175	3.9	LOS A	0.8	20.2	0.04	0.01	0.04	35.2
All Vehicles		611	2.0	957	2.0	0.190	4.4	LOS A	0.8	20.4	0.22	0.14	0.22	34.0

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Sign Control.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Geometric Delay is not included).

Queue Model: HCM Queue Formula.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [Jane Lundeen & Walker - Ex PM (Site Folder: General)]

Existing PM Hour
 Site Category: (None)
 Roundabout

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] ft				
South: Jane Lundeen														
3	L2	53	2.0	151	2.0	0.073	3.8	LOS A	0.3	7.0	0.31	0.19	0.31	33.3
18	R2	4	2.0	11	2.0	0.073	3.7	LOS A	0.3	6.8	0.30	0.18	0.30	32.5
Approach		57	2.0	163	2.0	0.073	3.8	LOS A	0.3	7.0	0.31	0.19	0.31	33.3
East: Walker Rd														
1	L2	2	2.0	3	2.0	0.077	3.8	LOS A	0.3	8.4	0.30	0.16	0.30	36.0
6	T1	67	2.0	86	2.0	0.077	3.8	LOS A	0.3	8.4	0.30	0.16	0.30	35.9
Approach		69	2.0	88	2.0	0.077	3.8	LOS A	0.3	8.4	0.30	0.16	0.30	35.9
West: Walker Rd														
2	T1	165	2.0	212	2.0	0.152	3.8	LOS A	0.7	17.2	0.03	0.00	0.03	35.9
12	R2	16	2.0	21	2.0	0.015	2.7	LOS A	0.1	1.4	0.02	0.00	0.02	35.2
Approach		181	2.0	232	2.0	0.152	3.7	LOS A	0.7	17.2	0.03	0.00	0.03	35.9
All Vehicles		307	2.0	483	2.0	0.152	3.8	LOS A	0.7	17.2	0.17	0.10	0.17	34.9

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Sign Control.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Geometric Delay is not included).

Queue Model: HCM Queue Formula.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [Jane Lundeen & Walker - ST Back AM (Site Folder: General)]

Short-Term Background AM Peak Hour
 Site Category: (None)
 Roundabout

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
		[Total veh/h	HV] %	[Total veh/h	HV] %				[Veh. veh	Dist] ft				
South: Jane Lundeen														
3	L2	292	2.0	679	2.0	0.285	5.5	LOS A	1.4	34.8	0.27	0.15	0.27	32.5
18	R2	10	2.0	23	2.0	0.285	5.4	LOS A	1.3	34.0	0.26	0.14	0.26	31.6
Approach		302	2.0	702	2.0	0.285	5.5	LOS A	1.4	34.8	0.27	0.15	0.27	32.5
East: Walker Rd														
1	L2	11	2.0	13	2.0	0.240	8.3	LOS A	1.0	25.5	0.64	0.64	0.64	33.5
6	T1	122	2.0	147	2.0	0.240	8.3	LOS A	1.0	25.5	0.64	0.64	0.64	33.4
Approach		133	2.0	160	2.0	0.240	8.3	LOS A	1.0	25.5	0.64	0.64	0.64	33.4
West: Walker Rd														
2	T1	54	2.0	108	2.0	0.079	3.2	LOS A	0.3	8.1	0.07	0.01	0.07	36.3
12	R2	190	2.0	380	2.0	0.276	5.0	LOS A	1.4	36.2	0.08	0.02	0.08	34.0
Approach		244	2.0	488	2.0	0.276	4.6	LOS A	1.4	36.2	0.08	0.02	0.08	34.5
All Vehicles		679	2.0	1351	2.0	0.285	5.5	LOS A	1.4	36.2	0.25	0.16	0.25	33.3

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Sign Control.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Geometric Delay is not included).

Queue Model: HCM Queue Formula.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [Jane Lundeen & Walker - ST Back Mid (Site Folder: General)]

Short-Term Background Midday Hour
 Site Category: (None)
 Roundabout

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
		[Total veh/h	HV] %	[Total veh/h	HV] %				[Veh. veh	Dist] ft				
South: Jane Lundeen														
3	L2	251	2.0	411	2.0	0.192	4.9	LOS A	0.8	20.6	0.33	0.22	0.33	32.8
18	R2	16	2.0	26	2.0	0.192	4.7	LOS A	0.8	20.1	0.32	0.21	0.32	32.0
Approach		267	2.0	438	2.0	0.192	4.9	LOS A	0.8	20.6	0.33	0.22	0.33	32.8
East: Walker Rd														
1	L2	5	2.0	6	2.0	0.099	5.0	LOS A	0.4	10.4	0.49	0.40	0.49	35.2
6	T1	71	2.0	82	2.0	0.099	5.0	LOS A	0.4	10.4	0.49	0.40	0.49	35.1
Approach		76	2.0	87	2.0	0.099	5.0	LOS A	0.4	10.4	0.49	0.40	0.49	35.1
West: Walker Rd														
2	T1	120	2.0	194	2.0	0.140	3.7	LOS A	0.6	15.5	0.04	0.01	0.04	36.0
12	R2	152	2.0	245	2.0	0.177	4.0	LOS A	0.8	20.5	0.05	0.01	0.05	34.5
Approach		272	2.0	439	2.0	0.177	3.9	LOS A	0.8	20.5	0.04	0.01	0.04	35.2
All Vehicles		615	2.0	964	2.0	0.192	4.4	LOS A	0.8	20.6	0.22	0.14	0.22	34.0

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Sign Control.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Geometric Delay is not included).

