

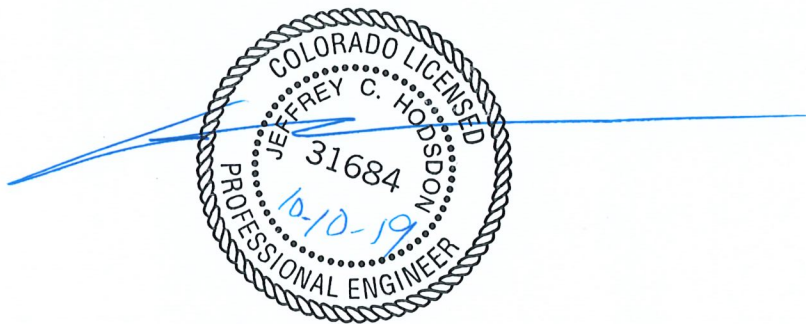


LSC TRANSPORTATION CONSULTANTS, INC.
545 East Pikes Peak Avenue, Suite 210
Colorado Springs, CO 80903
(719) 633-2868
FAX (719) 633-5430
E-mail: lsc@lsctrans.com
Website: <http://www.lsctrans.com>

The Glen at Widefield Filing Nos. 10 and 11
Updated Transportation Memorandum
(LSC #194800)
October 10, 2019

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.

A blue ink signature of the developer, written over a horizontal line.

Oct 10th 2019
Date



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Colorado Springs, CO 80903
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FAX (719) 633-5430
E-mail: lsc@lsctrans.com
Website: <http://www.lsctrans.com>

October 10, 2019

Mr. J. Ryan Watson
Widefield Investment Group
3 Widefield Boulevard
Colorado Springs, CO 80911

RE: The Glen at Widefield Filing Nos. 10 and 11
Updated Transportation Memorandum
El Paso County, Colorado
LSC #194800

Dear Mr. Watson:

In response to your request, LSC Transportation Consultants, Inc. has prepared this transportation memorandum for The Glen at Widefield Filing Nos. 10 and 11. As shown in Figure 1, the site is located northwest of the Marksheffel Road/Mesa Ridge Parkway intersection in El Paso County, Colorado. Filing 10 is planned to contain 40 lots for single-family homes and Filing 11 is planned to contain 103 lots for single family homes. This memorandum is a supplement to the overall Glen at Widefield East Preliminary Plan traffic report dated January 18, 2016.

Copies of the plat for Filing Nos. 10 and 11 are attached for reference. The lot and street layout for this filing matches the Preliminary Plan.

REPORT CONTENTS

This report is being prepared as part of a submittal to El Paso County. It identifies the traffic impacts of this development. The report contains the following:

- Updated traffic count data
- Projections of short-term (2022) baseline/background traffic volumes at the key area intersections
- The projected average weekday and peak-hour vehicle-trips to be generated by Filing Nos. 10 and 11
- The assignment of the Filing Nos. 10 and 11 projected trips to the key area intersections
- The short-term level of service at these intersections
- The short-term level of service and queuing analysis at the intersection of Powers Boulevard/ Mesa Ridge Parkway

- Findings and recommendations
- Signal escrow analysis tables.

LAND USE AND ACCESS

Since completion of the 2016 Glen at Widefield East Preliminary Plan Traffic Report, 356 of the 578 proposed lots for single-family homes within the preliminary plan area have been platted as The Glen at Widefield Filing Nos. 7, 8 and 9. At the time traffic counts were conducted in September 2019, about 144 homes had been constructed in The Glen at Widefield Filing 7 and about 32 homes had been constructed in Filing 8. Note: There is currently significant home construction activity within Filing No. 8, so these figures will change rapidly. None of the homes in Filing 9 had been constructed at the time of the counts. Access for these filings is via the intersection of Spring Glen Drive and Mesa Ridge Parkway and via the recently completed west leg of the intersection of Marksheffel and Peaceful Valley Road.

The currently proposed Glen at Widefield Filing No. 10 is planned to contain 40 lots for single-family homes and Filing No. 11 is planned to contain lots for 103 single family homes. Figure 2 shows the location of The Glen at Widefield Filing Nos. 7 through 11. An additional access to Marksheffel Road aligning with Poa Annua Street is planned as part of Filing No. 11.

ROADWAY AND TRAFFIC CONDITIONS

Area Roadways

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

Powers Boulevard is a four-lane Expressway extending north from Mesa Ridge Parkway. In the future, Powers Boulevard is planned to be extended south to connect to Interstate 25, potentially at Exit 122. In the vicinity of the site, Powers Boulevard has two through lanes in each direction and a posted speed limit of 55 miles per hour (mph). The Colorado Department of Transportation has been collecting escrow funds from the previous Glen at Widefield filings as participation toward the recently installed traffic signal at the intersection of Mesa Ridge/Powers.

Marksheffel Road extends north from the Link Road/C&S Road intersection in Fountain, Colorado to north of Woodmen Road. Marksheffel has recently been upgraded to an interim three-lane facility between Mesa Ridge Parkway and Bradley Road as part of a PPRTA project. Marksheffel Road is shown as a future four-lane Expressway on the El Paso County *Major Transportation Corridors Plan (MTCP)*. The posted speed limit on Marksheffel Road is 55 mph north of Mesa Ridge Parkway and 45 mph south of Mesa Ridge Parkway.

Mesa Ridge Parkway is a four-lane median-divided Principal Arterial extending east from I-25 to Powers Boulevard. A half-section of Mesa Ridge Parkway with one through lane in each direction has been constructed east from Powers Boulevard to Marksheffel Road. It is our understanding

that the construction of the other half-section is not the applicant's responsibility. LSC estimates that Mesa Ridge Parkway will likely need to be widened to provide two lanes in each direction once the average weekday traffic volumes reach 14,000 to 18,000 vehicles per day. Mesa Ridge Parkway improvements are listed as an "A-List" PPRTA project. The posted speed limit in the vicinity of the site is 45 mph.

Peaceful Valley Road is a two-lane City of Fountain street that extends east from Marksheffel Road about two-and-a-half miles to the location of a future extension of Meridian Road. The posted speed limit on Peaceful Valley Road is 30 mph. Most of Peaceful Valley Road is located within the City of Fountain.

Notable Recent Area Roadway System Improvements

The Marksheffel South project has been completed, a traffic signal has been installed at the intersection of Mesa Ridge Parkway and Powers, and it is our understanding that this signal has only been fully operational since early January 2018. The temporary Roanfield Drive street connection to Powers Boulevard has been closed. Also, the southbound left-turn lane at the Mesa Ridge/Powers intersection has been lengthened as required with The Glen at Widefield Filing No. 7. The Marksheffel painted center median at the intersection of Peaceful Valley Road/Marksheffel Road was originally striped as a channelized T-configuration (with southbound left-turn deceleration and left-turn acceleration lanes). The configuration may need to change through restriping of the center painted median with recent addition of the fourth/west leg of this intersection.

EXISTING TRAFFIC VOLUMES

Figure 3 shows the existing peak-hour traffic volumes and existing lane geometries and traffic controls. The traffic volumes are based on traffic counts conducted by LSC in September 2019. The traffic count reports are attached.

LEVEL OF SERVICE

Level of service (LOS) is a quantitative measure of the level of 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		

The intersections of Powers/Mesa Ridge, Marksheffel/Mesa Ridge and Marksheffel/Peaceful Valley were analyzed to determine the existing levels of service. The intersection of Powers/Mesa Ridge was analyzed using Synchro. The intersections of Marksheffel/Mesa Ridge and Marksheffel/Peaceful Valley were analyzed using the unsignalized method of analysis procedures outlined in the *Highway Capacity Manual, 6th Edition* by the Transportation Research Board.

The intersection of Powers/Mesa Ridge currently operates at an overall LOS B or better during the peak hours. The westbound left-turn movement at this intersection is operating at LOS D during the peak hours.

All movements at the stop sign-controlled intersections of Marksheffel/Mesa Ridge and Marksheffel/Peaceful Valley are currently operating at LOS C or better during the peak hours.

SHORT-TERM (YEAR 2022) BACKGROUND TRAFFIC

Figure 4a shows the short-term (Year 2022) background traffic volumes at the key area intersections. Background traffic is the traffic estimated to be on the roadways without the Glen at Widefield Filing Nos. 10 and 11 traffic.

Background traffic includes the existing traffic volume (from Figure 3) plus increases in through traffic due to regional growth plus traffic estimated to be generated by buildout of existing and currently proposed subdivisions in the vicinity of the site. These estimates include traffic projected to be generated by the development of the 180 single-family homes within The Glen at Widefield Filing Nos. 7, 8 and 9 that were unoccupied when traffic counts were conducted in September 2019 and traffic projected to be generated by buildout of all the existing and currently proposed developments within the Lorson Ranch development located east of the intersection of Marksheffel/Fontaine.

Increases in the through traffic volumes on Powers Boulevard were estimated based on the growth rate calculated from the Colorado Department of Transportation 20-year growth factor for this section of Powers Boulevard.

Figure 4b shows the lane geometry, traffic control, and level of service at the key area intersections of based on the short-term background volumes.

TRIP GENERATION

The Filing Nos. 10 and 11 site-generated vehicle-trips have been estimated using the nationally published trip generation rates from *Trip Generation, 10th Edition, 2017* by the Institute of Transportation Engineers (ITE). Table 2 shows the trip generation estimates for these filings. Table 2 also shows estimates of the additional traffic expected to be generated due to buildout of the approved Filings 7, 8 and 9 and future filings within the Glen at Widefield East Preliminary Plan area.

Filing 10 is expected to generate 378 vehicle-trips on the average weekday, with about half entering and half exiting the site during a 24-hour period. During the morning peak hour, which generally occurs for one hour between 6:30 and 8:30 a.m., about 7 vehicles would enter and 22 vehicles would exit the site. During the afternoon peak hour, which generally occurs for one hour between 4:15 and 6:15 p.m., about 25 vehicles would enter, and 15 vehicles would exit the site.

Filing 11 is expected to generate 972 vehicle-trips on the average weekday, with about half entering and half exiting the site during a 24-hour period. During the morning peak about 19 vehicles would enter and 57 vehicles would exit the site. During the afternoon peak hour about 64 vehicles would enter, and 38 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 an important factor in determining the site's traffic impacts. Figure 5 shows the short-term distribution estimates. The directional distribution estimates have been based on the following factors: the location of the site with respect to the regional employment, commercial, and activity centers; the land use proposed for the site; the proposed access system for the site; and the roadway system serving the site. The short-term distribution assumes the existing street network.

When the estimated site trips (from Table 2) are directionally distributed according to the LSC-estimated percentages shown in Figure 5 and assigned/routed on the internal and area street network (according to LSC estimates) the resulting projected site-generated traffic volumes can be determined.

Figure 6 shows the projected short-term site-generated traffic volumes at the site access points and at key area intersections due to the currently proposed Glen at Widefield Filing Nos. 10 and 11 only. The short-term site-generated traffic volumes assume the addition of the north access

point to Marksheffel Road aligning with Poa Annua, but assume the internal street network west through the future development area just west of Filing 11 has not been constructed.

SHORT-TERM TOTAL TRAFFIC

Figure 7a shows the projected short-term total traffic volumes at the key areas. The short-term total traffic volumes are the sum of the short-term background traffic volumes (from Figure 4a) plus the Filing Nos. 10 and 11 short-term site-generated traffic volumes (from Figure 6).

Figure 7b shows the lane geometry, traffic control, and level of service at the key area intersections based on the short-term total volumes.

LEVEL OF SERVICE

The intersections of Marksheffel/Mesa Ridge, Marksheffel/Peaceful Valley, and Marksheffel/Poa Annua were analyzed to determine the projected levels of service based on the short-term background and total traffic volumes using the unsignalized method of analysis procedures outlined in the *Highway Capacity Manual, 6th Edition* by the Transportation Research Board. The signalized intersection of Powers/Mesa Ridge was analyzed using Synchro. The results of the analysis are shown in Figures 4b and 7b.

Powers Boulevard/Mesa Ridge Parkway

All movement at the intersection of Powers/Mesa Ridge is projected to continue to operate at a LOS D or better during the peak hours based on the projected short-term background and total peak-hour traffic volumes.

Spring Glen Drive/Mesa Ridge Parkway

All movements at the stop sign-controlled intersection of Springs Glen/Mesa Ridge are projected to operate at LOS C or better during the peak hours based on the projected short-term total traffic volumes.

Marksheffel Road/Mesa Ridge Parkway

The eastbound left-turn movement at the stop sign-controlled intersection of Marksheffel/Mesa Ridge is projected to operate at LOS E during the morning peak hour based on the projected short-term background and total traffic volumes. If this intersection were restriped to provide a northbound left-turn acceleration lane, the eastbound left-turn movement is projected to operate at LOS D or better during the peak hours.

Marksheffel Road/Peaceful Valley Road

The westbound left-turn and through movements at the stop sign-controlled intersection of Marksheffel/Peaceful Valley is projected to operate at LOS F during the morning peak hour and LOS E during the afternoon peak hour based on the projected short-term total traffic volumes. Previous filings within the Glen at Widefield East Preliminary Plan area have contributed to an escrow account for a potential future traffic signal at this location, however, a traffic signal may not be

warranted in the short term. The level of service for the westbound approach is projected to be LOS E in the morning peak hour if a raised right turn island is installed on the eastbound approach (such that eastbound right turning traffic is required to give right-of-way to westbound left turns from Peaceful Valley Road).

Poa Annua Street/Peaceful Valley Road

All movements at the stop sign-controlled intersection of Poa Annua/Marksheffel are projected to operate at LOS D or better during the peak hours based on the projected short-term total traffic volumes.

Please refer to the Glen at Widefield East Preliminary Plan traffic report for the long-term analysis of the key area intersections.

QUEUING ANALYSIS

A queuing analysis has been performed for the southbound and westbound left turn at Powers/Mesa Ridge. The analysis has been completed based on dual left-turn lanes with existing length for the westbound Mesa Ridge left-turn lane, the recently extended southbound left-turn lane, and projected short-term total traffic.

The maximum southbound left-turn queue on Powers Boulevard approaching Mesa Ridge Parkway is projected to be about 187 feet long based on the projected short-term total traffic volumes. The southbound left-turn lane has recently been lengthened to 1,108 feet plus a 222-foot taper.

The maximum westbound left-turn queue on Mesa Ridge Parkway approaching Powers Boulevard is projected to be about 388 feet long based on the projected short-term total traffic volumes assuming dual westbound left-turn lanes. An additional queuing analysis was performed based on the 2040 morning peak hour traffic volumes shown in the overall Glen at Widefield East Preliminary Plan traffic report dated January 18, 2016. The projected maximum westbound left-turn queue based on the 2040 traffic volumes is 469 feet.

TRAFFIC SIGNAL WARRANT ANALYSIS

The intersections of Marksheffel/Mesa Ridge and Marksheffel/Peaceful Valley were analyzed to determine if either an Eight-Hour Vehicular Volume Traffic Signal Warrant or a Four-Hour Vehicular Volume Traffic Signal Warrant would be met or be close to being met based on the projected existing and/or short-term morning and afternoon peak-hour total traffic volume. The preliminary/partial (for planning purposes) traffic signal warrant analysis using the peak hours is intended to provide an indication that a warrant may be met or is close to being met. In order for a Four-Hour Traffic Signal Warrant to be satisfied, the volume threshold would need to be met for two additional hours of the day. For example, the four-hour warrant would be satisfied with the volume thresholds met for the one hour in the morning, two hours (instead of the one-hour peak) during the afternoon peak period, and an hour during the mid-afternoon. In order for an Eight-Hour Traffic Signal Warrant to be satisfied, the volume threshold would need to be met for six additional hours of the day.

Table 3 shows the results of the analysis for Marksheffel/Mesa Ridge based on the existing traffic volumes. As shown on the table, existing traffic volumes during both the morning and afternoon peak hours currently meets the thresholds for both the Eight Hour Vehicular Volume Traffic Signal Warrant and the Four-Hour Vehicular Volume Traffic Signal Warrant. The satisfaction of warrants does not indicate that a signal must be installed. The decision to require a signal to be installed at this location rests with the County. As discussed in the Level of Service section above, this intersection could potentially continue to operate at a satisfactory level of service as a stop sign-controlled intersection in the short term with minor modifications to the existing traffic lane striping.

Table 4 shows the results of the analysis for Marksheffel/Peaceful Valley based on the existing, short-term background and short-term total traffic volumes. The minor approach volumes include the higher of either the westbound left-turn and through volumes or the eastbound left-turn, through and right-turn volumes. As shown in Table 4, the existing morning peak hour traffic volumes currently meet the threshold for an Eight Hour Vehicular Volume Traffic Signal Warrant, but not a Four-Hour Vehicular Volume Traffic Signal Warrant. Based on the projected short-term total traffic volumes the morning peak hour volumes are projected to meet the threshold for a Four-Hour Vehicular Volume Traffic Signal Warrant, but the afternoon peak hour volumes are not projected to meet the thresholds for either an Eight Hour Vehicular Volume Traffic Signal Warrant or a Four-Hour Vehicular Volume Traffic Signal Warrant.

CONCLUSIONS AND RECOMMENDATIONS

Trip Generation

- Filing 10 is expected to generate 378 vehicle-trips on the average weekday, with about half entering and half exiting the site during a 24-hour period. During the morning peak hour about 7 vehicles would enter and 22 vehicles would exit the site. During the afternoon peak hour about 25 vehicles would enter and 15 vehicles would exit the site.
- Filing 11 is expected to generate 972 vehicle-trips on the average weekday, with about half entering and half exiting the site during a 24-hour period. During the morning peak hour about 19 vehicles would enter and 57 vehicles would exit the site. During the afternoon peak hour about 64 vehicles would enter and 38 vehicles would exit the site.

Level of Service

- The signalized intersection of Mesa Ridge Parkway/Powers Boulevard is projected to continue to operate at a satisfactory level of service based on the projected short-term background and total peak-hour traffic volumes.
- The eastbound left-turn movement at the stop sign-controlled intersection of Marksheffel/Mesa Ridge is projected to operate at LOS E during the morning peak hour based on the projected short-term background and total traffic volumes. If this intersection were restriped to provide a northbound left-turn acceleration lane, the eastbound left-turn movement is projected to operate at LOS D or better during the peak hours.

- The intersections of Mesa Ridge Parkway/Spring Glen Drive and Marksheffel/Poa Annua would operate at satisfactory levels of service as stop sign-controlled intersections based on the projected short-term background and total peak-hour traffic volumes.
- The westbound left-turn and through movements at the stop sign-controlled intersection of Marksheffel/Peaceful Valley is projected to operate at LOS F during the morning peak hour and LOS E during the afternoon peak hour based on the projected short-term total traffic volumes. Previous filings within the Glen at Widefield East Preliminary Plan area have contributed to an escrow account for a potential traffic signal at this location, however, a traffic signal may not be warranted in the short term.

Intersection Lane Configurations

- A 475-foot left-turn lane approaching Spring Glen Drive has been installed with the construction of Mesa Ridge Parkway.
- Mesa Ridge Parkway has been constructed and striped with 10-foot paved shoulders in the vicinity of Spring Glen Drive. Once the full four-lane Principal Arterial section is completed, it is anticipated that the acceleration lane will be implemented at that time. The width for a future westbound right-turn acceleration lane on Mesa Ridge Parkway will become available as the half-section to be built with the initial Mesa Ridge construction will be sufficiently wide. This has been shown on the Mesa Ridge Parkway design plans.
- The addition of Filing Nos. 10 and 11 site-generated traffic will not require the addition a westbound right-turn deceleration lane on Mesa Ridge Parkway at Spring Glen Drive.
- The painted center median on Marksheffel Road at the Peaceful Valley Road intersection is currently striped for a dedicated southbound left turn lane and a dedicated southbound left-turn acceleration lane. The west leg of this intersection was recently completed to provide a second access to the Glen at Widefield East. This painted center median should be restriped as an exclusive northbound left-turn deceleration lane with taper according to ECM standards, as this intersection is no longer a T-intersection, rather a four-leg intersection. The white channelized T pavement markings in the center of the intersection will also need to be removed.
- The painted center median on Marksheffel Road at Mesa Ridge Parkway is currently striped as a two-way, left-turn lane. LSC recommends this painted center median be restriped to create an interim "Channelized Tee" type intersection. This would include a dedicated northbound left-turn lane and a dedicated northbound left-turn acceleration lane similar to the existing striping at the intersection of Marksheffel/Peaceful Valley (that is being removed).
- Based on the projected short-term total traffic volumes and the criteria contained in the *El Paso County Engineering Criteria Manual* (ECM), southbound right-turn deceleration lanes are projected to be warranted on Marksheffel Road approaching Peaceful Valley Road and

Poa Annua Street. Based on a design speed of 60 mph, the prescribed lane length for these deceleration lanes is 290 feet plus a 240-foot taper.

- The southbound left-turn lane on Powers Boulevard approaching Mesa Ridge Parkway was lengthened as part of the Glen at Widefield Filing 7 access permit. The level of service analysis and queueing analysis for the short-term total traffic volumes indicates acceptable operations with the current single-lane configuration.
- Based on the projected short-term and total traffic volumes, Mesa Ridge Parkway should be widened approaching Powers Boulevard to provide dual westbound left-turn lanes. Based on the queueing analysis, dual 475-foot left turn lanes (plus transition taper) would be adequate to accommodate the projected queues. Deceleration distance would not be necessary, as Powers/Mesa Ridge is a T-intersection. New redirect tapers would be required east of the dual left turn lanes to transition to the existing cross section. The taper ratio should be 45:1.

Proposed Subdivision Street Classifications

- Figure 11 shows the recommended street classifications for the proposed street sections within Filing Nos. 10 and 11.

Mesa Ridge Parkway/Powers Boulevard Intersection

- CDOT has agreed to a signal escrow amount of \$107,018 for all of Glen at Widefield East. The number of total lots in the Preliminary Plan has been reduced to 578 and therefore the corresponding escrow amount would be \$103,960 for all of Glen at Widefield East. For purposes of the Filing 10 access permit, the amount would be \$7,222. For the purposes of the Filing 11 access permit, the amount would be \$18,596. Table 5 presents the signal escrow analysis including the previously identified amount for Filings 7, 8 and 9 and the remaining amount for future filings.
- Access permit applications will be submitted to CDOT for these filings for purposes of processing the signal escrow and for work in the CDOT right-of-way to construct the westbound dual left-turn lanes and any associated traffic signal modifications. A new access permit and associated Notice-to-Proceed will be required.

Mesa Ridge Parkway/Spring Glen Drive Signal Escrow

The Glen East Preliminary Plan traffic report contains an estimated signal escrow amount for the entire Preliminary Plan and states that the developer's percentage contribution toward this signal will be calculated and a proportional contribution made toward the signal construction with each filing. The estimated proportional contribution is \$2,276 for Filing No. 10 and \$5,859 for Filing No. 11. Table 6 presents the signal escrow analysis for this intersection including the previously identified amount for Filings 7, 8 and 9 and the remaining amount for future filings.

Marksheffel Road/Peaceful Valley Road

- The Glen at Widefield East Preliminary Plan traffic report contains an estimated escrow amount for the Preliminary Plan and states that the developer's percentage contribution toward this signal will be calculated and a proportional contribution made toward the signal construction with each filing. The estimated proportional contribution is \$2,521 for Filing No. 10 and \$6,489 For Filing No. 11. Table 7 presents the signal escrow analysis for this intersection including the previously identified amount for Filings 7, 8 and 9 and the remaining amount for future filings. However, based on the criteria contained in the *El Paso County Colorado Road Impact Fee Implementation Document 2018* this intersection may qualify as an eligible intersection improvement and escrow may no longer be required for filings within the Preliminary Plan area.

Roadway Improvement Fee Program

- This project will be required to participate in the El Paso County Road Improvement Fee Program. The Glen at Widefield Filing Nos. 10 and 11 will join the ten-mil PID. The ten-mil PID building permit fee portion associated with this option is \$1,221 per single-family dwelling unit. The total building permit fee would be \$48,840 for the 40 lots within Filing No. 10 and \$125,763 for the proposed 103 lots within Filing No. 11.
- Signal escrow amounts for the intersection of Mesa Ridge Parkway/Powers and the left turn lane improvement on the westbound approach (expansion to dual left turn lanes) would be "eligible improvements" with the opportunity for credit in accordance with the fee program guidelines.
- Based on the criteria contained in the El Paso County Colorado Road Impact Fee Implementation Document 2018 the intersection of Marksheffel/Peaceful Valley Road may qualify as an "eligible intersection" and escrow may no longer be required for filings within the Preliminary Plan area.

* * * * *

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

Sincerely,

LSC TRANSPORTATION CONSULTANTS, INC.

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

JCH:KDF:jas

Enclosures: Tables 2-7
Figures 1-8
Traffic Count Reports
Level of Service Reports
Queuing Reports
Additional Attachments:
The Glen at Widefield Filing 10
The Glen at Widefield Filing 11

Tables and Figures



Table 2
Trip Generation Estimate
The Glen at Widefield Filing Nos. 10 and 11

Filing	Land Use Code	Land Use Description	Trip Generation Units				Trip Generation Rates ⁽¹⁾					Future Total Trips Generated				
							Average Weekday Traffic	Morning Peak Hour		Afternoon Peak Hour		Average Weekday Traffic	Morning Peak Hour		Afternoon Peak Hour	
			Existing	Future	Total			In	Out	In	Out		In	Out	In	Out
Approved Filings																
7	210	Single-Family Detached Housing	144	4	148	DU ⁽²⁾	9.44	0.19	0.56	0.62	0.37	38	1	2	2	1
8	210	Single-Family Detached Housing	32	69	101	DU	9.44	0.19	0.56	0.62	0.37	651	13	38	43	25
9	210	Single-Family Detached Housing	0	107	107	DU ⁽²⁾	9.44	0.19	0.56	0.62	0.37	1,010	20	59	67	39
Total Filings 7-9			176	180	356	DU						1,699	34	99	112	65
Currently Proposed Filings																
10	210	Single-Family Detached Housing	0	40	40	DU ⁽²⁾	9.44	0.19	0.56	0.62	0.37	378	7	22	25	15
11	210	Single-Family Detached Housing	0	103	103	DU	9.44	0.19	0.56	0.62	0.37	972	19	57	64	38
Total Filings 10-11			0	143	143	DU						1,350	26	79	89	53
Total Filings 7-11			176	323	499	DU						3,049	60	178	201	118
Future Filing																
12	210	Single-Family Detached Housing	0	79	79	DU	9.44	0.19	0.56	0.62	0.37	746	15	44	49	29
Total Filings 7-12			176	402	578	DU						3,795	75	222	250	147

Notes:

(1) Source: "Trip Generation, 10th Edition, 2017" by the Institute of Transportation Engineers (ITE)

(2) DU = dwelling unit

Source: LSC Transportation Consultants, Inc.

<p align="center">Table 3 Trip Generation Estimate Traffic Signal Warrant Analysis of Mesa Ridge Pkwy/Marksheffel Rd</p>	
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Hour	Traffic Volumes Major ⁽²⁾ Minor ⁽³⁾		Warrant Analysis ⁽¹⁾							
			Warrant 1, Eight Hour Vehicular Volume Evaluation						Warrant 2, Four Hour Vehicular Volume Evaluation	
			Warrant Thresholds				Warrant Threshold Met?			Warrant Threshold Met?
			Condition A (70%)		Condition B (70%)		West Leg		70% Warrant Threshold Minor Minimum	West Leg
			Major	Minor	Major	Minor	A	B		
Existing										
AM Peak	815	169	420	105	630	53	Yes	Yes	78	Yes
PM Peak	730	296	420	105	630	53	Yes	Yes	94	Yes

Notes:

- (1) Thresholds are based on 2 or more lanes on the major approach and 1 lane on the minor approach with the 70% factor used as the posted speed limit on Marksheffel Rd exceeds 40 mph.
- (2) The major street traffic includes all northbound and southbound movements (left, through and right) on Marksheffel Rd.
- (3) The minor street traffic includes the eastbound left-turn traffic only on Mesa Ridge Pkwy

Source: LSC Transportation Consultants, Inc.

<p style="text-align: center;">Table 4 Trip Generation Estimate Traffic Signal Warrant Analysis of Peaceful Valley Rd/Marksheffel Rd</p>

Hour	Traffic Volumes			Warrant Analysis ⁽¹⁾										Warrant 2, Four Hour Vehicular Volume Evaluation		
				Warrant 1, Eight Hour Vehicular Volume Evaluation												
				Warrant Thresholds				Warrant Threshold Met?								
				Minor			Condition A (70%)		Condition B (70%)		West Leg		East Leg			
	Major ⁽²⁾	West ⁽³⁾	East ⁽⁴⁾	Major	Minor	Major	Minor	A	B	A	B					
Existing Traffic																
AM Peak	1021	30	57	420	105	630	53	No	No	No	Yes	60	No	No		
PM Peak	1004	17	38	420	105	630	53	No	No	No	No	60	No	No		
Short-Term Background Traffic																
AM Peak	1106	45	57	420	105	630	53	No	No	No	Yes	60	No	No		
PM Peak	1127	26	38	420	105	630	53	No	No	No	No	60	No	No		
Short-Term Total Traffic																
AM Peak	1141	78	57	420	105	630	53	No	Yes	No	Yes	60	Yes	No		
PM Peak	1188	48	38	420	105	630	53	No	No	No	No	60	No	No		
Notes:																
(1) Thresholds are based on 2 or more lanes on the major approach and 1 lane on the minor approach with the 70% factor used as the posted speed limit on Marksheffel Rd exceeds 40 mph.																
(2) The major street traffic includes all northbound and southbound movements (left, through and right) on Marksheffel Rd.																
(3) The west leg minor street traffic includes all eastbound traffic left-turn, through and right-turn traffic on Peaceful Valley Rd																
(4) The east leg minor street traffic includes westbound traffic left-turn and through traffic only on Peaceful Valley Dri																
Source: LSC Transportation Consultants, Inc.																

Table 5
Glen East Preliminar Plan CDOT Access Permit and Escrow Analysis
Mesa Ridge & Powers (SH 21)
The Glen at Widefield Filings 10 & 11

Subdivisions Currently Proposed			Currently Proposed Separate Access Permits and Escrow Amounts per Access Permit			
Subdivision Name	Number of Lots	Status	Portion of total Escrow of \$103,960	Access Permits	Access Permit Escrow Amt.	Escrow to be deposited in Account with CDOT
Filing 7	148	Recorded	\$26,648	Permit No. 216057	\$26,648	Completed
Filing 8	101	Recorded	\$18,166	Permit No. 218055	\$18,166	Completed
Filing 9	107	Plat Approved - not recorded	\$19,065	Permit No. 218056	\$19,065	Completed
Filing 10	40	Pending	\$7,222	Application to be submitted soon	\$7,222	Prior to issuance of NTP
Filing 11	103	Pending	\$18,596	Application to be submitted soon	\$18,596	Prior to issuance of NTP
Remaining Filings	79	Future	\$14,263	Application(s) not submitted	TBD	

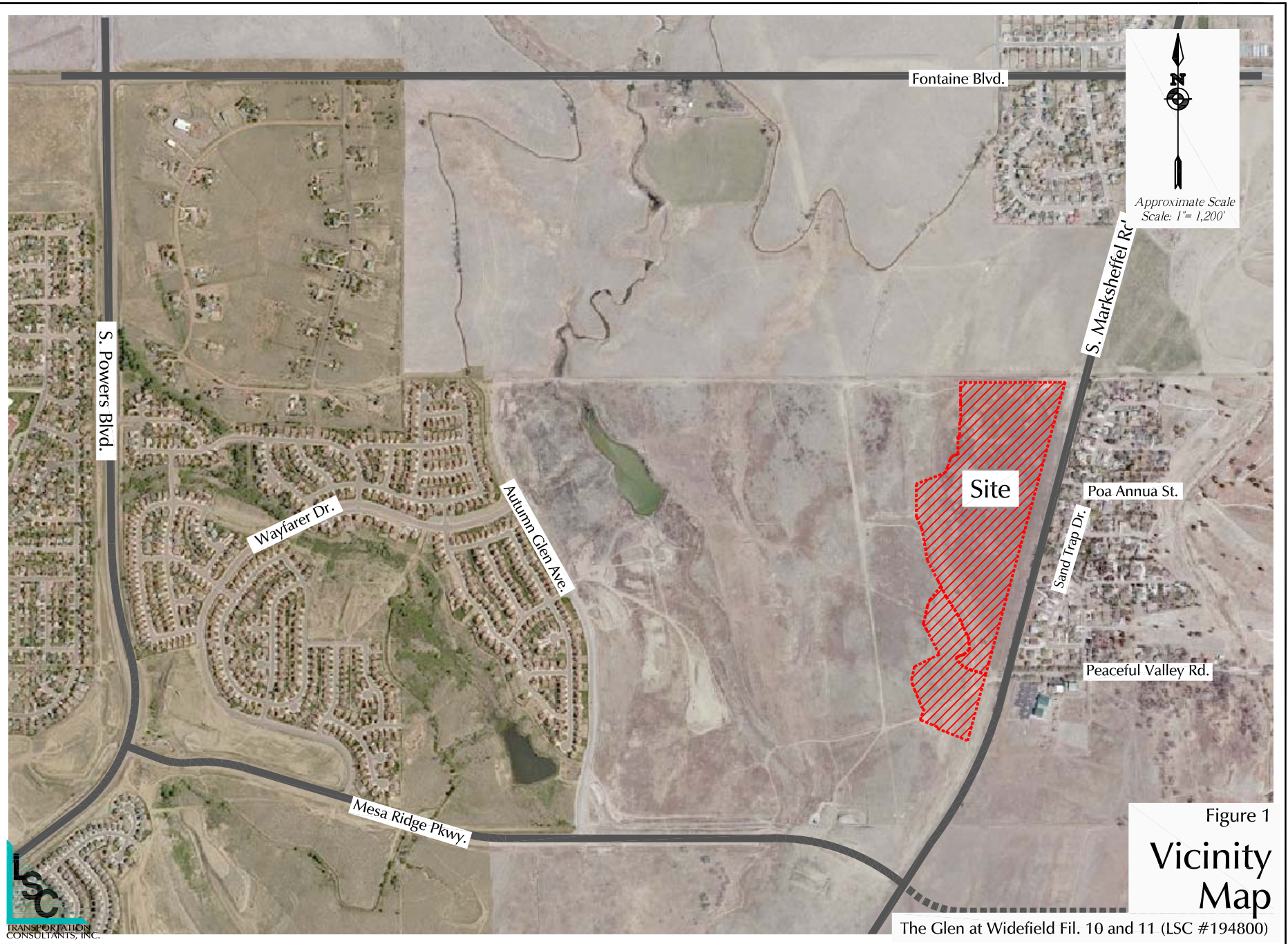
Source: LSC Transportation Consultants, Inc.

