



TRAFFIC IMPACT STUDY

CROWSNEST

Castle Pines, CO

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Executive Summary

Site Location and Study Area

The property that comprises the application area for the proposed development is approximately 750 acres of private property and public property (right-of-way) and is identified as Douglas County Parcel Numbers 2349-084-00-001, 2349-083-00-003, 2349-082-00-003, 2349-082-00-001, 2349-080-00-019, 2349-080-00-031, 2349-090-00-010, 2349-080-00-003, 2349-070-00-023, 2349-080-00-026, 2349-080-01-002, 2349-080-00-015. It is generally located on either side of Crowfoot Valley Road, south of Chambers Road, and west of Bayou Gulch Road. The site location is shown on Figure 1-1. It is currently zoned A1 Agricultural by Douglas County and is being used for agricultural purposes and open lands. The Applicant proposes to change the Property's zoning, upon annexation, to the City zone district of PD Planned Development.

The study area for the project includes intersections that could be affected by the proposed development:

- Crowfoot Valley Rd/Stroh Rd
- Crowfoot Valley Rd/S Chambers Rd
- Crowfoot Valley Rd/N Pinery Pkwy
- Crowfoot Valley Rd/Pradera Pkwy
- Crowfoot Valley Rd/Macanta Blvd
- Crowfoot Valley Rd/Sapphire Pointe Blvd
- Proposed Site Accesses

Description of Proposed Development

The Applicant, Ventana Capital, seeks to develop the area with a neighborhood serving commercial, mixed-use, multifamily, and single-family residential uses. The primary access points will be from Crowfoot Valley Road to the northwest and southeast, aligning with existing access points of adjacent developments where feasible.

Conclusions and Recommendations

Conclusions

Based on the results of this traffic impact study, the following may be concluded:

- Under existing traffic conditions, the intersections within the study area currently operate without the need for additional improvements during the weekday AM and PM peak hours. Existing queues remain within their respective storage lengths with the exception of the westbound left turn movement at the Crowfoot Valley Rd/Stroh Rd intersection which exceeds its queue during the PM peak hour.
- Under background future conditions, without the development of the subject site, the signalized intersections in the study area are forecasted to operate at acceptable overall LOS "D" or better during the weekday AM and PM peak hours with the exception of the Crowfoot Valley Rd/Stroh Rd intersection which is expected to operate at LOS "E" during the 2045 PM peak hour and the Crowfoot Valley Rd/S Chambers Rd intersection which is expected to operate at LOS "F" during the 2045 AM peak hour and LOS "E" during the 2045 PM peak hour. The unsignalized intersections are expected to operate without the need for additional improvements during the weekday AM and PM peak hours. The queues are expected to remain generally consistent with existing conditions.

- The proposed site development would generate, upon completion and full occupancy:

Phase 1 (2028):

- 1,439 net new weekday AM peak hour vehicle trips,
- 2,617 net new weekday PM peak hour vehicle trips, and
- 28,401 net new weekday daily trips

Phase 1+2 (2030):

- 1,890 net new weekday AM peak hour vehicle trips,
- 3,217 net new weekday PM peak hour vehicle trips, and
- 34,258 net new weekday daily trips

Phase 1+2+3 (2045):

- 2,674 net new weekday AM peak hour vehicle trips,
- 4,258 net new weekday PM peak hour vehicle trips, and
- 44,435 net new weekday daily trips

- Under total future conditions, with the implemented improvements studied herein, the study intersections and roadway sections are expected to operate acceptably and without the need for additional improvements. All queues are expected to be contained within the proposed storage lengths.

Recommendations

A Recommended Improvements Summary can be found in Table 6-3. These improvements are listed below and should be evaluated at site plan for further refinement. Intersection spacing and road design should adhere to the applicable design standards. Specifically, the full movement signalized roadway intersections should be spaced at ½ mile spacing minimum. Additional partial movement access should be evaluated at time of site plan when specific internal roadway layouts and uses are known.

Phase 1 Improvements (2028)

Crowfoot Valley Road/Stroh Rd

- Dual westbound left turn lanes

Crowfoot Valley Road/S Chambers Rd

- Two northbound through lanes
- Two southbound through lanes
- Two eastbound through lanes
- Two westbound through lanes
- Designated eastbound channelized right turn lane
- Designated westbound channelized right turn lane
- Dual northbound left turn lanes

Crowfoot Valley Road/N Pinery Parkway

- Signalization
- West leg addition (left turn lane & through/right turn lane)
- Northbound left turn lane

- Southbound right turn lane
- Two northbound through lanes
- Two southbound through lanes

Crowfoot Valley Road/Pradera Pkwy

- Signalization
- West leg addition (left turn lane & through/right turn lane)
- Northbound left turn lane
- Southbound right turn lane
- Two northbound through lanes
- Two southbound through lanes

The addition of the proposed intersections including:

- Crowfoot Valley Rd/Access Road 2
- Crowfoot Valley Rd/Access Road 3
- Crowfoot Valley Rd/Access Road 4

Phase 2 Improvements (2030)

Crowfoot Valley Road/Stroh Rd

- Channelization of eastbound right turn lane

Crowfoot Valley Road/Access Road 2

- East leg addition (right-out only)
- Northbound right turn lane
- Southbound left turn lane

Crowfoot Valley Road/Access Road 3

- East leg addition (right-out only)
- Northbound right turn lane
- Southbound left turn lane

Crowfoot Valley Road/Access Road 4

- East leg addition (left turn lane & through/right turn lane)
- Northbound right turn lane
- Southbound left turn lane

Phase 3 Improvements (2045)

Crowfoot Valley Road/Stroh Rd

- Channelization of northbound right turn lane
- Channelization of westbound right turn lane
- Two northbound through lanes
- Two southbound through lanes

Crowfoot Valley Road/S Chambers Rd

- Triple northbound left turn lanes

Crowfoot Valley Road/N Pinery Parkway

- Dual eastbound left turn lanes

Crowfoot Valley Road/Pradera Parkway

- Dual eastbound left turn lanes

Crowfoot Valley Road/Access Road 4

- Dual eastbound left turn lanes

Canyons Improvements (2040)

The following improvements were shown in the Canyons TIS and would be constructed by 2040:

Crowfoot Valley Road/Macanta Blvd

- Signalization
- West leg addition (dual left turn lanes, one through lane, and one right turn lane)
- Two southbound through lanes
- Northbound left turn lane
- Southbound right turn lane
- Westbound through lane addition

Crowfoot Valley Road/Sapphire Pointe Blvd

- Signalization
- Two southbound through lanes

I. Introduction

Overview

This report presents the results of a Traffic Impact Study (TIS) conducted in support of an annexation and planned development (PD) applications. Currently the site is vacant.

Per the requirements of Chapter 6 of the Roadway Design and Construction Standards, a TIS is required to support the proposed project.

Site Location and Study Area

The property that comprises the application area for the proposed development is approximately 750 acres of private property and public property (right-of-way) and is identified as Douglas County Parcel Numbers 2349-084-00-001, 2349-083-00-003, 2349-082-00-003, 2349-082-00-001, 2349-080-00-019, 2349-080-00-031, 2349-090-00-010, 2349-080-00-003, 2349-070-00-023, 2349-080-00-026, 2349-080-01-002, 2349-080-00-015. It is generally located on either side of Crowfoot Valley Road, south of Chambers Road, and west of Bayou Gulch Road. The site location is shown on Figure 1-1. It is currently zoned A1 Agricultural by Douglas County and is being used for agricultural purposes and open lands. The Applicant proposes to change the Property's zoning, upon annexation, to the City zone district of PD Planned Development.

The Applicant, Ventana Capital, seeks to develop the area with a neighborhood serving commercial, mixed-use, multifamily, and single-family residential uses. The primary access points will be from Crowfoot Valley Road to the northwest and southeast, aligning with existing access points of adjacent developments where feasible. The proposed uses are generally consistent with the land use designations of nearby and similar locations within Castle Pines shown on the Future Land Use Map of the 2021 Comprehensive Plan. A reduction of the Applicant's proposed conceptual site plan is provided in Figure 1-2. A full-size copy of the plan is provided in Appendix A.

Tasks undertaken in the course of this study included the following:

1. Reviewed the Applicant's proposed development plans and other background data.
2. Conducted a virtual field reconnaissance of existing roadway and intersection geometries, traffic controls, and speed limits.
3. Collected weekday AM/PM peak hour turning movement counts as well as Average Daily Traffic (ADT) counts at the key intersections and segments.
4. Analyzed existing levels of service at each of the key study intersections based on the methodologies set forth in the Highway Capacity Guidelines (HCM) 7th Edition and reports generated by Synchro as reported by Synchro version 12.
5. Forecasted background future traffic volumes based on baseline traffic counts, regional traffic growth, and pipeline developments for all study years.
6. Estimated the number of AM and PM peak hour trips that would be generated by the proposed use based on the Institute of Transportation Engineers (ITE) Trip Generation 12th Edition rates/equations and methodologies.

7. Prepared AM and PM peak hour total future traffic forecasts based on background traffic forecasts plus site traffic assignments for Phase 1 (2028), Phase 2 (2030), and Phase 3 (2045) scenarios.
8. Calculated total future levels of service for each of the key study intersections based on projected total future traffic forecasts and future intersection geometries.
9. Identified roadway improvements required for intersections and roadway segments to accommodate future traffic volumes as necessary.

Sources of data for this analysis included the ITE Trip Generation, 12th edition, the Highway Capacity Guidelines HCM 7th, Synchro 12, Ventana Capital, Douglas County Roadway Design and Technical Criteria, Castle Pines, Colorado, and the files/library of Galloway.

Site Description and Access

Site Conditions

The terrain proximate to and surrounding the site is generally classified as “level”.

Proposed Site Access

Access to the site would be provided by new intersections and connections to Crowfoot Valley Drive. Specifically, three new full movement signalized intersections with ½ mile spacing will be provided as well as opportunities for partial movement access can be provided as detailed herein.

Nearby Uses

The subject property is adjacent to developed and developing neighborhoods to the:

North: Parker Municipal Area (developed/developing)

South: Canyons Planned Development (under construction) and Pinery Separated Urban Area

East: Parker Municipal Area and Pinery Separated Urban Area

West: Castle Park Ranch (estate development)

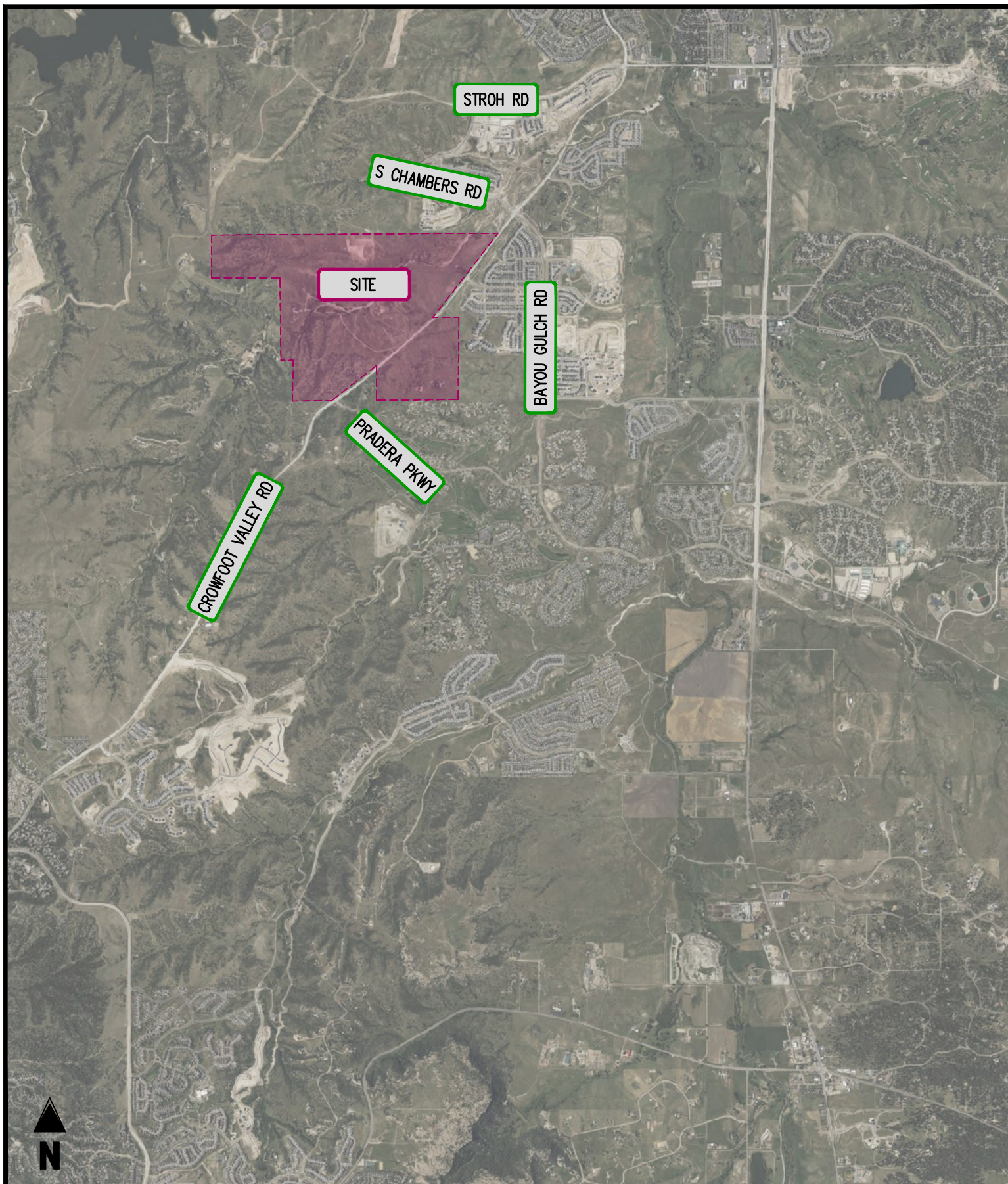
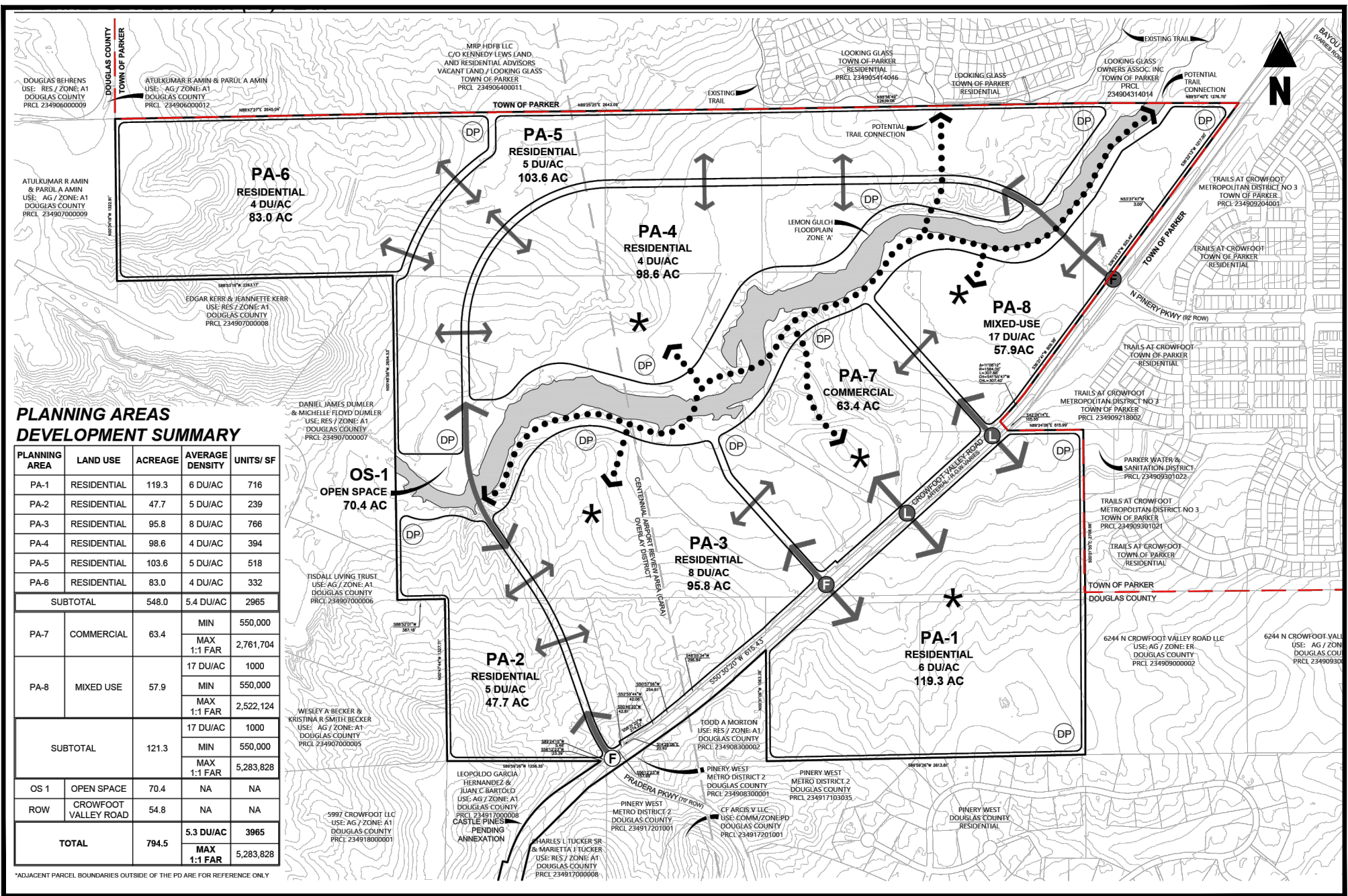


FIGURE 1-1
SITE LOCATION





**FIGURE 1-2
SITE PLAN**

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II. Background Information

Study Area

The study area was determined by a review of intersections that would experience a significant portion of turning movement volumes generated by the site. This was confirmed via a scoping meeting held on November 10, 2025. As such, the traffic study focuses primarily on the following intersections:

Study Intersections

- Crowfoot Valley Rd/Stroh Rd
- Crowfoot Valley Rd/S Chambers Rd
- Crowfoot Valley Rd/N Pinery Pkwy
- Crowfoot Valley Rd/Pradera Pkwy
- Crowfoot Valley Rd/Macanta Blvd
- Crowfoot Valley Rd/Sapphire Pointe Blvd
- Proposed Site Accesses

The study intersections, as well as additional study assumptions, were provided via a base assumptions form and confirmed in the aforementioned meeting held on November 10 2025. The base assumptions form is provided as Appendix B.

Study Assumptions

For purposes of this analysis only, the proposed project was analyzed in three distinct phases to provide guidance to infrastructure requirements. It was assumed that Phase 1 would be built and operational in the study year 2028, Phase 2 would be built out in the year 2030, and a long-range analysis referred to as Phase 3 for study year 2045 was conducted.

Study Methodology

Synchro software version 12 was used to evaluate levels of service at each of the study intersections during the weekday AM and PM peak hours. Synchro is a macroscopic model used for optimizing traffic signal timing and performing capacity analyses. The software can model existing traffic signal timings or optimize splits, offsets, and cycle lengths for individual intersections, an arterial, or a complete network. Synchro allows the user to evaluate the effects of changing intersection geometrics, traffic demands, traffic control, and/or traffic signal settings as well as optimize traffic signal timings.

The levels of service reported for the signalized and unsignalized intersections analyzed herein were taken from the Highway Capacity Manual (HCM) 7th and reports generated by Synchro. Level of service descriptions are included in Appendix C.

The heavy vehicle (%HV) factor from the turning movement counts were used for the analysis. A default %HV factor of 2% was used for all new/proposed movements in the study area.

Existing Roadway Network

Regional access to the subject site is provided by Crowfoot Valley Rd, S Chambers Rd, Bayou Gulch Rd, N Pinery Pkwy, and Pradera Pkwy. Figure 2-1 depicts existing lane use and traffic controls in the vicinity of the subject site. The following provides a description of each of the roadways within the study network.

Crowfoot Valley Rd

Crowfoot Valley Rd is constructed as a two-lane section with turn lanes at major intersections. The posted speed limit is 50 mph in the vicinity of the subject site. Douglas County classifies the roadway as a Major Arterial. The roadway is designed with on-street bike facilities. The intersection with Chambers Road/Bayou Gulch Road operates under signalized control. The roadway provides southwest/northeast connection throughout the area.

S Chambers Rd

S Chambers Rd is constructed as a three-lane roadway with turn lanes at major intersections. The posted speed limit is 45 mph in the vicinity of the subject site. Douglas County classifies the roadway as a Major Arterial. The roadway provides north/south regional connection through the area.

Bayou Gulch Rd

Bayou Gulch Rd is constructed as a two-lane roadway with a posted speed limit of 40 mph in the vicinity of the subject site. Douglas County classifies the roadway as a Major Arterial. The roadway provides north/south regional connection through the area.

N Pinery Pkwy

N Pinery Pkwy is constructed as a two-lane divided roadway with a posted speed limit of 35 mph in the vicinity of the subject site. Douglas County classifies the roadway as a Collector. The intersections along the roadway operate under stop control and provide access to residential neighborhoods.

Pradera Pkwy

Pradera Pkwy is constructed as a two-lane roadway with a posted speed limit of 40 mph in the vicinity of the subject site. Douglas County classifies the roadway as a Collector. The intersections along the roadway operate under stop control and provide access to residential neighborhoods.

Driveway Accesses

Additional driveways exist on Crowfoot Valley Rd for residential use. These driveways were not studied within this analysis as they are expected to have minimal inbound/outbound volumes, and all site trips are expected to be through movements at the driveways.

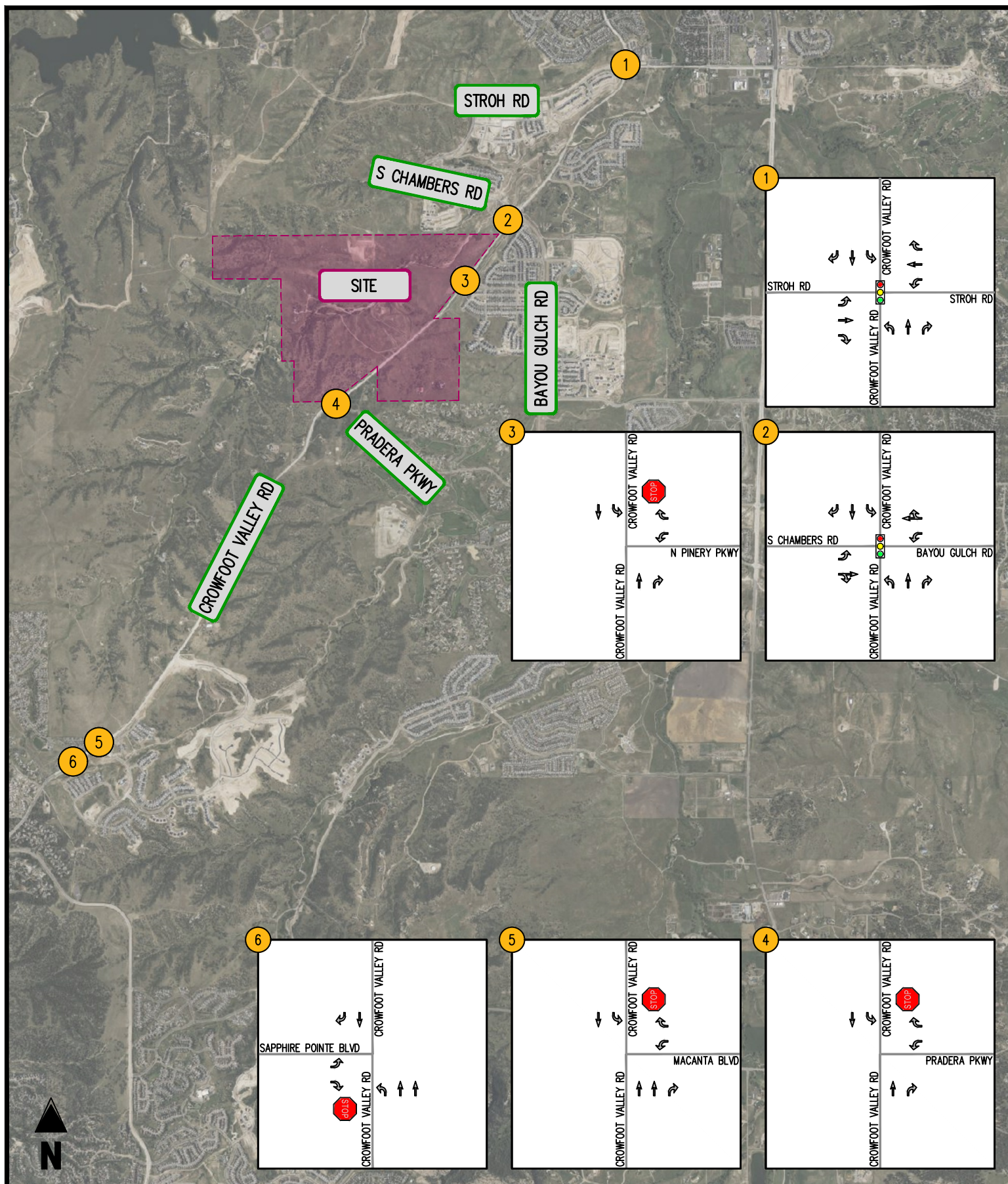
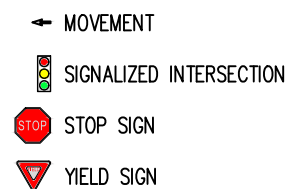


FIGURE 2-1
EXISTING LANE USE AND TRAFFIC CONTROL

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III. Analysis of Existing Conditions

Traffic Volumes

24 hour average daily traffic (ADT) counts along Crowfoot Valley Road as well as Weekday AM and PM peak hour traffic volume counts were conducted on Wednesday October 8, 2025, and Tuesday November 18, 2025 from 7:00 AM to 9:00 AM and 4:00 PM to 6:00 PM at the study intersections by IDAX Data Solutions. The AM and PM peak hours of the network were found to be 7:15 AM to 8:15 AM and 4:30 PM to 5:30 PM, therefore the counted volumes from those hours were used for each of the intersections and balanced between each intersection to create consistency. Volumes were only increased in order to balance the trips between intersections to create a conservative analysis.

The existing volumes are summarized in Figure 3-1. Copies of traffic counts are included in Appendix D. Existing peak hour factors (PHF) were also computed by approach from the traffic counts and applied to the analysis with a minimum of 0.85 and a maximum of 0.92.

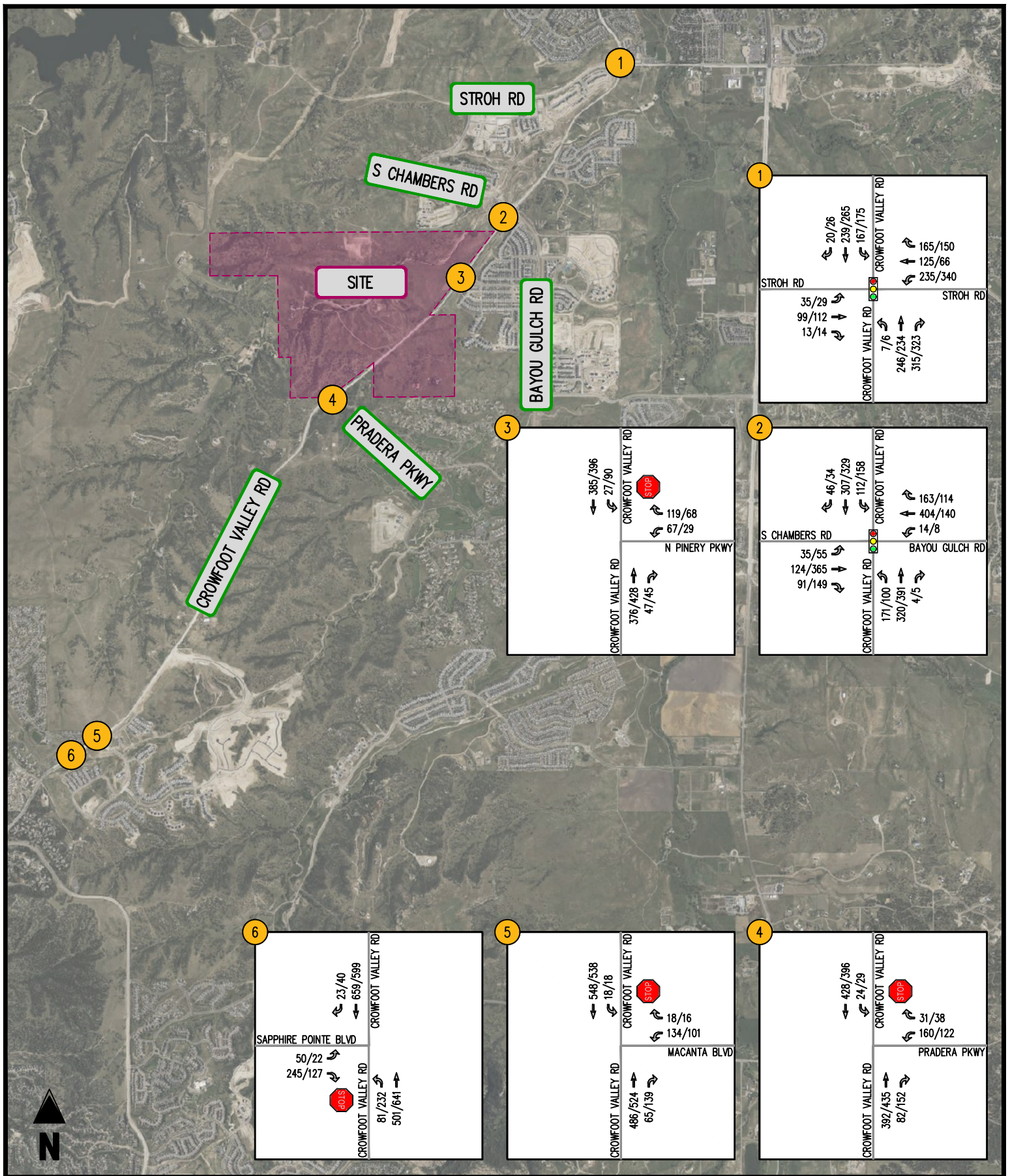
Operational Analysis

Capacity/level of service (LOS) analyses were conducted at the study intersections based on the existing lane use and traffic controls shown in Figure 2-1 and existing baseline vehicular traffic volumes shown in Figure 3-1. The capacity analysis results are presented in Appendix E and summarized in Table 3-1 and in Figure 3-2.

As shown in Table 3-1, the intersections in the study area currently operate without the need for additional improvements during the weekday AM and PM peak hours.

Existing Intersection Queues

An analysis of intersection 95th-percentile queues was performed at key locations. The results of the queuing analysis, as reported by Synchro, are summarized in Table 3-2. As shown in the table, queues are contained within their effective storage with the exception of the westbound left movement at the Crowfoot Valley Rd/Stroh Rd intersection during the PM peak hour.



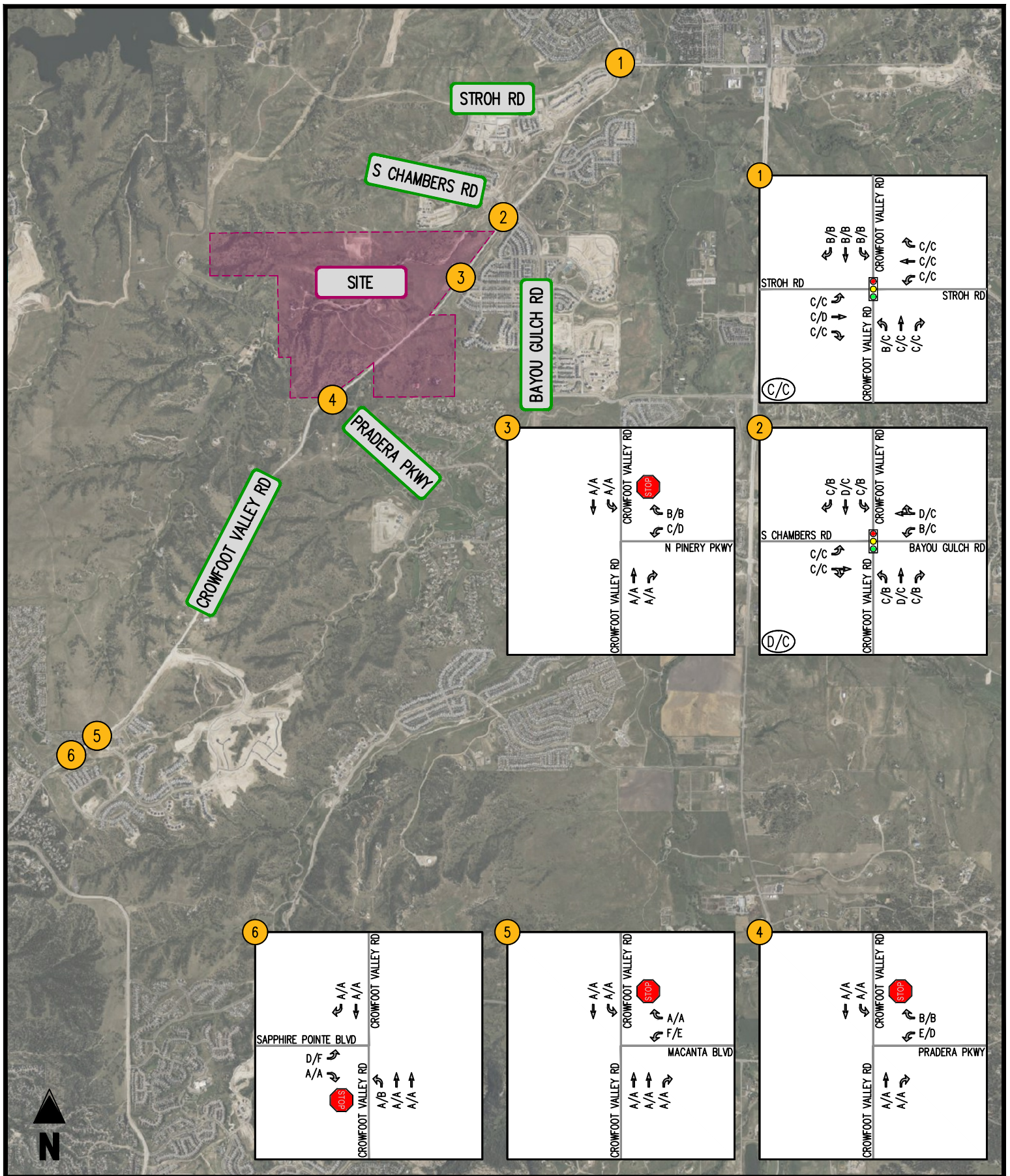
**FIGURE 3-1
EXISTING VOLUMES**

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(A/A) INTERSECTION LOS
0000/0000 (AM PEAK HOUR/PM PEAK HOUR)

← MOVEMENT
 SIGNALIZED INTERSECTION
 STOP SIGN
 YIELD SIGN





**FIGURE 3-2
EXISTING LOS**

CROWSNEST
CASTLE PINES, CO

(A/A) INTERSECTION LOS
0000/0000 (AM PEAK HOUR/PM PEAK HOUR)

← MOVEMENT
 SIGNALIZED INTERSECTION
 STOP SIGN
 YIELD SIGN



Table 3-1
 Crowsnest - Castle Pines, CO
 Existing Intersection Level of Service Summary ^{(1) (2)}

Intersection	Operating Condition	Street Name	Approach/ Movement	Existing 2025	
				AM Peak Hour	PM Peak Hour
1 Crowfoot Valley Rd/Stroh Rd	SIGNAL	Stroh Rd	EBL	C (29.3)	C (33.8)
			EBT	C (31.9)	D (37.3)
			EBR	C (28.8)	C (33.4)
		Stroh Rd	WBL	C (28.9)	C (32.7)
			WBT	C (24.7)	C (24.0)
			WBR	C (26.8)	C (26.1)
		Crowfoot Valley Rd	NBL	B (16.6)	C (20.2)
			NBT	C (20.8)	C (24.8)
			NBR	C (24.9)	C (30.8)
		Crowfoot Valley Rd	SBL	B (14.1)	B (17.2)
			SBT	B (15.8)	B (19.3)
			SBR	<u>B (13.4)</u>	<u>B (16.2)</u>
Overall		C (23.0)	C (26.8)		
2 Crowfoot Valley Rd/S Chambers Rd	SIGNAL	S Chambers Rd	EBL	C (27.0)	C (23.3)
			EBTR	C (21.0)	C (32.3)
		Bayou Gulch Rd	WBL	B (19.2)	C (24.6)
			WBTR	D (45.9)	C (31.6)
		Crowfoot Valley Rd	NBL	C (31.4)	B (18.2)
			NBT	D (42.7)	C (30.2)
			NBR	C (30.7)	B (19.5)
		Crowfoot Valley Rd	SBL	C (31.4)	B (19.2)
			SBT	D (48.3)	C (24.4)
			SBR	<u>C (34.9)</u>	<u>B (18.4)</u>
		Overall		D (40.6)	C (27.5)
		3 Crowfoot Valley Rd/N Pinery Pkwy	STOP	N Pinery Pkwy	WBL
WBR	B [12.5]				B [12.3]
Crowfoot Valley Rd	NBT			A [0.0]	A [0.0]
	NBR			A [0.0]	A [0.0]
Crowfoot Valley Rd	SBL			A [8.5]	A [9.0]
	SBT			A [0.0]	A [0.0]
4 Crowfoot Valley Rd/Pradera Pkwy	STOP	Pradera Pkwy	WBL	E [43.9]	D [34.8]
			WBR	B [11.4]	B [11.9]
		Crowfoot Valley Rd	NBT	A [0.0]	A [0.0]
			NBR	A [0.0]	A [0.0]
		Crowfoot Valley Rd	SBL	A [8.4]	A [8.5]
			SBT	A [0.0]	A [0.0]
5 Crowfoot Valley Rd/Macanta Blvd	STOP	Macanta Blvd	WBL	F [62.2]	E [47.9]
			WBR	A [0.0]	A [0.0]
		Crowfoot Valley Rd	NBT	A [0.0]	A [0.0]
			NBR	A [0.0]	A [0.0]
		Crowfoot Valley Rd	SBL	A [8.8]	A [9.2]
			SBT	A [0.0]	A [0.0]
6 Crowfoot Valley Rd/Sapphire Pointe Blvd	STOP	Sapphire Pointe Blvd	EBL	D [33.4]	F [60.5]
			EBR	A [0.0]	A [0.0]
		Crowfoot Valley Rd	NBL	A [9.6]	B [10.6]
			NBT	A [0.0]	A [0.0]
		Crowfoot Valley Rd	SBT	A [0.0]	A [0.0]
			SBR	A [0.0]	A [0.0]

Notes : (1) Numbers in brackets [] represent delay at unsignalized intersections in seconds per vehicle.
 (2) Numbers in parenthesis () represent delay at signalized intersections in seconds per vehicle.

Table 3-2
Crowsnest - Castle Pines, CO
Existing Intersection Queueing Summary ⁽¹⁾

Intersection	Operating Condition	Street Name	Approach/ Movement	Available Storage	Existing 2025	
					AM Peak Hour	PM Peak Hour
1 Crowfoot Valley Rd/Stroh Rd	SIGNAL	S Chambers Rd	EBL	225	62	61
			EBT	-	140	178
			EBR	350	0	0
			WBL	350	267	415
		Bayou Gulch Rd	WBT	-	146	87
			WBR	600	56	52
			NBL	250	13	14
			NBT	-	269	307
		Crowfoot Valley Rd	NBR	500	72	84
			SBL	450	134	175
			SBT	-	226	301
			SBR	-	0	0
2 Crowfoot Valley Rd/S Chambers Rd	SIGNAL	S Chambers Rd	EBL	550	46	70
			EBTR	-	248	822
		Bayou Gulch Rd	WBL	300	24	17
			WBTR	-	925	323
		Crowfoot Valley Rd	NBL	500	166	91
			NBT	-	402	484
			NBR	400	0	0
			SBL	550	112	138
		Crowfoot Valley Rd	SBT	-	418	384
			SBR	350	10	0
3 Crowfoot Valley Rd/N Pinery Pkwy	STOP	N Pinery Pkwy	WBL	-	28	15
			WBR	215	23	13
		Crowfoot Valley Rd	NBT	-	0	0
			NBR	440	0	0
		Crowfoot Valley Rd	SBL	500	3	10
			SBT	-	0	0
4 Crowfoot Valley Rd/Pradera Pkwy	STOP	Pradera Pkwy	WBL	-	118	78
			WBR	250	5	8
		Crowfoot Valley Rd	NBT	-	0	0
			NBR	880	0	0
		Crowfoot Valley Rd	SBL	450	3	3
			SBT	-	0	0
5 Crowfoot Valley Rd/Macanta Blvd	STOP	Macanta Blvd	WBL	265	120	80
			WBR	-	0	0
		Crowfoot Valley Rd	NBT	-	0	0
			NBR	575	0	0
		Crowfoot Valley Rd	SBL	575	3	3
			SBT	-	0	0
6 Crowfoot Valley Rd/Sapphire Pointe Blvd	STOP	Sapphire Pointe Blvd	EBL	265	30	25
			EBR	-	0	0
		Crowfoot Valley Rd	NBL	600	8	30
			NBT	-	0	0
		Crowfoot Valley Rd	SBT	-	0	0
			SBR	250	0	0

Notes : (1) Queue length, in feet, is based on the 95th percentile queue as reported by Synchro, Version 12.

IV. Analysis of Future Conditions without Site Development

Methodology

The future traffic forecasts, without the proposed new use, were developed for 2028, 2030, and 2045 conditions based on a composite of existing baseline traffic volumes, pipeline developments, and regional traffic growth.

Regional Growth

Increases in traffic associated with regional growth were estimated at 2.0% per year compounded for all movements on Crowfoot Valley Rd, Stroh Rd, and Chambers Rd/Bayou Gulch Rd up to 2028, 2030, and 2045. This growth accounts for increases in traffic resulting from influences outside of the immediate study area. The resulting increases in volumes within the study area are reflected in Figure 4-1 for 2028 conditions, Figure 4-2 for 2030 conditions, and Figure 4-3 for 2045 conditions.

Pipeline Developments

To account for projected traffic from nearby developments not yet built, trip assignments from the nearby Canyons pipeline development were included for 2045 conditions. This development would not connect to Crowfoot Valley Rd until 2040, therefore only the 2040 development plan was considered within this analysis.

The location of the pipeline development in relation to the Applicant's property is shown in Figure 4-4. The intersections of Crowfoot Valley Rd/Macanta Blvd and Crowfoot Valley Rd/Sapphire Pointe Blvd were identified to warrant signalization and additional turn lanes by the pipeline development. The proposed lane use and traffic control for those intersections shown in the pipeline TIS was used for the background future and total future 2045 conditions. Background future lane use and traffic control for 2045 is shown in Figure 4-5.

Pipeline development site trips were obtained from the supporting TIS completed by FHU and dated March 2025 and are shown in Figure 4-6. Improvements associated with the pipeline development were assumed complete by 2045, consistent with the approved TIS. Relevant excerpts from the pipeline TIS are included in Appendix F.

Background Future Traffic Forecasts

The existing traffic forecasts depicted in Figure 3-1, the regional growth shown in Figure 4-1 (2028), Figure 4-2 (2030), and Figure 4-3 (2045), and the pipeline development site trips shown in Figure 4-6 (2045) were added together to yield the background future traffic forecasts shown in Figure 4-7 (2028), Figure 4-8 (2030), and Figure 4-9 (2045).

Background Future Levels of Service

Capacity analyses of 2028, 2030, and 2045 future traffic conditions without the proposed development are provided in Appendix G and summarized in Table 4-1. The forecasted levels of service are also depicted graphically in Figure 4-10 for 2028 conditions, Figure 4-11 for 2030 conditions, and Figure 4-12 for 2045 conditions.

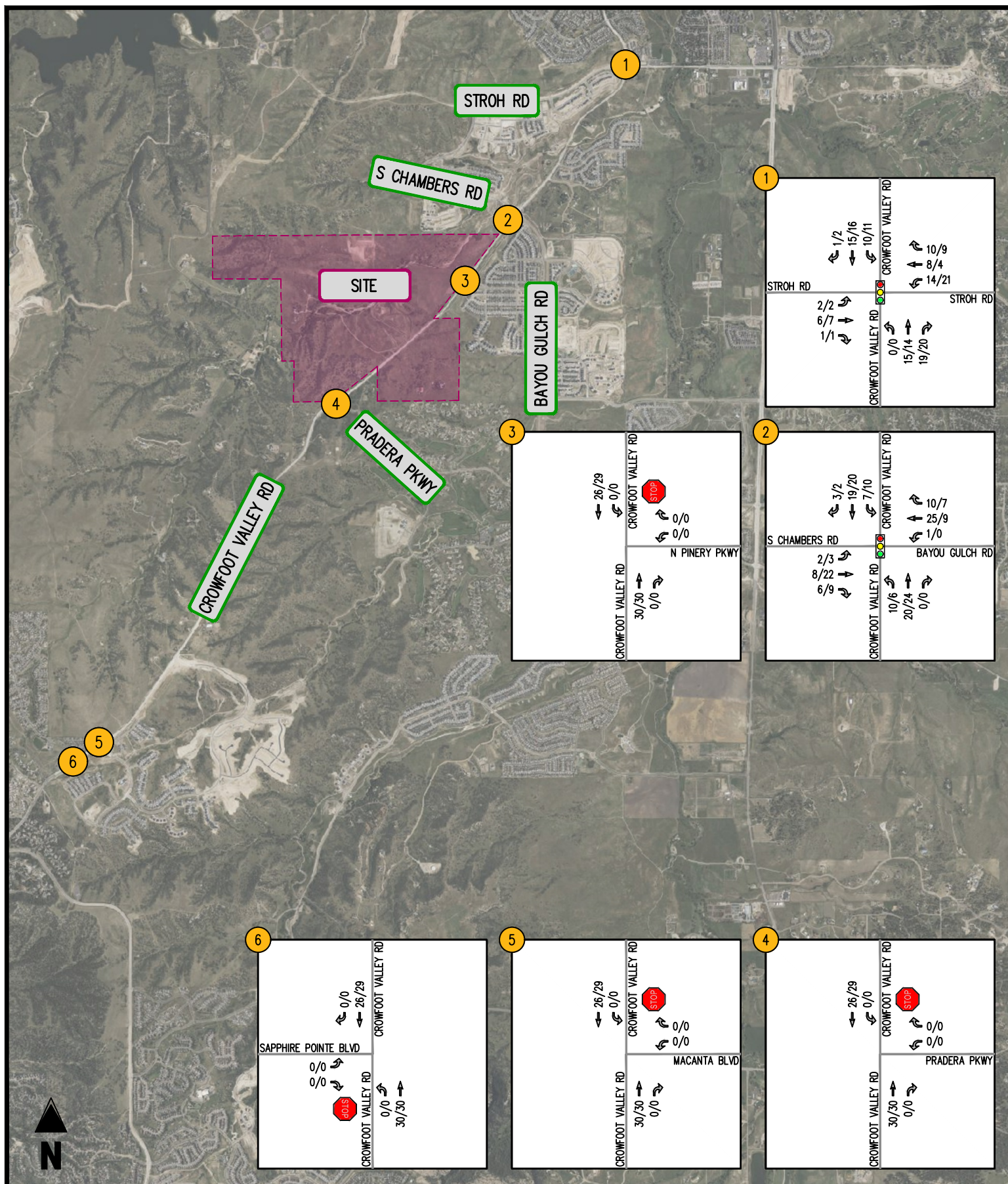
As shown in Table 4-1, the signalized intersections in the study area are forecasted to operate at acceptable overall LOS "D" or better during the weekday AM and PM peak hours with the exception of the Crowfoot

Valley Rd/Stroh Rd intersection which is expected to operate at LOS “E” during the 2045 PM peak hour and the Crowfoot Valley Rd/S Chambers Rd intersection which is expected to operate at LOS “F” during the 2045 AM peak hour and LOS “E” during the 2045 PM peak hour. The unsignalized intersections are expected to operate without the need for additional improvements during the weekday AM and PM peak hours.

Background Future Queueing

An analysis of intersection queues was performed at key locations under background future traffic conditions. The results of the queuing analysis are summarized in Table 5-2.

As shown in the table, queues within the study network will generally increase due to regional traffic growth. All queues are expected to be contained in their effective storage with the exception of the westbound left movement at the Crowfoot Valley Rd/Stroh Rd intersection during the 2028 PM, 2030 PM, and 2045 AM and PM peak hours, generally consistent with existing conditions.