Queue Model: HCM Queue Formula.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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Project: G:\Shared drives\CS Engineering Active Projects\2021\S214070 - Walden Preserve Filing 5\Sidra\Walker and Jane Lundeen Short Term.sip9

MOVEMENT SUMMARY

Site: 101 [Jane Lundeen & Walker - ST Back PM (Site Folder: General)]

Short-Term Background PM Hour
 Site Category: (None)
 Roundabout

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] ft				
South: Jane Lundeen														
3	L2	55	2.0	157	2.0	0.075	3.9	LOS A	0.3	7.2	0.31	0.19	0.31	33.3
18	R2	4	2.0	11	2.0	0.075	3.7	LOS A	0.3	7.1	0.30	0.18	0.30	32.5
Approach		59	2.0	169	2.0	0.075	3.8	LOS A	0.3	7.2	0.31	0.19	0.31	33.3
East: Walker Rd														
1	L2	2	2.0	3	2.0	0.077	3.8	LOS A	0.3	8.4	0.30	0.17	0.30	36.0
6	T1	67	2.0	86	2.0	0.077	3.8	LOS A	0.3	8.4	0.30	0.17	0.30	35.9
Approach		69	2.0	88	2.0	0.077	3.8	LOS A	0.3	8.4	0.30	0.17	0.30	35.9
West: Walker Rd														
2	T1	165	2.0	212	2.0	0.152	3.8	LOS A	0.7	17.2	0.03	0.00	0.03	35.9
12	R2	18	2.0	23	2.0	0.017	2.7	LOS A	0.1	1.6	0.02	0.00	0.02	35.2
Approach		183	2.0	235	2.0	0.152	3.7	LOS A	0.7	17.2	0.03	0.00	0.03	35.9
All Vehicles		311	2.0	492	2.0	0.152	3.8	LOS A	0.7	17.2	0.17	0.10	0.17	34.9

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Sign Control.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Geometric Delay is not included).

Queue Model: HCM Queue Formula.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [Jane Lundeen & Walker - ST Total AM (Site Folder: General)]

Short-Term Total AM Peak Hour
 Site Category: (None)
 Roundabout

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] ft				
South: Jane Lundeen														
3	L2	307	2.0	714	2.0	0.299	5.7	LOS A	1.5	37.2	0.28	0.15	0.28	32.4
18	R2	10	2.0	23	2.0	0.299	5.5	LOS A	1.4	36.3	0.27	0.15	0.27	31.5
Approach		317	2.0	737	2.0	0.299	5.7	LOS A	1.5	37.2	0.28	0.15	0.28	32.4
East: Walker Rd														
1	L2	11	2.0	13	2.0	0.249	8.7	LOS A	1.0	26.3	0.66	0.66	0.66	33.3
6	T1	122	2.0	147	2.0	0.249	8.7	LOS A	1.0	26.3	0.66	0.66	0.66	33.2
Approach		133	2.0	160	2.0	0.249	8.7	LOS A	1.0	26.3	0.66	0.66	0.66	33.2
West: Walker Rd														
2	T1	54	2.0	108	2.0	0.079	3.2	LOS A	0.3	8.1	0.07	0.01	0.07	36.3
12	R2	193	2.0	386	2.0	0.281	5.0	LOS A	1.5	36.9	0.08	0.02	0.08	34.0
Approach		247	2.0	494	2.0	0.281	4.6	LOS A	1.5	36.9	0.08	0.02	0.08	34.5
All Vehicles		697	2.0	1391	2.0	0.299	5.6	LOS A	1.5	37.2	0.25	0.16	0.25	33.2

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Sign Control.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Geometric Delay is not included).

Queue Model: HCM Queue Formula.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [Jane Lundeen & Walker - ST Total Mid (Site Folder: General)]

Short-Term Total Midday Hour
 Site Category: (None)
 Roundabout

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
		[Total veh/h	HV] %	[Total veh/h	HV] %				[Veh. veh	Dist] ft				
South: Jane Lundeen														
3	L2	259	2.0	425	2.0	0.198	4.9	LOS A	0.8	21.3	0.33	0.22	0.33	32.8
18	R2	16	2.0	26	2.0	0.198	4.8	LOS A	0.8	20.9	0.33	0.21	0.33	31.9
Approach		275	2.0	451	2.0	0.198	4.9	LOS A	0.8	21.3	0.33	0.22	0.33	32.8
East: Walker Rd														
1	L2	5	2.0	6	2.0	0.100	5.1	LOS A	0.4	10.5	0.50	0.41	0.50	35.1
6	T1	71	2.0	82	2.0	0.100	5.1	LOS A	0.4	10.5	0.50	0.41	0.50	35.0
Approach		76	2.0	87	2.0	0.100	5.1	LOS A	0.4	10.5	0.50	0.41	0.50	35.0
West: Walker Rd														
2	T1	120	2.0	194	2.0	0.140	3.7	LOS A	0.6	15.5	0.04	0.01	0.04	36.0
12	R2	159	2.0	256	2.0	0.185	4.1	LOS A	0.9	21.7	0.05	0.01	0.05	34.5
Approach		279	2.0	450	2.0	0.185	3.9	LOS A	0.9	21.7	0.04	0.01	0.04	35.1
All Vehicles		630	2.0	988	2.0	0.198	4.5	LOS A	0.9	21.7	0.22	0.14	0.22	34.0

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Sign Control.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Geometric Delay is not included).