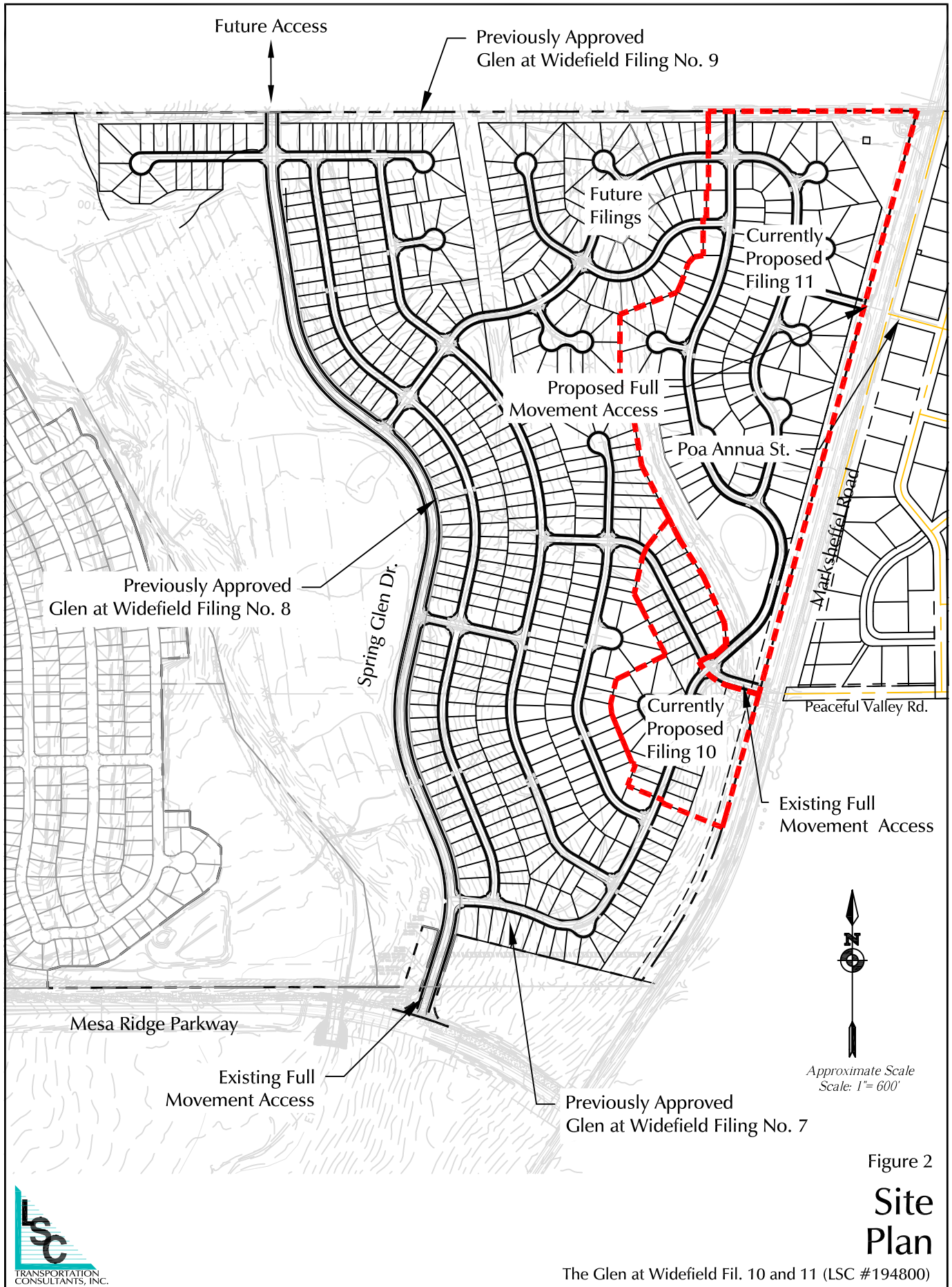
Table 6
Glen East Preliminary Plan County Intersection Escrow Analysis
Mesa Ridge Parkway & Spring Glen Drive Intersection
The Glen at Widefield Filings 10 & 11

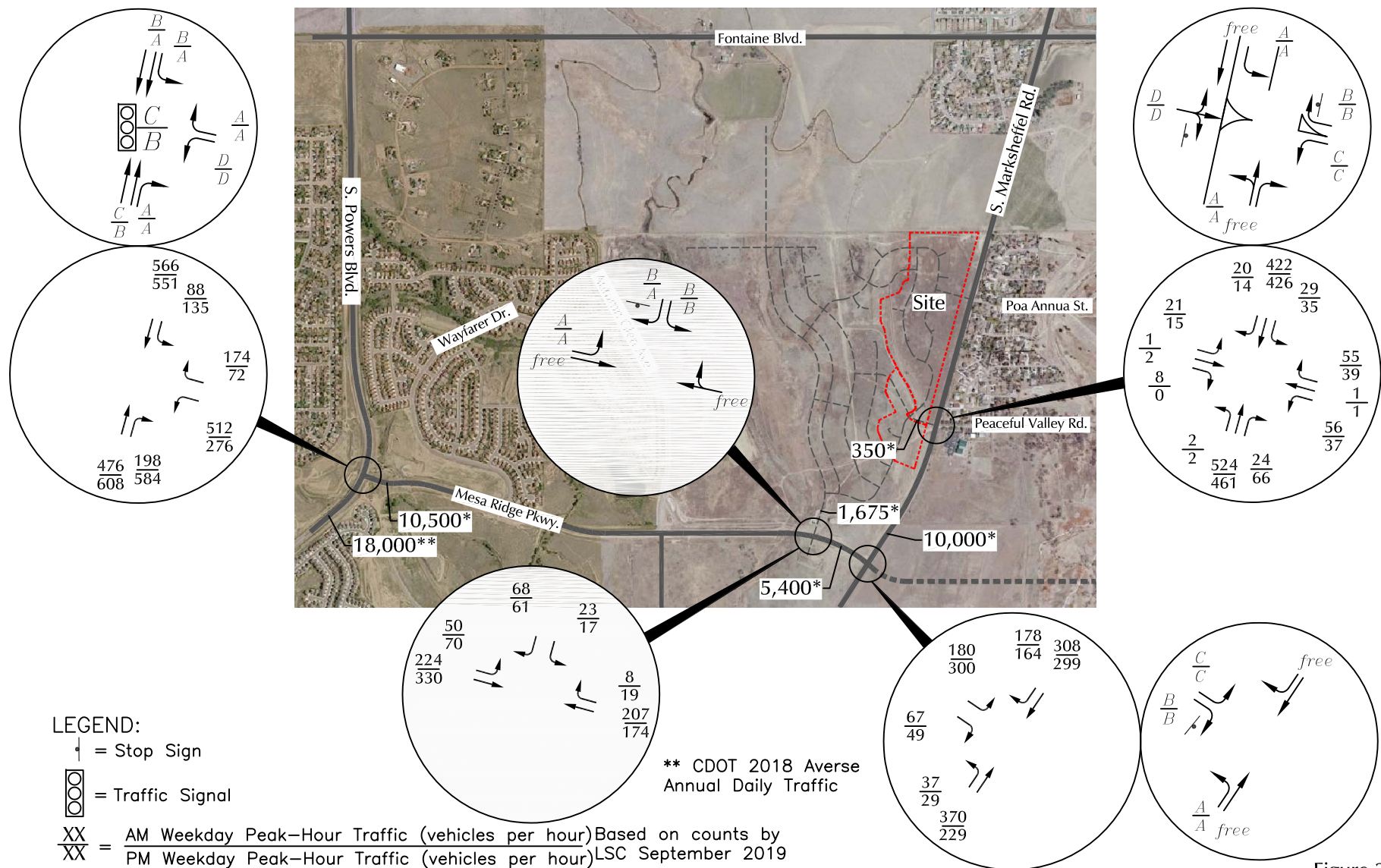
Subdivisions Currently Proposed			Signal Escrow Amounts
Subdivision Name	Number of Lots	Status	Portion of Total Escrow of \$33,750
Filing 7	148	Platted	\$8,875
Filing 8	101	Platted	\$6,057
Filing 9	107	Plat Approved - not recorded	\$6,189
Filing 10	40	Pending	\$2,276
Filing 11	103	Pending	\$5,859
Remaining Filings	79	Future	\$4,494
			\$33,750
Source: LSC Transportation Consultants, Inc. August 24, 2016			

Table 7
Glen East Preliminary Plan County Intersection Escrow Analysis
Peaceful Valley Road & Marksheffel Road Intersection
The Glen at Widefield Filings 10 & 11

Subdivisions Currently Proposed			Signal Escrow Amounts
Subdivision Name	Number of Lots	Status	Portion of Total Escrow of \$36,250
Filing 7	148	Platted	Deferred to Fil 8
Filing 8	101	Platted	\$15,615
Filing 9	107	Plat Approved - not recorded	\$6,648
Filing 10	40	Pending	\$2,521
Filing 11	103	Pending	\$6,489
Remaining Filings	79	Future	\$4,977
			\$36,250
Note: The escrow amount for Filing 8 includes the deferred amount for Filing 7			
Source: LSC Transportation Consultants, Inc. August 24, 2016			







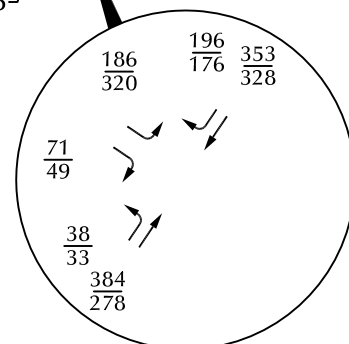
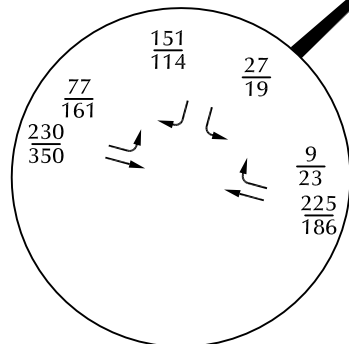
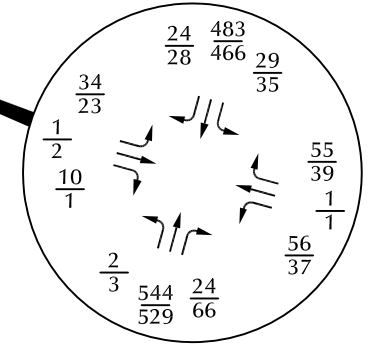
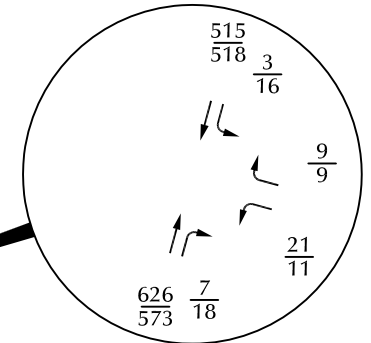
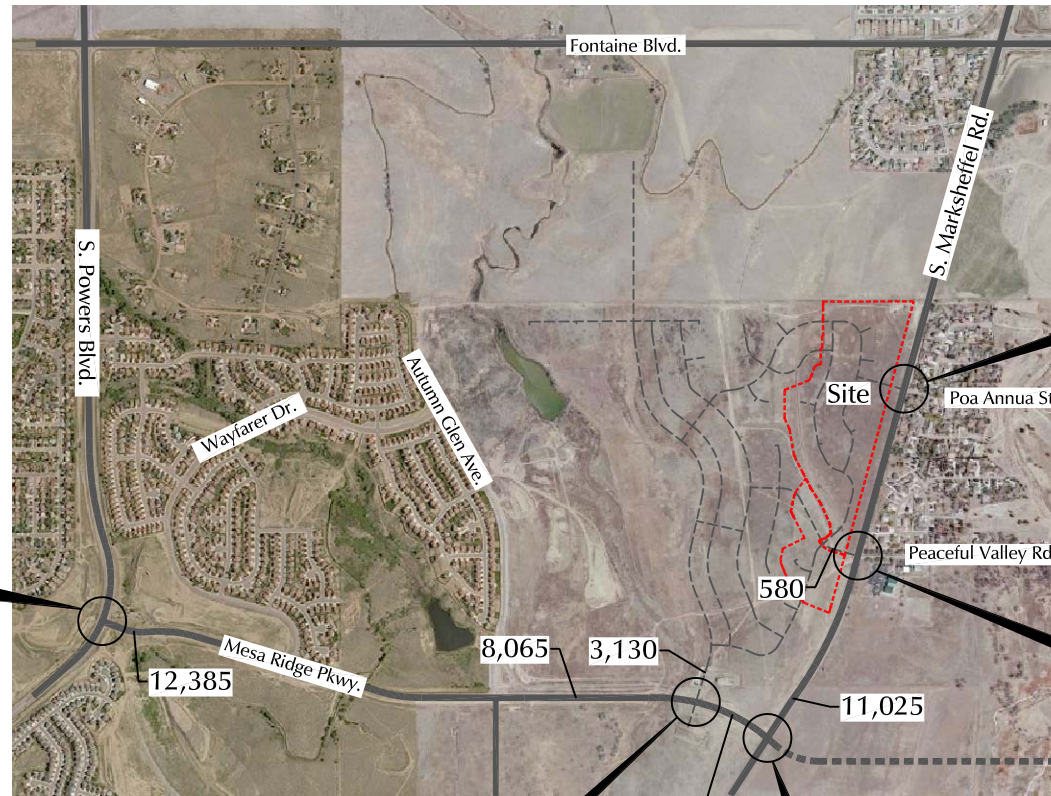
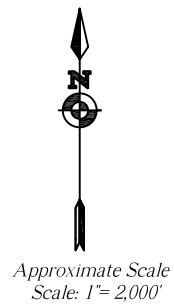
** CDOT 2018 Averse Annual Daily Traffic

Figure 3

Existing Traffic, Lane Geometry, Traffic Control and Level of Service

The Glen at Widefield Fil. 10 and 11 (LSC #194800)





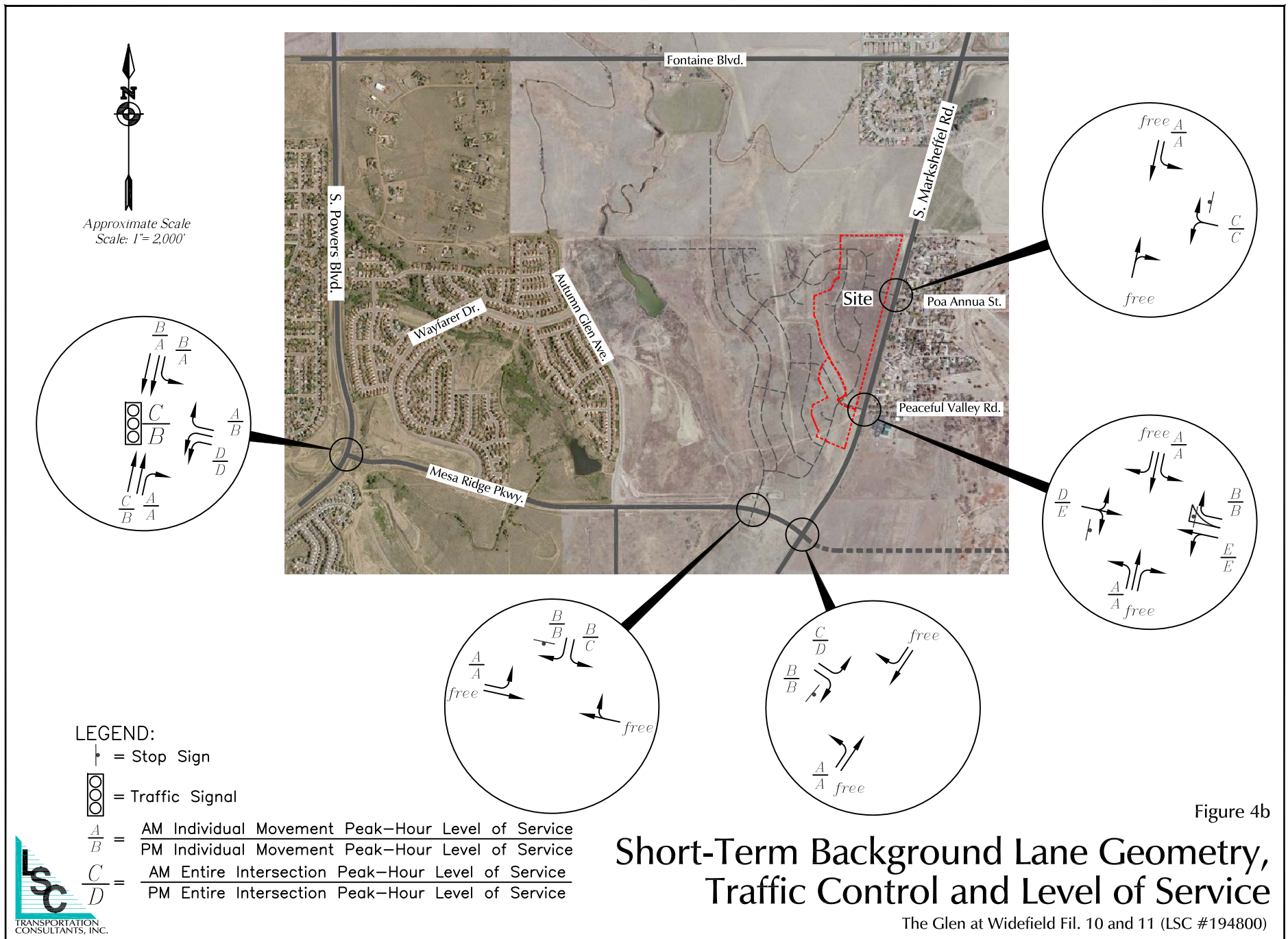
LEGEND:

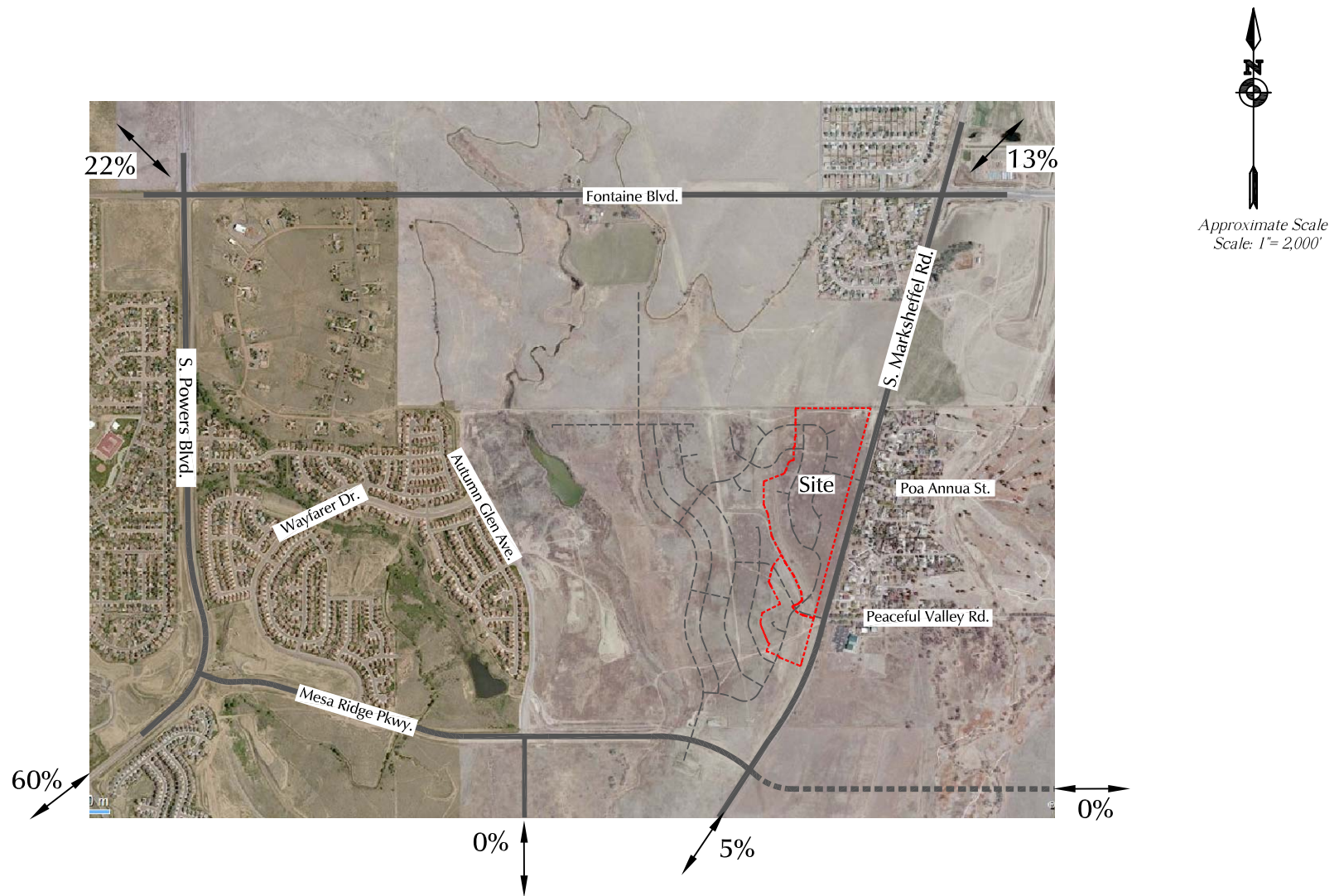
$\frac{XX}{XX}$ = AM Weekday Peak-Hour Traffic (vehicles per hour)
 $\frac{XX}{XX}$ = PM Weekday Peak-Hour Traffic (vehicles per hour)
 XXX = Average Weekday Traffic (vehicles per day)

Figure 4a

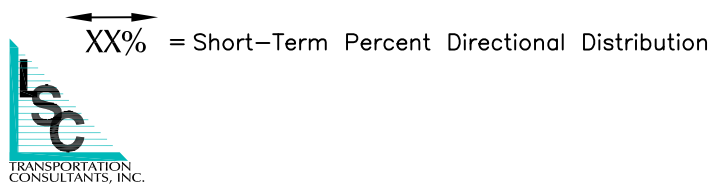
Short-Term Background Traffic

The Glen at Widefield Fil. 10 and 11 (LSC #194800)





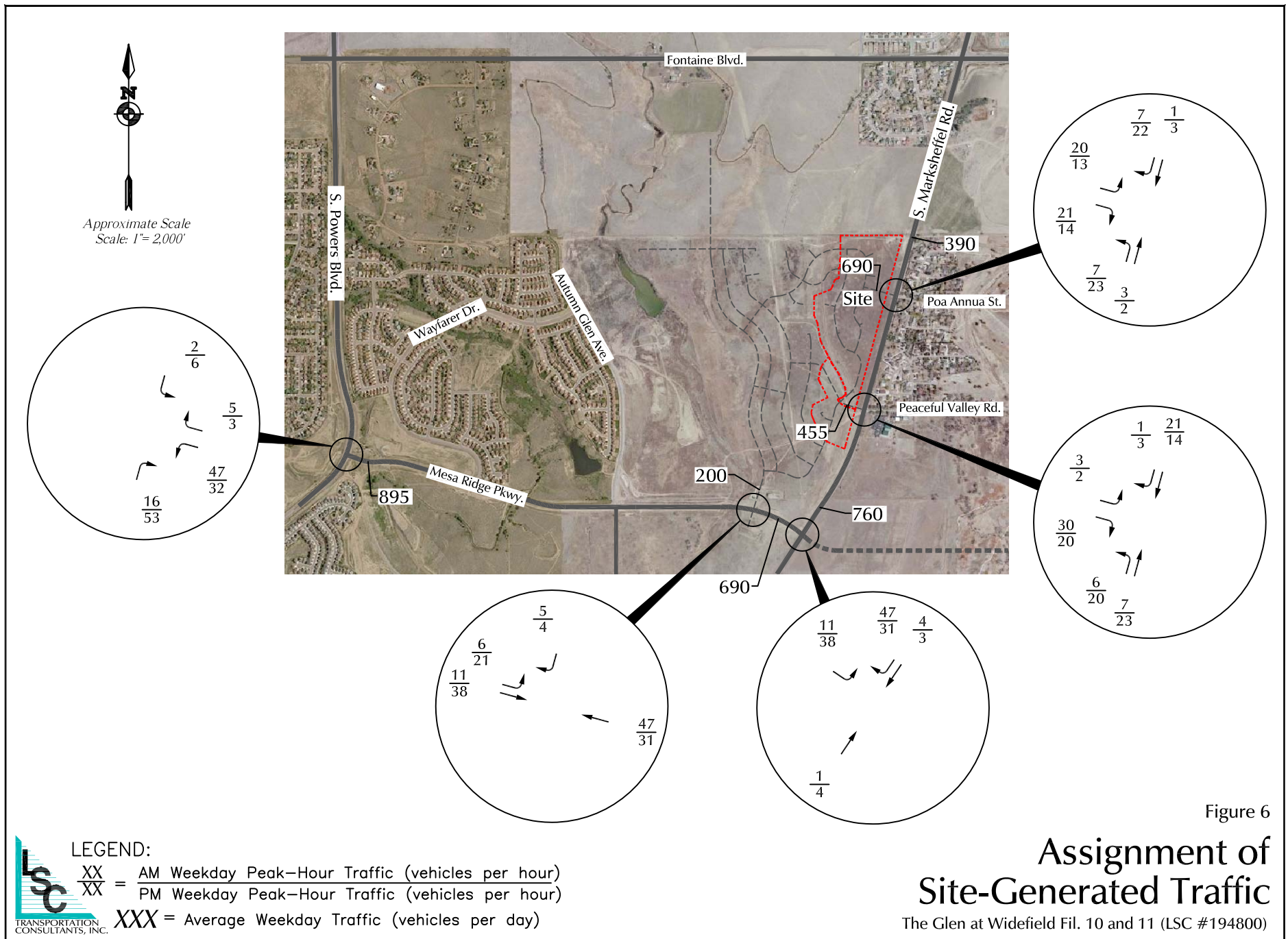
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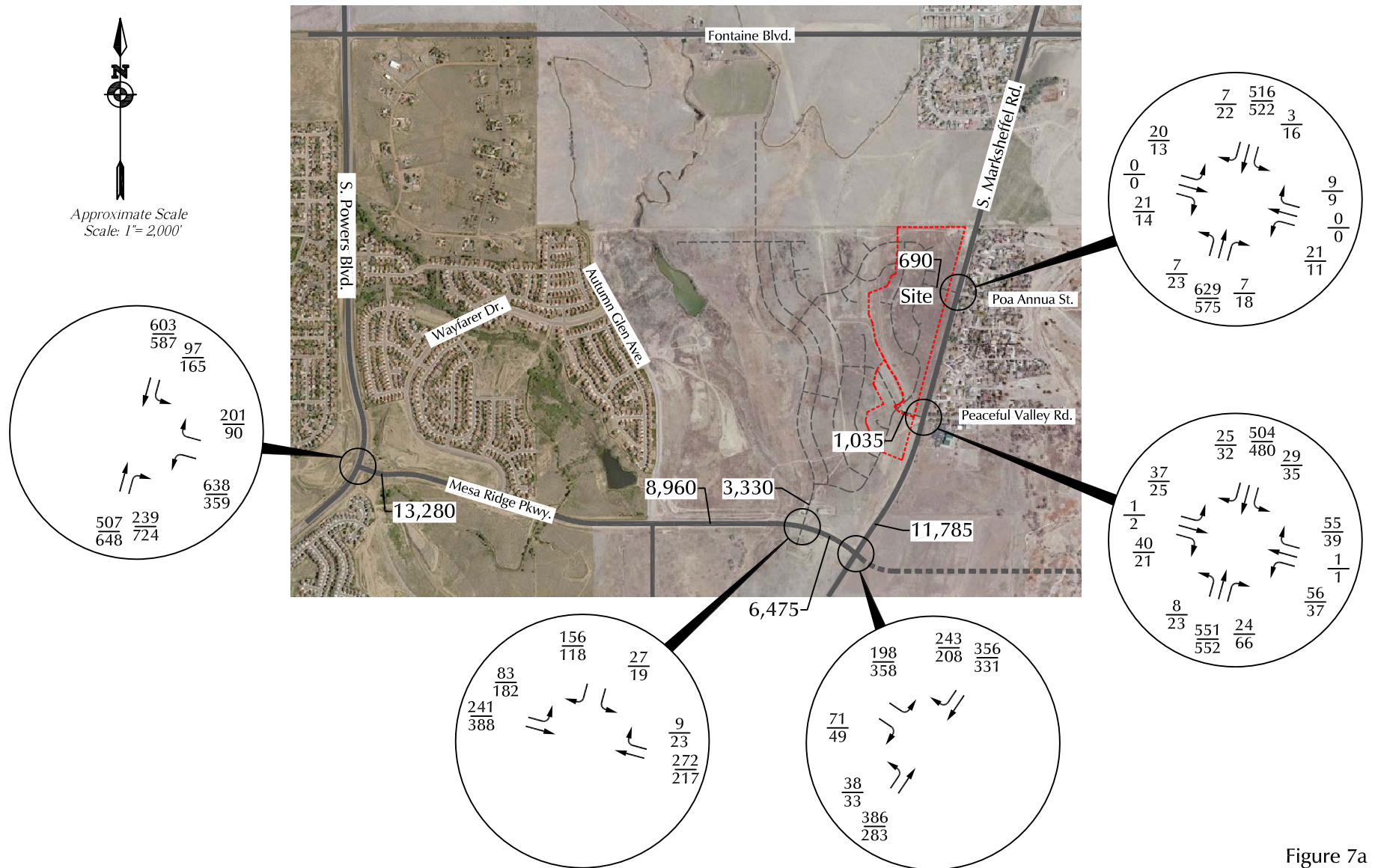
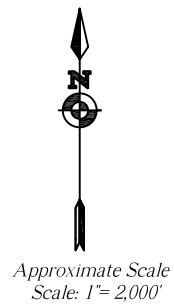


Estimated Directional Distribution of Site-Generated Traffic

The Glen at Widefield Fil. 10 and 11 (LSC #194800)

Figure 5





LEGEND:

$\frac{XX}{XX}$ = AM Weekday Peak-Hour Traffic (vehicles per hour)
 $\frac{XX}{XX}$ = PM Weekday Peak-Hour Traffic (vehicles per hour)

XXX = Average Weekday Traffic (vehicles per day)

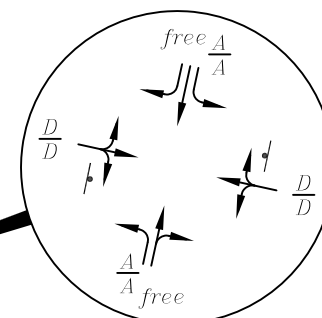
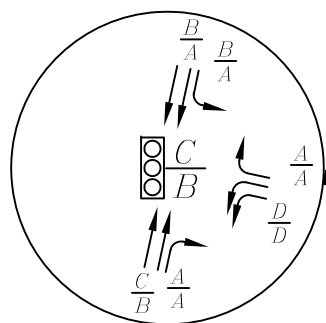
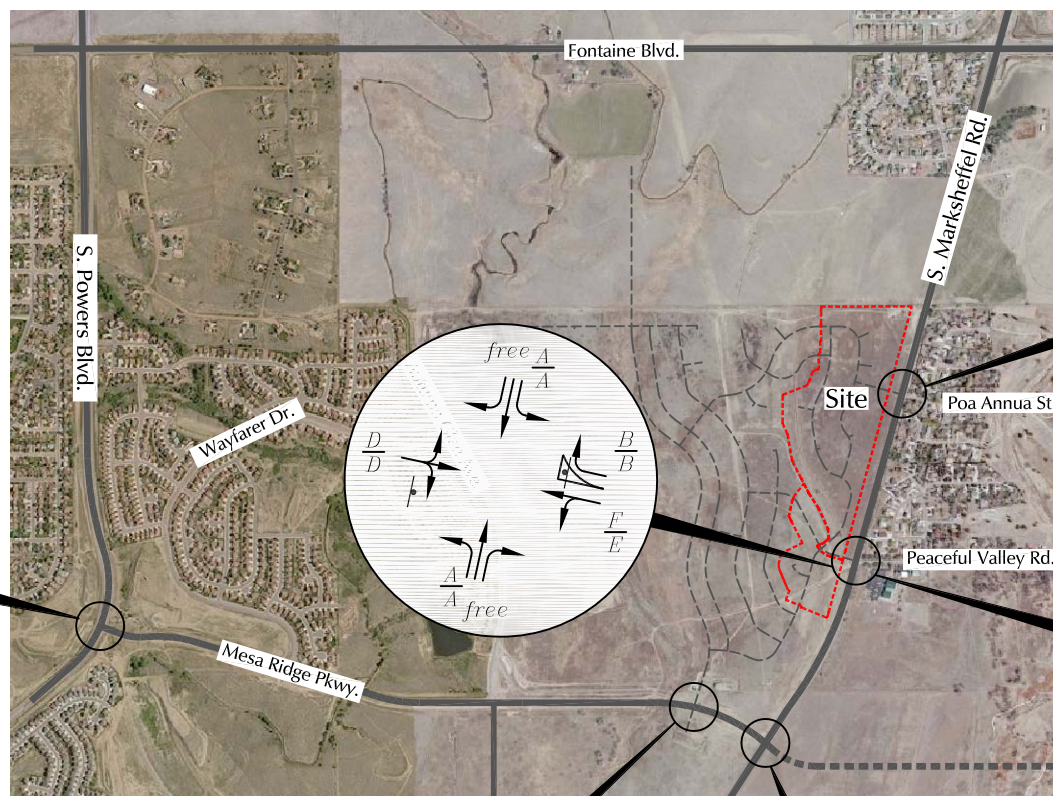
Figure 7a