**FIGURE 4-1
BACKGROUND GROWTH 2028**

CROWSNEST
CASTLE PINES, CO

(A/A) INTERSECTION LOS
0000/0000 (AM PEAK HOUR/PM PEAK HOUR)

← MOVEMENT
 SIGNALIZED INTERSECTION
 STOP SIGN
 YIELD SIGN



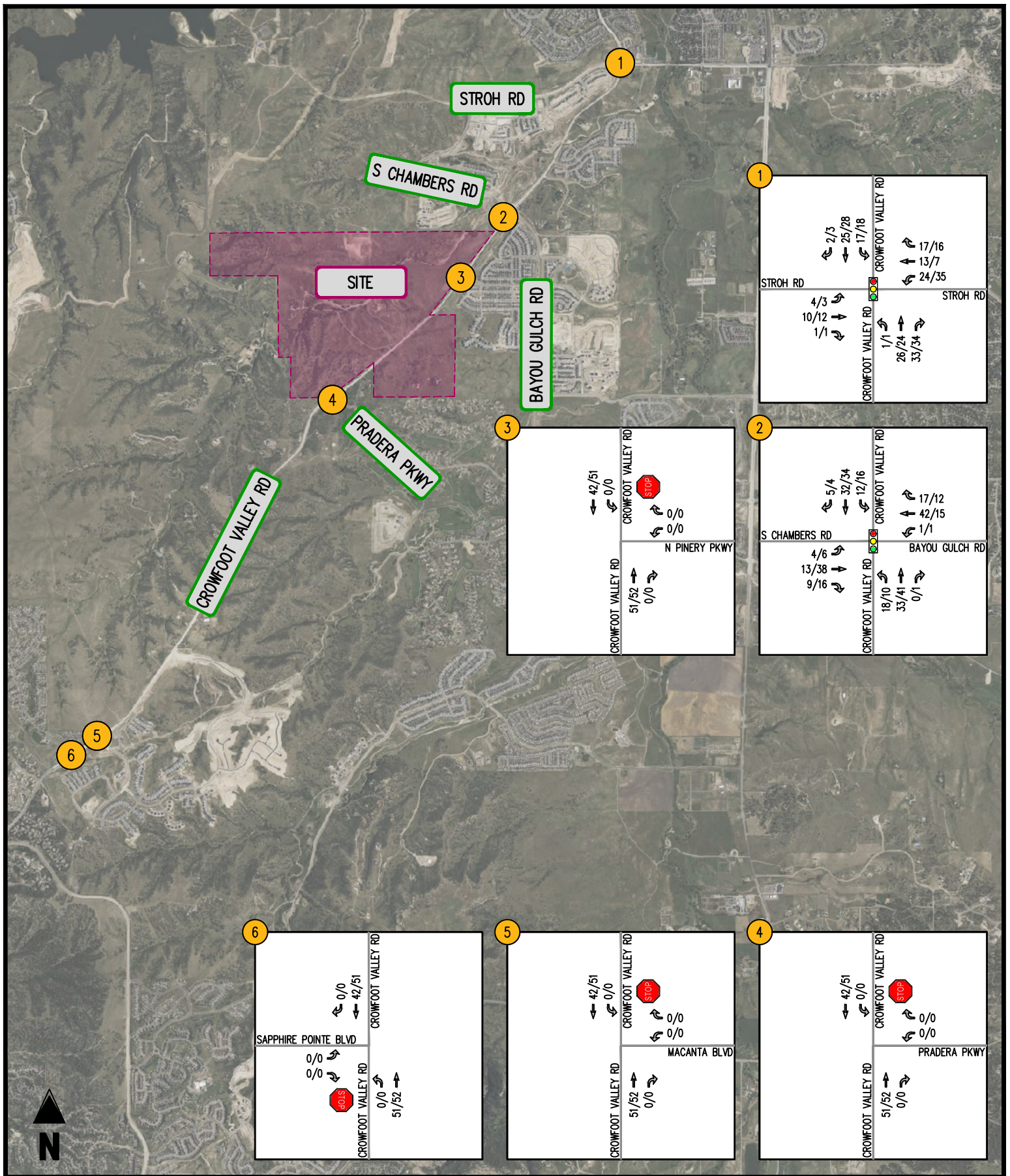


FIGURE 4-2
BACKGROUND GROWTH 2030

CROWSNEST
CASTLE PINES, CO

(A/A) INTERSECTION LOS
0000/0000 (AM PEAK HOUR/PM PEAK HOUR)

← MOVEMENT
 SIGNALIZED INTERSECTION
 STOP SIGN
 YIELD SIGN



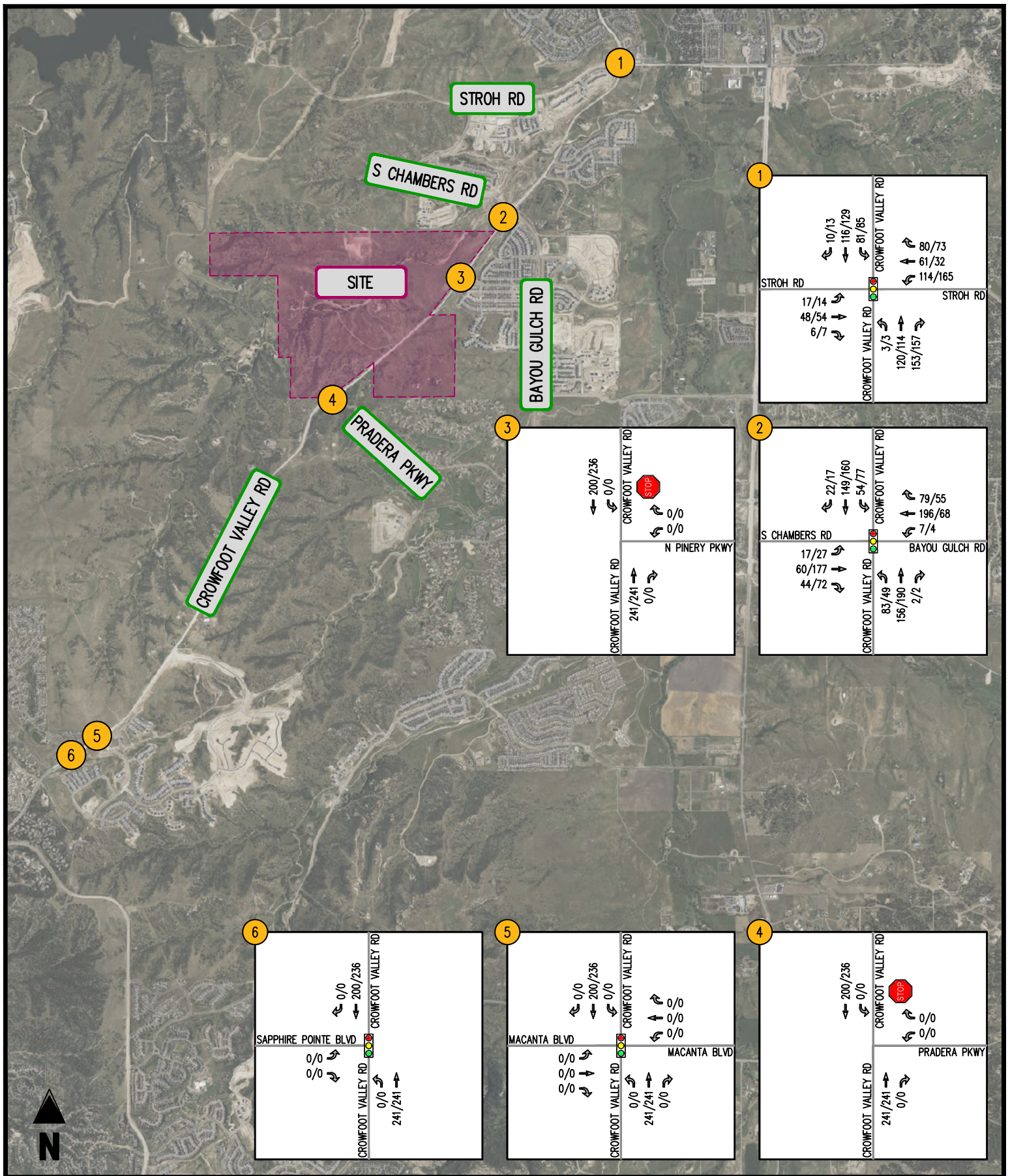


FIGURE 4-3
BACKGROUND GROWTH 2045

CROWSNEST
CASTLE PINES, CO

(A/A) INTERSECTION LOS
0000/0000 (AM PEAK HOUR/PM PEAK HOUR)

← MOVEMENT
 SIGNALIZED INTERSECTION
 STOP SIGN
 YIELD SIGN



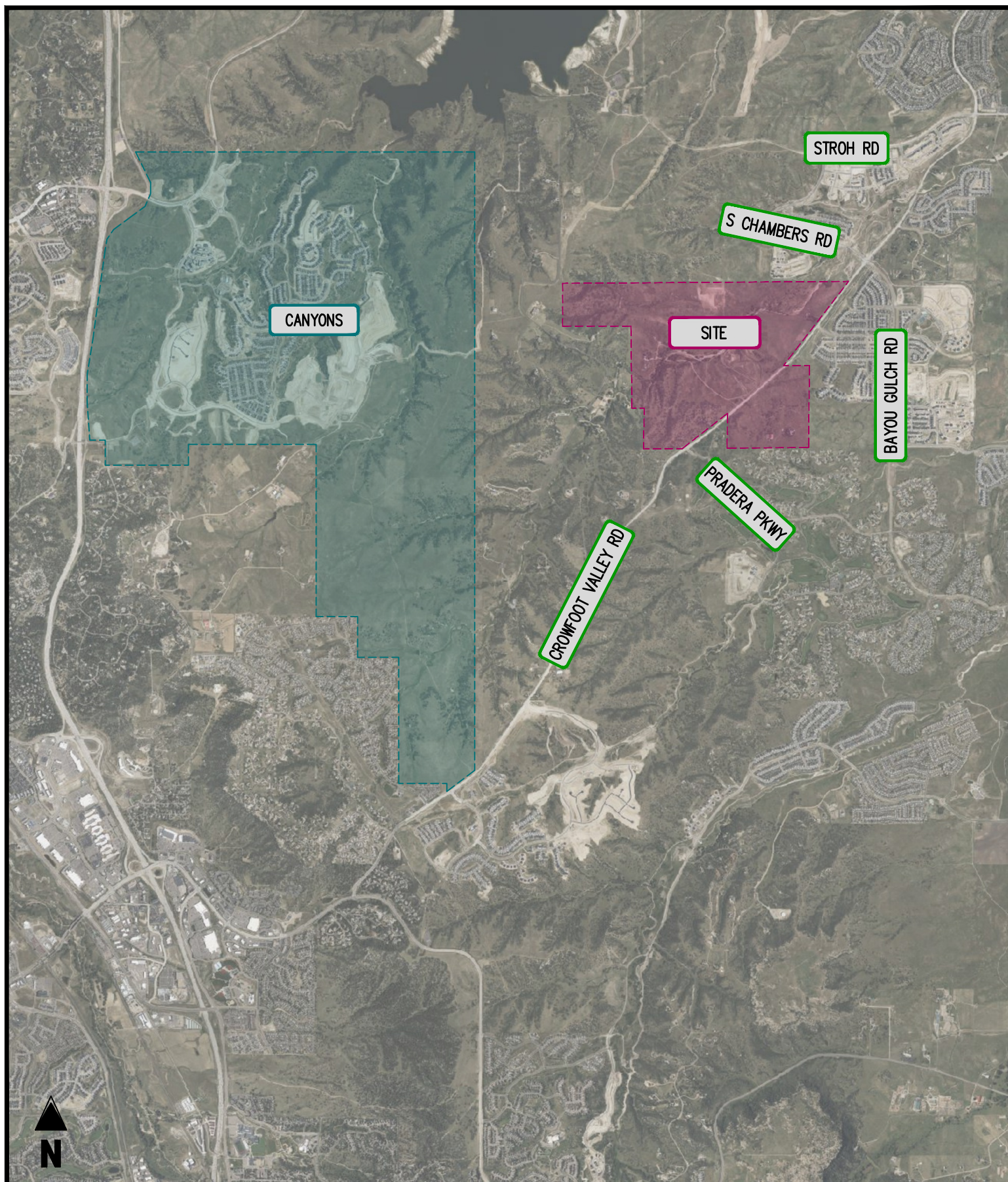


FIGURE 4-4
PIPELINE LOCATION



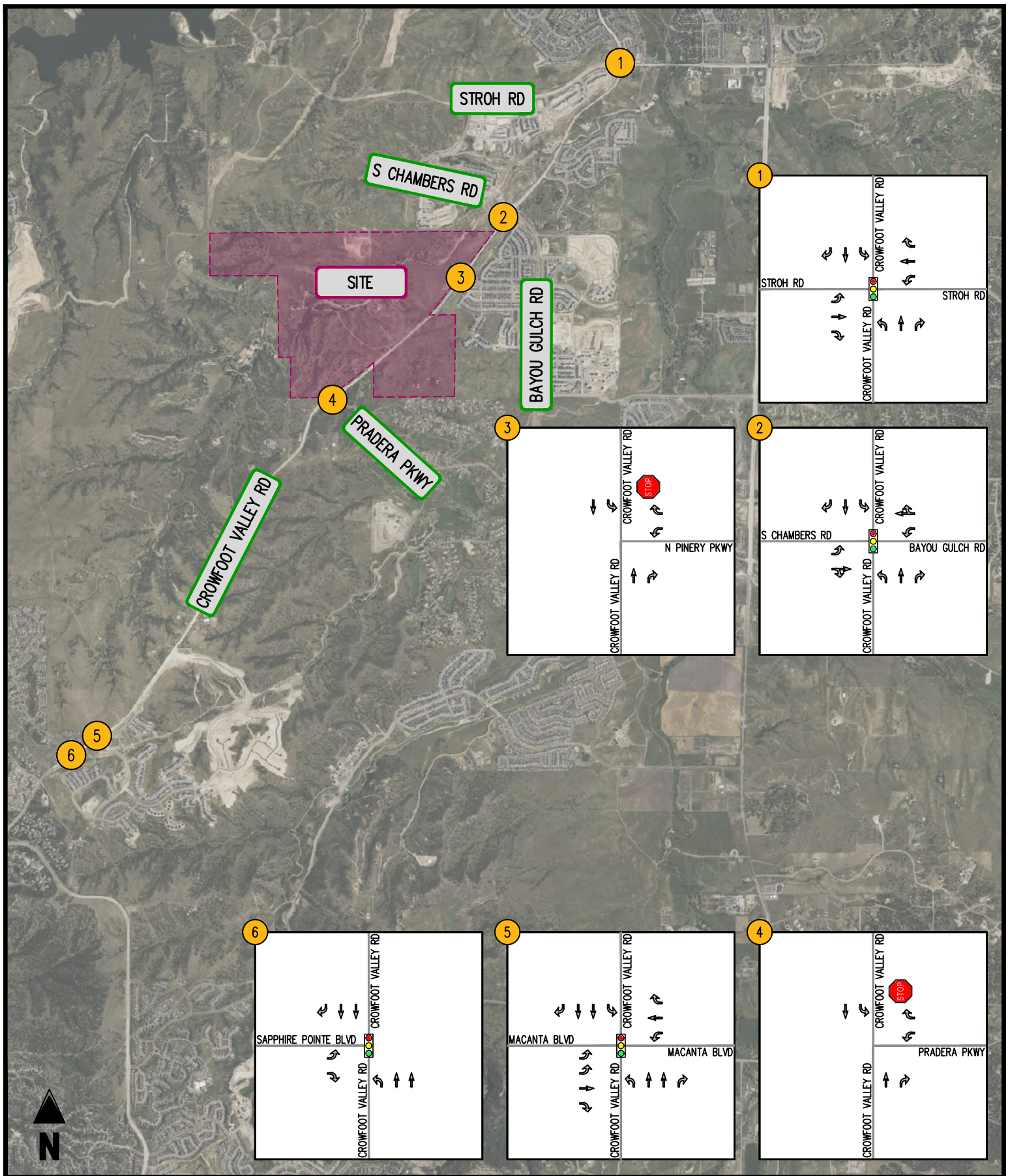
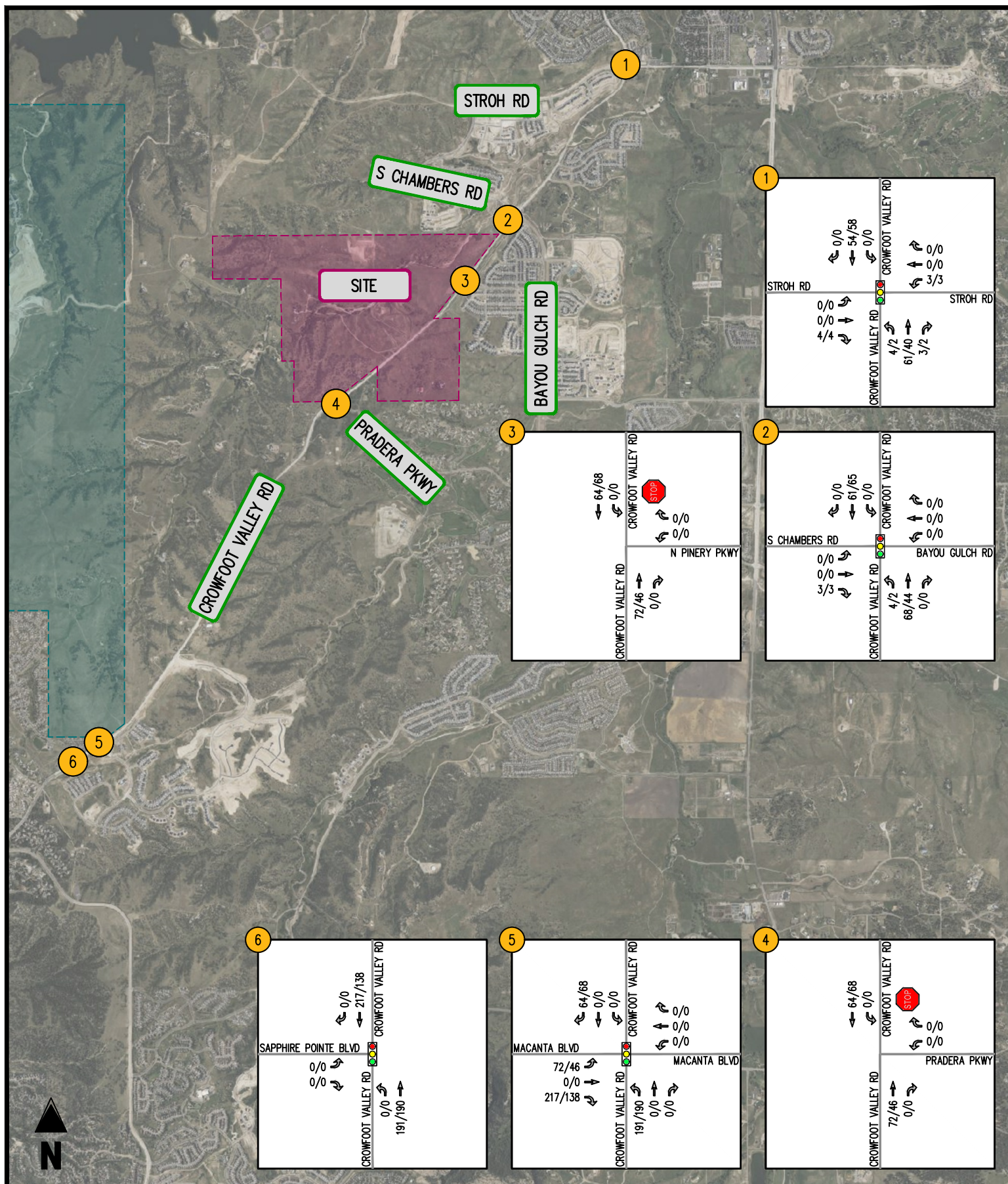
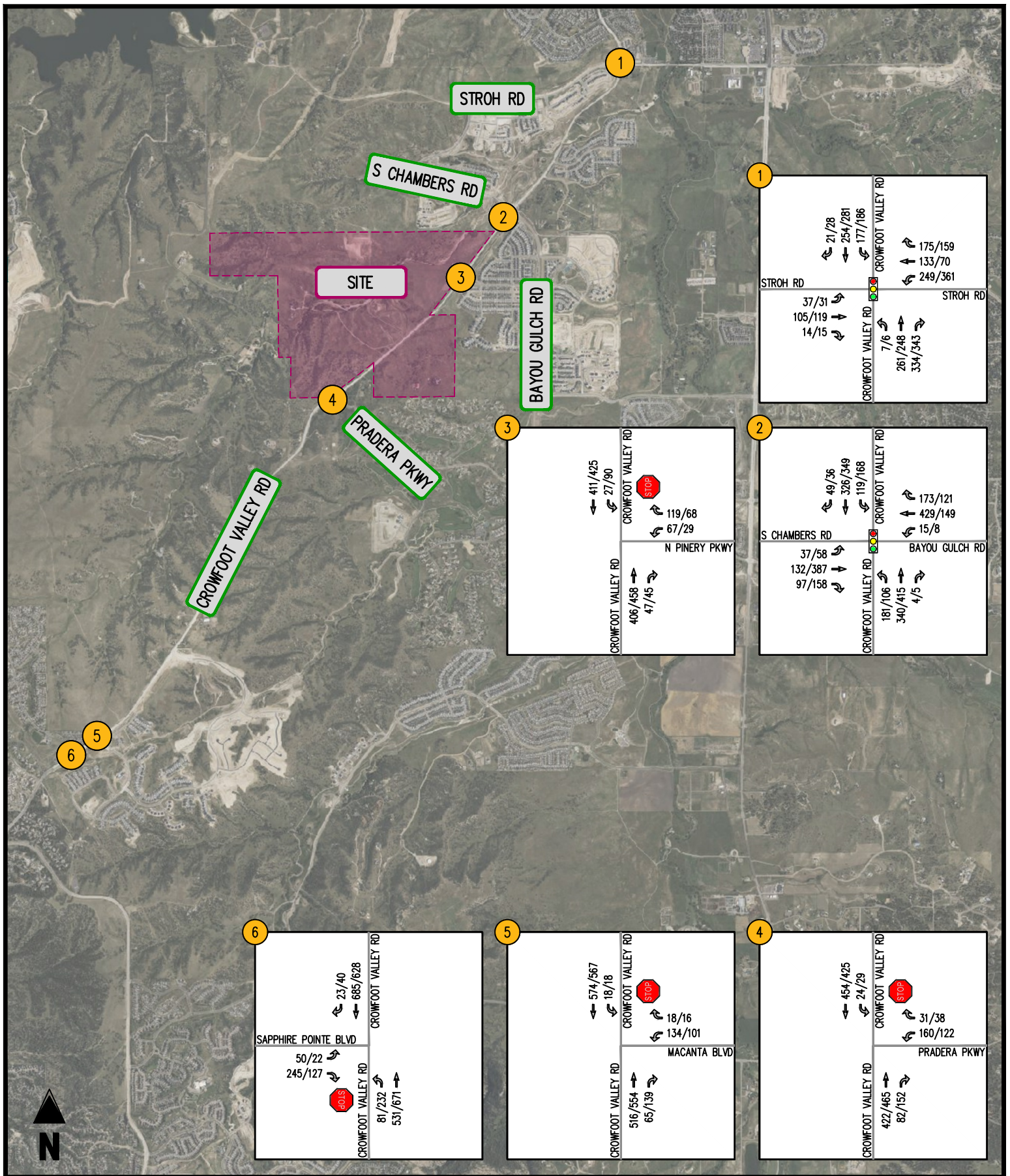


FIGURE 4-5
BACKGROUND FUTURE LANE USE AND TRAFFIC CONTROL 2045





**FIGURE 4-6
PIPELINE SITE TRIPS 2045**



**FIGURE 4-7
BACKGROUND FUTURE FORECASTS 2028**

CROWSNEST
CASTLE PINES, CO

(A/A) INTERSECTION LOS
0000/0000 (AM PEAK HOUR/PM PEAK HOUR)

← MOVEMENT
 SIGNALIZED INTERSECTION
 STOP SIGN
 YIELD SIGN



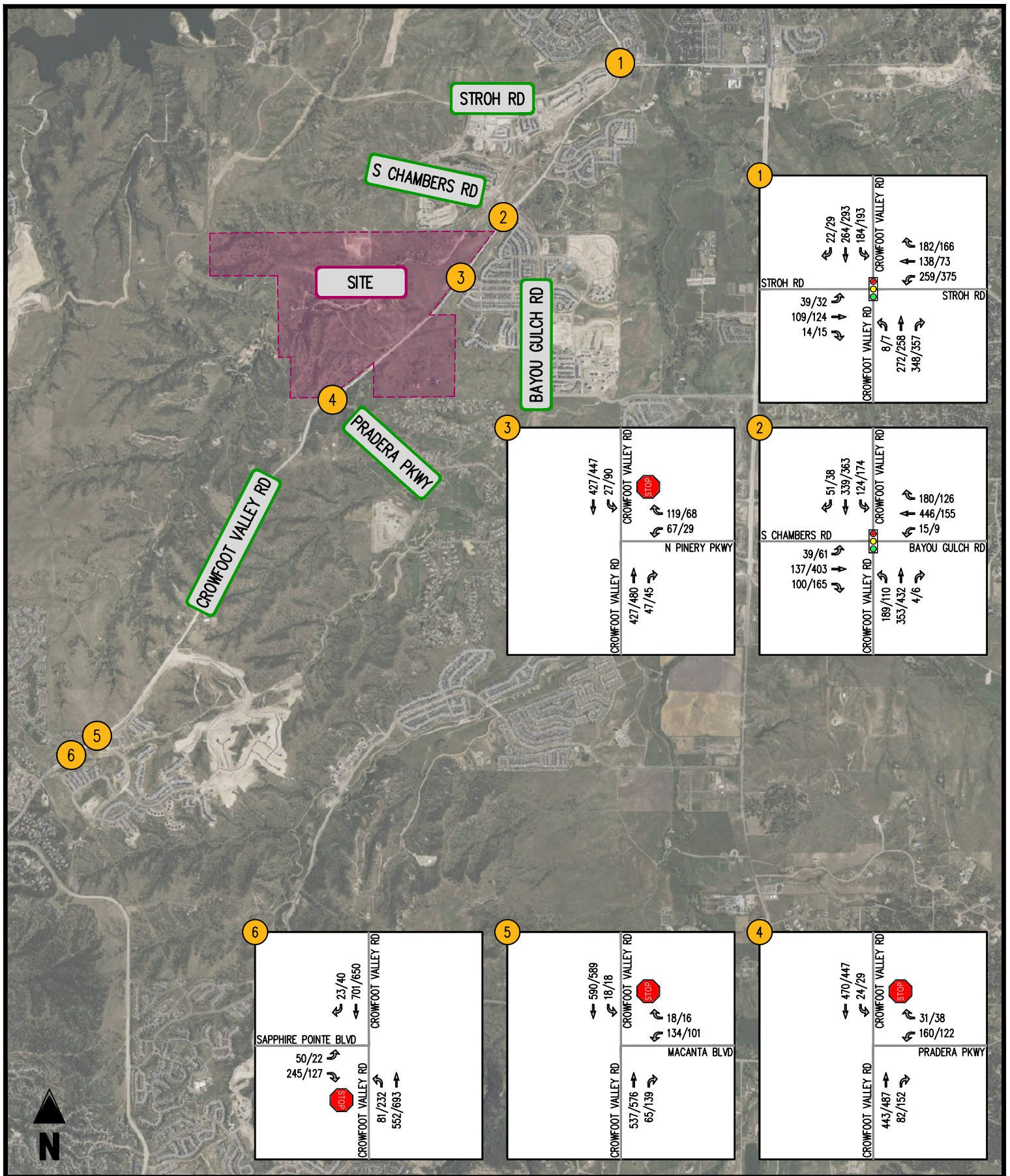


FIGURE 4-8
BACKGROUND FUTURE FORECASTS 2030

CROWSNEST
CASTLE PINES, CO

(A/A) INTERSECTION LOS
0000/0000 (AM PEAK HOUR/PM PEAK HOUR)

← MOVEMENT
 SIGNALIZED INTERSECTION
 STOP SIGN
 YIELD SIGN



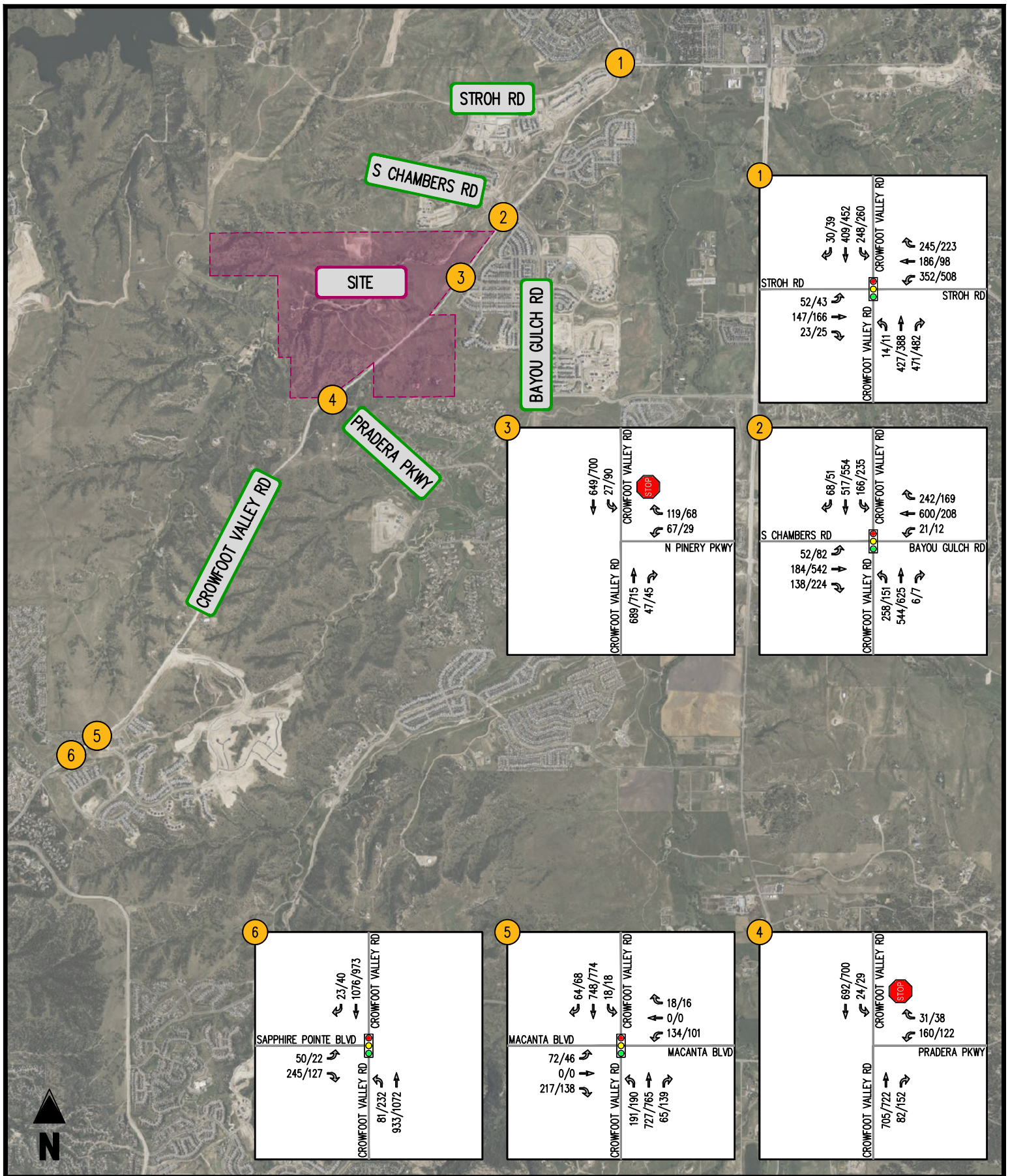


FIGURE 4-9
BACKGROUND FUTURE FORECASTS 2045

CROWSNEST
CASTLE PINES, CO

(A/A) INTERSECTION LOS
0000/0000 (AM PEAK HOUR/PM PEAK HOUR)

← MOVEMENT
 SIGNALIZED INTERSECTION
 STOP SIGN
 YIELD SIGN



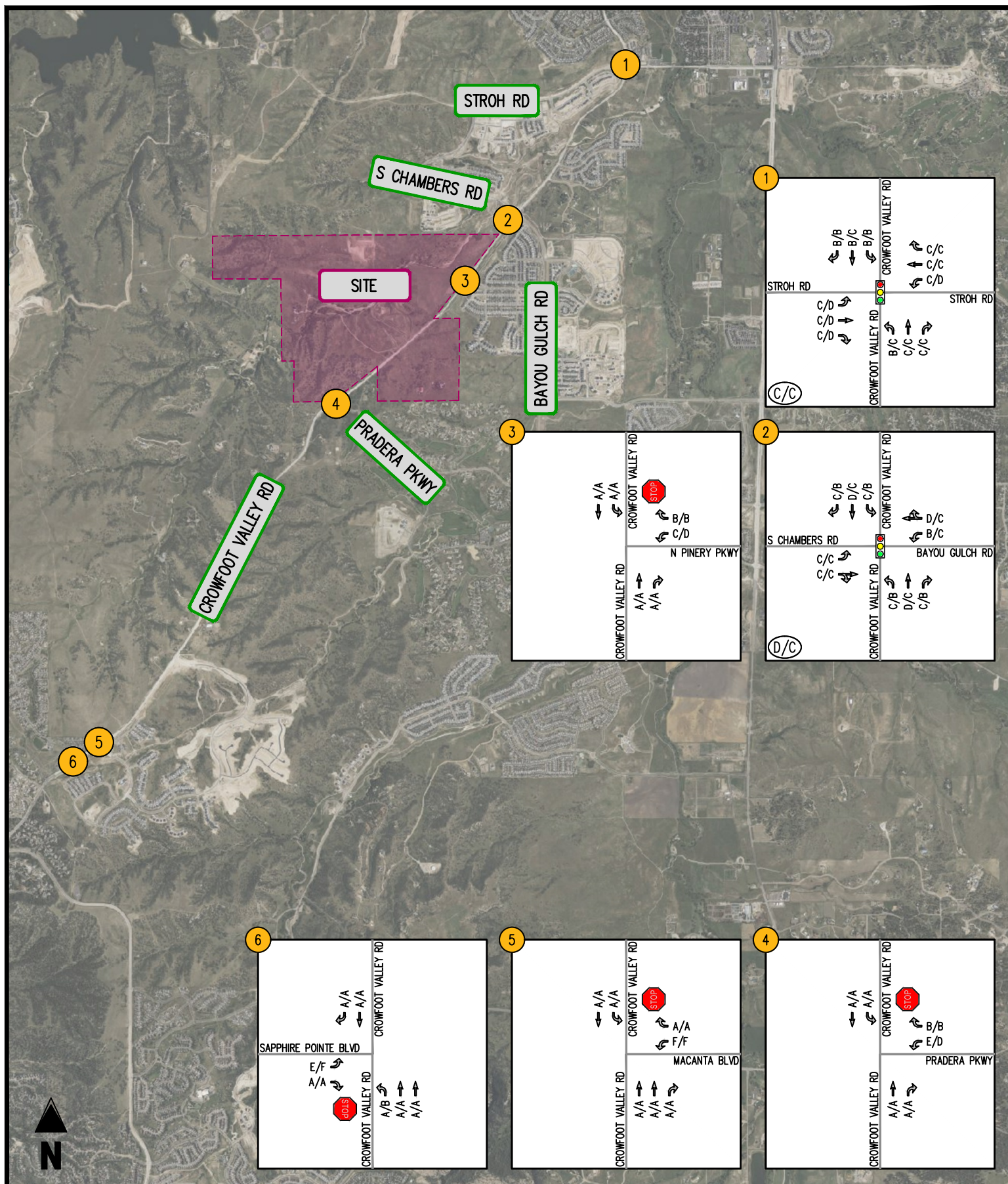


FIGURE 4-10
BACKGROUND LEVELS OF SERVICE 2028

CROWSNEST
CASTLE PINES, CO

(A/A) INTERSECTION LOS
0000/0000 (AM PEAK HOUR/PM PEAK HOUR)

← MOVEMENT
 SIGNALIZED INTERSECTION
 STOP SIGN
 YIELD SIGN



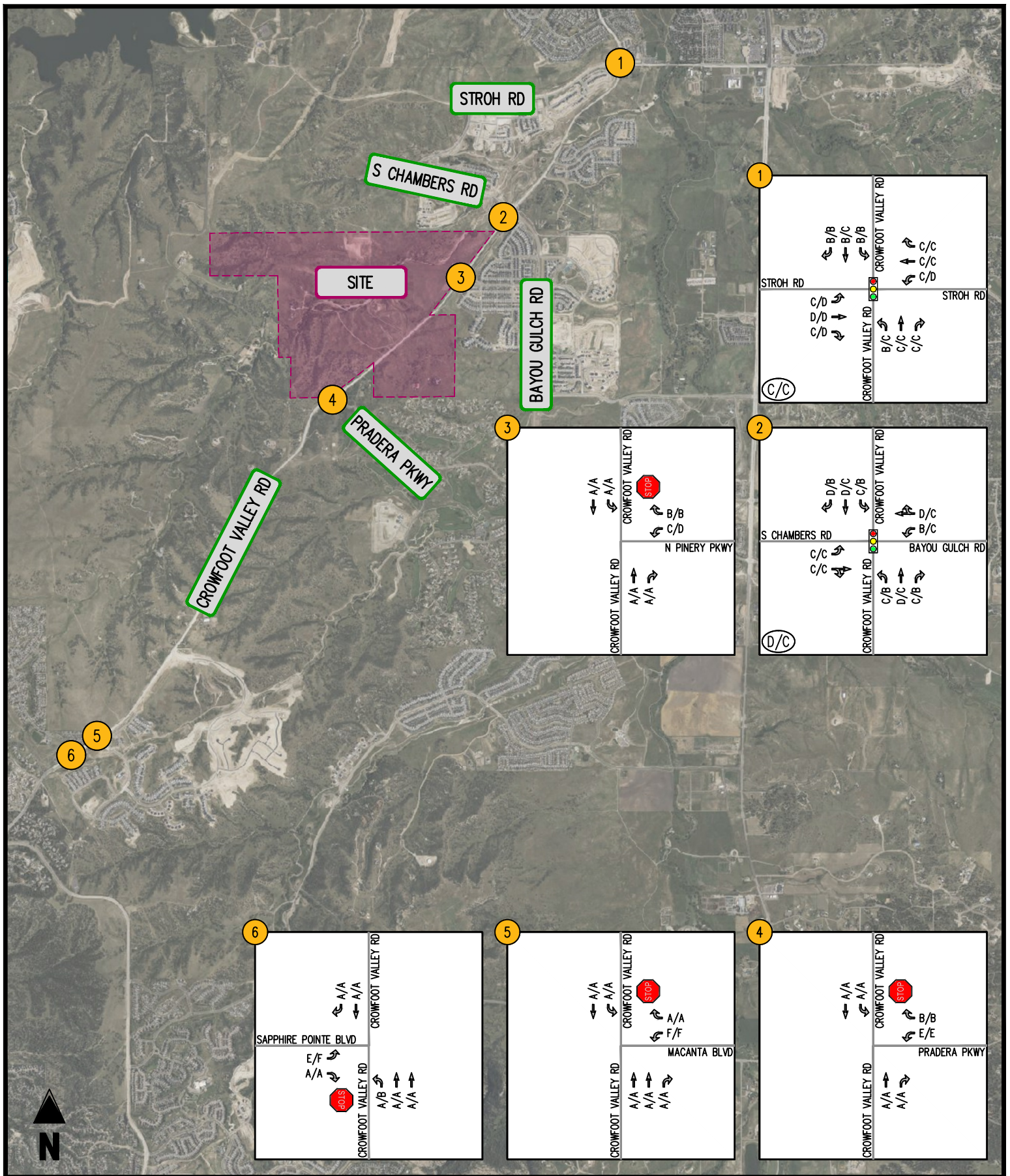


FIGURE 4-11
BACKGROUND LEVELS OF SERVICE 2030

CROWSNEST
CASTLE PINES, CO

(A/A) INTERSECTION LOS
0000/0000 (AM PEAK HOUR/PM PEAK HOUR)

← MOVEMENT
 SIGNALIZED INTERSECTION
 STOP SIGN
 YIELD SIGN



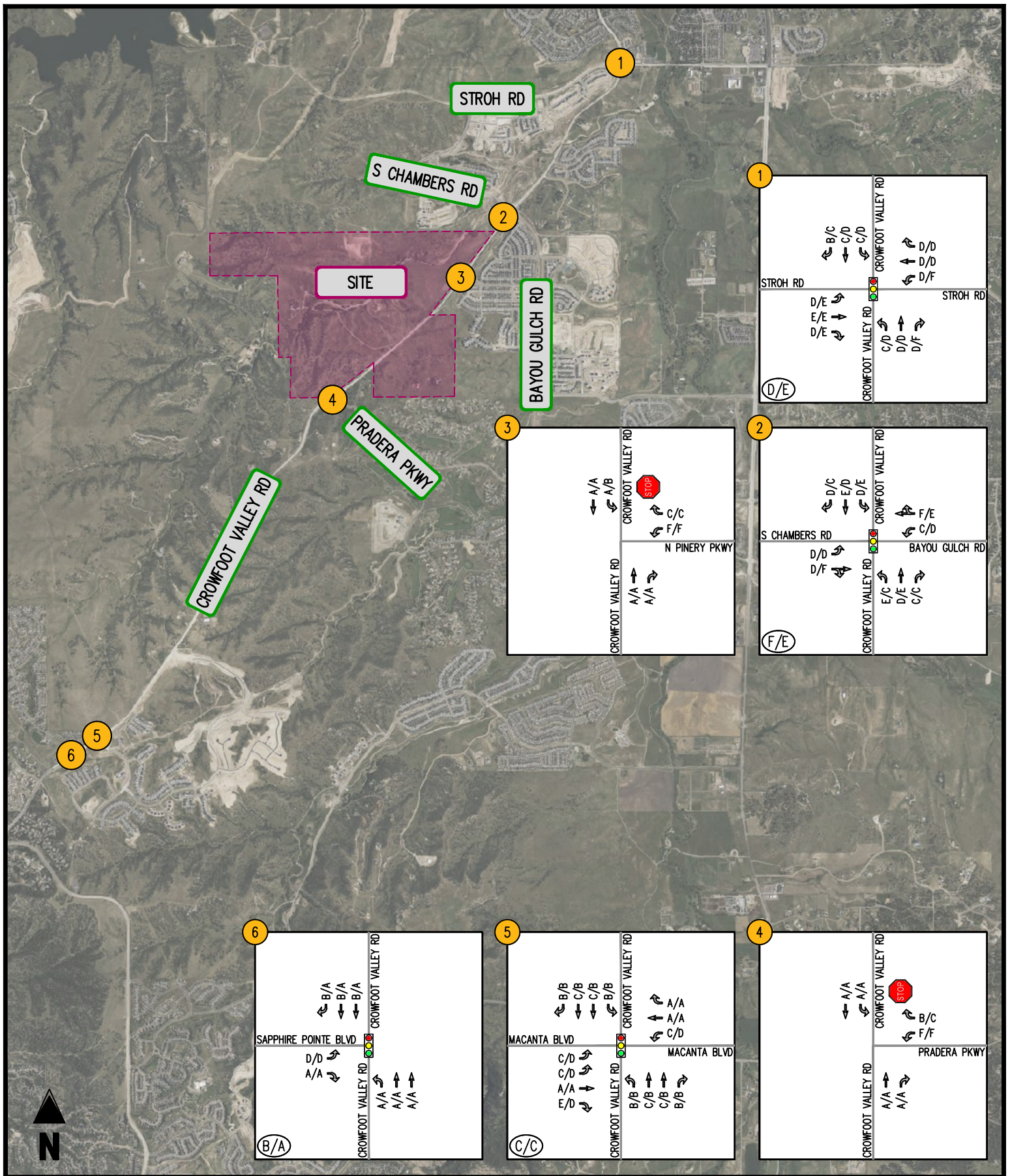


FIGURE 4-12
BACKGROUND LEVELS OF SERVICE 2045

CROWSNEST
CASTLE PINES, CO

(A/A) INTERSECTION LOS
0000/0000 (AM PEAK HOUR/PM PEAK HOUR)

← MOVEMENT
 SIGNALIZED INTERSECTION
 STOP SIGN
 YIELD SIGN



Table 4-1
Crownsnest - Castle Pines, CO
Background Future Intersection Level of Service Summary ^{(1) (2)}

Intersection	Operating Condition	Street Name	Approach/ Movement	Existing 2025		Background 2028		Background 2030		Background 2045	
				AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
1 Crowfoot Valley Rd/Stroh Rd	SIGNAL	Stroh Rd	EBL	C (29.3)	C (33.8)	C (30.9)	D (36.8)	C (32.4)	D (39.1)	D (52.9)	E (67.4)
			EBT	C (31.9)	D (37.3)	C (33.7)	D (40.8)	D (35.3)	D (43.5)	E (59.0)	E (79.7)
			EBR	C (28.8)	C (33.4)	C (30.3)	D (36.3)	C (31.7)	D (38.7)	D (51.9)	E (66.7)
			WBL	C (28.9)	C (32.7)	C (30.4)	D (35.4)	C (31.8)	D (37.6)	D (53.3)	F (102.6)
		Stroh Rd	WBT	C (24.7)	C (24.0)	C (25.8)	C (25.6)	C (26.9)	C (26.9)	D (41.4)	D (42.7)
			WBR	C (26.8)	C (26.1)	C (28.0)	C (28.0)	C (29.2)	C (29.4)	D (45.5)	D (48.1)
			NBL	B (16.6)	C (20.2)	B (17.3)	C (21.5)	B (17.7)	C (22.5)	C (24.9)	D (36.4)
			NBT	C (20.8)	C (24.8)	C (21.9)	C (26.6)	C (22.6)	C (28.0)	D (36.3)	D (50.8)
		Crowfoot Valley Rd	NBR	C (24.9)	C (30.8)	C (26.6)	C (33.3)	C (27.7)	D (35.4)	D (50.5)	F (92.2)
			SBL	B (14.1)	B (17.2)	B (14.8)	B (18.5)	B (15.3)	B (19.6)	C (27.1)	D (40.9)
			SBT	B (15.8)	B (19.3)	B (16.4)	C (20.5)	B (16.9)	C (21.6)	C (25.3)	D (37.2)
			SBR	B (13.4)	B (16.2)	B (13.8)	B (17.1)	B (14.1)	B (17.9)	B (19.2)	C (27.1)
		Overall		C (23.0)	C (26.8)	C (24.2)	C (28.9)	C (25.2)	C (30.6)	D (41.3)	E (66.0)
2 Crowfoot Valley Rd/S Chambers Rd	SIGNAL	S Chambers Rd	EBL	C (27.0)	C (23.3)	C (25.9)	C (22.9)	C (28.3)	C (23.8)	D (46.0)	D (41.2)
			EBTR	C (21.0)	C (32.3)	C (20.5)	C (31.6)	C (21.4)	C (33.2)	D (36.4)	F (82.7)
			WBL	B (19.2)	C (24.6)	B (18.8)	C (24.1)	B (19.6)	C (32.2)	C (32.2)	D (44.9)
			WBTR	D (45.9)	C (31.6)	D (43.1)	C (31.0)	D (49.1)	C (32.2)	F (273.7)	E (60.0)
		Crowfoot Valley Rd	NBL	C (31.4)	B (18.2)	C (30.5)	B (17.9)	C (32.3)	B (18.6)	E (64.0)	C (30.3)
			NBT	D (42.7)	C (30.2)	D (41.6)	C (29.6)	D (44.0)	C (31.0)	D (51.1)	E (58.8)
			NBR	C (30.7)	B (19.5)	C (30.0)	B (19.2)	C (31.5)	B (19.9)	C (30.1)	C (28.3)
			SBL	C (31.4)	B (19.2)	C (30.6)	B (18.8)	C (32.3)	B (19.7)	D (36.4)	E (60.5)
		Crowfoot Valley Rd	SBT	D (48.3)	C (24.4)	D (47.0)	C (23.9)	D (49.8)	C (24.9)	E (60.5)	D (40.8)
			SBR	C (34.9)	B (18.4)	C (34.0)	B (18.1)	D (35.7)	B (18.7)	D (36.0)	C (25.6)
		Overall		D (40.6)	C (27.5)	D (39.0)	C (26.9)	D (42.4)	C (28.2)	F (122.1)	E (57.3)
3 Crowfoot Valley Rd/N Pinery Pkwy	STOP	N Pinery Pkwy	WBL	C [22.9]	D [28.1]	C [22.0]	D [26.6]	C [23.3]	D [28.4]	F [64.5]	F [69.8]
			WBR	B [12.5]	B [12.3]	B [12.3]	B [12.2]	B [12.6]	B [12.4]	C [17.5]	C [16.0]
		Crowfoot Valley Rd	NBT	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]
			NBR	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]
		Crowfoot Valley Rd	SBL	A [8.5]	A [9.0]	A [8.5]	A [8.9]	A [8.6]	A [9.0]	A [9.6]	B [10.2]
			SBT	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]
4 Crowfoot Valley Rd/Pradera Pkwy	STOP	Pradera Pkwy	WBL	E [43.9]	D [34.8]	E [42.4]	D [34.4]	E [48.0]	E [38.6]	F [320.8]	F [221.1]
			WBR	B [11.4]	B [11.9]	B [11.4]	B [11.9]	B [11.6]	B [12.1]	B [14.8]	C [15.3]
		Crowfoot Valley Rd	NBT	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]
			NBR	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]
		Crowfoot Valley Rd	SBL	A [8.4]	A [8.5]	A [8.4]	A [8.5]	A [8.4]	A [8.6]	A [9.4]	A [9.5]
			SBT	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]
5 Crowfoot Valley Rd/Macanta Blvd	STOP	Macanta Blvd	WBL	F [62.2]	E [47.9]	F [77.2]	F [57.4]	F [89.8]	F [66.3]	-	-
			WBR	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	-	-
		Crowfoot Valley Rd	NBT	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	-	-
			NBR	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	-	-
		Crowfoot Valley Rd	SBL	A [8.8]	A [9.2]	A [8.9]	A [9.3]	A [9.0]	A [9.4]	-	-
			SBT	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	-	-
	SIGNAL	Canyonside Blvd	EBL	-	-	-	-	-	-	C (30.7)	D (48.9)
			EBT	-	-	-	-	-	-	A (0.0)	A (0.0)
			EBR	-	-	-	-	-	-	E (75.8)	D (54.1)
			WBL	-	-	-	-	-	-	C (21.4)	D (35.5)
		Macanta Blvd	WBT	-	-	-	-	-	-	A (0.0)	A (0.0)
			WBR	-	-	-	-	-	-	A (0.0)	A (0.0)
			NBL	-	-	-	-	-	-	B (19.4)	B (13.4)
			NBT	-	-	-	-	-	-	C (23.0)	B (16.0)
		Crowfoot Valley Rd	NBR	-	-	-	-	-	-	B (16.5)	B (13.4)
			SBL	-	-	-	-	-	-	B (13.7)	B (11.6)
			SBT	-	-	-	-	-	-	C (24.8)	B (18.1)
			SBR	-	-	-	-	-	-	B (16.9)	B (14.0)
		Overall		-	-	-	-	-	-	C (28.1)	C (20.1)
6 Crowfoot Valley Rd/Sapphire Pointe Blvd	STOP	Sapphire Pointe Blvd	EBL	D [33.4]	F [60.5]	E [36.2]	F [66.8]	E [38.3]	F [72.3]	-	-
			EBR	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	-	-
		Crowfoot Valley Rd	NBL	A [9.6]	B [10.6]	A [9.8]	B [10.8]	A [9.9]	B [10.9]	-	-
			NBT	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	-	-
		Crowfoot Valley Rd	SBT	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	-	-
			SBR	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	-	-
	SIGNAL	Sapphire Pointe Blvd	EBL	-	-	-	-	-	-	D (37.9)	D (41.7)
			EBR	-	-	-	-	-	-	A (0.0)	A (0.0)
			NBL	-	-	-	-	-	-	A (7.5)	A (5.8)
			NBT	-	-	-	-	-	-	A (3.0)	A (2.6)
		Crowfoot Valley Rd	SBT	-	-	-	-	-	-	B (18.3)	A (6.9)
			SBR	-	-	-	-	-	-	B (10.4)	A (4.7)
		Overall		-	-	-	-	-	-	B (11.7)	A (5.1)

Notes : (1) Numbers in brackets [] represent delay at unsignalized intersections in seconds per vehicle.
(2) Numbers in parenthesis () represent delay at signalized intersections in seconds per vehicle.

Table 4-2
 Crowsnest - Castle Pines, CO
 Background Future Intersection Queueing Summary ⁽¹⁾

Intersection	Operating Condition	Street Name	Approach/Movement	Available Storage	Existing 2025		Background 2028		Background 2030		Background 2045	
					AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
1 Crowfoot Valley Rd/Stroh Rd	SIGNAL	S Chambers Rd	EBL	225	62	61	69	66	73	69	116	98
			EBT	-	140	178	157	195	168	205	279	309
			EBR	350	0	0	0	0	0	0	0	0
		Bayou Gulch Rd	WBL	350	267	415	299	465	326	501	621	1087
			WBT	-	146	87	162	95	175	101	301	168
			WBR	600	56	52	58	55	61	57	81	77
		Crowfoot Valley Rd	NBL	250	13	14	13	14	15	16	25	21
			NBT	-	269	307	304	338	330	355	746	639
			NBR	500	72	84	77	87	79	89	105	104
		Crowfoot Valley Rd	SBL	450	134	175	151	192	163	201	275	307
			SBT	-	226	301	252	330	271	348	529	610
			SBR	-	0	0	0	0	0	0	0	0
2 Crowfoot Valley Rd/S Chambers Rd	SIGNAL	S Chambers Rd	EBL	550	46	70	48	71	51	77	79	114
			EBTR	-	248	822	258	867	278	959	476	1657
			WBL	300	24	17	24	18	25	20	40	27
		Bayou Gulch Rd	WBTR	-	925	323	976	336	1067	364	1921	602
			NBL	500	166	91	174	96	181	98	438	152
			NBT	-	402	484	426	512	445	540	834	1132
		Crowfoot Valley Rd	NBR	400	0	0	0	0	0	0	0	0
			SBL	550	112	138	117	146	122	149	160	462
			SBT	-	418	384	439	404	462	424	793	894
		Crowfoot Valley Rd	SBR	350	10	0	13	0	16	1	33	13
3 Crowfoot Valley Rd/N Pinery Pkwy	STOP	N Pinery Pkwy	WBL	-	28	15	25	15	28	15	70	35
			WBR	215	23	13	20	10	20	13	33	18
		Crowfoot Valley Rd	NBT	-	0	0	0	0	0	0	0	0
			NBR	440	0	0	0	0	0	0	0	0
		Crowfoot Valley Rd	SBL	500	3	10	3	8	3	8	3	10
			SBT	-	0	0	0	0	0	0	0	0
4 Crowfoot Valley Rd/Pradera Pkwy	STOP	Pradera Pkwy	WBL	-	118	78	108	70	118	78	308	213
			WBR	250	5	8	5	5	5	5	8	10
		Crowfoot Valley Rd	NBT	-	0	0	0	0	0	0	0	0
			NBR	880	0	0	0	0	0	0	0	0
		Crowfoot Valley Rd	SBL	450	3	3	3	3	3	3	3	3
			SBT	-	0	0	0	0	0	0	0	0
5 Crowfoot Valley Rd/Macanta Blvd	STOP	Macanta Blvd	WBL	265	120	80	138	90	150	100	-	-
			WBR	-	0	0	0	0	0	0	-	-
		Crowfoot Valley Rd	NBT	-	0	0	0	0	0	0	-	-
			NBR	575	0	0	0	0	0	0	-	-
		Crowfoot Valley Rd	SBL	575	3	3	3	3	3	3	-	-
			SBT	-	0	0	0	0	0	0	-	-
	SIGNAL	Canyonside Blvd	EBL	200	-	-	-	-	-	-	34	35
			EBT	-	-	-	-	-	-	-	0	0
		Macanta Blvd	EBR	200	-	-	-	-	-	-	38	0
			WBL	300	-	-	-	-	-	-	81	94
		Macanta Blvd	WBT	-	-	-	-	-	-	-	0	0
			WBR	265	-	-	-	-	-	-	0	0
		Crowfoot Valley Rd	NBL	300	-	-	-	-	-	-	132	97
			NBT	-	-	-	-	-	-	-	232	257
		Crowfoot Valley Rd	NBR	575	-	-	-	-	-	-	13	0
			SBL	575	-	-	-	-	-	-	13	15
		Crowfoot Valley Rd	SBT	-	-	-	-	-	-	-	211	302
			SBR	300	-	-	-	-	-	-	0	0
6 Crowfoot Valley Rd/Sapphire Pointe Blvd	STOP	Sapphire Pointe Blvd	EBL	265	30	25	33	28	35	30	-	-
			EBR	-	0	0	0	0	0	0	-	-
		Crowfoot Valley Rd	NBL	600	8	30	8	30	10	30	-	-
			NBT	-	0	0	0	0	0	0	-	-
		Crowfoot Valley Rd	SBT	-	0	0	0	0	0	0	-	-
			SBR	250	0	0	0	0	0	0	-	-
	SIGNAL	Sapphire Pointe Blvd	EBL	265	-	-	-	-	-	-	42	29
			EBR	-	-	-	-	-	-	-	79	44
		Crowfoot Valley Rd	NBL	600	-	-	-	-	-	-	29	73
			NBT	-	-	-	-	-	-	-	158	146
		Crowfoot Valley Rd	SBT	-	-	-	-	-	-	-	363	285
			SBR	250	-	-	-	-	-	-	7	18

Notes : (1) Queue length, in feet, is based on the 95th percentile queue as reported by Synchro, Version 12.

V. Site Analysis

Overview

Due to the size of the proposed development, the study intersections and roadway segments will need to be improved phased coincident with the proposed development. The development program is forecasted herein and analyzed for future scenarios to determine the required improvements and roadway sizing that would be needed for each of the development scenarios.

Proposed Development

The Applicant seeks to develop the area with a neighborhood serving commercial, mixed-use, multifamily, and single-family residential uses. For purposes of this study, the site is assumed to be complete and occupied in three phases. The following use and development programs were analyzed:

Build-Out 2028 Phase 1:

1,005	DU	Single Family Detached Housing
1,000	DU	Multifamily Housing (Low-Rise)
550,000	SF	Retail

Build-Out 2030 Phase 2:

716	DU	Single Family Detached Housing
-----	----	--------------------------------

Build-Out 2045 Phase 3:

1,244	DU	Single Family Detached Housing
-------	----	--------------------------------

Proposed Site Access

As shown on the Applicant's conceptual plan (Figure 1-2), ultimate access to the development is proposed via three full movement signalized intersections provided at ½ mile spacing and aligned with existing roadway intersections where possible. Additional partial access is contemplated to provide necessary additional access to the commercial and multifamily planning areas where increased access is necessary to support development. Further refinement of access will be provided during the site plan stages. Proposed lane use and traffic control are shown in Figure 5-1 (Phase 1 2028), Figure 5-2 (Phase 2 2030) and Figure 5-3 (Phase 3 2045). Improvements assumed and analyzed later in this report are represented within these Figures.

Trip Generation

Overview

Trip generation estimates for the weekday AM and PM peak hours, as well as the weekday average daily traffic (ADT), were derived from the standard ITE Trip Generation Manual rates/equations, as published in the 12th edition. The trip generation analysis is presented in Table 5-1.

Internal Capture

Due to the mixed-use nature of the proposed development and the neighboring uses, it is assumed that a number of trips would be shared between the uses. These are trips that are going from one use on site to another use on site and should not be counted as separate trips for each use. An internal capture reduction of 10% was applied to the trip generation analysis.

Pass-by Trips

According to ITE, in some cases the driveway volumes at a particular land use are different from the amount of traffic added to the adjacent street system. Uses such as shopping centers establishments attract a portion of their trips from traffic that is already present on the road network. Pass-by trips are those trips which are made as intermediate stops on the way to a primary destination. An example of a pass-by trip would be one in which a driver stops at a supermarket on their way home from work.