Queue Model: HCM Queue Formula.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [Jane Lundeen & Walker - ST Total PM (Site Folder: General)]

Short-Term Total PM Hour
 Site Category: (None)
 Roundabout

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] ft				
South: Jane Lundeen														
3	L2	64	2.0	183	2.0	0.087	4.0	LOS A	0.3	8.4	0.32	0.20	0.32	33.3
18	R2	4	2.0	11	2.0	0.087	3.8	LOS A	0.3	8.2	0.31	0.19	0.31	32.4
Approach		68	2.0	194	2.0	0.087	3.9	LOS A	0.3	8.4	0.32	0.20	0.32	33.2
East: Walker Rd														
1	L2	2	2.0	3	2.0	0.079	3.9	LOS A	0.3	8.6	0.33	0.19	0.33	35.9
6	T1	67	2.0	86	2.0	0.079	3.9	LOS A	0.3	8.6	0.33	0.19	0.33	35.8
Approach		69	2.0	88	2.0	0.079	3.9	LOS A	0.3	8.6	0.33	0.19	0.33	35.8
West: Walker Rd														
2	T1	165	2.0	212	2.0	0.152	3.8	LOS A	0.7	17.2	0.03	0.00	0.03	35.9
12	R2	29	2.0	37	2.0	0.027	2.8	LOS A	0.1	2.6	0.02	0.00	0.02	35.2
Approach		194	2.0	249	2.0	0.152	3.7	LOS A	0.7	17.2	0.03	0.00	0.03	35.8
All Vehicles		331	2.0	531	2.0	0.152	3.8	LOS A	0.7	17.2	0.18	0.11	0.18	34.8

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Sign Control.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Geometric Delay is not included).

Queue Model: HCM Queue Formula.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [Jane Lundeen & Walker - 2040 Back AM (Site Folder: General)]

2040 Background AM Peak Hour
 Site Category: (None)
 Roundabout

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] ft				
South: Jane Lundeen														
3	L2	770	2.0	811	2.0	0.364	6.7	LOS A	1.9	47.5	0.38	0.25	0.38	32.0
8	T1	1	2.0	1	2.0	0.364	6.5	LOS A	1.8	46.5	0.37	0.24	0.37	32.1
18	R2	34	2.0	36	2.0	0.364	6.5	LOS A	1.8	46.5	0.37	0.24	0.37	31.2
Approach		805	2.0	847	2.0	0.364	6.7	LOS A	1.9	47.5	0.38	0.25	0.38	32.0
East: Walker Rd														
1	L2	63	2.0	66	2.0	0.794	31.4	LOS D	8.0	203.2	0.90	1.29	2.16	24.9
6	T1	345	2.0	363	2.0	0.794	31.4	LOS D	8.0	203.2	0.90	1.29	2.16	24.8
16	R2	3	2.0	3	2.0	0.794	31.4	LOS D	8.0	203.2	0.90	1.29	2.16	24.3
Approach		411	2.0	433	2.0	0.794	31.4	LOS D	8.0	203.2	0.90	1.29	2.16	24.8
North: Shannon Rd														
7	L2	1	2.0	1	2.0	0.226	10.9	LOS B	0.8	19.4	0.71	0.71	0.71	32.3
4	T1	1	2.0	1	2.0	0.226	10.9	LOS B	0.8	19.4	0.71	0.71	0.71	32.2
14	R2	100	2.0	105	2.0	0.226	10.9	LOS B	0.8	19.4	0.71	0.71	0.71	31.3
Approach		102	2.0	107	2.0	0.226	10.9	LOS B	0.8	19.4	0.71	0.71	0.71	31.3
West: Walker Rd														
5	L2	60	2.0	63	2.0	0.131	3.8	LOS A	0.6	14.1	0.18	0.08	0.18	34.9
2	T1	102	2.0	107	2.0	0.131	3.8	LOS A	0.6	14.1	0.18	0.08	0.18	34.8
12	R2	640	2.0	674	2.0	0.516	8.2	LOS A	3.7	93.5	0.31	0.15	0.31	32.4
Approach		802	2.0	844	2.0	0.516	7.3	LOS A	3.7	93.5	0.28	0.13	0.28	32.9
All Vehicles		2120	2.0	2232	2.0	0.794	11.9	LOS B	8.0	203.2	0.46	0.43	0.70	30.6

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Sign Control.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Geometric Delay is not included).

Queue Model: HCM Queue Formula.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Jane Lundeen & Walker - 2040 Back Midday (Site Folder: General)]

2040 Background Midday Hour
 Site Category: (None)
 Roundabout

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total veh/h	HV] %				[Veh. veh	Dist] ft				
South: Jane Lundeen														
3	L2	891	2.0	938	2.0	0.477	8.9	LOS A	2.6	66.6	0.54	0.44	0.54	31.1
8	T1	1	2.0	1	2.0	0.477	8.7	LOS A	2.6	65.8	0.53	0.43	0.53	31.2
18	R2	59	2.0	62	2.0	0.477	8.7	LOS A	2.6	65.8	0.53	0.43	0.53	30.4
Approach		951	2.0	1001	2.0	0.477	8.9	LOS A	2.6	66.6	0.54	0.44	0.54	31.0
East: Walker Rd														
1	L2	43	2.0	45	2.0	0.337	13.9	LOS B	1.4	36.1	0.75	0.80	0.92	30.4
6	T1	93	2.0	98	2.0	0.337	13.9	LOS B	1.4	36.1	0.75	0.80	0.92	30.4
16	R2	6	2.0	6	2.0	0.337	13.9	LOS B	1.4	36.1	0.75	0.80	0.92	29.6
Approach		142	2.0	149	2.0	0.337	13.9	LOS B	1.4	36.1	0.75	0.80	0.92	30.3
North: Shannon Rd														
7	L2	6	2.0	6	2.0	0.222	9.6	LOS A	0.8	19.6	0.66	0.66	0.66	32.8
4	T1	1	2.0	1	2.0	0.222	9.6	LOS A	0.8	19.6	0.66	0.66	0.66	32.7
14	R2	108	2.0	114	2.0	0.222	9.6	LOS A	0.8	19.6	0.66	0.66	0.66	31.8
Approach		115	2.0	121	2.0	0.222	9.6	LOS A	0.8	19.6	0.66	0.66	0.66	31.9
West: Walker Rd														
5	L2	126	2.0	133	2.0	0.211	4.5	LOS A	1.0	25.1	0.17	0.07	0.17	34.3
2	T1	140	2.0	147	2.0	0.211	4.5	LOS A	1.0	25.1	0.17	0.07	0.17	34.2
12	R2	568	2.0	598	2.0	0.451	7.2	LOS A	2.9	74.3	0.24	0.10	0.24	32.9
Approach		834	2.0	878	2.0	0.451	6.3	LOS A	2.9	74.3	0.22	0.09	0.22	33.3
All Vehicles		2042	2.0	2149	2.0	0.477	8.2	LOS A	2.9	74.3	0.43	0.34	0.44	31.9