Short-Term Total Traffic

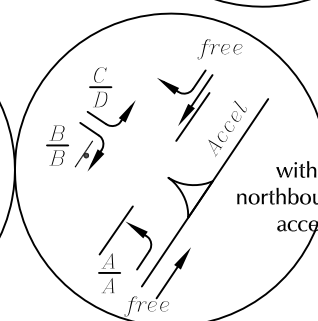
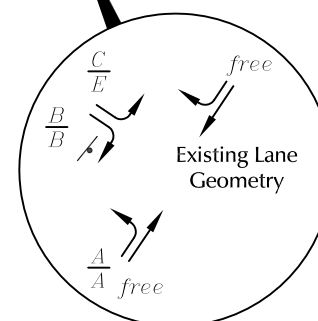
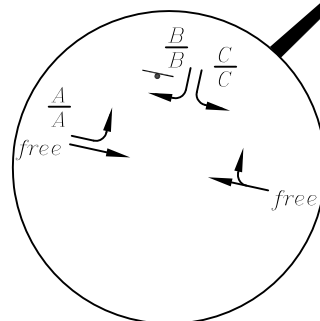
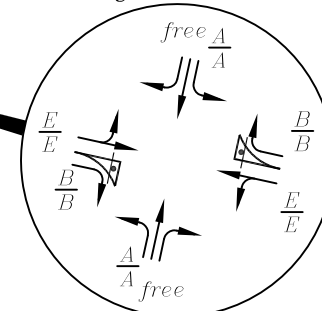
The Glen at Widefield Fil. 10 and 11 (LSC #194800)



Approximate Scale
Scale: 1"= 2,000'



with raised eastbound
right-turn island



LEGEND:

= Stop Sign

= Traffic Signal

$\frac{A}{B}$ = 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

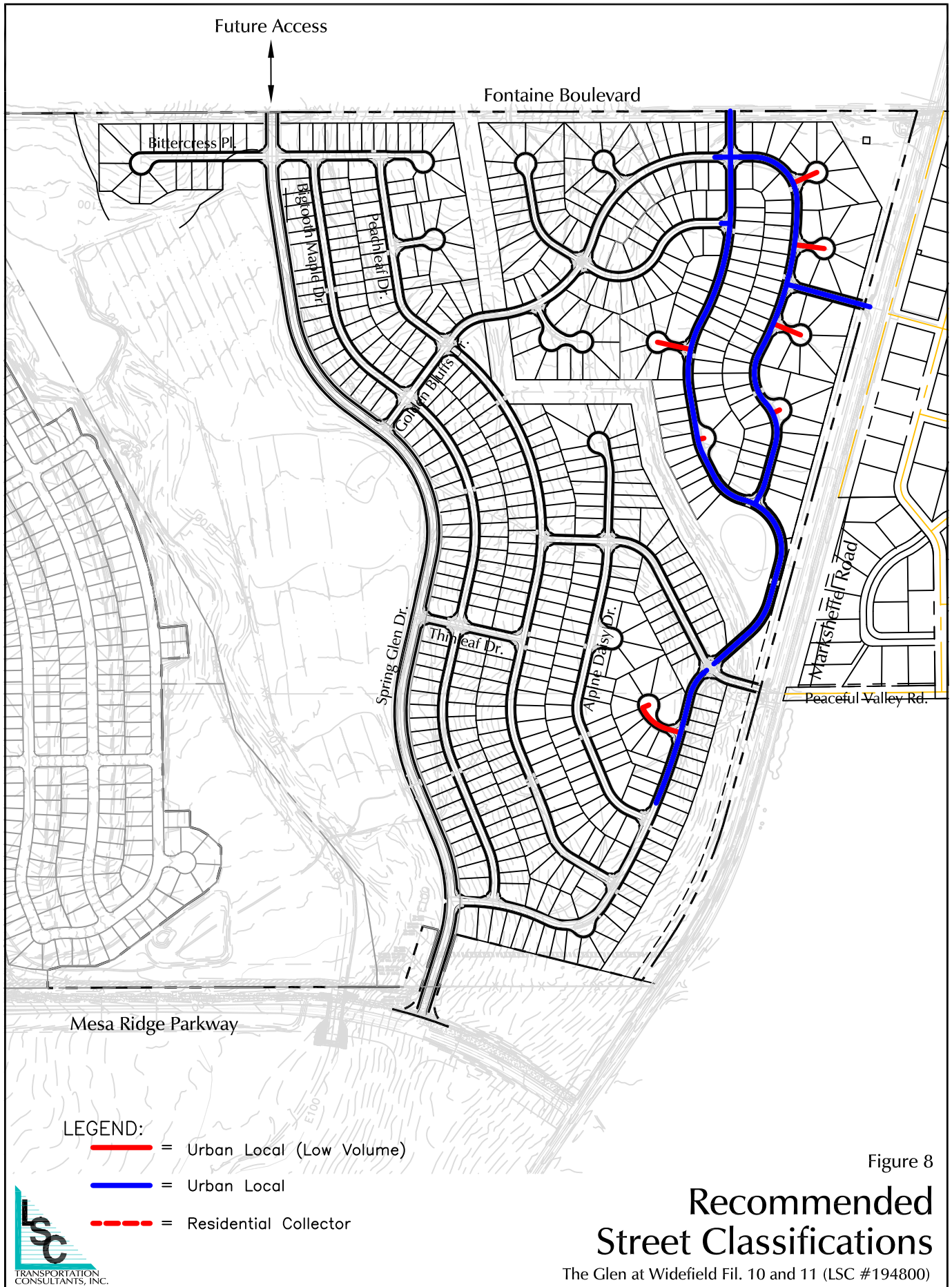
$\frac{D}{D}$ = PM Entire Intersection Peak-Hour Level of Service



Short-Term Total Lane Geometry, Traffic Control and Level of Service

The Glen at Widefield Fil. 10 and 11 (LSC #194800)

Figure 7b



Traffic Counts





LSC Transportation Consultants, Inc.

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

File Name : Powers Blvd - Mesa Ridge Parkway AM 9-19

Site Code : 00194800

Start Date : 9/25/2019

Page No : 1

Groups Printed- Unshifted

	Powers Blvd Southbound					Mesa Ridge Pkwy Westbound					Powers Blvd Northbound					Eastbound					
Start Time	Left	Through	Right	Peds	App. Total	Left	Through	Right	Peds	App. Total	Left	Through	Right	Peds	App. Total	Left	Through	Right	Peds	App. Total	Int. Total
06:30 AM	9	137	0	0	146	114	0	32	0	146	0	109	29	0	138	0	0	0	0	0	430
06:45 AM	21	170	0	0	191	171	0	34	0	205	0	109	43	0	152	0	0	0	0	0	548
Total	30	307	0	0	337	285	0	66	0	351	0	218	72	0	290	0	0	0	0	0	978
07:00 AM	24	159	0	0	183	143	0	56	0	199	0	130	38	0	168	0	0	0	0	0	550
07:15 AM	18	115	0	0	133	112	0	48	0	160	0	119	65	0	184	0	0	0	0	0	477
07:30 AM	25	122	0	0	147	86	0	36	0	122	0	118	52	0	170	0	0	0	0	0	439
07:45 AM	14	118	0	0	132	94	0	41	0	135	0	96	46	0	142	0	0	0	0	0	409
Total	81	514	0	0	595	435	0	181	0	616	0	463	201	0	664	0	0	0	0	0	1875
08:00 AM	21	144	0	0	165	82	0	29	0	111	0	99	59	0	158	0	0	0	0	0	434
08:15 AM	14	151	0	0	165	105	0	23	0	128	0	70	43	0	113	0	0	0	0	0	406
Grand Total	146	1116	0	0	1262	907	0	299	0	1206	0	850	375	0	1225	0	0	0	0	0	3693
Apprch %	11.6	88.4	0	0		75.2	0	24.8	0		0	69.4	30.6	0		0	0	0	0		
Total %	4	30.2	0	0	34.2	24.6	0	8.1	0	32.7	0	23	10.2	0	33.2	0	0	0	0	0	



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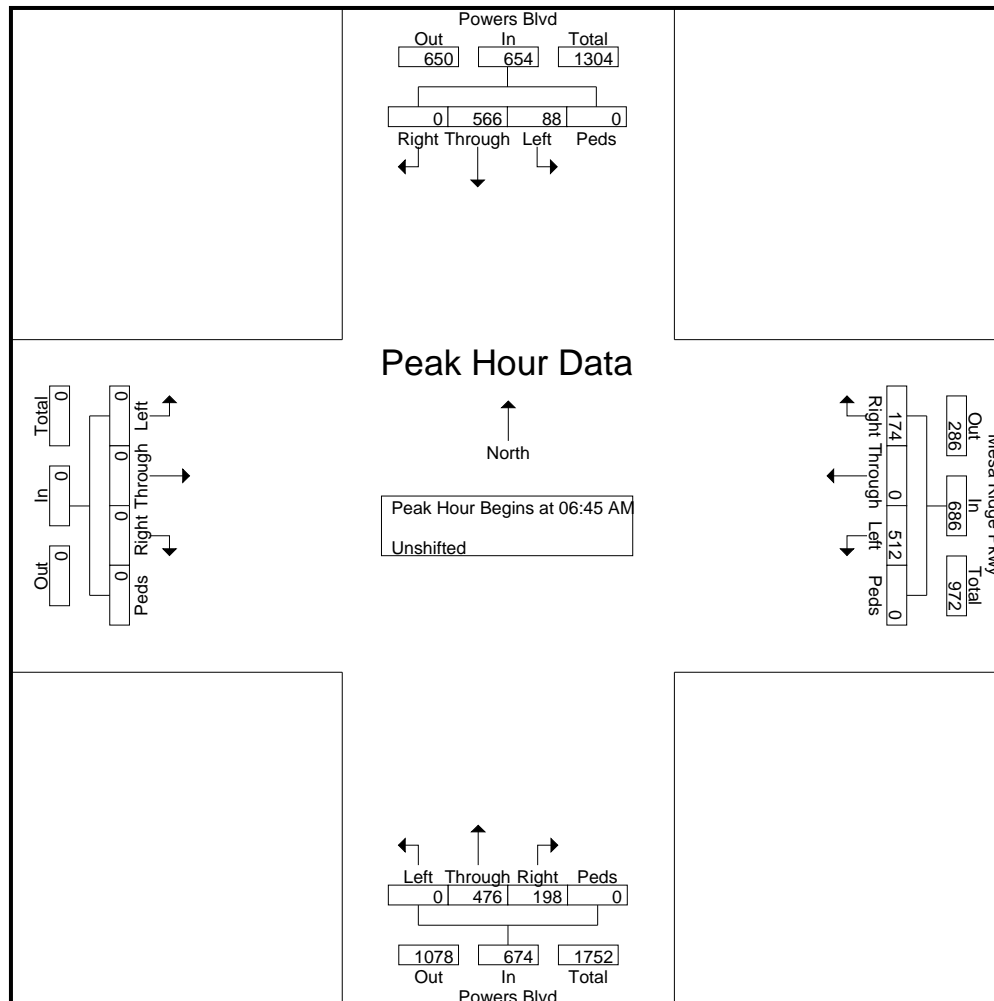
File Name : Powers Blvd - Mesa Ridge Parkway AM 9-19

Site Code : 00194800

Start Date : 9/25/2019

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	Powers Blvd Southbound					Mesa Ridge Pkwy Westbound					Powers Blvd Northbound					Eastbound					
Start Time	Left	Through	Right	Peds	App. Total	Left	Through	Right	Peds	App. Total	Left	Through	Right	Peds	App. Total	Left	Through	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:15 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 06:45 AM																					
06:45 AM	21	170	0	0	191	171	0	34	0	205	0	109	43	0	152	0	0	0	0	0	548
07:00 AM	24	159	0	0	183	143	0	56	0	199	0	130	38	0	168	0	0	0	0	0	550
07:15 AM	18	115	0	0	133	112	0	48	0	160	0	119	65	0	184	0	0	0	0	0	477
07:30 AM	25	122	0	0	147	86	0	36	0	122	0	118	52	0	170	0	0	0	0	0	439
Total Volume	88	566	0	0	654	512	0	174	0	686	0	476	198	0	674	0	0	0	0	0	2014
% App. Total	13.5	86.5	0	0		74.6	0	25.4	0		0	70.6	29.4	0		0	0	0	0	0	
PHF	.880	.832	.000	.000	.856	.749	.000	.777	.000	.837	.000	.915	.762	.000	.916	.000	.000	.000	.000	.000	.915





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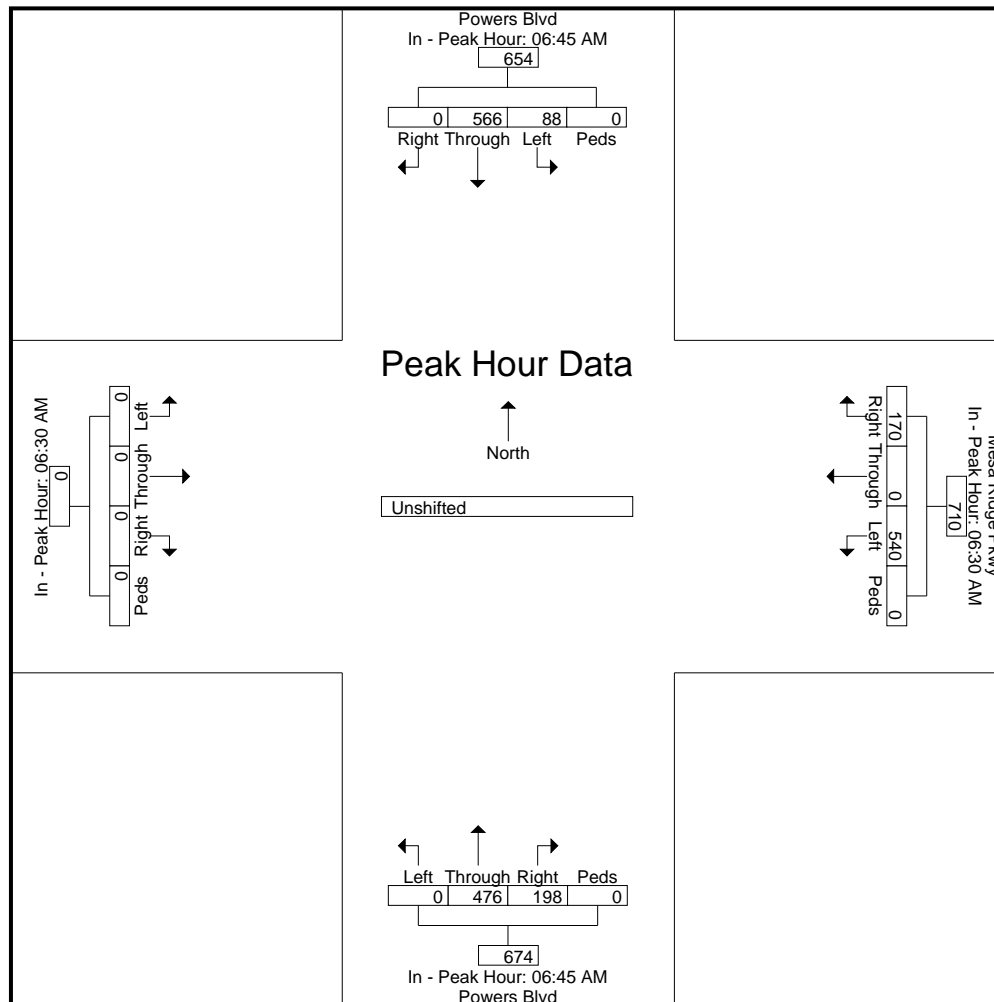
File Name : Powers Blvd - Mesa Ridge Parkway AM 9-19

Site Code : 00194800

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	Powers Blvd Southbound					Mesa Ridge Pkwy Westbound					Powers Blvd Northbound					Eastbound					
Start Time	Left	Through	Right	Peds	App. Total	Left	Through	Right	Peds	App. Total	Left	Through	Right	Peds	App. Total	Left	Through	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:15 AM - Peak 1 of 1																					
Peak Hour for Each Approach Begins at:																					
	06:45 AM					06:30 AM					06:45 AM					06:30 AM					
+0 mins.	21	170	0	0	191	114	0	32	0	146	0	109	43	0	152	0	0	0	0	0	
+15 mins.	24	159	0	0	183	171	0	34	0	205	0	130	38	0	168	0	0	0	0	0	
+30 mins.	18	115	0	0	133	143	0	56	0	199	0	119	65	0	184	0	0	0	0	0	
+45 mins.	25	122	0	0	147	112	0	48	0	160	0	118	52	0	170	0	0	0	0	0	
Total Volume	88	566	0	0	654	540	0	170	0	710	0	476	198	0	674	0	0	0	0	0	
% App. Total	13.5	86.5	0	0		76.1	0	23.9	0		0	70.6	29.4	0		0	0	0	0		
PHF	.880	.832	.000	.000	.856	.789	.000	.759	.000	.866	.000	.915	.762	.000	.916	.000	.000	.000	.000	.000	





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Groups Printed- Unshifted

	Powers Blvd Southbound					Mesa Ridge Pkwy Westbound					Powers Blvd Northbound					Eastbound					
Start Time	Left	Through	Right	Peds	App. Total	Left	Through	Right	Peds	App. Total	Left	Through	Right	Peds	App. Total	Left	Through	Right	Peds	App. Total	Int. Total
04:00 PM	35	109	0	0	144	70	0	19	0	89	0	152	137	0	289	0	0	0	0	0	522
04:15 PM	37	137	0	0	174	61	0	24	0	85	0	146	145	0	291	0	0	0	0	0	550
04:30 PM	37	140	0	0	177	62	0	23	0	85	0	171	141	0	312	0	0	0	0	0	574
04:45 PM	29	138	0	0	167	77	0	14	0	91	0	147	140	0	287	0	0	0	0	0	545
Total	138	524	0	0	662	270	0	80	0	350	0	616	563	0	1179	0	0	0	0	0	2191
05:00 PM	30	112	0	0	142	78	0	18	0	96	0	160	137	0	297	0	0	0	0	0	535
05:15 PM	39	161	0	0	200	59	0	17	0	76	0	130	166	0	296	0	0	0	0	0	572
05:30 PM	33	147	0	0	180	61	0	17	0	78	0	161	128	0	289	0	0	0	0	0	547
05:45 PM	20	89	0	0	109	75	0	17	0	92	0	148	150	0	298	0	0	0	0	0	499
Total	122	509	0	0	631	273	0	69	0	342	0	599	581	0	1180	0	0	0	0	0	2153
Grand Total	260	1033	0	0	1293	543	0	149	0	692	0	1215	1144	0	2359	0	0	0	0	0	4344
Apprch %	20.1	79.9	0	0		78.5	0	21.5	0		0	51.5	48.5	0		0	0	0	0	0	
Total %	6	23.8	0	0	29.8	12.5	0	3.4	0	15.9	0	28	26.3	0	54.3	0	0	0	0	0	



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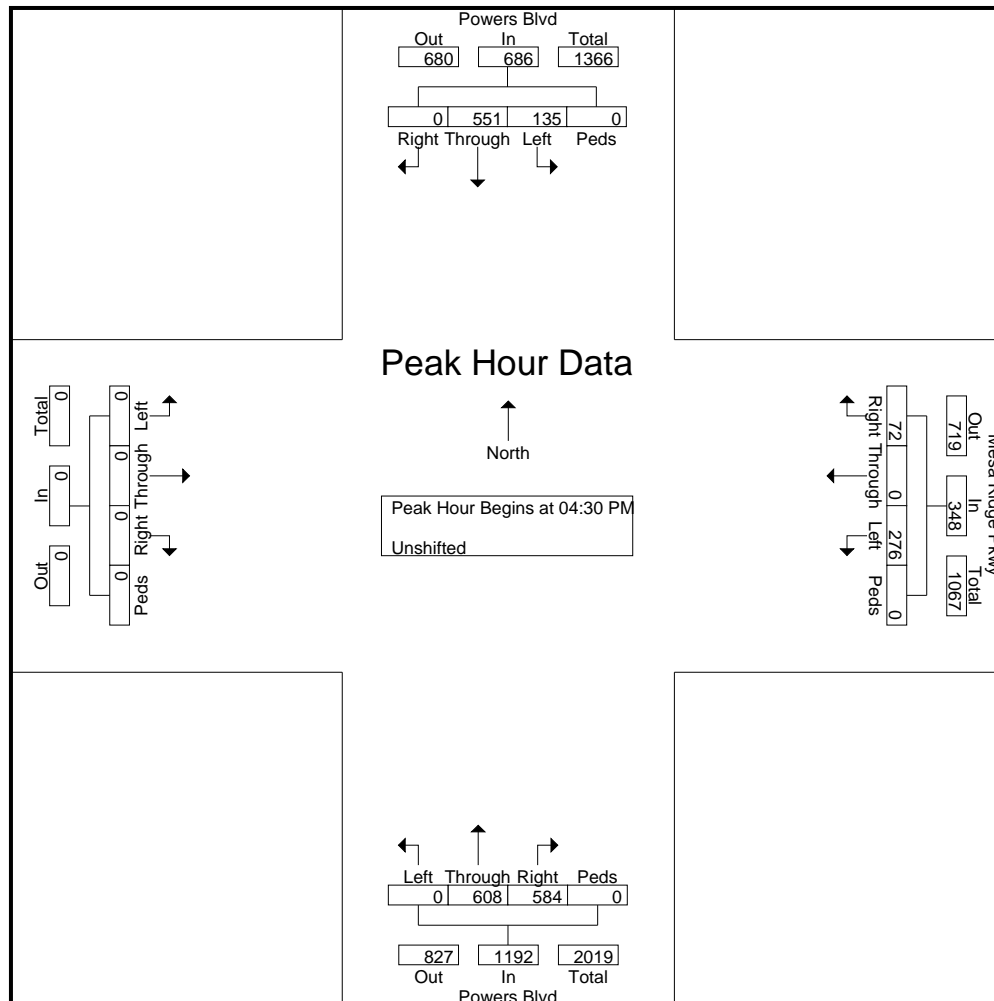
File Name : Powers Blvd - Mesa Ridge Parkway PM 9-19

Site Code : 00194800

Start Date : 9/25/2019

Page No : 2

	Powers Blvd Southbound					Mesa Ridge Pkwy Westbound					Powers Blvd Northbound					Eastbound					
Start Time	Left	Through	Right	Peds	App. Total	Left	Through	Right	Peds	App. Total	Left	Through	Right	Peds	App. Total	Left	Through	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	37	140	0	0	177	62	0	23	0	85	0	171	141	0	312	0	0	0	0	0	574
04:45 PM	29	138	0	0	167	77	0	14	0	91	0	147	140	0	287	0	0	0	0	0	545
05:00 PM	30	112	0	0	142	78	0	18	0	96	0	160	137	0	297	0	0	0	0	0	535
05:15 PM	39	161	0	0	200	59	0	17	0	76	0	130	166	0	296	0	0	0	0	0	572
Total Volume	135	551	0	0	686	276	0	72	0	348	0	608	584	0	1192	0	0	0	0	0	2226
% App. Total	19.7	80.3	0	0		79.3	0	20.7	0		0	51	49	0		0	0	0	0	0	
PHF	.865	.856	.000	.000	.858	.885	.000	.783	.000	.906	.000	.889	.880	.000	.955	.000	.000	.000	.000	.000	.970





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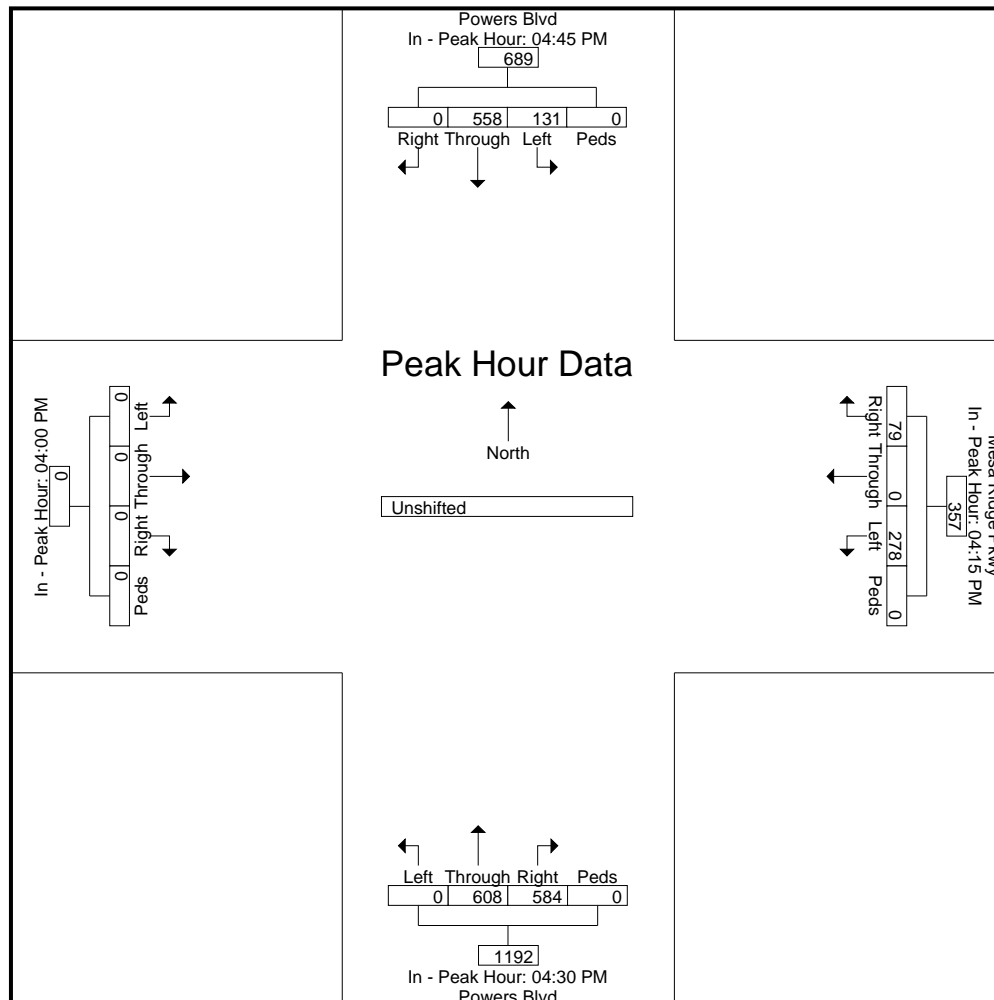
File Name : Powers Blvd - Mesa Ridge Parkway PM 9-19

Site Code : 00194800

Start Date : 9/25/2019

Page No : 3

	Powers Blvd Southbound					Mesa Ridge Pkwy Westbound					Powers Blvd Northbound					Eastbound					
Start Time	Left	Through	Right	Peds	App. Total	Left	Through	Right	Peds	App. Total	Left	Through	Right	Peds	App. Total	Left	Through	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Each Approach Begins at:																					
	04:45 PM					04:15 PM					04:30 PM					04:00 PM					
+0 mins.	29	138	0	0	167	61	0	24	0	85	0	171	141	0	312	0	0	0	0	0	
+15 mins.	30	112	0	0	142	62	0	23	0	85	0	147	140	0	287	0	0	0	0	0	
+30 mins.	39	161	0	0	200	77	0	14	0	91	0	160	137	0	297	0	0	0	0	0	
+45 mins.	33	147	0	0	180	78	0	18	0	96	0	130	166	0	296	0	0	0	0	0	
Total Volume	131	558	0	0	689	278	0	79	0	357	0	608	584	0	1192	0	0	0	0	0	
% App. Total	19	81	0	0		77.9	0	22.1	0		0	51	49	0		0	0	0	0		
PHF	.840	.866	.000	.000	.861	.891	.000	.823	.000	.930	.000	.889	.880	.000	.955	.000	.000	.000	.000	.000	





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File Name : Spring Glen Dr - Mesa Ridge Pkwy AM

Site Code : 00194800

Start Date : 9/18/2019

Page No : 1

Groups Printed- Unshifted

Start Time	Spring Glen Dr Southbound					Mesa Ridge Pkwy Westbound					Northbound					Mesa Ridge Pkwy Eastbound					Int. Total
	Left	Through	Right	Peds	App. Total	Left	Through	Right	Peds	App. Total	Left	Through	Right	Peds	App. Total	Left	Through	Right	Peds	App. Total	
06:30 AM	6	0	15	0	21	0	51	1	0	52	0	0	0	0	0	9	38	0	0	47	120
06:45 AM	4	0	21	0	25	0	47	4	0	51	0	0	0	0	0	10	58	0	0	68	144
Total	10	0	36	0	46	0	98	5	0	103	0	0	0	0	0	19	96	0	0	115	264
07:00 AM	7	0	21	0	28	0	58	1	0	59	0	0	0	0	0	12	52	0	0	64	151
07:15 AM	4	0	16	0	20	0	39	3	0	42	0	0	0	0	0	13	67	0	0	80	142
07:30 AM	8	0	11	0	19	0	38	1	0	39	0	0	0	0	0	7	52	0	0	59	117
07:45 AM	4	0	20	0	24	0	50	3	0	53	0	0	0	0	0	18	53	0	0	71	148
Total	23	0	68	0	91	0	185	8	0	193	0	0	0	0	0	50	224	0	0	274	558
08:00 AM	4	0	16	0	20	0	53	1	0	54	0	0	0	0	0	17	50	0	0	67	141
08:15 AM	0	0	13	0	13	0	38	1	0	39	0	0	0	0	0	14	53	0	0	67	119
Grand Total	37	0	133	0	170	0	374	15	0	389	0	0	0	0	0	100	423	0	0	523	1082
Apprch %	21.8	0	78.2	0		0	96.1	3.9	0		0	0	0	0		19.1	80.9	0	0		
Total %	3.4	0	12.3	0	15.7	0	34.6	1.4	0	36	0	0	0	0	0	9.2	39.1	0	0	48.3	



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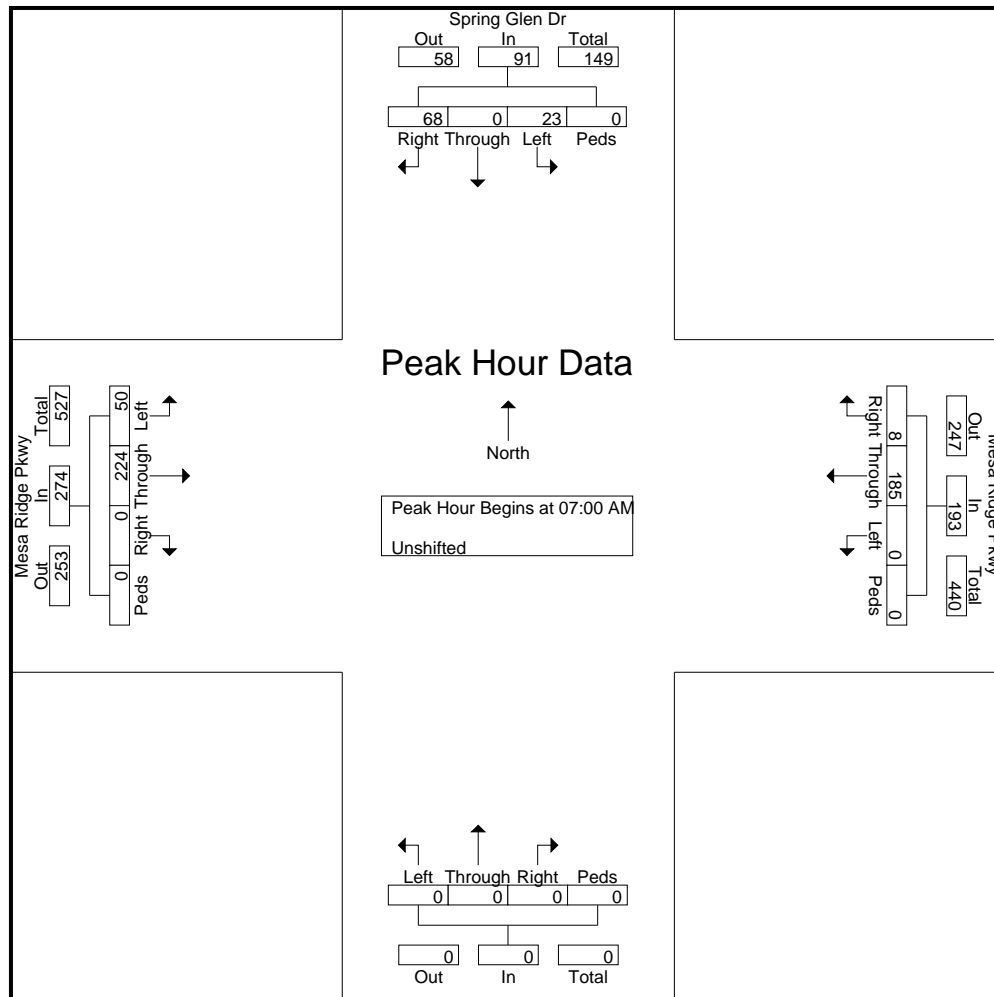
File Name : Spring Glen Dr - Mesa Ridge Pkwy AM