The proposed use would experience pass-by trips consistent with the primary uses located on site. In recognition of this phenomenon and consistent with ITE published data, the following pass-by reductions were applied to the trip generation analysis:

- Shopping Center: 0% AM / 19% PM

As shown in Table 5-1, the site in total is anticipated to generate 306 weekday PM peak hour pass-by trips. Therefore, these trips would be drawn from the existing road network and assigned to the future site entrances accordingly.

Net Site Trips

The vehicle trips that would be generated by the proposed development plan are summarized in Table 5-1. As shown in the table, the site would generate upon completion and full occupancy:

Phase 1 (2028):

- 1,439 net new weekday AM peak hour vehicle trips,
- 2,617 net new weekday PM peak hour vehicle trips, and
- 28,401 net new weekday daily trips

Phase 1+2 (2030):

- 1,890 net new weekday AM peak hour vehicle trips,
- 3,217 net new weekday PM peak hour vehicle trips, and
- 34,258 net new weekday daily trips

Phase 1+2+3 (2045):

- 2,674 net new weekday AM peak hour vehicle trips,
- 4,258 net new weekday PM peak hour vehicle trips, and
- 44,435 net new weekday daily trips

Site Trip Distributions

The distribution of the anticipated trips generated by the completion of the proposed development was based on an examination of existing traffic counts and local knowledge. Existing travel patterns indicate the following distribution is appropriate in the forecasting of future site traffic:

Residential:

- To/from the north on Crowfoot Valley Road: 20%
- To/from the east on Stroh Rd: 15%
- To/from the west on Stroh Rd: 5%
- To/from the west on Chambers Rd: 25%
- To/from the east on Bayou Gulch Rd: 5%
- To/from the east on Pradera Pkwy: 5%
- To/from the south on Crowfoot Valley Road: 25%

Commercial:

- To/from the north on Crowfoot Valley Road: 20%
- To/from the east on Stroh Rd: 15%
- To/from the west on Stroh Rd: 5%
- To/from the west on Chambers Rd: 25%
- To/from the east on Bayou Gulch Rd: 5%
- To/from the east on N Pinery Pkwy: 5%
- To/from the east on Pradera Pkwy: 5%
- To/from the south on Crowfoot Valley Road: 20%

Site Trip Assignments

The assignment of the new vehicle trips generated upon the future build-out of the development project was based on the above distributions. The trips assignments are depicted in Figure 5-4 for Phase 1 Residential Trips, Figure 5-5 for Phase 1 Commercial net new trips, Figure 5-6 for Phase 1 Commercial Pass-by trips, Figure 5-7 for Phase 2 trips, and Figure 5-8 for Phase 3 trips.

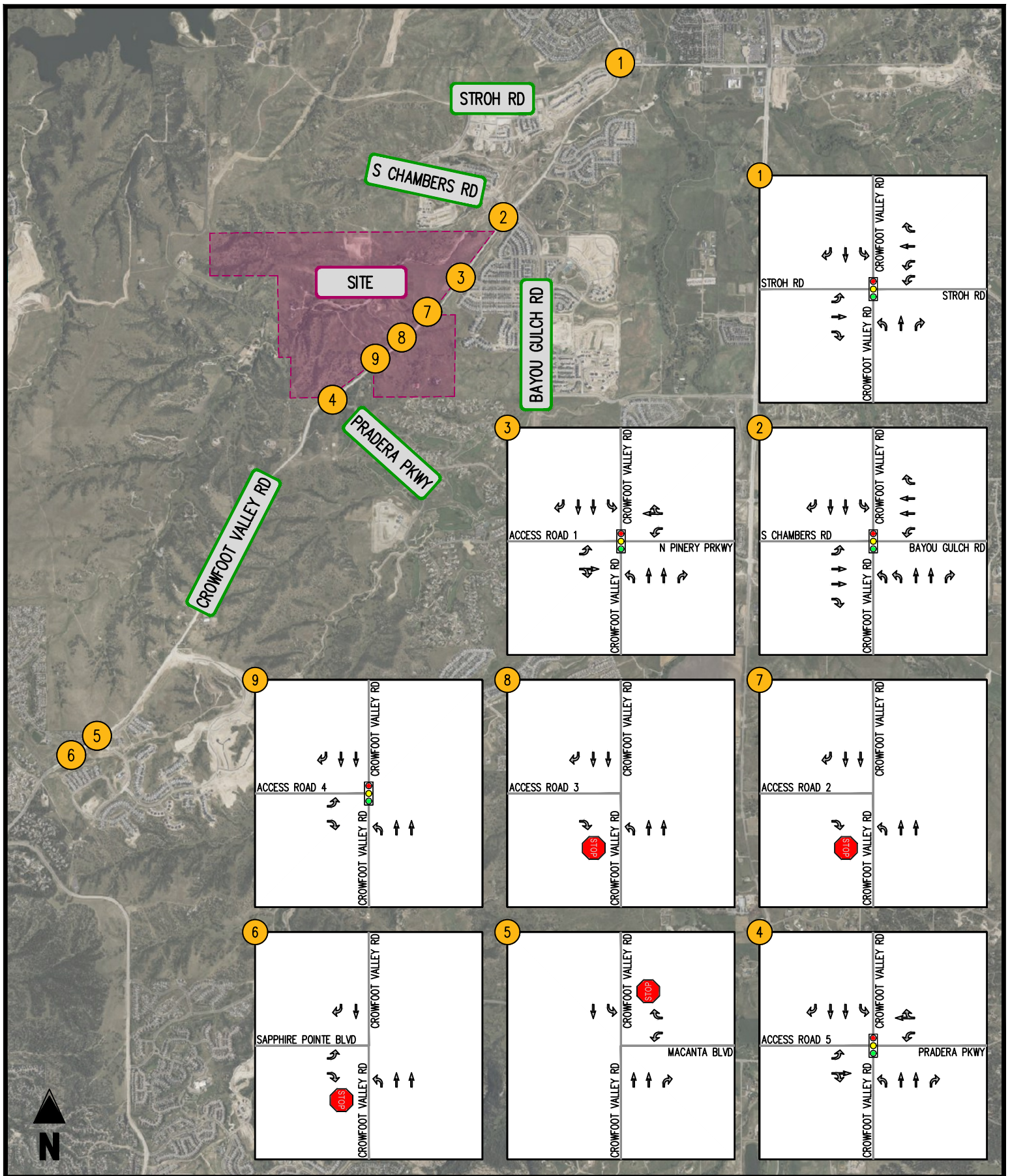
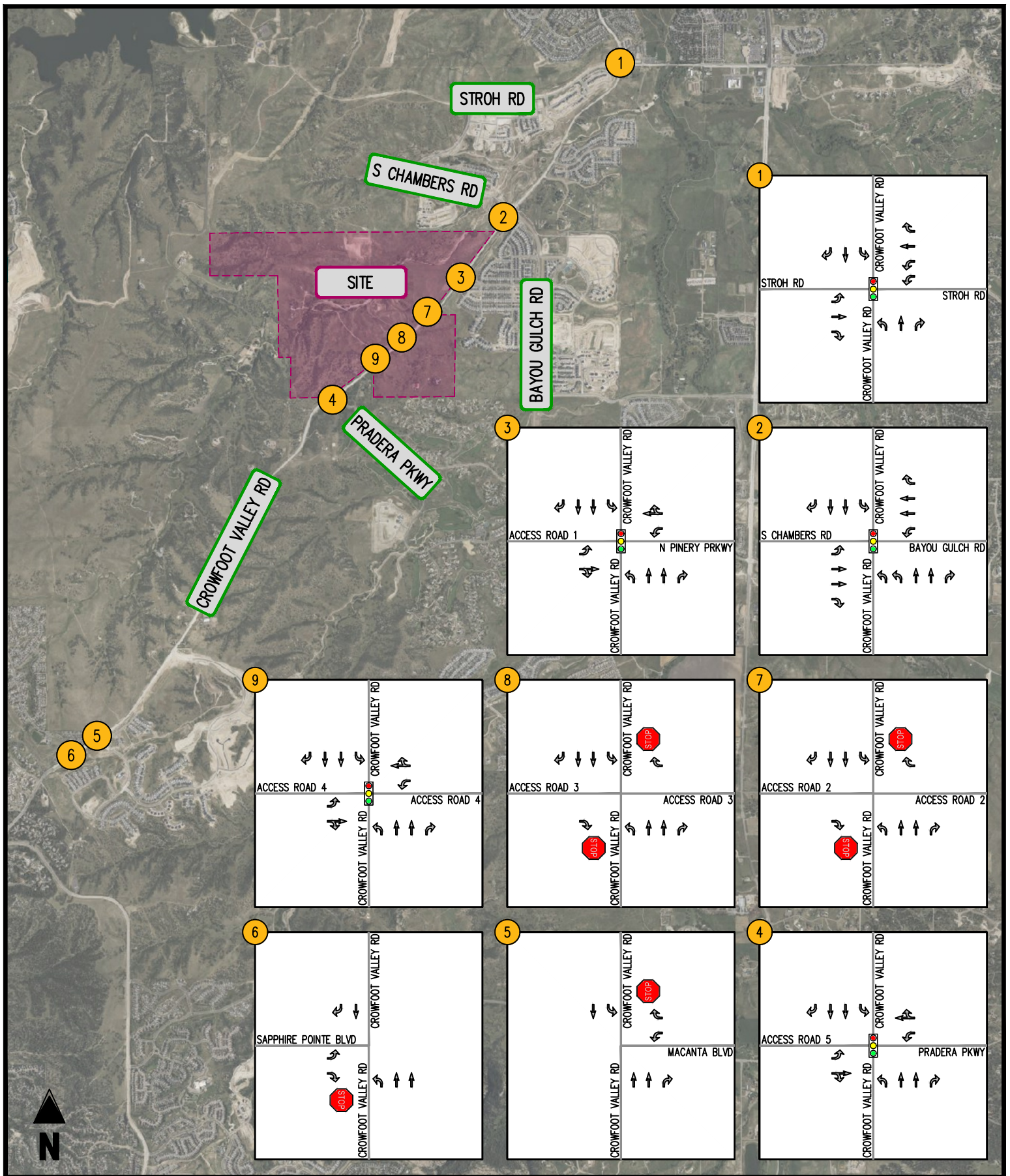


FIGURE 5-1
TOTAL FUTURE LANE USE AND TRAFFIC CONTROL: PHASE 1-2028





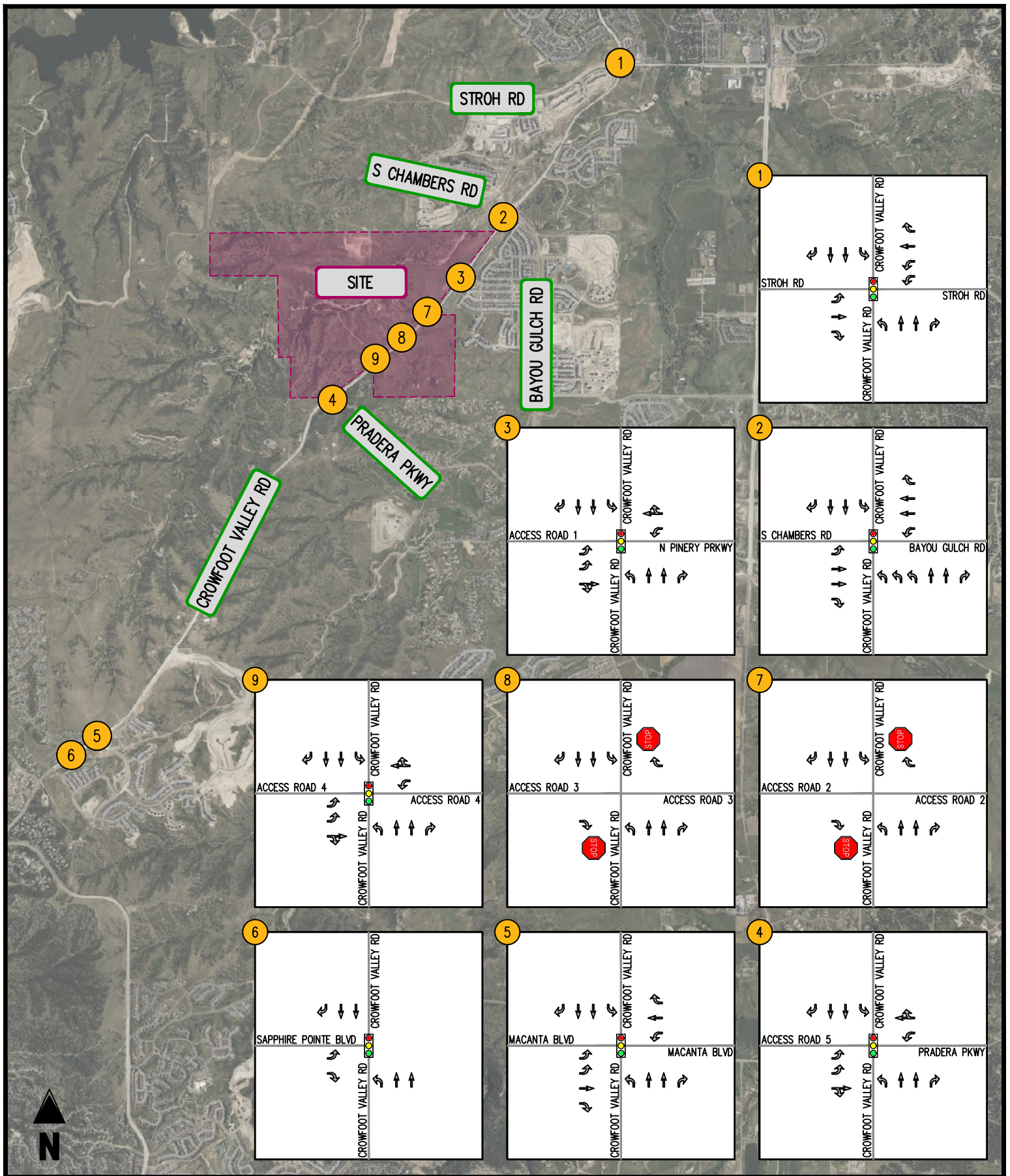
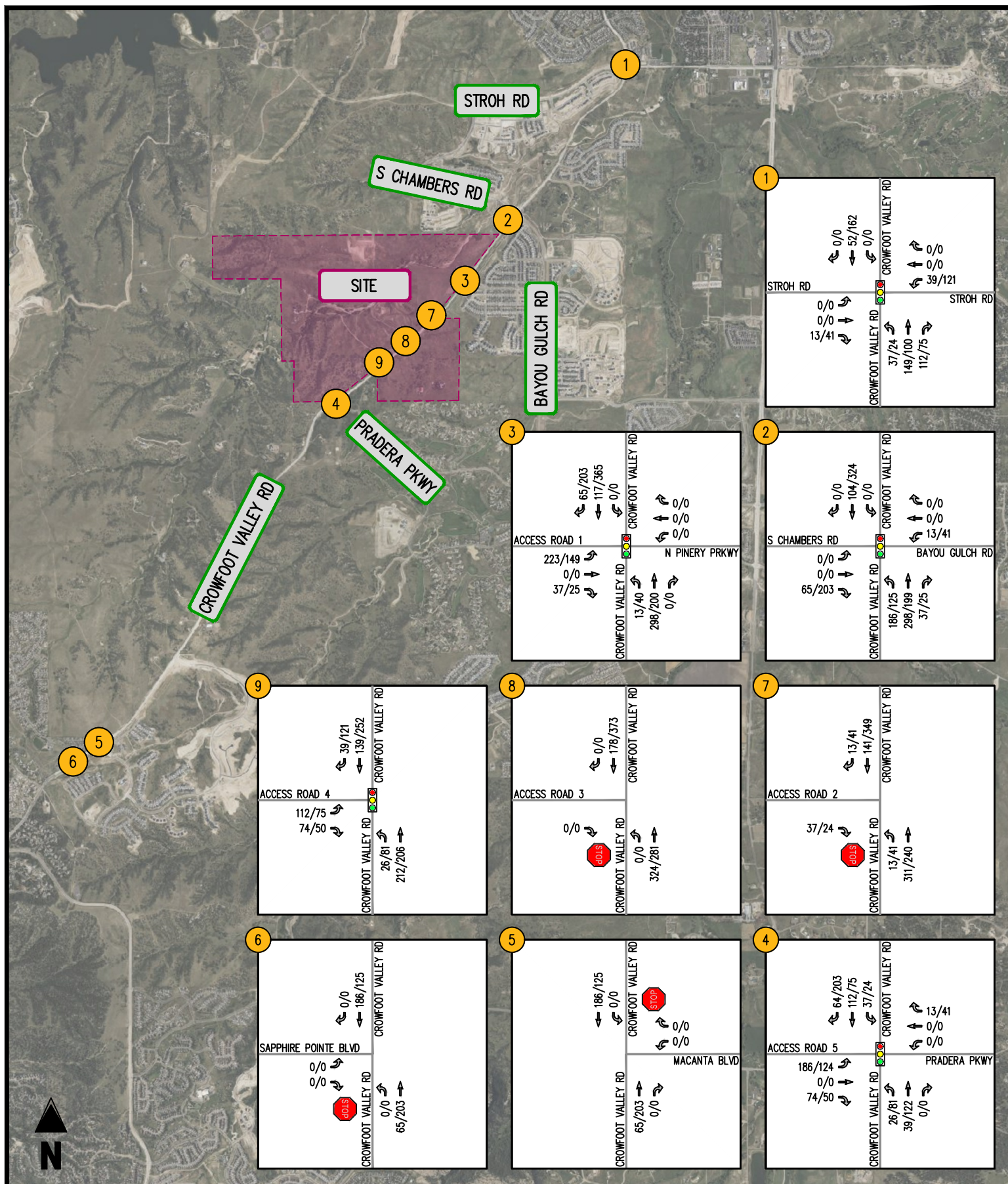
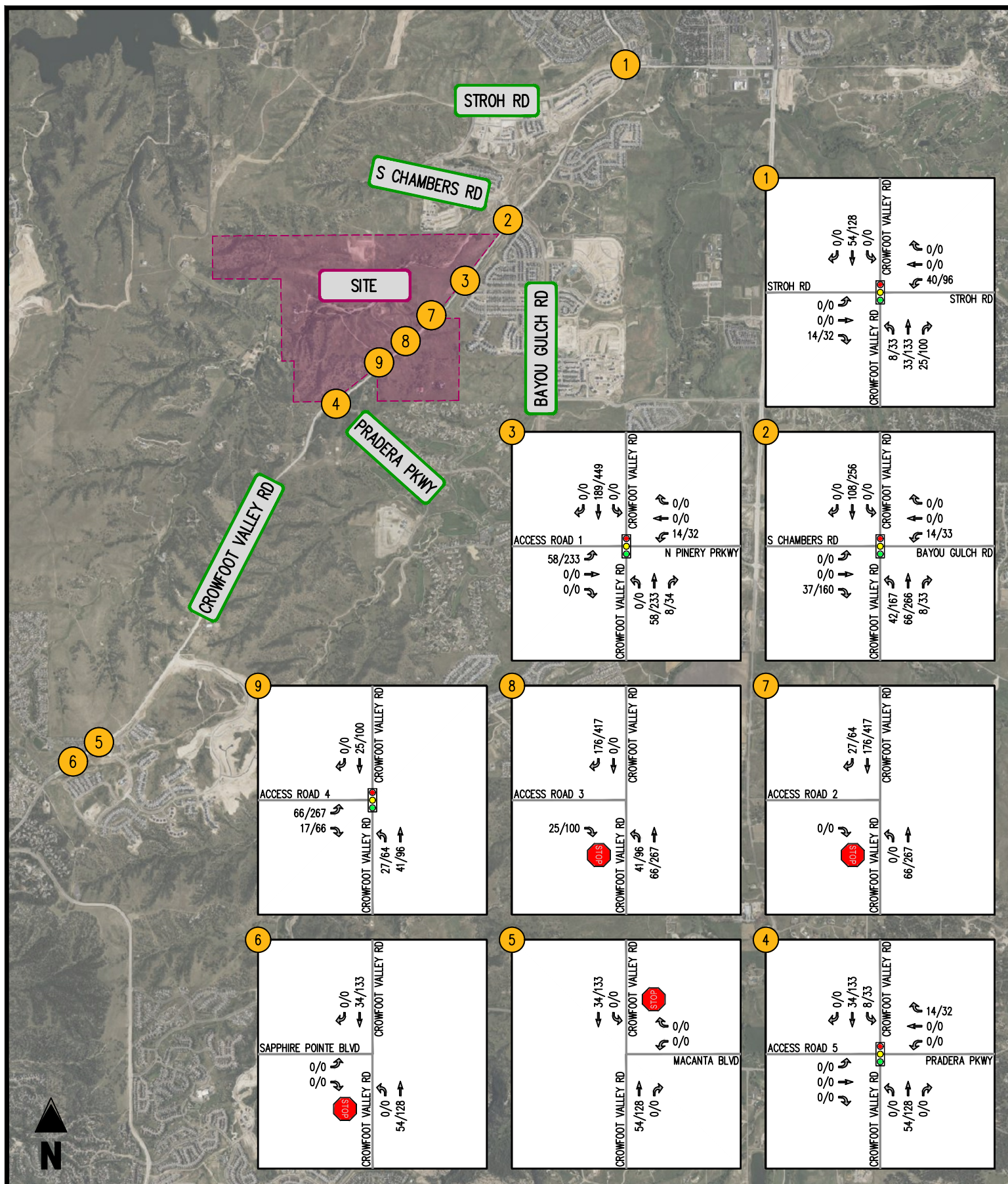


FIGURE 5-3
TOTAL FUTURE LANE USE AND TRAFFIC CONTROL: PHASE 3-2045

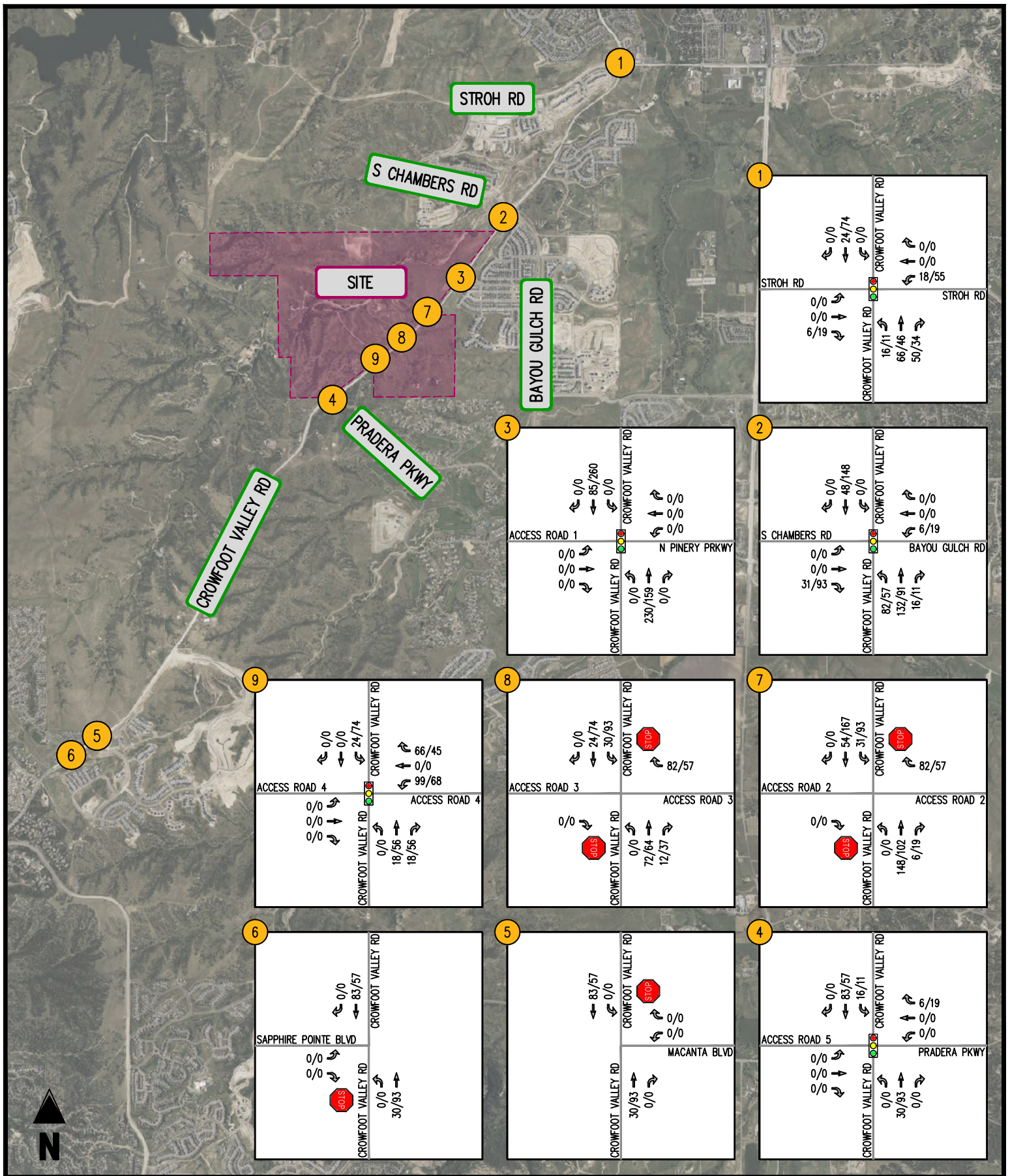




**FIGURE 5-4
PHASE 1 (2028) RESIDENTIAL SITE TRIPS**

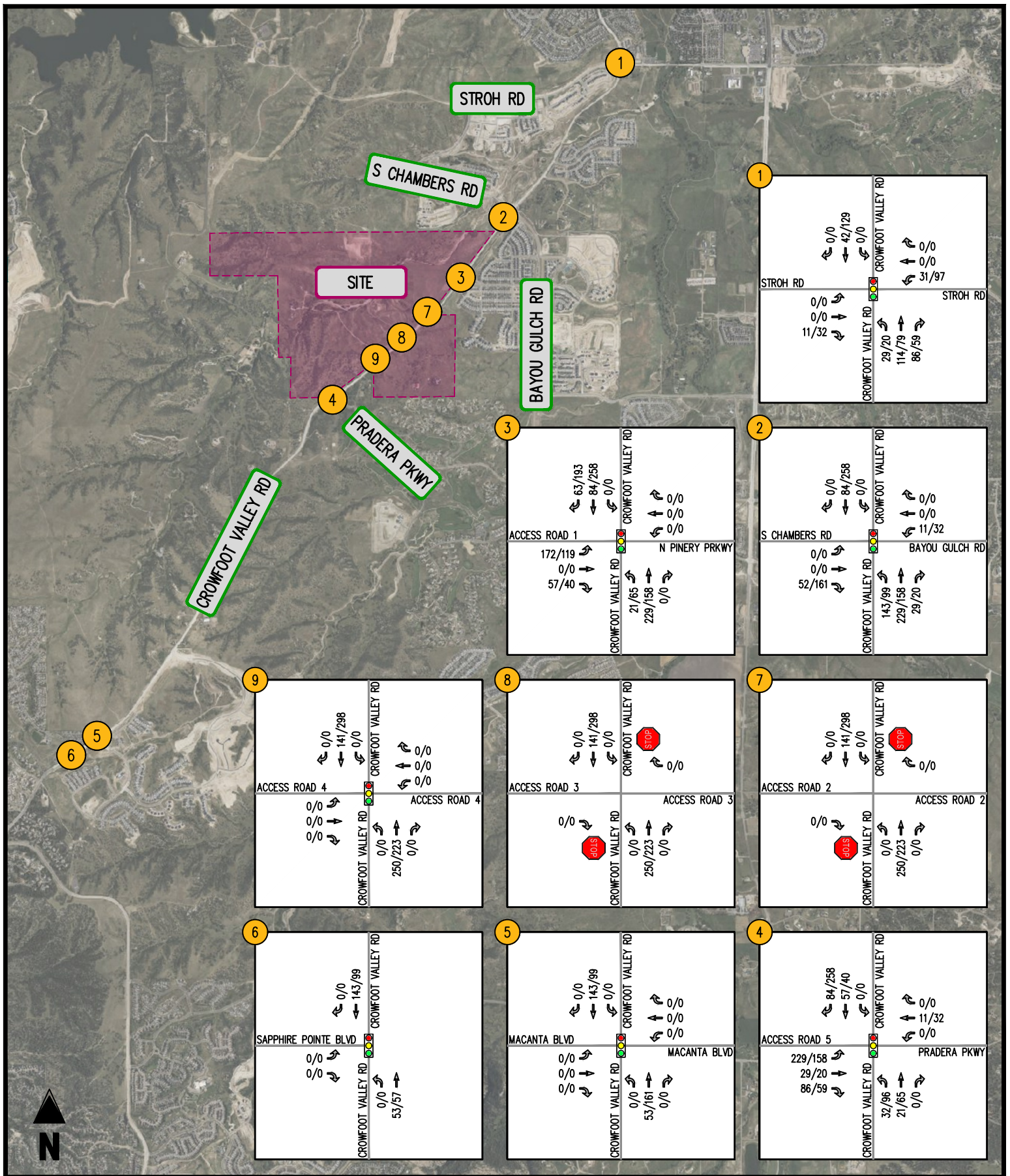


**FIGURE 5-5
PHASE 1 (2028) COMMERCIAL SITE TRIPS**



**FIGURE 5-7
PHASE 2 (2030) SITE TRIPS**

CROWSNEST
CASTLE PINES, CO



**FIGURE 5-8
PHASE 3 (2045) SITE TRIPS**

Table 5-1

Crowsnest - Castle Pines, CO

Site Trip Generation ⁽¹⁾

Land Use	Land Use Code	Amount	Units	AM Peak Hour			PM Peak Hour			Average Daily Trips
				In	Out	Total	In	Out	Total	
<u>Phase 1</u>										
Single-Family Detached Housing	210	1,005	DU	190	514	704	579	356	935	9,135
			Internal Capture (10%)	(19)	(51)	(70)	(58)	(36)	(94)	(914)
			External Trips	171	463	634	521	320	841	8,221
Multifamily Housing (Low-Rise)	220	1,000	DU	98	312	410	322	198	520	6,210
			Internal Capture (10%)	(10)	(31)	(41)	(32)	(20)	(52)	(621)
			External Trips	88	281	369	290	178	468	5,589
Shopping Center (>150K)	820	550,000	SF	300	184	484	879	914	1,793	20,015
			Internal Capture (10%)	(30)	(18)	(48)	(88)	(91)	(179)	(2,002)
			External Trips	270	166	436	791	823	1,614	18,013
			Pass-by (AM 0%/PM 19%)	-	-	-	(150)	(156)	(306)	(3,422)
Net New Shopping Center Trips				270	166	436	641	667	1,308	14,591
Net New Phase 1 Residential Trips				259	744	1,003	811	498	1,309	13,810
Net New Phase 1 Trips				529	910	1,439	1,452	1,165	2,617	28,401
<u>Phase 2</u>										
Single-Family Detached Housing	210	716	DU	135	366	501	413	253	666	6,508
			Internal Capture (10%)	(14)	(37)	(50)	(41)	(25)	(67)	(651)
			External Trips	121	329	451	372	228	600	5,857
Net New Phase 1 + Phase 2 Trips				650	1,239	1,890	1,824	1,393	3,217	34,258
<u>Phase 3</u>										
Single-Family Detached Housing	210	1,244	DU	235	636	871	717	440	1,157	11,308
			Internal Capture (10%)	(24)	(64)	(87)	(72)	(44)	(116)	(1,131)
			External Trips	211	572	784	645	396	1,041	10,177
Net New Phase 1 + Phase 2 + Phase 3 Trips				861	1,811	2,674	2,469	1,789	4,258	44,435

Note(s):

(1) Trip generation based on the Institute of Transportation Engineers' Trip Generation Manual, 12th Edition

VI. Analysis of Future Conditions with Site Development

Total Future Traffic Forecasts

The Phase 1 (2028), Phase 2 (2030), and Phase 3 (2045) total future traffic forecasts associated with the proposed development were developed by combining the background future forecasts shown in Figure 4-7 (2028), Figure 4-8 (2030), and Figure 4-9 (2045), and the site trip assignments shown in Figure 5-4, Figure 5-5, Figure 5-6, Figure 5-7, and Figure 5-8. The resulting total future traffic forecasts are provided in Figure 6-1 for 2028 conditions, Figure 6-2 for 2030 conditions and Figure 6-3 for 2045 conditions.

Total Future Levels of Service with Proposed Development

Future levels of service with the proposed development plan were estimated at key study intersections based on the future traffic volumes shown in Figure 6-1 (2028), Figure 6-2 (2030), and Figure 6-3 (2045), the total future lane use in Figure 5-1 (2028), Figure 5-2 (2030) and Figure 5-3 (2045), and the HCM 7th methodologies for signalized and unsignalized intersections. The results of these analyses are provided in Appendix H and presented in Table 6-1. Total future levels of service are also presented graphically in Figure 6-4 (2028), Figure 6-5 (2030), and Figure 6-6 (2045).

As shown in Table 6-1, the lane use and traffic control assumed necessary in Section V of this report would allow the intersections to operate acceptably in the respective scenarios. The side street approaches at the intersections of Crowfoot Valley Rd/Macanta Blvd and Crowfoot Valley Rd/Sapphire Pointe Blvd operate at LOS "F" during the 2028 and 2030 scenarios without signalization and improvements proposed by the Canyons pipeline development. These intersections should continue to be monitored and the timing of signalization should be assessed as development in the area progresses.

Total Future Queuing

Total future queues were forecasted using Synchro. The results of the queuing analysis are summarized in Table 6-2. The forecasted queues are expected to be accommodated with the proposed storage lengths with the exception of the westbound left movement at the Crowfoot Valley Rd/Macanta Blvd intersection during the 2030 weekday peak hours before improvements and signalization.

Roadway Sections

Also represented within the figures and analysis are the roadway segments and widening that would be necessary to accommodate each scenario. The roadway section for Crowfoot Valley Rd will be governed by the Principal Arterial classification which requires two through lanes per direction along the site frontage.

Improvements Summary

A summary of improvements required is provided for ease of reference. As detailed herein, each phase would require additional improvements to both intersections and roadway sections. Table 6-3 provides a summary of those improvements.

Crowfoot Valley Rd Driveways

Existing driveways to residential uses exist on Crowfoot Valley Rd in the vicinity of the subject site. These driveways were not studied within this analysis as they are expected to have minimal inbound/outbound volumes, and all site trips are expected to be through movements at the driveways. The future operations of Crowfoot Valley Rd are not expected to be impacted by the existing driveway accesses along the roadway.

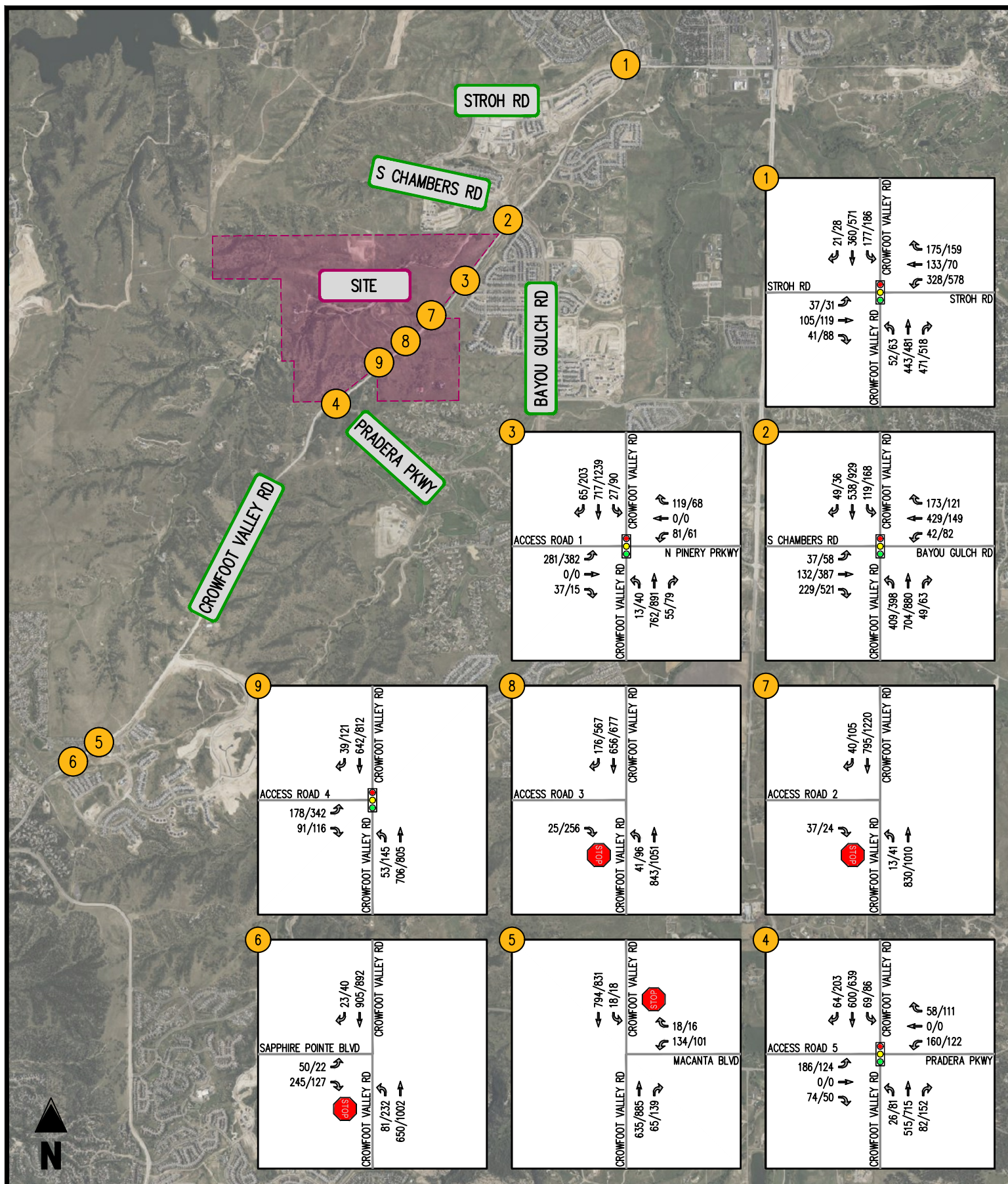


FIGURE 6-1
TOTAL FUTURE FORECASTS 2028



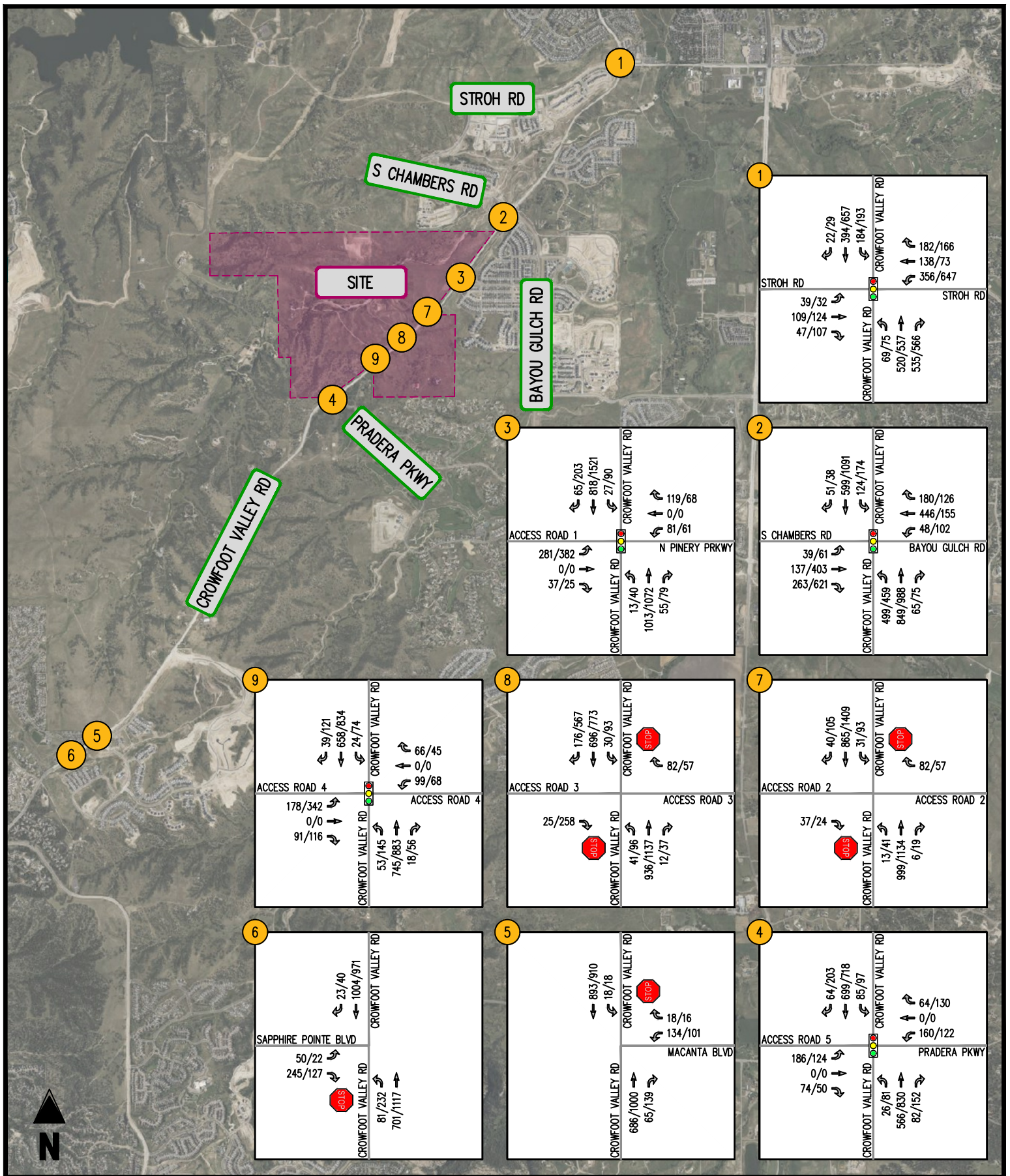


FIGURE 6-2
TOTAL FUTURE FORECASTS 2030

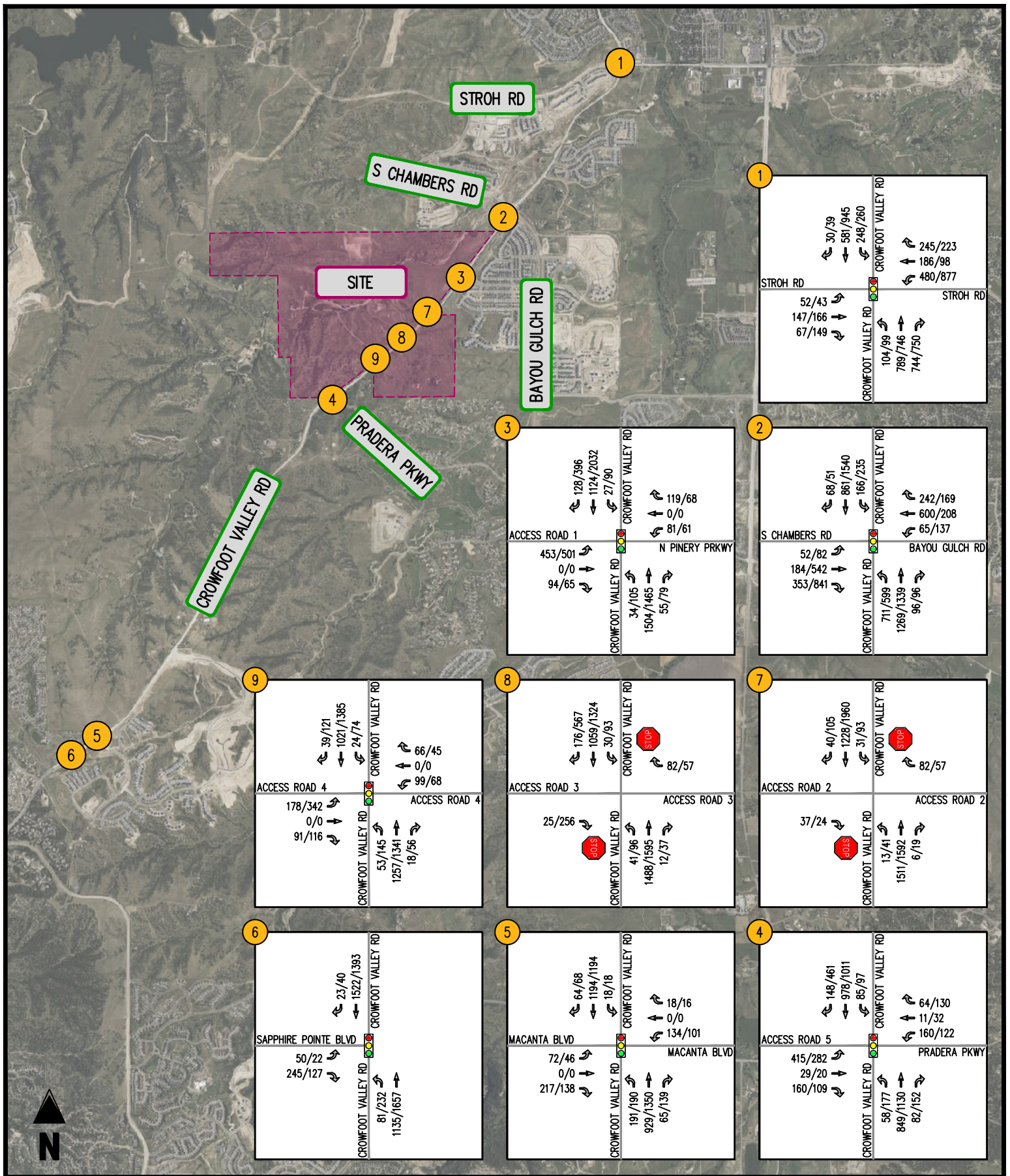


FIGURE 6-3
TOTAL FUTURE FORECASTS 2045



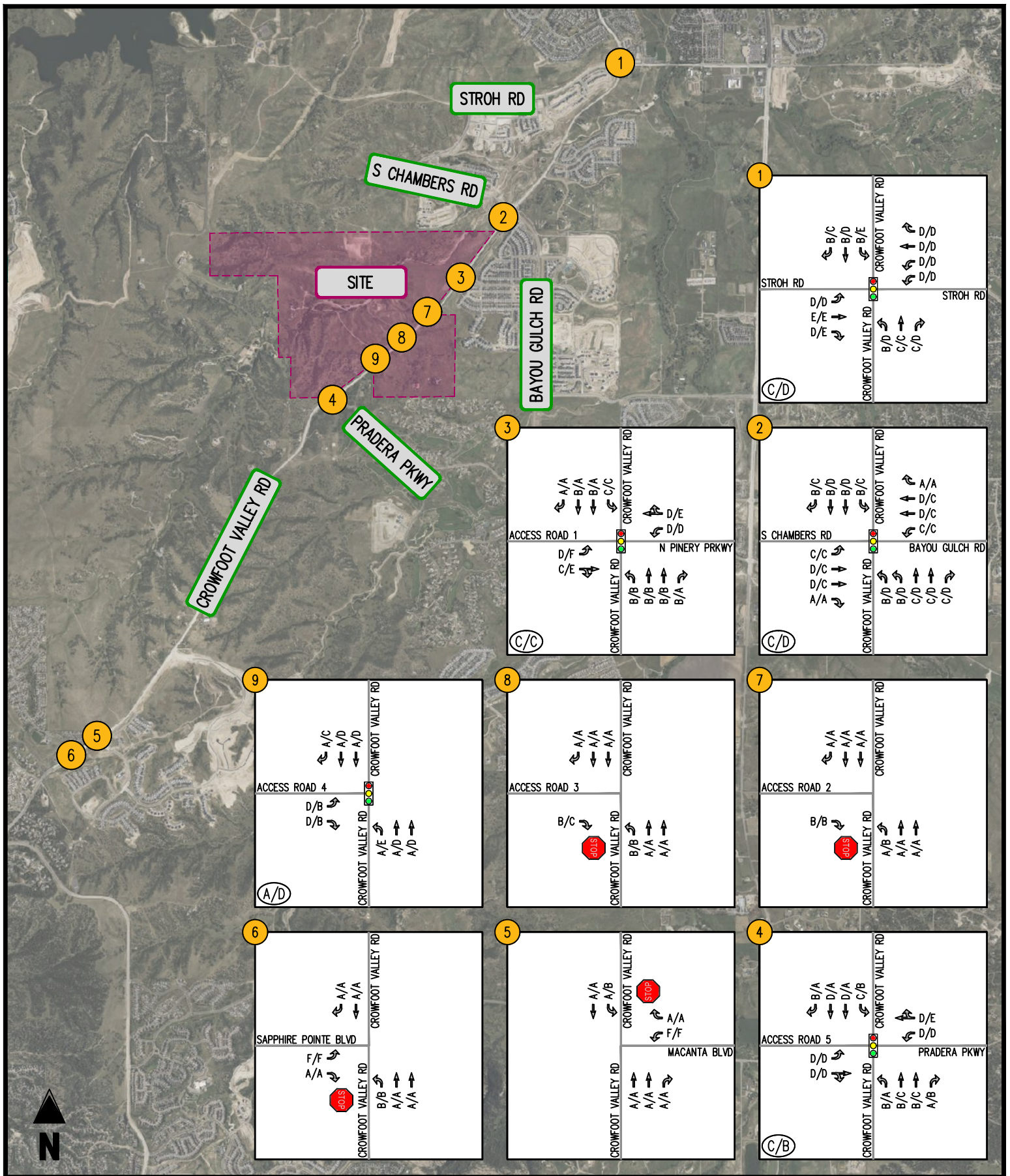


FIGURE 6-4
TOTAL FUTURE LEVELS OF SERVICE 2028

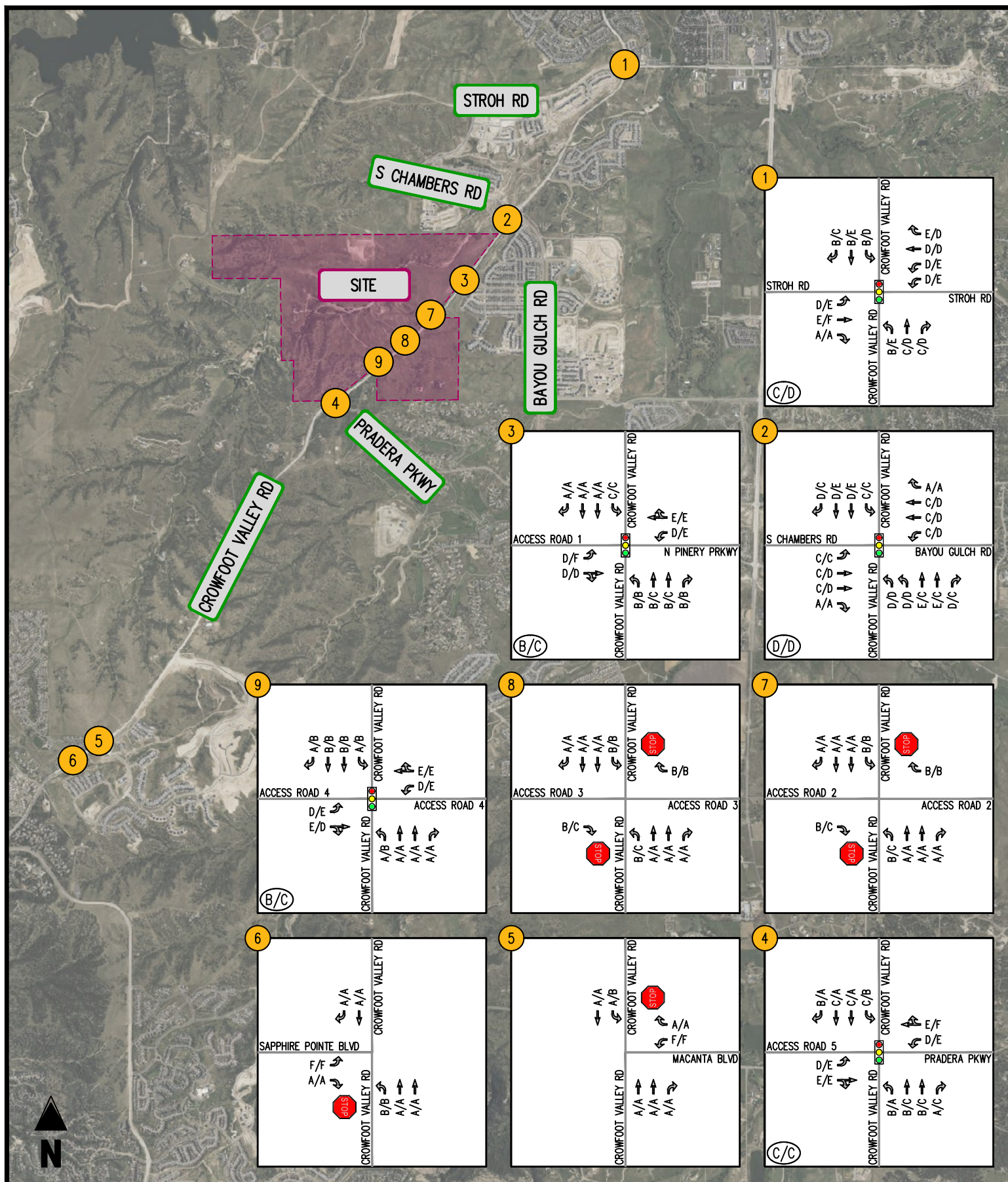


FIGURE 6-5
TOTAL FUTURE LEVELS OF SERVICE 2030

CROWSNEST
CASTLE PINES, CO

(A/A) INTERSECTION LOS
0000/0000 (AM PEAK HOUR/PM PEAK HOUR)