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Sign Control.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Geometric Delay is not included).

Queue Model: HCM Queue Formula.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Jane Lundeen & Walker - 2040 Back PM (Site Folder: General)]

2040 Background PM Peak Hour
 Site Category: (None)
 Roundabout

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] ft				
South: Jane Lundeen														
3	L2	735	2.0	774	2.0	0.437	8.9	LOS A	2.4	61.3	0.58	0.56	0.65	31.1
8	T1	1	2.0	1	2.0	0.437	8.7	LOS A	2.3	59.3	0.57	0.54	0.62	31.2
18	R2	49	2.0	52	2.0	0.437	8.7	LOS A	2.3	59.3	0.57	0.54	0.62	30.4
Approach		785	2.0	826	2.0	0.437	8.9	LOS A	2.4	61.3	0.58	0.56	0.64	31.0
East: Walker Rd														
1	L2	34	2.0	36	2.0	0.386	13.6	LOS B	1.8	45.9	0.74	0.81	0.97	30.8
6	T1	145	2.0	153	2.0	0.386	13.6	LOS B	1.8	45.9	0.74	0.81	0.97	30.7
16	R2	5	2.0	5	2.0	0.386	13.6	LOS B	1.8	45.9	0.74	0.81	0.97	29.9
Approach		184	2.0	194	2.0	0.386	13.6	LOS B	1.8	45.9	0.74	0.81	0.97	30.7
North: Shannon Rd														
7	L2	6	2.0	6	2.0	0.240	9.0	LOS A	0.9	21.9	0.64	0.64	0.64	33.1
4	T1	1	2.0	1	2.0	0.240	9.0	LOS A	0.9	21.9	0.64	0.64	0.64	33.0
14	R2	131	2.0	138	2.0	0.240	9.0	LOS A	0.9	21.9	0.64	0.64	0.64	32.1
Approach		138	2.0	145	2.0	0.240	9.0	LOS A	0.9	21.9	0.64	0.64	0.64	32.1
West: Walker Rd														
5	L2	170	2.0	179	2.0	0.296	5.3	LOS A	1.5	39.2	0.17	0.06	0.17	34.0
2	T1	206	2.0	217	2.0	0.296	5.3	LOS A	1.5	39.2	0.17	0.06	0.17	33.8
12	R2	424	2.0	446	2.0	0.334	5.7	LOS A	1.8	46.5	0.18	0.07	0.18	33.6
Approach		800	2.0	842	2.0	0.334	5.5	LOS A	1.8	46.5	0.18	0.07	0.18	33.8
All Vehicles		1907	2.0	2007	2.0	0.437	7.9	LOS A	2.4	61.3	0.43	0.38	0.48	32.2

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Sign Control.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Geometric Delay is not included).

Queue Model: HCM Queue Formula.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Jane Lundeen & Walker - 2040 Total AM (Site Folder: General)]

2040 Total AM Peak Hour
 Site Category: (None)
 Roundabout

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] ft				
South: Jane Lundeen														
3	L2	784	2.0	825	2.0	0.371	6.8	LOS A	1.9	48.7	0.38	0.25	0.38	32.0
8	T1	1	2.0	1	2.0	0.371	6.6	LOS A	1.9	47.7	0.37	0.24	0.37	32.0
18	R2	34	2.0	36	2.0	0.371	6.6	LOS A	1.9	47.7	0.37	0.24	0.37	31.1
Approach		819	2.0	862	2.0	0.371	6.8	LOS A	1.9	48.7	0.38	0.25	0.38	31.9
East: Walker Rd														
1	L2	63	2.0	66	2.0	0.807	33.1	LOS D	8.3	210.4	0.91	1.31	2.24	24.5
6	T1	345	2.0	363	2.0	0.807	33.1	LOS D	8.3	210.4	0.91	1.31	2.24	24.4
16	R2	3	2.0	3	2.0	0.807	33.1	LOS D	8.3	210.4	0.91	1.31	2.24	23.9
Approach		411	2.0	433	2.0	0.807	33.1	LOS D	8.3	210.4	0.91	1.31	2.24	24.4
North: Shannon Rd														
7	L2	1	2.0	1	2.0	0.229	11.1	LOS B	0.8	19.6	0.72	0.72	0.72	32.2
4	T1	1	2.0	1	2.0	0.229	11.1	LOS B	0.8	19.6	0.72	0.72	0.72	32.1
14	R2	100	2.0	105	2.0	0.229	11.1	LOS B	0.8	19.6	0.72	0.72	0.72	31.2
Approach		102	2.0	107	2.0	0.229	11.1	LOS B	0.8	19.6	0.72	0.72	0.72	31.2
West: Walker Rd														
5	L2	60	2.0	63	2.0	0.131	3.8	LOS A	0.6	14.1	0.18	0.08	0.18	34.9
2	T1	102	2.0	107	2.0	0.131	3.8	LOS A	0.6	14.1	0.18	0.08	0.18	34.8
12	R2	643	2.0	677	2.0	0.518	8.3	LOS A	3.7	94.3	0.31	0.15	0.31	32.4
Approach		805	2.0	847	2.0	0.518	7.4	LOS A	3.7	94.3	0.28	0.13	0.28	32.9
All Vehicles		2137	2.0	2249	2.0	0.807	12.3	LOS B	8.3	210.4	0.46	0.43	0.72	30.4

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Sign Control.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Geometric Delay is not included).