Site Code : 00194800

Start Date : 9/18/2019

Page No : 2

	Spring Glen Dr Southbound					Mesa Ridge Pkwy Westbound					Northbound					Mesa Ridge Pkwy Eastbound					
Start Time	Left	Through	Right	Peds	App. Total	Left	Through	Right	Peds	App. Total	Left	Through	Right	Peds	App. Total	Left	Through	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:15 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	7	0	21	0	28	0	58	1	0	59	0	0	0	0	0	12	52	0	0	64	151
07:15 AM	4	0	16	0	20	0	39	3	0	42	0	0	0	0	0	13	67	0	0	80	142
07:30 AM	8	0	11	0	19	0	38	1	0	39	0	0	0	0	0	7	52	0	0	59	117
07:45 AM	4	0	20	0	24	0	50	3	0	53	0	0	0	0	0	18	53	0	0	71	148
Total Volume	23	0	68	0	91	0	185	8	0	193	0	0	0	0	0	50	224	0	0	274	558
% App. Total	25.3	0	74.7	0		0	95.9	4.1	0		0	0	0	0		18.2	81.8	0	0		
PHF	.719	.000	.810	.000	.813	.000	.797	.667	.000	.818	.000	.000	.000	.000	.000	.694	.836	.000	.000	.856	.924





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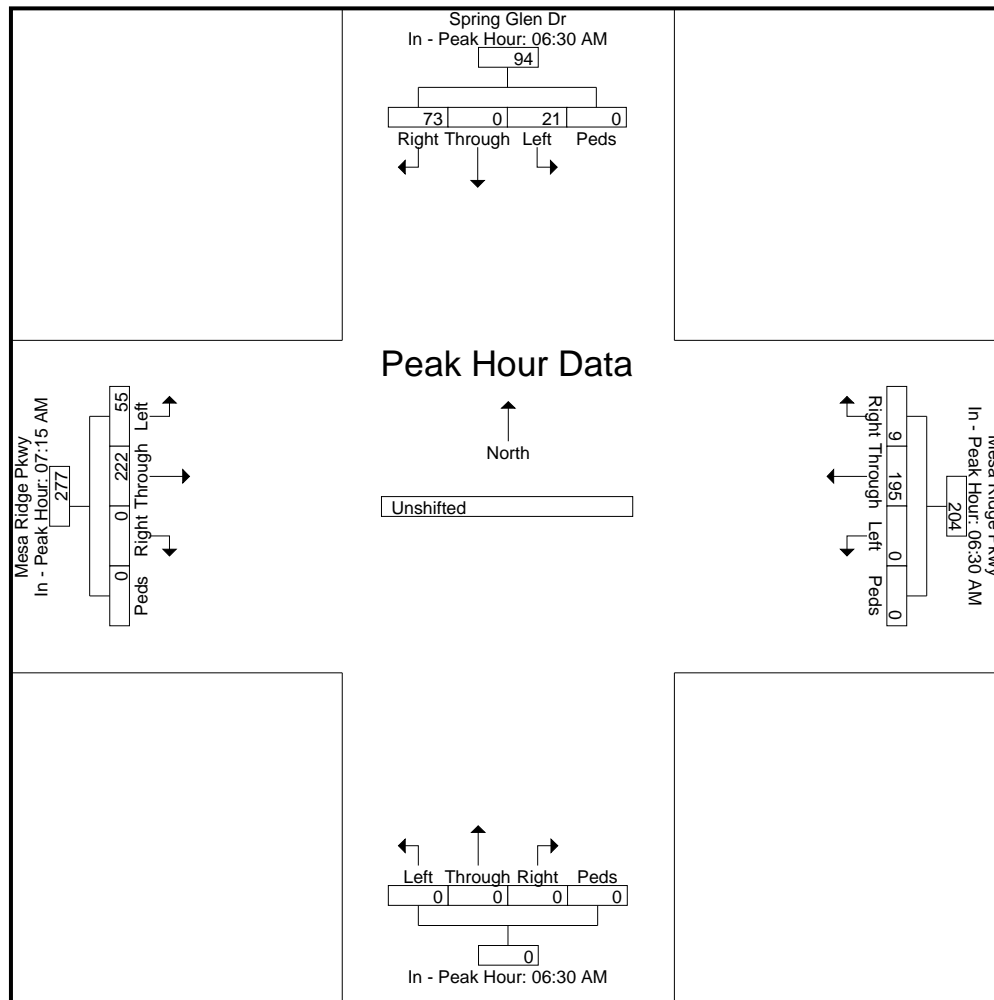
File Name : Spring Glen Dr - Mesa Ridge Pkwy AM

Site Code : 00194800

Start Date : 9/18/2019

Page No : 3

	Spring Glen Dr Southbound					Mesa Ridge Pkwy Westbound					Northbound					Mesa Ridge Pkwy Eastbound					
Start Time	Left	Through	Right	Peds	App. Total	Left	Through	Right	Peds	App. Total	Left	Through	Right	Peds	App. Total	Left	Through	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:15 AM - Peak 1 of 1																					
Peak Hour for Each Approach Begins at:																					
	06:30 AM					06:30 AM					06:30 AM					07:15 AM					
+0 mins.	6	0	15	0	21	0	51	1	0	52	0	0	0	0	0	13	67	0	0	80	
+15 mins.	4	0	21	0	25	0	47	4	0	51	0	0	0	0	0	7	52	0	0	59	
+30 mins.	7	0	21	0	28	0	58	1	0	59	0	0	0	0	0	18	53	0	0	71	
+45 mins.	4	0	16	0	20	0	39	3	0	42	0	0	0	0	0	17	50	0	0	67	
Total Volume	21	0	73	0	94	0	195	9	0	204	0	0	0	0	0	55	222	0	0	277	
% App. Total	22.3	0	77.7	0		0	95.6	4.4	0		0	0	0	0		19.9	80.1	0	0		
PHF	.750	.000	.869	.000	.839	.000	.841	.563	.000	.864	.000	.000	.000	.000	.000	.764	.828	.000	.000	.866	





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File Name : Spring Glen Dr - Mesa Ridge Pkwy PM

Site Code : 00194800

Start Date : 9/18/2019

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Groups Printed- Unshifted

	Spring Glen Dr Southbound					Mesa Ridge Pkwy Westbound					Northbound					Mesa Ridge Pkwy Eastbound					
Start Time	Left	Through	Right	Peds	App. Total	Left	Through	Right	Peds	App. Total	Left	Through	Right	Peds	App. Total	Left	Through	Right	Peds	App. Total	Int. Total
04:00 PM	5	0	10	0	15	0	41	1	0	42	0	0	0	0	0	22	67	0	0	89	146
04:15 PM	2	0	10	0	12	0	25	3	0	28	0	0	0	0	0	18	59	0	0	77	117
04:30 PM	1	0	16	0	17	0	32	5	0	37	0	0	0	0	0	20	77	0	0	97	151
04:45 PM	4	0	13	0	17	0	48	3	0	51	0	0	0	0	0	14	83	0	0	97	165
Total	12	0	49	0	61	0	146	12	0	158	0	0	0	0	0	74	286	0	0	360	579
05:00 PM	4	0	18	0	22	0	41	2	0	43	0	0	0	0	0	19	80	0	0	99	164
05:15 PM	5	0	16	0	21	0	38	8	0	46	0	0	0	0	0	13	85	0	0	98	165
05:30 PM	4	0	14	0	18	0	30	6	0	36	0	0	0	0	0	24	82	0	0	106	160
05:45 PM	2	0	13	0	15	0	52	5	0	57	0	0	0	0	0	20	67	0	0	87	159
Total	15	0	61	0	76	0	161	21	0	182	0	0	0	0	0	76	314	0	0	390	648
Grand Total	27	0	110	0	137	0	307	33	0	340	0	0	0	0	0	150	600	0	0	750	1227
Apprch %	19.7	0	80.3	0		0	90.3	9.7	0		0	0	0	0		20	80	0	0		
Total %	2.2	0	9	0	11.2	0	25	2.7	0	27.7	0	0	0	0		12.2	48.9	0	0	61.1	



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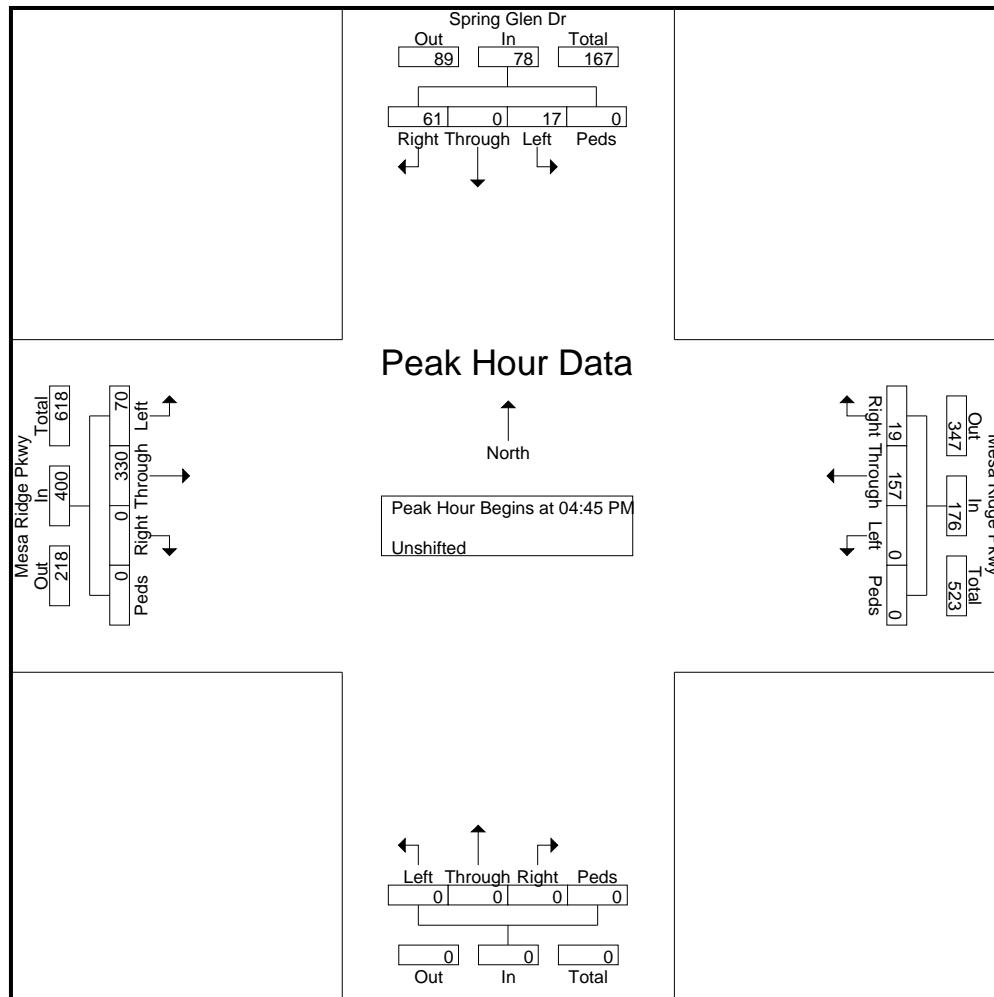
File Name : Spring Glen Dr - Mesa Ridge Pkwy PM

Site Code : 00194800

Start Date : 9/18/2019

Page No : 2

	Spring Glen Dr Southbound					Mesa Ridge Pkwy Westbound					Northbound					Mesa Ridge Pkwy Eastbound					
Start Time	Left	Through	Right	Peds	App. Total	Left	Through	Right	Peds	App. Total	Left	Through	Right	Peds	App. Total	Left	Through	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	4	0	13	0	17	0	48	3	0	51	0	0	0	0	0	14	83	0	0	97	165
05:00 PM	4	0	18	0	22	0	41	2	0	43	0	0	0	0	0	19	80	0	0	99	164
05:15 PM	5	0	16	0	21	0	38	8	0	46	0	0	0	0	0	13	85	0	0	98	165
05:30 PM	4	0	14	0	18	0	30	6	0	36	0	0	0	0	0	24	82	0	0	106	160
Total Volume	17	0	61	0	78	0	157	19	0	176	0	0	0	0	0	70	330	0	0	400	654
% App. Total	21.8	0	78.2	0		0	89.2	10.8	0		0	0	0	0		17.5	82.5	0	0		
PHF	.850	.000	.847	.000	.886	.000	.818	.594	.000	.863	.000	.000	.000	.000	.000	.729	.971	.000	.000	.943	.991





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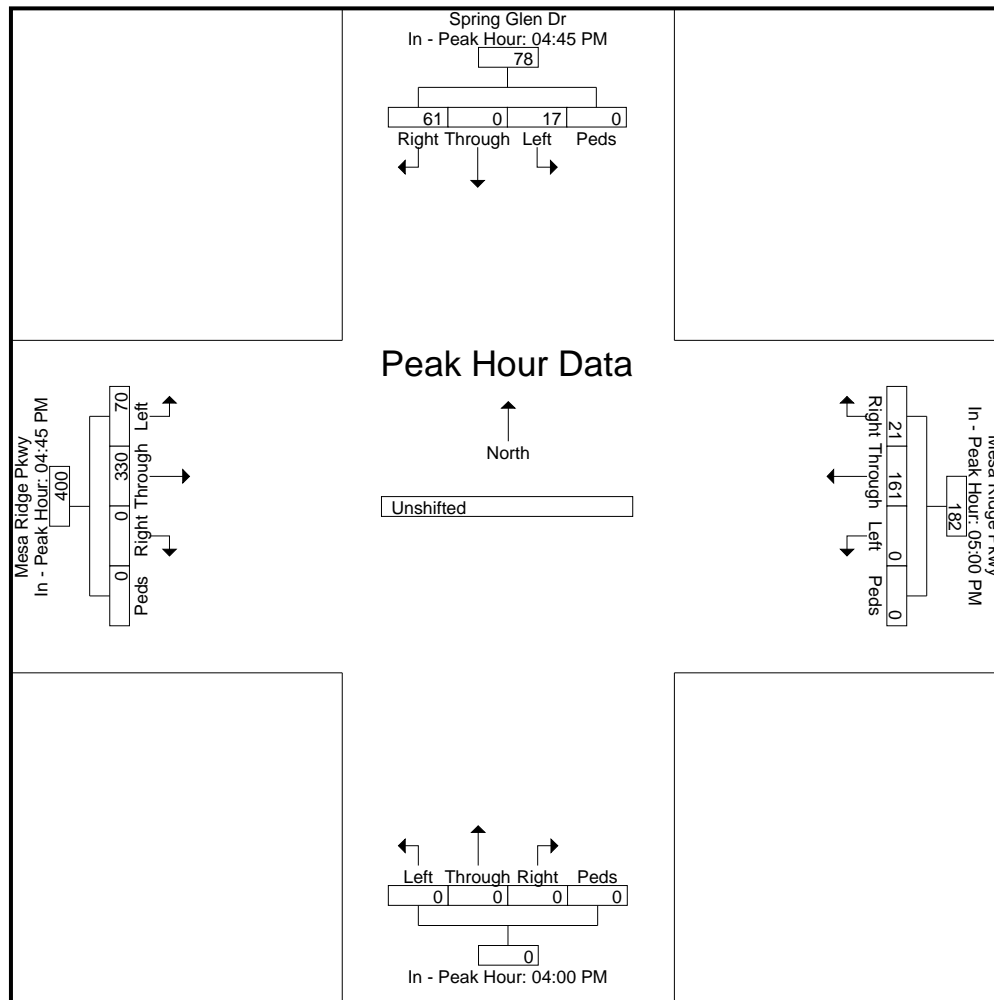
File Name : Spring Glen Dr - Mesa Ridge Pkwy PM

Site Code : 00194800

Start Date : 9/18/2019

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	Spring Glen Dr Southbound					Mesa Ridge Pkwy Westbound					Northbound					Mesa Ridge Pkwy Eastbound					
Start Time	Left	Through	Right	Peds	App. Total	Left	Through	Right	Peds	App. Total	Left	Through	Right	Peds	App. Total	Left	Through	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Each Approach Begins at:																					
	04:45 PM					05:00 PM					04:00 PM					04:45 PM					
+0 mins.	4	0	13	0	17	0	41	2	0	43	0	0	0	0	0	14	83	0	0	97	
+15 mins.	4	0	18	0	22	0	38	8	0	46	0	0	0	0	0	19	80	0	0	99	
+30 mins.	5	0	16	0	21	0	30	6	0	36	0	0	0	0	0	13	85	0	0	98	
+45 mins.	4	0	14	0	18	0	52	5	0	57	0	0	0	0	0	24	82	0	0	106	
Total Volume	17	0	61	0	78	0	161	21	0	182	0	0	0	0	0	70	330	0	0	400	
% App. Total	21.8	0	78.2	0		0	88.5	11.5	0		0	0	0	0	0	17.5	82.5	0	0		
PHF	.850	.000	.847	.000	.886	.000	.774	.656	.000	.798	.000	.000	.000	.000	.000	.729	.971	.000	.000	.943	





File Name : marksheffel rd - mesa ridge pkwy am 9-19

Site Code : 00194800

Start Date : 9/25/2019

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Groups Printed- Unshifted

	Marksheffel Rd Southbound					Westbound					Marksheffel Rd Northbound					Mesa Ridge Pkwy Eastbound					
06:30 AM	0	63	55	1	119	0	0	0	0	0	4	71	0	0	75	27	0	7	0	34	228
06:45 AM	0	64	53	0	117	0	0	0	0	0	9	93	0	0	102	43	0	13	0	56	275
Total	0	127	108	1	236	0	0	0	0	0	13	164	0	0	177	70	0	20	0	90	503
07:00 AM	0	66	52	0	118	0	0	0	0	0	7	97	0	0	104	35	0	20	0	55	277
07:15 AM	0	60	38	0	98	0	0	0	0	0	13	86	0	0	99	48	0	18	0	66	263
07:30 AM	0	53	35	0	88	0	0	0	0	0	8	81	0	0	89	43	0	16	0	59	236
07:45 AM	0	53	36	0	89	0	0	0	0	0	6	61	0	0	67	37	0	12	0	49	205
Total	0	232	161	0	393	0	0	0	0	0	34	325	0	0	359	163	0	66	0	229	981
08:00 AM	0	32	48	0	80	0	0	0	0	0	10	68	0	0	78	37	0	8	0	45	203
08:15 AM	0	34	54	0	88	0	0	0	0	0	4	44	0	0	48	36	0	3	0	39	175
	0	425	371	1	797	0	0	0	0	0	61	601	0	0	662	306	0	97	0	403	1862
Apprch %	0			0.1		0	0	0	0	0	9.2		0	0			0		0		
Total %	0			0.1	42.8	0	0	0	0	0	3.3		0	0	35.6		0	5.2	0	21.6	



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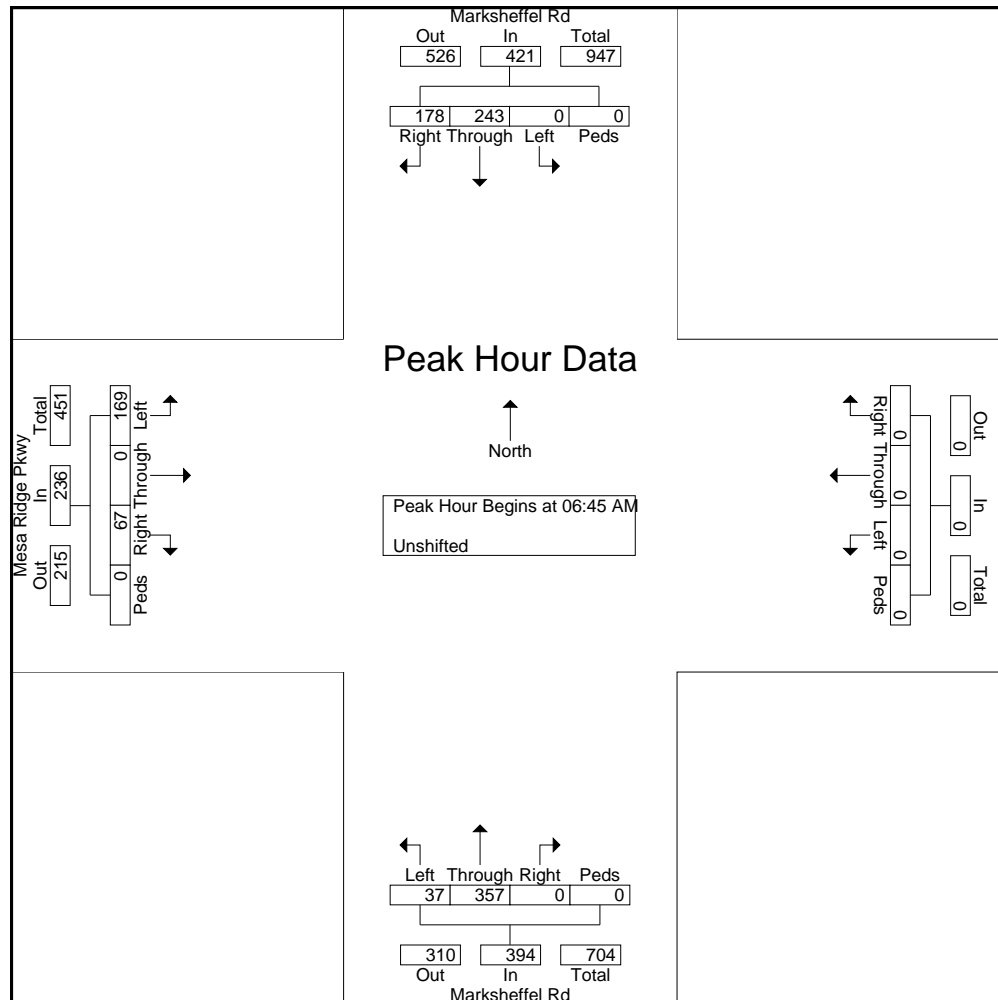
File Name : marksheffel rd - mesa ridge pkwy am 9-19

Site Code : 00194800

Start Date : 9/25/2019

Page No : 2

	Marksheffel Rd Southbound					Westbound					Marksheffel Rd Northbound					Mesa Ridge Pkwy Eastbound					
Start Time	Left	Through	Right	Peds	App. Total	Left	Through	Right	Peds	App. Total	Left	Through	Right	Peds	App. Total	Left	Through	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:15 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 06:45 AM																					
06:45 AM	0	64	53	0	117	0	0	0	0	0	9	93	0	0	102	43	0	13	0	56	275
07:00 AM	0	66	52	0	118	0	0	0	0	0	7	97	0	0	104	35	0	20	0	55	277
07:15 AM	0	60	38	0	98	0	0	0	0	0	13	86	0	0	99	48	0	18	0	66	263
07:30 AM	0	53	35	0	88	0	0	0	0	0	8	81	0	0	89	43	0	16	0	59	236
Total Volume	0	243	178	0	421	0	0	0	0	0	37	357	0	0	394	169	0	67	0	236	1051
% App. Total	0	57.7	42.3	0		0	0	0	0		9.4	90.6	0	0		71.6	0	28.4	0		
PHF	.000	.920	.840	.000	.892	.000	.000	.000	.000	.000	.712	.920	.000	.000	.947	.880	.000	.838	.000	.894	.949





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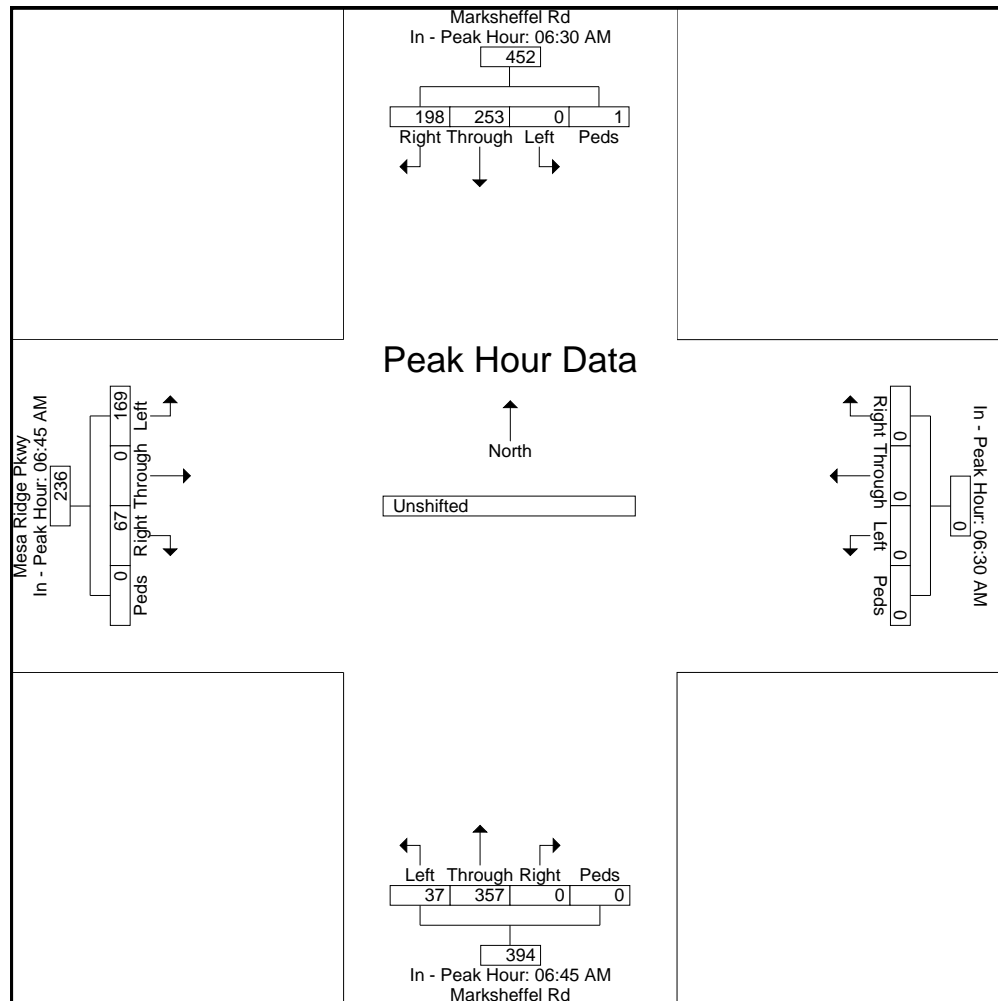
File Name : marksheffel rd - mesa ridge pkwy am 9-19

Site Code : 00194800

Start Date : 9/25/2019

Page No : 3

	Marksheffel Rd Southbound					Westbound					Marksheffel Rd Northbound					Mesa Ridge Pkwy Eastbound					
Start Time	Left	Through	Right	Peds	App. Total	Left	Through	Right	Peds	App. Total	Left	Through	Right	Peds	App. Total	Left	Through	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:15 AM - Peak 1 of 1																					
Peak Hour for Each Approach Begins at:																					
	06:30 AM					06:30 AM					06:45 AM					06:45 AM					
+0 mins.	0	63	55	1	119	0	0	0	0	0	9	93	0	0	102	43	0	13	0	56	
+15 mins.	0	64	53	0	117	0	0	0	0	0	7	97	0	0	104	35	0	20	0	55	
+30 mins.	0	66	52	0	118	0	0	0	0	0	13	86	0	0	99	48	0	18	0	66	
+45 mins.	0	60	38	0	98	0	0	0	0	0	8	81	0	0	89	43	0	16	0	59	
Total Volume	0	253	198	1	452	0	0	0	0	0	37	357	0	0	394	169	0	67	0	236	
% App. Total	0	56	43.8	0.2		0	0	0	0		9.4	90.6	0	0		71.6	0	28.4	0		
PHF	.000	.958	.900	.250	.950	.000	.000	.000	.000	.000	.712	.920	.000	.000	.947	.880	.000	.838	.000	.894	





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File Name : Marksheffel Rd - Mesa Ridge Pkwy PM 9-19

Site Code : 00194800

Start Date : 9/25/2019

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Start Time	Marksheffel Rd Southbound					Westbound					Marksheffel Rd Northbound					Mesa Ridge Pkwy Eastbound					Int. Total
	Left	Through	Right	Peds	App. Total	Left	Through	Right	Peds	App. Total	Left	Through	Right	Peds	App. Total	Left	Through	Right	Peds	App. Total	
04:00 PM	0	56	39	0	95	0	0	0	0	0	5	76	0	0	81	67	0	11	0	78	254
04:15 PM	0	76	43	0	119	0	0	0	0	0	8	37	0	0	45	70	0	11	0	81	245
04:30 PM	0	66	41	0	107	0	0	0	0	0	12	51	0	0	63	76	0	12	0	88	258
04:45 PM	0	77	51	0	128	0	0	0	0	0	5	53	0	0	58	83	0	5	0	88	274
Total	0	275	174	0	449	0	0	0	0	0	30	217	0	0	247	296	0	39	0	335	1031
05:00 PM	0	70	39	0	109	0	0	0	0	0	8	52	0	0	60	60	0	7	0	67	236
05:15 PM	0	85	33	0	118	0	0	0	0	0	4	73	0	0	77	66	0	8	0	74	269
05:30 PM	0	57	45	0	102	0	0	0	0	0	10	52	0	0	62	62	0	9	0	71	235
05:45 PM	0	60	36	0	96	0	0	0	0	0	9	41	0	0	50	60	0	14	0	74	220
Total	0	272	153	0	425	0	0	0	0	0	31	218	0	0	249	248	0	38	0	286	960
Grand Total	0	547	327	0	874	0	0	0	0	0	61	435	0	0	496	544	0	77	0	621	1991
Apprch %	0	62.6	37.4	0		0	0	0	0		12.3	87.7	0	0		87.6	0	12.4	0		
Total %	0	27.5	16.4	0	43.9	0	0	0	0	0	3.1	21.8	0	0	24.9	27.3	0	3.9	0	31.2	



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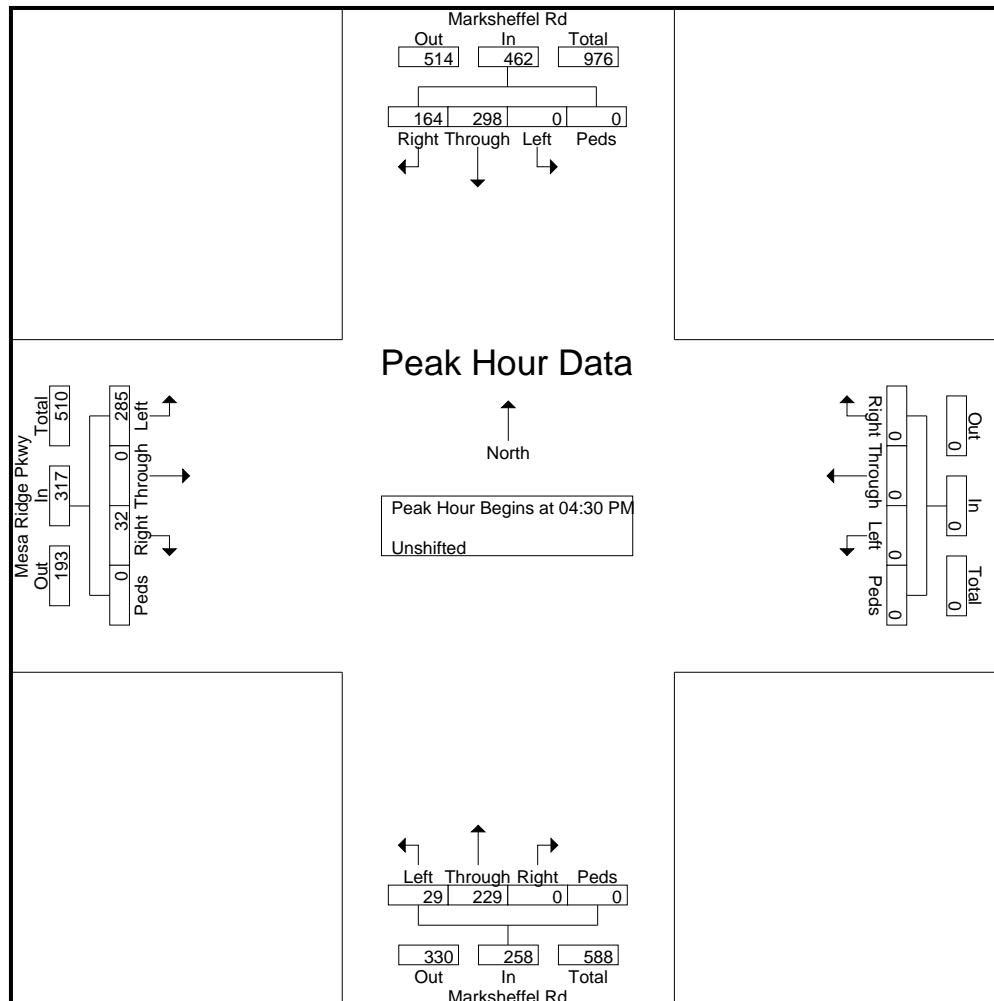
File Name : Marksheffel Rd - Mesa Ridge Pkwy PM 9-19

Site Code : 00194800

Start Date : 9/25/2019

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	Marksheffel Rd Southbound					Westbound					Marksheffel Rd Northbound					Mesa Ridge Pkwy Eastbound					
Start Time	Left	Through	Right	Peds	App. Total	Left	Through	Right	Peds	App. Total	Left	Through	Right	Peds	App. Total	Left	Through	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	0	66	41	0	107	0	0	0	0	0	12	51	0	0	63	76	0	12	0	88	258
04:45 PM	0	77	51	0	128	0	0	0	0	0	5	53	0	0	58	83	0	5	0	88	274
05:00 PM	0	70	39	0	109	0	0	0	0	0	8	52	0	0	60	60	0	7	0	67	236
05:15 PM	0	85	33	0	118	0	0	0	0	0	4	73	0	0	77	66	0	8	0	74	269
Total Volume	0	298	164	0	462	0	0	0	0	0	29	229	0	0	258	285	0	32	0	317	1037
% App. Total	0	64.5	35.5	0		0	0	0	0		11.2	88.8	0	0		89.9	0	10.1	0		
PHF	.000	.876	.804	.000	.902	.000	.000	.000	.000	.000	.604	.784	.000	.000	.838	.858	.000	.667	.000	.901	.946