← MOVEMENT
 SIGNALIZED INTERSECTION
 STOP SIGN
 YIELD SIGN



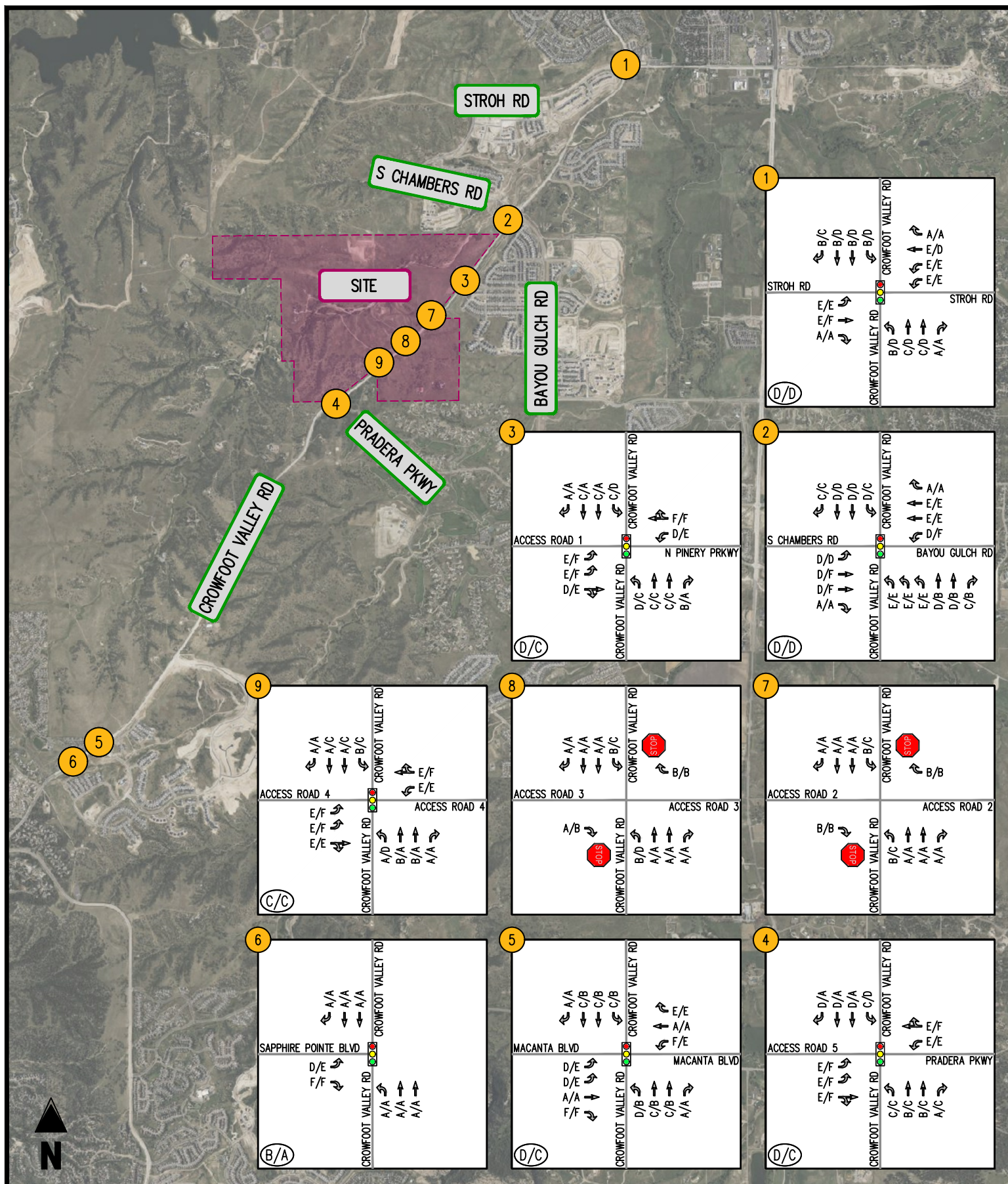


FIGURE 6-6
TOTAL FUTURE LEVELS OF SERVICE 2045

CROWSNEST
CASTLE PINES, CO

(A/A) INTERSECTION LOS
0000/0000 (AM PEAK HOUR/PM PEAK HOUR)

← MOVEMENT
 SIGNALIZED INTERSECTION
 STOP SIGN
 YIELD SIGN



Table 6-1
 Crownsnest - Castle Pines, CO
 Total Future Intersection Level of Service Summary⁽¹⁾⁽²⁾

Intersection	Operating Condition	Street Name	Approach/ Movement	Background 2028		Background 2030		Background 2045		Phase 1 Total Future 2028		Phase 2 Total Future 2030		Phase 3 Total Future 2045	
				AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
1 Crowfoot Valley Rd/Stroh Rd	SIGNAL	Stroh Rd	EBL	C (30.9)	D (36.8)	C (32.4)	D (39.1)	D (52.9)	E (67.4)	-	-	-	-	-	-
			EBT	C (33.7)	D (40.8)	D (35.3)	E (59.0)	E (79.7)	-	-	-	-	-	-	
			EBR	C (30.3)	D (36.3)	C (31.7)	D (38.7)	E (66.7)	-	-	-	-	-	-	
			WBL	C (30.4)	D (35.4)	C (31.8)	D (37.6)	D (53.3)	F (102.6)	-	-	-	-	-	
		Stroh Rd	WBT	C (25.8)	C (25.6)	C (26.9)	C (26.9)	D (41.4)	D (42.7)	-	-	-	-	-	-
			WBR	C (28.0)	C (28.0)	C (29.2)	C (29.4)	D (45.5)	D (48.1)	-	-	-	-	-	-
			NBL	B (17.3)	C (21.5)	B (17.7)	C (22.5)	C (24.9)	D (36.4)	-	-	-	-	-	-
			NBT	C (21.9)	C (26.6)	C (22.6)	C (28.0)	D (36.3)	D (50.8)	-	-	-	-	-	-
		Crowfoot Valley Rd	NBR	C (26.6)	C (33.3)	C (27.7)	D (35.4)	D (50.5)	F (92.2)	-	-	-	-	-	-
			SBL	B (14.8)	B (18.5)	B (15.3)	B (19.6)	C (27.1)	D (40.9)	-	-	-	-	-	-
			SBT	B (16.4)	C (20.5)	B (16.9)	C (21.6)	C (25.3)	D (37.2)	-	-	-	-	-	-
			SBR	B (13.8)	B (17.1)	B (14.1)	B (17.9)	B (19.2)	C (27.1)	-	-	-	-	-	-
		Overall		C (24.2)	C (28.9)	C (25.2)	C (30.6)	D (41.3)	E (66.0)	-	-	-	-	-	-
	SIGNAL	Stroh Rd	EBL	-	-	-	-	-	-	D (43.7)	D (50.2)	D (54.8)	E (62.6)	E (58.9)	E (65.6)
			EBT	-	-	-	-	-	-	E (72.0)	E (69.8)	E (70.8)	F (90.8)	E (76.6)	F (99.8)
			EBR	-	-	-	-	-	-	D (44.2)	E (62.4)	A (0.0)	A (0.0)	A (0.0)	A (0.0)
			WBL	-	-	-	-	-	-	D (41.1)	D (54.8)	D (52.3)	E (69.9)	E (68.0)	E (71.4)
		Stroh Rd	WBT	-	-	-	-	-	-	D (39.9)	D (38.7)	D (50.1)	D (46.4)	E (56.1)	D (42.8)
			WBR	-	-	-	-	-	-	D (44.8)	D (42.4)	E (59.7)	D (50.8)	A (0.0)	A (0.0)
			NBL	-	-	-	-	-	-	B (13.4)	D (42.8)	B (13.7)	E (56.3)	B (17.8)	D (35.3)
			NBT	-	-	-	-	-	-	C (21.9)	C (30.6)	C (22.6)	D (37.2)	C (26.2)	D (46.4)
		Crowfoot Valley Rd	NBR	-	-	-	-	-	-	C (26.6)	D (39.8)	C (26.6)	D (49.2)	A (0.0)	A (0.0)
			SBL	-	-	-	-	-	-	B (15.2)	E (60.6)	B (17.9)	D (41.9)	B (19.3)	D (41.4)
			SBT	-	-	-	-	-	-	B (17.4)	D (53.4)	B (17.7)	E (59.3)	B (20.0)	D (41.6)
			SBR	-	-	-	-	-	-	B (12.9)	C (24.2)	B (13.0)	C (25.9)	B (16.4)	C (28.5)
		Overall		-	-	-	-	-	-	C (29.2)	D (47.5)	C (32.8)	D (54.9)	D (37.0)	D (53.6)
2 Crowfoot Valley Rd/S Chambers Rd	SIGNAL	S Chambers Rd	EBL	C (25.9)	C (22.9)	C (28.3)	C (23.8)	D (46.0)	D (41.2)	-	-	-	-	-	-
			EBTR	C (20.5)	C (31.6)	C (21.4)	C (33.2)	D (36.4)	F (82.7)	-	-	-	-	-	-
			WBL	B (18.8)	C (24.1)	B (19.6)	C (25.1)	C (32.2)	D (44.9)	-	-	-	-	-	-
			WBTR	D (43.1)	C (31.0)	D (49.1)	C (32.2)	F (273.7)	E (60.0)	-	-	-	-	-	-
		Crowfoot Valley Rd	NBL	C (30.5)	B (17.9)	C (32.3)	B (18.6)	E (64.0)	C (30.3)	-	-	-	-	-	-
			NBT	D (41.6)	C (29.6)	D (44.0)	C (31.0)	D (51.1)	E (58.8)	-	-	-	-	-	-
			NBR	C (30.0)	B (19.2)	C (31.5)	B (19.9)	C (30.1)	C (28.3)	-	-	-	-	-	-
			SBL	C (30.6)	B (18.8)	C (32.3)	B (19.7)	D (36.4)	E (60.5)	-	-	-	-	-	-
		Crowfoot Valley Rd	SBT	D (47.0)	C (23.9)	D (49.8)	C (24.9)	E (60.5)	D (40.8)	-	-	-	-	-	-
			SBR	C (34.0)	B (18.1)	D (35.7)	B (18.7)	D (36.0)	C (25.6)	-	-	-	-	-	-
		Overall		D (39.0)	C (26.9)	D (42.4)	C (28.2)	F (122.1)	E (57.3)	-	-	-	-	-	-
	SIGNAL	S Chambers Rd	EBL	-	-	-	-	-	-	C (33.0)	C (24.2)	C (23.2)	C (31.7)	D (44.5)	D (54.8)
			EBT	-	-	-	-	-	-	D (35.2)	C (30.3)	C (25.4)	D (39.3)	D (45.6)	F (80.8)
			EBR	-	-	-	-	-	-	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)
			WBL	-	-	-	-	-	-	C (31.7)	C (24.7)	C (22.5)	D (36.0)	D (41.1)	F (228.5)
		Bayou Gulch Rd	WBT	-	-	-	-	-	-	D (40.5)	C (26.9)	C (28.5)	D (35.6)	E (59.0)	E (57.6)
			WBR	-	-	-	-	-	-	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)
			NBL	-	-	-	-	-	-	B (14.1)	D (38.5)	D (35.3)	D (47.6)	E (66.8)	E (64.7)
			NBT	-	-	-	-	-	-	C (30.8)	D (52.2)	E (55.6)	C (31.7)	D (53.2)	B (17.1)
		Crowfoot Valley Rd	NBR	-	-	-	-	-	-	C (23.2)	D (37.3)	C (22.3)	C (32.9)	B (10.7)	-
			SBL	-	-	-	-	-	-	B (15.1)	C (34.4)	C (34.0)	C (31.9)	D (44.0)	C (26.7)
			SBT	-	-	-	-	-	-	B (18.9)	D (47.0)	D (44.0)	E (59.4)	D (37.5)	D (53.5)
			SBR	-	-	-	-	-	-	B (16.0)	D (28.6)	D (35.5)	C (32.2)	C (27.6)	C (22.4)
		Overall		-	-	-	-	-	-	C (26.3)	D (42.3)	D (41.3)	D (43.3)	D (51.1)	D (50.7)
3 Crowfoot Valley Rd/N Pinery Pkwy	STOP	N Pinery Pkwy	WBL	C [22.0]	D [26.6]	C [23.3]	D [28.4]	F [64.5]	F [69.8]	-	-	-	-	-	-
			WBR	B [12.3]	B [12.2]	B [12.6]	B [12.4]	C [17.5]	C [16.0]	-	-	-	-	-	-
			NBT	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	-	-	-	-	-	-
			NBR	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	-	-	-	-	-	-
		Crowfoot Valley Rd	SBL	A [8.5]	A [8.9]	A [8.6]	A [9.0]	A [9.6]	B [10.2]	-	-	-	-	-	-
			SBT	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	-	-	-	-	-	-
	SIGNAL	Access Road 1	EBL	-	-	-	-	-	-	D (37.8)	F (126.4)	D (49.0)	F (140.5)	E (77.5)	F (123.2)
			EBTR	-	-	-	-	-	-	C (32.4)	E (58.3)	D (40.6)	D (50.0)	D (49.3)	E (59.4)
			WBL	-	-	-	-	-	-	D (36.9)	D (37.8)	D (47.1)	E (60.9)	D (53.2)	E (67.1)
			WBTR	-	-	-	-	-	-	D (52.0)	E (69.2)	E (69.2)	E (79.5)	F (83.5)	F (87.3)
		Crowfoot Valley Rd	NBL	-	-	-	-	-	-	B (19.8)	B (17.2)	B (15.2)	B (19.1)	D (36.3)	C (26.8)
			NBT	-	-	-	-	-	-	B (15.9)	B (16.8)	B (18.4)	C (27.2)	C (24.6)	C (30.9)
			NBR	-	-	-	-	-	-	B (12.1)	A (2.0)	B (12.5)	B (11.0)	B (12.1)	A (9.4)
			SBL	-	-	-	-	-	-	C (21.7)	C (20.7)	C (22.2)	C (28.4)	C (27.4)	D (46.7)
		Crowfoot Valley Rd	SBT	-	-	-	-	-	-	B (19.5)	A (5.0)	A (3.4)	A (1.6)	C (34.4)	A (7.9)
			SBR	-	-	-	-	-	-	A (5.2)	A (1.1)	A (0.9)	A (0.3)	A (6.4)	A (0.4)
		Overall		-	-	-	-	-	-	C (22.7)	C (26.1)	B (20.0)	C (28.2)	D (36.8)	C (29.8)
		4 Crowfoot Valley Rd/Pradera Pkwy	STOP	Pradera Pkwy	WBL	E [42.4]	D [34.4]	E [48.0]	E [38.6]	F [320.8]	F [221.1]	-	-	-	-
WBR	B [11.4]				B [11.9]	B [11.6]	B [12.1]	B [14.8]	C [15.3]	-	-	-	-	-	-
NBT	A [0.0]				A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	-	-	-	-	-	-
NBR	A [0.0]				A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	-	-	-	-	-	-
Crowfoot Valley Rd	SBL			A [8.4]	A [8.5]	A [8.4]	A [8.6]	A [9.4]	A [9.5]	-	-	-	-	-	-
	SBT			A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	-	-	-	-	-	-
SIGNAL	Access Road 5		EBL	-	-	-	-	-	-	D (39.9)	D (45.1)	D (49.8)	E (77.6)	E (61.3)	F (80.3)
			EBTR	-	-	-	-	-	-	D (52.0)	D (51.0)	E (62.5)	E (79.6)	E (77.8)	F (82.8)
			WBL	-	-	-	-	-	-	D (39.6)	D (43.6)	D (50.0)	E (59.9)	E (73.4)	E (63.7)
			WBTR	-	-	-	-	-	-	D (53.1)	E (69.8)	E (67.3)	F (81.8)	E (75.5)	F (97.2)
	Crowfoot Valley Rd		NBL	-	-	-	-	-	-	B (16.3)	A (10.0)	A (9.1)	C (24.9)	C (24.9)	C (24.9)
			NBT	-	-	-	-	-	-	B (10.4)	C (25.6)	B (11.0)	C (26.1)	B (15.9)	C (30.8)
			NBR	-	-	-	-	-	-	A (9.1)	B (11.6)	A (9.4)	C (21.2)	A (4.9)	C (21.4)
			SBL	-	-	-	-	-	-	C (24.4)	B (11.4)	C (23.3)	B (14.4)	C (26.6)	D (36.1)
	Crowfoot Valley Rd		SBT	-	-	-	-	-	-	D (36.9)	A (4.8)	A (0.9)	D (50.7)	A (14.1)	D (50.7)
			SBR	-	-	-	-	-	-	B (13.4)	A (2.8)	B (11.2)	A (0.2)	D (37.6)	A (6.0)
	Overall			-	-	-	-	-	-	C (28.3)	B (20.0)	C (29.7)	C (36.2)	D (43.1)	C (29.7)
	5 Crowfoot Valley Rd/Macanta Blvd		STOP	Macanta Blvd	WBL	F [77.2]	F [57.4]	F [89.8]	F [66.3]	-	-	F [296.7]	F [466.4]	F [475.8]	F [782.7]
WBR		A [0.0]			A [0.0]	A [0.0]	A [0.0]	-	-	A [0.0]	A [0.0]	A [0.0]	A [0.0]	-	-
NBT		A [0.0]			A [0.0]	A [0.0]	A [0.0]	-	-	A [0.0]	A [0.0]	A [0.0]	A [0.0]	-	-
NBR		A [0.0]			A [0.0]	A [0.0]	A [0.0]	-	-	A [0.0]	A [0.0]	A [0.0]	A [0.0]	-	-
Crowfoot Valley Rd		SBL		A [8.9]	A [9.3]	A [9.0]	A [9.4]	-	-	A [9.3]	B [10.9]	A [9.0]	B [11.7]	-	-
		SBT		A [0.0]	A [0.0]	A [0.0]	A [0.0]	-	-	A [0.0]	A [0.0]	A [0.0]	A [0.0]	-	-
SIGNAL		Canyonside Blvd	EBL	-	-	-	-	C (30.7)	D (48.9)	-	-	-	-	D (54.6)	E (63.0)
			EBT	-	-	-	-	A (0.0)	D (54.1)	E (75.8)	-	-	-	A (0.0)	F (82.0)
			EBR	-	-	-	-	E (75.8)	D (41.1)	E (62.4)	-	-	-	F (161.2)	F (116.6)
			WBL	-	-	-	-	C (21.4)	D (35.5)	-	-	-	-	F (85.2)	E (75.1)
		Macanta Blvd	WBT	-	-	-	-	A (0.0)	A (0.0)	-	-	-	-	A (0.0)	A (0.0)
			WBR	-	-	-	-	A (0.0)	A (0.0)	-	-	-	-	E (61.9)	E (56.7)
			NBL	-	-	-	-	B (13.4)	B (19.4)	-	-	-	-	B (14.6)	B (13.9)
			NBT	-	-	-	-	C (23.0)	B (16.0)	-	-	-	-	C (26.8)	B (13.9)
		Crowfoot Valley Rd	NBR	-	-	-	-	B (16.5)	B (13.4)	-	-	-	-	A (9.0)	A (8.8)
			SBL	-	-	-	-	B (13.7)	B (11.6)	-	-	-	-	C (27.1)	B (10.7)
			SBT	-	-	-	-	C (24.8)	B (18.1)	-	-	-	-	C (26.1)	B (14.5)
			SBR	-	-	-	-	B (14.0)	B (15.9)	-	-	-	-	A (4.6)	A (3.1)
Overall		-	-	-	-	C (28.1)	C (20.1)	-	-	-	-	D (40.3)	C (20.6)		
6 Crowfoot Valley Rd/Sapphire Pointe Blvd	STOP	Sapphire Pointe Blvd	EBL	E [36.2]	F [66.8]	E [38.3]	F [72.3]	-	-	F [71.1]	F [219.0]	F [103.3]	F [36.7]	-	-
			EBR	A [0.0]	A [0.0]	A [0.0]	A [0.0]	-	-	A [0.0]	A [0.0]	A [0.0]	A [0.0]	-	-
			NBL	A [8.6]	B [10.8]	A [9.9]	B [10.9]	-	-	B [11.0]	B [13.3]	B [11.7]	B [14.4]	-	-
			NBT	A [0.0]	A [0.0]	A [0.0]	A [0.0]	-	-	A [0.0]	A [0.0]	A [0.0]	A [0.0]	-	-
		Crowfoot Valley Rd	SBT	A [0.0]	A [0.0]	A [0.0]	A [0.0]	-	-	A [0.0]	A [0.0]	A [0.0]	A [0.0]	-	-
			SBR	A [0.0]	A [0.0]	A [0.0]	A [0.0]	-	-	A [0.0]	A [0.0]	A [0.0]	A [0.0]	-	-
	SIGNAL	Sapphire Pointe Blvd	EBL	-	-	-	-	D (37.9)	D (41.7)	-	-	-	-	D (51.3)	E (63.6)
			EBR	-	-	-	-	A (0.0)	A (0.0)	-	-	-	-	F (113.4)	F (87.7)
			NBL	-	-	-	-	A (7.5)	D (35.5)	-	-	-	-	A (6.9)	A (7.2)
			WBL	-	-	-	-	C (21.4)	D (35.5)	-	-	-	-	F (85.2)	E (75.1)
		Crowfoot Valley Rd	WBT	-	-	-	-	A (0.0)	A (0.0)	-	-	-	-	A (0.0)	A (0.0)
			WBR	-	-	-	-	A (0.0)	A (0.0)	-	-	-	-	E (61.9)	E (56.7)
			NBL	-	-	-	-	B (13.4)	B (19.4)	-	-	-	-	B (14.6)	B (13.9)
			NBT	-	-	-	-								

Intersection	Operating Condition	Street Name	Approach/ Movement	Background 2028		Background 2030		Background 2045		Phase 1 Total Future 2028		Phase 2 Total Future 2030		Phase 3 Total Future 2045		
				Peak AM	Peak PM	Peak AM	Peak PM	Peak AM	Peak PM	Peak AM	Peak PM	Peak AM	Peak PM	Peak AM	Peak PM	
7 Crowfoot Valley Rd/Access Road 2	STOP	Access Road 2	EBR	-	-	-	-	-	-	B [11.8]	B [14.5]	-	-	-	-	
		Crowfoot Valley Rd	NBL	-	-	-	-	-	-	A [9.9]	B [13.5]	-	-	-	-	
			NBT	-	-	-	-	-	-	A [0.0]	A [0.0]	-	-	-	-	
		Crowfoot Valley Rd	SBT	-	-	-	-	-	-	A [0.0]	A [0.0]	-	-	-	-	
		SBR	-	-	-	-	-	-	A [0.0]	A [0.0]	-	-	-	-		
	Phase 2 Improvements: - East leg addition - Northbound right turn lane addition - Southbound left turn lane addition	STOP	Access Road 2	EBR	-	-	-	-	-	-	-	B [12.2]	C [16.3]	B [10.2]	B [12.1]	
			Access Road 2	WBR	-	-	-	-	-	-	-	-	B [14.1]	B [14.7]	B [11.3]	B [11.3]
				NBL	-	-	-	-	-	-	-	-	B [10.3]	C [15.4]	B [10.6]	C [24.9]
			Crowfoot Valley Rd	NBT	-	-	-	-	-	-	-	-	A [0.0]	A [0.0]	A [0.0]	A [0.0]
			NBR	-	-	-	-	-	-	-	-	A [0.0]	A [0.0]	A [0.0]	A [0.0]	
			SBL	-	-	-	-	-	-	-	-	B [11.0]	B [13.0]	B [12.6]	C [15.2]	
			SBT	-	-	-	-	-	-	-	-	A [0.0]	A [0.0]	A [0.0]	A [0.0]	
			SBR	-	-	-	-	-	-	-	-	A [0.0]	A [0.0]	A [0.0]	A [0.0]	
	8 Crowfoot Valley Rd/Access Road 3	STOP	Access Road 3	EBR	-	-	-	-	-	-	B [10.9]	C [15.2]	-	-	-	-
			Crowfoot Valley Rd	NBL	-	-	-	-	-	-	B [10.1]	B [14.0]	-	-	-	-
				NBT	-	-	-	-	-	-	A [0.0]	A [0.0]	-	-	-	-
Crowfoot Valley Rd			SBT	-	-	-	-	-	-	A [0.0]	A [0.0]	-	-	-	-	
		SBR	-	-	-	-	-	-	A [0.0]	A [0.0]	-	-	-	-		
Phase 2 Improvements: - East Leg Addition - Northbound right turn lane addition - Southbound left turn lane addition		STOP	Access Road 3	EBR	-	-	-	-	-	-	-	B [11.1]	C [16.7]	A [9.7]	B [13.2]	
			Access Road 3	WBR	-	-	-	-	-	-	-	-	B [13.6]	B [14.7]	B [11.1]	B [11.3]
				NBL	-	-	-	-	-	-	-	-	B [10.3]	C [15.1]	B [11.1]	D [25.9]
			Crowfoot Valley Rd	NBT	-	-	-	-	-	-	-	-	A [0.0]	A [0.0]	A [0.0]	A [0.0]
			NBR	-	-	-	-	-	-	-	-	A [0.0]	A [0.0]	A [0.0]	A [0.0]	
			SBL	-	-	-	-	-	-	-	-	B [10.6]	B [13.2]	B [12.1]	C [15.7]	
			SBT	-	-	-	-	-	-	-	-	A [0.0]	A [0.0]	A [0.0]	A [0.0]	
			SBR	-	-	-	-	-	-	-	-	A [0.0]	A [0.0]	A [0.0]	A [0.0]	
9 Crowfoot Valley Rd/Access Road 4		SIGNAL	Access Road 4	EBL	-	-	-	-	-	-	D (48.7)	B (17.5)	-	-	-	-
				EBR	-	-	-	-	-	-	-	-	A (5.2)	A (6.8)	-	-
			Crowfoot Valley Rd	NBL	-	-	-	-	-	-	-	-	D (41.7)	B (14.3)	-	-
			NBT	-	-	-	-	-	-	-	-	A (3.6)	E (65.4)	-	-	
		SBT	-	-	-	-	-	-	-	-	A (0.2)	D (43.3)	-	-		
		SBR	-	-	-	-	-	-	-	-	D (42.7)	-	-	-		
		Overall	-	-	-	-	-	-	-	-	A (4.9)	C (32.0)	-	-		
			-	-	-	-	-	-	-	-	D (38.7)	-	-	-		
	Phase 2 Improvements: - East Leg Addition - Northbound right turn lane addition - Southbound left turn lane addition Phase 3 Improvements: - Dual eastbound left turn lanes	SIGNAL	Access Road 4	EBL	-	-	-	-	-	-	-	D (48.4)	E (60.3)	E (69.0)	F (87.1)	
				EBTR	-	-	-	-	-	-	-	-	E (56.2)	D (50.4)	E (74.3)	E (70.5)
			Access Road 4	WBL	-	-	-	-	-	-	-	-	D (51.2)	E (64.0)	E (70.4)	E (71.4)
				WBTR	-	-	-	-	-	-	-	-	E (67.3)	E (79.8)	E (75.8)	F (87.9)
			NBL	-	-	-	-	-	-	-	-	A (6.9)	B (14.1)	A (6.3)	D (38.0)	
		Crowfoot Valley Rd	NBT	-	-	-	-	-	-	-	-	A (7.0)	A (8.7)	B (16.7)	A (0.6)	
			NBR	-	-	-	-	-	-	-	-	A (5.2)	A (6.8)	A (0.0)	A (0.1)	
			SBL	-	-	-	-	-	-	-	-	A (9.2)	B (12.9)	B (18.0)	C (23.7)	
	Crowfoot Valley Rd	SBT	-	-	-	-	-	-	-	B (10.7)	B (19.0)	A (9.3)	C (29.2)			
	SBR	-	-	-	-	-	-	-	-	A (8.5)	B (15.2)	A (11.8)	A (6.3)			
	Overall	-	-	-	-	-	-	-	-	-	B (18.5)	C (23.5)	C (22.0)	C (26.0)		

Notes : (1) Numbers in brackets () represent delay at unsignalized intersections in seconds per vehicle.
(2) Numbers in parenthesis () represent delay at signalized intersections in seconds per vehicle.

Table 6-2
Crownsnest - Castle Pines, CO
Total Future Intersection Queuing Summary⁽¹⁾

Total Future Intersection Queueing Summary																	
Intersection	Operating Condition	Street Name	Approach/ Movement	Available Storage	Background 2028		Background 2030		Background 2045		Phase 1 Total Future 2028		Phase 2 Total Future 2030		Phase 3 Total Future 2045		
					Peak Hour AM	Peak Hour PM	Peak Hour AM	Peak Hour PM	Peak Hour AM	Peak Hour PM	Peak Hour AM	Peak Hour PM	Peak Hour AM	Peak Hour PM	Peak Hour AM	Peak Hour PM	
1 Crowfoot Valley Rd/Stroh Rd	SIGNAL	S Chambers Rd	EBL	225	69	66	73	69	116	98	-	-	-	-	-	-	
			EBT	-	157	195	168	205	279	309	-	-	-	-	-	-	
		Bayou Gulch Rd	EBR	350	0	0	0	0	0	0	-	-	-	-	-	-	
			WBL	350	299	465	326	501	621	1087	-	-	-	-	-	-	
		Crowfoot Valley Rd	WBT	-	162	95	175	101	301	168	-	-	-	-	-	-	
			WBR	600	58	55	61	57	81	77	-	-	-	-	-	-	
		Crowfoot Valley Rd	NBL	250	13	14	15	16	25	21	-	-	-	-	-	-	
			NBT	-	304	338	330	355	746	639	-	-	-	-	-	-	
		Crowfoot Valley Rd	NBR	500	77	87	79	89	105	104	-	-	-	-	-	-	
			SBL	450	151	192	163	201	275	307	-	-	-	-	-	-	
	SIGNAL	S Chambers Rd	SBT	-	252	330	271	348	529	610	-	-	-	-	-	-	
			SBR	-	0	0	0	0	0	0	-	-	-	-	-	-	
		Bayou Gulch Rd	EBL	225	-	-	-	-	-	-	57	57	69	69	92	89	
			EBT	-	-	-	-	-	-	-	151	192	159	232	219	317	
		Crowfoot Valley Rd	EBR	350	-	-	-	-	-	-	0	0	0	0	0	109	
			WBL	650	-	-	-	-	-	-	146	295	196	413	299	613	
		Crowfoot Valley Rd	WBT	-	-	-	-	-	-	-	136	87	171	108	252	136	
			WBR	600	-	-	-	-	-	-	55	47	63	62	77	66	
		Crowfoot Valley Rd	NBL	250	-	-	-	-	-	-	12	9	12	23	41	37	
			NBT	-	-	-	-	-	-	-	443	67	99	721	448	535	
2 Crowfoot Valley Rd/S Chambers Rd	SIGNAL	S Chambers Rd	EBL	550	48	71	51	77	79	114	-	-	-	-	-	-	
			EBTR	-	258	867	278	959	476	1657	-	-	-	-	-	-	
		Bayou Gulch Rd	WBL	300	24	18	25	20	40	27	-	-	-	-	-	-	
			WBTR	-	976	336	1067	364	1921	602	-	-	-	-	-	-	
		Crowfoot Valley Rd	NBL	500	174	96	181	98	438	152	-	-	-	-	-	-	
			NBT	-	426	512	445	540	834	1132	-	-	-	-	-	-	
		Crowfoot Valley Rd	NBR	400	0	0	0	0	0	0	-	-	-	-	-	-	
			SBL	550	117	146	122	149	160	462	-	-	-	-	-	-	
		Crowfoot Valley Rd	SBT	-	439	404	462	424	793	894	-	-	-	-	-	-	
			SBR	350	13	0	16	1	33	13	-	-	-	-	-	-	
	SIGNAL	S Chambers Rd	EBL	550	-	-	-	-	-	-	38	56	45	80	69	125	
			EBT	-	-	-	-	-	-	-	62	173	72	240	110	413	
		Bayou Gulch Rd	EBR	300	-	-	-	-	-	-	0	0	0	0	0	0	
			WBL	350	-	-	-	-	-	-	43	75	53	124	82	309	
		Crowfoot Valley Rd	WBT	-	-	-	-	-	-	-	184	72	216	98	354	152	
			WBR	300	-	-	-	-	-	-	0	0	0	0	0	0	
		Crowfoot Valley Rd	NBL	500	-	-	-	-	-	-	74	156	162	204	262	285	
			NBT	-	-	-	-	-	-	-	272	303	430	361	640	889	
		Crowfoot Valley Rd	NBR	400	-	-	-	-	-	-	3	13	18	5	19	14	
			SBL	550	-	-	-	-	-	-	70	137	60	108	236	242	
3 Crowfoot Valley Rd/N Pinery Pkwy	STOP	N Pinery Pkwy	WBL	-	25	15	28	15	70	35	-	-	-	-	-	-	
			WBR	215	20	10	20	13	33	18	-	-	-	-	-	-	
		Crowfoot Valley Rd	NBT	-	0	0	0	0	0	0	-	-	-	-	-	-	
			NBR	440	0	0	0	0	0	0	-	-	-	-	-	-	
		Crowfoot Valley Rd	SBL	500	3	8	3	8	3	10	-	-	-	-	-	-	
			SBT	-	0	0	0	0	0	0	-	-	-	-	-	-	
	SIGNAL	Access Road 1	EBL	650	-	-	-	-	-	-	264	604	305	649	324	444	
			EBTR	-	-	-	-	-	-	-	0	0	0	0	0	0	
		N Pinery Pkwy	WBL	-	-	-	-	-	-	-	81	85	95	93	106	103	
			WBTR	215	-	-	-	-	-	-	3	0	28	0	76	0	
		Crowfoot Valley Rd	NBL	300	-	-	-	-	-	-	9	37	11	27	24	122	
			NBT	-	-	-	-	-	-	-	138	256	276	327	463	427	
		Crowfoot Valley Rd	NBR	440	-	-	-	-	-	-	1	28	0	18	11	10	
			SBL	500	-	-	-	-	-	-	7	17	6	23	6	20	
		Crowfoot Valley Rd	SBT	-	-	-	-	-	-	-	48	116	68	260	87	1289	
			SBR	300	-	-	-	-	-	-	0	0	0	0	0	0	
	4 Crowfoot Valley Rd/Pradera Pkwy	STOP	Pradera Pkwy	WBL	-	108	70	118	78	308	213	-	-	-	-	-	-
				WBR	250	5	5	5	8	10	-	-	-	-	-	-	-
			Crowfoot Valley Rd	NBT	-	0	0	0	0	0	0	-	-	-	-	-	-
				NBR	880	0	0	0	0	0	0	-	-	-	-	-	-
Crowfoot Valley Rd			SBL	450	3	3	3	3	3	3	-	-	-	-	-	-	
			SBT	-	0	0	0	0	0	0	-	-	-	-	-	-	
SIGNAL		Access Road 5	EBL	300	-	-	-	-	-	-	168	143	212	179	254	209	
			EBTR	-	-	-	-	-	-	-	0	0	0	0	109	95	
		Pradera Pkwy	WBL	-	-	-	-	-	-	-	146	140	184	176	184	164	
			WBTR	250	-	-	-	-	-	-	0	0	0	0	64	154	
		Crowfoot Valley Rd	NBL	300	-	-	-	-	-	-	24	37	25	37	18	81	
			NBT	-	-	-	-	-	-	-	152	197	178	262	88	176	
		Crowfoot Valley Rd	NBR	880	-	-	-	-	-	-	0	28	23	28	3	11	
			SBL	450	-	-	-	-	-	-	24	7	31	6	40	30	
		Crowfoot Valley Rd	SBT	-	-	-	-	-	-	-	89	24	128	45	357	273	
			SBR	300	-	-	-	-	-	-	0	0	1	1	7	12	
5 Crowfoot Valley Rd/Macanta Blvd	STOP	Macanta Blvd	WBL	265	138	90	150	100	-	-	260	245	308	285	-	-	
			WBR	-	0	0	0	0	-	-	0	0	0	0	-	-	
		Crowfoot Valley Rd	NBT	-	0	0	0	0	-	-	0	0	0	0	-	-	
			NBR	575	0	0	0	0	-	-	0	0	0	0	-	-	
		Crowfoot Valley Rd	SBL	575	3	3	3	3	-	-	3	3	3	3	-	-	
			SBT	-	0	0	0	0	-	-	0	0	0	0	-	-	
	SIGNAL	Canyonside Blvd	EBL	200	-	-	-	-	34	35	-	-	-	-	62	43	
			EBT	-	-	-	-	-	0	0	-	-	-	-	0	0	
		Macanta Blvd	EBR	200	-	-	-	-	38	0	-	-	-	-	16	0	
			WBL	300	-	-	-	-	81	94	-	-	-	-	281	166	
		Crowfoot Valley Rd	WBT	-	-	-	-	-	0	0	-	-	-	-	0	0	
			WBR	265	-	-	-	-	0	0	-	-	-	-	0	0	
		Crowfoot Valley Rd	NBL	300	-	-	-	-	132	97	-	-	-	-	158	66	
			NBT	-	-	-	-	-	232	257	-	-	-	-	178	512	
		Crowfoot Valley Rd	NBR	575	-	-	-	-	13	0	-	-	-	-	0	15	
			SBL	575	-	-	-	-	13	15	-	-	-	-	8	3	
6 Crowfoot Valley Rd/Sapphire Pointe Blvd	STOP	Sapphire Pointe Blvd	EBL	265	33	28	35	30	-	-	58	58	75	70	-	-	
			EBR	-	0	0	0	0	-	-	0	0	0	0	-	-	
		Crowfoot Valley Rd	NBL	600	8	30	10	30	-	-	10	43	13	48	-	-	
			NBT	-	0	0	0	0	-	-	0	0	0	0	-	-	
		Crowfoot Valley Rd	SBT	-	0	0	0	0	-	-	0	0	0	0	-	-	
			SBR	250	0	0	0	0	-	-	0	0	0	0	-	-	
	SIGNAL	Sapphire Pointe Blvd	EBL	265	-	-	-	-	42	29	-	-	-	-	85	54	
			EBR	-	-	-	-	-	79	44	-	-	-	-	133	68	
		Crowfoot Valley Rd	NBL	600	-	-	-	-	29	73	-	-	-	-	63	232	
			NBT	-	-	-	-	-	158	146	-	-	-	-	246	398	
		Crowfoot Valley Rd	SBT	-	-	-	-	-	363	285	-	-	-	-	202	204	
			SBR	250	-	-	-	-	7	18	-	-	-	-	1	4	

Intersection	Operating Condition	Street Name	Approach/Movement	Available Storage	Background 2028		Background 2030		Background 2045		Phase 1 Total Future 2028		Phase 2 Total Future 2030		Phase 3 Total Future 2045	
					AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
					Peak Hour	Peak Hour	Peak Hour	Peak Hour	Peak Hour	Peak Hour	Peak Hour	Peak Hour	Peak Hour	Peak Hour	Peak Hour	Peak Hour
7 Crowfoot Valley Rd/Access Road 2	STOP	Access Road 2	EBR	-	-	-	-	-	-	-	5	5	-	-	-	-
		Crowfoot Valley Rd	NBL	300	-	-	-	-	-	-	3	8	-	-	-	-
			NBT	-	-	-	-	-	-	-	0	0	-	-	-	-
		Crowfoot Valley Rd	SBT	-	-	-	-	-	-	-	0	0	-	-	-	-
	STOP		SBR	300	-	-	-	-	-	-	0	0	-	-	-	-
		Access Road 2	EBR	-	-	-	-	-	-	-	-	-	5	5	5	5
		Access Road 2	WBR	-	-	-	-	-	-	-	-	-	18	13	13	8
		Access Road 2	NBL	300	-	-	-	-	-	-	-	-	3	10	3	18
		Crowfoot Valley Rd	NBT	-	-	-	-	-	-	-	-	-	0	0	0	0
			NBR	300	-	-	-	-	-	-	-	-	0	0	0	0
		Crowfoot Valley Rd	SBL	300	-	-	-	-	-	-	-	-	5	18	5	20
			SBT	-	-	-	-	-	-	-	-	-	0	0	0	0
		Crowfoot Valley Rd	SBR	300	-	-	-	-	-	-	-	-	0	0	0	0
8 Crowfoot Valley Rd/Site Access	STOP	Access Road 3	EBR	-	-	-	-	-	-	-	3	58	-	-	-	-
		Crowfoot Valley Rd	NBL	300	-	-	-	-	-	-	5	20	-	-	-	-
			NBT	-	-	-	-	-	-	-	0	0	-	-	-	-
		Crowfoot Valley Rd	SBT	-	-	-	-	-	-	-	0	0	-	-	-	-
	STOP		SBR	300	-	-	-	-	-	-	0	0	-	-	-	-
		Access Road 3	EBR	-	-	-	-	-	-	-	-	-	3	65	3	48
		Access Road 3	WBR	-	-	-	-	-	-	-	-	-	15	13	13	8
		Access Road 3	NBL	300	-	-	-	-	-	-	-	-	5	23	5	43
		Crowfoot Valley Rd	NBT	-	-	-	-	-	-	-	-	-	0	0	0	0
			NBR	300	-	-	-	-	-	-	-	-	0	0	0	0
		Crowfoot Valley Rd	SBL	300	-	-	-	-	-	-	-	-	5	18	5	23
			SBT	-	-	-	-	-	-	-	-	-	0	0	0	0
		Crowfoot Valley Rd	SBR	300	-	-	-	-	-	-	-	-	0	0	0	0
9 Crowfoot Valley Rd/Access Road 4	SIGNAL	Access Road 4	EBL	-	-	-	-	-	-	-	178	311	-	-	-	-
			EBR	300	-	-	-	-	-	-	41	38	-	-	-	-
		Crowfoot Valley Rd	NBL	300	-	-	-	-	-	-	4	70	-	-	-	-
			NBT	-	-	-	-	-	-	-	18	157	-	-	-	-
	SIGNAL	Crowfoot Valley Rd	SBT	-	-	-	-	-	-	-	50	296	-	-	-	-
			SBR	300	-	-	-	-	-	-	1	10	-	-	-	-
		Access Road 4	EBL	450	-	-	-	-	-	-	-	-	206	429	126	267
			EBTR	-	-	-	-	-	-	-	-	-	0	0	0	8
		Access Road 4	WBL	300	-	-	-	-	-	-	-	-	122	92	144	116
			WBTR	-	-	-	-	-	-	-	-	-	0	0	11	0
		Crowfoot Valley Rd	NBL	300	-	-	-	-	-	-	-	-	10	99	8	64
			NBT	-	-	-	-	-	-	-	-	-	203	223	143	212
	SIGNAL	Crowfoot Valley Rd	NBR	300	-	-	-	-	-	-	-	-	1	0	0	8
			SBL	300	-	-	-	-	-	-	-	-	10	15	6	20
		Crowfoot Valley Rd	SBT	-	-	-	-	-	-	-	-	-	71	240	88	242
			SBR	300	-	-	-	-	-	-	-	-	0	21	0	3

Notes : (1) Queue length, in feet, is based on the 95th percentile queue as reported by Synchro, Version 12.

Table 6-3
 Crowsnest - Castle Pines, CO
 Recommended Improvements Summary

Improvement Description and Location	Phase		
	Phase 1	Phase 2	Phase 3
1. Crowfoot Valley Rd/Stroh Rd			
Dual westbound left turn lanes	•		
Channelization of eastbound right turn lane		•	
Channelization of westbound right turn lane			•
Two northbound through lanes			•
Two southbound through lanes			•
Channelization of northbound right turn lane			•
2. Crowfoot Valley Rd/S Chambers Rd			
Two northbound through lanes	•		
Two southbound through lanes	•		
Two eastbound through lanes	•		
Two westbound through lanes	•		
Designated eastbound channelized right turn lane	•		
Designated westbound channelized right turn lane	•		
Dual northbound left turn lanes	•		
Triple northbound left turn lanes			•
3. Crowfoot Valley Rd/N Pinery Pkwy			
Signalization	•		
West leg addition (left turn lane & through/right turn lane)	•		
Northbound left turn lane	•		
Southbound right turn lane	•		
Two northbound through lanes	•		
Two southbound through lanes	•		
Dual eastbound left turn lanes			•
4. Crowfoot Valley Rd/Pradera Pkwy			
Signalization	•		
West leg addition (left turn lane & through/right turn lane)	•		
Northbound left turn lane	•		
Southbound right turn lane	•		
Two northbound through lanes	•		
Two southbound through lanes	•		
Dual eastbound left turn lanes			•
5. Crowfoot Valley Rd/Macanta Blvd			
Signalization			•
West leg addition (dual left turns, one through lane, and one right turn lane)			•
Two southbound through lanes			•
Northbound left turn lane			•
Southbound right turn lane			•
Westbound through lane addition			•
6. Crowfoot Valley Rd/Sapphire Pointe Blvd			
Signalization			•
Two southbound through lanes			•
7. Crowfoot Valley Rd/Access Road 2			
West leg addition (right-out only)	•		
Two northbound through lanes	•		
Two southbound through lanes	•		
Northbound left turn lane	•		
Southbound right turn lane	•		
East leg addition (right-out only)		•	
Northbound right turn lane		•	
Southbound left turn lane		•	
8. Crowfoot Valley Rd/Access Road 3			
West leg addition (right-out only)	•		
Two northbound through lanes	•		
Two southbound through lanes	•		
Northbound left turn lane	•		
Southbound right turn lane	•		
East leg addition (right-out only)		•	
Northbound right turn lane		•	
Southbound left turn lane		•	
9. Crowfoot Valley Rd/Access Road 4			
Signalization	•		
West leg addition (left turn lane & right turn lane)	•		
Two northbound through lanes	•		
Two southbound through lanes	•		
Northbound left turn lane	•		
Southbound right turn lane	•		
East leg addition (left turn lane & through/right turn lane)		•	
Northbound right turn lane		•	
Southbound left turn lane		•	
Dual eastbound left turn lanes			•

• Improvements that will be provided by Applicant
 • Improvements that will be provided by Canyons development

VII. Conclusions and Recommendations

Conclusions

Based on the results of this traffic impact study, the following may be concluded:

- Under existing traffic conditions, the intersections within the study area currently operate without the need for additional improvements during the weekday AM and PM peak hours. Existing queues remain within their respective storage lengths with the exception of the westbound left turn movement at the Crowfoot Valley Rd/Stroh Rd intersection which exceeds its queue during the PM peak hour.
- Under background future conditions, without the development of the subject site, the signalized intersections in the study area are forecasted to operate at acceptable overall LOS “D” or better during the weekday AM and PM peak hours with the exception of the Crowfoot Valley Rd/Stroh Rd intersection which is expected to operate at LOS “E” during the 2045 PM peak hour and the Crowfoot Valley Rd/S Chambers Rd intersection which is expected to operate at LOS “F” during the 2045 AM peak hour and LOS “E” during the 2045 PM peak hour. The unsignalized intersections are expected to operate without the need for additional improvements during the weekday AM and PM peak hours. The queues are expected to remain generally consistent with existing conditions.
- The proposed site development would generate, upon completion and full occupancy:

Phase 1 (2028):

- 1,439 net new weekday AM peak hour vehicle trips,
- 2,617 net new weekday PM peak hour vehicle trips, and
- 28,401 net new weekday daily trips

Phase 1+2 (2030):

- 1,890 net new weekday AM peak hour vehicle trips,
- 3,217 net new weekday PM peak hour vehicle trips, and
- 34,258 net new weekday daily trips

Phase 1+2+3 (2045):

- 2,674 net new weekday AM peak hour vehicle trips,
 - 4,258 net new weekday PM peak hour vehicle trips, and
 - 44,435 net new weekday daily trips
- Under total future conditions, with the implemented improvements studied herein, the study intersections and roadway sections are expected to operate acceptably and without the need for additional improvements. All queues are expected to be contained within the proposed storage lengths.

Recommendations

A Recommended Improvements Summary can be found in Table 6-3. These improvements are listed below and should be evaluated at site plan for further refinement. Intersection spacing and road design should adhere to the applicable design standards. Specifically, the full movement signalized roadway intersections

should be spaced at ½ mile spacing minimum. Additional partial movement access should be evaluated at time of site plan when specific internal roadway layouts and uses are known.