Queue Model: HCM Queue Formula.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Jane Lundeen & Walker - 2040 Total Midday (Site Folder: General)]

2040 Total Midday Hour
 Site Category: (None)
 Roundabout

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total veh/h	HV] %				[Veh. veh	Dist] ft				
South: Jane Lundeen														
3	L2	899	2.0	946	2.0	0.481	9.0	LOS A	2.7	67.9	0.54	0.45	0.54	31.1
8	T1	1	2.0	1	2.0	0.481	8.8	LOS A	2.6	66.7	0.53	0.43	0.53	31.2
18	R2	59	2.0	62	2.0	0.481	8.8	LOS A	2.6	66.7	0.53	0.43	0.53	30.3
Approach		959	2.0	1009	2.0	0.481	9.0	LOS A	2.7	67.9	0.54	0.45	0.54	31.0
East: Walker Rd														
1	L2	43	2.0	45	2.0	0.340	14.0	LOS B	1.4	36.5	0.76	0.81	0.93	30.4
6	T1	93	2.0	98	2.0	0.340	14.0	LOS B	1.4	36.5	0.76	0.81	0.93	30.3
16	R2	6	2.0	6	2.0	0.340	14.0	LOS B	1.4	36.5	0.76	0.81	0.93	29.5
Approach		142	2.0	149	2.0	0.340	14.0	LOS B	1.4	36.5	0.76	0.81	0.93	30.3
North: Shannon Rd														
7	L2	6	2.0	6	2.0	0.224	9.7	LOS A	0.8	19.7	0.67	0.67	0.67	32.8
4	T1	1	2.0	1	2.0	0.224	9.7	LOS A	0.8	19.7	0.67	0.67	0.67	32.7
14	R2	108	2.0	114	2.0	0.224	9.7	LOS A	0.8	19.7	0.67	0.67	0.67	31.8
Approach		115	2.0	121	2.0	0.224	9.7	LOS A	0.8	19.7	0.67	0.67	0.67	31.8
West: Walker Rd														
5	L2	126	2.0	133	2.0	0.211	4.5	LOS A	1.0	25.1	0.17	0.07	0.17	34.3
2	T1	140	2.0	147	2.0	0.211	4.5	LOS A	1.0	25.1	0.17	0.07	0.17	34.2
12	R2	576	2.0	606	2.0	0.457	7.3	LOS A	3.0	76.2	0.24	0.10	0.24	32.9
Approach		842	2.0	886	2.0	0.457	6.4	LOS A	3.0	76.2	0.22	0.09	0.22	33.3
All Vehicles		2058	2.0	2166	2.0	0.481	8.3	LOS A	3.0	76.2	0.43	0.34	0.44	31.9

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Sign Control.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Geometric Delay is not included).

Queue Model: HCM Queue Formula.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Jane Lundeen & Walker - 2040 Total PM (Site Folder: General)]

2040 Total PM Peak Hour
 Site Category: (None)
 Roundabout

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total veh/h	HV] %				[Veh. veh	Dist] ft				
South: Jane Lundeen														
3	L2	744	2.0	783	2.0	0.442	9.0	LOS A	2.5	63.2	0.58	0.57	0.66	31.0
8	T1	1	2.0	1	2.0	0.442	8.7	LOS A	2.4	61.2	0.57	0.55	0.64	31.2
18	R2	49	2.0	52	2.0	0.442	8.7	LOS A	2.4	61.2	0.57	0.55	0.64	30.3
Approach		794	2.0	836	2.0	0.442	9.0	LOS A	2.5	63.2	0.58	0.57	0.66	31.0
East: Walker Rd														
1	L2	34	2.0	36	2.0	0.390	13.8	LOS B	1.8	46.4	0.74	0.81	0.98	30.7
6	T1	145	2.0	153	2.0	0.390	13.8	LOS B	1.8	46.4	0.74	0.81	0.98	30.7
16	R2	5	2.0	5	2.0	0.390	13.8	LOS B	1.8	46.4	0.74	0.81	0.98	29.9
Approach		184	2.0	194	2.0	0.390	13.8	LOS B	1.8	46.4	0.74	0.81	0.98	30.6
North: Shannon Rd														
7	L2	6	2.0	6	2.0	0.242	9.1	LOS A	0.9	22.1	0.64	0.64	0.64	33.1
4	T1	1	2.0	1	2.0	0.242	9.1	LOS A	0.9	22.1	0.64	0.64	0.64	33.0
14	R2	131	2.0	138	2.0	0.242	9.1	LOS A	0.9	22.1	0.64	0.64	0.64	32.0
Approach		138	2.0	145	2.0	0.242	9.1	LOS A	0.9	22.1	0.64	0.64	0.64	32.1
West: Walker Rd														
5	L2	170	2.0	179	2.0	0.296	5.3	LOS A	1.5	39.2	0.17	0.06	0.17	34.0
2	T1	206	2.0	217	2.0	0.296	5.3	LOS A	1.5	39.2	0.17	0.06	0.17	33.8
12	R2	434	2.0	457	2.0	0.342	5.8	LOS A	1.9	48.1	0.18	0.07	0.18	33.6
Approach		810	2.0	853	2.0	0.342	5.6	LOS A	1.9	48.1	0.18	0.07	0.18	33.7
All Vehicles		1926	2.0	2027	2.0	0.442	8.0	LOS A	2.5	63.2	0.43	0.39	0.48	32.1

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Sign Control.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Geometric Delay is not included).