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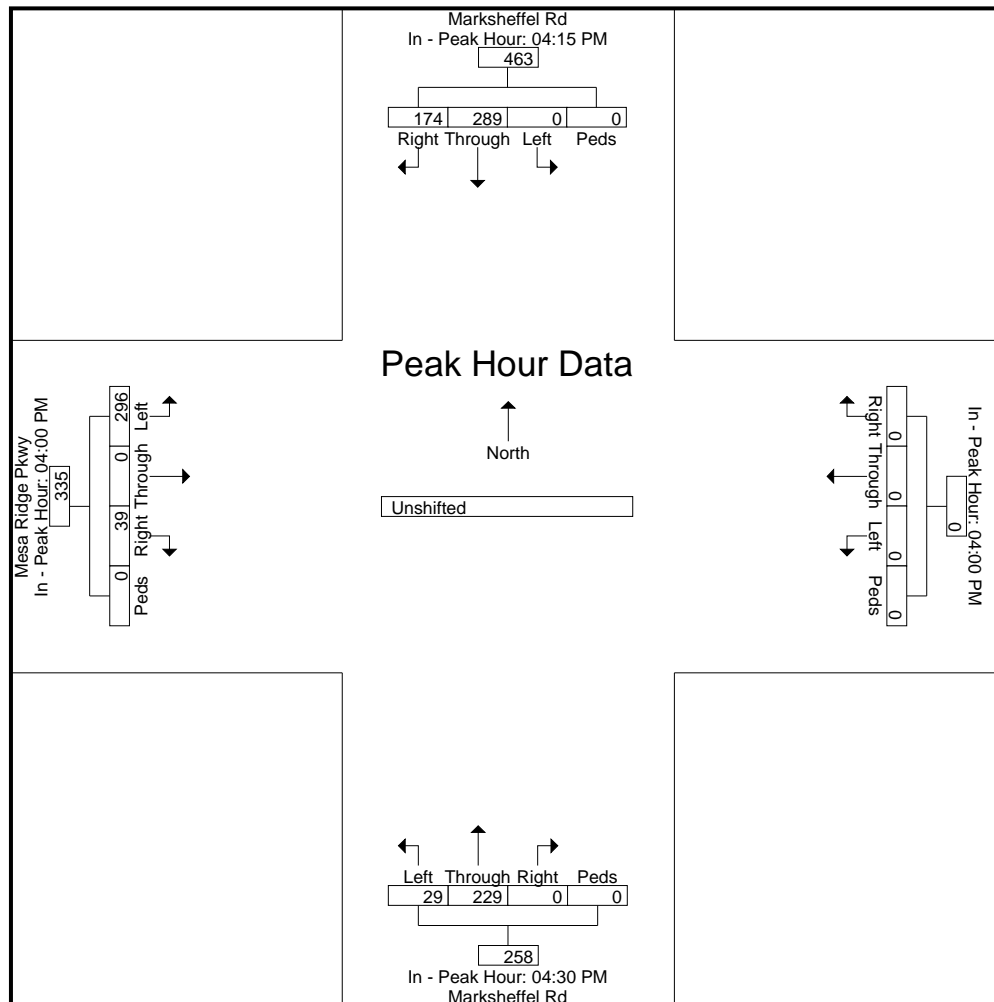
File Name : Marksheffel Rd - Mesa Ridge Pkwy PM 9-19

Site Code : 00194800

Start Date : 9/25/2019

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	Marksheffel Rd Southbound					Westbound					Marksheffel Rd Northbound					Mesa Ridge Pkwy Eastbound					
Start Time	Left	Through	Right	Peds	App. Total	Left	Through	Right	Peds	App. Total	Left	Through	Right	Peds	App. Total	Left	Through	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Each Approach Begins at:																					
	04:15 PM					04:00 PM					04:30 PM					04:00 PM					
+0 mins.	0	76	43	0	119	0	0	0	0	0	12	51	0	0	63	67	0	11	0	78	
+15 mins.	0	66	41	0	107	0	0	0	0	0	5	53	0	0	58	70	0	11	0	81	
+30 mins.	0	77	51	0	128	0	0	0	0	0	8	52	0	0	60	76	0	12	0	88	
+45 mins.	0	70	39	0	109	0	0	0	0	0	4	73	0	0	77	83	0	5	0	88	
Total Volume	0	289	174	0	463	0	0	0	0	0	29	229	0	0	258	296	0	39	0	335	
% App. Total	0	62.4	37.6	0		0	0	0	0		11.2	88.8	0	0		88.4	0	11.6	0		
PHF	.000	.938	.853	.000	.904	.000	.000	.000	.000	.000	.604	.784	.000	.000	.838	.892	.000	.813	.000	.952	





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File Name : Marksheffel Rd - Peaceful Valley Rd AM 9-19

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Groups Printed- Unshifted

	Marksheffel Rd Southbound					Peaceful Valley Rd Westbound					Marksheffel Rd Northbound					Peaceful Valley Rd Eastbound					
Start Time	Left	Through	Right	Peds	App. Total	Left	Through	Right	Peds	App. Total	Left	Through	Right	Peds	App. Total	Left	Through	Right	Peds	App. Total	Int. Total
06:30 AM	3	72	4	0	79	8	0	7	0	15	0	94	3	0	97	7	0	1	0	8	199
06:45 AM	5	110	5	0	120	13	1	12	0	26	0	107	6	0	113	4	0	2	0	6	265
Total	8	182	9	0	199	21	1	19	0	41	0	201	9	0	210	11	0	3	0	14	464
07:00 AM	6	112	2	0	120	25	0	12	0	37	0	139	2	0	141	1	0	2	0	3	301
07:15 AM	7	92	5	0	104	12	0	12	0	24	2	147	9	0	158	13	1	3	0	17	303
07:30 AM	11	108	8	0	127	6	0	19	0	25	0	131	7	0	138	3	0	1	0	4	294
07:45 AM	13	77	3	0	93	6	0	6	0	12	0	98	12	0	110	3	0	1	0	4	219
Total	37	389	18	0	444	49	0	49	0	98	2	515	30	0	547	20	1	7	0	28	1117
08:00 AM	15	68	12	0	95	17	0	10	0	27	0	93	16	0	109	1	1	0	0	2	233
08:15 AM	23	69	2	0	94	24	0	16	0	40	0	45	25	0	70	1	0	0	0	1	205
Grand Total	83	708	41	0	832	111	1	94	0	206	2	854	80	0	936	33	2	10	0	45	2019
Apprch %	10	85.1	4.9	0		53.9	0.5	45.6	0		0.2	91.2	8.5	0		73.3	4.4	22.2	0		
Total %	4.1	35.1	2	0	41.2	5.5	0	4.7	0	10.2	0.1	42.3	4	0	46.4	1.6	0.1	0.5	0	2.2	



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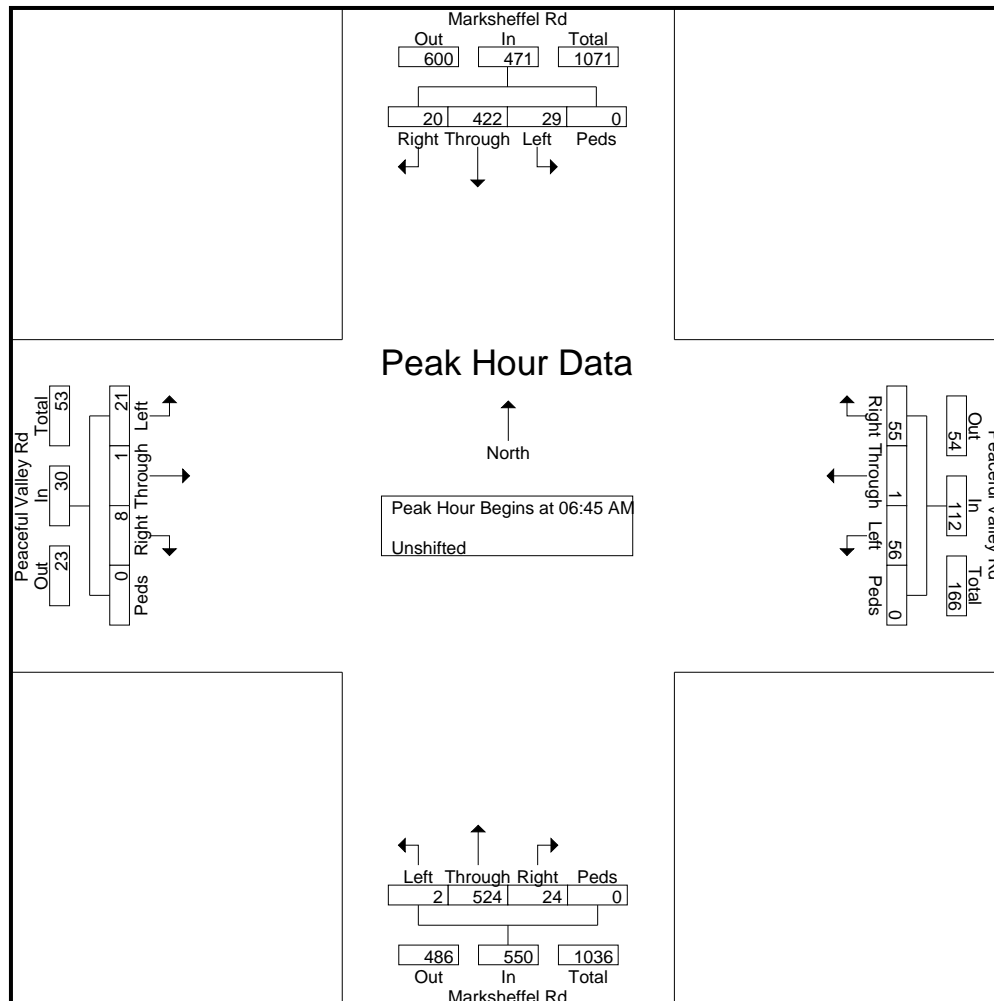
File Name : Marksheffel Rd - Peaceful Valley Rd AM 9-19

Site Code : 194800

Start Date : 9/12/2019

Page No : 2

	Marksheffel Rd Southbound					Peaceful Valley Rd Westbound					Marksheffel Rd Northbound					Peaceful Valley Rd Eastbound					
Start Time	Left	Through	Right	Peds	App. Total	Left	Through	Right	Peds	App. Total	Left	Through	Right	Peds	App. Total	Left	Through	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:15 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 06:45 AM																					
06:45 AM	5	110	5	0	120	13	1	12	0	26	0	107	6	0	113	4	0	2	0	6	265
07:00 AM	6	112	2	0	120	25	0	12	0	37	0	139	2	0	141	1	0	2	0	3	301
07:15 AM	7	92	5	0	104	12	0	12	0	24	2	147	9	0	158	13	1	3	0	17	303
07:30 AM	11	108	8	0	127	6	0	19	0	25	0	131	7	0	138	3	0	1	0	4	294
Total Volume	29	422	20	0	471	56	1	55	0	112	2	524	24	0	550	21	1	8	0	30	1163
% App. Total	6.2	89.6	4.2	0		50	0.9	49.1	0		0.4	95.3	4.4	0		70	3.3	26.7	0		
PHF	.659	.942	.625	.000	.927	.560	.250	.724	.000	.757	.250	.891	.667	.000	.870	.404	.250	.667	.000	.441	.960





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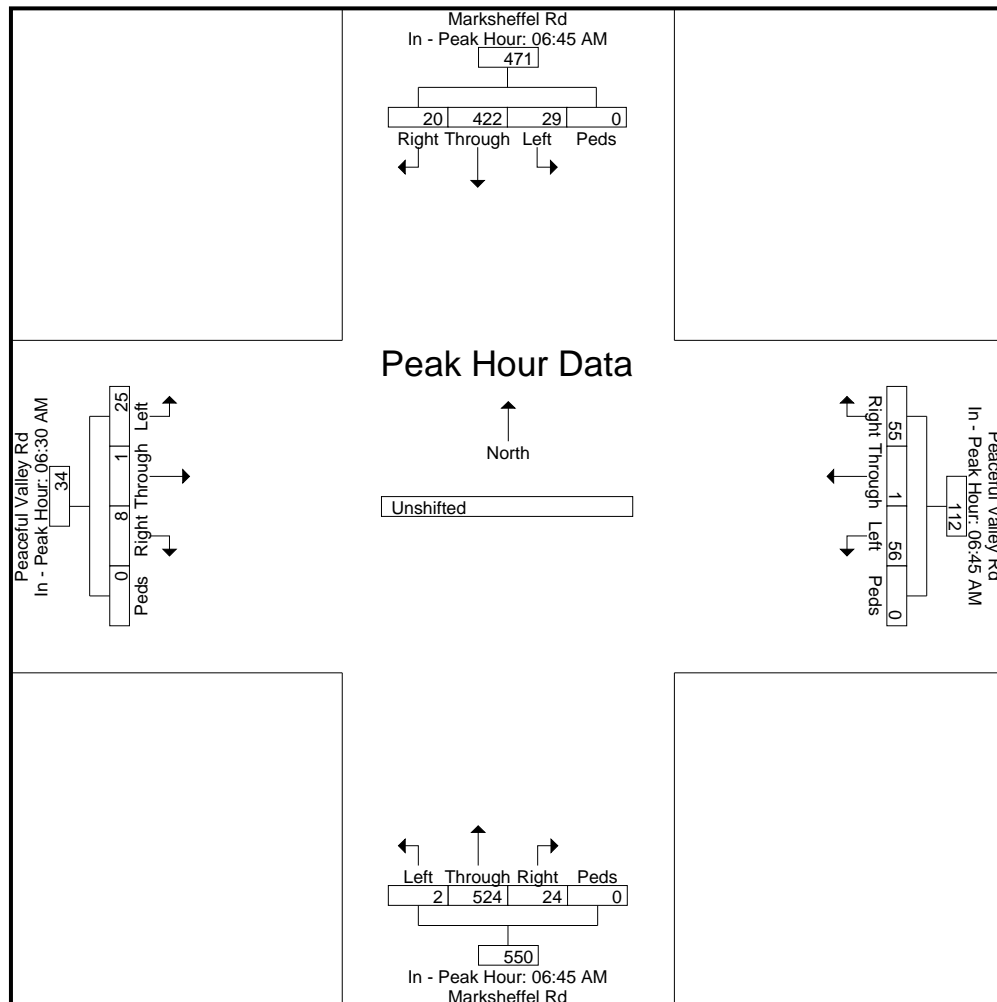
File Name : Marksheffel Rd - Peaceful Valley Rd AM 9-19

Site Code : 194800

Start Date : 9/12/2019

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	Marksheffel Rd Southbound					Peaceful Valley Rd Westbound					Marksheffel Rd Northbound					Peaceful Valley Rd Eastbound					
Start Time	Left	Through	Right	Peds	App. Total	Left	Through	Right	Peds	App. Total	Left	Through	Right	Peds	App. Total	Left	Through	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:15 AM - Peak 1 of 1																					
Peak Hour for Each Approach Begins at:																					
	06:45 AM					06:45 AM					06:45 AM					06:30 AM					
+0 mins.	5	110	5	0	120	13	1	12	0	26	0	107	6	0	113	7	0	1	0	8	
+15 mins.	6	112	2	0	120	25	0	12	0	37	0	139	2	0	141	4	0	2	0	6	
+30 mins.	7	92	5	0	104	12	0	12	0	24	2	147	9	0	158	1	0	2	0	3	
+45 mins.	11	108	8	0	127	6	0	19	0	25	0	131	7	0	138	13	1	3	0	17	
Total Volume	29	422	20	0	471	56	1	55	0	112	2	524	24	0	550	25	1	8	0	34	
% App. Total	6.2	89.6	4.2	0		50	0.9	49.1	0		0.4	95.3	4.4	0		73.5	2.9	23.5	0		
PHF	.659	.942	.625	.000	.927	.560	.250	.724	.000	.757	.250	.891	.667	.000	.870	.481	.250	.667	.000	.500	





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File Name : Marksheffel Rd - Peaceful Valley Rd PM 9-19

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Start Date : 9/12/2019

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Groups Printed- Unshifted

	Marksheffel Rd Southbound					Peaceful Valley Rd Westbound					Marksheffel Rd Northbound					Peaceful Valley Rd Eastbound					
Start Time	Left	Through	Right	Peds	App. Total	Left	Through	Right	Peds	App. Total	Left	Through	Right	Peds	App. Total	Left	Through	Right	Peds	App. Total	Int. Total
04:00 PM	9	94	2	0	105	5	0	6	0	11	1	107	9	0	117	1	0	0	0	1	234
04:15 PM	19	120	3	0	142	5	0	7	0	12	0	118	14	0	132	5	1	0	0	6	292
04:30 PM	7	91	2	0	100	10	1	13	0	24	1	130	15	0	146	3	1	0	0	4	274
04:45 PM	3	110	6	0	119	11	0	8	0	19	1	109	20	0	130	3	0	0	0	3	271
Total	38	415	13	0	466	31	1	34	0	66	3	464	58	0	525	12	2	0	0	14	1071
05:00 PM	6	105	3	0	114	11	0	11	0	22	0	104	17	0	121	4	0	0	0	4	261
05:15 PM	7	94	4	0	105	9	0	8	0	17	0	121	22	0	143	1	0	0	0	1	266
05:30 PM	8	98	2	0	108	7	0	7	0	14	0	97	9	0	106	0	0	0	0	0	228
05:45 PM	6	98	1	0	105	6	0	9	0	15	1	100	11	0	112	3	1	1	0	5	237
Total	27	395	10	0	432	33	0	35	0	68	1	422	59	0	482	8	1	1	0	10	992
Grand Total	65	810	23	0	898	64	1	69	0	134	4	886	117	0	1007	20	3	1	0	24	2063
Apprch %	7.2	90.2	2.6	0		47.8	0.7	51.5	0		0.4	88	11.6	0		83.3	12.5	4.2	0		
Total %	3.2	39.3	1.1	0	43.5	3.1	0	3.3	0	6.5	0.2	42.9	5.7	0	48.8	1	0.1	0	0	1.2	



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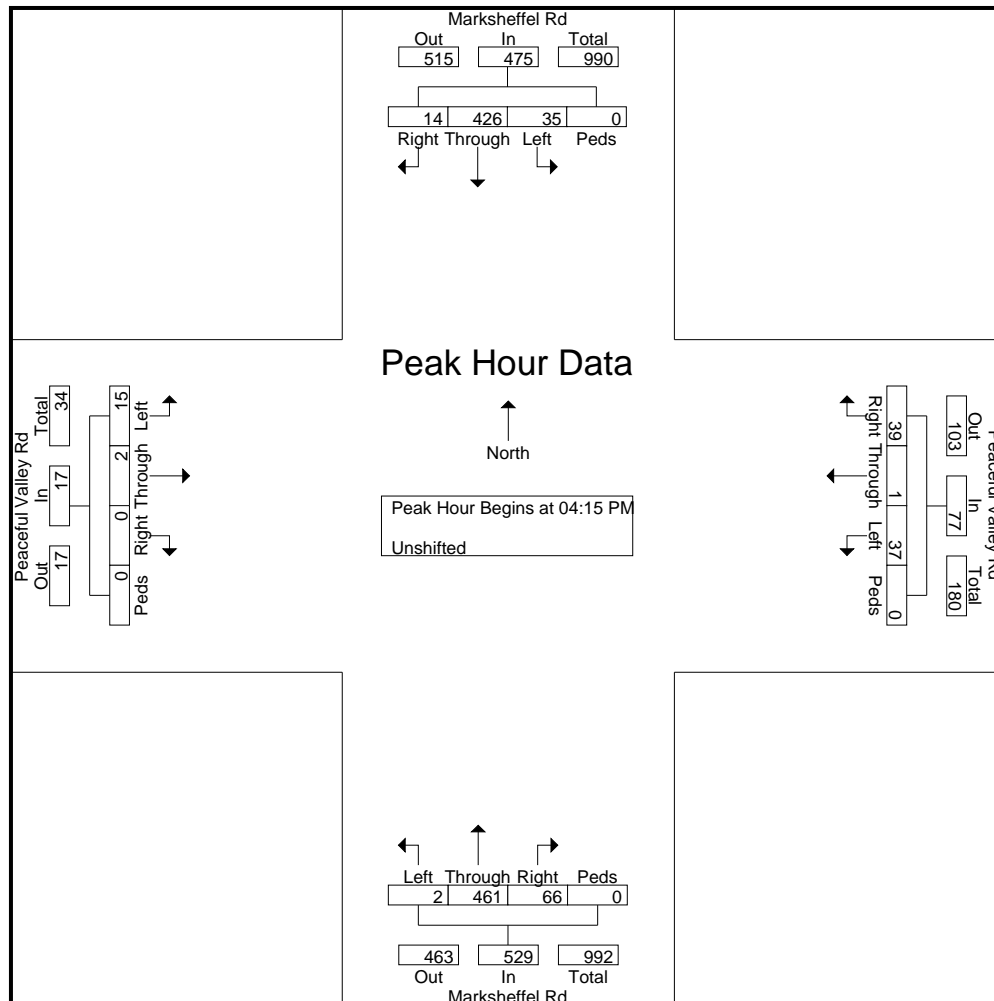
File Name : Marksheffel Rd - Peaceful Valley Rd PM 9-19

Site Code : 00194800

Start Date : 9/12/2019

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	Marksheffel Rd Southbound					Peaceful Valley Rd Westbound					Marksheffel Rd Northbound					Peaceful Valley Rd Eastbound					
Start Time	Left	Through	Right	Peds	App. Total	Left	Through	Right	Peds	App. Total	Left	Through	Right	Peds	App. Total	Left	Through	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:15 PM																					
04:15 PM	19	120	3	0	142	5	0	7	0	12	0	118	14	0	132	5	1	0	0	6	292
04:30 PM	7	91	2	0	100	10	1	13	0	24	1	130	15	0	146	3	1	0	0	4	274
04:45 PM	3	110	6	0	119	11	0	8	0	19	1	109	20	0	130	3	0	0	0	3	271
05:00 PM	6	105	3	0	114	11	0	11	0	22	0	104	17	0	121	4	0	0	0	4	261
Total Volume	35	426	14	0	475	37	1	39	0	77	2	461	66	0	529	15	2	0	0	17	1098
% App. Total	7.4	89.7	2.9	0		48.1	1.3	50.6	0		0.4	87.1	12.5	0		88.2	11.8	0	0		
PHF	.461	.888	.583	.000	.836	.841	.250	.750	.000	.802	.500	.887	.825	.000	.906	.750	.500	.000	.000	.708	.940





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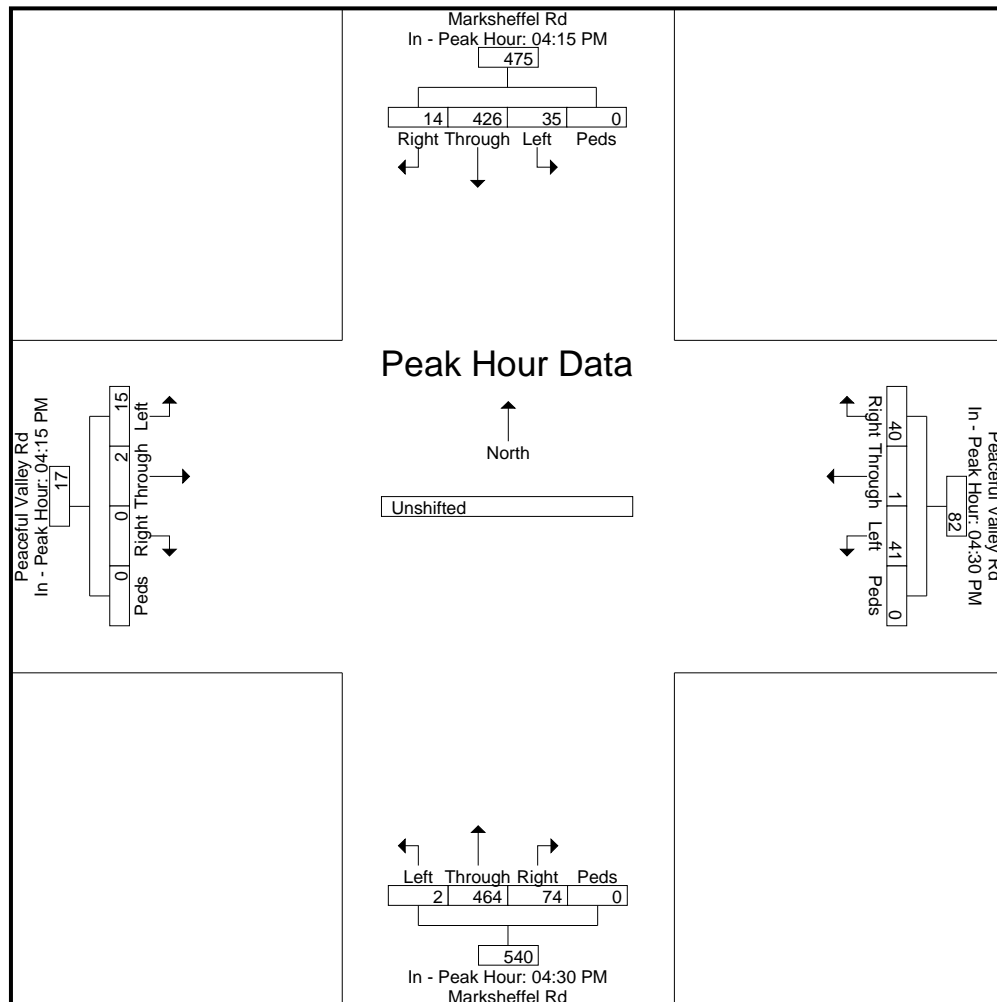
File Name : Marksheffel Rd - Peaceful Valley Rd PM 9-19

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	Marksheffel Rd Southbound					Peaceful Valley Rd Westbound					Marksheffel Rd Northbound					Peaceful Valley Rd Eastbound					
Start Time	Left	Through	Right	Peds	App. Total	Left	Through	Right	Peds	App. Total	Left	Through	Right	Peds	App. Total	Left	Through	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Each Approach Begins at:																					
	04:15 PM					04:30 PM					04:30 PM					04:15 PM					
+0 mins.	19	120	3	0	142	10	1	13	0	24	1	130	15	0	146	5	1	0	0	6	
+15 mins.	7	91	2	0	100	11	0	8	0	19	1	109	20	0	130	3	1	0	0	4	
+30 mins.	3	110	6	0	119	11	0	11	0	22	0	104	17	0	121	3	0	0	0	3	
+45 mins.	6	105	3	0	114	9	0	8	0	17	0	121	22	0	143	4	0	0	0	4	
Total Volume	35	426	14	0	475	41	1	40	0	82	2	464	74	0	540	15	2	0	0	17	
% App. Total	7.4	89.7	2.9	0		50	1.2	48.8	0		0.4	85.9	13.7	0		88.2	11.8	0	0		
PHF	.461	.888	.583	.000	.836	.932	.250	.769	.000	.854	.500	.892	.841	.000	.925	.750	.500	.000	.000	.708	



Levels of Service



HCM 6th TWSC
5: Marksheffel Rd & Peaceful Valley Rd

Existing Traffic
AM Peak Hour

Intersection												
Int Delay, s/veh	3.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔	↔		↔	↔	↔	↔	
Traffic Vol, veh/h	21	1	8	56	1	55	2	524	24	29	422	20
Future Vol, veh/h	21	1	8	56	1	55	2	524	24	29	422	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	Stop	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	290	340	-	-
Veh in Median Storage, #	-	0	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	44	44	44	100	100	100	87	87	87	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	48	2	18	56	1	55	2	602	28	29	422	20







Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1111	1124	432	1106	1106	602	442	0	0	630	0	0
Stage 1	490	490	-	606	606	-	-	-	-	-	-	-
Stage 2	621	634	-	500	500	-	-	-	-	-	-	-
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	186	205	624	188	210	500	1118	-	-	952	-	-
Stage 1	560	549	-	484	487	-	-	-	-	-	-	-
Stage 2	475	473	-	553	543	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	161	198	624	176	203	500	1118	-	-	952	-	-
Mov Cap-2 Maneuver	161	198	-	308	323	-	-	-	-	-	-	-
Stage 1	558	533	-	483	486	-	-	-	-	-	-	-
Stage 2	421	472	-	518	527	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	31.6		16.3		0		0.5	
HCM LOS	D		C					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1118	-	-	202 308 500	952	-	-
HCM Lane V/C Ratio	0.002	-	-	0.338 0.185 0.11	0.03	-	-
HCM Control Delay (s)	8.2	0	-	31.6 19.3 13.1	8.9	-	-
HCM Lane LOS	A	A	-	D C B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	1.4 0.7 0.4	0.1	-	-






HCM 6th TWSC
6: Marksheffel Rd & Mesa Ridge Pkwy

Existing Traffic
AM Peak Hour

Intersection						
Int Delay, s/veh	3.6					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	180	67	37	370	308	178
Future Vol, veh/h	180	67	37	370	308	178
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	0	500	-	-	290
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	95	95	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	180	67	39	389	346	200
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	813	346	546	0	-	0
Stage 1	346	-	-	-	-	-
Stage 2	467	-	-	-	-	-
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	348	697	1023	-	-	-
Stage 1	716	-	-	-	-	-
Stage 2	631	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	335	697	1023	-	-	-
Mov Cap-2 Maneuver	442	-	-	-	-	-
Stage 1	689	-	-	-	-	-
Stage 2	631	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	16.5	0.8		0		
HCM LOS	C					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1023	-	442	697	-	-
HCM Lane V/C Ratio	0.038	-	0.407	0.096	-	-
HCM Control Delay (s)	8.7	-	18.6	10.7	-	-
HCM Lane LOS	A	-	C	B	-	-
HCM 95th %tile Q(veh)	0.1	-	1.9	0.3	-	-








HCM 6th TWSC
7: Mesa Ridge Pkwy & Spring Glen Dr

Existing Traffic
AM Peak Hour

Intersection						
Int Delay, s/veh	2.5					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	50	224	207	8	23	68
Future Vol, veh/h	50	224	207	8	23	68
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	390	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	82	82	81	81
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	50	224	252	10	28	84
Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	262	0	-	0	581	257
Stage 1	-	-	-	-	257	-
Stage 2	-	-	-	-	324	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1302	-	-	-	476	782
Stage 1	-	-	-	-	786	-
Stage 2	-	-	-	-	733	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1302	-	-	-	458	782
Mov Cap-2 Maneuver	-	-	-	-	458	-
Stage 1	-	-	-	-	756	-
Stage 2	-	-	-	-	733	-
Approach	EB	WB		SB		
HCM Control Delay, s	1.4	0		11		
HCM LOS				B		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1302	-	-	-	458	782
HCM Lane V/C Ratio	0.038	-	-	-	0.062	0.107
HCM Control Delay (s)	7.9	-	-	-	13.4	10.2
HCM Lane LOS	A	-	-	-	B	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.2	0.4

Timings 10: Mesa Ridge Pkwy/Powers Blvd & Mesa Ridge Pkwy

Existing Traffic
AM Peak Hour

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	512	174	476	198	88	566
Future Volume (vph)	512	174	476	198	88	566
Turn Type	Prot	Perm	NA	Perm	pm+pt	NA
Protected Phases	8		2		1	6
Permitted Phases		8		2	6	
Detector Phase	8	8	2	2	1	6
Switch Phase						
Minimum Initial (s)	6.0	6.0	30.0	30.0	6.0	30.0
Minimum Split (s)	11.0	11.0	37.0	37.0	11.0	37.0
Total Split (s)	56.0	56.0	44.0	44.0	20.0	64.0
Total Split (%)	46.7%	46.7%	36.7%	36.7%	16.7%	53.3%
Yellow Time (s)	3.0	3.0	5.0	5.0	3.0	5.0
All-Red Time (s)	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
Total Lost Time (s)	5.0	5.0	7.0	7.0	5.0	7.0
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None	None	C-Max	C-Max	None	C-Max
Act Effect Green (s)	46.6	46.6	45.4	45.4	63.4	61.4
Actuated g/C Ratio	0.39	0.39	0.38	0.38	0.53	0.51
v/c Ratio	0.87	0.28	0.36	0.27	0.21	0.35
Control Delay	47.4	4.3	29.2	5.1	16.6	18.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	47.4	4.3	29.2	5.1	16.6	18.9
LOS	D	A	C	A	B	B
Approach Delay	36.5		22.1			18.6
Approach LOS	D		C			B

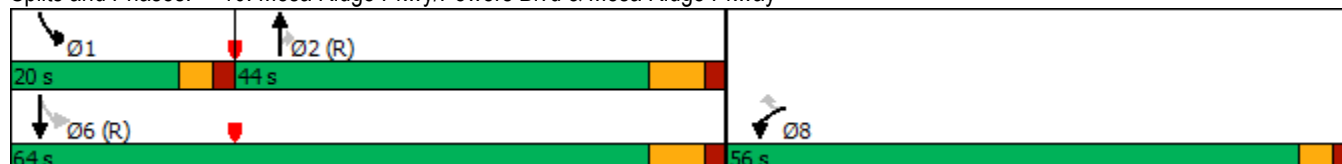
Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green
Natural Cycle: 80
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.87
Intersection Signal Delay: 26.1
Intersection Capacity Utilization 72.5%
Analysis Period (min) 15

Intersection LOS: C

ICU Level of Service C

Splits and Phases: 10: Mesa Ridge Pkwy/Powers Blvd & Mesa Ridge Pkwy



HCM 6th TWSC
5: Marksheffel Rd & Peaceful Valley Rd

Existing Traffic
PM Peak Hour

Intersection												
Int Delay, s/veh	1.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕	↕		↕	↕	↕	↕	
Traffic Vol, veh/h	15	2	0	37	1	39	2	461	66	35	426	14
Future Vol, veh/h	15	2	0	37	1	39	2	461	66	35	426	14
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	-	-	Stop	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	290	340	-	-
Veh in Median Storage, #	-	0	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	71	71	71	100	100	100	100	100	100	84	84	84
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	21	3	0	37	1	39	2	461	66	42	507	17







Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1099	1131	516	1066	1073	461	524	0	0	527	0	0
Stage 1	600	600	-	465	465	-	-	-	-	-	-	-
Stage 2	499	531	-	601	608	-	-	-	-	-	-	-
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	190	203	559	200	220	600	1043	-	-	1040	-	-
Stage 1	488	490	-	578	563	-	-	-	-	-	-	-
Stage 2	554	526	-	487	486	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	171	194	559	191	211	600	1043	-	-	1040	-	-
Mov Cap-2 Maneuver	171	194	-	320	327	-	-	-	-	-	-	-
Stage 1	487	470	-	576	561	-	-	-	-	-	-	-
Stage 2	516	524	-	465	467	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	29.1		14.6		0		0.6	
HCM LOS	D		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1043	-	-	173 320 600	1040	-	-
HCM Lane V/C Ratio	0.002	-	-	0.138 0.119 0.065	0.04	-	-
HCM Control Delay (s)	8.5	0	-	29.1 17.8 11.4	8.6	-	-
HCM Lane LOS	A	A	-	D C B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.5 0.4 0.2	0.1	-	-






HCM 6th TWSC
6: Marksheffel Rd & Mesa Ridge Pkwy

Existing Traffic
PM Peak Hour

Intersection						
Int Delay, s/veh	7.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	300	47	29	229	299	164
Future Vol, veh/h	300	47	29	229	299	164
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	0	500	-	-	290
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	100	100	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	333	52	29	229	332	182
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	619	332	514	0	-	0
Stage 1	332	-	-	-	-	-
Stage 2	287	-	-	-	-	-
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	452	710	1052	-	-	-
Stage 1	727	-	-	-	-	-
Stage 2	762	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	439	710	1052	-	-	-
Mov Cap-2 Maneuver	529	-	-	-	-	-
Stage 1	707	-	-	-	-	-
Stage 2	762	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	21	1		0		
HCM LOS	C					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1052	-	529	710	-	-
HCM Lane V/C Ratio	0.028	-	0.63	0.074	-	-
HCM Control Delay (s)	8.5	-	22.7	10.5	-	-
HCM Lane LOS	A	-	C	B	-	-
HCM 95th %tile Q(veh)	0.1	-	4.3	0.2	-	-








HCM 6th TWSC
7: Mesa Ridge Pkwy & Spring Glen Dr

Existing Traffic
PM Peak Hour

Intersection						
Int Delay, s/veh	2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	70	330	174	19	17	61
Future Vol, veh/h	70	330	174	19	17	61
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	390	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	86	86	100	100
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	70	330	202	22	17	61
Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	224	0	-	0	683	213
Stage 1	-	-	-	-	213	-
Stage 2	-	-	-	-	470	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1345	-	-	-	415	827
Stage 1	-	-	-	-	823	-
Stage 2	-	-	-	-	629	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1345	-	-	-	393	827
Mov Cap-2 Maneuver	-	-	-	-	393	-
Stage 1	-	-	-	-	780	-
Stage 2	-	-	-	-	629	-
Approach	EB	WB		SB		
HCM Control Delay, s	1.4	0		10.8		
HCM LOS				B		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1345	-	-	-	393	827
HCM Lane V/C Ratio	0.052	-	-	-	0.043	0.074
HCM Control Delay (s)	7.8	-	-	-	14.6	9.7
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0.2	-	-	-	0.1	0.2

Timings 10: Mesa Ridge Pkwy/Powers Blvd & Mesa Ridge Pkwy

Existing Traffic
PM Peak Hour

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	276	72	608	584	135	551
Future Volume (vph)	276	72	608	584	135	551
Turn Type	Prot	Perm	NA	Perm	pm+pt	NA
Protected Phases	8		2		1	6
Permitted Phases		8		2	6	
Detector Phase	8	8	2	2	1	6
Switch Phase						
Minimum Initial (s)	6.0	6.0	30.0	30.0	6.0	30.0
Minimum Split (s)	11.0	11.0	37.0	37.0	11.0	37.0
Total Split (s)	56.0	56.0	44.0	44.0	20.0	64.0
Total Split (%)	46.7%	46.7%	36.7%	36.7%	16.7%	53.3%
Yellow Time (s)	3.0	3.0	5.0	5.0	3.0	5.0
All-Red Time (s)	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
Total Lost Time (s)	5.0	5.0	7.0	7.0	5.0	7.0
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None	None	C-Max	C-Max	None	C-Max
Act Effect Green (s)	26.4	26.4	65.8	65.8	83.6	81.6
Actuated g/C Ratio	0.22	0.22	0.55	0.55	0.70	0.68
v/c Ratio	0.71	0.18	0.33	0.54	0.25	0.24
Control Delay	52.8	8.5	16.8	4.5	8.2	8.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	52.8	8.5	16.8	4.5	8.2	8.3
LOS	D	A	B	A	A	A
Approach Delay	43.6		10.8			8.3
Approach LOS	D		B			A

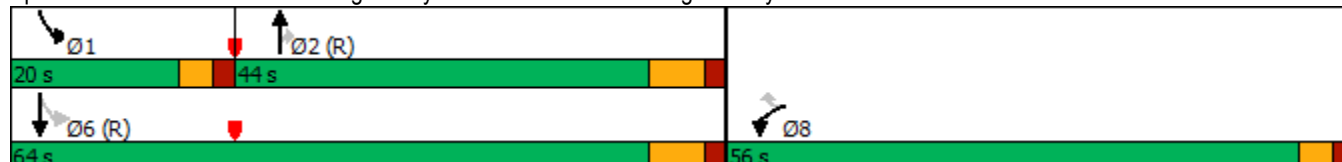
Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.71
Intersection Signal Delay: 15.0
Intersection Capacity Utilization 61.9%
Analysis Period (min) 15

Intersection LOS: B





ICU Level of Service B

Splits and Phases: 10: Mesa Ridge Pkwy/Powers Blvd & Mesa Ridge Pkwy












HCM 6th TWSC
4: Marksheffel Rd & Poa Annua St







Short-Term Background Traffic
AM Peak Hour

Intersection						
Int Delay, s/veh	0.5					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	21	9	626	7	3	515
Future Vol, veh/h	21	9	626	7	3	515
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	-	-	-	290	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	87	87	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	23	10	720	8	3	560
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1290	724	0	0	728	0
Stage 1	724	-	-	-	-	-
Stage 2	566	-	-	-	-	-
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	180	426	-	-	876	-
Stage 1	480	-	-	-	-	-
Stage 2	568	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	179	426	-	-	876	-
Mov Cap-2 Maneuver	318	-	-	-	-	-
Stage 1	479	-	-	-	-	-
Stage 2	568	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	16.6	0	0.1			
HCM LOS	C					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	344	876	-	
HCM Lane V/C Ratio	-	-	0.095	0.004	-	
HCM Control Delay (s)	-	-	16.6	9.1	-	
HCM Lane LOS	-	-	C	A	-	
HCM 95th %tile Q(veh)	-	-	0.3	0	-	

HCM 6th TWSC
5: Marksheffel Rd & Peaceful Valley Rd






Short-Term Background Traffic
AM Peak Hour

Intersection												
Int Delay, s/veh	3.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	34	1	10	56	1	55	2	544	24	29	483	24
Future Vol, veh/h	34	1	10	56	1	55	2	544	24	29	483	24
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	-	-	Stop	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	340	-	290	340	-	290
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	100	100	100	87	87	87	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	37	1	11	56	1	55	2	625	28	29	483	24
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1185	1198	483	1188	1194	625	507	0	0	653	0	0
Stage 1	541	541	-	629	629	-	-	-	-	-	-	-
Stage 2	644	657	-	559	565	-	-	-	-	-	-	-
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	166	186	584	165	187	485	1058	-	-	934	-	-
Stage 1	525	521	-	470	475	-	-	-	-	-	-	-
Stage 2	461	462	-	513	508	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	143	180	584	157	181	485	1058	-	-	934	-	-
Mov Cap-2 Maneuver	143	180	-	157	181	-	-	-	-	-	-	-
Stage 1	524	505	-	469	474	-	-	-	-	-	-	-
Stage 2	407	461	-	487	492	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s	33.8		27.2		0		0.5					
HCM LOS	D		D									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1WBLn2	SBL	SBT	SBR					
Capacity (veh/h)	1058	-	-	173	157	485	934	-	-			
HCM Lane V/C Ratio	0.002	-	-	0.283	0.363	0.113	0.031	-	-			
HCM Control Delay (s)	8.4	-	-	33.8	40.5	13.4	9	-	-			
HCM Lane LOS	A	-	-	D	E	B	A	-	-			
HCM 95th %tile Q(veh)	0	-	-	1.1	1.5	0.4	0.1	-	-			

Intersection						
Int Delay, s/veh	3.7					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	186	71	38	384	353	196
Future Vol, veh/h	186	71	38	384	353	196
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	0	500	-	-	290
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	95	95	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	186	71	40	404	397	220
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	881	397	617	0	-	0
Stage 1	397	-	-	-	-	-
Stage 2	484	-	-	-	-	-
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	317	652	963	-	-	-
Stage 1	679	-	-	-	-	-
Stage 2	620	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	304	652	963	-	-	-
Mov Cap-2 Maneuver	418	-	-	-	-	-
Stage 1	650	-	-	-	-	-
Stage 2	620	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	17.8	0.8		0		
HCM LOS	C					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	963	-	418	652	-	-
HCM Lane V/C Ratio	0.042	-	0.445	0.109	-	-
HCM Control Delay (s)	8.9	-	20.3	11.2	-	-
HCM Lane LOS	A	-	C	B	-	-
HCM 95th %tile Q(veh)	0.1	-	2.2	0.4	-	-













HCM 6th TWSC
7: Mesa Ridge Pkwy & Spring Glen

Short-Term Background Traffic
AM Peak Hour

Intersection						
Int Delay, s/veh	3.9					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	77	230	225	9	27	151
Future Vol, veh/h	77	230	225	9	27	151
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	475	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	82	82	81	81
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	77	230	274	11	33	186
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	285	0	-	0	664	280
Stage 1	-	-	-	-	280	-
Stage 2	-	-	-	-	384	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1277	-	-	-	426	759
Stage 1	-	-	-	-	767	-
Stage 2	-	-	-	-	688	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1277	-	-	-	400	759
Mov Cap-2 Maneuver	-	-	-	-	400	-
Stage 1	-	-	-	-	721	-
Stage 2	-	-	-	-	688	-
Approach	EB	WB		SB		
HCM Control Delay, s	2	0		11.8		
HCM LOS	B					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1277	-	-	-	400	759
HCM Lane V/C Ratio	0.06	-	-	-	0.083	0.246
HCM Control Delay (s)	8	-	-	-	14.8	11.3
HCM Lane LOS	A	-	-	-	B	B
HCM 95th %tile Q(veh)	0.2	-	-	-	0.3	1

Timings 10: Mesa Ridge Pkwy/Powers Blvd & Mesa Ridge Pkwy

Short-Term Background Traffic
AM Peak Hour

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	591	196	507	224	95	603
Future Volume (vph)	591	196	507	224	95	603
Turn Type	Prot	Perm	NA	Perm	pm+pt	NA
Protected Phases	8		2		1	6
Permitted Phases		8		2	6	
Detector Phase	8	8	2	2	1	6
Switch Phase						
Minimum Initial (s)	6.0	6.0	30.0	30.0	6.0	30.0
Minimum Split (s)	11.0	11.0	37.0	37.0	11.0	37.0
Total Split (s)	56.0	56.0	44.0	44.0	20.0	64.0
Total Split (%)	46.7%	46.7%	36.7%	36.7%	16.7%	53.3%
Yellow Time (s)	3.0	3.0	5.0	5.0	3.0	5.0
All-Red Time (s)	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
Total Lost Time (s)	5.0	5.0	7.0	7.0	5.0	7.0
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None	None	C-Max	C-Max	None	C-Max
Act Effect Green (s)	34.6	34.6	57.9	57.9	75.4	73.4
Actuated g/C Ratio	0.29	0.29	0.48	0.48	0.63	0.61
v/c Ratio	0.69	0.37	0.30	0.25	0.19	0.31
Control Delay	41.4	5.3	20.8	3.7	11.0	12.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	41.4	5.3	20.8	3.7	11.0	12.5
LOS	D	A	C	A	B	B
Approach Delay	32.4		15.6			12.3
Approach LOS	C		B			B

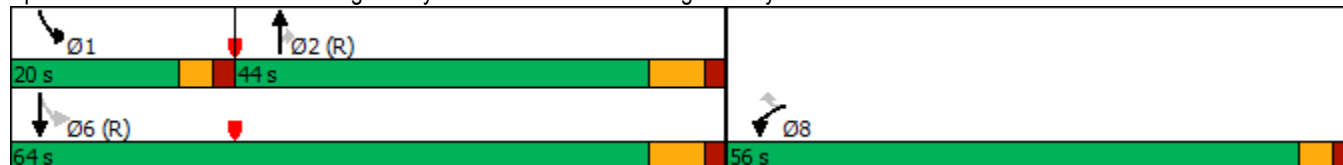
Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green
Natural Cycle: 65
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.69
Intersection Signal Delay: 20.8
Intersection Capacity Utilization 61.3%
Analysis Period (min) 15

Intersection LOS: C





ICU Level of Service B

Splits and Phases: 10: Mesa Ridge Pkwy/Powers Blvd & Mesa Ridge Pkwy



HCM 6th TWSC
4: Marksheffel Rd & Poa Annua St

Short-Term Background Traffic
PM Peak Hour

Intersection						
Int Delay, s/veh	0.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	11	9	573	18	16	518
Future Vol, veh/h	11	9	573	18	16	518
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	-	-	-	290	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	84	84
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	12	10	623	20	19	617
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1288	633	0	0	643	0
Stage 1	633	-	-	-	-	-
Stage 2	655	-	-	-	-	-
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	181	480	-	-	942	-
Stage 1	529	-	-	-	-	-
Stage 2	517	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	177	480	-	-	942	-
Mov Cap-2 Maneuver	313	-	-	-	-	-
Stage 1	518	-	-	-	-	-
Stage 2	517	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	15.3	0	0.3			
HCM LOS	C					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	371	942	-	
HCM Lane V/C Ratio	-	-	0.059	0.02	-	
HCM Control Delay (s)	-	-	15.3	8.9	-	
HCM Lane LOS	-	-	C	A	-	
HCM 95th %tile Q(veh)	-	-	0.2	0.1	-	

HCM 6th TWSC
5: Marksheffel Rd & Peaceful Valley Rd

Short-Term Background Traffic
PM Peak Hour

Intersection												
Int Delay, s/veh	2.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕	↕	↕	↕	↕	↕	↕	↕
Traffic Vol, veh/h	23	2	1	37	1	39	3	529	66	35	466	28
Future Vol, veh/h	23	2	1	37	1	39	3	529	66	35	466	28
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	-	-	Stop	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	340	-	290	340	-	290
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	71	71	71	100	100	100	100	100	100	84	84	84
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	32	3	1	37	1	39	3	529	66	42	555	33







Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	1208	1240	555	1193	1207	529	588	0	0	595	0	0
Stage 1	639	639	-	535	535	-	-	-	-	-	-	-
Stage 2	569	601	-	658	672	-	-	-	-	-	-	-
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	160	175	531	164	183	550	987	-	-	981	-	-
Stage 1	464	470	-	529	524	-	-	-	-	-	-	-
Stage 2	507	489	-	453	454	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	143	167	531	156	175	550	987	-	-	981	-	-
Mov Cap-2 Maneuver	143	167	-	156	175	-	-	-	-	-	-	-
Stage 1	463	450	-	527	522	-	-	-	-	-	-	-
Stage 2	469	488	-	430	434	-	-	-	-	-	-	-

Approach	EB		WB		NB			SB				
HCM Control Delay, s	36.9		23.5		0			0.6				
HCM LOS	E		C									

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1WBLn2	SBL	SBT	SBR
Capacity (veh/h)	987	-	-	149 156 550	981	-	-
HCM Lane V/C Ratio	0.003	-	-	0.246 0.244 0.071	0.042	-	-
HCM Control Delay (s)	8.7	-	-	36.9 35.4 12	8.8	-	-
HCM Lane LOS	A	-	-	E E B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.9 0.9 0.2	0.1	-	-






HCM 6th TWSC
6: Marksheffel Rd & Mesa Ridge Pkwy

Short-Term Background Traffic
PM Peak Hour

Intersection						
Int Delay, s/veh	8.9					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	320	49	33	278	328	176
Future Vol, veh/h	320	49	33	278	328	176
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	0	500	-	-	290
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	100	100	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	356	54	33	278	364	196
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	708	364	560	0	-	0
Stage 1	364	-	-	-	-	-
Stage 2	344	-	-	-	-	-
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	401	681	1011	-	-	-
Stage 1	703	-	-	-	-	-
Stage 2	718	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	388	681	1011	-	-	-
Mov Cap-2 Maneuver	489	-	-	-	-	-
Stage 1	680	-	-	-	-	-
Stage 2	718	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	27.1	0.9		0		
HCM LOS	D					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1011	-	489	681	-	-
HCM Lane V/C Ratio	0.033	-	0.727	0.08	-	-
HCM Control Delay (s)	8.7	-	29.6	10.7	-	-
HCM Lane LOS	A	-	D	B	-	-
HCM 95th %tile Q(veh)	0.1	-	5.9	0.3	-	-













HCM 6th TWSC
7: Mesa Ridge Pkwy & Spring Glen

Short-Term Background Traffic
PM Peak Hour

Intersection						
Int Delay, s/veh	3.2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	161	350	186	23	19	114
Future Vol, veh/h	161	350	186	23	19	114
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	475	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	86	86	100	100
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	161	350	216	27	19	114
Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	243	0	-	0	902	230
Stage 1	-	-	-	-	230	-
Stage 2	-	-	-	-	672	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1323	-	-	-	308	809
Stage 1	-	-	-	-	808	-
Stage 2	-	-	-	-	508	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1323	-	-	-	270	809
Mov Cap-2 Maneuver	-	-	-	-	270	-
Stage 1	-	-	-	-	709	-
Stage 2	-	-	-	-	508	-
Approach	EB	WB		SB		
HCM Control Delay, s	2.6	0		11.5		
HCM LOS				B		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1323	-	-	-	270	809
HCM Lane V/C Ratio	0.122	-	-	-	0.07	0.141
HCM Control Delay (s)	8.1	-	-	-	19.3	10.2
HCM Lane LOS	A	-	-	-	C	B
HCM 95th %tile Q(veh)	0.4	-	-	-	0.2	0.5

Timings 10: Mesa Ridge Pkwy/Powers Blvd & Mesa Ridge Pkwy

Short-Term Background Traffic
PM Peak Hour

												
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT						
Lane Configurations												
Traffic Volume (vph)	327	86	648	671	159	587						
Future Volume (vph)	327	86	648	671	159	587						
Turn Type	Prot	Perm	NA	Perm	pm+pt	NA						
Protected Phases	8		2		1	6						
Permitted Phases		8		2	6							
Detector Phase	8	8	2	2	1	6						
Switch Phase												
Minimum Initial (s)	6.0	6.0	30.0	30.0	6.0	30.0						
Minimum Split (s)	11.0	11.0	37.0	37.0	11.0	37.0						
Total Split (s)	56.0	56.0	44.0	44.0	20.0	64.0						
Total Split (%)	46.7%	46.7%	36.7%	36.7%	16.7%	53.3%						
Yellow Time (s)	3.0	3.0	5.0	5.0	3.0	5.0						
All-Red Time (s)	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						
Total Lost Time (s)	5.0	5.0	7.0	7.0	5.0	7.0						
Lead/Lag			Lag	Lag	Lead							
Lead-Lag Optimize?			Yes	Yes	Yes							
Recall Mode	None	None	C-Max	C-Max	None	C-Max						
Act Effect Green (s)	19.1	19.1	73.2	73.2	90.9	88.9						
Actuated g/C Ratio	0.16	0.16	0.61	0.61	0.76	0.74						
v/c Ratio	0.60	0.27	0.31	0.58	0.28	0.23						
Control Delay	51.1	10.6	12.4	4.5	5.6	5.4						
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0						
Total Delay	51.1	10.6	12.4	4.5	5.6	5.4						
LOS	D	B	B	A	A	A						
Approach Delay	42.7		8.4			5.5						
Approach LOS	D		A			A						

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.60

Intersection Signal Delay: 13.0

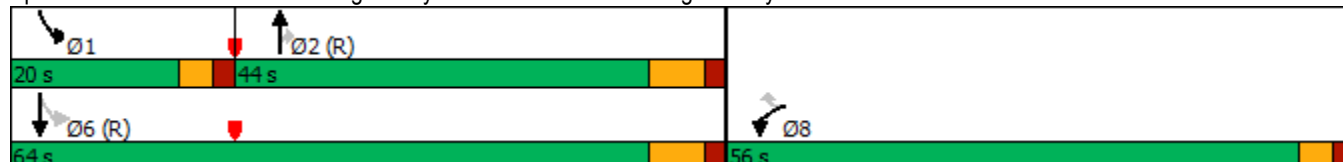
Intersection LOS: B

Intersection Capacity Utilization 60.4%

ICU Level of Service B








Analysis Period (min) 15

Splits and Phases: 10: Mesa Ridge Pkwy/Powers Blvd & Mesa Ridge Pkwy



HCM 6th TWSC
4: Marksheffel Rd & Poa Annua St

Short-Term Total Traffic
AM Peak Hour

Intersection												
Int Delay, s/veh	1.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	0	21	21	0	9	7	629	7	3	516	7
Future Vol, veh/h	20	0	21	21	0	9	7	629	7	3	516	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	290	-	-	290	-	290
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	87	87	87	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	22	0	23	23	0	10	8	723	8	3	561	8
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1315	1314	561	1326	1318	727	569	0	0	731	0	0
Stage 1	567	567	-	743	743	-	-	-	-	-	-	-
Stage 2	748	747	-	583	575	-	-	-	-	-	-	-
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	135	158	527	133	157	424	1003	-	-	873	-	-
Stage 1	508	507	-	407	422	-	-	-	-	-	-	-
Stage 2	404	420	-	498	503	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	131	156	527	126	155	424	1003	-	-	873	-	-
Mov Cap-2 Maneuver	131	156	-	126	155	-	-	-	-	-	-	-
Stage 1	504	505	-	404	419	-	-	-	-	-	-	-
Stage 2	392	417	-	475	501	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s	26.3		33.2		0.1		0.1					
HCM LOS	D		D									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR					
Capacity (veh/h)	1003	-	-	213	160	873	-	-				
HCM Lane V/C Ratio	0.008	-	-	0.209	0.204	0.004	-	-				
HCM Control Delay (s)	8.6	-	-	26.3	33.2	9.1	-	-				
HCM Lane LOS	A	-	-	D	D	A	-	-				
HCM 95th %tile Q(veh)	0	-	-	0.8	0.7	0	-	-				

HCM 6th TWSC
5: Marksheffel Rd & Peaceful Valley Rd

Short-Term Total Traffic
AM Peak Hour

Intersection												
Int Delay, s/veh	4.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔	↔	↔	↔	↔	↔	↔	↔
Traffic Vol, veh/h	37	1	40	56	1	55	8	551	24	29	504	25
Future Vol, veh/h	37	1	40	56	1	55	8	551	24	29	504	25
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	-	-	Stop	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	340	-	290	340	-	290
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	100	100	100	87	87	87	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	40	1	43	56	1	55	9	633	28	29	504	25







Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1228	1241	504	1248	1238	633	529	0	0	661	0	0
Stage 1	562	562	-	651	651	-	-	-	-	-	-	-
Stage 2	666	679	-	597	587	-	-	-	-	-	-	-
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	155	175	568	150	176	480	1038	-	-	927	-	-
Stage 1	512	510	-	457	465	-	-	-	-	-	-	-
Stage 2	449	451	-	490	497	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	133	168	568	134	169	480	1038	-	-	927	-	-
Mov Cap-2 Maneuver	133	168	-	134	169	-	-	-	-	-	-	-
Stage 1	507	494	-	453	461	-	-	-	-	-	-	-
Stage 2	393	447	-	437	482	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	31.3		32.3		0.1		0.5	
HCM LOS	D		D					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1038	-	-	220 134 480	927	-	-
HCM Lane V/C Ratio	0.009	-	-	0.385 0.425 0.115	0.031	-	-
HCM Control Delay (s)	8.5	-	-	31.3 50.4 13.5	9	-	-
HCM Lane LOS	A	-	-	D F B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	1.7 1.9 0.4	0.1	-	-







HCM 6th TWSC
6: Marksheffel Rd & Mesa Ridge Pkwy

Short-Term Total Traffic
AM Peak Hour

Intersection						
Int Delay, s/veh	3.9					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	198	71	38	386	356	243
Future Vol, veh/h	198	71	38	386	356	243
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	0	500	-	-	290
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	95	95	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	198	71	40	406	400	273
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	886	400	673	0	-	0
Stage 1	400	-	-	-	-	-
Stage 2	486	-	-	-	-	-
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	315	650	918	-	-	-
Stage 1	677	-	-	-	-	-
Stage 2	618	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	301	650	918	-	-	-
Mov Cap-2 Maneuver	415	-	-	-	-	-
Stage 1	647	-	-	-	-	-
Stage 2	618	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	18.6	0.8		0		
HCM LOS	C					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	918	-	415	650	-	-
HCM Lane V/C Ratio	0.044	-	0.477	0.109	-	-
HCM Control Delay (s)	9.1	-	21.3	11.2	-	-
HCM Lane LOS	A	-	C	B	-	-
HCM 95th %tile Q(veh)	0.1	-	2.5	0.4	-	-






HCM 6th TWSC
6: Marksheffel Rd & Mesa Ridge Pkwy

Short-Term Total Traffic (With LT Accel Lane)
AM Peak Hour

Intersection						
Int Delay, s/veh	3.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	198	71	38	386	356	243
Future Vol, veh/h	198	71	38	386	356	243
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	0	500	-	-	290
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	95	95	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	198	71	40	406	400	273
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	886	400	673	0	-	0
Stage 1	400	-	-	-	-	-
Stage 2	486	-	-	-	-	-
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	315	650	918	-	-	-
Stage 1	677	-	-	-	-	-
Stage 2	618	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	301	650	918	-	-	-
Mov Cap-2 Maneuver	480	-	-	-	-	-
Stage 1	647	-	-	-	-	-
Stage 2	618	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	16	0.8		0		
HCM LOS	C					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	918	-	480	650	-	-
HCM Lane V/C Ratio	0.044	-	0.413	0.109	-	-
HCM Control Delay (s)	9.1	-	17.7	11.2	-	-
HCM Lane LOS	A	-	C	B	-	-
HCM 95th %tile Q(veh)	0.1	-	2	0.4	-	-













HCM 6th TWSC
7: Mesa Ridge Pkwy & Spring Glen

Short-Term Total Traffic
AM Peak Hour

Intersection						
Int Delay, s/veh	4					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	83	241	272	9	27	156
Future Vol, veh/h	83	241	272	9	27	156
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	475	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	82	82	81	81
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	83	241	332	11	33	193
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	343	0	-	0	745	338
Stage 1	-	-	-	-	338	-
Stage 2	-	-	-	-	407	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1216	-	-	-	382	704
Stage 1	-	-	-	-	722	-
Stage 2	-	-	-	-	672	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1216	-	-	-	356	704
Mov Cap-2 Maneuver	-	-	-	-	356	-
Stage 1	-	-	-	-	673	-
Stage 2	-	-	-	-	672	-
Approach	EB	WB		SB		
HCM Control Delay, s	2.1	0		12.6		
HCM LOS	B					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1216	-	-	-	356	704
HCM Lane V/C Ratio	0.068	-	-	-	0.094	0.274
HCM Control Delay (s)	8.2	-	-	-	16.2	12
HCM Lane LOS	A	-	-	-	C	B
HCM 95th %tile Q(veh)	0.2	-	-	-	0.3	1.1

Timings
10: Mesa Ridge Pkwy/Powers Blvd & Mesa Ridge Pkway

Short-Term Total Traffic
AM Peak Hour

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	638	201	507	239	97	603
Future Volume (vph)	638	201	507	239	97	603
Turn Type	Prot	Perm	NA	Perm	pm+pt	NA
Protected Phases	8		2		1	6
Permitted Phases		8		2	6	
Detector Phase	8	8	2	2	1	6
Switch Phase						
Minimum Initial (s)	6.0	6.0	30.0	30.0	6.0	30.0
Minimum Split (s)	11.0	11.0	37.0	37.0	11.0	37.0
Total Split (s)	56.0	56.0	44.0	44.0	20.0	64.0
Total Split (%)	46.7%	46.7%	36.7%	36.7%	16.7%	53.3%
Yellow Time (s)	3.0	3.0	5.0	5.0	3.0	5.0
All-Red Time (s)	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
Total Lost Time (s)	5.0	5.0	7.0	7.0	5.0	7.0
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None	None	C-Max	C-Max	None	C-Max
Act Effect Green (s)	36.9	36.9	55.4	55.4	73.1	71.1
Actuated g/C Ratio	0.31	0.31	0.46	0.46	0.61	0.59
v/c Ratio	0.70	0.36	0.31	0.28	0.20	0.32
Control Delay	40.1	4.9	22.5	4.0	12.1	13.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	40.1	4.9	22.5	4.0	12.1	13.7
LOS	D	A	C	A	B	B
Approach Delay	31.6		16.6			13.5
Approach LOS	C		B			B

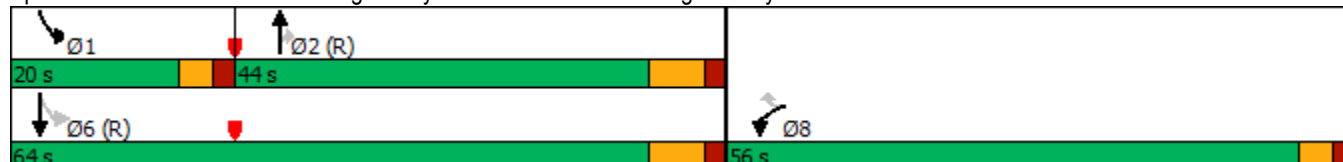
Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green
 Natural Cycle: 65
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.70
 Intersection Signal Delay: 21.5
 Intersection Capacity Utilization 62.7%
 Analysis Period (min) 15

Intersection LOS: C

ICU Level of Service B

Splits and Phases: 10: Mesa Ridge Pkwy/Powers Blvd & Mesa Ridge Pkway



HCM 6th TWSC
4: Marksheffel Rd & Poa Annua St

Short-Term Total Traffic
PM Peak Hour

Intersection												
Int Delay, s/veh	1.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	↕
Traffic Vol, veh/h	13	0	14	11	0	9	23	575	18	16	522	22
Future Vol, veh/h	13	0	14	11	0	9	23	575	18	16	522	22
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	-	-	-	-	-	-	290	-	-	290	-	290
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	84	84	84
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	14	0	15	12	0	10	25	625	20	19	621	26

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1349	1354	621	1365	1370	635	647	0	0	645	0	0
Stage 1	659	659	-	685	685	-	-	-	-	-	-	-
Stage 2	690	695	-	680	685	-	-	-	-	-	-	-
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	128	150	487	125	146	478	939	-	-	940	-	-
Stage 1	453	461	-	438	448	-	-	-	-	-	-	-
Stage 2	435	444	-	441	448	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	121	143	487	117	139	478	939	-	-	940	-	-
Mov Cap-2 Maneuver	121	143	-	117	139	-	-	-	-	-	-	-
Stage 1	441	452	-	426	436	-	-	-	-	-	-	-
Stage 2	415	432	-	419	439	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	26.3		28.2		0.3		0.3	
HCM LOS	D		D					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	939	-	-	198	177	940	-
HCM Lane V/C Ratio	0.027	-	-	0.148	0.123	0.02	-
HCM Control Delay (s)	8.9	-	-	26.3	28.2	8.9	-
HCM Lane LOS	A	-	-	D	D	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.5	0.4	0.1	-

HCM 6th TWSC
5: Marksheffel Rd & Peaceful Valley Rd

Short-Term Total Traffic
PM Peak Hour

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	25	2	21	37	1	39	23	552	66	35	480	32
Future Vol, veh/h	25	2	21	37	1	39	23	552	66	35	480	32
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	-	-	Stop	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	340	-	290	340	-	290
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	71	71	71	100	100	100	100	100	100	84	84	84
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	35	3	30	37	1	39	23	552	66	42	571	38







Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1287	1319	571	1289	1291	552	609	0	0	618	0	0
Stage 1	655	655	-	598	598	-	-	-	-	-	-	-
Stage 2	632	664	-	691	693	-	-	-	-	-	-	-
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	141	157	520	141	163	533	970	-	-	962	-	-
Stage 1	455	463	-	489	491	-	-	-	-	-	-	-
Stage 2	468	458	-	435	445	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	123	146	520	124	152	533	970	-	-	962	-	-
Mov Cap-2 Maneuver	123	146	-	124	152	-	-	-	-	-	-	-
Stage 1	444	443	-	477	479	-	-	-	-	-	-	-
Stage 2	423	447	-	390	425	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	34.8		28.9		0.3		0.6	
HCM LOS	D		D					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1WBLn2	SBL	SBT	SBR
Capacity (veh/h)	970	-	-	187 125 533	962	-	-
HCM Lane V/C Ratio	0.024	-	-	0.362 0.304 0.073	0.043	-	-
HCM Control Delay (s)	8.8	-	-	34.8 45.9 12.3	8.9	-	-
HCM Lane LOS	A	-	-	D E B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	1.5 1.2 0.2	0.1	-	-







HCM 6th TWSC
6: Marksheffel Rd & Mesa Ridge Pkwy

Short-Term Total Traffic
PM Peak Hour

Intersection						
Int Delay, s/veh	11.7					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	358	49	33	283	331	208
Future Vol, veh/h	358	49	33	283	331	208
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	0	500	-	-	290
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	100	100	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	398	54	33	283	368	231
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	717	368	599	0	-	0
Stage 1	368	-	-	-	-	-
Stage 2	349	-	-	-	-	-
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	~ 396	677	978	-	-	-
Stage 1	700	-	-	-	-	-
Stage 2	714	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 383	677	978	-	-	-
Mov Cap-2 Maneuver	485	-	-	-	-	-
Stage 1	676	-	-	-	-	-
Stage 2	714	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	34.8	0.9		0		
HCM LOS	D					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	978	-	485	677	-	-
HCM Lane V/C Ratio	0.034	-	0.82	0.08	-	-
HCM Control Delay (s)	8.8	-	38.1	10.8	-	-
HCM Lane LOS	A	-	E	B	-	-
HCM 95th %tile Q(veh)	0.1	-	7.9	0.3	-	-
Notes						
~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon						