Phase 1 Improvements (2028)

Crowfoot Valley Road/Stroh Rd

- Dual westbound left turn lanes

Crowfoot Valley Road/S Chambers Rd

- Two northbound through lanes
- Two southbound through lanes
- Two eastbound through lanes
- Two westbound through lanes
- Designated eastbound channelized right turn lane
- Designated westbound channelized right turn lane
- Dual northbound left turn lanes

Crowfoot Valley Road/N Pinery Parkway

- Signalization
- West leg addition (left turn lane & through/right turn lane)
- Northbound left turn lane
- Southbound right turn lane
- Two northbound through lanes
- Two southbound through lanes

Crowfoot Valley Road/Pradera Pkwy

- Signalization
- West leg addition (left turn lane & through/right turn lane)
- Northbound left turn lane
- Southbound right turn lane
- Two northbound through lanes
- Two southbound through lanes

The addition of the proposed intersections including:

- Crowfoot Valley Rd/Access Road 2
- Crowfoot Valley Rd/Access Road 3
- Crowfoot Valley Rd/Access Road 4

Phase 2 Improvements (2030)

Crowfoot Valley Road/Stroh Rd

- Channelization of eastbound right turn lane

Crowfoot Valley Road/Access Road 2

- East leg addition (right-out only)
- Northbound right turn lane
- Southbound left turn lane

Crowfoot Valley Road/Access Road 3

- East leg addition (right-out only)
- Northbound right turn lane
- Southbound left turn lane

Crowfoot Valley Road/Access Road 4

- East leg addition (left turn lane & through/right turn lane)
- Northbound right turn lane
- Southbound left turn lane

Phase 3 Improvements (2045)

Crowfoot Valley Road/Stroh Rd

- Channelization of northbound right turn lane
- Channelization of westbound right turn lane
- Two northbound through lanes
- Two southbound through lanes

Crowfoot Valley Road/S Chambers Rd

- Triple northbound left turn lanes

Crowfoot Valley Road/N Pinery Parkway

- Dual eastbound left turn lanes

Crowfoot Valley Road/Pradera Parkway

- Dual eastbound left turn lanes

Crowfoot Valley Road/Access Road 4

- Dual eastbound left turn lanes

Canyons Improvements (2040)

The following improvements were shown in the Canyons TIS and would be constructed by 2040:

Crowfoot Valley Road/Macanta Blvd

- Signalization
- West leg addition (dual left turn lanes, one through lane, and one right turn lane)
- Two southbound through lanes
- Northbound left turn lane
- Southbound right turn lane
- Westbound through lane addition

Crowfoot Valley Road/Sapphire Pointe Blvd

- Signalization
- Two southbound through lanes

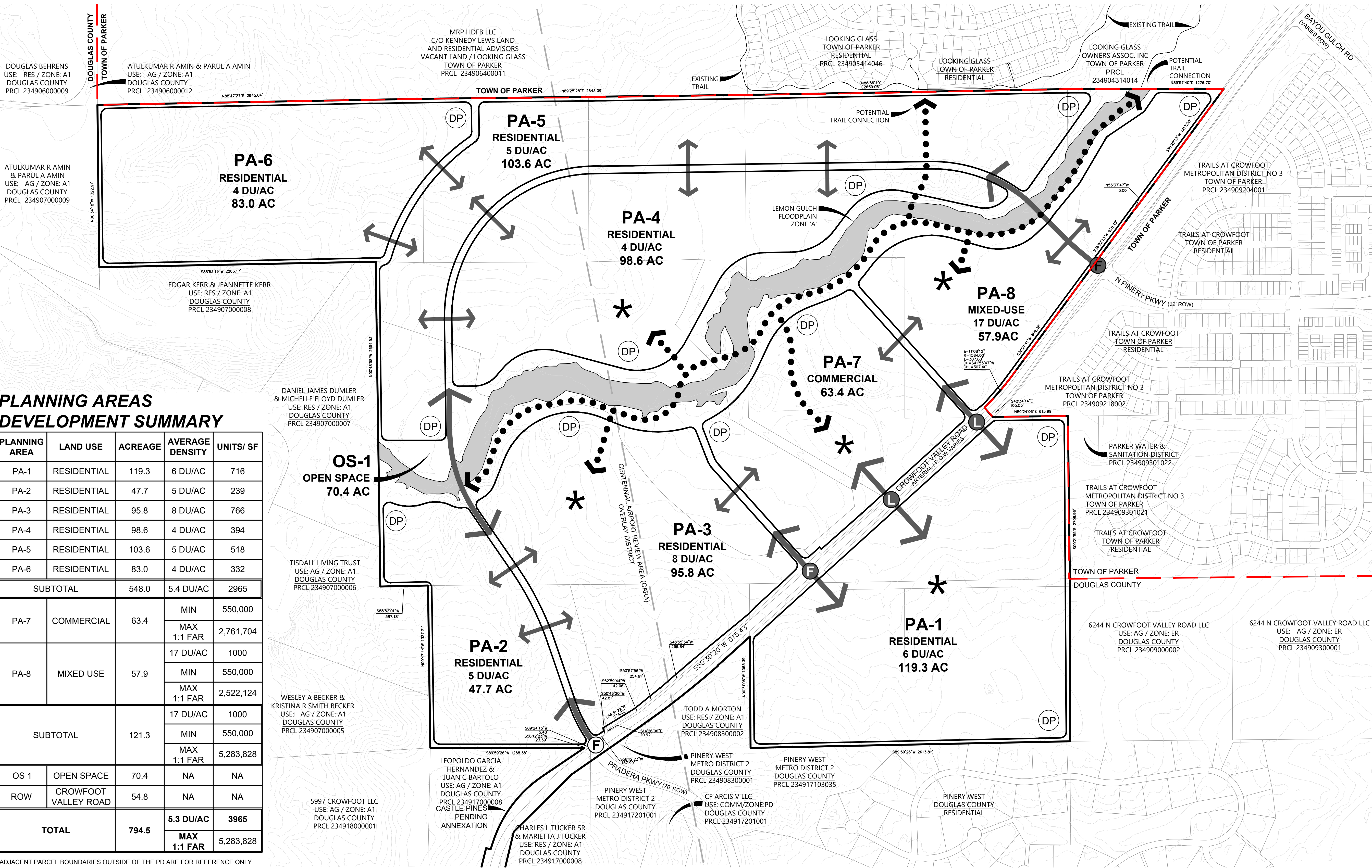
APPENDIX A – Conceptual Site Plan

CROWSNEST PLANNED DEVELOPMENT

CASTLE PINES, COLORADO

LOCATED IN SECTION 7,8,9, TOWNSHIP 7 SOUTH, RANGE 66 WEST OF THE 6TH P.M.
CITY OF CASTLE PINES, COUNTY OF DOUGLAS, STATE OF COLORADO
~ 794.506 ACRES ~ 3,965 RES LOTS / MIN. 550,000 SF COMMERCIAL ~

PLANNED DEVELOPMENT (PD) PLAN

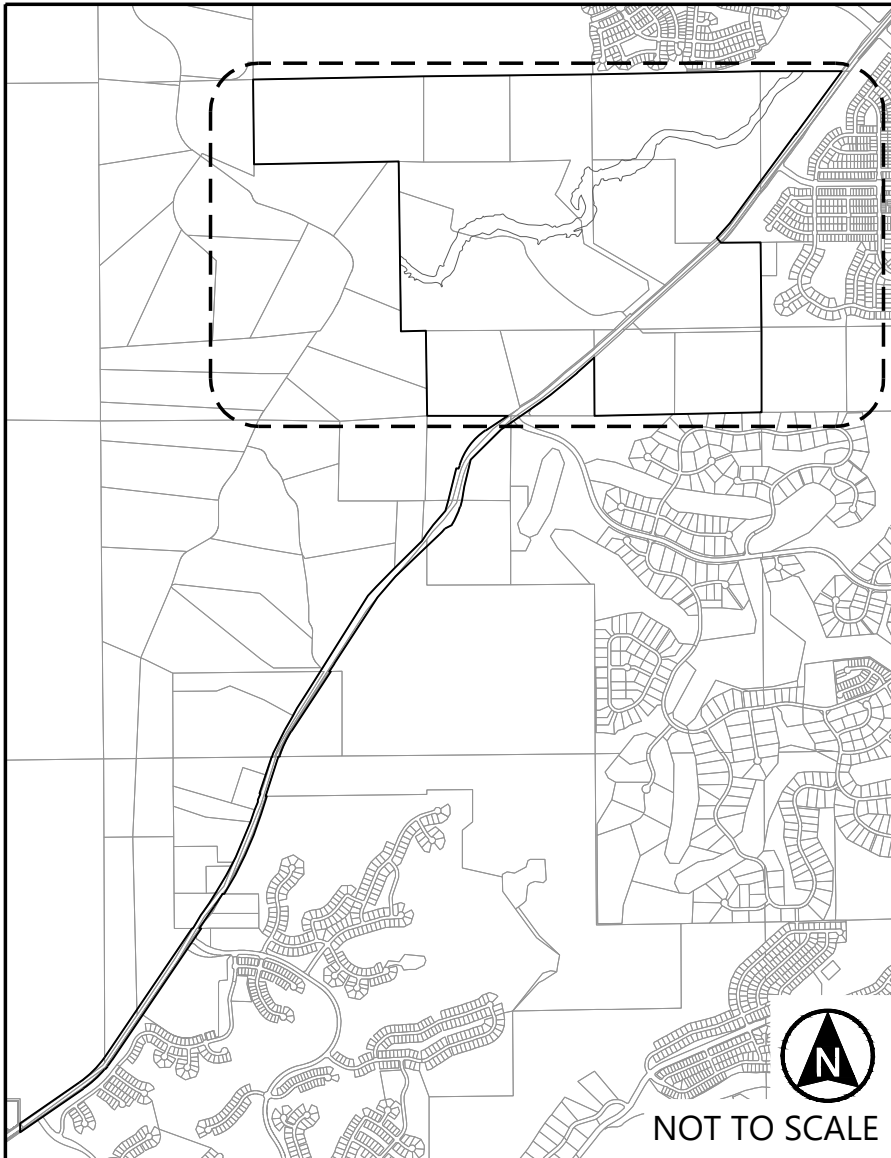


PLANNING AREAS DEVELOPMENT SUMMARY

PLANNING AREA	LAND USE	ACREAGE	AVERAGE DENSITY	UNITS/ SF
PA-1	RESIDENTIAL	119.3	6 DU/AC	716
PA-2	RESIDENTIAL	47.7	5 DU/AC	239
PA-3	RESIDENTIAL	95.8	8 DU/AC	766
PA-4	RESIDENTIAL	98.6	4 DU/AC	394
PA-5	RESIDENTIAL	103.6	5 DU/AC	518
PA-6	RESIDENTIAL	83.0	4 DU/AC	332
SUBTOTAL		548.0	5.4 DU/AC	2965
PA-7	COMMERCIAL	63.4	MIN	550,000
			MAX 1:1 FAR	2,761,704
PA-8	MIXED USE	57.9	17 DU/AC	1000
			MIN	550,000
			MAX 1:1 FAR	2,522,124
SUBTOTAL		121.3	17 DU/AC	1000
			MIN	550,000
			MAX 1:1 FAR	5,283,828
OS 1	OPEN SPACE	70.4	NA	NA
ROW	CROWFOOT VALLEY ROAD	54.8	NA	NA
TOTAL		794.5	5.3 DU/AC	3965
			MAX 1:1 FAR	5,283,828

*ADJACENT PARCEL BOUNDARIES OUTSIDE OF THE PD ARE FOR REFERENCE ONLY

KEY MAP



LEGEND

- PROPERTY LINE
- PLANNING AREA BOUNDARY
- CENTENNIAL AIRPORT REVIEW AREA (CARA) OVERLAY DISTRICT
- MUNICIPAL BOUNDARY
- CONCEPTUAL ROADWAY
- CONCEPTUAL CROSS ACCESS
- CONCEPTUAL FULL ACCESS
- CONCEPTUAL LIMITED ACCESS
- CONCEPTUAL TRAIL
- PARK / PUBLIC OUTDOOR SPACE
- STORMWATER DETENTION
- FLOODPLAIN ZONE 'A'
- PA PLANNING AREA
- OS OPEN SPACE



Planning & Landscape Architecture

Land & Master Planning
Land Use/Feasibility Studies
Sustainable Design
Urban Design
Landscape Architecture
1765 West 121st Ave, Suite 300
Westminster, CO 80234
P 303.421.4224

No.	Rev. Date:
1	10/31/2025
2	01/14/2026
3	02/09/2026
4	
5	
6	

Crowsnest PD
Castle Pine, Colorado

PD PLAN/
PLANNING AREA
TABLE
Sheet: 7 of 7

0 200' 400'
1" = 400'-0"

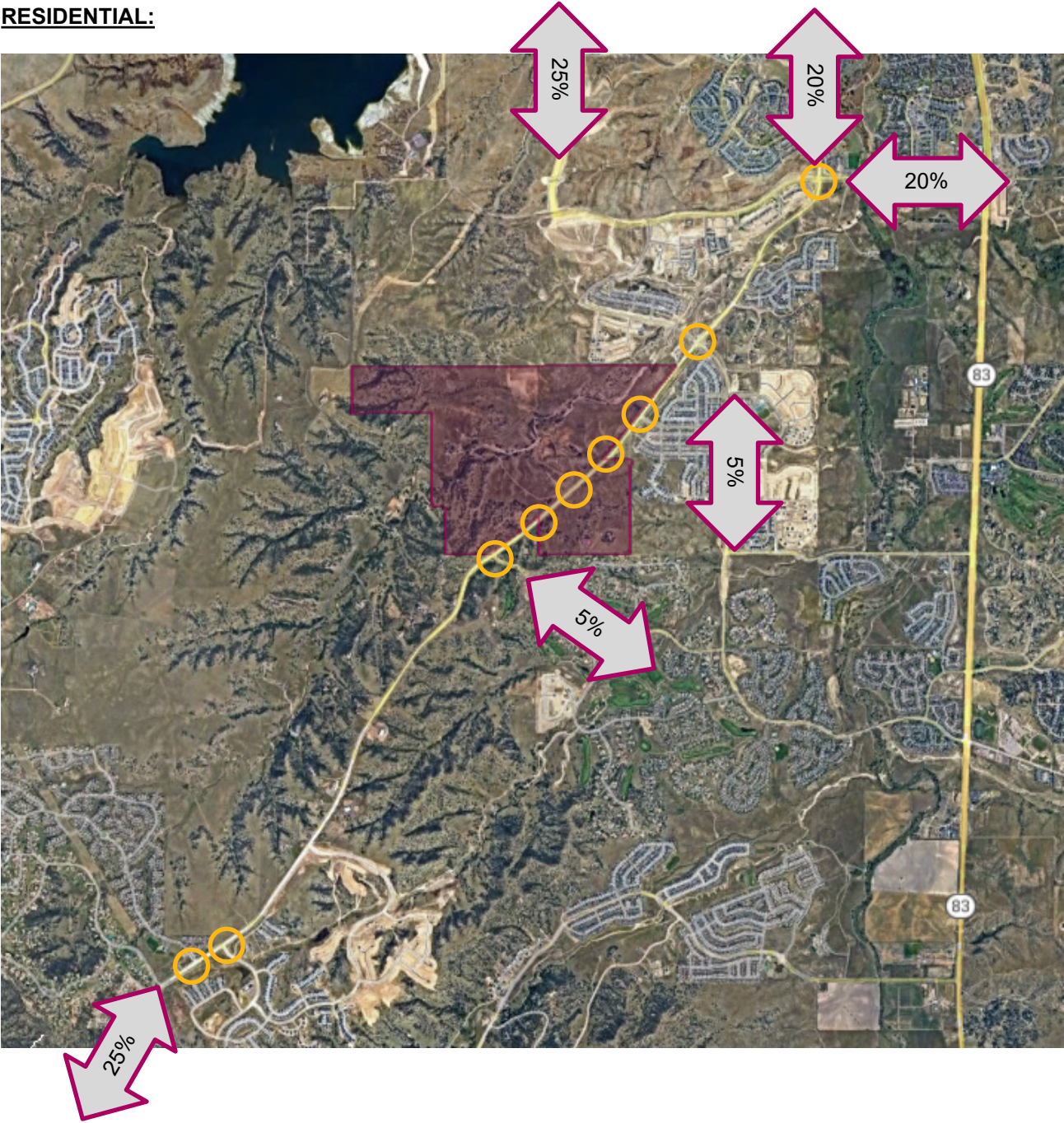
APPENDIX B – Base Assumptions Form

TRAFFIC IMPACT STUDY BASE ASSUMPTIONS WORKSHEET

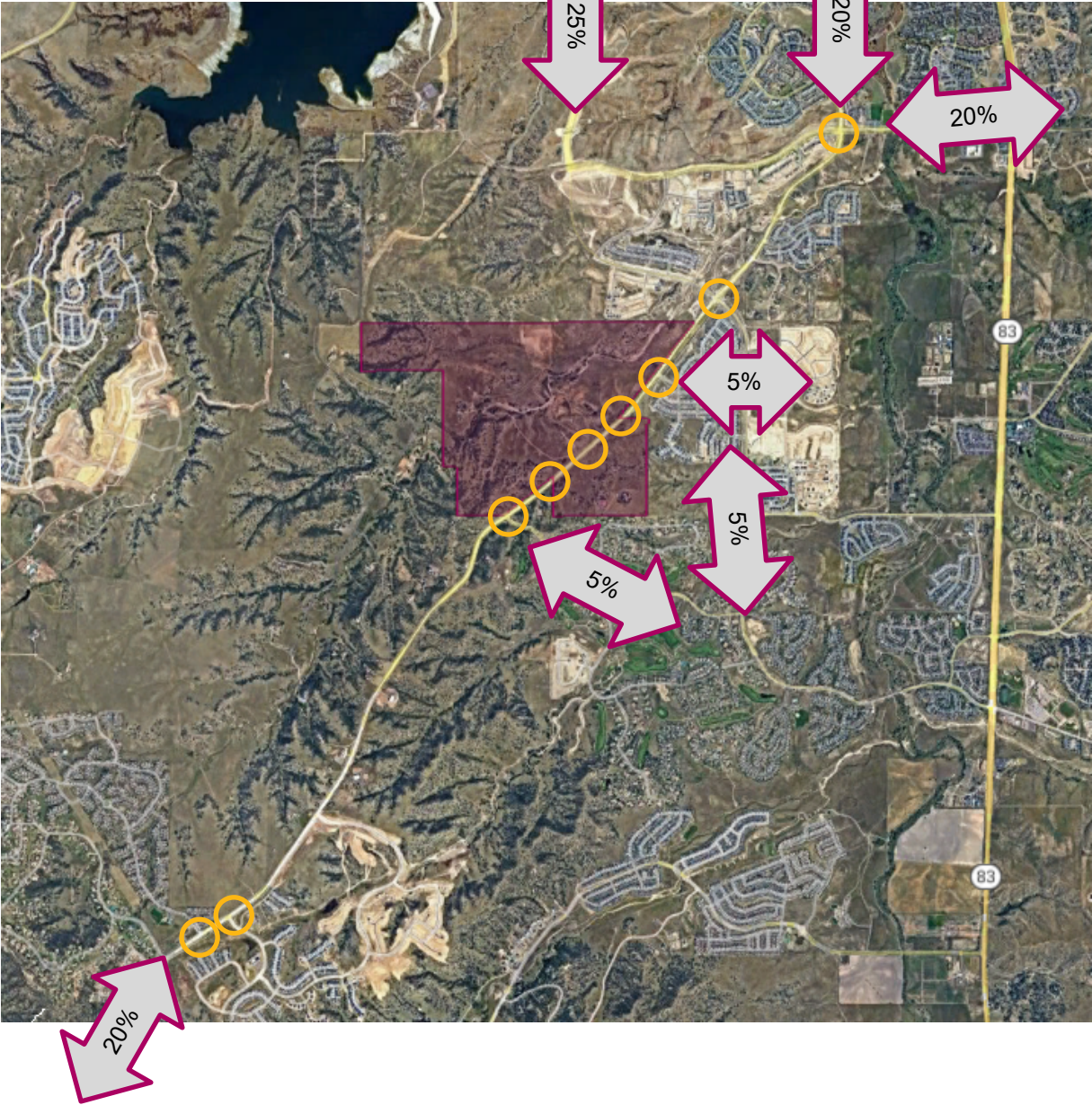
Project Name	Crowsnest			
Project Location	Castle Pines, CO			
Project Size	665 Acres			
Study Area Boundaries	North: Property Lines	South: Property Lines		
	East: Property Lines	West: Property Lines		
Study Years	Phase 1: 2028, Phase 2: 2030, Phase 3: 2045			
Future Traffic Growth Rate	Assumed 2.0%			
Study Intersections (see attached)	1. Crowfoot Valley Rd/Chambers Rd	2. Crowfoot Valley Rd/Pinery Pkwy		
	3. Crowfoot Valley Rd/Pradera Pkwy	4. Crowfoot Valley Rd/Stroh Rd		
	5. Crowfoot Valley Rd/Macanta Blvd	6. Crowfoot Valley Rd/Sapphire Pointe		
	7. Site Accesses	8.		
Time Period for Study	AM: ☒	PM: ☒	Sat. Noon: ☐	
Trip Generation Rates (Latest ITE <i>Trip Generation Manual</i> rates/equations will be utilized unless otherwise recommended or approved.) (see attached)				
Trip Adjustment Factors (Subject to approval.)	Pass by: AM 0%/PM 19% for commercial		Captive Market: 10%	
Overall Trip Distribution (see attached)	North: Res: 40% Comm: 40%	South: Res: 25% Comm: 20%	East: Res: 10% Comm: 15%	West: Res: 25% Comm: 25%
Mode Split Assumptions	N/A			
Committed Roadway Improvements	N/A			
Other Traffic Studies	The Canyons			
Areas Requiring Special Study (i.e. Signal progression, passenger car equivalents, accident analyses, etc.)	N/A			
DATE: 11/15/2025				
TRANSPORTATION ENGINEER: Brian Horan (Galloway)				



RESIDENTIAL:



COMMERCIAL:



APPENDIX C – LOS Descriptions

Level of Service for Signalized Intersections

Level of service for signalized intersections is defined in terms of delay, which is a measure of driver discomfort and frustration, fuel consumption, and lost travel time. Specifically, level-of-service (LOS) criteria are stated in terms of the average stopped delay per vehicle for a 15-min analysis period. The criteria are given in Exhibit 16-2. Delay may be measured in the field or estimated using procedures presented later in this chapter. Delay is a complex measure and is dependent on a number of variables, including the quality of progression, the cycle length, the green ratio, and the v/c ratio for the lane group in question.

LOS A describes operations with very low delay, up to 10 sec per vehicle. This level of service occurs when progression is extremely favorable and most vehicles arrive during the green phase. Most vehicles do not stop at all. Short cycle lengths may also contribute to low delay.

LOS B describes operations with delay greater than 10 and up to 20 sec per vehicle. This level generally occurs with good progression, short cycle lengths, or both. More vehicles stop than with LOS A, causing higher levels of average delay.

Exhibit 16-2. Level-of-Service Criteria for Signalized Intersections

LEVEL OF SERVICE	STOPPED DELAY PER VEHICLE (SEC)
A	≤ 10.0
B	> 10.0 and ≤ 20.0
C	> 20.0 and ≤ 35.0
D	> 35.0 and ≤ 55.0
E	> 55.0 and ≤ 80.0
F	> 80.0

LOS C describes operations with delay greater than 20 and up to 35 sec per vehicle. These higher delays may result from fair progression, longer cycle lengths, or both. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is significant at this level, though many still pass through the intersection without stopping.

LOS D describes operations with delay greater than 35 and up to 55 sec per vehicle. At level D, the influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high v/c ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.

LOS E describes operations with delay greater than 55 and up to 80 sec per vehicle. This level is considered by many agencies to be the limit of acceptable delay. These high delay values generally indicate poor progression, long cycle lengths, and high v/c ratios. Individual cycle failures are frequent occurrences.

LOS F describes operations with delay in excess of 80 sec per vehicle. This level, considered to be unacceptable to most drivers, often occurs with oversaturation, that is, when arrival flow rates exceed the capacity of the intersection. It may also occur at high v/c ratios below 1.0 with many individual cycle failures. Poor progression and long cycle lengths may also be major contributing causes to such delay levels.

Source: Highway Capacity Manual, 2000. Transportation Research Board, National Research Council

Level of Service Criteria for Stop Sign Controlled Intersections

The level of service criteria are given in Table 17-2. As used here, control delay is defined as the total elapsed time from the time a vehicle stops at the end of the queue until the vehicle departs from the stop line; this time includes the time required for the vehicle to travel from the last-in-queue position to the first-in-queue position, including deceleration of vehicles from free-flow speed to the speed of vehicles in queue.

The average total delay for any particular minor movement is a function of the service rate or capacity of the approach and the degree of saturation. . . .

Table 17-2. Level of Service Criteria for TWSC Intersections

LEVEL OF SERVICE	AVERAGE CONTROL DELAY (sec/veh)
A	≤ 10
B	> 10 and ≤ 15
C	> 15 and ≤ 25
D	> 25 and ≤ 35
E	> 35 and ≤ 50
F	> 50

Average total delay less than 10 sec/veh is defined as Level of Service (LOS) A. Follow-up times of less than 5 sec have been measured when there is no conflicting traffic for a minor street movement, so control delays of less than 10 sec/veh are appropriate for low flow conditions. To remain consistent with the AWSC intersection analysis procedure described later in this chapter, a total delay of 50 sec/veh is assumed as the break point between LOS E and F.

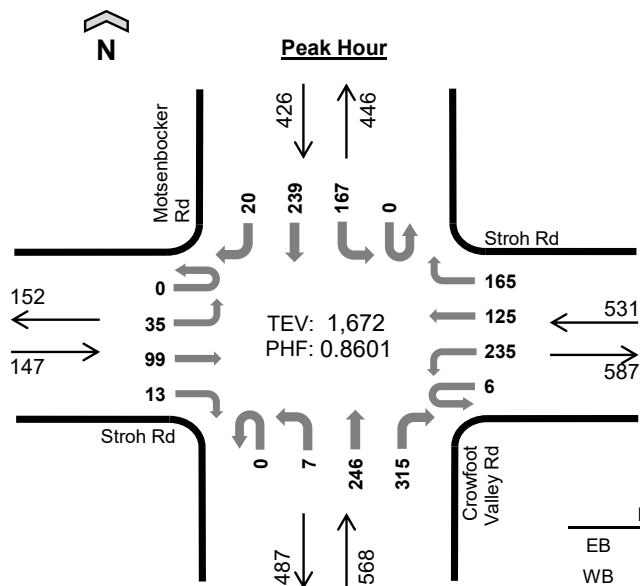
The proposed level of service criteria for TWSC intersections are somewhat different from the criteria used in Chapter 16 for signalized intersections. The primary reason for this difference is that drivers expect different levels of performance from different kinds of transportation facilities. The expectation is that a signalized intersection is designed to carry higher traffic volumes than an unsignalized intersection. Additionally, several driver behavior considerations combine to make delays at signalized intersections less onerous than at unsignalized intersections. For example, drivers at signalized intersections are able to relax during the red interval, where drivers on the minor approaches to unsignalized intersections must remain attentive to the task of identifying acceptable gaps and vehicle conflicts. Also, there is often much more variability in the amount of delay experienced by individual drivers at unsignalized than signalized intersections. For these reasons, it is considered that the total delay threshold for any given level of service is less for an unsignalized intersection than for a signalized intersection. . . .

LOS F exists when there are insufficient gaps of suitable size to allow a side street demand to cross safely through a major street traffic stream. This level of service is generally evident from extremely long total delays experienced by side street traffic and by queueing on the minor approaches. The method, however, is based on a constant critical gap size - that is, the critical gap remains constant, no matter how long the side street motorist waits. LOS F may also appear in the form of side street vehicles' selecting smaller-than-usual gaps. In such cases, safety may be a problem and some disruption to the major traffic stream may result. It is important to note that LOS F may not always result in long queues but may result in adjustments to normal gap acceptance behavior. The latter is more difficult to observe on the field than queueing, which is more obvious.

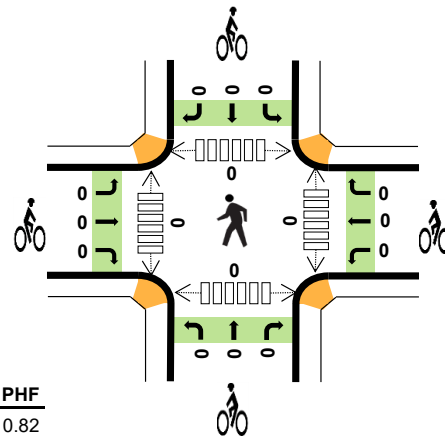
Source: Highway Capacity Manual, 2000. Transportation Research Board, National Research Council

APPENDIX D – Traffic Counts

Motsenbocker Rd Stroh Rd



Date: 11/18/2025
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:15 AM to 8:15 AM



	HV%	PHF
EB	3%	0.82
WB	1%	0.74
NB	1%	0.76
SB	2%	0.89
TOTAL	1%	0.86

Peak Hour Count Summaries

Peak Hour Interval Start		Stroh Rd				Stroh Rd				Crowfoot Valley Rd				Motsenbocker Rd				15-min Total	Rolling Hour Total
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:15 AM		0	9	24	4	0	39	26	31	0	0	67	80	0	44	52	3	379	0
7:30 AM		0	13	26	1	0	74	42	50	0	3	84	101	0	48	43	1	486	0
7:45 AM		0	5	34	6	2	73	37	67	0	3	50	74	0	46	66	8	471	0
8:00 AM		0	8	15	2	4	49	20	17	0	1	45	60	0	29	78	8	336	1,672
Pk Hr	All	0	35	99	13	6	235	125	165	0	7	246	315	0	167	239	20	1,672	
	HV	0	2	2	0	0	2	4	0	0	0	1	5	0	3	6	0	25	
	HV%	-	6%	2%	0%	0%	1%	3%	0%	-	0%	0%	2%	-	2%	3%	0%	1%	

Note: For complete count summary (all intervals), see following pages.

** Heavy Vehicle Classifications include FHWA Classes 4-13.

** Count Summaries include heavy vehicles, but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
7:15 AM	0	2	0	6	8	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0
7:45 AM	1	2	2	1	6	0	0	0	0	0	0	0	0	0	0
8:00 AM	3	2	3	2	10	0	0	0	0	0	0	0	0	0	0
Peak Hour	4	6	6	9	25	0	0	0	0	0	0	0	0	0	0

Count Summaries - All Vehicles

Interval Start		Stroh Rd				Stroh Rd				Crowfoot Valley Rd				Motsenbocker Rd				15-min Total	Rolling Hour Total
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM		0	6	12	1	0	39	17	16	0	3	39	80	1	43	41	0	298	0
7:15 AM		0	9	24	4	0	39	26	31	0	0	67	80	0	44	52	3	379	0
7:30 AM		0	13	26	1	0	74	42	50	0	3	84	101	0	48	43	1	486	0
7:45 AM		0	5	34	6	2	73	37	67	0	3	50	74	0	46	66	8	471	1,634
8:00 AM		0	8	15	2	4	49	20	17	0	1	45	60	0	29	78	8	336	1,672
8:15 AM		0	3	16	4	0	54	14	18	0	3	53	56	0	7	45	8	281	1,574
8:30 AM		0	11	12	3	0	55	13	24	0	3	64	83	0	25	58	3	354	1,442
8:45 AM		0	15	18	1	0	49	20	42	0	5	71	78	0	40	61	10	410	1,381
Count Total		0	70	157	22	6	432	189	265	0	21	473	612	1	282	444	41	3,015	
Pk Hr	All	0	35	99	13	6	235	125	165	0	7	246	315	0	167	239	20	1,672	
	HV	0	2	2	0	0	2	4	0	0	0	1	5	0	3	6	0	25	
	HV%	-	6%	2%	0%	0%	1%	3%	0%	-	0%	0%	2%	-	2%	3%	0%	1%	

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
7:00 AM	0	0	3	5	8	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	2	0	6	8	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0
7:45 AM	1	2	2	1	6	0	0	0	0	0	0	0	0	0	0
8:00 AM	3	2	3	2	10	0	0	0	0	0	0	0	0	0	0
8:15 AM	1	5	3	1	10	0	0	0	0	0	0	0	0	0	0
8:30 AM	1	3	3	2	9	0	0	0	0	0	0	0	0	0	0
8:45 AM	2	6	7	0	15	0	0	0	0	0	0	1	0	0	1
Count Total	8	20	22	17	67	0	0	0	0	0	0	1	0	0	1
Peak Hour	4	6	6	9	25	0	0	0	0	0	0	0	0	0	0

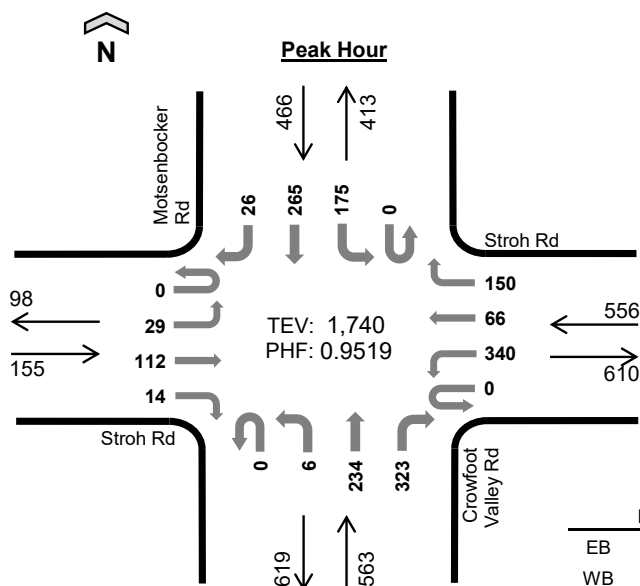
Count Summaries - Heavy Vehicles

Interval Start	Stroh Rd				Stroh Rd				Crowfoot Valley Rd				Motsenbocker Rd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	1	2	0	3	2	0	8	0
7:15 AM	0	0	0	0	0	1	1	0	0	0	0	0	0	2	4	0	8	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0
7:45 AM	0	0	1	0	0	1	1	0	0	0	1	1	0	0	1	0	6	23
8:00 AM	0	2	1	0	0	0	2	0	0	0	0	3	0	1	1	0	10	25
8:15 AM	0	0	1	0	0	5	0	0	0	0	0	3	0	0	1	0	10	27
8:30 AM	0	0	1	0	0	3	0	0	0	0	0	3	0	1	1	0	9	35
8:45 AM	0	0	2	0	0	5	0	1	0	0	2	5	0	0	0	0	15	44
Count Total	0	2	6	0	0	15	4	1	0	0	4	18	0	7	10	0	67	
Pk Hr Heavy	0	2	2	0	0	2	4	0	0	0	1	5	0	3	6	0	25	

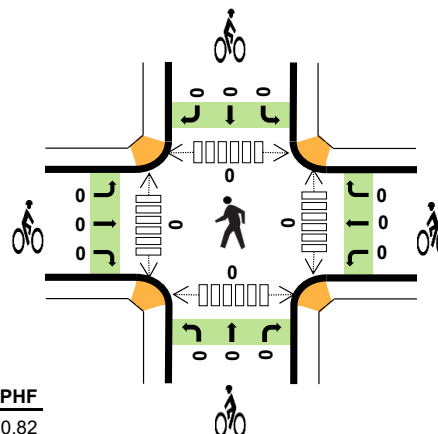
Count Summaries - Bikes

Interval Start	Stroh Rd				Stroh Rd				Crowfoot Valley Rd				Motsenbocker Rd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Pk Hr Bike	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		

Motsenbocker Rd Stroh Rd



Date: 11/18/2025
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:30 PM to 5:30 PM



	HV%	PHF
EB	3%	0.82
WB	1%	0.97
NB	1%	0.86
SB	0%	0.95
TOTAL	1%	0.95

Peak Hour Count Summaries

Peak Hour Interval Start		Stroh Rd				Stroh Rd				Crowfoot Valley Rd				Motsenbocker Rd				15-min Total	Rolling Hour Total
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:30 PM		0	7	35	3	0	83	24	36	0	0	55	68	0	56	54	6	427	0
4:45 PM		0	9	32	6	0	85	13	38	0	2	52	75	0	34	69	7	422	0
5:00 PM		0	9	25	1	0	80	12	41	0	1	60	87	0	43	71	4	434	0
5:15 PM		0	4	20	4	0	92	17	35	0	3	67	93	0	42	71	9	457	1,740
Pk Hr	All	0	29	112	14	0	340	66	150	0	6	234	323	0	175	265	26	1,740	
	HV	0	1	2	1	0	5	2	0	0	0	4	0	0	2	0	0	17	
	HV%	-	3%	2%	7%	-	1%	3%	0%	-	0%	2%	0%	-	1%	0%	0%	1%	

Note: For complete count summary (all intervals), see following pages.

** Heavy Vehicle Classifications include FHWA Classes 4-13.

** Count Summaries include heavy vehicles, but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
4:30 PM	2	1	3	1	7	0	0	0	0	0	0	0	0	0	0
4:45 PM	2	4	1	1	8	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	4	7	4	2	17	0	0	0	0	0	0	0	0	0	0

Count Summaries - All Vehicles

Interval Start		Stroh Rd				Stroh Rd				Crowfoot Valley Rd				Motsenbocker Rd				15-min Total	Rolling Hour Total
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		0	4	22	1	0	66	7	39	0	4	59	67	0	43	86	16	414	0
4:15 PM		0	4	31	2	0	58	16	33	0	1	48	92	0	47	73	8	413	0
4:30 PM		0	7	35	3	0	83	24	36	0	0	55	68	0	56	54	6	427	0
4:45 PM		0	9	32	6	0	85	13	38	0	2	52	75	0	34	69	7	422	1,676
5:00 PM		0	9	25	1	0	80	12	41	0	1	60	87	0	43	71	4	434	1,696
5:15 PM		0	4	20	4	0	92	17	35	0	3	67	93	0	42	71	9	457	1,740
5:30 PM		0	3	24	1	0	68	17	26	0	3	58	76	0	26	98	3	403	1,716
5:45 PM		0	4	27	3	0	76	13	31	0	2	70	60	0	19	71	10	386	1,680
Count Total		0	44	216	21	0	608	119	279	0	16	469	618	0	310	593	63	3,356	
Pk Hr	All	0	29	112	14	0	340	66	150	0	6	234	323	0	175	265	26	1,740	
	HV	0	1	2	1	0	5	2	0	0	0	4	0	0	2	0	0	17	
	HV%	-	3%	2%	7%	-	1%	3%	0%	-	0%	2%	0%	-	1%	0%	0%	1%	

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
4:00 PM	0	2	2	2	6	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	1	3	1	5	0	0	0	0	0	0	0	0	0	0
4:30 PM	2	1	3	1	7	0	0	0	0	0	0	0	0	0	0
4:45 PM	2	4	1	1	8	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
5:45 PM	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0
Count Total	5	11	9	6	31	0	0	0	0	0	0	0	0	0	0
Peak Hour	4	7	4	2	17	0	0	0	0	0	0	0	0	0	0

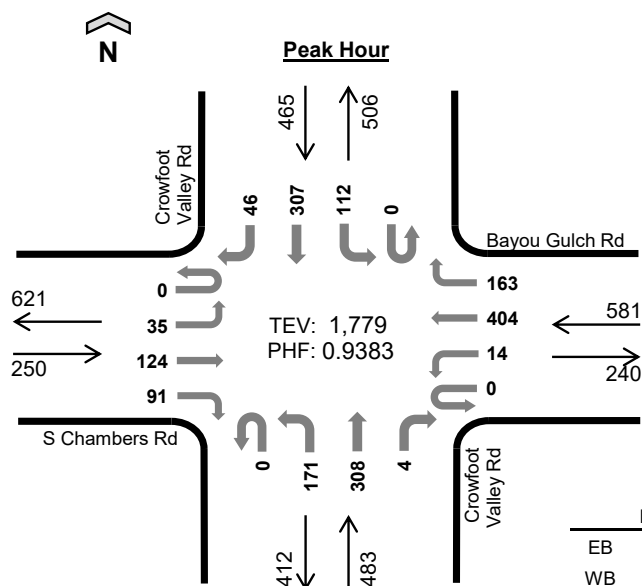
Count Summaries - Heavy Vehicles

Interval Start	Stroh Rd				Stroh Rd				Crowfoot Valley Rd				Motsenbocker Rd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	2	0	0	2	0	0	2	0	0	6	0
4:15 PM	0	0	0	0	0	1	0	0	0	0	1	2	0	0	1	0	5	0
4:30 PM	0	1	0	1	0	0	1	0	0	0	3	0	0	1	0	0	7	0
4:45 PM	0	0	2	0	0	3	1	0	0	0	1	0	0	1	0	0	8	26
5:00 PM	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2	22
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	11
5:45 PM	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	2	5
Count Total	0	1	3	1	0	6	2	3	0	0	7	2	0	4	2	0	31	
Pk Hr Heavy	0	1	2	1	0	5	2	0	0	0	4	0	0	2	0	0	17	

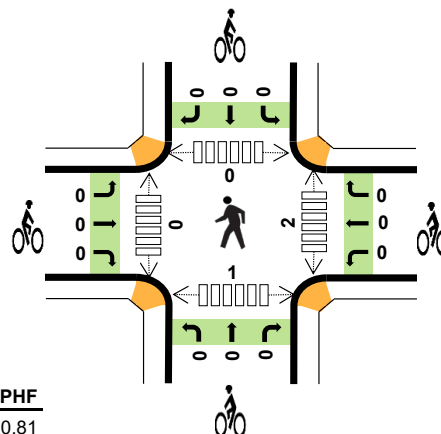
Count Summaries - Bikes

Interval Start	Stroh Rd				Stroh Rd				Crowfoot Valley Rd				Motsenbocker Rd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Pk Hr Bike	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		

Crowfoot Valley Rd Bayou Gulch Rd



Date: 10/8/2025
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:15 AM to 8:15 AM



	HV%	PHF
EB	6%	0.81
WB	2%	0.76
NB	3%	0.83
SB	3%	0.83
TOTAL	3%	0.94

Peak Hour Count Summaries

Peak Hour Interval Start		S Chambers Rd				Bayou Gulch Rd				Crowfoot Valley Rd				Crowfoot Valley Rd				15-min Total	Rolling Hour Total
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:15 AM		0	6	30	20	0	4	104	39	0	51	93	2	0	19	70	12	450	0
7:30 AM		0	13	26	14	0	4	130	57	0	53	75	1	0	26	66	9	474	0
7:45 AM		0	8	36	20	0	5	81	37	0	37	73	1	0	43	81	16	438	0
8:00 AM		0	8	32	37	0	1	89	30	0	30	67	0	0	24	90	9	417	1,779
Pk Hr	All	0	35	124	91	0	14	404	163	0	171	308	4	0	112	307	46	1,779	
	HV	0	3	3	9	0	1	9	2	0	8	6	0	0	4	9	2	56	
	HV%	-	9%	2%	10%	-	7%	2%	1%	-	5%	2%	0%	-	4%	3%	4%	3%	

Note: For complete count summary (all intervals), see following pages.

** Heavy Vehicle Classifications include FHWA Classes 4-13.

** Count Summaries include heavy vehicles, but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
7:15 AM	3	4	1	2	10	0	0	0	0	0	0	0	0	0	0
7:30 AM	2	1	1	4	8	0	0	0	0	0	0	0	0	0	0
7:45 AM	2	6	8	3	19	0	0	0	0	0	1	0	0	0	1
8:00 AM	8	1	4	6	19	0	0	0	0	0	1	0	0	1	2
Peak Hour	15	12	14	15	56	0	0	0	0	0	2	0	0	1	3

Count Summaries - All Vehicles

Interval Start		S Chambers Rd				Bayou Gulch Rd				Crowfoot Valley Rd				Crowfoot Valley Rd				15-min Total	Rolling Hour Total
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM		0	5	22	11	0	2	106	22	0	37	69	2	0	11	54	3	344	0
7:15 AM		0	6	30	20	0	4	104	39	0	51	93	2	0	19	70	12	450	0
7:30 AM		0	13	26	14	0	4	130	57	0	53	75	1	0	26	66	9	474	0
7:45 AM		0	8	36	20	0	5	81	37	0	37	73	1	0	43	81	16	438	1,706
8:00 AM		0	8	32	37	0	1	89	30	0	30	67	0	0	24	90	9	417	1,779
8:15 AM		0	6	35	23	0	1	50	43	0	39	88	2	0	11	76	13	387	1,716
8:30 AM		0	8	29	39	0	2	51	33	0	20	99	0	0	16	85	9	391	1,633
8:45 AM		0	11	30	31	0	1	37	28	0	27	55	1	0	28	103	10	362	1,557
Count Total		0	65	240	195	0	20	648	289	0	294	619	9	0	178	625	81	3,263	
Pk Hr	All	0	35	124	91	0	14	404	163	0	171	308	4	0	112	307	46	1,779	
	HV	0	3	3	9	0	1	9	2	0	8	6	0	0	4	9	2	56	
	HV%	-	9%	2%	10%	-	7%	2%	1%	-	5%	2%	0%	-	4%	3%	4%	3%	

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
7:00 AM	1	0	2	1	4	0	0	0	0	0	0	0	0	0	0
7:15 AM	3	4	1	2	10	0	0	0	0	0	0	0	0	0	0
7:30 AM	2	1	1	4	8	0	0	0	0	0	0	0	0	0	0
7:45 AM	2	6	8	3	19	0	0	0	0	0	1	0	0	0	1
8:00 AM	8	1	4	6	19	0	0	0	0	0	1	0	0	1	2
8:15 AM	9	2	11	2	24	0	0	0	0	0	1	0	0	0	1
8:30 AM	8	0	5	1	14	0	0	0	0	0	0	0	0	1	1
8:45 AM	10	2	11	3	26	0	0	0	0	0	0	0	0	1	1
Count Total	43	16	43	22	124	0	0	0	0	0	3	0	0	3	6
Peak Hour	15	12	14	15	56	0	0	0	0	0	2	0	0	1	3

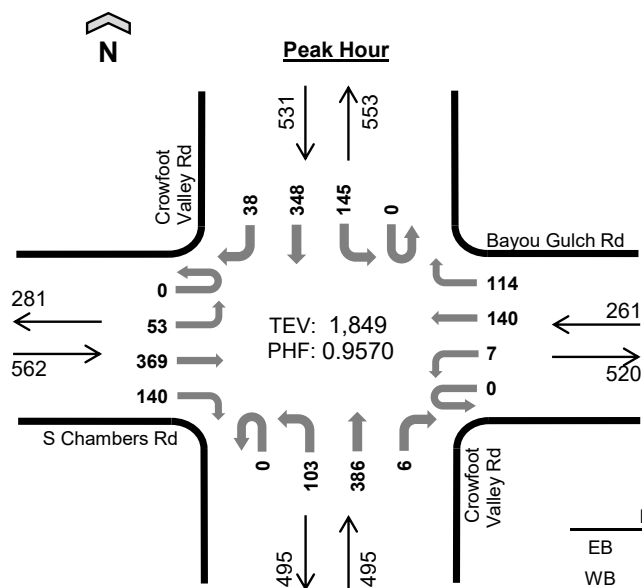
Count Summaries - Heavy Vehicles

Interval Start	S Chambers Rd				Bayou Gulch Rd				Crowfoot Valley Rd				Crowfoot Valley Rd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	1	0	0	0	0	0	1	1	0	0	0	1	0	4	0
7:15 AM	0	0	1	2	0	1	1	2	0	1	0	0	0	0	2	0	10	0
7:30 AM	0	1	0	1	0	0	1	0	0	0	1	0	0	1	3	0	8	0
7:45 AM	0	0	1	1	0	0	6	0	0	4	4	0	0	1	1	1	19	41
8:00 AM	0	2	1	5	0	0	1	0	0	3	1	0	0	2	3	1	19	56
8:15 AM	0	0	3	6	0	0	1	1	0	8	2	1	0	1	1	0	24	70
8:30 AM	0	0	2	6	0	0	0	0	0	0	5	0	0	0	1	0	14	76
8:45 AM	0	0	2	8	0	0	1	1	0	8	3	0	0	1	2	0	26	83
Count Total	0	3	10	30	0	1	11	4	0	25	17	1	0	6	14	2	124	
Pk Hr Heavy	0	3	3	9	0	1	9	2	0	8	6	0	0	4	9	2	56	

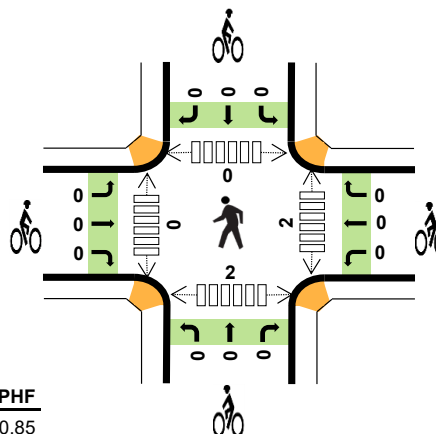
Count Summaries - Bikes

Interval Start	S Chambers Rd				Bayou Gulch Rd				Crowfoot Valley Rd				Crowfoot Valley Rd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pk Hr Bike	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Crowfoot Valley Rd Bayou Gulch Rd



Date: 10/8/2025
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:15 PM to 5:15 PM



	HV%	PHF
EB	2%	0.85
WB	1%	0.81
NB	2%	0.93
SB	1%	0.90
TOTAL	2%	0.96

Peak Hour Count Summaries

Peak Hour Interval Start		S Chambers Rd				Bayou Gulch Rd				Crowfoot Valley Rd				Crowfoot Valley Rd				15-min Total	Rolling Hour Total
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:15 PM		0	15	92	32	0	2	28	24	0	26	93	3	0	43	93	11	462	0
4:30 PM		0	14	92	38	0	2	49	30	0	34	88	0	0	36	88	12	483	0
4:45 PM		0	15	105	46	0	0	32	31	0	21	95	2	0	26	77	10	460	0
5:00 PM		0	9	80	24	0	3	31	29	0	22	110	1	0	40	90	5	444	1,849
Pk Hr	All	0	53	369	140	0	7	140	114	0	103	386	6	0	145	348	38	1,849	
	HV	0	3	6	2	0	1	2	0	0	2	10	0	0	1	1	1	29	
	HV%	-	6%	2%	1%	-	14%	1%	0%	-	2%	3%	0%	-	1%	0%	3%	2%	

Note: For complete count summary (all intervals), see following pages.

** Heavy Vehicle Classifications include FHWA Classes 4-13.

** Count Summaries include heavy vehicles, but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
4:15 PM	2	0	4	1	7	0	0	0	0	0	0	0	0	0	0
4:30 PM	6	0	3	0	9	0	0	0	0	0	1	0	0	0	1
4:45 PM	3	1	2	2	8	0	0	0	0	0	1	0	0	1	2
5:00 PM	0	2	3	0	5	0	0	0	0	0	0	0	0	1	1
Peak Hour	11	3	12	3	29	0	0	0	0	0	2	0	0	2	4

Count Summaries - All Vehicles

Interval Start		S Chambers Rd				Bayou Gulch Rd				Crowfoot Valley Rd				Crowfoot Valley Rd				15-min Total	Rolling Hour Total
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		0	10	74	29	0	2	35	27	0	17	83	0	0	43	81	13	414	0
4:15 PM		0	15	92	32	0	2	28	24	0	26	93	3	0	43	93	11	462	0
4:30 PM		0	14	92	38	0	2	49	30	0	34	88	0	0	36	88	12	483	0
4:45 PM		0	15	105	46	0	0	32	31	0	21	95	2	0	26	77	10	460	1,819
5:00 PM		0	9	80	24	0	3	31	29	0	22	110	1	0	40	90	5	444	1,849
5:15 PM		0	17	88	41	0	3	28	24	1	22	98	2	0	56	74	7	461	1,848
5:30 PM		0	19	80	29	0	2	37	31	0	18	93	0	0	38	65	10	422	1,787
5:45 PM		0	11	66	34	0	0	28	30	0	16	75	0	0	31	89	8	388	1,715
Count Total		0	110	677	273	0	14	268	226	1	176	735	8	0	313	657	76	3,534	
Pk Hr	All	0	53	369	140	0	7	140	114	0	103	386	6	0	145	348	38	1,849	
	HV	0	3	6	2	0	1	2	0	0	2	10	0	0	1	1	1	29	
	HV%	-	6%	2%	1%	-	14%	1%	0%	-	2%	3%	0%	-	1%	0%	3%	2%	

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
4:00 PM	3	5	0	1	9	0	0	0	0	0	1	0	0	0	1
4:15 PM	2	0	4	1	7	0	0	0	0	0	0	0	0	0	0
4:30 PM	6	0	3	0	9	0	0	0	0	0	1	0	0	0	1
4:45 PM	3	1	2	2	8	0	0	0	0	0	1	0	0	1	2
5:00 PM	0	2	3	0	5	0	0	0	0	0	0	0	0	1	1
5:15 PM	0	0	2	0	2	0	0	0	0	0	1	0	0	0	1
5:30 PM	2	0	1	0	3	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	1	2	2	5	0	0	0	0	0	2	0	0	3	5
Count Total	16	9	17	6	48	0	0	0	0	0	6	0	0	5	11
Peak Hour	11	3	12	3	29	0	0	0	0	0	2	0	0	2	4

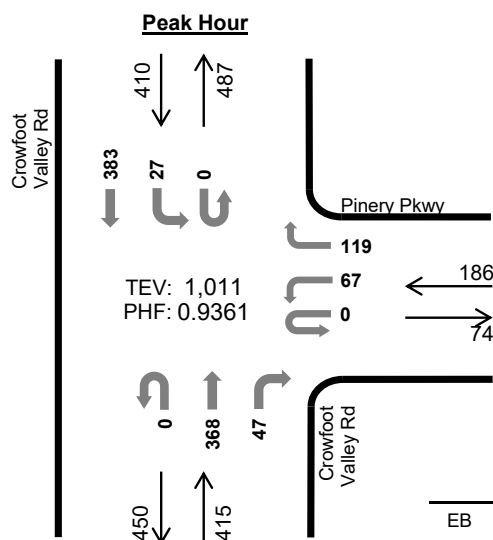
Count Summaries - Heavy Vehicles

Interval Start	S Chambers Rd				Bayou Gulch Rd				Crowfoot Valley Rd				Crowfoot Valley Rd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	2	1	0	0	3	2	0	0	0	0	0	1	0	0	9	0
4:15 PM	0	1	0	1	0	0	0	0	0	1	3	0	0	0	0	1	7	0
4:30 PM	0	2	3	1	0	0	0	0	0	1	2	0	0	0	0	0	9	0
4:45 PM	0	0	3	0	0	0	1	0	0	0	2	0	0	1	1	0	8	33
5:00 PM	0	0	0	0	0	1	1	0	0	0	3	0	0	0	0	0	5	29
5:15 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	24
5:30 PM	0	1	1	0	0	0	0	0	0	0	1	0	0	0	0	0	3	18
5:45 PM	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1	1	5	15
Count Total	0	4	9	3	0	1	6	2	0	3	14	0	0	2	2	2	48	
Pk Hr Heavy	0	3	6	2	0	1	2	0	0	2	10	0	0	1	1	1	29	

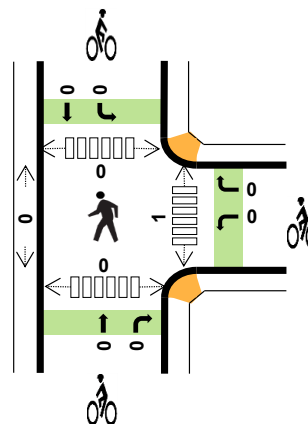
Count Summaries - Bikes

Interval Start	S Chambers Rd				Bayou Gulch Rd				Crowfoot Valley Rd				Crowfoot Valley Rd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Pk Hr Bike	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		

Crowfoot Valley Rd Pinery Pkwy



Date: 10/8/2025
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:15 AM to 8:15 AM



	HV%	PHF
EB	--	--
WB	0%	0.78
NB	5%	0.80
SB	4%	0.84
TOTAL	4%	0.94

Peak Hour Count Summaries

Peak Hour Interval Start		n/a				Pinery Pkwy				Crowfoot Valley Rd				Crowfoot Valley Rd				15-min Total	Rolling Hour Total
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:15 AM		0	0	0	0	0	11	0	29	0	0	119	11	0	4	96	0	270	0
7:30 AM		0	0	0	0	0	24	0	36	0	0	90	16	0	2	79	0	247	0
7:45 AM		0	0	0	0	0	16	0	27	0	0	87	10	0	7	100	0	247	0
8:00 AM		0	0	0	0	0	16	0	27	0	0	72	10	0	14	108	0	247	1,011
Pk Hr	All	0	0	0	0	0	67	0	119	0	0	368	47	0	27	383	0	1,011	
	HV	0	0	0	0	0	0	0	0	0	0	16	3	0	1	17	0	37	
	HV%	-	-	-	-	-	0%	-	0%	-	-	4%	6%	-	4%	4%	-	4%	

Note: For complete count summary (all intervals), see following pages.

** Heavy Vehicle Classifications include FHWA Classes 4-13.

** Count Summaries include heavy vehicles, but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
7:15 AM	0	0	2	5	7	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	1	5	6	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	9	2	11	0	0	0	0	0	1	0	0	0	1
8:00 AM	0	0	7	6	13	0	0	0	0	0	0	0	0	0	0
Peak Hour	0	0	19	18	37	0	0	0	0	0	1	0	0	0	1

Count Summaries - All Vehicles

Interval Start		n/a				Pinery Pkwy				Crowfoot Valley Rd				Crowfoot Valley Rd				15-min Total	Rolling Hour Total
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM		0	0	0	0	0	6	0	19	0	0	96	6	0	3	61	0	191	0
7:15 AM		0	0	0	0	0	11	0	29	0	0	119	11	0	4	96	0	270	0
7:30 AM		0	0	0	0	0	24	0	36	0	0	90	16	0	2	79	0	247	0
7:45 AM		0	0	0	0	0	16	0	27	0	0	87	10	0	7	100	0	247	955
8:00 AM		0	0	0	0	0	16	0	27	0	0	72	10	0	14	108	0	247	1,011
8:15 AM		0	0	0	0	0	7	0	20	0	0	104	6	0	11	97	0	245	986
8:30 AM		0	0	0	0	0	10	0	20	0	0	91	6	0	13	115	0	255	994
8:45 AM		0	0	0	0	0	8	0	11	0	0	75	5	0	12	122	0	233	980
Count Total		0	0	0	0	0	98	0	189	0	0	734	70	0	66	778	0	1,935	
Pk Hr	All	0	0	0	0	0	67	0	119	0	0	368	47	0	27	383	0	1,011	
	HV	0	0	0	0	0	0	0	0	0	0	16	3	0	1	17	0	37	
	HV%	-	-	-	-	-	0%	-	0%	-	-	4%	6%	-	4%	4%	-	4%	

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
7:00 AM	0	0	2	2	4	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	2	5	7	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	1	5	6	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	9	2	11	0	0	0	0	0	1	0	0	0	1
8:00 AM	0	0	7	6	13	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	1	8	6	15	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	2	4	9	15	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	1	11	10	22	0	0	0	0	0	0	0	0	0	0
Count Total	0	4	44	45	93	0	0	0	0	0	1	0	0	0	1
Peak Hour	0	0	19	18	37	0	0	0	0	0	1	0	0	0	1

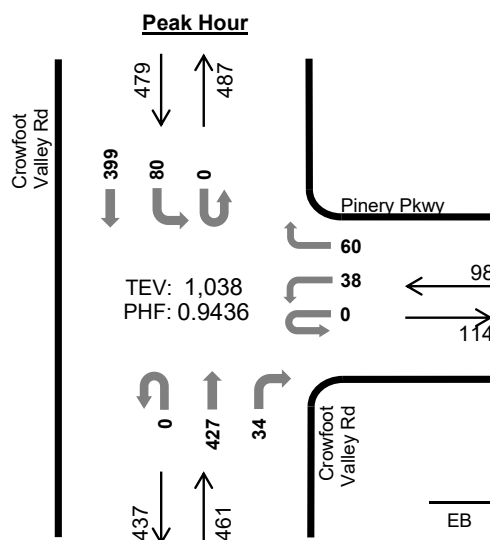
Count Summaries - Heavy Vehicles

Interval Start	n/a				Pinery Pkwy				Crowfoot Valley Rd				Crowfoot Valley Rd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	4	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	1	4	0	7	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	5	0	6	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	9	0	0	0	2	0	11	28
8:00 AM	0	0	0	0	0	0	0	0	0	0	6	1	0	0	6	0	13	37
8:15 AM	0	0	0	0	0	0	0	1	0	0	8	0	0	0	6	0	15	45
8:30 AM	0	0	0	0	0	1	0	1	0	0	4	0	0	0	9	0	15	54
8:45 AM	0	0	0	0	0	1	0	0	0	0	11	0	0	0	10	0	22	65
Count Total	0	0	0	0	0	2	0	2	0	0	41	3	0	1	44	0	93	
Pk Hr Heavy	0	0	0	0	0	0	0	0	0	0	16	3	0	1	17	0	37	

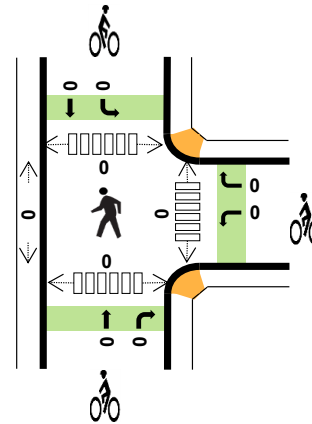
Count Summaries - Bikes

Interval Start	n/a				Pinery Pkwy				Crowfoot Valley Rd				Crowfoot Valley Rd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pk Hr Bike	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Crowfoot Valley Rd Pinery Pkwy



Date: 10/8/2025
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:15 PM to 5:15 PM



	HV%	PHF
EB	--	--
WB	2%	0.94
NB	3%	0.96
SB	1%	0.93
TOTAL	2%	0.94

Peak Hour Count Summaries

Peak Hour Interval Start		n/a				Pinery Pkwy				Crowfoot Valley Rd				Crowfoot Valley Rd				15-min Total	Rolling Hour Total
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:15 PM		0	0	0	0	0	16	0	9	0	0	113	3	0	14	110	0	265	0
4:30 PM		0	0	0	0	0	7	0	19	0	0	107	13	0	16	113	0	275	0
4:45 PM		0	0	0	0	0	7	0	15	0	0	99	7	0	33	89	0	250	0
5:00 PM		0	0	0	0	0	8	0	17	0	0	108	11	0	17	87	0	248	1,038
Pk Hr	All	0	0	0	0	0	38	0	60	0	0	427	34	0	80	399	0	1,038	
	HV	0	0	0	0	0	1	0	1	0	0	11	1	0	1	4	0	19	
	HV%	-	-	-	-	-	3%	-	2%	-	-	3%	3%	-	1%	1%	-	2%	

Note: For complete count summary (all intervals), see following pages.