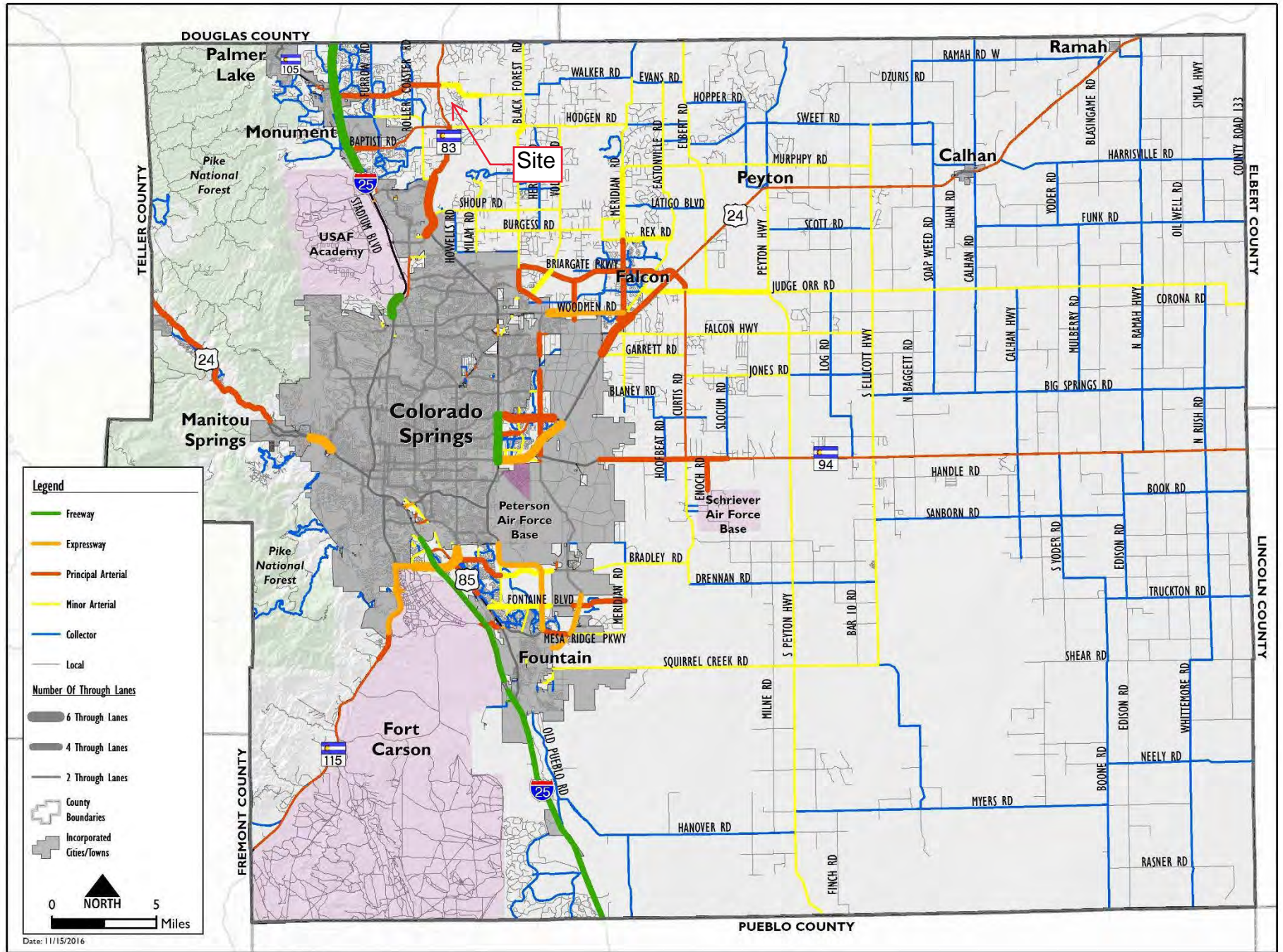
Queue Model: HCM Queue Formula.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