HCM 6th TWSC
6: Marksheffel Rd & Mesa Ridge Pkwy

Short-Term Total Traffic (With NB LT Accel Lane)
PM Peak Hour

Intersection						
Int Delay, s/veh	8.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	358	49	33	283	331	208
Future Vol, veh/h	358	49	33	283	331	208
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	0	500	-	-	290
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	100	100	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	398	54	33	283	368	231
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	717	368	599	0	-	0
Stage 1	368	-	-	-	-	-
Stage 2	349	-	-	-	-	-
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	~ 396	677	978	-	-	-
Stage 1	700	-	-	-	-	-
Stage 2	714	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 383	677	978	-	-	-
Mov Cap-2 Maneuver	550	-	-	-	-	-
Stage 1	676	-	-	-	-	-
Stage 2	714	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	24.9	0.9		0		
HCM LOS	C					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	978	-	550	677	-	-
HCM Lane V/C Ratio	0.034	-	0.723	0.08	-	-
HCM Control Delay (s)	8.8	-	26.8	10.8	-	-
HCM Lane LOS	A	-	D	B	-	-
HCM 95th %tile Q(veh)	0.1	-	6	0.3	-	-
Notes						
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon













HCM 6th TWSC
7: Mesa Ridge Pkwy & Spring Glen

Short-Term Total Traffic
PM Peak Hour

Intersection						
Int Delay, s/veh	3.2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	182	388	217	23	19	118
Future Vol, veh/h	182	388	217	23	19	118
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	475	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	100	100	86	86	100	100
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	182	388	252	27	19	118
Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	279	0	-	0	1018	266
Stage 1	-	-	-	-	266	-
Stage 2	-	-	-	-	752	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1284	-	-	-	263	773
Stage 1	-	-	-	-	779	-
Stage 2	-	-	-	-	466	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1284	-	-	-	226	773
Mov Cap-2 Maneuver	-	-	-	-	226	-
Stage 1	-	-	-	-	668	-
Stage 2	-	-	-	-	466	-
Approach	EB	WB		SB		
HCM Control Delay, s	2.6	0		12.2		
HCM LOS				B		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1284	-	-	-	226	773
HCM Lane V/C Ratio	0.142	-	-	-	0.084	0.153
HCM Control Delay (s)	8.3	-	-	-	22.4	10.5
HCM Lane LOS	A	-	-	-	C	B
HCM 95th %tile Q(veh)	0.5	-	-	-	0.3	0.5

Timings
10: Mesa Ridge Pkwy/Powers Blvd & Mesa Ridge Pkway

Short-Term Total Traffic
PM Peak Hour

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	359	90	648	724	165	587
Future Volume (vph)	359	90	648	724	165	587
Turn Type	Prot	Perm	NA	Perm	pm+pt	NA
Protected Phases	8		2		1	6
Permitted Phases		8		2	6	
Detector Phase	8	8	2	2	1	6
Switch Phase						
Minimum Initial (s)	6.0	6.0	30.0	30.0	6.0	30.0
Minimum Split (s)	11.0	11.0	37.0	37.0	11.0	37.0
Total Split (s)	56.0	56.0	44.0	44.0	20.0	64.0
Total Split (%)	46.7%	46.7%	36.7%	36.7%	16.7%	53.3%
Yellow Time (s)	3.0	3.0	5.0	5.0	3.0	5.0
All-Red Time (s)	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
Total Lost Time (s)	5.0	5.0	7.0	7.0	5.0	7.0
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None	None	C-Max	C-Max	None	C-Max
Act Effect Green (s)	20.4	20.4	71.7	71.7	89.6	87.6
Actuated g/C Ratio	0.17	0.17	0.60	0.60	0.75	0.73
v/c Ratio	0.61	0.26	0.32	0.63	0.29	0.23
Control Delay	50.3	9.9	13.4	5.1	6.1	5.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	50.3	9.9	13.4	5.1	6.1	5.9
LOS	D	A	B	A	A	A
Approach Delay	42.2		9.0			6.0
Approach LOS	D		A			A

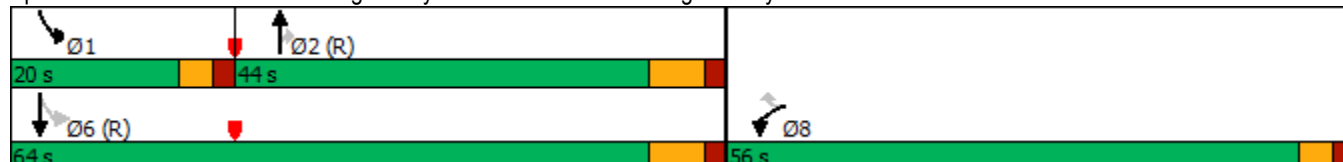
Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green
 Natural Cycle: 60
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.63
 Intersection Signal Delay: 13.7
 Intersection Capacity Utilization 64.0%
 Analysis Period (min) 15

Intersection LOS: B

ICU Level of Service B

Splits and Phases: 10: Mesa Ridge Pkwy/Powers Blvd & Mesa Ridge Pkway



Queuing and Blocking Report

Short-Term Total Traffic

AM Peak Hour

Intersection: 10: Mesa Ridge Pkwy/Powers Blvd & Mesa Ridge Pkwy

Movement	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	L	R	T	T	R	L	T	T
Maximum Queue (ft)	364	388	84	232	199	102	106	173	146
Average Queue (ft)	215	258	39	140	73	45	43	97	57
95th Queue (ft)	307	348	69	218	169	81	87	156	120
Link Distance (ft)			824	517	517			1437	1437
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)	500	500				150	1000		
Storage Blk Time (%)					0				
Queuing Penalty (veh)					1				

Queuing and Blocking Report

Intersection: 10: Mesa Ridge Pkwy/Powers Blvd & Mesa Ridge Pkwy

Movement	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	L	R	T	T	R	L	T	T
Maximum Queue (ft)	198	226	61	341	460	250	187	185	142
Average Queue (ft)	104	155	23	183	152	169	86	86	55
95th Queue (ft)	205	221	48	287	348	272	150	157	122
Link Distance (ft)			824	517	517			1437	1437
Upstream Blk Time (%)					0				
Queuing Penalty (veh)					0				
Storage Bay Dist (ft)	350	350				150	1000		
Storage Blk Time (%)					2	14			
Queuing Penalty (veh)					14	46			

Queuing and Blocking Report

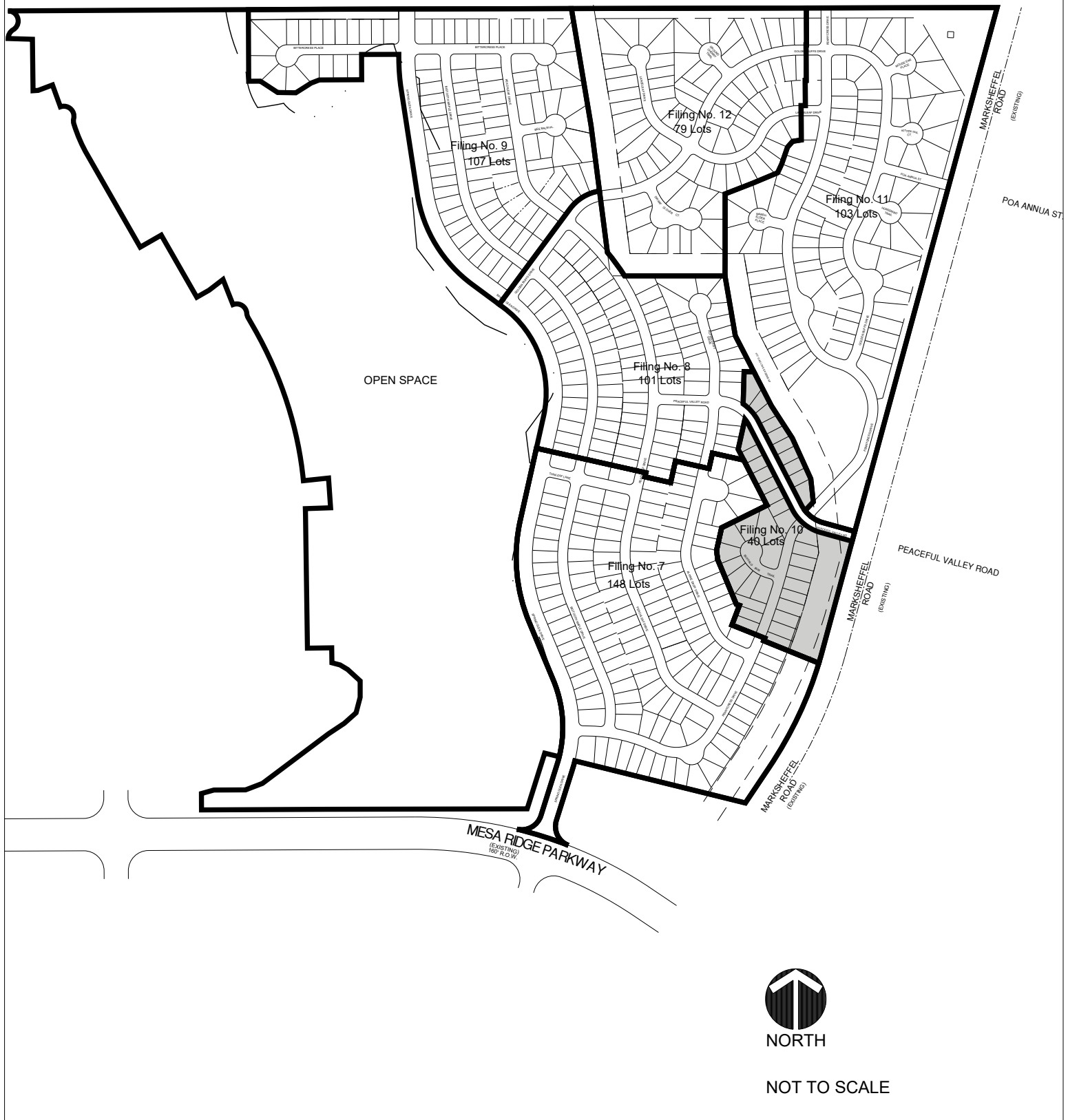
Intersection: 10: Mesa Ridge Pkwy/Powers Blvd & Mesa Ridge Pkwy

Movement	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	L	R	T	T	R	L	T	T
Maximum Queue (ft)	469	446	447	366	325	206	188	313	295
Average Queue (ft)	311	278	180	237	190	82	104	193	184
95th Queue (ft)	436	408	360	330	286	152	167	280	270
Link Distance (ft)	1202	1202	1202	517	517			1437	1437
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)						150	1000		
Storage Blk Time (%)					4	0			
Queuing Penalty (veh)					14	1			

Additional Attachments

The Glen at Widefield Filing 10





VICINITY MAP

EXHIBIT A

LAND DESCRIPTION:

PARCEL "A"

A tract of land located in a Portion of the Southwest One-quarter (SW1/4) of Section 22 and the Northwest One-quarter (NW1/4) of Section 27, Township 15 South (T15S), Range 65 West (R65W) of the 6th P.M., County of El Paso, State of Colorado, being more particularly described as follows:

Beginning at the most Northeast corner of Lot 98, Glen at Widefield Subdivision No. 8 as recorded under Reception No. 218714205 in the records of the Clerk and Recorder's Office, County of El Paso, State of Colorado. Said point being also a point on the Southerly Right-of-Way line of Peaceful Valley Road as platted in said Glen at Widefield Subdivision No. 8; Thence along said Southerly Right-of-Way line the following four (4) courses: 1.) along the arc of a non-tangential curve to the right, having a central angle of 12°07'10", a radius of 175.00 feet, an arc length of 37.02 feet, whose chord bears S33°17'00"E; 2.) Thence S27°13'25"E, a distance of 468.13 feet; 3.) Thence along the arc of a curve to the left having a central angle of 47°14'18", a radius of 225.00 feet, an arc length of 185.50 feet; 4.) Thence S74°27'43"E, a distance of 162.02 feet to a point on the Westerly Right-of-Way line of Marksheffel Road; Thence along said Westerly Right-of-Way line, S15°11'44"W, a distance of 560.50 feet; Thence continuing along said Westerly Right-of-Way line on the arc of a curve to the right having a central angle of 01°53'00", a radius of 1965.40 feet, an arc length of 64.60 feet to a point on the Northerly line of the Glen at Widefield Subdivision Filing No. 7 as recorded under Reception No. 217713903 in the records of the Clerk and Recorder's Office of said County; Thence along the Northerly and Westerly boundary lines of said Glen at Widefield Filing No. 7, the following ten (10) courses: 1.) N67°54'25"W, a distance of 293.95 feet; 2.) Thence along the arc of a non-tangential curve to the left having a central angle of 00°15'40", a radius of 3025.00 feet, an arc length of 13.78 feet, whose chord bears N21°57'45"E; 3.) Thence N68°10'05"W, a distance of 175.00 feet; 4.) Thence N20°47'09"E, a distance of 104.08 feet; 5.) Thence N70°15'38"W, a distance of 16.28 feet; 6.) Thence N22°38'09"W, a distance of 239.19 feet; 7.) Thence N07°13'27"W, a distance of 46.12 feet; 8.) Thence N12°37'51"E, a distance of 115.00 feet; 9.) Thence N62°46'35"E, a distance of 250.28 feet; 10.) Thence N27°13'25"W, a distance of 307.62 feet to the angle point of said Glen at Widefield Subdivision Filing No. 8; Thence N12°37'51"E along the Easterly line of said Glen at Widefield Subdivision Filing No. 8, a distance of 153.08 feet to the Point of Beginning.

Said Parcel contains 8.856 acres (385,757 S.F.) more or less.

PARCEL "B"

A tract of land located in a Portion of the Southwest One-quarter (SW1/4) of Section 22, Township 15 South (T15S), Range 65 West (R65W) of the 6th P.M., County of El Paso, State of Colorado, being more particularly described as follows:

Beginning at the Southeast corner of Lot 97, Glen at Widefield Subdivision No. 8 as recorded under Reception No. 218714205 in the records of the Clerk and Recorder's Office, County of El Paso, State of Colorado; Thence N01°44'08"E along the Easterly line of said Glen at Widefield Subdivision No. 8; Thence S88°15'51"E along the Southerly line of said Glen at Widefield Subdivision No. 8 to a point on the Westerly line of a 110.00 foot Gas Line Easement as described under Reception No. 202092771 in the records of the Clerk and Recorder's Office of said County; Thence along the Westerly line of said 110.00 foot Gas Line Easement, the following four (4) courses: 1.) S27°15'04"E, a distance of 188.77 feet; 2.) Thence S32°55'46"E, a distance of 190.67 feet; 3.) Thence S24°24'25"E, a distance of 220.92 feet; 4.) Thence S06°05'38"E, a distance of 115.36 feet;

Thence S43°21'16"W, a distance of 34.29 feet; Thence along the arc of a curve to the right having a central angle of 106°52'38", a radius of 20.00 feet, an arc length of 37.31 feet to a point on the Northerly Right-of-Way line of Peaceful Valley Road as described in said Glen at Widefield Subdivision No. 8; Thence along said Northerly Right-of-Way line the following three (3) courses: 1.) on the arc of a curve to the right having a central angle of 02°32'41", a radius of 175.00 feet, an arc length of 7.77 feet; 2.) Thence N27°13'25"W, a distance of 468.13 feet; 3.) Thence along the arc of a curve to the left having a central angle of 28°35'08", a radius of 225.00 feet, an arc length of 112.25 feet to the Point of Beginning.

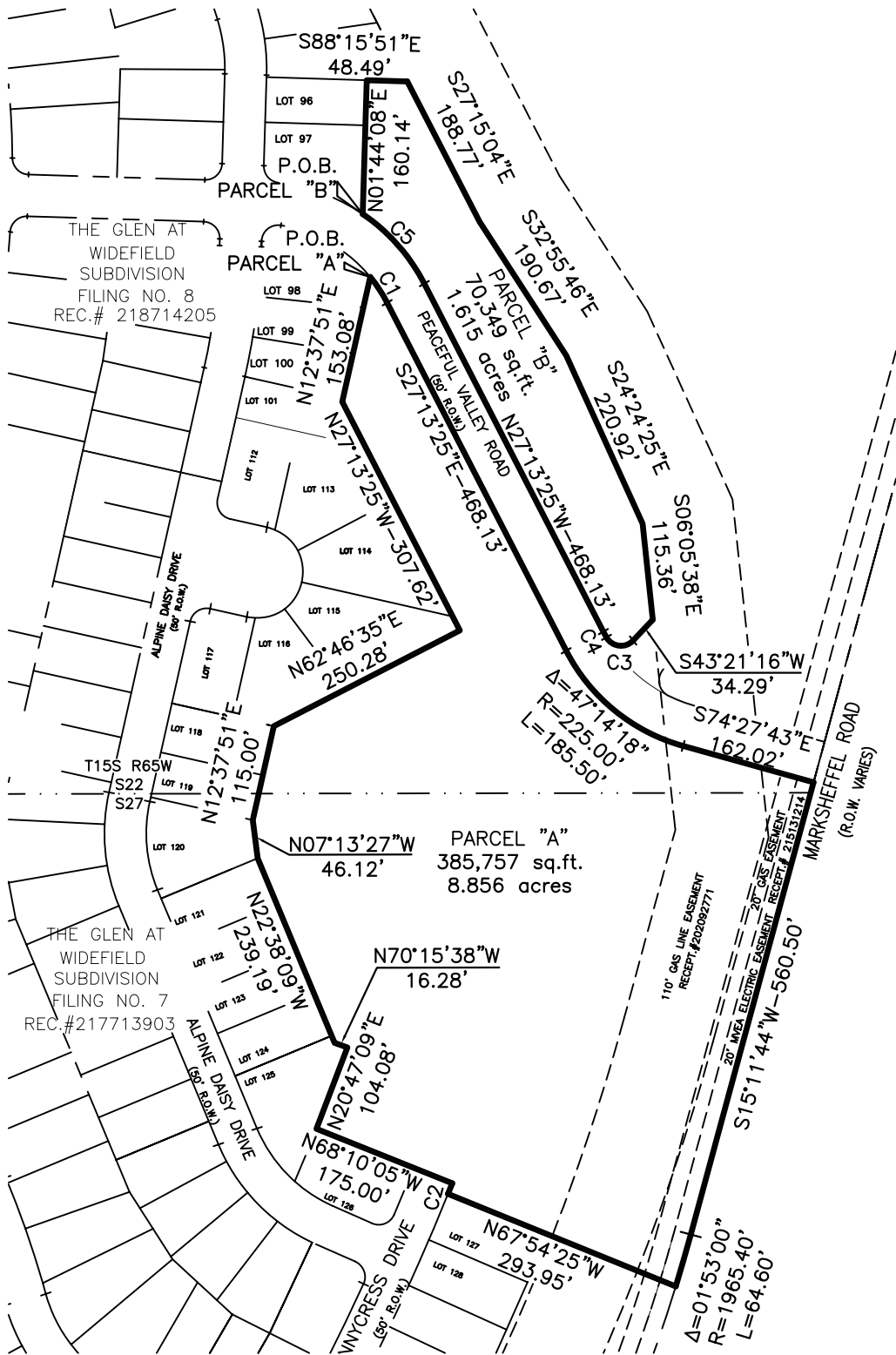
Said Parcel contains 1.615 acres (70,349 S.F.) more or less.

Said Parcels combined contain 10.471 acres (456,106 S.F.) more or less.

For and on Behalf of
Pinnacle Land Surveying Co., Inc.
John W. Towner
P.L.S. #25968

PINNACLE LAND SURVEYING, INC.		
121 County Road 5, Divide, CO 80814		
EXHIBIT A		
TITLE: THE GLEN AT WIDEFIELD FILING NO. 10		
SCALE: 1"= 200'	DRAWN BY: MWW	FILE: 19001600-exh.dwg
DATE: 05/28/19	CHECKED BY: JWT	JOB NO. 19001600

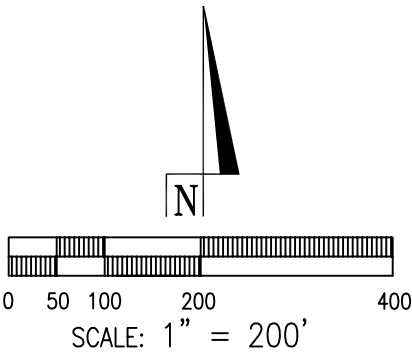
EXHIBIT B



THE GLEN AT
WIDEFIELD
SUBDIVISION
FILING NO. 8
REC.# 218714205

THE GLEN AT
WIDEFIELD
SUBDIVISION
FILING NO. 7
REC.# 217713903

GLEN 10-BOUNDARY CURVE TABLE				
CURVE	DELTA	RADIUS	LENGTH	CHORD BEARING
C1	12°07'10"	175.00'	37.02'	S33°17'00"E
C2	0°15'40"	3025.00'	13.78'	N21°57'45"E
C3	106°52'38"	20.00'	37.31'	N83°12'25"W
C4	2°32'41"	175.00'	7.77'	N28°29'46"W
C5	28°35'08"	225.00'	112.25'	N41°30'59"W



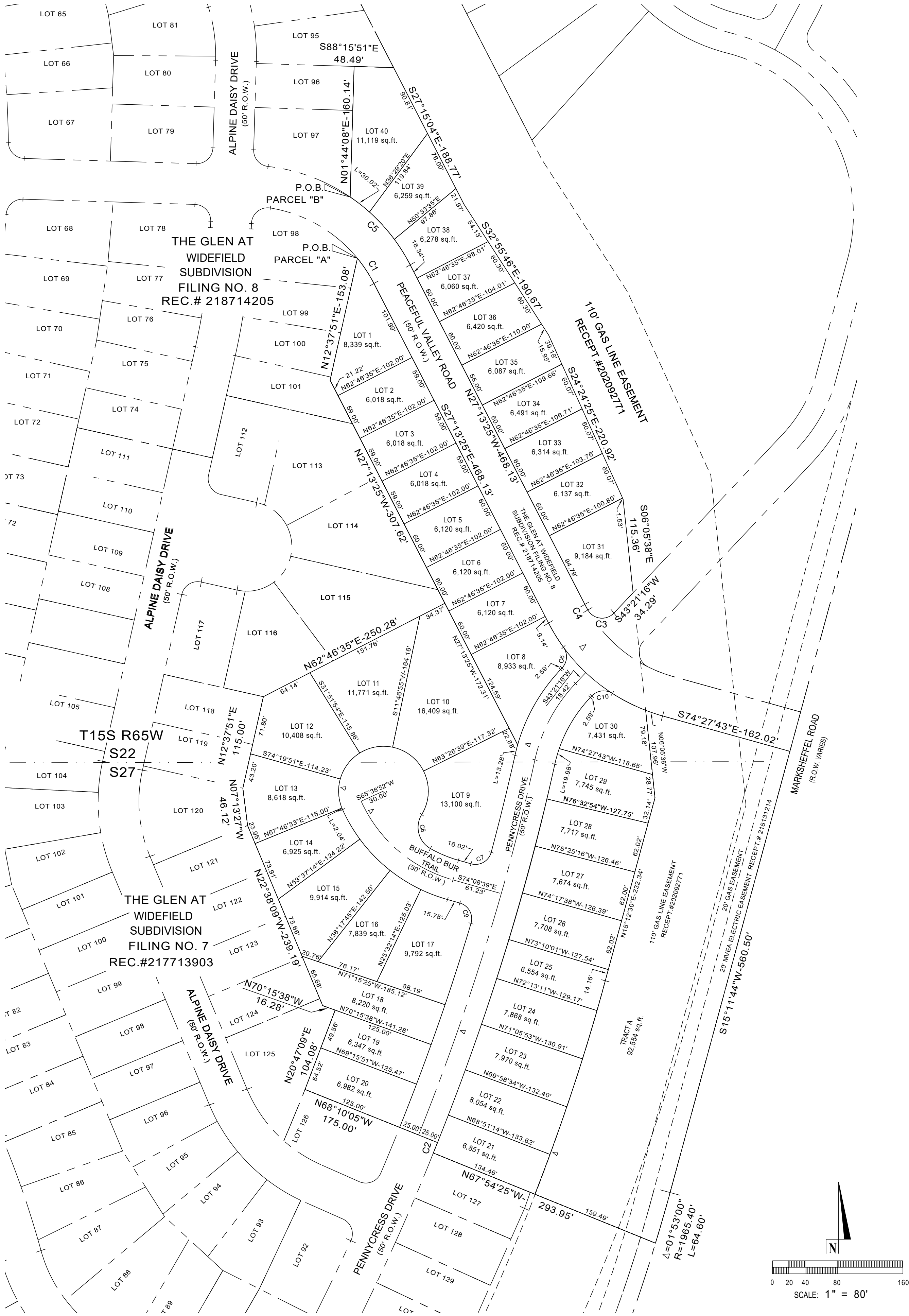
For and on Behalf of
Pinnacle Land Surveying Co., Inc.
John W. Towner
P.L.S. #25968

PINNACLE LAND SURVEYING, INC.
121 County Road 5, Divide, CO 80814

EXHIBIT B		
TITLE: THE GLEN AT WIDEFIELD FILING NO. 10		
SCALE: 1"= 200'	DRAWN BY: MWW	FILE: 19001600-exh.dwg
DATE: 05/28/19	CHECKED BY: JWT	JOB NO. 19001600

THE GLEN AT WIDEFIELD SUBDIVISION FILING NO. 10

A portion of the Southwest One-quarter (SW1/4) of Section 22 and the Northwest One-quarter (NW1/4) of Section 27
Township 15 South (T15S), Range 65 West (R65W) of the 6TH P.M.
County of El Paso, State of Colorado



KEY MAP THIS SHEET

TYPICAL LOT EASEMENTS
SCALE:N.T.S.

TYPICAL SIGHT VISIBILITY &
PUBLIC IMPROVEMENT EASEMENT
SCALE:1"=20'

PINNACLE LAND SURVEYING COMPANY, INC.
121 COUNTY ROAD 5, DIVIDE, CO 687-7360

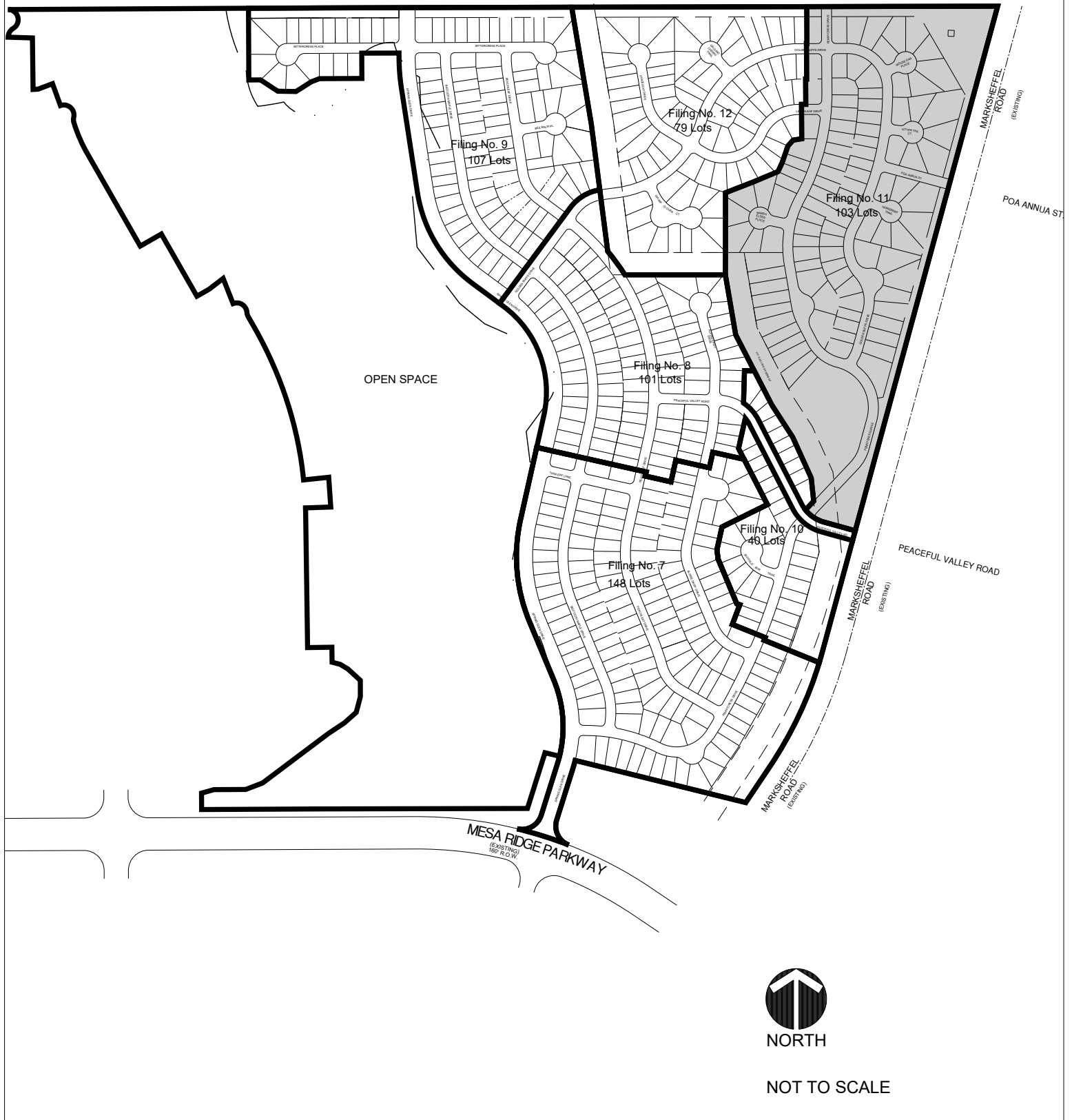
NOTICE: ACCORDING TO COLORADO LAW YOU MUST COMMENCE ANY LEGAL ACTION BASED UPON ANY DEFECT IN THIS SURVEY WITHIN THREE YEARS AFTER YOU FIRST DISCOVER SUCH DEFECT. IN NO EVENT, MAY ANY ACTION BASED UPON ANY DEFECT IN THIS SURVEY BE COMMENCED MORE THAN TEN YEARS FROM THE DATE OF THE CERTIFICATION SHOWN HEREON.

THE GLEN AT WIDEFIELD SUBDIVISION FILING NO.10		
DRAWN BY:MMW	CHECKED BY:JWT	DATE: 05/28/19
JOB NO.: 19001600	DWG: 19001600-FP.DWG	SHEET 2 OF 2

Additional Attachments

The Glen at Widefield Filing 11





VICINITY MAP

EXHIBIT A

LAND DESCRIPTION:

A tract of land located in a Portion of the South One-half (S1/2) of Section 22, Township 15 South (T15S), Range 65 West (R65W) of the 6th P.M., County of El Paso, State of Colorado, being more particularly described as follows:

Beginning at the Northeast corner of Lot 89, Glen at Widefield Subdivision Filing No. 8 as recorded under Reception No. 218714205 in the records of the Clerk and Recorder's Office, County of El Paso, State of Colorado; Thence N00°04'54"E, a distance of 405.64 feet; Thence N68°48'00"E, a distance of 146.71 feet; Thence N67°16'30"E, a distance of 133.27 feet; Thence N24°56'29"E, a distance of 48.70 feet; Thence N18°59'59"E, a distance of 87.12 feet; Thence N41°26'03"E, a distance of 38.75 feet; Thence N81°14'24"E, a distance of 43.05 feet; Thence N00°5d18'38"W, a distance of 170.00 feet; Thence N89°41'22"E, a distance of 28.36 feet; Thence N01°18'38"W, a distance of 483.09 feet to a point on the North line of the South One-half (S1/2) of said Section 22; Thence N89°51'21"E along the North line of the South One-half (S1/2) of said Section 22, a distance of 944.14 feet to a point on the Westerly Right-of-Way line of Marksheffel Road; Thence S15°11'44"W along the Westerly Right-of-Way line of Marksheffel Road, a distance of 2686.82 feet to a point on the Northerly Right-of-Way line of Peaceful Valley Road as described in said Glen at Widefield Subdivision Filing No. 8; Thence N74°27'43"W along said Northerly Right-of-Way line, a distance of 161.72 feet; Thence continuing along said Northerly Right-of-Way line on the arc of a curve to the right, having a central angle of 44°41'37", a radius of 175.00 feet, an arc length of 136.51 feet; Thence along the arc of a non-tangential curve to the left having a central angle of 106°52'38", a radius of 20.00 feet, an arc length of 37.31 feet, whose chord bears S83°12'25"E; Thence N43°21'16"E, a distance of 34.29 feet to a point on the Westerly line of a 110.00 foot Gas Line Easement as described under Reception No. 202092771 in the records of the Clerk and Recorder's Office of said County; Thence along the Westerly line of said 110.00 foot Gas Line Easement, the following five (5) courses:

- 1.) N06°05'38"W, a distance of 115.36 feet;
- 2.) Thence N24°24'25"W, a distance of 220.92 feet;
- 3.) Thence N32°55'46"W, a distance of 190.67 feet;
- 4.) Thence N27°15'04"W, a distance of 389.87 feet;
- 5.) Thence N09°45'52"W, a distance of 300.61 feet to the Point of Beginning.

Said Parcel contains 44.996 acres (1,960,019 S.F.) more or less.