** Heavy Vehicle Classifications include FHWA Classes 4-13.

** Count Summaries include heavy vehicles, but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
4:15 PM	0	1	3	2	6	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	4	1	5	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	1	2	1	4	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	3	1	4	0	0	0	0	0	0	0	0	0	0
Peak Hour	0	2	12	5	19	0	0	0	0	0	0	0	0	0	0

Count Summaries - All Vehicles

Interval Start		n/a				Pinery Pkwy				Crowfoot Valley Rd				Crowfoot Valley Rd				15-min Total	Rolling Hour Total
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		0	0	0	0	0	8	0	17	0	0	90	9	0	18	103	0	245	0
4:15 PM		0	0	0	0	0	16	0	9	0	0	113	3	0	14	110	0	265	0
4:30 PM		0	0	0	0	0	7	0	19	0	0	107	13	0	16	113	0	275	0
4:45 PM		0	0	0	0	0	7	0	15	0	0	99	7	0	33	89	0	250	1,035
5:00 PM		0	0	0	0	0	8	0	17	0	0	108	11	0	17	87	0	248	1,038
5:15 PM		0	0	0	0	0	7	0	17	0	0	108	14	0	24	94	0	264	1,037
5:30 PM		0	0	0	0	0	6	0	12	0	0	102	15	0	16	81	0	232	994
5:45 PM		0	0	0	0	0	9	0	12	0	0	79	11	0	19	111	0	241	985
Count Total		0	0	0	0	0	68	0	118	0	0	806	83	0	157	788	0	2,020	
Pk Hr	All	0	0	0	0	0	38	0	60	0	0	427	34	0	80	399	0	1,038	
	HV	0	0	0	0	0	1	0	1	0	0	11	1	0	1	4	0	19	
	HV%	-	-	-	-	-	3%	-	2%	-	-	3%	3%	-	1%	1%	-	2%	

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
4:00 PM	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0
4:15 PM	0	1	3	2	6	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	4	1	5	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	1	2	1	4	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	3	1	4	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	1	1	0	2	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	1	1	2	0	0	0	0	0	0	0	0	0	0
Count Total	0	5	14	6	25	0	0	1	1	2	0	0	0	0	0
Peak Hour	0	2	12	5	19	0	0	0	0	0	0	0	0	0	0

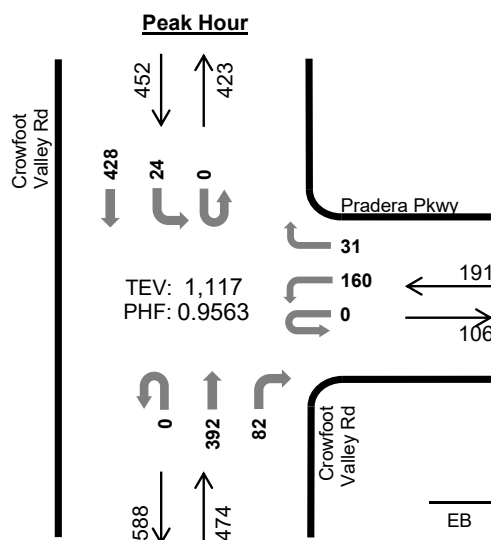
Count Summaries - Heavy Vehicles

Interval Start	n/a				Pinery Pkwy				Crowfoot Valley Rd				Crowfoot Valley Rd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	1	0	0	3	0	0	1	1	0	6	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	3	1	0	0	1	0	5	0
4:45 PM	0	0	0	0	0	1	0	0	0	0	2	0	0	0	1	0	4	15
5:00 PM	0	0	0	0	0	0	0	0	0	0	3	0	0	0	1	0	4	19
5:15 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2	15
5:30 PM	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2	12
5:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2	10
Count Total	0	0	0	0	0	1	0	4	0	0	13	1	0	1	5	0	25	
Pk Hr Heavy	0	0	0	0	0	1	0	1	0	0	11	1	0	1	4	0	19	

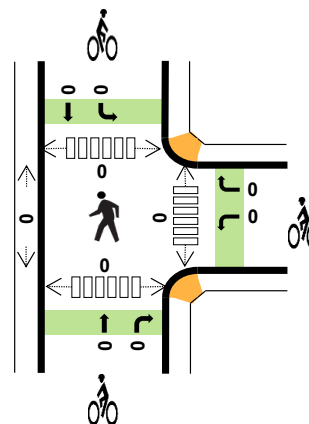
Count Summaries - Bikes

Interval Start	n/a				Pinery Pkwy				Crowfoot Valley Rd				Crowfoot Valley Rd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2	
Pk Hr Bike	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Crowfoot Valley Rd Pradera Pkwy



Date: 10/8/2025
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:15 AM to 8:15 AM



	HV%	PHF
EB	--	--
WB	2%	0.78
NB	4%	0.86
SB	3%	0.91
TOTAL	3%	0.96

Peak Hour Count Summaries

Peak Hour Interval Start		n/a				Pradera Pkwy				Crowfoot Valley Rd				Crowfoot Valley Rd				15-min Total	Rolling Hour Total
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:15 AM		0	0	0	0	0	44	0	8	0	0	120	17	0	5	98	0	292	0
7:30 AM		0	0	0	0	0	51	0	10	0	0	99	19	0	0	106	0	285	0
7:45 AM		0	0	0	0	0	38	0	3	0	0	95	24	0	10	109	0	279	0
8:00 AM		0	0	0	0	0	27	0	10	0	0	78	22	0	9	115	0	261	1,117
Pk Hr	All	0	0	0	0	0	160	0	31	0	0	392	82	0	24	428	0	1,117	
	HV	0	0	0	0	0	3	0	1	0	0	18	1	0	1	11	0	35	
	HV%	-	-	-	-	-	2%	-	3%	-	-	5%	1%	-	4%	3%	-	3%	

Note: For complete count summary (all intervals), see following pages.

** Heavy Vehicle Classifications include FHWA Classes 4-13.

** Count Summaries include heavy vehicles, but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
7:15 AM	0	0	2	3	5	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	3	3	4	10	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	1	7	1	9	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	7	4	11	0	0	0	0	0	0	0	0	0	0
Peak Hour	0	4	19	12	35	0	0	0	0	0	0	0	0	0	0

Count Summaries - All Vehicles

Interval Start		n/a				Pradera Pkwy				Crowfoot Valley Rd				Crowfoot Valley Rd				15-min Total	Rolling Hour Total
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM		0	0	0	0	0	35	0	8	0	0	89	12	0	4	65	0	213	0
7:15 AM		0	0	0	0	0	44	0	8	0	0	120	17	0	5	98	0	292	0
7:30 AM		0	0	0	0	0	51	0	10	0	0	99	19	0	0	106	0	285	0
7:45 AM		0	0	0	0	0	38	0	3	0	0	95	24	0	10	109	0	279	1,069
8:00 AM		0	0	0	0	0	27	0	10	0	0	78	22	0	9	115	0	261	1,117
8:15 AM		0	0	0	0	0	28	0	7	0	0	95	16	0	6	101	0	253	1,078
8:30 AM		0	0	0	0	0	29	0	13	0	0	95	21	0	11	109	0	278	1,071
8:45 AM		0	0	0	0	0	20	0	9	0	0	67	20	0	10	120	0	246	1,038
Count Total		0	0	0	0	0	272	0	68	0	0	738	151	0	55	823	0	2,107	
P k H r	All	0	0	0	0	0	160	0	31	0	0	392	82	0	24	428	0	1,117	
	HV	0	0	0	0	0	3	0	1	0	0	18	1	0	1	11	0	35	
	HV%	-	-	-	-	-	2%	-	3%	-	-	5%	1%	-	4%	3%	-	3%	

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
7:00 AM	0	0	3	2	5	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	2	3	5	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	3	3	4	10	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	1	7	1	9	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	7	4	11	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	8	8	16	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	5	9	14	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	2	10	15	27	0	0	0	0	0	0	0	0	0	0
Count Total	0	6	45	46	97	0	0	0	0	0	0	0	0	0	0
Peak Hour	0	4	19	12	35	0	0	0	0	0	0	0	0	0	0

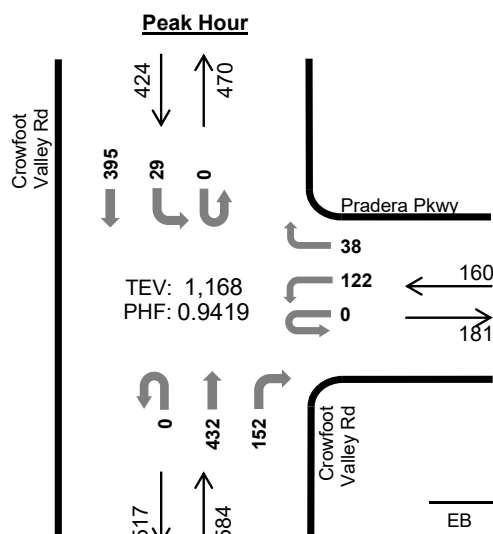
Count Summaries - Heavy Vehicles

Interval Start	n/a				Pradera Pkwy				Crowfoot Valley Rd				Crowfoot Valley Rd				15-min Total	Rolling Hour Total	
	Eastbound				Westbound				Northbound				Southbound						
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT			
7:00 AM	0	0	0	0	0	0	0	0	0	0	3	0	0	0	2	0	5	0	
7:15 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	1	2	0	5	0	
7:30 AM	0	0	0	0	0	3	0	0	0	0	0	3	0	0	0	4	0	10	0
7:45 AM	0	0	0	0	0	0	0	1	0	0	6	1	0	0	1	0	9	29	
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	4	0	11	35
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	7	1	0	1	7	0	16	46
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	4	1	0	0	9	0	14	50
8:45 AM	0	0	0	0	0	1	0	1	0	0	0	10	0	0	2	13	0	27	68
Count Total	0	0	0	0	0	4	0	2	0	0	42	3	0	4	42	0	97		
Pk Hr Heavy	0	0	0	0	0	3	0	1	0	0	18	1	0	1	11	0	35		

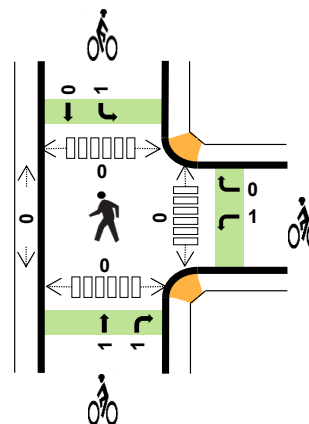
Count Summaries - Bikes

Interval Start	n/a				Pradera Pkwy				Crowfoot Valley Rd				Crowfoot Valley Rd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pk Hr Bike	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Crowfoot Valley Rd Pradera Pkwy



Date: 10/8/2025
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:30 PM to 5:30 PM



	HV%	PHF
EB	--	--
WB	0%	0.82
NB	1%	0.92
SB	1%	0.86
TOTAL	1%	0.94

Peak Hour Count Summaries

Peak Hour Interval Start		n/a				Pradera Pkwy				Crowfoot Valley Rd				Crowfoot Valley Rd				15-min Total	Rolling Hour Total
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:30 PM		0	0	0	0	0	30	0	9	0	0	115	33	0	7	116	0	310	0
4:45 PM		0	0	0	0	0	23	0	4	0	0	95	31	0	6	97	0	256	0
5:00 PM		0	0	0	0	0	34	0	11	0	0	116	42	0	6	89	0	298	0
5:15 PM		0	0	0	0	0	35	0	14	0	0	106	46	0	10	93	0	304	1,168
Pk Hr	All	0	0	0	0	0	122	0	38	0	0	432	152	0	29	395	0	1,168	
	HV	0	0	0	0	0	0	0	0	0	0	7	0	0	0	3	0	10	
	HV%	-	-	-	-	-	0%	-	0%	-	-	2%	0%	-	0%	1%	-	1%	

Note: For complete count summary (all intervals), see following pages.

** Heavy Vehicle Classifications include FHWA Classes 4-13.

** Count Summaries include heavy vehicles, but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
4:30 PM	0	0	2	1	3	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	3	1	4	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	1	1	2	0	1	0	0	1	0	0	0	0	0
5:15 PM	0	0	1	0	1	0	0	2	1	3	0	0	0	0	0
Peak Hour	0	0	7	3	10	0	1	2	1	4	0	0	0	0	0

Count Summaries - All Vehicles

Interval Start		n/a				Pradera Pkwy				Crowfoot Valley Rd				Crowfoot Valley Rd				15-min Total	Rolling Hour Total
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		0	0	0	0	0	31	0	18	0	0	92	26	0	9	105	0	281	0
4:15 PM		0	0	0	0	0	22	0	10	0	0	102	29	0	7	113	0	283	0
4:30 PM		0	0	0	0	0	30	0	9	0	0	115	33	0	7	116	0	310	0
4:45 PM		0	0	0	0	0	23	0	4	0	0	95	31	0	6	97	0	256	1,130
5:00 PM		0	0	0	0	0	34	0	11	0	0	116	42	0	6	89	0	298	1,147
5:15 PM		0	0	0	0	0	35	0	14	0	0	106	46	0	10	93	0	304	1,168
5:30 PM		0	0	0	0	0	31	0	3	0	0	108	44	0	5	88	0	279	1,137
5:45 PM		0	0	0	0	0	23	0	11	0	0	78	25	0	8	100	0	245	1,126
Count Total		0	0	0	0	0	229	0	80	0	0	812	276	0	58	801	0	2,256	
P k H r	All	0	0	0	0	0	122	0	38	0	0	432	152	0	29	395	0	1,168	
	HV	0	0	0	0	0	0	0	0	0	0	7	0	0	0	3	0	10	
	HV%	-	-	-	-	-	0%	-	0%	-	-	2%	0%	-	0%	1%	-	1%	

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
4:00 PM	0	3	2	1	6	0	0	0	1	1	0	0	0	0	0
4:15 PM	0	1	3	1	5	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	2	1	3	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	3	1	4	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	1	1	2	0	1	0	0	1	0	0	0	0	0
5:15 PM	0	0	1	0	1	0	0	2	1	3	0	0	0	0	0
5:30 PM	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	1	1	2	0	0	0	0	0	0	0	0	0	0
Count Total	0	4	15	6	25	0	1	2	2	5	0	0	0	0	0
Peak Hour	0	0	7	3	10	0	1	2	1	4	0	0	0	0	0

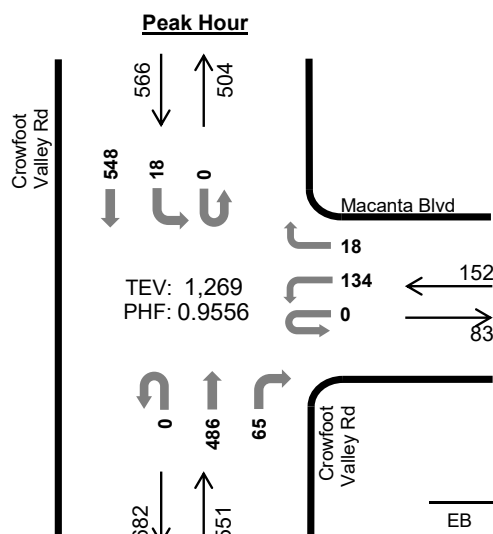
Count Summaries - Heavy Vehicles

Interval Start	n/a				Pradera Pkwy				Crowfoot Valley Rd				Crowfoot Valley Rd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	3	0	0	0	0	2	0	0	0	1	0	6	0
4:15 PM	0	0	0	0	0	1	0	0	0	0	3	0	0	0	1	0	5	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	3	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	3	0	0	0	1	0	4	18
5:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2	14
5:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	10
5:30 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	2	9
5:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2	7
Count Total	0	0	0	0	0	4	0	0	0	0	14	1	0	0	6	0	25	
Pk Hr Heavy	0	0	0	0	0	0	0	0	0	0	7	0	0	0	3	0	10	

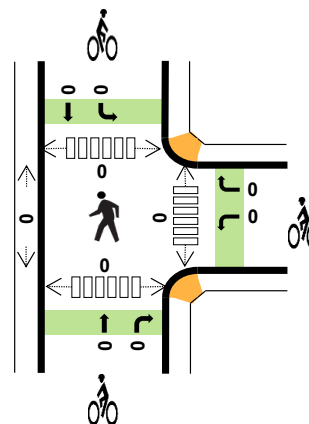
Count Summaries - Bikes

Interval Start	n/a				Pradera Pkwy				Crowfoot Valley Rd				Crowfoot Valley Rd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	1	0	0	3	4
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Count Total	0	0	0	0	0	1	0	0	0	0	0	1	1	0	1	1	0	
Pk Hr Bike	0	0	0	0	0	1	0	0	0	0	0	1	1	0	1	0	0	

Crowfoot Valley Rd Macanta Blvd



Date: 11/18/2025
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:15 AM to 8:15 AM



	HV%	PHF
EB	--	--
WB	3%	0.90
NB	5%	0.91
SB	2%	0.88
TOTAL	3%	0.96

Peak Hour Count Summaries

Peak Hour Interval Start		n/a				Macanta Blvd				Crowfoot Valley Rd				Crowfoot Valley Rd				15-min Total	Rolling Hour Total
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:15 AM		0	0	0	0	0	34	0	5	0	0	142	10	0	3	129	0	323	0
7:30 AM		0	0	0	0	0	38	0	4	0	0	126	18	0	5	141	0	332	0
7:45 AM		0	0	0	0	0	34	0	4	0	0	110	12	0	4	157	0	321	0
8:00 AM		0	0	0	0	0	28	0	5	0	0	108	25	0	6	121	0	293	1,269
Pk Hr	All	0	0	0	0	0	134	0	18	0	0	486	65	0	18	548	0	1,269	
	HV	0	0	0	0	0	2	0	2	0	0	19	6	0	3	7	0	39	
	HV%	-	-	-	-	-	1%	-	11%	-	-	4%	9%	-	17%	1%	-	3%	

Note: For complete count summary (all intervals), see following pages.

** Heavy Vehicle Classifications include FHWA Classes 4-13.

** Count Summaries include heavy vehicles, but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
7:15 AM	0	0	4	2	6	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	7	3	10	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	2	7	2	11	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	2	7	3	12	0	0	0	0	0	0	0	0	0	0
Peak Hour	0	4	25	10	39	0	0	0	0	0	0	0	0	0	0

Count Summaries - All Vehicles

Interval Start		n/a				Macanta Blvd				Crowfoot Valley Rd				Crowfoot Valley Rd				15-min Total	Rolling Hour Total
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM		0	0	0	0	0	31	0	8	0	0	105	12	0	0	118	0	274	0
7:15 AM		0	0	0	0	0	34	0	5	0	0	142	10	0	3	129	0	323	0
7:30 AM		0	0	0	0	0	38	0	4	0	0	126	18	0	5	141	0	332	0
7:45 AM		0	0	0	0	0	34	0	4	0	0	110	12	0	4	157	0	321	1,250
8:00 AM		0	0	0	0	0	28	0	5	0	0	108	25	0	6	121	0	293	1,269
8:15 AM		0	0	0	0	0	30	0	4	0	0	117	28	0	0	127	0	306	1,252
8:30 AM		0	0	0	0	0	41	0	14	0	0	106	26	0	5	108	0	300	1,220
8:45 AM		0	0	0	0	0	28	0	9	0	0	101	21	0	7	131	0	297	1,196
Count Total		0	0	0	0	0	264	0	53	0	0	915	152	0	30	1,032	0	2,446	
Pk Hr	All	0	0	0	0	0	134	0	18	0	0	486	65	0	18	548	0	1,269	
	HV	0	0	0	0	0	2	0	2	0	0	19	6	0	3	7	0	39	
	HV%	-	-	-	-	-	1%	-	11%	-	-	4%	9%	-	17%	1%	-	3%	

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
7:00 AM	0	1	8	2	11	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	4	2	6	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	7	3	10	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	2	7	2	11	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	2	7	3	12	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	4	10	3	17	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	2	5	3	10	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	8	5	13	0	0	0	0	0	0	0	0	0	0
Count Total	0	11	56	23	90	0	0	0	0	0	0	0	0	0	0
Peak Hour	0	4	25	10	39	0	0	0	0	0	0	0	0	0	0

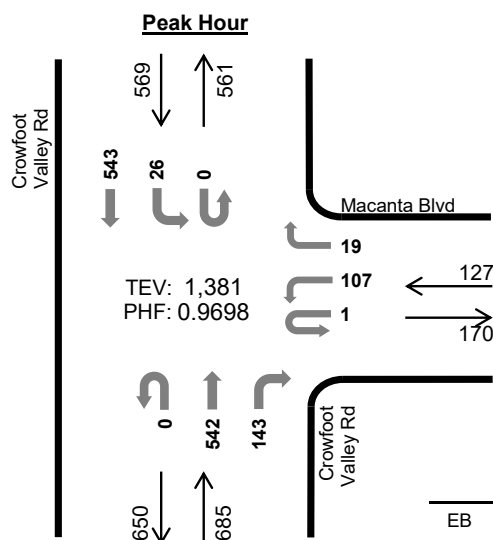
Count Summaries - Heavy Vehicles

Interval Start	n/a				Macanta Blvd				Crowfoot Valley Rd				Crowfoot Valley Rd				15-min Total	Rolling Hour Total	
	Eastbound				Westbound				Northbound				Southbound						
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT			
7:00 AM	0	0	0	0	0	1	0	0	0	0	0	6	2	0	0	2	0	11	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	3	1	0	1	1	0	6	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	4	3	0	1	2	0	10	0
7:45 AM	0	0	0	0	0	0	0	2	0	0	0	6	1	0	0	2	0	11	38
8:00 AM	0	0	0	0	0	2	0	0	0	0	0	6	1	0	1	2	0	12	39
8:15 AM	0	0	0	0	0	4	0	0	0	0	0	7	3	0	0	3	0	17	50
8:30 AM	0	0	0	0	0	2	0	0	0	0	0	4	1	0	0	3	0	10	50
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	7	1	0	1	4	0	13	52
Count Total	0	0	0	0	0	9	0	2	0	0	0	43	13	0	4	19	0	90	
Pk Hr Heavy	0	0	0	0	0	2	0	2	0	0	0	19	6	0	3	7	0	39	

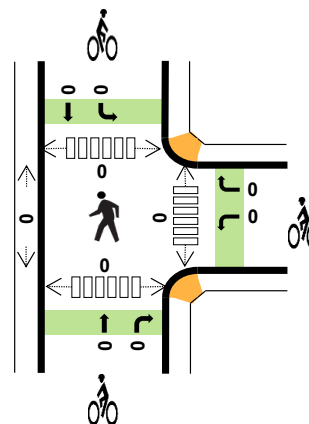
Count Summaries - Bikes

Interval Start	n/a				Macanta Blvd				Crowfoot Valley Rd				Crowfoot Valley Rd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Pk Hr Bike	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		

Crowfoot Valley Rd Macanta Blvd



Date: 11/18/2025
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:00 PM to 5:00 PM



	HV%	PHF
EB	--	--
WB	10%	0.74
NB	1%	0.94
SB	4%	0.92
TOTAL	3%	0.97

Peak Hour Count Summaries

Peak Hour Interval Start		n/a				Macanta Blvd				Crowfoot Valley Rd				Crowfoot Valley Rd				15-min Total	Rolling Hour Total
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		0	0	0	0	0	28	0	6	0	0	139	32	0	9	124	0	338	0
4:15 PM		0	0	0	0	0	16	0	2	0	0	142	41	0	6	149	0	356	0
4:30 PM		0	0	0	0	0	35	0	8	0	0	118	33	0	4	139	0	337	0
4:45 PM		0	0	0	0	1	28	0	3	0	0	143	37	0	7	131	0	350	1,381
Pk Hr	All	0	0	0	0	1	107	0	19	0	0	542	143	0	26	543	0	1,381	
	HV	0	0	0	0	1	9	0	3	0	0	4	3	0	3	17	0	40	
	HV%	-	-	-	-	100%	8%	-	16%	-	-	1%	2%	-	12%	3%	-	3%	

Note: For complete count summary (all intervals), see following pages.

** Heavy Vehicle Classifications include FHWA Classes 4-13.

** Count Summaries include heavy vehicles, but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
4:00 PM	0	1	2	6	9	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	2	3	4	9	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	4	2	7	13	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	6	0	3	9	0	0	0	0	0	0	0	0	0	0
Peak Hour	0	13	7	20	40	0	0	0	0	0	0	0	0	0	0

Count Summaries - All Vehicles

Interval Start		n/a				Macanta Blvd				Crowfoot Valley Rd				Crowfoot Valley Rd				15-min Total	Rolling Hour Total
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		0	0	0	0	0	28	0	6	0	0	139	32	0	9	124	0	338	0
4:15 PM		0	0	0	0	0	16	0	2	0	0	142	41	0	6	149	0	356	0
4:30 PM		0	0	0	0	0	35	0	8	0	0	118	33	0	4	139	0	337	0
4:45 PM		0	0	0	0	1	28	0	3	0	0	143	37	0	7	131	0	350	1,381
5:00 PM		0	0	0	0	0	20	0	4	0	0	127	33	0	1	118	0	303	1,346
5:15 PM		0	0	0	0	0	17	0	1	0	0	136	35	0	6	150	0	345	1,335
5:30 PM		0	0	0	0	0	18	0	2	0	0	129	34	0	5	123	0	311	1,309
5:45 PM		0	0	0	0	0	15	0	6	0	0	94	32	0	7	110	0	264	1,223
Count Total		0	0	0	0	1	177	0	32	0	0	1,028	277	0	45	1,044	0	2,604	
Pk Hr	All	0	0	0	0	1	107	0	19	0	0	542	143	0	26	543	0	1,381	
	HV	0	0	0	0	1	9	0	3	0	0	4	3	0	3	17	0	40	
	HV%	-	-	-	-	100%	8%	-	16%	-	-	1%	2%	-	12%	3%	-	3%	

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
4:00 PM	0	1	2	6	9	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	2	3	4	9	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	4	2	7	13	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	6	0	3	9	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	1	1	1	3	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	1	1	2	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	1	2	3	0	0	0	0	0	0	0	0	0	0
Count Total	0	14	10	27	51	0	0	0	0	0	0	0	0	0	0
Peak Hour	0	13	7	20	40	0	0	0	0	0	0	0	0	0	0

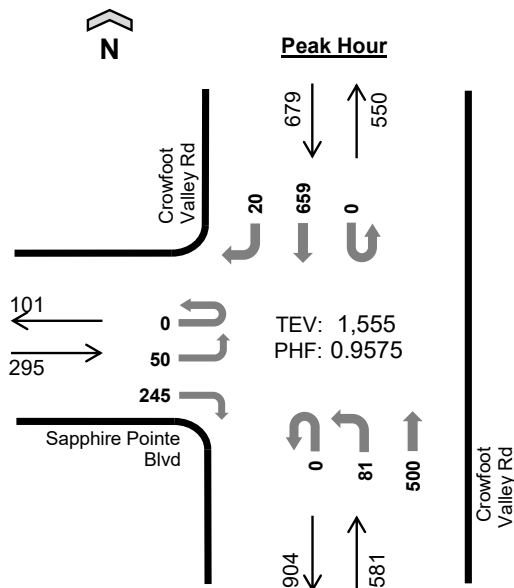
Count Summaries - Heavy Vehicles

Interval Start	n/a				Macanta Blvd				Crowfoot Valley Rd				Crowfoot Valley Rd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	1	0	0	2	0	0	2	4	0	9	0
4:15 PM	0	0	0	0	0	2	0	0	0	0	1	2	0	0	4	0	9	0
4:30 PM	0	0	0	0	0	3	0	1	0	0	1	1	0	0	7	0	13	0
4:45 PM	0	0	0	0	1	4	0	1	0	0	0	0	0	1	2	0	9	40
5:00 PM	0	0	0	0	0	1	0	0	0	0	1	0	0	0	1	0	3	34
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	28
5:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2	17
5:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	3	11
Count Total	0	0	0	0	1	10	0	3	0	0	7	3	0	3	24	0	51	
Pk Hr Heavy	0	0	0	0	1	9	0	3	0	0	4	3	0	3	17	0	40	

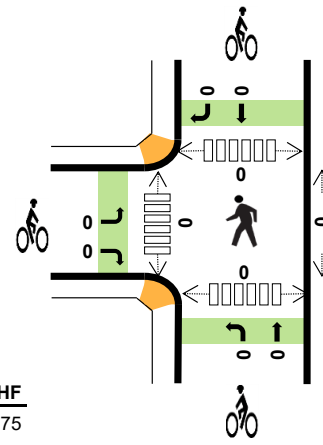
Count Summaries - Bikes

Interval Start	n/a				Macanta Blvd				Crowfoot Valley Rd				Crowfoot Valley Rd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pk Hr Bike	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Crowfoot Valley Rd Sapphire Pointe Blvd



Date: 11/18/2025
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:15 AM to 8:15 AM



	HV%	PHF
EB	2%	0.75
WB	--	--
NB	5%	0.96
SB	1%	0.91
TOTAL	3%	0.96

Peak Hour Count Summaries

Peak Hour Interval Start		Sapphire Pointe Blvd				n/a				Crowfoot Valley Rd				Crowfoot Valley Rd				15-min Total	Rolling Hour Total
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:15 AM		0	17	0	81	0	0	0	0	0	8	136	0	0	0	152	2	396	0
7:30 AM		0	14	0	54	0	0	0	0	0	22	129	0	0	0	181	6	406	0
7:45 AM		0	11	0	61	0	0	0	0	0	22	112	0	0	0	179	6	391	0
8:00 AM		0	8	0	49	0	0	0	0	0	29	123	0	0	0	147	6	362	1,555
Pk Hr	All	0	50	0	245	0	0	0	0	0	81	500	0	0	0	659	20	1,555	
	HV	0	0	0	6	0	0	0	0	0	4	25	0	0	0	9	0	44	
	HV%	-	0%	-	2%	-	-	-	-	-	5%	5%	-	-	-	1%	0%	3%	

Note: For complete count summary (all intervals), see following pages.

** Heavy Vehicle Classifications include FHWA Classes 4-13.

** Count Summaries include heavy vehicles, but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
7:15 AM	1	0	5	1	7	0	0	0	0	0	0	0	0	0	0
7:30 AM	2	0	9	1	12	0	0	0	0	0	0	0	0	0	0
7:45 AM	1	0	8	2	11	0	0	0	0	0	0	0	0	0	0
8:00 AM	2	0	7	5	14	0	0	0	0	0	0	0	0	0	0
Peak Hour	6	0	29	9	44	0	0	0	0	0	0	0	0	0	0

Count Summaries - All Vehicles

Interval Start		Sapphire Pointe Blvd				n/a				Crowfoot Valley Rd				Crowfoot Valley Rd				15-min Total	Rolling Hour Total
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM		0	12	0	57	0	0	0	0	0	4	105	0	0	0	138	3	319	0
7:15 AM		0	17	0	81	0	0	0	0	0	8	136	0	0	0	152	2	396	0
7:30 AM		0	14	0	54	0	0	0	0	0	22	129	0	0	0	181	6	406	0
7:45 AM		0	11	0	61	0	0	0	0	0	22	112	0	0	0	179	6	391	1,512
8:00 AM		0	8	0	49	0	0	0	0	0	29	123	0	0	0	147	6	362	1,555
8:15 AM		0	8	0	38	0	0	0	0	0	26	138	0	0	0	155	7	372	1,531
8:30 AM		0	13	0	48	0	0	0	0	0	29	121	0	0	0	138	2	351	1,476
8:45 AM		0	6	0	54	0	0	0	0	0	27	114	0	0	0	167	7	375	1,460
Count Total		0	89	0	442	0	0	0	0	0	167	978	0	0	0	1,257	39	2,972	
Pk Hr	All	0	50	0	245	0	0	0	0	0	81	500	0	0	0	659	20	1,555	
	HV	0	0	0	6	0	0	0	0	0	4	25	0	0	0	9	0	44	
	HV%	-	0%	-	2%	-	-	-	-	-	5%	5%	-	-	-	1%	0%	3%	

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
7:00 AM	0	0	9	3	12	0	0	0	0	0	0	0	0	0	0
7:15 AM	1	0	5	1	7	0	0	0	0	0	0	0	0	0	0
7:30 AM	2	0	9	1	12	0	0	0	0	0	0	0	0	0	0
7:45 AM	1	0	8	2	11	0	0	0	0	0	0	0	0	0	0
8:00 AM	2	0	7	5	14	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	11	7	18	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	6	4	10	0	0	0	0	0	0	0	0	0	0
8:45 AM	1	0	7	5	13	0	0	0	0	0	0	0	0	0	0
Count Total	7	0	62	28	97	0	0	0	0	0	0	0	0	0	0
Peak Hour	6	0	29	9	44	0	0	0	0	0	0	0	0	0	0

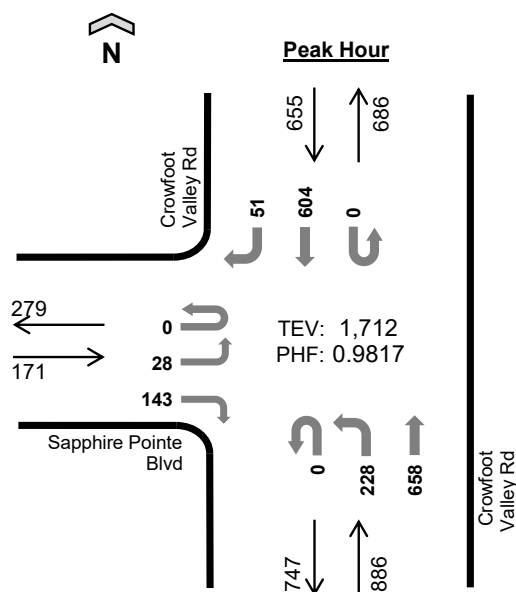
Count Summaries - Heavy Vehicles

Interval Start	Sapphire Pointe Blvd				n/a				Crowfoot Valley Rd				Crowfoot Valley Rd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	9	0	0	0	2	1	12	0
7:15 AM	0	0	0	1	0	0	0	0	0	0	5	0	0	0	1	0	7	0
7:30 AM	0	0	0	2	0	0	0	0	0	0	2	7	0	0	0	1	12	0
7:45 AM	0	0	0	1	0	0	0	0	0	0	1	7	0	0	0	2	11	42
8:00 AM	0	0	0	2	0	0	0	0	0	0	1	6	0	0	0	5	14	44
8:15 AM	0	0	0	0	0	0	0	0	0	0	1	10	0	0	0	7	18	55
8:30 AM	0	0	0	0	0	0	0	0	0	0	1	5	0	0	0	4	10	53
8:45 AM	0	0	0	1	0	0	0	0	0	0	0	7	0	0	0	4	13	55
Count Total	0	0	0	7	0	0	0	0	0	0	6	56	0	0	0	26	97	
Pk Hr Heavy	0	0	0	6	0	0	0	0	0	0	4	25	0	0	0	9	44	

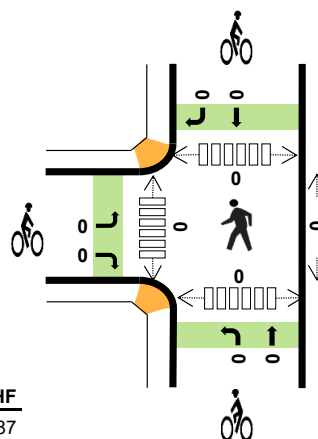
Count Summaries - Bikes

Interval Start	Sapphire Pointe Blvd				n/a				Crowfoot Valley Rd				Crowfoot Valley Rd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pk Hr Bike	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Crowfoot Valley Rd Sapphire Pointe Blvd



Date: 11/18/2025
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:00 PM to 5:00 PM



	HV%	PHF
EB	1%	0.87
WB	--	--
NB	1%	0.94
SB	4%	0.94
TOTAL	2%	0.98

Peak Hour Count Summaries

Peak Hour Interval Start		Sapphire Pointe Blvd				n/a				Crowfoot Valley Rd				Crowfoot Valley Rd				15-min Total	Rolling Hour Total
		Eastbound				Westbound				Northbound				Southbound					
UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT				
4:00 PM		0	8	0	41	0	0	0	0	0	61	163	0	0	0	153	8	434	0
4:15 PM		0	8	0	34	0	0	0	0	0	52	175	0	0	0	137	21	427	0
4:30 PM		0	7	0	34	0	0	0	0	0	54	145	0	0	0	166	9	415	0
4:45 PM		0	5	0	34	0	0	0	0	0	61	175	0	0	0	148	13	436	1,712
Pk Hr	All	0	28	0	143	0	0	0	0	0	228	658	0	0	0	604	51	1,712	
	HV	0	0	0	2	0	0	0	0	0	4	8	0	0	0	24	1	39	
	HV%	-	0%	-	1%	-	-	-	-	-	2%	1%	-	-	-	4%	2%	2%	

Note: For complete count summary (all intervals), see following pages.

** Heavy Vehicle Classifications include FHWA Classes 4-13.

** Count Summaries include heavy vehicles, but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
4:00 PM	1	0	5	4	10	0	0	0	0	0	0	0	0	0	0
4:15 PM	1	0	4	3	8	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	2	13	15	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	1	5	6	0	0	0	0	0	0	0	0	0	0
Peak Hour	2	0	12	25	39	0	0	0	0	0	0	0	0	0	0

Count Summaries - All Vehicles

Interval Start		Sapphire Pointe Blvd				n/a				Crowfoot Valley Rd				Crowfoot Valley Rd				15-min Total	Rolling Hour Total
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		0	8	0	41	0	0	0	0	0	61	163	0	0	0	153	8	434	0
4:15 PM		0	8	0	34	0	0	0	0	0	52	175	0	0	0	137	21	427	0
4:30 PM		0	7	0	34	0	0	0	0	0	54	145	0	0	0	166	9	415	0
4:45 PM		0	5	0	34	0	0	0	0	0	61	175	0	0	0	148	13	436	1,712
5:00 PM		0	6	0	30	0	0	0	0	0	52	153	0	0	0	136	7	384	1,662
5:15 PM		0	4	0	29	0	0	0	0	0	65	168	0	0	0	149	11	426	1,661
5:30 PM		0	8	0	41	0	0	0	0	0	58	154	0	0	0	131	15	407	1,653
5:45 PM		0	4	0	40	0	0	0	0	0	48	122	0	0	0	109	8	331	1,548
Count Total		0	50	0	283	0	0	0	0	0	451	1,255	0	0	0	1,129	92	3,260	
Pk Hr	All	0	28	0	143	0	0	0	0	0	228	658	0	0	0	604	51	1,712	
	HV	0	0	0	2	0	0	0	0	0	4	8	0	0	0	24	1	39	
	HV%	-	0%	-	1%	-	-	-	-	-	2%	1%	-	-	-	4%	2%	2%	

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	E	W	N	S	Total
4:00 PM	1	0	5	4	10	0	0	0	0	0	0	0	0	0	0
4:15 PM	1	0	4	3	8	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	2	13	15	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	1	5	6	0	0	0	0	0	0	0	0	0	0
5:00 PM	1	0	1	1	3	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	1	2	3	0	0	0	0	0	0	0	0	0	0
Count Total	3	0	14	34	51	0	0	0	0	0	0	0	0	0	0
Peak Hour	2	0	12	25	39	0	0	0	0	0	0	0	0	0	0

Count Summaries - Heavy Vehicles

Interval Start	Sapphire Pointe Blvd				n/a				Crowfoot Valley Rd				Crowfoot Valley Rd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	1	0	0	0	0	0	3	2	0	0	0	4	0	10	0
4:15 PM	0	0	0	1	0	0	0	0	0	1	3	0	0	0	3	0	8	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	12	1	15	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	5	0	6	39
5:00 PM	0	0	0	1	0	0	0	0	0	0	1	0	0	0	1	0	3	32
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	5	29
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	15
5:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	3	12
Count Total	0	0	0	3	0	0	0	0	0	4	10	0	0	0	33	1	51	
Pk Hr Heavy	0	0	0	2	0	0	0	0	0	4	8	0	0	0	24	1	39	

Count Summaries - Bikes

Interval Start	Sapphire Pointe Blvd				n/a				Crowfoot Valley Rd				Crowfoot Valley Rd				15-min Total	Rolling Hour Total
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Pk Hr Bike	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		

APPENDIX E – Existing Synchro Outputs

Queues

1: Crowfoot Valley Rd & Stroh Rd

02/02/2026

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	38	108	14	255	136	179	8	267	342	182	260	22
v/c Ratio	0.18	0.48	0.05	0.65	0.33	0.36	0.02	0.53	0.51	0.38	0.32	0.03
Control Delay (s/veh)	43.1	49.0	0.3	42.2	34.0	7.5	17.3	35.3	6.4	18.8	21.0	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	43.1	49.0	0.3	42.2	34.0	7.5	17.3	35.3	6.4	18.8	21.0	0.1
Queue Length 50th (ft)	19	55	0	125	61	0	2	126	0	58	89	0
Queue Length 95th (ft)	62	140	0	267	146	56	13	269	72	134	226	0
Internal Link Dist (ft)		528			1364			5833			547	
Turn Bay Length (ft)	275		440	400		1000	330		600	525		
Base Capacity (vph)	607	639	613	1012	1066	982	661	1173	1123	761	1483	1276
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.06	0.17	0.02	0.25	0.13	0.18	0.01	0.23	0.30	0.24	0.18	0.02
Intersection Summary												

HCM 7th Signalized Intersection Summary

1: Crowfoot Valley Rd & Stroh Rd

02/02/2026

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	35	99	13	235	125	165	7	246	315	167	239	20
Future Volume (veh/h)	35	99	13	235	125	165	7	246	315	167	239	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	38	108	14	255	136	179	8	267	342	182	260	22
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	154	162	137	334	351	297	428	549	466	417	707	599
Arrive On Green	0.09	0.09	0.09	0.19	0.19	0.19	0.01	0.29	0.29	0.09	0.38	0.38
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	38	108	14	255	136	179	8	267	342	182	260	22
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	1.4	3.8	0.6	9.2	4.3	7.0	0.2	8.0	13.2	4.5	6.8	0.6
Cycle Q Clear(g_c), s	1.4	3.8	0.6	9.2	4.3	7.0	0.2	8.0	13.2	4.5	6.8	0.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	154	162	137	334	351	297	428	549	466	417	707	599
V/C Ratio(X)	0.25	0.67	0.10	0.76	0.39	0.60	0.02	0.49	0.73	0.44	0.37	0.04
Avail Cap(c_a), veh/h	785	824	698	1308	1374	1164	933	1511	1280	1164	1923	1630
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.0	30.2	28.7	26.2	24.2	25.3	16.6	19.8	21.7	13.8	15.3	13.4
Incr Delay (d2), s/veh	0.3	1.8	0.1	2.7	0.5	1.5	0.0	0.9	3.2	0.3	0.5	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	1.7	0.2	3.8	1.8	2.5	0.1	3.1	4.6	1.5	2.5	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	29.3	31.9	28.8	28.9	24.7	26.8	16.6	20.8	24.9	14.1	15.8	13.4
LnGrp LOS	C	C	C	C	C	C	B	C	C	B	B	B
Approach Vol, veh/h	160			570			617			464		
Approach Delay, s/veh	31.0			27.3			23.0			15.0		
Approach LOS	C			C			C			B		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.4	26.0		11.9	5.7	31.7		18.8				
Change Period (Y+Rc), s	5.0	6.0		6.0	5.0	6.0		6.0				
Max Green Setting (Gmax), s	35.0	55.0		30.0	20.0	70.0		50.0				
Max Q Clear Time (g_c+I1), s	6.5	15.2		5.8	2.2	8.8		11.2				
Green Ext Time (p_c), s	0.1	4.3		0.4	0.0	2.3		1.5				
Intersection Summary												
HCM 7th Control Delay, s/veh	23.0											
HCM 7th LOS	C											

Queues

2: Crowfoot Valley Rd & S Chambers Rd/Bayou Gulch Rd

02/02/2026



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	41	253	16	667	201	376	5	132	361	54
v/c Ratio	0.23	0.32	0.03	0.89	0.64	0.70	0.01	0.46	0.79	0.12
Control Delay (s/veh)	24.3	26.9	21.9	54.8	35.5	50.9	0.0	30.3	61.5	3.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	24.3	26.9	21.9	54.8	35.5	50.9	0.0	30.3	61.5	3.3
Queue Length 50th (ft)	18	121	7	555	117	300	0	73	303	0
Queue Length 95th (ft)	46	248	24	#925	166	402	0	112	418	10
Internal Link Dist (ft)		496		564		2512			5833	
Turn Bay Length (ft)	550		300		550		470	540		400
Base Capacity (vph)	319	782	633	746	407	981	889	457	971	856
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.32	0.03	0.89	0.49	0.38	0.01	0.29	0.37	0.06

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

HCM 7th Signalized Intersection Summary

2: Crowfoot Valley Rd & S Chambers Rd/Bayou Gulch Rd

02/02/2026

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	35	124	91	14	404	163	171	320	4	112	307	46
Future Volume (veh/h)	35	124	91	14	404	163	171	320	4	112	307	46
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1767	1870	1752	1796	1870	1885	1826	1870	1900	1841	1856	1841
Adj Flow Rate, veh/h	41	146	0	16	475	192	201	376	5	132	361	54
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	9	2	10	7	2	1	5	2	0	4	3	4
Cap, veh/h	157	795		541	520	210	299	511	440	279	450	378
Arrive On Green	0.03	0.43	0.00	0.02	0.41	0.41	0.10	0.27	0.27	0.07	0.24	0.24
Sat Flow, veh/h	1682	1870	0	1711	1266	512	1739	1870	1610	1753	1856	1560
Grp Volume(v), veh/h	41	146	0	16	0	667	201	376	5	132	361	54
Grp Sat Flow(s),veh/h/ln	1682	1870	0	1711	0	1778	1739	1870	1610	1753	1856	1560
Q Serve(g_s), s	1.6	5.6	0.0	0.6	0.0	41.0	9.9	21.2	0.3	6.5	21.2	3.2
Cycle Q Clear(g_c), s	1.6	5.6	0.0	0.6	0.0	41.0	9.9	21.2	0.3	6.5	21.2	3.2
Prop In Lane	1.00		0.00	1.00		0.29	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	157	795		541	0	730	299	511	440	279	450	378
V/C Ratio(X)	0.26	0.18		0.03	0.00	0.91	0.67	0.74	0.01	0.47	0.80	0.14
Avail Cap(c_a), veh/h	394	806		880	0	843	493	1129	972	529	1120	941
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.2	20.8	0.0	19.2	0.0	32.2	30.4	38.3	30.7	30.9	41.3	34.5
Incr Delay (d2), s/veh	0.9	0.2	0.0	0.0	0.0	13.6	1.0	4.4	0.0	0.5	7.0	0.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	2.4	0.0	0.2	0.0	19.5	4.0	9.9	0.1	2.6	10.1	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	27.0	21.0	0.0	19.2	0.0	45.9	31.4	42.7	30.7	31.4	48.3	34.9
LnGrp LOS	C	C		B		D	C	D	C	C	D	C
Approach Vol, veh/h	187			683			582			547		
Approach Delay, s/veh	22.3			45.2			38.7			42.9		
Approach LOS	C			D			D			D		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.2	54.1	14.0	38.7	7.5	55.8	17.6	35.1				
Change Period (Y+Rc), s	5.5	6.5	5.5	7.0	5.5	6.5	5.5	7.0				
Max Green Setting (Gmax), s	20.0	55.0	25.0	70.0	25.0	50.0	25.0	70.0				
Max Q Clear Time (g_c+l1), s	3.6	43.0	8.5	23.2	2.6	7.6	11.9	23.2				
Green Ext Time (p_c), s	0.1	4.6	0.1	4.7	0.0	1.1	0.2	4.9				
Intersection Summary												
HCM 7th Control Delay, s/veh	40.6											
HCM 7th LOS	D											
Notes												
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.												