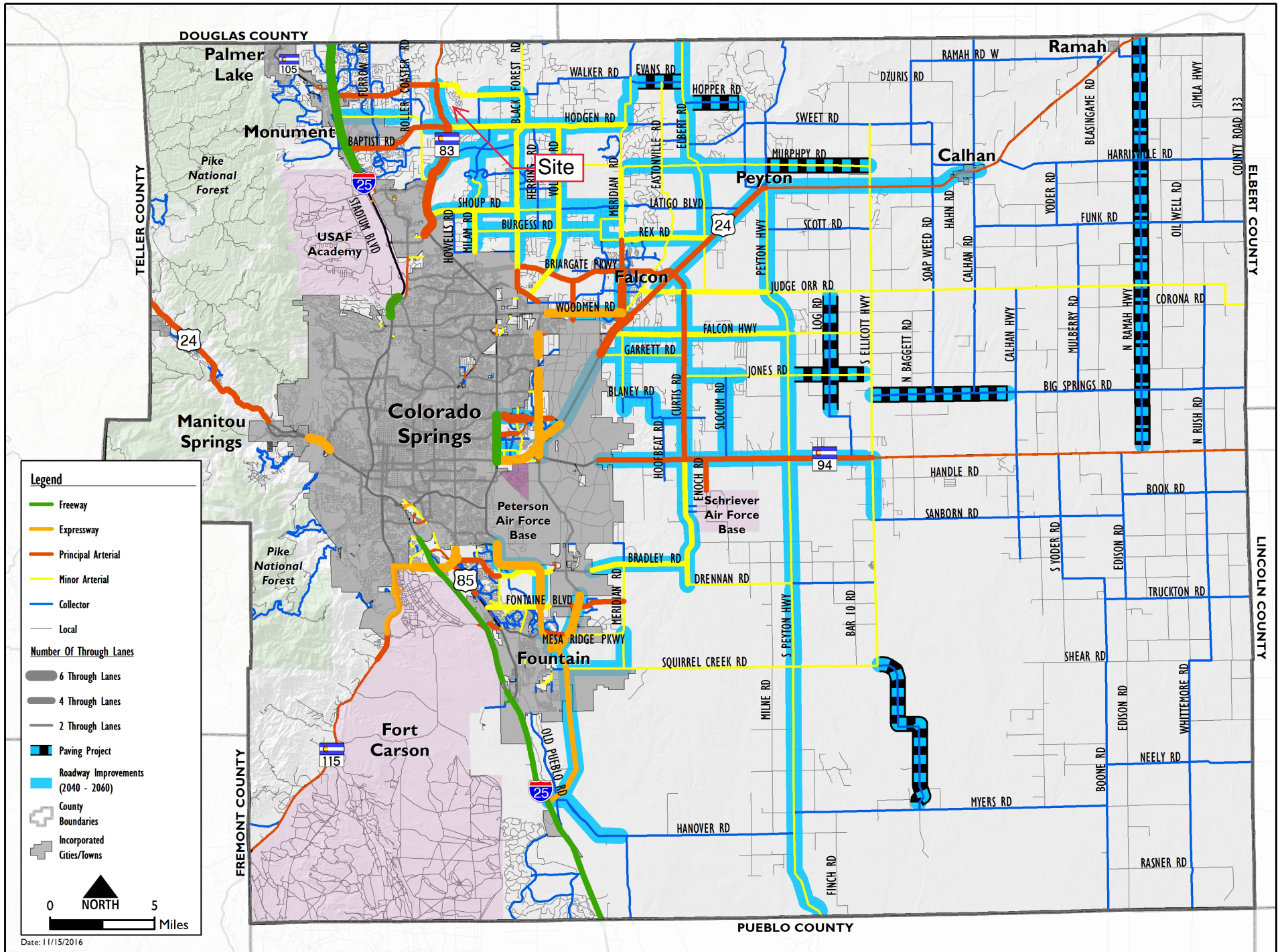
MTCP Maps





Map 14: 2040 Roadway Plan (Classification and Lanes)

Map 17: 2060 Corridor Preservation



DOUGLAS COUNTY

Palmer Lake

Monument

Pike National Forest

USAF Academy

Manitou Springs

Colorado Springs

Peterson Air Force Base

Schriever Air Force Base

Fountain

Fort Carson

Ramah

Calhan

Peyton

Falcon

Fountain

TELLER COUNTY

ELBERT COUNTY

LINCOLN COUNTY

FREMONT COUNTY

PUEBLO COUNTY

Palmer Lake

Monument

Pike National Forest

USAF Academy

Manitou Springs

Colorado Springs

Peterson Air Force Base

Schriever Air Force Base

Fountain

Fort Carson

Ramah

Calhan

Peyton

Falcon

Fountain

Fort Carson

TELLER COUNTY

ELBERT COUNTY

LINCOLN COUNTY

FREMONT COUNTY

PUEBLO COUNTY

Appendix Table 1



Appendix Table 1
Area Traffic Impact Studies by LSC
Walden Preserve 2 Filing No. 5

Study	PCD File No.	Date
Walden Preserve 2 Preliminary Plan and Filings 1 and 2 Updated Traffic Impact Study	SP1410	September 17, 2014
Walden Preserve 2 Filing No. 4 Traffic Technical Memorandum	SF-18-034	March 14, 2019
Walden Preserve 2 Filing No. 4 CDOT Access Permit Technical Memorandum	SF-18-034	July 12, 2019
Abert Ranch Subdivision Updated Transportation Memorandum	P-17-005 and SP-17-007	November 17, 2017
Settlers' View Subdivision Final Plat Transportation Memorandum	SF-18-041	December 18, 2018
Rollin' Ridge Traffic Impact Study	SP-181, P-181, PUD-183	March 18, 2019
Rollin' Ridge Filing No. 1 Transportation Memorandum	SF-19-002	January 17, 2020
Monument Academy Updated Traffic Impact Study	U102/PPR19009	April 7, 2020
<i>Source: LSC Transportation Consultants, Inc. (December 2021)</i>		

Crash History



AccidentDate	AccidentTime	NumberKilled	NumberInjured	FIP	HighestInjuryLevel	ReferencePointName	ReferencePointAtName	LightingConditionCode	AdverseWeatherConditionCode	AccidentNarrative
4/19/2018 0:00	8:11:00 PM	0	0	Property	1	HIGHWAY 83	WALDEN WAY	04	05	Vehicle #1 was traveling north on Highway 83 , south of Walden Way. Vehicle #2 was in front of vehicle #1, also traveling north on Highway 83, south of Walden Way. Vehicle #2 slowed to turn right onto Walden Way , at which point Vehicle #1's front crashed into the rear of Vehicle #1. Both vehicles were driven to the shoulder of the road after the collision.
9/7/2018 0:00	3:45:00 PM	0	1	Injury	2	HIGHWAY 83	WALDEN WAY	01	00	Vehicle #1 was traveling southbound on Colorado 83 approaching Walden Way. Vehicle #2 was stopped on Colorado 83 southbound at Walden Way waiting to turn left . Vehicle #1's front struck Vehicle #2's rear. Vehicle #2 was pushed 85.3 feet south where it went off the right side of the road and its front struck a delineator post. Vehicle #2 then continued south for 81.2 feet, coming to final rest on its wheels facing south off the west edge of the road. Vehicle #1 drove from final rest off road.
10/21/2018 0:00	5:15:00 PM	0	0	Property	0	HIGHWAY 83	WALDEN WAY	01	00	Vehicles 1 and 2 were southbound on Highway 83 just north of Walden Way. Vehicle 2 was stopped for traffic ahead . Vehicle 1 failed to stop and collided its front with the rear of vehicle 2. Both vehicles were moved prior to investigation.
1/8/2020 0:00	3:59:00 PM	0	0	Property	0	HIGHWAY 83	WALDEN WAY	01	00	Vehicle 1 was traveling southbound Highway 83 near Walden Way. Vehicle 2 was traveling southbound Highway 83 and attempting to turn east onto Walden Way . Vehicle 1 drove off the right side of the road to avoid a collision with Vehicle 2 and collided with a gas pipe and fence. Vehicle 1 came to final rest off the west side of the road on the fence facing south.