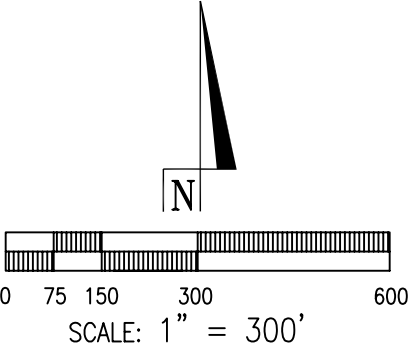
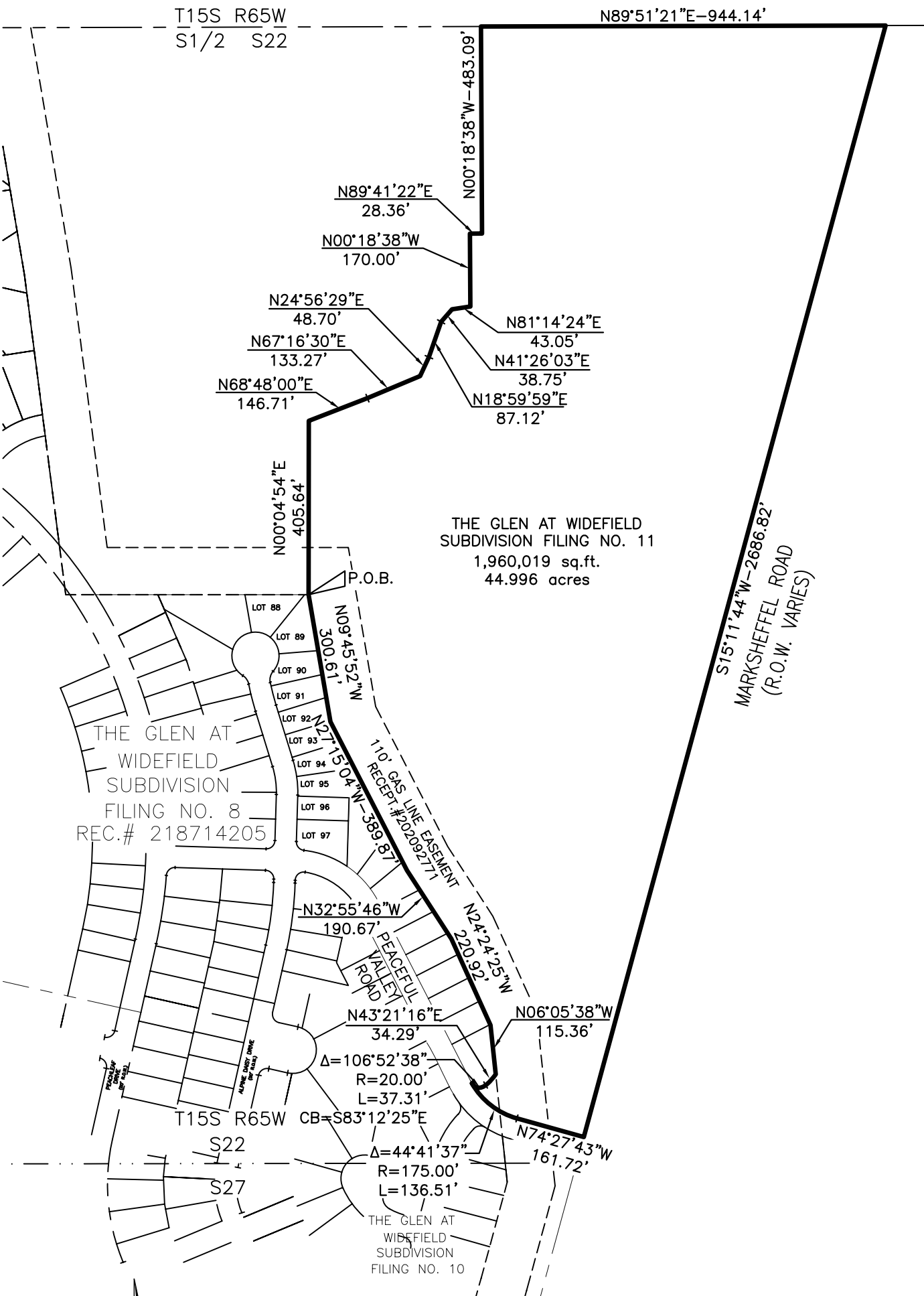
For and on Behalf of
Pinnacle Land Surveying Co., Inc.
John W. Towner
P.L.S. #25968

The Glen at Widefield Filing No. 11

EXHIBIT A

TITLE:	DRAWN BY: MWW	FILE: 19001700-exh.dwg
SCALE:	CHECKED BY: JWT	JOB NO. 19001700
DATE:		

EXHIBIT B



For and on Behalf of
Pinnacle Land Surveying Co., Inc.
John W. Towner
P.L.S. #25968

PINNACLE LAND SURVEYING, INC.		
121 County Road 5, Divide, CO 80814		
EXHIBIT B		
TITLE: THE GLEN AT WIDEFIELD FILING NO. 11		
SCALE: 1"= 300'	DRAWN BY: MWW	FILE: 19001700-exh.dwg
DATE: 05/28/19	CHECKED BY: JWT	JOB NO. 19001700

THE GLEN AT WIDEFIELD SUBDIVISION FILING NO. 11

A portion of the South One-half (S1/2) of Section 22
Township 15 South (T15S), Range 65 West (R65W) of the 6TH P.M.
County of El Paso, State of Colorado

KNOW ALL MEN BY THESE PRESENTS:

That Glen Investment Group No. VIII, LLC, being the owner of the described tract of land, to wit:

LAND DESCRIPTION, THE GLEN AT WIDEFIELD SUBDIVISION FILING NO. 9:

A tract of land located in a Portion of Sections 21 and 22, Township 15 South (T15S), Range 65 West (R65W) of the 6th P.M., County of El Paso, State of Colorado, being more particularly described as follows:

Beginning at the Northwest corner of the Glen at Widefield Subdivision No. 8 as recorded under Reception No. _____ in the records of the Clerk and Recorder's Office, County of El Paso, State of Colorado; Thence N53°29'23"W, a distance of 166.96 feet; Thence along the arc of a curve to the right, having a central angle of 44°45'21", a radius of 690.00 feet, an arc length of 538.99 feet; Thence N08°44'02"W, a distance of 522.83 feet; Thence along the arc of a curve to the right having a central angle of 08°48'48", a radius of 990.00 feet, an arc length of 152.28 feet; Thence along the arc of a reverse curve to the left, having a central angle of 90°23'24", a radius of 20.00 feet, an arc length of 31.55 feet; Thence S89°41'22"W, a distance of 164.24 feet; Thence S00°18'38"E, a distance of 125.00 feet; Thence S89°41'22"W, a distance of 210.00 feet; Thence S65°54'53"W, a distance of 42.79 feet; Thence S57°40'22"W, a distance of 89.89 feet; Thence N89°03'10"W, a distance of 89.89 feet; Thence N58°49'31"W, a distance of 59.34 feet; Thence N53°53'00"W, a distance of 42.88 feet; Thence S89°41'22"W, a distance of 57.81 feet; Thence N00°18'38"W, a distance of 354.40 feet to a point on the North line of the Southeast One-quarter (SE1/4) of said Section 21; Thence N89°41'22"E along the North line the Southeast One-quarter (SE1/4) of said Section 21, a distance of 381.45 feet; Thence N89°51'21"E, a distance of 1216.92 feet to a point on the Westerly line of a 110' GIS Gas Line Easement as recorded under Reception No. 202092771 in the records of the Clerk and Recorder's Office of said County; Thence S09°31'38"E along the Westerly line of said Gas Line Easement, a distance of 584.99 feet; Thence S07°21'14"E along the Westerly line of said Gas Line Easement, a distance of 328.34 feet to a point on the Northerly line of said Glen at Widefield Subdivision Filing No. 8; Thence along the arc of a non-tangential curve to the left and the Northerly line of said Glen at Widefield Subdivision Filing No. 8, having a central angle of 44°38'25", a radius of 225.00 feet, an arc length of 175.17 feet, whose chord bears S58°48'50"W; Thence continuing along the Northerly line of said Glen at Widefield Subdivision Filing No. 8, S36°30'37"W, a distance of 588.31 feet to the Point of Beginning.

Said tract contains 30.505 acres (1,328,801 S.F.) more or less.

TOGETHER WITH TRACT C LAND DESCRIPTION:

A Portion of Sections 21, 22, 27 and 28, Township 15 South, Range 65 West of the 6th P.M., County of El Paso, State of Colorado, being more particularly described as follows:

Beginning at the Southeast corner of the Glen at Widefield Subdivision Filing No. 6A as recorded under Reception No. _____ in the records of the Clerk and Recorder's Office of said County; Thence along the Easterly boundaries of the Glen at Widefield Subdivision Filing No. 6A (Recept. No. 213713312), 6B (Recept. No. 214713541) and 6C (Recept. No. 215713589); the following thirty-nine (39) courses:
1.) N00°12'26"W, a distance of 81.12 feet; 2.) Thence N74°18'43"E, a distance of 64.03 feet; 3.) Thence N89°42'34"E, a distance of 156.77 feet; 4.) Thence N69°00'39"E, a distance of 89.31 feet; 5.) Thence N53°05'24"E, a distance of 408.47 feet; 6.) Thence N52°23'05"E, a distance of 84.06 feet; 7.) Thence N48°19'15"E, a distance of 78.00 feet; 8.) Thence N14°40'13"E, a distance of 79.69 feet; 9.) Thence N00°00'00"E, a distance of 80.83 feet; 10.) Thence N47°32'46"W, a distance of 83.98 feet; 11.) Thence N59°07'16"W, a distance of 43.67 feet; 12.) Thence N75°10'14"W, a distance of 41.66 feet; 13.) Thence N00°50'00"W, a distance of 74.00 feet; 14.) Thence S89°10'00"W, a distance of 120.00 feet; 15.) Thence N00°50'00"W, a distance of 863.35 feet; 16.) Thence along the arc of a curve to the left, having a central angle of 01°05'47", a radius of 1930.00 feet, an arc length of 36.93 feet; 17.) Thence N88°04'13"E, a distance of 125.00 feet; 18.) Thence N03°59'13"W, a distance of 147.54 feet; 19.) Thence S83°57'21"W, a distance of 125.00 feet; 20.) Thence along the arc of a non-tangential curve to the left, having a central angle of 23°40'5", a radius of 1930.00 feet, an arc length of 799.50 feet, whose chord bears N17°54'42"W; 21.) Thence N29°46'44"W, a distance of 59.51 feet; 22.) Thence along the arc of a curve to the right, having a central angle of 25°50'31", a radius of 50.00 feet, an arc length of 22.55 feet; 23.) Thence along the arc of a reverse curve to the left, having a central angle of 107°37'45", a radius of 50.00 feet, an arc length of 93.92 feet; 24.) Thence N21°33'57"W, a distance of 133.92 feet; 25.) Thence S52°29'14"W, a distance of 87.00 feet; 26.) Thence S80°13'10"W, a distance of 70.00 feet; 27.) Thence N29°46'50"W, a distance of 354.00 feet; 28.) Thence S60°13'10"W, a distance of 120.00 feet; 29.) Thence N29°46'50"W, a distance of 527.00 feet; 30.) Thence along the arc of a curve to the right, having a central angle of 12°35'05", a radius of 760.00 feet, an arc length of 166.93 feet; 31.) Thence along the arc of a compound curve to the right, having a central angle of 30°13'06", a radius of 50.00 feet, an arc length of 28.37 feet; 32.) Thence along the arc of a reverse curve to the left, having a central angle of 122°55'41", a radius of 50.00 feet, an arc length of 107.27 feet; 33.) Thence N19°54'14"W, a distance of 115.00 feet; 34.) Thence S69°15'09"W, a distance of 75.76 feet; 35.) Thence S86°19'29"W, a distance of 25.36 feet; 36.) Thence N00°40'30"W, a distance of 254.64 feet; 37.) Thence N88°13'59"W, a distance of 120.08 feet; 38.) Thence along a non-tangential curve to the right, having a central angle of 60°00'00", a radius of 50.00 feet, an arc length of 52.36 feet, whose chord bears N29°42'12"E; 39.) Thence along the arc of a reverse curve to the left, having a central angle of 150°00'00", a radius of 50.00 feet, an arc length of 130.91 feet to a point on the North line of the Southeast One-quarter (SE1/4) of said Section 21;

Thence N89°41'22"E along the North line of the Southeast One-quarter (SE1/4) of said Section 21, a distance of 1188.63 feet; Thence S00°18'38"E, a distance of 354.40 feet; Thence S89°41'22"E, a distance of 57.81 feet; Thence S53°53'00"E, a distance of 42.88 feet; Thence S58°49'31"E, a distance of 59.34 feet; Thence S89°03'10"E, a distance of 89.89 feet; Thence N57°40'22"E, a distance of 89.89 feet; Thence N68°54'53"E, a distance of 42.79 feet; Thence N89°41'22"E, a distance of 210.00 feet; Thence N00°18'38"W, a distance of 125.00 feet; Thence N89°41'22"E, a distance of 164.24 feet; Thence along the arc of a curve to the right, having a central angle of 90°23'24", a radius of 20.00 feet, an arc length of 31.55 feet; Thence along the arc of a reverse curve to the left, having a central angle of 08°48'48", a radius of 990.00 feet, an arc length of 152.28 feet; Thence S02°40'02"E, a distance of 522.83 feet; Thence along the arc of a curve to the left, having a central angle of 44°45'21", a radius of 690.00 feet, an arc length of 538.99 feet; Thence S53°29'23"E, a distance of 191.96 feet; Thence along the arc of a curve to the right, having a central angle of 66°07'14", a radius of 525.00 feet, an arc length of 606.86 feet; Thence S12°37'51"W, a distance of 528.19 feet; Thence along the arc of a curve to the left, having a central angle of 35°16'00", a radius of 840.00 feet, an arc length of 517.04 feet; Thence S22°38'09"E, a distance of 308.02 feet; Thence along the arc of a curve to the left, having a central angle of 36°23'00", a radius of 610.00 feet, an arc length of 387.35 feet to the Northeast corner of the Jimmy Camp Lift Station as recorded under Reception No. 205032403 in the records of the Clerk and Recorder's Office of said County; Thence N78°12'09"W along the North line of said Jimmy Camp Lift Station, a distance of 73.86 feet; Thence S17°29'04"W along the West line of said Jimmy Camp Lift Station, a distance of 288.96 feet to the Southwest corner of said Jimmy Camp Lift Station; Thence S89°52'30"W, a distance of 992.47 feet; Thence S89°42'34"W, a distance of 618.49 feet to the Point of Beginning.

Said tract contains 114.702 acres (4,996,437 S.F.) more or less.
Combined tracts contain 145.207 acres (6,325,238 S.F.) more or less.

OWNERS CERTIFICATE:

The undersigned, being all the owners, mortgagees, beneficiaries of deeds of trust and holders of other interests in the land described herein, have laid out, subdivided, and platted said lands into lots, streets, and easements as shown hereon under the name and subdivision of THE GLEN AT WIDEFIELD SUBDIVISION FILING NO. 9. All public improvements so platted are hereby dedicated to public use and said owner does hereby covenant and agree that the public improvements will be constructed to El Paso County standards and that proper drainage and erosion control for same will be provided at said owner's expense, all to the satisfaction of the Board of County Commissioners of El Paso County, Colorado. Upon acceptance by resolution, all public improvements so dedicated will become matters of maintenance by El Paso County, Colorado. The utility easements shown hereon are hereby dedicated for public utilities and communication systems and other purposes as shown hereon. The entities responsible for providing the services for which the easements are established are hereby granted the perpetual right of ingress and egress from and to adjacent properties for installation, maintenance, and replacement of utility lines and related facilities.

Glen Investment Group No. VIII, LLC

J. Mark Watson President Glen Investment Group No. VIII, LLC

NOTARIAL:

STATE OF COLORADO)
COUNTY OF EL PASO) SS

The foregoing instrument was acknowledged before me this ____ day of _____, 20__ A.D., by J. Mark Watson, President of Glen Investment Group No. VIII, LLC

Witness my Hand and Seal: _____ Notary Public

My Commission Expires: _____

Address: _____

DEDICATION:

The above party in interest has caused said tract to be platted into Lots, Blocks, Streets, Easements and Tracts as shown on the plat, which is drawn to a fixed scale as indicated thereon, and accurately sets forth the boundaries and dimensions of said Lots, Blocks, Streets, Easements, and Tracts which shall be known as "THE GLEN AT WIDEFIELD SUBDIVISION FILING NO. 9" El Paso County, Colorado. All streets as platted are hereby dedicated to public use and said owner does hereby personally covenant and agree that all platted streets will be graded, paved and that proper drainage for same will be provided at his own expense, all to the satisfaction of the Board of County Commissioners of El Paso County, Colorado, and upon acceptance by resolution, all streets so dedicated will become matters of maintenance by EL Paso County, Colorado.

BASIS OF BEARINGS STATEMENT:

The bearings of this plat are based upon a portion of the Easterly boundary of the Glen at Widefield Subdivision Filing No. 5B as recorded under Reception No. 206712328 in the records of the Clerk and Recorder's Office, County of El Paso, State of Colorado; Said line being also a portion of the Easterly Right-of-Way line of Autumn Glen Avenue as described in said subdivision, being monumented at the Point of Tangency of said boundary by a found cap and rebar marked "PLSC 25968" and at the Point of Curvature of said boundary by a found rebar and cap marked "PLSC 25968". Said line bears N29°46'44"W, a distance of 1154.12 feet.

EASEMENTS:

Unless shown greater in width, both sides of all side lot lines will be platted with five (5') foot easements for drainage purposes and public utilities only, and both sides of all rear lot lines will be platted with a ten (10') foot easement for drainage purposes and public utilities only, and all lot lines adjoining a street which has a fifty (50') foot right-of-way width will be platted with a fifteen (15') foot easement, being a five (5') foot easement adjacent to that fifty (50') foot right-of-way for public improvements and a ten (10') foot easement adjacent to the five (5') foot easement for utility purposes, with sole responsibility for maintenance being vested with the adjoining property owners.

NOTES:

1. These tracts of land are subject to the following per the Commitment for Title Insurance, prepared by Unified Title Company, Order No. 54829UTC, effective date December 9, 2017 at 7:30 A.M.

9. Any interest which may have been acquired by the public reason of the Resolution of the Board of County Commissioners dated and recorded October 3, 1987 in Road Book A at Page 78, which provided that all section lines, township lines, and range lines on the public domain east of the range line dividing range lines 65 west and 66 west declared to be public highways of the width of 60 feet, being 30 feet on each side of said section lines, township lines, or range lines.

10. Any rights of the Spring Lake Reservoir as shown on Map recorded under Reception No. 499772, File No. 836.

11. Any rights, interest or easements in favor of the riparian owners, the State of Colorado, the United States of America, or the general public, which exist, have existed, or are claimed to exist in and over the waters and present and past bed and banks of the streams, ditches and/or ponds within the herein described property.

12. Any question, dispute or adverse claims as to any loss or gain of land as a result of any change in the river bed location by other than natural causes, or alteration through accretion, reliction, erosion or avulsion of the center thread, bank, channel or flow of waters in Jimmy Camp Creek lying within subject land, and any question as to the location of such center thread, bed bank or channel as a legal description monument or marker for purposes of describing or locating subject lands.

NOTE: There are no documents in the land records of the office of the Clerk and Recorder of El Paso, accurately locating past or present location(s) of the center thread, bank, bed or channel of the above Jimmy Camp Creek or indicating any alterations of the same as from time to time may have occurred.

13. Terms, agreements, provisions, conditions and obligations as contained in Agreement between W. T. Gore and The League Land Company recorded December 9, 1922 in Book 606 at Page 542 at Reception No. 331050.

14. Right of Way recorded December 1, 1927 in Book 798 at Page 202, subject to the Special Warranty Deed recorded July 19, 1928 in Book 814 at Page 324, subject to the Agreement and Partial Release recorded November 15, 1982 in Book 3534 at Page 80, as modified by and subject to the Colorado Interstate Gas Company Right of Way and Easement Agreement to Pipeline Corridor recorded June 7, 2002 as Reception No. 202092771, and as modified by the Partial Release of Right of Way Agreement recorded February 21, 2008 as Reception No. 205020315.

15. Terms, agreements, provisions, conditions, obligations and easements as contained in Grant of Right of Way to the Mountain View Electric Association, Inc., recorded September 30, 1968 in Book 2256 at Page 64.

16. Inclusion within the Security Fire Protection District as evidenced by instruments recorded October 23, 1986 in Book 5258 at Page 1049; recorded March 27, 2001 at Reception No. 201036563, and recorded December 9, 2005 as Reception No. 205196147.

17. Terms, agreements, provisions, conditions and obligations as contained in Annexation Agreement recorded September 23, 1988 in Book 5557 at Page 405.

18. Agreement between Widefield Water and Sanitation District and JHW Investment Company recorded May 6, 1997 at Reception No. 97051183.

19. Right of Way and easement to Colorado Interstate Gas Company as contained in instrument recorded June 7, 2002 at Reception No. 202092771, and subject to the terms and conditions contained therein.

20. The effects of Order and Decree Organizing the Glen Metropolitan District No. 2 and Issuance of Certificates of Election recorded June 24, 2004 at Reception No. 204105070.

21. The effects of Order and Decree Organizing the Glen Metropolitan District No. 3 and issuance of Certificates of Election recorded June 24, 2004 at Reception No. 204105072.

22. Resolution No. 04-482 recorded February 4, 2005 as Reception No. 205017888.

23. Terms, agreements, provisions, conditions and obligations as contained in Development Agreement recorded November 23, 2005 at Reception No. 205187505 and recorded May 26, 2006 at Reception No. 206077406.

24. Terms, agreements, provisions, conditions, obligations and easements as contained in Grant of Right of Way to Mountain View Electric Association, Inc., recorded March 2, 2006 at Reception No. 206031532.

25. Terms, agreements, provisions, conditions, obligations and easements as contained in Resolution, recorded July 18, 2007 at Reception No. 207095753.

26. Inclusion within the Fountain Sanitation District as disclosed by instrument recorded August 23, 2007 at Reception No. 207110450.

27. Terms, agreements, provisions, conditions, obligations and easements as contained in Water Easement Agreement, recorded June 12, 2008 at Reception No. 208067692.

28. Terms, agreements, provisions, conditions, obligations and easements as contained in Water Easement Agreement, recorded June 12, 2008 at Reception No. 208067699.

29. Terms, agreements, provisions, conditions, obligations and easements as contained in Private Detention Basin/Stormwater Quality Best Management Practice Maintenance Agreement and Easement, recorded March 28, 2013 at Reception No. 213040268, recorded November 20, 2014 at Reception No. 214077991, recorded March 4, 2015 at Reception No. 215020223 and subject to Declaration of Covenants, Conditions, Restrictions and Easements recorded March 28, 2013 at Reception No. 213040268.

30. Terms, agreements, provisions, conditions, obligations and easements as contained in Slope Access Easement, recorded March 28, 2013 at Reception No. 213040267.

31. Terms, agreements, provisions, conditions, obligations and easements as contained in Grant of Right of Way to Mountain View Electric Association, Inc., recorded August 27, 2014 at Reception No. 214077996.

32. Terms, agreements, provisions, conditions, obligations and easements as contained in Grant of Right of Way to Mountain View Electric Association, Inc., recorded August 27, 2014 at Reception No. 214077996.

33. Terms, agreements, provisions, conditions, obligations and easements as contained in Grant of Right of Way to Mountain View Electric Association, Inc., recorded August 27, 2014 at Reception No. 214077997.

34. Terms, agreements, provisions, conditions, obligations and easements as contained in Grant of Right of Way to Mountain View Electric Association, Inc., recorded August 27, 2014 at Reception No. 214077998.

35. Terms, agreements, provisions, conditions, obligations and easements as contained in Park Easement Agreement, recorded December 30, 2014 at Reception No. 214119757.

36. Terms, agreements, provisions, conditions, obligations and easements as contained in Grant of Right of Way to Mountain View Electric Association, Inc., recorded August 27, 2015 at Reception No. 215093708.

37. Terms, agreements, provisions, conditions, obligations and easements as contained in Grant of Right of Way to Mountain View Electric Association, Inc., recorded August 27, 2015 at Reception No. 215093709.

38. Terms, agreements, provisions, conditions, obligations and easements as contained in Park & Trail Easement Agreement, recorded October 1, 2015 at Reception No. 215107195.

39. Terms, agreements, provisions, conditions and obligations as contained in ReSolution No. 16-141 recorded May 3, 2016 at Reception No. 216047340.

40. Terms, agreements, provisions, conditions and obligations as contained in Resolution No. 16-227 recorded June 29, 2016 at Reception No. 216070954.

41. Covenants, conditions, restrictions and easements, if any, which do not contain a forfeiture or reverter clause, (deleting any restrictions indicating any preference, limitation or discrimination based on race, color, religion, sex, handicap, familial status or national origin) as contained in instrument recorded August 1, 2016 at Reception No. 216085646 and any and all amendments and/or supplements thereto.

42. Terms, agreements, provisions, conditions, obligations and easements as contained in Grant of Right of Way to Mountain View Electric Association, Inc., recorded January 19, 2017 at Reception No. 217007137.

NOTES CONTINUED:

43. Terms, agreements, provisions, conditions, obligations and easements as contained in Private Detention Basin/Stormwater Quality Best Management Practice Maintenance Agreement and Easement, recorded January 30, 2017 at Reception No. 217011405.

44. Terms, agreements, provisions, conditions, obligations and easements as contained in Exclusive Access and Utility Easement Agreement, recorded January 6, 2017 at Reception No. 217001810 and re-recorded January 19, 2017 at Reception No. 217007192.

45. Terms, agreements, provisions, conditions, obligations and easements as contained in Filing No. 6 Detention Basin Easement Agreement, recorded September 20, 2017 at Reception No. 217113818.

46. Any and all unrecorded leases or tenancies and any and all parties claiming by, through, or under such leases or tenancies.

2. Water and sewer service is provided by Widefield Water and Sanitation District subject to the District's rules, regulations, and specifications.

3. The El Paso County Planning and Community Development must be contacted prior to the establishment of any driveway.

4. All structural foundations shall be located and designed by a Professional Engineer, currently registered in the State of Colorado.

5. The following reports have been submitted and are on file at the County Planning and Community Development: Soils and Geological, Water and Wastewater Resources, Drainage Report, Natural Features Inventory Report, Erosion Control Report, Wetland Impact Report.

6. No man-made or non-man-made obstructions shall be allowed to penetrate the 40:1 approach surface of the Colorado Springs Municipal Airport.

7. All exterior lighting plans shall be approved by the Director of Aviation to prevent a hazard to aircraft.

8. No electromagnetic, light, or any other physical emissions which might interfere with aircraft, aviation, communications or navigational aids shall be allowed.

9. The Airport Advisory Commission suggests that residences constructed in this area should include F.A.A. approved sound mitigation construction techniques to obtain at least a 25db reduction in interior noise.

NOTICE: This property may be adversely impacted by noise caused by aircraft operating into and out of the Colorado Springs Municipal Airport. The buyer should familiarize himself/herself with this potentiality and the ramifications thereof.

10. All property owners are responsible for maintaining proper storm water drainage in and through their property. Public drainage easements as specifically noted on the plat shall be maintained by the individual lot owners unless otherwise indicated. Structures, fences, materials or landscaping that could impede the flow of runoff shall not be placed in drainage easements.

11. No lot or interest therein, shall be sold, conveyed, or transferred whether by deed or by contract, nor shall building permits be issued, until and unless the requirements of the easement and title of improvement, Pinnacle Land Surveying Company have been constructed and completed and preliminary accepted in accordance with the Subdivision Improvements Agreement between the applicant/owner and El Paso County as recorded under Reception Number _____ in the Office of the Clerk and Recorder of El Paso County, Colorado or, in the alternative, other collateral is provided to the Subdivision for the completion of said improvements in accordance with the El Paso County Planning and Community Development Code and Engineering Criteria Manual. Any such alternative collateral must be approved by the Board of County Commissioners or, if permitted by the Subdivision Improvements Agreement, by the Planning and Community Development Director and meet the policy and procedure requirements of El Paso County prior to the release by the County of any lots for sale, conveyance or transfer.

This plat restriction may be removed or rescinded by the Board of County Commissioners or, if permitted by the Subdivision Improvements Agreement, by the Planning and Community Development Director upon either approval of an alternative form of collateral or completion and preliminary acceptance by the El Paso Board of County Commissioners of all improvements required to be constructed and completed in accordance with said Subdivision Improvements Agreement. The partial release of lots for sale, conveyance or transfer may only be granted in accordance with any planned partial release of lots authorized by the Subdivision Improvements Agreement.

12. All corner lots will be platted with a Slight Visibility and Public Improvements Easement as shown in the "Typical Public Improvement Easement" detail. No obstructions greater than thirty (30') inches in height above flow line elevation of the adjacent roadway are allowed within this area. The sole responsibility for maintenance and ownership being vested with individual property owners.

13. The addresses (0000) exhibited on this plat are for informational purposes only. They are not the legal descriptions and are subject to change.

14. Direct lot access to Spring Glen Drive is prohibited.

15. The Glen at Widefield Filing No. 9 is subject to the provisions of the Park Lands Agreement as recorded at Reception No. _____ in the records of El Paso County, Colorado, recorded on the ____ day of _____, 20__.

16. This property may be adversely impacted by possible radio towers installation on an adjacent parcel. The buyer should familiarize himself/herself with this potentiality and ramification thereof.

17. This property is subject to the Protective Covenants, recorded at Reception No. _____, in the records of the El Paso County Clerk and Recorder.

18. This survey does not constitute a title search by Pinnacle Land Surveying Company to determine ownership of easements of record. For all information regarding easements, rights-of-way and title of improvement, Pinnacle Land Surveying Company relied upon a Commitment for Title Insurance, prepared by Unified Title Company, Order No. 54829UTC, effective date December 9, 2017 at 7:30 A.M.

19. Developer shall comply with federal and state laws, regulations, ordinances, review and permit requirements, and other agency requirements, if any, of applicable agencies including, but not limited to, the Colorado Department of Wildlife, Colorado Department of Transportation, U.S. Army the Corps of Engineers, the U.S. Fish & Wildlife Service and/or Colorado Department of Wildlife regarding the Endangered Species Act, particularly as it relates to the Proboscidea Meadow Jumping Mouse as a listed threatened species.

20. Mailboxes shall be installed in accordance with all El Paso County Department of Transportation and United States Postal Service regulations.

21. The Subdivider(s) agrees on behalf of himself/ herself and any developer or builder successors and assigns that Subdivider and/or said successors and assigns shall be required to pay traffic impact fees in accordance with the El Paso County Road Impact Fee Program Resolution (Resolution N16-454), or any amendments thereto, at or prior to the time of building permit submittals. The fee obligation, if not paid at final plat recording, shall be documented on all sales documents and on plat notes to ensure that a title search would find the fee obligation before sale of the property.

22. The property in The Glen at Widefield Subdivision Filing No. 9 is located in Flood Zone X, determined to be outside the 500-year floodplain and a portion of Tract C is located in Flood Zone AE with base flood elevations determined. Zone X areas within the 500-year flood, areas of 100-year flood with average depth of less than 1 foot or drainage areas less than 1 square mile and areas protected by levees from the 100-year flood and in Flood Zone X determined to be outside the 500-year flood per FEMA Flood Insurance Rate Maps 08041C956 F and 08041C957 F. Effective date March 17, 1997.

23. Pursuant to Resolution No. _____, approved by the Board of Directors, El Paso County Public Improvement District ____, and recorded in the records of the El Paso County Clerk and Recorder at Reception Number _____, the parcels within the platted boundaries of Glen at Widefield Subdivision Filing No. 9 are included within the boundaries of the El Paso County Public Improvement District #2 and as such is subject to applicable road impact fees and mill levy.

24. Detention Basin Easement as shown, is for location purposes only and is not part of this subdivision. The Detention Basin Easement is owned and maintained by the Glen at Widefield Subdivision Filing No. 9 Homeowners Association as recorded under Reception No. _____ in the records of the El Paso County Clerk and Recorder.

25. This plat has opted to be included in the 10-mil PID #2 for the road impact fee program. The fee is based on the established rate at the time of building permit application.

26. Tracts "A", "B", and "D" are to be used for open space, public and private utilities, drainage, trails, and signage. The tracts will be owned and maintained by The Glen Metropolitan District.

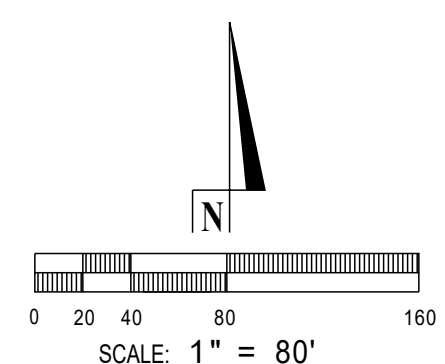
27. Tract C is to be used for Open Space, Trails, Signage, picnic area furnishings and structures, drainage facilities, utilities, and general urban recreation uses and will be owned and maintained by The Glen Metropolitan District.

28. All distances shown hereon are in US Feet.

29. There are 106 lots and 4 tracts within this subdivision.

GLEN 9 ACREAGE TABLE		
TRACTS		OWNERSHIP & MAINTENANCE
TRACT A	0.894 AC	THE GLEN METROPOLITAN DISTRICT
TRACT B	0.853 AC	THE GLEN METROPOLITAN DISTRICT
TRACT C	114.702 AC	THE GLEN METROPOLITAN DISTRICT
TRACT D	0.344 AC	THE GLEN METROPOLITAN DISTRICT
TOTAL ACREAGE	116.793 AC	
RIGHT-OF-WAY (R.O.W.)		

A portion of the South One-half (S1/2) of Section 22
Township 15 South (T15S), Range 65 West (R65W) of the 6TH P.M.
County of El Paso, State of Colorado



THE GLEN AT WIDEFIELD SUBDIVISION FILING NO. 11

A portion of the South One-half (S1/2) of Section 22
Township 15 South (T15S), Range 65 West (R65W) of the 6TH P.M.
County of El Paso, State of Colorado



KEY MAP THIS SHEET