Intersection

Int Delay, s/veh 3.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	67	119	376	47	27	385
Future Vol, veh/h	67	119	376	47	27	385
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	215	-	440	500	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	0	4	6	4	4
Mvmt Flow	79	140	442	55	32	453

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	959	442	0
Stage 1	442	-	-
Stage 2	516	-	-
Critical Hdwy	6.4	6.2	-
Critical Hdwy Stg 1	5.4	-	-
Critical Hdwy Stg 2	5.4	-	-
Follow-up Hdwy	3.5	3.3	-
Pot Cap-1 Maneuver	288	619	-
Stage 1	652	-	-
Stage 2	603	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	279	619	-
Mov Cap-2 Maneuver	279	-	-
Stage 1	652	-	-
Stage 2	585	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	16.25	0	0.56
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1WBLn2	SBL	SBT
Capacity (veh/h)	-	- 279 619 1056	-	-
HCM Lane V/C Ratio	-	- 0.283 0.226 0.03	-	-
HCM Ctrl Dly (s/v)	-	- 22.9 12.5 8.5	-	-
HCM Lane LOS	-	- C B A	-	-
HCM 95th %tile Q(veh)	-	- 1.1 0.9 0.1	-	-

Intersection						
Int Delay, s/veh	7.6					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	160	31	392	82	24	428
Future Vol, veh/h	160	31	392	82	24	428
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	Free	-	None
Storage Length	0	370	-	880	370	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	86	86	91	91
Heavy Vehicles, %	2	3	5	1	4	3
Mvmt Flow	188	36	456	95	26	470
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	979	456	0	-	456	0
Stage 1	456	-	-	-	-	-
Stage 2	523	-	-	-	-	-
Critical Hdwy	6.42	6.23	-	-	4.14	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.327	-	-	2.236	-
Pot Cap-1 Maneuver	277	602	-	0	1094	-
Stage 1	638	-	-	0	-	-
Stage 2	595	-	-	0	-	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	271	602	-	-	1094	-
Mov Cap-2 Maneuver	271	-	-	-	-	-
Stage 1	638	-	-	-	-	-
Stage 2	580	-	-	-	-	-
Approach	WB	NB	SB			
HCM Ctrl Dly, s/v	38.59	0	0.44			
HCM LOS	E					
Minor Lane/Major Mvmt	NBTWBLn1WBLn2		SBL	SBT		
Capacity (veh/h)	-	271	602	1094	-	
HCM Lane V/C Ratio	-	0.695	0.061	0.024	-	
HCM Ctrl Dly (s/v)	-	43.9	11.4	8.4	-	
HCM Lane LOS	-	E	B	A	-	
HCM 95th %tile Q(veh)	-	4.7	0.2	0.1	-	

Intersection

Int Delay, s/veh 6.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	134	18	486	65	18	548
Future Vol, veh/h	134	18	486	65	18	548
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	None
Storage Length	220	0	-	575	575	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	146	20	528	71	20	596

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	1163	-	0
Stage 1	528	-	-
Stage 2	635	-	-
Critical Hdwy	6.63	-	-
Critical Hdwy Stg 1	5.83	-	-
Critical Hdwy Stg 2	5.43	-	-
Follow-up Hdwy	3.519	-	-
Pot Cap-1 Maneuver	201	0	-
Stage 1	557	0	-
Stage 2	527	0	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	197	-	-
Mov Cap-2 Maneuver	197	-	-
Stage 1	557	-	-
Stage 2	516	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	62.15	0	0.28
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBRWBLn1WBLn2	SBL	SBT
Capacity (veh/h)	-	-	197	-
HCM Lane V/C Ratio	-	-	0.739	-
HCM Ctrl Dly (s/v)	-	-	62.2	-
HCM Lane LOS	-	-	F	-
HCM 95th %tile Q(veh)	-	-	4.8	-

Intersection						
Int Delay, s/veh	1.9					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	50	245	81	501	659	23
Future Vol, veh/h	50	245	81	501	659	23
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	None
Storage Length	265	0	300	-	-	300
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	54	266	88	545	716	25
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	1165	-	741	0	-	0
Stage 1	716	-	-	-	-	-
Stage 2	448	-	-	-	-	-
Critical Hdwy	6.63	-	4.13	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.83	-	-	-	-	-
Follow-up Hdwy	3.519	-	2.219	-	-	-
Pot Cap-1 Maneuver	201	0	863	-	-	-
Stage 1	483	0	-	-	-	-
Stage 2	611	0	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	180	-	863	-	-	-
Mov Cap-2 Maneuver	180	-	-	-	-	-
Stage 1	434	-	-	-	-	-
Stage 2	611	-	-	-	-	-
Approach	EB	NB		SB		
HCM Ctrl Dly, s/v	33.39	1.34		0		
HCM LOS	D					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	863	-	180	-	-	-
HCM Lane V/C Ratio	0.102	-	0.302	-	-	-
HCM Ctrl Dly (s/v)	9.6	-	33.4	0	-	-
HCM Lane LOS	A	-	D	A	-	-
HCM 95th %tile Q(veh)	0.3	-	1.2	-	-	-

Queues

1: Crowfoot Valley Rd & Stroh Rd

02/02/2026

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	32	122	15	370	72	163	7	254	351	190	288	28
v/c Ratio	0.15	0.55	0.05	0.74	0.14	0.29	0.02	0.56	0.54	0.43	0.38	0.04
Control Delay (s/veh)	50.2	58.3	0.4	45.7	31.4	6.4	23.0	43.8	7.5	24.8	27.3	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	50.2	58.3	0.4	45.7	31.4	6.4	23.0	43.8	7.5	24.8	27.3	0.1
Queue Length 50th (ft)	19	76	0	216	35	0	3	148	0	79	128	0
Queue Length 95th (ft)	61	178	0	415	87	52	14	307	84	175	301	0
Internal Link Dist (ft)	528			1364			5833			547		
Turn Bay Length (ft)	275		440	400		1000	330		600	525		
Base Capacity (vph)	528	555	547	880	926	869	592	1019	1025	678	1297	1126
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.06	0.22	0.03	0.42	0.08	0.19	0.01	0.25	0.34	0.28	0.22	0.02
Intersection Summary												

HCM 7th Signalized Intersection Summary

1: Crowfoot Valley Rd & Stroh Rd

02/02/2026

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	29	112	14	340	66	150	6	234	323	175	265	26
Future Volume (veh/h)	29	112	14	340	66	150	6	234	323	175	265	26
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	32	122	15	370	72	163	7	254	351	190	288	28
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	163	171	145	432	453	384	377	527	447	400	691	585
Arrive On Green	0.09	0.09	0.09	0.24	0.24	0.24	0.01	0.28	0.28	0.10	0.37	0.37
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	32	122	15	370	72	163	7	254	351	190	288	28
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	1.3	5.1	0.7	15.9	2.4	6.9	0.2	9.0	16.3	5.7	9.2	0.9
Cycle Q Clear(g_c), s	1.3	5.1	0.7	15.9	2.4	6.9	0.2	9.0	16.3	5.7	9.2	0.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	163	171	145	432	453	384	377	527	447	400	691	585
V/C Ratio(X)	0.20	0.71	0.10	0.86	0.16	0.42	0.02	0.48	0.79	0.48	0.42	0.05
Avail Cap(c_a), veh/h	669	703	596	1115	1171	993	807	1288	1092	1009	1640	1390
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.6	35.3	33.3	28.9	23.8	25.5	20.2	23.8	26.4	16.9	18.8	16.2
Incr Delay (d2), s/veh	0.2	2.1	0.1	3.8	0.1	0.6	0.0	1.0	4.4	0.3	0.6	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	2.3	0.3	6.7	1.0	2.5	0.1	3.7	6.0	2.0	3.6	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	33.8	37.3	33.4	32.7	24.0	26.1	20.2	24.8	30.8	17.2	19.3	16.2
LnGrp LOS	C	D	C	C	C	C	C	C	C	B	B	B
Approach Vol, veh/h	169			605			612			506		
Approach Delay, s/veh	36.3			29.9			28.2			18.4		
Approach LOS	D			C			C			B		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.7	28.5		13.3	5.7	35.5		25.3				
Change Period (Y+Rc), s	5.0	6.0		6.0	5.0	6.0		6.0				
Max Green Setting (Gmax), s	35.0	55.0		30.0	20.0	70.0		50.0				
Max Q Clear Time (g_c+I1), s	7.7	18.3		7.1	2.2	11.2		17.9				
Green Ext Time (p_c), s	0.1	4.2		0.4	0.0	2.6		1.5				
Intersection Summary												
HCM 7th Control Delay, s/veh	26.8											
HCM 7th LOS	C											

Queues

2: Crowfoot Valley Rd & S Chambers Rd/Bayou Gulch Rd

02/02/2026



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	65	604	9	299	118	460	6	186	387	40
v/c Ratio	0.17	0.83	0.05	0.50	0.35	0.79	0.01	0.65	0.64	0.07
Control Delay (s/veh)	25.0	45.2	25.8	38.1	21.4	49.4	0.0	30.0	40.5	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	25.0	45.2	25.8	38.1	21.4	49.4	0.0	30.0	40.5	0.2
Queue Length 50th (ft)	28	382	4	174	49	318	0	81	248	0
Queue Length 95th (ft)	70	#822	17	323	91	484	0	138	384	0
Internal Link Dist (ft)		496		564		2512			5833	
Turn Bay Length (ft)	550		300		550		470	540		400
Base Capacity (vph)	464	729	426	808	510	1081	972	448	1071	935
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.14	0.83	0.02	0.37	0.23	0.43	0.01	0.42	0.36	0.04

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

HCM 7th Signalized Intersection Summary

2: Crowfoot Valley Rd & S Chambers Rd/Bayou Gulch Rd

02/02/2026

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	365	149	8	140	114	100	391	5	158	329	34
Future Volume (veh/h)	55	365	149	8	140	114	100	391	5	158	329	34
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1767	1870	1752	1796	1870	1885	1826	1870	1900	1841	1856	1841
Adj Flow Rate, veh/h	65	429	0	9	165	134	118	460	6	186	387	40
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	9	2	10	7	2	1	5	2	0	4	3	4
Cap, veh/h	256	528		169	236	191	365	596	513	340	645	542
Arrive On Green	0.05	0.28	0.00	0.01	0.25	0.25	0.07	0.32	0.32	0.09	0.35	0.35
Sat Flow, veh/h	1682	1870	0	1711	955	776	1739	1870	1610	1753	1856	1560
Grp Volume(v), veh/h	65	429	0	9	0	299	118	460	6	186	387	40
Grp Sat Flow(s),veh/h/ln	1682	1870	0	1711	0	1731	1739	1870	1610	1753	1856	1560
Q Serve(g_s), s	2.4	17.9	0.0	0.3	0.0	13.1	3.7	18.6	0.2	5.8	14.4	1.4
Cycle Q Clear(g_c), s	2.4	17.9	0.0	0.3	0.0	13.1	3.7	18.6	0.2	5.8	14.4	1.4
Prop In Lane	1.00		0.00	1.00		0.45	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	256	528		169	0	427	365	596	513	340	645	542
V/C Ratio(X)	0.25	0.81		0.05	0.00	0.70	0.32	0.77	0.01	0.55	0.60	0.07
Avail Cap(c_a), veh/h	580	1119		661	0	1139	771	1567	1349	699	1554	1307
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.8	27.9	0.0	24.5	0.0	28.7	18.0	25.7	19.5	18.7	22.5	18.2
Incr Delay (d2), s/veh	0.5	4.3	0.0	0.1	0.0	3.0	0.2	4.5	0.0	0.5	1.9	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	7.9	0.0	0.1	0.0	5.5	1.3	8.1	0.1	2.1	5.9	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	23.3	32.3	0.0	24.6	0.0	31.6	18.2	30.2	19.5	19.2	24.4	18.4
LnGrp LOS	C	C		C		C	B	C	B	B	C	B
Approach Vol, veh/h	494		308			584			613			
Approach Delay, s/veh	31.1		31.4			27.7			22.4			
Approach LOS	C		C			C			C			
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.4	27.1	13.4	33.6	6.4	30.1	11.0	36.1				
Change Period (Y+Rc), s	5.5	6.5	5.5	7.0	5.5	6.5	5.5	7.0				
Max Green Setting (Gmax), s	20.0	55.0	25.0	70.0	25.0	50.0	25.0	70.0				
Max Q Clear Time (g_c+I1), s	4.4	15.1	7.8	20.6	2.3	19.9	5.7	16.4				
Green Ext Time (p_c), s	0.1	2.8	0.2	6.1	0.0	3.7	0.1	5.2				
Intersection Summary												
HCM 7th Control Delay, s/veh				27.5								
HCM 7th LOS				C								
Notes												
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.												

Intersection

Int Delay, s/veh 2.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	29	68	428	45	90	396
Future Vol, veh/h	29	68	428	45	90	396
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	215	-	440	500	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	0	4	6	4	4
Mvmt Flow	34	80	504	53	106	466

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1181	504	0	0	556	0
Stage 1	504	-	-	-	-	-
Stage 2	678	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.14	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.236	-
Pot Cap-1 Maneuver	212	572	-	-	1004	-
Stage 1	611	-	-	-	-	-
Stage 2	508	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	190	572	-	-	1004	-
Mov Cap-2 Maneuver	190	-	-	-	-	-
Stage 1	611	-	-	-	-	-
Stage 2	455	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	17.04	0	1.67
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1WBLn2	SBL	SBT
Capacity (veh/h)	-	- 190 572 1004	-	-
HCM Lane V/C Ratio	-	- 0.18 0.14 0.105	-	-
HCM Ctrl Dly (s/v)	-	- 28.1 12.3 9	-	-
HCM Lane LOS	-	- D B A	-	-
HCM 95th %tile Q(veh)	-	- 0.6 0.5 0.4	-	-

Intersection

Int Delay, s/veh 5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	122	38	435	152	29	396
Future Vol, veh/h	122	38	435	152	29	396
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	Free	-	None
Storage Length	0	370	-	880	370	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	86	86	91	91
Heavy Vehicles, %	2	3	5	1	4	3
Mvmt Flow	144	45	506	177	32	435

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	1005	506	0
Stage 1	506	-	-
Stage 2	499	-	-
Critical Hdwy	6.42	6.23	-
Critical Hdwy Stg 1	5.42	-	-
Critical Hdwy Stg 2	5.42	-	-
Follow-up Hdwy	3.518	3.327	-
Pot Cap-1 Maneuver	268	564	-
Stage 1	606	-	-
Stage 2	610	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	260	564	-
Mov Cap-2 Maneuver	260	-	-
Stage 1	606	-	-
Stage 2	592	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	29.33	0	0.58
HCM LOS	D		

Minor Lane/Major Mvmt	NBTWBLn1WBLn2	SBL	SBT
Capacity (veh/h)	- 260 564	1049	-
HCM Lane V/C Ratio	- 0.553 0.079	0.03	-
HCM Ctrl Dly (s/v)	- 34.8 11.9	8.5	-
HCM Lane LOS	- D B	A	-
HCM 95th %tile Q(veh)	- 3.1 0.3	0.1	-

Intersection

Int Delay, s/veh 3.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	101	16	524	139	18	538
Future Vol, veh/h	101	16	524	139	18	538
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	None
Storage Length	220	0	-	575	575	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	110	17	570	151	20	585

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	1193	-	0 0 721 0
Stage 1	570	-	- - - -
Stage 2	624	-	- - - -
Critical Hdwy	6.63	-	- - 4.13 -
Critical Hdwy Stg 1	5.83	-	- - - -
Critical Hdwy Stg 2	5.43	-	- - - -
Follow-up Hdwy	3.519	-	- - 2.219 -
Pot Cap-1 Maneuver	192	0	- - 879 -
Stage 1	530	0	- - - -
Stage 2	533	0	- - - -
Platoon blocked, %		-	- - -
Mov Cap-1 Maneuver	188	-	- - 879 -
Mov Cap-2 Maneuver	188	-	- - - -
Stage 1	530	-	- - - -
Stage 2	521	-	- - - -

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	47.92	0	0.3
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBRWBLn1WBLn2	SBL	SBT
Capacity (veh/h)	-	- 188	- 879	-
HCM Lane V/C Ratio	-	- 0.583	- 0.022	-
HCM Ctrl Dly (s/v)	-	- 47.9	0 9.2	-
HCM Lane LOS	-	- E	A A	-
HCM 95th %tile Q(veh)	-	- 3.2	- 0.1	-

Intersection						
Int Delay, s/veh	2.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	22	127	232	641	599	40
Future Vol, veh/h	22	127	232	641	599	40
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	None
Storage Length	265	0	300	-	-	300
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	24	138	252	697	651	43
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	1504	-	695	0	-	0
Stage 1	651	-	-	-	-	-
Stage 2	853	-	-	-	-	-
Critical Hdwy	6.63	-	4.13	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.83	-	-	-	-	-
Follow-up Hdwy	3.519	-	2.219	-	-	-
Pot Cap-1 Maneuver	122	0	899	-	-	-
Stage 1	518	0	-	-	-	-
Stage 2	379	0	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	88	-	899	-	-	-
Mov Cap-2 Maneuver	88	-	-	-	-	-
Stage 1	373	-	-	-	-	-
Stage 2	379	-	-	-	-	-
Approach	EB	NB		SB		
HCM Ctrl Dly, s/v	60.45	2.81		0		
HCM LOS	F					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	899	-	88	-	-	-
HCM Lane V/C Ratio	0.281	-	0.271	-	-	-
HCM Ctrl Dly (s/v)	10.6	-	60.5	0	-	-
HCM Lane LOS	B	-	F	A	-	-
HCM 95th %tile Q(veh)	1.2	-	1	-	-	-

APPENDIX F – Pipeline Development Excerpt

CANYONS PRELIMINARY PLAN #3

TRAFFIC IMPACT STUDY

Castle Pines, Colorado

Prepared for:

Shea Homes
9380 Station Street, Suite 600
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Prepared by:

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Project Engineer: Ryan Saline, PE

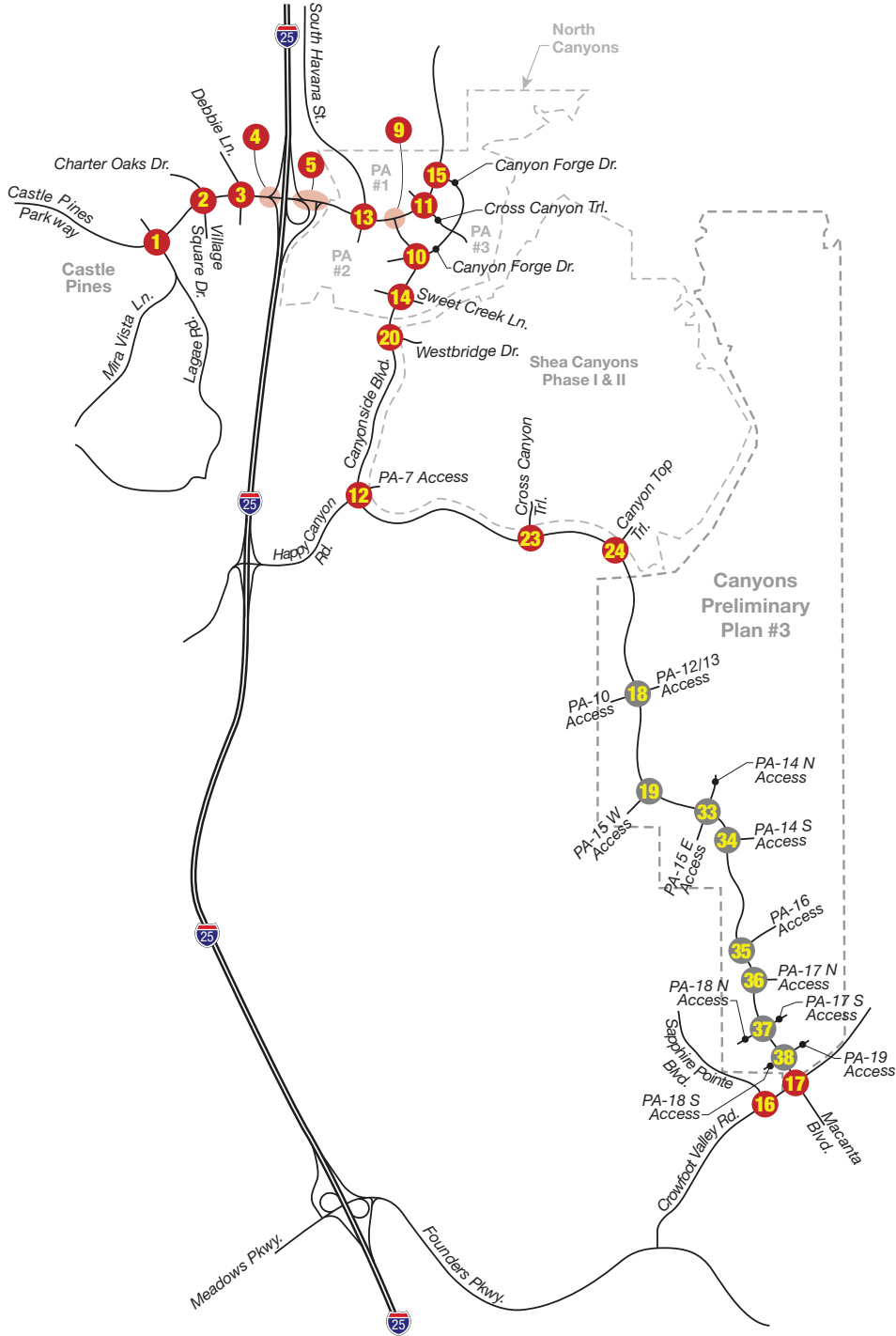


FHU Reference No. 122644-01

April 2023

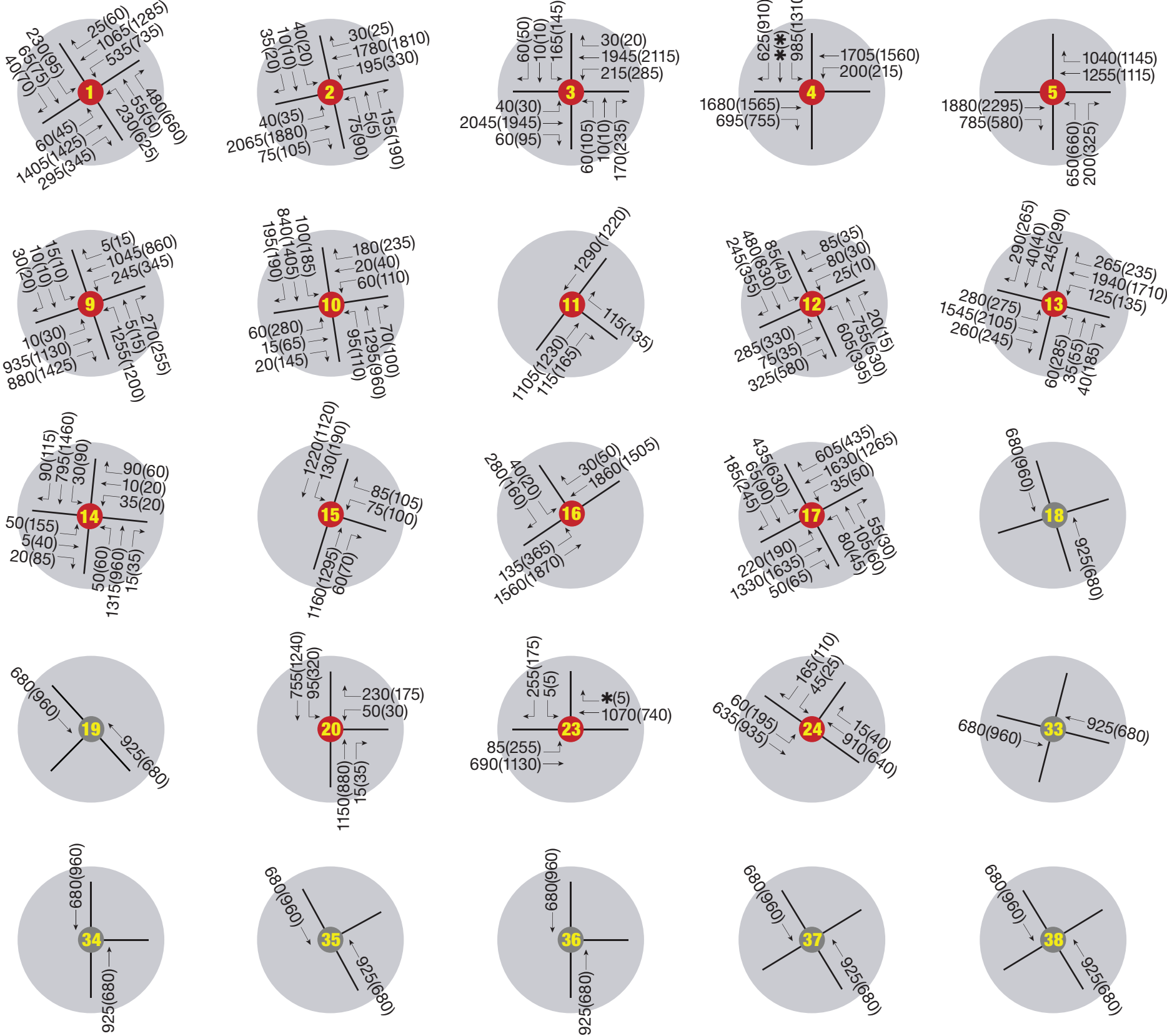
Revised March 2025

KEY MAP

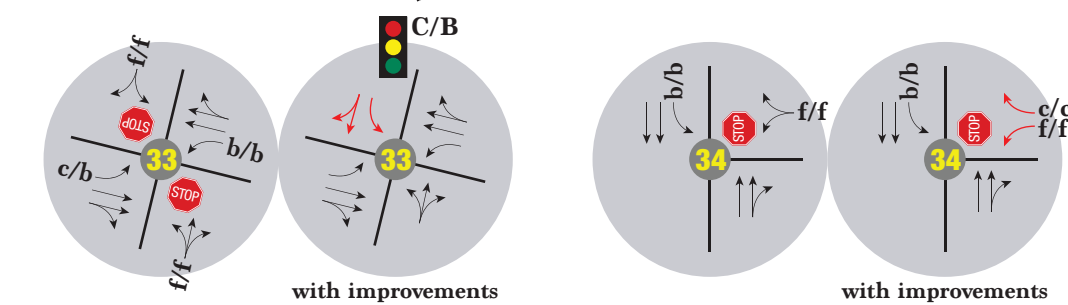
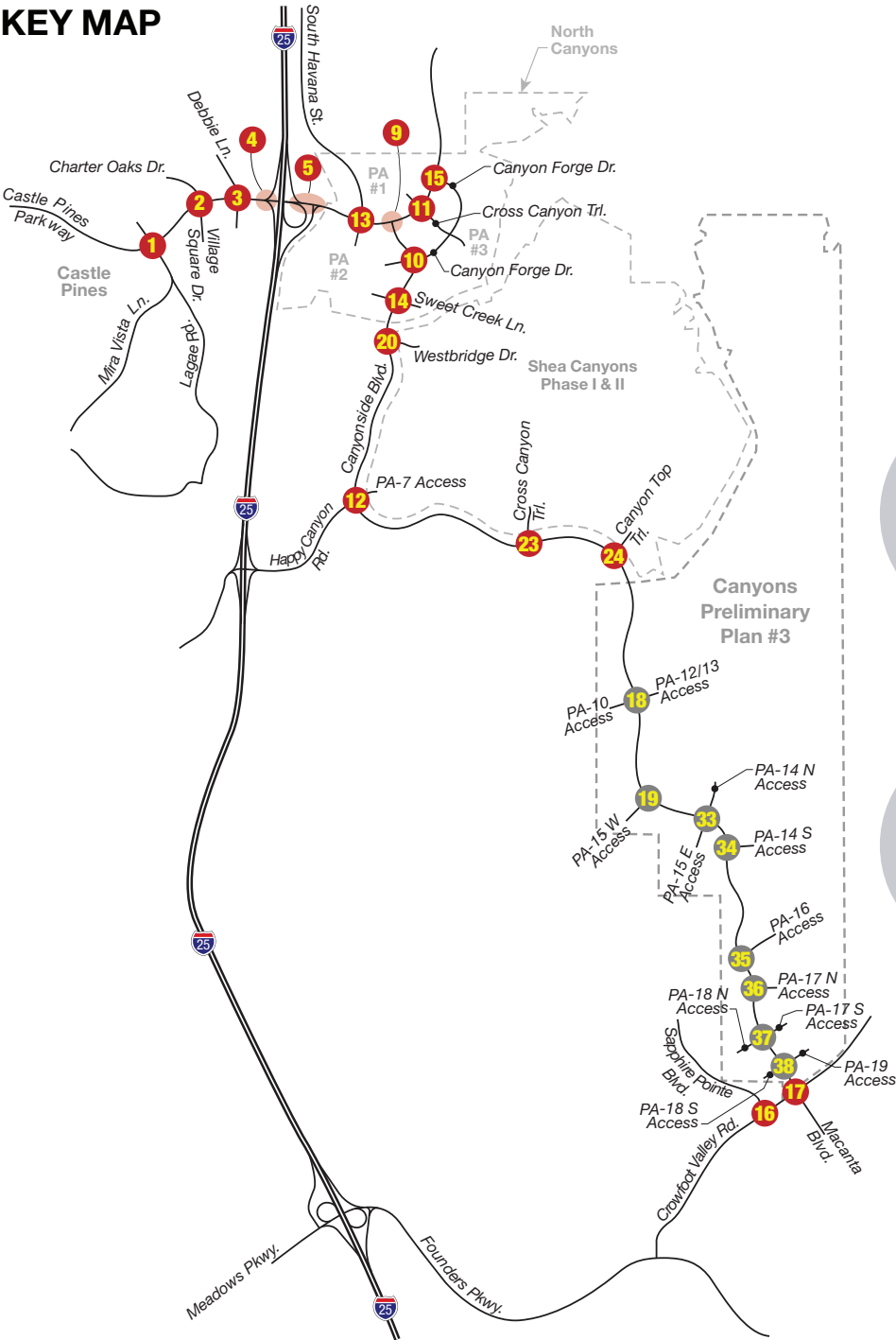


- LEGEND**
- xxx(xxx) = AM(PM) Peak Hour Traffic Volumes
 - * = Less Than 5 Vehicles per Hour (vph)
 - X = Background Study Intersection
 - X = Proposed Study Intersections

NOTE: Drawing Not to Scale



KEY MAP

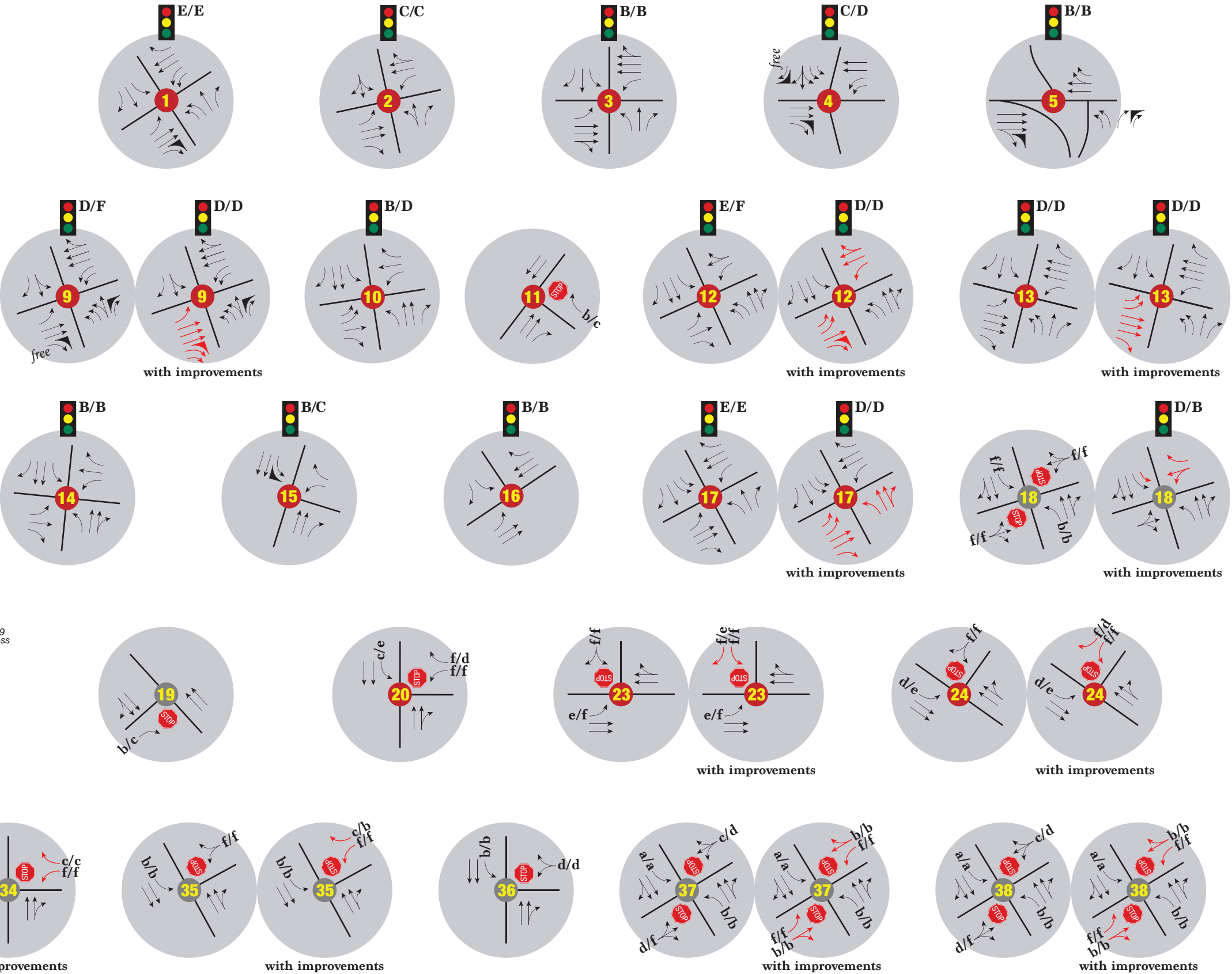


NOTE: Drawing Not to Scale

LEGEND

- x/x = AM/PM Peak Hour Signalized Intersection Level of Service
- x/x = AM/PM Peak Hour Unsignalized Intersection Level of Service

- STOP = Stop Sign
- Signal icon = Traffic Signal
- Red circle with X = Background Study Intersection
- Yellow circle with X = Proposed Study Intersections



APPENDIX G – Background Future (without site development)

Synchro Outputs

Queues

1: Crowfoot Valley Rd & Stroh Rd

02/03/2026

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	41	114	15	271	145	190	8	284	363	192	276	23
v/c Ratio	0.19	0.51	0.05	0.66	0.34	0.37	0.02	0.56	0.52	0.41	0.34	0.03
Control Delay (s/veh)	46.2	52.4	0.4	43.8	35.3	7.3	18.4	37.8	6.6	20.2	22.2	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	46.2	52.4	0.4	43.8	35.3	7.3	18.4	37.8	6.6	20.2	22.2	0.1
Queue Length 50th (ft)	22	64	0	143	71	0	3	145	0	67	103	0
Queue Length 95th (ft)	69	157	0	299	162	58	13	304	77	151	252	0
Internal Link Dist (ft)		528			1364			5833			547	
Turn Bay Length (ft)	225		350	350		600	250		500	450		
Base Capacity (vph)	578	609	589	964	1015	949	647	1116	1094	736	1420	1225
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.07	0.19	0.03	0.28	0.14	0.20	0.01	0.25	0.33	0.26	0.19	0.02
Intersection Summary												

HCM 7th Signalized Intersection Summary

1: Crowfoot Valley Rd & Stroh Rd

02/03/2026

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	38	105	14	249	133	175	7	261	334	177	254	21
Future Volume (veh/h)	38	105	14	249	133	175	7	261	334	177	254	21
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	41	114	15	271	145	190	8	284	363	192	276	23
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	159	167	141	347	365	309	421	560	475	409	723	612
Arrive On Green	0.09	0.09	0.09	0.20	0.20	0.20	0.01	0.30	0.30	0.10	0.39	0.39
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	41	114	15	271	145	190	8	284	363	192	276	23
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	1.5	4.3	0.6	10.4	4.9	7.9	0.2	9.0	15.0	5.0	7.7	0.7
Cycle Q Clear(g_c), s	1.5	4.3	0.6	10.4	4.9	7.9	0.2	9.0	15.0	5.0	7.7	0.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	159	167	141	347	365	309	421	560	475	409	723	612
V/C Ratio(X)	0.26	0.68	0.11	0.78	0.40	0.61	0.02	0.51	0.76	0.47	0.38	0.04
Avail Cap(c_a), veh/h	741	779	660	1236	1298	1100	897	1427	1210	1101	1817	1539
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.6	31.8	30.2	27.5	25.3	26.5	17.3	20.8	22.9	14.5	15.9	13.8
Incr Delay (d2), s/veh	0.3	1.8	0.1	2.9	0.5	1.5	0.0	1.0	3.7	0.3	0.5	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	1.9	0.2	4.4	2.1	2.9	0.1	3.6	5.3	1.7	2.8	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	30.9	33.7	30.3	30.4	25.8	28.0	17.3	21.9	26.6	14.8	16.4	13.8
LnGrp LOS	C	C	C	C	C	C	B	C	C	B	B	B
Approach Vol, veh/h	170			606			655			491		
Approach Delay, s/veh	32.7			28.6			24.4			15.7		
Approach LOS	C			C			C			B		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.0	27.6		12.4	5.7	33.8		20.1				
Change Period (Y+Rc), s	5.0	6.0		6.0	5.0	6.0		6.0				
Max Green Setting (Gmax), s	35.0	55.0		30.0	20.0	70.0		50.0				
Max Q Clear Time (g_c+I1), s	7.0	17.0		6.3	2.2	9.7		12.4				
Green Ext Time (p_c), s	0.1	4.6		0.4	0.0	2.4		1.6				
Intersection Summary												
HCM 7th Control Delay, s/veh	24.2											
HCM 7th LOS	C											

Queues

2: Crowfoot Valley Rd & S Chambers Rd/Bayou Gulch Rd

02/03/2026



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	40	248	16	654	197	370	4	129	354	53
v/c Ratio	0.21	0.32	0.03	0.87	0.63	0.70	0.01	0.45	0.78	0.12
Control Delay (s/veh)	23.4	26.2	21.4	51.6	35.1	51.0	0.0	30.2	61.1	3.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	23.4	26.2	21.4	51.6	35.1	51.0	0.0	30.2	61.1	3.1
Queue Length 50th (ft)	18	116	7	531	114	293	0	71	295	0
Queue Length 95th (ft)	48	258	24	#976	174	426	0	117	439	13
Internal Link Dist (ft)		496		564		2512			5833	
Turn Bay Length (ft)	550		300		550		400	550		350
Base Capacity (vph)	331	786	642	751	410	989	895	459	979	862
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.12	0.32	0.02	0.87	0.48	0.37	0.00	0.28	0.36	0.06

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

HCM 7th Signalized Intersection Summary

2: Crowfoot Valley Rd & S Chambers Rd/Bayou Gulch Rd

02/03/2026

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	37	132	97	15	429	173	181	340	4	119	326	49
Future Volume (veh/h)	37	132	97	15	429	173	181	340	4	119	326	49
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1767	1870	1752	1796	1870	1885	1826	1870	1900	1841	1856	1841
Adj Flow Rate, veh/h	40	143	0	16	466	188	197	370	4	129	354	53
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	9	2	10	7	2	1	5	2	0	4	3	4
Cap, veh/h	164	788		541	516	208	301	506	436	281	444	374
Arrive On Green	0.03	0.42	0.00	0.02	0.41	0.41	0.10	0.27	0.27	0.07	0.24	0.24
Sat Flow, veh/h	1682	1870	0	1711	1267	511	1739	1870	1610	1753	1856	1560
Grp Volume(v), veh/h	40	143	0	16	0	654	197	370	4	129	354	53
Grp Sat Flow(s),veh/h/ln	1682	1870	0	1711	0	1778	1739	1870	1610	1753	1856	1560
Q Serve(g_s), s	1.5	5.4	0.0	0.6	0.0	38.7	9.4	20.2	0.2	6.1	20.1	3.0
Cycle Q Clear(g_c), s	1.5	5.4	0.0	0.6	0.0	38.7	9.4	20.2	0.2	6.1	20.1	3.0
Prop In Lane	1.00		0.00	1.00		0.29	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	164	788		541	0	724	301	506	436	281	444	374
V/C Ratio(X)	0.24	0.18		0.03	0.00	0.90	0.65	0.73	0.01	0.46	0.80	0.14
Avail Cap(c_a), veh/h	410	833		892	0	871	509	1166	1003	544	1156	972
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.2	20.3	0.0	18.8	0.0	31.2	29.6	37.3	30.0	30.1	40.1	33.6
Incr Delay (d2), s/veh	0.8	0.2	0.0	0.0	0.0	11.9	0.9	4.3	0.0	0.4	6.8	0.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	2.3	0.0	0.2	0.0	18.1	3.8	9.4	0.1	2.5	9.6	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	25.9	20.5	0.0	18.8	0.0	43.1	30.5	41.6	30.0	30.6	47.0	34.0
LnGrp LOS	C	C		B		D	C	D	C	C	D	C
Approach Vol, veh/h	183			670			571			536		
Approach Delay, s/veh	21.7			42.5			37.7			41.7		
Approach LOS	C			D			D			D		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.1	52.3	13.6	37.4	7.5	53.9	17.1	33.9				
Change Period (Y+Rc), s	5.5	6.5	5.5	7.0	5.5	6.5	5.5	7.0				
Max Green Setting (Gmax), s	20.0	55.0	25.0	70.0	25.0	50.0	25.0	70.0				
Max Q Clear Time (g_c+I1), s	3.5	40.7	8.1	22.2	2.6	7.4	11.4	22.1				
Green Ext Time (p_c), s	0.1	5.0	0.1	4.6	0.0	1.1	0.2	4.8				
Intersection Summary												
HCM 7th Control Delay, s/veh				39.0								
HCM 7th LOS				D								
Notes												
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.												

Intersection

Int Delay, s/veh 2.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	67	119	406	47	27	411
Future Vol, veh/h	67	119	406	47	27	411
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	215	-	440	500	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	4	6	4	4
Mvmt Flow	73	129	441	51	29	447

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	947	441	0
Stage 1	441	-	-
Stage 2	505	-	-
Critical Hdwy	6.4	6.2	-
Critical Hdwy Stg 1	5.4	-	-
Critical Hdwy Stg 2	5.4	-	-
Follow-up Hdwy	3.5	3.3	-
Pot Cap-1 Maneuver	292	620	-
Stage 1	653	-	-
Stage 2	610	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	284	620	-
Mov Cap-2 Maneuver	284	-	-
Stage 1	653	-	-
Stage 2	593	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	15.8	0	0.52
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1WBLn2	SBL	SBT
Capacity (veh/h)	-	- 284 620 1061	-	-
HCM Lane V/C Ratio	-	- 0.256 0.209 0.028	-	-
HCM Ctrl Dly (s/v)	-	- 22 12.3 8.5	-	-
HCM Lane LOS	-	- C B A	-	-
HCM 95th %tile Q(veh)	-	- 1 0.8 0.1	-	-

Intersection						
Int Delay, s/veh	6.7					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	160	31	422	82	24	454
Future Vol, veh/h	160	31	422	82	24	454
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	Free	-	None
Storage Length	0	250	-	880	450	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	3	5	1	4	3
Mvmt Flow	174	34	459	89	26	493
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1004	459	0	-	459	0
Stage 1	459	-	-	-	-	-
Stage 2	546	-	-	-	-	-
Critical Hdwy	6.42	6.23	-	-	4.14	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.327	-	-	2.236	-
Pot Cap-1 Maneuver	268	600	-	0	1092	-
Stage 1	636	-	-	0	-	-
Stage 2	581	-	-	0	-	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	262	600	-	-	1092	-
Mov Cap-2 Maneuver	262	-	-	-	-	-
Stage 1	636	-	-	-	-	-
Stage 2	567	-	-	-	-	-
Approach	WB	NB	SB			
HCM Ctrl Dly, s/v	37.36	0	0.42			
HCM LOS	E					
Minor Lane/Major Mvmt	NBTWBLn1WBLn2		SBL	SBT		
Capacity (veh/h)	-	262 600	1092	-		
HCM Lane V/C Ratio	-	0.665 0.056	0.024	-		
HCM Ctrl Dly (s/v)	-	42.4 11.4	8.4	-		
HCM Lane LOS	-	E B	A	-		
HCM 95th %tile Q(veh)	-	4.3 0.2	0.1	-		

Intersection

Int Delay, s/veh 8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	134	18	516	65	18	574
Future Vol, veh/h	134	18	516	65	18	574
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	None
Storage Length	220	0	-	575	575	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	146	20	561	71	20	624

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	1224	-	0
Stage 1	561	-	-
Stage 2	663	-	-
Critical Hdwy	6.63	-	-
Critical Hdwy Stg 1	5.83	-	-
Critical Hdwy Stg 2	5.43	-	-
Follow-up Hdwy	3.519	-	-
Pot Cap-1 Maneuver	184	0	-
Stage 1	536	0	-
Stage 2	511	0	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	180	-	-
Mov Cap-2 Maneuver	180	-	-
Stage 1	536	-	-
Stage 2	501	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	77.22	0	0.27
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBRWBLn1WBLn2	SBL	SBT
Capacity (veh/h)	-	-	180	-
HCM Lane V/C Ratio	-	-	0.808	-
HCM Ctrl Dly (s/v)	-	-	77.2	-
HCM Lane LOS	-	-	F	-
HCM 95th %tile Q(veh)	-	-	5.5	-

Intersection						
Int Delay, s/veh	1.9					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	50	245	81	531	685	23
Future Vol, veh/h	50	245	81	531	685	23
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	None
Storage Length	265	0	600	-	-	250
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	54	266	88	577	745	25
Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1209	-	770	0	-	0
Stage 1	745	-	-	-	-	-
Stage 2	465	-	-	-	-	-
Critical Hdwy	6.63	-	4.13	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.83	-	-	-	-	-
Follow-up Hdwy	3.519	-	2.219	-	-	-
Pot Cap-1 Maneuver	188	0	843	-	-	-
Stage 1	468	0	-	-	-	-
Stage 2	600	0	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	168	-	843	-	-	-
Mov Cap-2 Maneuver	168	-	-	-	-	-
Stage 1	419	-	-	-	-	-
Stage 2	600	-	-	-	-	-
Approach	EB	NB	SB			
HCM Ctrl Dly, s/v	36.23	1.29	0			
HCM LOS	E					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	843	-	168	-	-	-
HCM Lane V/C Ratio	0.104	-	0.323	-	-	-
HCM Ctrl Dly (s/v)	9.8	-	36.2	0	-	-
HCM Lane LOS	A	-	E	A	-	-
HCM 95th %tile Q(veh)	0.3	-	1.3	-	-	-

Queues

1: Crowfoot Valley Rd & Stroh Rd

02/03/2026

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	34	129	16	392	76	173	7	270	373	202	305	30
v/c Ratio	0.16	0.58	0.06	0.75	0.14	0.29	0.02	0.60	0.56	0.47	0.41	0.04
Control Delay (s/veh)	53.2	62.5	0.4	47.6	32.6	6.3	24.3	47.0	7.7	26.9	29.0	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	53.2	62.5	0.4	47.6	32.6	6.3	24.3	47.0	7.7	26.9	29.0	0.1
Queue Length 50th (ft)	22	88	0	251	40	0	3	172	0	92	149	0
Queue Length 95th (ft)	66	195	0	465	95	55	14	338	87	192	330	0
Internal Link Dist (ft)	528			1364			5833			547		
Turn Bay Length (ft)	225	350		350	600		250	500		450		
Base Capacity (vph)	497	523	521	828	872	832	575	959	996	649	1221	1064
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.07	0.25	0.03	0.47	0.09	0.21	0.01	0.28	0.37	0.31	0.25	0.03
Intersection Summary												

HCM 7th Signalized Intersection Summary

1: Crowfoot Valley Rd & Stroh Rd

02/03/2026

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	31	119	15	361	70	159	6	248	343	186	281	28
Future Volume (veh/h)	31	119	15	361	70	159	6	248	343	186	281	28
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	34	129	16	392	76	173	7	270	373	202	305	30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	167	175	149	449	471	400	372	546	463	394	714	605
Arrive On Green	0.09	0.09	0.09	0.25	0.25	0.25	0.01	0.29	0.29	0.10	0.38	0.38
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	34	129	16	392	76	173	7	270	373	202	305	30
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	1.5	5.9	0.8	18.4	2.8	8.0	0.2	10.4	19.0	6.5	10.5	1.0
Cycle Q Clear(g_c), s	1.5	5.9	0.8	18.4	2.8	8.0	0.2	10.4	19.0	6.5	10.5	1.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	167	175	149	449	471	400	372	546	463	394	714	605
V/C Ratio(X)	0.20	0.74	0.11	0.87	0.16	0.43	0.02	0.49	0.81	0.51	0.43	0.05
Avail Cap(c_a), veh/h	612	643	545	1020	1071	908	764	1178	998	932	1499	1271
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.6	38.5	36.2	31.3	25.5	27.4	21.5	25.6	28.6	18.1	19.9	17.0
Incr Delay (d2), s/veh	0.2	2.3	0.1	4.1	0.1	0.6	0.0	1.0	4.7	0.4	0.6	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	2.7	0.3	8.0	1.2	2.9	0.1	4.4	7.1	2.4	4.2	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	36.8	40.8	36.3	35.4	25.6	28.0	21.5	26.6	33.3	18.5	20.5	17.1
LnGrp LOS	D	D	D	D	C	C	C	C	C	B	C	B
Approach Vol, veh/h	179			641			650			537		
Approach Delay, s/veh	39.6			32.2			30.4			19.6		
Approach LOS	D			C			C			B		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	13.6	31.5		14.2	5.8	39.3		28.0				
Change Period (Y+Rc), s	5.0	6.0		6.0	5.0	6.0		6.0				
Max Green Setting (Gmax), s	35.0	55.0		30.0	20.0	70.0		50.0				
Max Q Clear Time (g_c+I1), s	8.5	21.0		7.9	2.2	12.5		20.4				
Green Ext Time (p_c), s	0.1	4.5		0.4	0.0	2.7		1.6				
Intersection Summary												
HCM 7th Control Delay, s/veh	28.9											
HCM 7th LOS	C											

Queues

2: Crowfoot Valley Rd & S Chambers Rd/Bayou Gulch Rd

02/03/2026



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	63	593	9	294	115	451	5	183	379	39
v/c Ratio	0.16	0.81	0.05	0.49	0.34	0.79	0.01	0.64	0.64	0.07
Control Delay (s/veh)	24.3	43.0	25.0	36.9	21.4	49.6	0.0	29.6	40.5	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	24.3	43.0	25.0	36.9	21.4	49.6	0.0	29.6	40.5	0.3
Queue Length 50th (ft)	27	367	4	168	48	309	0	80	242	0
Queue Length 95th (ft)	71	#867	18	336	96	512	0	146	404	0
Internal Link Dist (ft)		496		564		2512			5833	
Turn Bay Length (ft)	550		300		550		400	550		350
Base Capacity (vph)	473	734	437	815	514	1092	980	451	1081	944
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.81	0.02	0.36	0.22	0.41	0.01	0.41	0.35	0.04

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

HCM 7th Signalized Intersection Summary

2: Crowfoot Valley Rd & S Chambers Rd/Bayou Gulch Rd

02/03/2026

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	58	387	158	8	149	121	106	415	5	168	349	36
Future Volume (veh/h)	58	387	158	8	149	121	106	415	5	168	349	36
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1767	1870	1752	1796	1870	1885	1826	1870	1900	1841	1856	1841
Adj Flow Rate, veh/h	63	421	0	9	162	132	115	451	5	183	379	39
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	9	2	10	7	2	1	5	2	0	4	3	4
Cap, veh/h	258	522		172	232	189	367	589	507	343	639	537
Arrive On Green	0.05	0.28	0.00	0.01	0.24	0.24	0.06	0.31	0.31	0.09	0.34	0.34
Sat Flow, veh/h	1682	1870	0	1711	954	777	1739	1870	1610	1753	1856	1560
Grp Volume(v), veh/h	63	421	0	9	0	294	115	451	5	183	379	39
Grp Sat Flow(s),veh/h/ln	1682	1870	0	1711	0	1731	1739	1870	1610	1753	1856	1560
Q Serve(g_s), s	2.2	17.1	0.0	0.3	0.0	12.6	3.6	17.7	0.2	5.6	13.7	1.4
Cycle Q Clear(g_c), s	2.2	17.1	0.0	0.3	0.0	12.6	3.6	17.7	0.2	5.6	13.7	1.4
Prop In Lane	1.00		0.00	1.00		0.45	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	258	522		172	0	422	367	589	507	343	639	537
V/C Ratio(X)	0.24	0.81		0.05	0.00	0.70	0.31	0.77	0.01	0.53	0.59	0.07
Avail Cap(c_a), veh/h	592	1148		678	0	1168	788	1607	1383	716	1594	1340
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.4	27.3	0.0	24.0	0.0	28.1	17.7	25.2	19.2	18.3	22.0	18.0
Incr Delay (d2), s/veh	0.5	4.2	0.0	0.1	0.0	3.0	0.2	4.4	0.0	0.5	1.9	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	7.5	0.0	0.1	0.0	5.2	1.3	7.7	0.1	2.0	5.6	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	22.9	31.6	0.0	24.1	0.0	31.0	17.9	29.6	19.2	18.8	23.9	18.1
LnGrp LOS	C	C		C		C	B	C	B	B	C	B
Approach Vol, veh/h	484			303			571			601		
Approach Delay, s/veh	30.4			30.8			27.2			22.0		
Approach LOS	C			C			C			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.3	26.3	13.2	32.7	6.4	29.2	10.8	35.1				
Change Period (Y+Rc), s	5.5	6.5	5.5	7.0	5.5	6.5	5.5	7.0				
Max Green Setting (Gmax), s	20.0	55.0	25.0	70.0	25.0	50.0	25.0	70.0				
Max Q Clear Time (g_c+I1), s	4.2	14.6	7.6	19.7	2.3	19.1	5.6	15.7				
Green Ext Time (p_c), s	0.1	2.7	0.2	5.9	0.0	3.7	0.1	5.1				
Intersection Summary												
HCM 7th Control Delay, s/veh				26.9								
HCM 7th LOS				C								
Notes												
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.												