Additional Attachment

Excerpt of Pages from the July 2019 Traffic Memo for Filing No. 4



Excerpt of pages from the Filing 4 "CDOT Access Permit Technical Memorandum" report dated July 12, 2019



LSC TRANSPORTATION CONSULTANTS, INC.
545 East Pikes Peak Avenue, Suite 210
Colorado Springs, CO 80903
(719) 633-2868
FAX (719) 633-5430
E-mail: lsc@lsctrans.com
Website: <http://www.lsctrans.com>

July 12, 2019

Mr. Matt Dunston
Walden Holdings 1, LLC
17145 Colonial Park Drive
Monument, CO 80132

RE: Walden Preserve 2 Filing No. 4
El Paso County, CO
PCD File No. SF-18-034
CDOT Access Permit Technical Memorandum
LSC #184810

turn movement would likely utilize the new Pinehurst connection to the north instead of Walden Way.

Auxiliary Turn Lane Evaluation at Walden Way/SH 83

- Based on the existing traffic volumes and the criteria contained in the *State of Colorado Highway Access Code*, a southbound left-turn lane would be required on SH 83 approaching Walden Way. The applicant has indicated to LSC that many of the residents were resistant to either closing off the intersection entirely or installing major improvements to it, for instance constructing a raised island to prohibit left-turn movements and converting the intersection to a right-in/right-out.
- LSC recently met with CDOT to discuss keeping the intersection full-movement with the understanding that Pinehurst Circle will be extended north and west to connect to the Walker Road and SH 83 connections that will be installed by Monument Academy. This Pinehurst connection north will occur with Filing No. 5, the next filing of Walden Preserve 2.
- This report presents traffic volume counts at this intersection, crash history, and projections for the southbound left-turn movement in the short term prior to the Pinehurst connection north. **These projections will be updated and revisited with the future traffic report for Filing No. 5.** As the current and projected southbound left-turn volumes at this intersection exceed the turning movement volume requiring a southbound left-turn lane (or restriction to prohibit this turning movement), as part of the terms and conditions of the permit for Filing No. 4, LSC recommends the following:
 - Obtain crash history for the intersection on a semi-annual basis and send these data along with a brief summary to CDOT.
 - Conduct semi-annual PM peak hour turning movement count data at this intersection and send these results to CDOT.
 - The applicant will provide financial assurances for mitigating traffic safety problems at this intersection, should problems arise. This could involve the installation of signing, markings and potentially the installation and maintenance of centerline flexible, plastic delineator posts/traffic separators. See Exhibit No. 1 for examples of potential interim mitigation measures.
 - Permit terms and conditions related to the Walden Way/SH 83 intersection could be reevaluated and modified with the future access permit for Filing 5 (which would include the Pinehurst connection north).
- Based on the projected short-term, intermediate-term, and 2040 total traffic volumes and the criteria contained in the *State of Colorado Highway Access Code*, a northbound right-

turn deceleration lane would **not** be required on SH 83 approaching Walden Way; however, the threshold is close to being met and this intersection may benefit from the addition of this lane. Based on a posted speed limit of 60 miles per hour, the prescribed lane length for a deceleration lane is 700 feet long plus a 300-foot taper.

- Based on the projected short-term, intermediate-term and 2040 total traffic volumes and the criteria contained in the *State of Colorado Highway Access Code*, a northbound right-turn acceleration lane would **not** be required on SH 83 at Walden Way.

CDOT Signal Contribution Per Access Permit No. 215017

Table 3 in the March 14, 2019 transportation memorandum presented an updated signal escrow analysis for the intersection of SH 83/Walker Road/Highway 105. A CDOT access permit application will need to be submitted to CDOT for purposes of processing an amount due to CDOT of \$6,714.69 for the previously identified contribution associated with this filing to the traffic signal (now in place) at Highway 83 and Walker Road. This amount represents the prorated amount for 23 lots. (The original escrow table included in the Access Permit showed \$6,422.75 for 22 lots for this filing, which was previously called Filing 3.) Table 1 contains an updated escrow analysis.

CDOT Access Permit Process

CDOT Access Permit No. 215017 was issued for the first 42 lots within Walden Preserve 2 PUD plan. The permit was essentially for what are now Filings 1-3. CDOT has indicated in comments recently received (dated March 4, 2019), that a new phased access permit will need to be applied for with this subdivision filing (Filing 4). LSC and the applicant have been communicating with CDOT regarding the comments and the process. CDOT is agreeable to allowing the submittal of an access permit application for Filing 4 only with no Pinehurst Circle connection to the north, provided another access permit application and TIS report are submitted with Filing 5. A permit application form has been prepared and sent to the County Engineer for signature.

* * * * *