Intersection

Int Delay, s/veh 2.2

Movement	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NER
Lane Configurations		↗		↗	↗	↗	↗			
Traffic Vol, veh/h	0	68	0	458	45	90	425	0	0	0
Future Vol, veh/h	0	68	0	458	45	90	425	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	-	None	-	-	None	-	-
Storage Length	0	215	-	-	440	500	-	-	-	-
Veh in Median Storage, #	0	-	-	0	-	-	0	-	0	-
Grade, %	0	-	-	0	-	-	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	0	2	4	6	4	4	2	2	2
Mvmt Flow	0	74	0	498	49	98	462	0	0	0

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	1155	498	0
Stage 1	498	-	-
Stage 2	658	-	-
Critical Hdwy	6.4	6.2	4.14
Critical Hdwy Stg 1	5.4	-	-
Critical Hdwy Stg 2	5.4	-	-
Follow-up Hdwy	3.5	3.3	2.236
Pot Cap-1 Maneuver	220	576	1013
Stage 1	615	0	-
Stage 2	519	0	-
Platoon blocked, %			
Mov Cap-1 Maneuver	198	576	1013
Mov Cap-2 Maneuver	198	-	-
Stage 1	615	-	-
Stage 2	469	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	16.46	0	1.56
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1WBLn2	SBL	SBT
Capacity (veh/h)	-	198 576	1013	-
HCM Lane V/C Ratio	-	0.159 0.128	0.097	-
HCM Ctrl Dly (s/v)	-	26.6 12.2	8.9	-
HCM Lane LOS	-	D B	A	-
HCM 95th %tile Q(veh)	-	0.6 0.4	0.3	-

Intersection								
Int Delay, s/veh	4.5							
Movement	WBL	WBR	NBT	NBR	SBL	SBT	SWL	SWR
Lane Configurations								
Traffic Vol, veh/h	122	38	465	0	29	425	0	0
Future Vol, veh/h	122	38	465	0	29	425	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	-	-	-	-	None	-	None
Storage Length	0	370	-	880	370	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0	0	-
Grade, %	0	-	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	3	5	2	4	3	2	2
Mvmt Flow	133	41	505	0	32	462	0	0
Major/Minor	Minor1	Major1	Major2					
Conflicting Flow All	1030	505	0	-	505	0		
Stage 1	505	-	-	-	-	-		
Stage 2	525	-	-	-	-	-		
Critical Hdwy	6.42	6.23	-	-	4.14	-		
Critical Hdwy Stg 1	5.42	-	-	-	-	-		
Critical Hdwy Stg 2	5.42	-	-	-	-	-		
Follow-up Hdwy	3.518	3.327	-	-	2.236	-		
Pot Cap-1 Maneuver	258	565	-	0	1049	-		
Stage 1	606	-	-	0	-	-		
Stage 2	593	-	-	0	-	-		
Platoon blocked, %			-			-		
Mov Cap-1 Maneuver	251	565	-	-	1049	-		
Mov Cap-2 Maneuver	251	-	-	-	-	-		
Stage 1	606	-	-	-	-	-		
Stage 2	576	-	-	-	-	-		
Approach	WB	NB	SB					
HCM Ctrl Dly, s/v	29.06	0	0.55					
HCM LOS	D							
Minor Lane/Major Mvmt	NBTWBLn1WBLn2			SBL	SBT			
Capacity (veh/h)	-	251	565	1049	-			
HCM Lane V/C Ratio	-	0.529	0.073	0.03	-			
HCM Ctrl Dly (s/v)	-	34.4	11.9	8.5	-			
HCM Lane LOS	-	D	B	A	-			
HCM 95th %tile Q(veh)	-	2.8	0.2	0.1	-			

Intersection						
Int Delay, s/veh	4.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	101	16	554	139	18	567
Future Vol, veh/h	101	16	554	139	18	567
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	None
Storage Length	220	0	-	575	575	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	110	17	602	151	20	616
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1258	-	0	0	753	0
Stage 1	602	-	-	-	-	-
Stage 2	655	-	-	-	-	-
Critical Hdwy	6.63	-	-	-	4.13	-
Critical Hdwy Stg 1	5.83	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.519	-	-	-	2.219	-
Pot Cap-1 Maneuver	175	0	-	-	855	-
Stage 1	510	0	-	-	-	-
Stage 2	516	0	-	-	-	-
Platoon blocked, %		-	-	-	-	-
Mov Cap-1 Maneuver	171	-	-	-	855	-
Mov Cap-2 Maneuver	171	-	-	-	-	-
Stage 1	510	-	-	-	-	-
Stage 2	504	-	-	-	-	-
Approach	WB	NB	SB			
HCM Ctrl Dly, s/v	57.38	0	0.29			
HCM LOS	F					
Minor Lane/Major Mvmt	NBT	NBRWBLn1WBLn2	SBL	SBT		
Capacity (veh/h)	-	- 171	-	855	-	
HCM Lane V/C Ratio	-	- 0.641	-	0.023	-	
HCM Ctrl Dly (s/v)	-	- 57.4	0	9.3	-	
HCM Lane LOS	-	- F	A	A	-	
HCM 95th %tile Q(veh)	-	- 3.6	-	0.1	-	

Intersection						
Int Delay, s/veh	2.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	22	127	232	671	628	40
Future Vol, veh/h	22	127	232	671	628	40
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	None
Storage Length	265	0	600	-	-	250
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	24	138	252	729	683	43
Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1552	-	726	0	-	0
Stage 1	683	-	-	-	-	-
Stage 2	869	-	-	-	-	-
Critical Hdwy	6.63	-	4.13	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.83	-	-	-	-	-
Follow-up Hdwy	3.519	-	2.219	-	-	-
Pot Cap-1 Maneuver	114	0	875	-	-	-
Stage 1	501	0	-	-	-	-
Stage 2	372	0	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	81	-	875	-	-	-
Mov Cap-2 Maneuver	81	-	-	-	-	-
Stage 1	356	-	-	-	-	-
Stage 2	372	-	-	-	-	-
Approach	EB	NB	SB			
HCM Ctrl Dly, s/v	66.85	2.77	0			
HCM LOS	F					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	875	-	81	-	-	-
HCM Lane V/C Ratio	0.288	-	0.294	-	-	-
HCM Ctrl Dly (s/v)	10.8	-	66.8	0	-	-
HCM Lane LOS	B	-	F	A	-	-
HCM 95th %tile Q(veh)	1.2	-	1.1	-	-	-

Queues

1: Crowfoot Valley Rd & Stroh Rd

02/03/2026

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	42	118	15	282	150	198	9	296	378	200	287	24
v/c Ratio	0.20	0.52	0.05	0.67	0.34	0.38	0.02	0.58	0.54	0.44	0.35	0.03
Control Delay (s/veh)	48.2	54.8	0.4	45.5	36.5	7.3	19.1	39.4	6.6	21.2	23.0	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	48.2	54.8	0.4	45.5	36.5	7.3	19.1	39.4	6.6	21.2	23.0	0.1
Queue Length 50th (ft)	23	69	0	156	76	0	3	158	0	73	112	0
Queue Length 95th (ft)	73	168	0	326	175	61	15	330	79	163	271	0
Internal Link Dist (ft)		528			1364			5833			547	
Turn Bay Length (ft)	225		350	350		600	250		500	450		
Base Capacity (vph)	560	589	574	933	982	928	639	1081	1077	721	1376	1189
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.08	0.20	0.03	0.30	0.15	0.21	0.01	0.27	0.35	0.28	0.21	0.02
Intersection Summary												

HCM 7th Signalized Intersection Summary

1: Crowfoot Valley Rd & Stroh Rd

02/03/2026

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	39	109	14	259	138	182	8	272	348	184	264	22
Future Volume (veh/h)	39	109	14	259	138	182	8	272	348	184	264	22
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	42	118	15	282	150	198	9	296	378	200	287	24
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	162	170	144	356	373	316	419	574	487	406	738	625
Arrive On Green	0.09	0.09	0.09	0.20	0.20	0.20	0.01	0.31	0.31	0.10	0.39	0.39
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	42	118	15	282	150	198	9	296	378	200	287	24
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	1.7	4.6	0.7	11.4	5.3	8.6	0.3	9.9	16.4	5.4	8.3	0.7
Cycle Q Clear(g_c), s	1.7	4.6	0.7	11.4	5.3	8.6	0.3	9.9	16.4	5.4	8.3	0.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	162	170	144	356	373	316	419	574	487	406	738	625
V/C Ratio(X)	0.26	0.70	0.10	0.79	0.40	0.63	0.02	0.52	0.78	0.49	0.39	0.04
Avail Cap(c_a), veh/h	706	742	628	1177	1236	1047	870	1360	1152	1054	1730	1466
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.0	33.4	31.6	28.8	26.3	27.7	17.7	21.6	23.9	15.0	16.4	14.1
Incr Delay (d2), s/veh	0.3	1.9	0.1	3.0	0.5	1.5	0.0	1.0	3.8	0.3	0.5	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	2.1	0.2	4.8	2.3	3.2	0.1	4.0	5.9	1.9	3.1	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	32.4	35.3	31.7	31.8	26.9	29.2	17.7	22.6	27.7	15.3	16.9	14.1
LnGrp LOS	C	D	C	C	C	C	B	C	C	B	B	B
Approach Vol, veh/h	175			630			683			511		
Approach Delay, s/veh	34.3			29.8			25.3			16.1		
Approach LOS	C			C			C			B		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.5	29.2		12.9	5.9	35.8		21.1				
Change Period (Y+Rc), s	5.0	6.0		6.0	5.0	6.0		6.0				
Max Green Setting (Gmax), s	35.0	55.0		30.0	20.0	70.0		50.0				
Max Q Clear Time (g_c+I1), s	7.4	18.4		6.6	2.3	10.3		13.4				
Green Ext Time (p_c), s	0.1	4.8		0.4	0.0	2.5		1.7				
Intersection Summary												
HCM 7th Control Delay, s/veh	25.2											
HCM 7th LOS	C											

Queues

2: Crowfoot Valley Rd & S Chambers Rd/Bayou Gulch Rd

02/03/2026



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	42	258	16	681	205	384	4	135	368	55
v/c Ratio	0.25	0.33	0.03	0.92	0.66	0.71	0.01	0.47	0.80	0.12
Control Delay (s/veh)	25.5	27.5	22.4	58.8	35.9	51.1	0.0	30.5	61.9	3.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	25.5	27.5	22.4	58.8	35.9	51.1	0.0	30.5	61.9	3.4
Queue Length 50th (ft)	19	126	7	583	120	309	0	75	312	0
Queue Length 95th (ft)	51	278	25	#1067	181	445	0	122	462	16
Internal Link Dist (ft)		496		564		2512			5833	
Turn Bay Length (ft)	550		300		500		400	550		350
Base Capacity (vph)	307	777	625	740	403	973	882	455	964	850
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.14	0.33	0.03	0.92	0.51	0.39	0.00	0.30	0.38	0.06

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

HCM 7th Signalized Intersection Summary

2: Crowfoot Valley Rd & S Chambers Rd/Bayou Gulch Rd

02/03/2026

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	39	137	100	15	446	180	189	353	4	124	339	51
Future Volume (veh/h)	39	137	100	15	446	180	189	353	4	124	339	51
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1767	1870	1752	1796	1870	1885	1826	1870	1900	1841	1856	1841
Adj Flow Rate, veh/h	42	149	0	16	485	196	205	384	4	135	368	55
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	9	2	10	7	2	1	5	2	0	4	3	4
Cap, veh/h	149	801		540	524	212	297	516	445	277	455	382
Arrive On Green	0.03	0.43	0.00	0.02	0.41	0.41	0.10	0.28	0.28	0.07	0.24	0.24
Sat Flow, veh/h	1682	1870	0	1711	1266	512	1739	1870	1610	1753	1856	1560
Grp Volume(v), veh/h	42	149	0	16	0	681	205	384	4	135	368	55
Grp Sat Flow(s),veh/h/ln	1682	1870	0	1711	0	1778	1739	1870	1610	1753	1856	1560
Q Serve(g_s), s	1.7	5.9	0.0	0.6	0.0	43.5	10.4	22.4	0.2	6.8	22.4	3.3
Cycle Q Clear(g_c), s	1.7	5.9	0.0	0.6	0.0	43.5	10.4	22.4	0.2	6.8	22.4	3.3
Prop In Lane	1.00		0.00	1.00		0.29	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	149	801		540	0	736	297	516	445	277	455	382
V/C Ratio(X)	0.28	0.19		0.03	0.00	0.92	0.69	0.74	0.01	0.49	0.81	0.14
Avail Cap(c_a), veh/h	377	801		868	0	817	478	1093	941	513	1085	912
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.3	21.3	0.0	19.6	0.0	33.3	31.2	39.5	31.5	31.8	42.6	35.4
Incr Delay (d2), s/veh	1.0	0.2	0.0	0.0	0.0	15.8	1.1	4.5	0.0	0.5	7.2	0.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	2.5	0.0	0.3	0.0	21.1	4.2	10.4	0.1	2.8	10.7	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	28.3	21.4	0.0	19.6	0.0	49.1	32.3	44.0	31.5	32.3	49.8	35.7
LnGrp LOS	C	C		B		D	C	D	C	C	D	D
Approach Vol, veh/h	191		697			593			558			
Approach Delay, s/veh	22.9		48.4			39.9			44.1			
Approach LOS	C		D			D			D			
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.3	56.1	14.3	40.1	7.6	57.8	18.1	36.3				
Change Period (Y+Rc), s	5.5	6.5	5.5	7.0	5.5	6.5	5.5	7.0				
Max Green Setting (Gmax), s	20.0	55.0	25.0	70.0	25.0	50.0	25.0	70.0				
Max Q Clear Time (g_c+I1), s	3.7	45.5	8.8	24.4	2.6	7.9	12.4	24.4				
Green Ext Time (p_c), s	0.1	4.0	0.1	4.8	0.0	1.1	0.2	5.0				
Intersection Summary												
HCM 7th Control Delay, s/veh	42.4											
HCM 7th LOS	D											
Notes												
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.												

Intersection

Int Delay, s/veh 3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	67	119	427	47	27	427
Future Vol, veh/h	67	119	427	47	27	427
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	215	-	440	500	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	4	6	4	4
Mvmt Flow	73	129	464	51	29	464

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	987	464	0
Stage 1	464	-	-
Stage 2	523	-	-
Critical Hdwy	6.4	6.2	-
Critical Hdwy Stg 1	5.4	-	-
Critical Hdwy Stg 2	5.4	-	-
Follow-up Hdwy	3.5	3.3	-
Pot Cap-1 Maneuver	277	602	-
Stage 1	637	-	-
Stage 2	599	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	269	602	-
Mov Cap-2 Maneuver	269	-	-
Stage 1	637	-	-
Stage 2	582	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	16.45	0	0.51
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1WBLn2	SBL	SBT
Capacity (veh/h)	-	- 269 602 1040	-	-
HCM Lane V/C Ratio	-	- 0.271 0.215 0.028	-	-
HCM Ctrl Dly (s/v)	-	- 23.3 12.6 8.6	-	-
HCM Lane LOS	-	- C B A	-	-
HCM 95th %tile Q(veh)	-	- 1.1 0.8 0.1	-	-

Intersection

Int Delay, s/veh 7.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	160	31	443	82	24	470
Future Vol, veh/h	160	31	443	82	24	470
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	Free	-	None
Storage Length	0	250	-	880	450	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	3	5	1	4	3
Mvmt Flow	174	34	482	89	26	511

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	1045	482	0
Stage 1	482	-	-
Stage 2	563	-	-
Critical Hdwy	6.42	6.23	-
Critical Hdwy Stg 1	5.42	-	-
Critical Hdwy Stg 2	5.42	-	-
Follow-up Hdwy	3.518	3.327	-
Pot Cap-1 Maneuver	253	583	-
Stage 1	621	-	-
Stage 2	570	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	247	583	-
Mov Cap-2 Maneuver	247	-	-
Stage 1	621	-	-
Stage 2	556	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	42.08	0	0.41
HCM LOS	E		

Minor Lane/Major Mvmt	NBTWBLn1WBLn2	SBL	SBT
Capacity (veh/h)	- 247 583	1071	-
HCM Lane V/C Ratio	- 0.703 0.058	0.024	-
HCM Ctrl Dly (s/v)	- 48 11.6	8.4	-
HCM Lane LOS	- E B	A	-
HCM 95th %tile Q(veh)	- 4.7 0.2	0.1	-

Intersection						
Int Delay, s/veh	9.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	134	18	537	65	18	590
Future Vol, veh/h	134	18	537	65	18	590
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	None
Storage Length	220	0	-	575	575	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	146	20	584	71	20	641
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1264	-	0	0	654	0
Stage 1	584	-	-	-	-	-
Stage 2	680	-	-	-	-	-
Critical Hdwy	6.63	-	-	-	4.13	-
Critical Hdwy Stg 1	5.83	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.519	-	-	-	2.219	-
Pot Cap-1 Maneuver	174	0	-	-	931	-
Stage 1	522	0	-	-	-	-
Stage 2	502	0	-	-	-	-
Platoon blocked, %		-	-	-	-	-
Mov Cap-1 Maneuver	170	-	-	-	931	-
Mov Cap-2 Maneuver	170	-	-	-	-	-
Stage 1	522	-	-	-	-	-
Stage 2	491	-	-	-	-	-
Approach	WB	NB	SB			
HCM Ctrl Dly, s/v	89.8	0	0.27			
HCM LOS	F					
Minor Lane/Major Mvmt	NBT	NBRWBLn1WBLn2	SBL	SBT		
Capacity (veh/h)	-	- 170	- 931	-		
HCM Lane V/C Ratio	-	- 0.856	- 0.021	-		
HCM Ctrl Dly (s/v)	-	- 89.8	0 9	-		
HCM Lane LOS	-	- F	A A	-		
HCM 95th %tile Q(veh)	-	- 6	- 0.1	-		

Intersection						
Int Delay, s/veh	1.9					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	50	245	81	552	701	23
Future Vol, veh/h	50	245	81	552	701	23
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	None
Storage Length	265	0	600	-	-	250
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	54	266	88	600	762	25

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	1238	- 787	0 - 0
Stage 1	762	- -	- - -
Stage 2	476	- -	- - -
Critical Hdwy	6.63	- 4.13	- - -
Critical Hdwy Stg 1	5.43	- -	- - -
Critical Hdwy Stg 2	5.83	- -	- - -
Follow-up Hdwy	3.519	- 2.219	- - -
Pot Cap-1 Maneuver	180	0 830	- - -
Stage 1	460	0 -	- - -
Stage 2	592	0 -	- - -
Platoon blocked, %			- - -
Mov Cap-1 Maneuver	161	- 830	- - -
Mov Cap-2 Maneuver	161	- -	- - -
Stage 1	411	- -	- - -
Stage 2	592	- -	- - -

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	38.27	1.26	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	830	-	161	-	-	-
HCM Lane V/C Ratio	0.106	-	0.337	-	-	-
HCM Ctrl Dly (s/v)	9.9	-	38.3	0	-	-
HCM Lane LOS	A	-	E	A	-	-
HCM 95th %tile Q(veh)	0.4	-	1.4	-	-	-

Queues

1: Crowfoot Valley Rd & Stroh Rd

02/03/2026

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	35	135	16	408	79	180	8	280	388	210	318	32
v/c Ratio	0.16	0.60	0.06	0.76	0.14	0.30	0.02	0.62	0.57	0.50	0.43	0.05
Control Delay (s/veh)	54.8	65.1	0.4	48.9	33.4	6.3	25.0	49.5	7.8	28.5	30.4	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	54.8	65.1	0.4	48.9	33.4	6.3	25.0	49.5	7.8	28.5	30.4	0.1
Queue Length 50th (ft)	24	98	0	274	43	0	4	190	0	102	168	0
Queue Length 95th (ft)	69	205	0	501	101	57	16	355	89	201	348	0
Internal Link Dist (ft)		528			1364			5833			547	
Turn Bay Length (ft)	225		350	350		600	250		500	450		
Base Capacity (vph)	475	499	503	792	833	807	561	917	976	626	1167	1021
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.07	0.27	0.03	0.52	0.09	0.22	0.01	0.31	0.40	0.34	0.27	0.03
Intersection Summary												

HCM 7th Signalized Intersection Summary

1: Crowfoot Valley Rd & Stroh Rd

02/03/2026

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	32	124	15	375	73	166	7	258	357	193	293	29
Future Volume (veh/h)	32	124	15	375	73	166	7	258	357	193	293	29
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	35	135	16	408	79	180	8	280	388	210	318	32
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	171	179	152	462	485	411	367	558	473	390	727	616
Arrive On Green	0.10	0.10	0.10	0.26	0.26	0.26	0.01	0.30	0.30	0.10	0.39	0.39
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	35	135	16	408	79	180	8	280	388	210	318	32
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	1.7	6.6	0.9	20.5	3.0	8.9	0.3	11.5	21.2	7.2	11.7	1.2
Cycle Q Clear(g_c), s	1.7	6.6	0.9	20.5	3.0	8.9	0.3	11.5	21.2	7.2	11.7	1.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	171	179	152	462	485	411	367	558	473	390	727	616
V/C Ratio(X)	0.21	0.75	0.11	0.88	0.16	0.44	0.02	0.50	0.82	0.54	0.44	0.05
Avail Cap(c_a), veh/h	572	601	509	954	1002	849	730	1102	934	880	1403	1189
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.9	41.1	38.6	33.2	26.7	28.9	22.5	27.0	30.4	19.1	21.0	17.8
Incr Delay (d2), s/veh	0.2	2.4	0.1	4.4	0.1	0.5	0.0	1.0	5.0	0.4	0.6	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	3.0	0.3	8.9	1.3	3.3	0.1	4.9	8.1	2.7	4.7	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	39.1	43.5	38.7	37.6	26.9	29.4	22.5	28.0	35.4	19.6	21.6	17.9
LnGrp LOS	D	D	D	D	C	C	C	C	D	B	C	B
Approach Vol, veh/h	186			667			676			560		
Approach Delay, s/veh	42.3			34.1			32.2			20.6		
Approach LOS	D			C			C			C		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	14.3	33.9		14.9	5.9	42.3		30.2				
Change Period (Y+Rc), s	5.0	6.0		6.0	5.0	6.0		6.0				
Max Green Setting (Gmax), s	35.0	55.0		30.0	20.0	70.0		50.0				
Max Q Clear Time (g_c+I1), s	9.2	23.2		8.6	2.3	13.7		22.5				
Green Ext Time (p_c), s	0.1	4.6		0.4	0.0	2.9		1.7				
Intersection Summary												
HCM 7th Control Delay, s/veh	30.6											
HCM 7th LOS	C											

Queues

2: Crowfoot Valley Rd & S Chambers Rd/Bayou Gulch Rd

02/03/2026



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	66	617	10	305	120	470	7	189	395	41
v/c Ratio	0.18	0.87	0.06	0.50	0.37	0.81	0.01	0.68	0.65	0.07
Control Delay (s/veh)	25.3	51.1	26.1	38.4	22.6	52.6	0.0	32.5	42.1	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	25.3	51.1	26.1	38.4	22.6	52.6	0.0	32.5	42.1	0.3
Queue Length 50th (ft)	29	402	4	180	50	328	0	83	256	0
Queue Length 95th (ft)	77	#959	20	364	98	540	0	149	424	1
Internal Link Dist (ft)		496		564		2512			5833	
Turn Bay Length (ft)	550		300		500		400	550		350
Base Capacity (vph)	460	709	408	787	500	1053	948	433	1043	913
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.14	0.87	0.02	0.39	0.24	0.45	0.01	0.44	0.38	0.04

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

HCM 7th Signalized Intersection Summary

2: Crowfoot Valley Rd & S Chambers Rd/Bayou Gulch Rd

02/03/2026

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	61	403	165	9	155	126	110	432	6	174	363	38
Future Volume (veh/h)	61	403	165	9	155	126	110	432	6	174	363	38
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1767	1870	1752	1796	1870	1885	1826	1870	1900	1841	1856	1841
Adj Flow Rate, veh/h	66	438	0	10	168	137	120	470	7	189	395	41
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	9	2	10	7	2	1	5	2	0	4	3	4
Cap, veh/h	254	534		166	240	196	362	604	520	336	653	549
Arrive On Green	0.05	0.29	0.00	0.01	0.25	0.25	0.07	0.32	0.32	0.09	0.35	0.35
Sat Flow, veh/h	1682	1870	0	1711	953	777	1739	1870	1610	1753	1856	1560
Grp Volume(v), veh/h	66	438	0	10	0	305	120	470	7	189	395	41
Grp Sat Flow(s),veh/h/ln	1682	1870	0	1711	0	1730	1739	1870	1610	1753	1856	1560
Q Serve(g_s), s	2.5	18.8	0.0	0.4	0.0	13.8	3.9	19.6	0.3	6.1	15.1	1.5
Cycle Q Clear(g_c), s	2.5	18.8	0.0	0.4	0.0	13.8	3.9	19.6	0.3	6.1	15.1	1.5
Prop In Lane	1.00		0.00	1.00		0.45	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	254	534		166	0	436	362	604	520	336	653	549
V/C Ratio(X)	0.26	0.82		0.06	0.00	0.70	0.33	0.78	0.01	0.56	0.61	0.07
Avail Cap(c_a), veh/h	567	1085		641	0	1104	752	1519	1308	678	1507	1267
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.3	28.7	0.0	24.9	0.0	29.3	18.4	26.4	19.8	19.2	23.0	18.6
Incr Delay (d2), s/veh	0.5	4.5	0.0	0.1	0.0	2.9	0.2	4.6	0.0	0.6	1.9	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	8.4	0.0	0.1	0.0	5.7	1.4	8.6	0.1	2.2	6.2	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	23.8	33.2	0.0	25.1	0.0	32.2	18.6	31.0	19.9	19.7	24.9	18.7
LnGrp LOS	C	C		C		C	B	C	B	B	C	B
Approach Vol, veh/h	504					315		597		625		
Approach Delay, s/veh	32.0					31.9		28.4		23.0		
Approach LOS	C					C		C		C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.5	28.2	13.7	34.8	6.6	31.1	11.2	37.3				
Change Period (Y+Rc), s	5.5	6.5	5.5	7.0	5.5	6.5	5.5	7.0				
Max Green Setting (Gmax), s	20.0	55.0	25.0	70.0	25.0	50.0	25.0	70.0				
Max Q Clear Time (g_c+I1), s	4.5	15.8	8.1	21.6	2.4	20.8	5.9	17.1				
Green Ext Time (p_c), s	0.1	2.8	0.2	6.2	0.0	3.8	0.1	5.3				
Intersection Summary												
HCM 7th Control Delay, s/veh	28.2											
HCM 7th LOS	C											
Notes												
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.												

Intersection

Int Delay, s/veh 2.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	29	68	480	45	90	447
Future Vol, veh/h	29	68	480	45	90	447
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	215	-	440	500	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	4	6	4	4
Mvmt Flow	32	74	522	49	98	486

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	1203	522	0
Stage 1	522	-	-
Stage 2	682	-	-
Critical Hdwy	6.4	6.2	-
Critical Hdwy Stg 1	5.4	-	-
Critical Hdwy Stg 2	5.4	-	-
Follow-up Hdwy	3.5	3.3	-
Pot Cap-1 Maneuver	205	559	-
Stage 1	600	-	-
Stage 2	506	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	185	559	-
Mov Cap-2 Maneuver	185	-	-
Stage 1	600	-	-
Stage 2	456	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	17.19	0	1.51
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	185	559	992
HCM Lane V/C Ratio	-	-	0.17	0.132	0.099
HCM Ctrl Dly (s/v)	-	-	28.4	12.4	9
HCM Lane LOS	-	-	D	B	A
HCM 95th %tile Q(veh)	-	-	0.6	0.5	0.3

Intersection

Int Delay, s/veh 4.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	122	38	487	152	29	447
Future Vol, veh/h	122	38	487	152	29	447
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	Free	-	None
Storage Length	0	250	-	880	450	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	3	5	1	4	3
Mvmt Flow	133	41	529	165	32	486

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	1078	529	0
Stage 1	529	-	-
Stage 2	549	-	-
Critical Hdwy	6.42	6.23	-
Critical Hdwy Stg 1	5.42	-	-
Critical Hdwy Stg 2	5.42	-	-
Follow-up Hdwy	3.518	3.327	-
Pot Cap-1 Maneuver	242	547	-
Stage 1	591	-	-
Stage 2	579	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	235	547	-
Mov Cap-2 Maneuver	235	-	-
Stage 1	591	-	-
Stage 2	561	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	32.31	0	0.52
HCM LOS	D		

Minor Lane/Major Mvmt	NBTWBLn1WBLn2	SBL	SBT
Capacity (veh/h)	- 235 547 1028	-	-
HCM Lane V/C Ratio	- 0.565 0.075 0.031	-	-
HCM Ctrl Dly (s/v)	- 38.6 12.1 8.6	-	-
HCM Lane LOS	- E B A	-	-
HCM 95th %tile Q(veh)	- 3.1 0.2 0.1	-	-

Intersection

Int Delay, s/veh 4.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	101	16	576	139	18	589
Future Vol, veh/h	101	16	576	139	18	589
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	None
Storage Length	220	0	-	575	575	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	110	17	626	151	20	640

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	1305	-	0
Stage 1	626	-	-
Stage 2	679	-	-
Critical Hdwy	6.63	-	-
Critical Hdwy Stg 1	5.83	-	-
Critical Hdwy Stg 2	5.43	-	-
Follow-up Hdwy	3.519	-	-
Pot Cap-1 Maneuver	164	0	-
Stage 1	496	0	-
Stage 2	502	0	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	160	-	-
Mov Cap-2 Maneuver	160	-	-
Stage 1	496	-	-
Stage 2	491	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	66.32	0	0.28
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBRWBLn1WBLn2	SBL	SBT
Capacity (veh/h)	-	-	160	837
HCM Lane V/C Ratio	-	-	0.687	0.023
HCM Ctrl Dly (s/v)	-	-	66.3	0
HCM Lane LOS	-	-	F	A
HCM 95th %tile Q(veh)	-	-	4	0.1

Intersection						
Int Delay, s/veh	2.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	22	127	232	693	650	40
Future Vol, veh/h	22	127	232	693	650	40
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	None
Storage Length	265	0	600	-	-	250
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	24	138	252	753	707	43
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	1588	-	750	0	-	0
Stage 1	707	-	-	-	-	-
Stage 2	881	-	-	-	-	-
Critical Hdwy	6.63	-	4.13	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.83	-	-	-	-	-
Follow-up Hdwy	3.519	-	2.219	-	-	-
Pot Cap-1 Maneuver	108	0	857	-	-	-
Stage 1	488	0	-	-	-	-
Stage 2	366	0	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	76	-	857	-	-	-
Mov Cap-2 Maneuver	76	-	-	-	-	-
Stage 1	344	-	-	-	-	-
Stage 2	366	-	-	-	-	-
Approach	EB	NB		SB		
HCM Ctrl Dly, s/v	72.28	2.74		0		
HCM LOS	F					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	857	-	76	-	-	-
HCM Lane V/C Ratio	0.294	-	0.313	-	-	-
HCM Ctrl Dly (s/v)	10.9	-	72.3	0	-	-
HCM Lane LOS	B	-	F	A	-	-
HCM 95th %tile Q(veh)	1.2	-	1.2	-	-	-

Queues

1: Crowfoot Valley Rd & Stroh Rd

02/03/2026

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	57	160	25	383	202	266	15	464	512	270	445	33
v/c Ratio	0.26	0.70	0.09	0.82	0.41	0.43	0.04	0.81	0.61	0.73	0.53	0.04
Control Delay (s/veh)	70.8	85.4	0.6	70.1	52.0	7.6	25.1	62.7	7.0	37.1	35.3	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	70.8	85.4	0.6	70.1	52.0	7.6	25.1	62.7	7.0	37.1	35.3	0.1
Queue Length 50th (ft)	54	162	0	371	172	0	8	432	0	160	339	0
Queue Length 95th (ft)	116	279	0	#621	301	81	25	#746	105	275	529	0
Internal Link Dist (ft)		528			1364			5833			547	
Turn Bay Length (ft)	225		350	350		600	250		500	450		
Base Capacity (vph)	373	392	418	622	654	729	520	720	926	518	957	852
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.15	0.41	0.06	0.62	0.31	0.36	0.03	0.64	0.55	0.52	0.46	0.04

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

HCM 7th Signalized Intersection Summary

1: Crowfoot Valley Rd & Stroh Rd

02/03/2026

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	52	147	23	352	186	245	14	427	471	248	409	30
Future Volume (veh/h)	52	147	23	352	186	245	14	427	471	248	409	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	57	160	25	383	202	266	15	464	512	270	445	33
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	185	194	165	431	452	383	349	681	577	339	854	724
Arrive On Green	0.10	0.10	0.10	0.24	0.24	0.24	0.02	0.36	0.36	0.11	0.46	0.46
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	57	160	25	383	202	266	15	464	512	270	445	33
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	3.8	10.6	1.8	26.3	11.6	19.4	0.7	26.6	38.5	11.6	21.5	1.5
Cycle Q Clear(g_c), s	3.8	10.6	1.8	26.3	11.6	19.4	0.7	26.6	38.5	11.6	21.5	1.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	185	194	165	431	452	383	349	681	577	339	854	724
V/C Ratio(X)	0.31	0.82	0.15	0.89	0.45	0.69	0.04	0.68	0.89	0.80	0.52	0.05
Avail Cap(c_a), veh/h	421	443	375	702	738	625	601	811	688	637	1033	875
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.6	55.7	51.7	46.4	40.8	43.8	24.9	34.1	37.9	25.5	24.6	19.1
Incr Delay (d2), s/veh	0.3	3.3	0.2	6.9	0.5	1.7	0.0	2.3	12.7	1.6	0.7	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	5.1	0.7	12.2	5.4	7.6	0.3	11.9	16.1	4.7	9.1	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	52.9	59.0	51.9	53.3	41.4	45.5	24.9	36.3	50.5	27.1	25.3	19.2
LnGrp LOS	D	E	D	D	D	D	C	D	D	C	C	B
Approach Vol, veh/h	242			851			991			748		
Approach Delay, s/veh	56.8			48.0			43.5			25.7		
Approach LOS	E			D			D			C		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	18.8	52.2		19.2	7.1	63.9		36.7				
Change Period (Y+Rc), s	5.0	6.0		6.0	5.0	6.0		6.0				
Max Green Setting (Gmax), s	35.0	55.0		30.0	20.0	70.0		50.0				
Max Q Clear Time (g_c+I1), s	13.6	40.5		12.6	2.7	23.5		28.3				
Green Ext Time (p_c), s	0.2	5.7		0.5	0.0	4.2		2.3				
Intersection Summary												
HCM 7th Control Delay, s/veh	41.3											
HCM 7th LOS	D											

Queues

2: Crowfoot Valley Rd & S Chambers Rd/Bayou Gulch Rd

02/03/2026



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	57	350	23	915	280	591	7	180	562	74
v/c Ratio	0.44	0.57	0.08	1.54	0.90	0.80	0.01	0.66	0.87	0.12
Control Delay (s/veh)	44.6	49.2	34.6	288.2	70.7	56.0	0.0	34.6	67.8	6.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	44.6	49.2	34.6	288.2	70.7	56.0	0.0	34.6	67.8	6.0
Queue Length 50th (ft)	41	326	16	~1518	228	592	0	106	606	0
Queue Length 95th (ft)	79	476	40	#1921	#438	834	0	160	793	33
Internal Link Dist (ft)		496		564		2512			5833	
Turn Bay Length (ft)	550		300		500		300	550		350
Base Capacity (vph)	230	613	428	594	328	798	738	371	772	696
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.25	0.57	0.05	1.54	0.85	0.74	0.01	0.49	0.73	0.11

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

HCM 7th Signalized Intersection Summary

2: Crowfoot Valley Rd & S Chambers Rd/Bayou Gulch Rd

02/03/2026

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	52	184	138	21	600	242	258	544	6	166	517	68
Future Volume (veh/h)	52	184	138	21	600	242	258	544	6	166	517	68
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1767	1870	1752	1796	1870	1885	1826	1870	1900	1841	1856	1841
Adj Flow Rate, veh/h	57	200	0	23	652	263	280	591	7	180	562	74
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	9	2	10	7	2	1	5	2	0	4	3	4
Cap, veh/h	100	675		403	442	178	300	718	618	266	636	534
Arrive On Green	0.03	0.36	0.00	0.02	0.35	0.35	0.12	0.38	0.38	0.08	0.34	0.34
Sat Flow, veh/h	1682	1870	0	1711	1267	511	1739	1870	1610	1753	1856	1560
Grp Volume(v), veh/h	57	200	0	23	0	915	280	591	7	180	562	74
Grp Sat Flow(s),veh/h/ln	1682	1870	0	1711	0	1778	1739	1870	1610	1753	1856	1560
Q Serve(g_s), s	3.4	12.1	0.0	1.4	0.0	55.0	16.9	44.9	0.4	10.4	45.0	5.2
Cycle Q Clear(g_c), s	3.4	12.1	0.0	1.4	0.0	55.0	16.9	44.9	0.4	10.4	45.0	5.2
Prop In Lane	1.00		0.00	1.00		0.29	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	100	675		403	0	620	300	718	618	266	636	534
V/C Ratio(X)	0.57	0.30		0.06	0.00	1.47	0.93	0.82	0.01	0.68	0.88	0.14
Avail Cap(c_a), veh/h	259	675		640	0	620	365	830	715	404	824	693
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.9	36.1	0.0	32.2	0.0	51.3	38.5	43.7	30.1	35.3	48.9	35.8
Incr Delay (d2), s/veh	5.1	0.3	0.0	0.0	0.0	222.4	25.5	7.4	0.0	1.1	11.6	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	5.5	0.0	0.6	0.0	62.3	9.0	21.5	0.2	4.4	22.2	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	46.0	36.4	0.0	32.2	0.0	273.7	64.0	51.1	30.1	36.4	60.5	36.0
LnGrp LOS	D	D		C		F	E	D	C	D	E	D
Approach Vol, veh/h	257					938		878		816		
Approach Delay, s/veh	38.5					267.8		55.1		53.0		
Approach LOS	D					F		E		D		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.5	61.5	18.1	67.5	8.7	63.4	24.6	61.0				
Change Period (Y+Rc), s	5.5	6.5	5.5	7.0	5.5	6.5	5.5	7.0				
Max Green Setting (Gmax), s	20.0	55.0	25.0	70.0	25.0	50.0	25.0	70.0				
Max Q Clear Time (g_c+I1), s	5.4	57.0	12.4	46.9	3.4	14.1	18.9	47.0				
Green Ext Time (p_c), s	0.1	0.0	0.2	6.9	0.0	1.6	0.2	7.0				
Intersection Summary												
HCM 7th Control Delay, s/veh	122.1											
HCM 7th LOS	F											
Notes												
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.												

Intersection

Int Delay, s/veh 4.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	67	119	689	47	27	649
Future Vol, veh/h	67	119	689	47	27	649
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	215	-	440	500	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	4	6	4	4
Mvmt Flow	73	129	749	51	29	705

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	1513	749	0
Stage 1	749	-	-
Stage 2	764	-	-
Critical Hdwy	6.4	6.2	-
Critical Hdwy Stg 1	5.4	-	-
Critical Hdwy Stg 2	5.4	-	-
Follow-up Hdwy	3.5	3.3	-
Pot Cap-1 Maneuver	133	415	-
Stage 1	471	-	-
Stage 2	463	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	129	415	-
Mov Cap-2 Maneuver	129	-	-
Stage 1	471	-	-
Stage 2	447	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	34.47	0	0.38
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBRWBLn1WBLn2	SBL	SBT
Capacity (veh/h)	-	-	129	415
HCM Lane V/C Ratio	-	-	0.567	0.312
HCM Ctrl Dly (s/v)	-	-	64.5	17.5
HCM Lane LOS	-	-	F	C
HCM 95th %tile Q(veh)	-	-	2.8	1.3

Intersection

Int Delay, s/veh 32.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	160	31	705	82	24	692
Future Vol, veh/h	160	31	705	82	24	692
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	Free	-	None
Storage Length	0	250	-	880	450	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	3	5	1	4	3
Mvmt Flow	174	34	766	89	26	752

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	1571	766	0
Stage 1	766	-	-
Stage 2	804	-	-
Critical Hdwy	6.42	6.23	-
Critical Hdwy Stg 1	5.42	-	-
Critical Hdwy Stg 2	5.42	-	-
Follow-up Hdwy	3.518	3.327	-
Pot Cap-1 Maneuver	~ 122	401	-
Stage 1	459	-	-
Stage 2	440	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	~ 118	401	-
Mov Cap-2 Maneuver	~ 118	-	-
Stage 1	459	-	-
Stage 2	426	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	271.14	0	0.32
HCM LOS	F		

Minor Lane/Major Mvmt	NBTWBLn1WBLn2	SBL	SBT
Capacity (veh/h)	- 118 401 838	-	-
HCM Lane V/C Ratio	- 1.476 0.084 0.031	-	-
HCM Ctrl Dly (s/v)	- \$ 320.8 14.8 9.4	-	-
HCM Lane LOS	- F B A	-	-
HCM 95th %tile Q(veh)	- 12.3 0.3 0.1	-	-

Notes

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

Queues

5: Crowfoot Valley Rd & Macanta Blvd

02/03/2026

											
Lane Group	EBL	EBR	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Group Flow (vph)	78	236	146	20	208	790	71	20	813	70	
v/c Ratio	0.13	0.49	0.52	0.04	0.69	0.47	0.08	0.06	0.68	0.10	
Control Delay (s/veh)	22.6	6.3	33.2	0.2	30.6	19.9	2.3	8.9	23.0	0.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	22.6	6.3	33.2	0.2	30.6	19.9	2.3	8.9	23.0	0.3	
Queue Length 50th (ft)	10	0	~66	0	67	150	0	4	150	0	
Queue Length 95th (ft)	34	38	81	0	#132	232	13	13	211	0	
Internal Link Dist (ft)						775					13280
Turn Bay Length (ft)	200	200	265	265	300			575	575	300	
Base Capacity (vph)	612	477	281	502	303	1687	882	358	1187	692	
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.13	0.49	0.52	0.04	0.69	0.47	0.08	0.06	0.68	0.10	

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

HCM 7th Signalized Intersection Summary

5: Crowfoot Valley Rd & Macanta Blvd

02/03/2026

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	72	0	217	134	0	18	191	727	65	18	748	64
Future Volume (veh/h)	72	0	217	134	0	18	191	727	65	18	748	64
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	78	0	236	146	0	0	208	790	71	20	813	70
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	201	288	244	424	323		326	1121	500	325	1093	488
Arrive On Green	0.06	0.00	0.15	0.08	0.00	0.00	0.08	0.32	0.32	0.08	0.31	0.31
Sat Flow, veh/h	3456	1870	1585	1781	1870	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	78	0	236	146	0	0	208	790	71	20	813	70
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1781	1870	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	1.4	0.0	9.6	4.5	0.0	0.0	5.2	12.7	2.1	0.5	13.3	2.1
Cycle Q Clear(g_c), s	1.4	0.0	9.6	4.5	0.0	0.0	5.2	12.7	2.1	0.5	13.3	2.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	201	288	244	424	323		326	1121	500	325	1093	488
V/C Ratio(X)	0.39	0.00	0.97	0.34	0.00		0.64	0.70	0.14	0.06	0.74	0.14
Avail Cap(c_a), veh/h	266	288	244	424	323		326	1121	500	325	1093	488
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	0.91	0.91	0.91	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.5	0.0	27.3	20.9	0.0	0.0	15.6	19.6	15.9	13.6	20.2	16.3
Incr Delay (d2), s/veh	1.2	0.0	48.5	0.5	0.0	0.0	3.8	3.4	0.5	0.1	4.6	0.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	6.5	1.8	0.0	0.0	2.0	4.9	0.7	0.2	5.3	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	30.7	0.0	75.8	21.4	0.0	0.0	19.4	23.0	16.5	13.7	24.8	16.9
LnGrp LOS	C		E	C			B	C	B	B	C	B
Approach Vol, veh/h	314			146			1069			903		
Approach Delay, s/veh	64.6			21.4			21.9			23.9		
Approach LOS	E			C			C			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.3	17.7	10.5	27.5	10.5	16.5	11.0	27.0				
Change Period (Y+Rc), s	5.5	6.5	5.5	7.0	5.5	6.5	5.5	7.0				
Max Green Setting (Gmax), s	5.0	10.0	5.0	20.5	5.0	10.0	5.5	20.0				
Max Q Clear Time (g_c+l1), s	3.4	0.0	2.5	14.7	6.5	11.6	7.2	15.3				
Green Ext Time (p_c), s	0.0	0.0	0.0	2.5	0.0	0.0	0.0	2.1				
Intersection Summary												
HCM 7th Control Delay, s/veh	28.1											
HCM 7th LOS	C											
Notes												
Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.												

Queues

6: Crowfoot Valley Rd & Sapphire Pointe Blvd

02/03/2026



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	54	266	88	1014	1170	25
v/c Ratio	0.21	0.67	0.26	0.43	0.65	0.03
Control Delay (s/veh)	24.5	15.9	6.4	6.5	17.0	6.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	24.5	15.9	6.4	6.5	17.0	6.5
Queue Length 50th (ft)	20	24	9	77	226	3
Queue Length 95th (ft)	42	79	29	158	#363	m7
Internal Link Dist (ft)	475			924	775	
Turn Bay Length (ft)	300		600			250
Base Capacity (vph)	490	582	333	2345	1809	821
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.11	0.46	0.26	0.43	0.65	0.03

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

HCM 7th Signalized Intersection Summary

6: Crowfoot Valley Rd & Sapphire Pointe Blvd

02/03/2026



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	50	245	81	933	1076	23
Future Volume (veh/h)	50	245	81	933	1076	23
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	54	0	88	1014	1170	25
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	85		369	2700	2182	973
Arrive On Green	0.05	0.00	0.06	0.76	0.20	0.20
Sat Flow, veh/h	1781	1585	1781	3647	3647	1585
Grp Volume(v), veh/h	54	0	88	1014	1170	25
Grp Sat Flow(s), veh/h/ln	1781	1585	1781	1777	1777	1585
Q Serve(g_s), s	1.9	0.0	1.0	6.2	19.1	0.8
Cycle Q Clear(g_c), s	1.9	0.0	1.0	6.2	19.1	0.8
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	85		369	2700	2182	973
V/C Ratio(X)	0.63		0.24	0.38	0.54	0.03
Avail Cap(c_a), veh/h	493		397	2700	2182	973
HCM Platoon Ratio	1.00	1.00	1.00	1.00	0.33	0.33
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.74	0.74
Uniform Delay (d), s/veh	30.4	0.0	7.2	2.6	17.6	10.3
Incr Delay (d2), s/veh	7.5	0.0	0.3	0.4	0.7	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	0.3	0.5	8.8	0.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	37.9	0.0	7.5	3.0	18.3	10.4
LnGrp LOS	D		A	A	B	B
Approach Vol, veh/h	54			1102	1195	
Approach Delay, s/veh	37.9			3.4	18.2	
Approach LOS	D			A	B	
Timer - Assigned Phs				4	6	7
Phs Duration (G+Y+Rc), s				56.4	8.6	9.5
Change Period (Y+Rc), s				7.0	5.5	5.5
Max Green Setting (Gmax), s				34.5	18.0	5.0
Max Q Clear Time (g_c+I1), s				8.2	3.9	3.0
Green Ext Time (p_c), s				7.1	0.1	0.0
Intersection Summary						
HCM 7th Control Delay, s/veh			11.7			
HCM 7th LOS			B			
Notes						
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.						

Queues

1: Crowfoot Valley Rd & Stroh Rd

02/03/2026

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	47	180	27	552	107	242	12	422	524	283	491	42
v/c Ratio	0.21	0.77	0.09	0.98	0.18	0.36	0.05	0.83	0.64	0.83	0.63	0.06
Control Delay (s/veh)	69.2	91.4	0.6	88.4	46.3	7.0	26.9	70.2	7.5	50.8	41.8	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	69.2	91.4	0.6	88.4	46.3	7.0	26.9	70.2	7.5	50.8	41.8	0.2
Queue Length 50th (ft)	45	185	0	581	82	0	7	411	0	191	382	0
Queue Length 95th (ft)	98	309	0	#1087	168	77	21	639	104	307	610	0
Internal Link Dist (ft)		528			1364			5833			547	
Turn Bay Length (ft)	225		350	350		600	250		500	450		
Base Capacity (vph)	337	354	388	561	591	667	421	650	893	467	865	777
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.14	0.51	0.07	0.98	0.18	0.36	0.03	0.65	0.59	0.61	0.57	0.05

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

HCM 7th Signalized Intersection Summary

1: Crowfoot Valley Rd & Stroh Rd

02/03/2026

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	43	166	25	508	98	223	11	388	482	260	452	39
Future Volume (veh/h)	43	166	25	508	98	223	11	388	482	260	452	39
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	47	180	27	552	107	242	12	422	524	283	491	42
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	196	206	174	539	566	480	271	623	528	331	814	690
Arrive On Green	0.11	0.11	0.11	0.30	0.30	0.30	0.01	0.33	0.33	0.12	0.44	0.44
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	47	180	27	552	107	242	12	422	524	283	491	42
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	4.0	15.7	2.5	50.0	7.0	20.8	0.7	32.1	54.4	16.8	33.2	2.5
Cycle Q Clear(g_c), s	4.0	15.7	2.5	50.0	7.0	20.8	0.7	32.1	54.4	16.8	33.2	2.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	196	206	174	539	566	480	271	623	528	331	814	690
V/C Ratio(X)	0.24	0.87	0.15	1.02	0.19	0.50	0.04	0.68	0.99	0.86	0.60	0.06
Avail Cap(c_a), veh/h	323	340	288	539	566	480	463	623	528	503	814	690
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	67.2	72.4	66.6	57.6	42.6	47.4	36.4	47.5	54.9	35.1	35.7	27.1
Incr Delay (d2), s/veh	0.2	7.3	0.2	45.0	0.1	0.6	0.0	3.3	37.3	5.8	1.5	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	7.9	1.0	28.9	3.3	8.3	0.3	15.2	26.5	7.6	15.1	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	67.4	79.7	66.7	102.6	42.7	48.1	36.4	50.8	92.2	40.9	37.2	27.1
LnGrp LOS	E	E	E	F	D	D	D	D	F	D	D	C
Approach Vol, veh/h	254			901			958			816		
Approach Delay, s/veh	76.1			80.8			73.3			38.0		
Approach LOS	E			F			E			D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	24.0	61.0		24.2	7.1	77.9		56.0				
Change Period (Y+Rc), s	5.0	6.0		6.0	5.0	6.0		6.0				
Max Green Setting (Gmax), s	35.0	55.0		30.0	20.0	70.0		50.0				
Max Q Clear Time (g_c+I1), s	18.8	56.4		17.7	2.7	35.2		52.0				
Green Ext Time (p_c), s	0.2	0.0		0.5	0.0	4.6		0.0				
Intersection Summary												
HCM 7th Control Delay, s/veh	66.0											
HCM 7th LOS	E											

Queues

2: Crowfoot Valley Rd & S Chambers Rd/Bayou Gulch Rd

02/03/2026

										
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	89	832	13	410	164	679	8	255	602	55
v/c Ratio	0.46	1.43	0.14	0.88	0.53	0.92	0.01	0.90	0.72	0.07
Control Delay (s/veh)	45.0	243.5	38.5	80.0	26.6	69.6	0.0	84.7	48.4	2.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	45.0	243.5	38.5	80.0	26.6	69.6	0.0	84.7	48.4	2.3
Queue Length 50th (ft)	70	~1245	10	442	87	752	0	239	564	0
Queue Length 95th (ft)	114	#1657	27	602	152	#1132	0	#462	#894	13
Internal Link Dist (ft)		496		564		2512			5833	
Turn Bay Length (ft)	550		300		500		300	550		350
Base Capacity (vph)	259	583	270	559	409	739	689	290	831	745
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.34	1.43	0.05	0.73	0.40	0.92	0.01	0.88	0.72	0.07

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

HCM 7th Signalized Intersection Summary

2: Crowfoot Valley Rd & S Chambers Rd/Bayou Gulch Rd

02/03/2026

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	82	542	224	12	208	169	151	625	7	235	554	51
Future Volume (veh/h)	82	542	224	12	208	169	151	625	7	235	554	51
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1767	1870	1752	1796	1870	1885	1826	1870	1900	1841	1856	1841
Adj Flow Rate, veh/h	89	589	0	13	226	184	164	679	8	255	602	55
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	9	2	10	7	2	1	5	2	0	4	3	4
Cap, veh/h	190	603		79	274	223	293	743	640	276	810	681
Arrive On Green	0.05	0.32	0.00	0.01	0.29	0.29	0.07	0.40	0.40	0.11	0.44	0.44
Sat Flow, veh/h	1682	1870	0	1711	954	777	1739	1870	1610	1753	1856	1560
Grp Volume(v), veh/h	89	589	0	13	0	410	164	679	8	255	602	55
Grp Sat Flow(s),veh/h/ln	1682	1870	0	1711	0	1731	1739	1870	1610	1753	1856	1560
Q Serve(g_s), s	5.6	48.3	0.0	0.8	0.0	34.3	8.6	53.3	0.5	14.6	42.0	3.2
Cycle Q Clear(g_c), s	5.6	48.3	0.0	0.8	0.0	34.3	8.6	53.3	0.5	14.6	42.0	3.2
Prop In Lane	1.00		0.00	1.00		0.45	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	190	603		79	0	497	293	743	640	276	810	681
V/C Ratio(X)	0.47	0.98		0.17	0.00	0.82	0.56	0.91	0.01	0.92	0.74	0.08
Avail Cap(c_a), veh/h	324	603		331	0	614	452	844	727	369	838	704
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.4	52.0	0.0	44.2	0.0	51.6	29.6	44.2	28.3	39.7	36.5	25.5
Incr Delay (d2), s/veh	1.8	30.8	0.0	0.7	0.0	8.3	0.6	14.6	0.0	20.9	4.3	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	27.2	0.0	0.4	0.0	15.9	3.5	26.7	0.2	7.6	19.2	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	41.2	82.7	0.0	44.9	0.0	60.0	30.3	58.8	28.3	60.5	40.8	25.6
LnGrp LOS	D	F		D		E	C	E	C	E	D	C
Approach Vol, veh/h	678			423			851			912		
Approach Delay, s/veh	77.3			59.5			53.0			45.4		
Approach LOS	E			E			D			D		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	13.1	51.0	22.3	68.6	7.6	56.5	16.3	74.7				
Change Period (Y+Rc), s	5.5	6.5	5.5	7.0	5.5	6.5	5.5	7.0				
Max Green Setting (Gmax), s	20.0	55.0	25.0	70.0	25.0	50.0	25.0	70.0				
Max Q Clear Time (g_c+I1), s	7.6	36.3	16.6	55.3	2.8	50.3	10.6	44.0				
Green Ext Time (p_c), s	0.1	3.3	0.2	6.4	0.0	0.0	0.2	7.8				

Intersection Summary

HCM 7th Control Delay, s/veh	57.3
HCM 7th LOS	E

Notes

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

Intersection

Int Delay, s/veh 2.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	29	68	715	45	90	700
Future Vol, veh/h	29	68	715	45	90	700
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	215	-	440	500	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	4	6	4	4
Mvmt Flow	32	74	777	49	98	761

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	1734	777	0
Stage 1	777	-	-
Stage 2	957	-	-
Critical Hdwy	6.4	6.2	-
Critical Hdwy Stg 1	5.4	-	-
Critical Hdwy Stg 2	5.4	-	-
Follow-up Hdwy	3.5	3.3	-
Pot Cap-1 Maneuver	98	400	-
Stage 1	457	-	-
Stage 2	376	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	86	400	-
Mov Cap-2 Maneuver	86	-	-
Stage 1	457	-	-
Stage 2	330	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	32.09	0	1.16
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBRWBLn1WBLn2	SBL	SBT
Capacity (veh/h)	-	-	86	400
HCM Lane V/C Ratio	-	-	0.368	0.185
HCM Ctrl Dly (s/v)	-	-	69.8	16
HCM Lane LOS	-	-	F	C
HCM 95th %tile Q(veh)	-	-	1.4	0.7

Intersection

Int Delay, s/veh 17.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	122	38	722	152	29	700
Future Vol, veh/h	122	38	722	152	29	700
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	Free	-	None
Storage Length	0	250	-	880	450	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	3	5	1	4	3
Mvmt Flow	133	41	785	165	32	761

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	1609	785	0
Stage 1	785	-	-
Stage 2	824	-	-
Critical Hdwy	6.42	6.23	-
Critical Hdwy Stg 1	5.42	-	-
Critical Hdwy Stg 2	5.42	-	-
Follow-up Hdwy	3.518	3.327	-
Pot Cap-1 Maneuver	~ 115	391	-
Stage 1	450	-	-
Stage 2	431	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	~ 111	391	-
Mov Cap-2 Maneuver	~ 111	-	-
Stage 1	450	-	-
Stage 2	415	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	172.21	0	0.38
HCM LOS	F		

Minor Lane/Major Mvmt	NBTWBLn1WBLn2	SBL	SBT
Capacity (veh/h)	- 111 391	825	-
HCM Lane V/C Ratio	- 1.196 0.106	0.038	-
HCM Ctrl Dly (s/v)	- 221.1 15.3	9.5	-
HCM Lane LOS	- F C	A	-
HCM 95th %tile Q(veh)	- 8.5 0.4	0.1	-

Notes

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

Queues

5: Crowfoot Valley Rd & Macanta Blvd

02/03/2026

										
Lane Group	EBL	EBR	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	50	150	110	17	207	832	151	20	841	74
v/c Ratio	0.15	0.27	0.32	0.03	0.53	0.43	0.15	0.05	0.55	0.09
Control Delay (s/veh)	43.2	1.2	32.6	0.1	14.3	15.6	0.3	9.6	24.1	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	43.2	1.2	32.6	0.1	14.3	15.6	0.3	9.6	24.1	0.2
Queue Length 50th (ft)	11	0	67	0	54	137	0	5	207	0
Queue Length 95th (ft)	35	0	94	0	97	257	0	15	302	0
Internal Link Dist (ft)	775						13280			
Turn Bay Length (ft)	200	200	265	265	300		575	575		300
Base Capacity (vph)	330	643	403	759	392	1949	996	583	1518	804
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.15	0.23	0.27	0.02	0.53	0.43	0.15	0.03	0.55	0.09
Intersection Summary										

HCM 7th Signalized Intersection Summary 5: Crowfoot Valley Rd & Macanta Blvd

02/03/2026

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	46	0	138	101	0	16	190	765	139	18	774	68
Future Volume (veh/h)	46	0	138	101	0	16	190	765	139	18	774	68
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	50	0	150	110	0	0	207	832	151	20	841	74
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	130	214	181	346	282		412	1835	819	372	1736	774
Arrive On Green	0.04	0.00	0.11	0.07	0.00	0.00	0.08	0.52	0.52	0.05	0.49	0.49
Sat Flow, veh/h	3456	1870	1585	1781	1870	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	50	0	150	110	0	0	207	832	151	20	841	74
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1781	1870	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	1.4	0.0	9.3	5.3	0.0	0.0	5.7	14.8	5.1	0.5	15.9	2.5
Cycle Q Clear(g_c), s	1.4	0.0	9.3	5.3	0.0	0.0	5.7	14.8	5.1	0.5	15.9	2.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	130	214	181	346	282		412	1835	819	372	1736	774
V/C Ratio(X)	0.39	0.00	0.83	0.32	0.00		0.50	0.45	0.18	0.05	0.48	0.10
Avail Cap(c_a), veh/h	173	337	285	534	580		450	1835	819	604	1736	774
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	0.91	0.91	0.91	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.0	0.0	43.3	35.0	0.0	0.0	12.5	15.3	12.9	11.5	17.1	13.7
Incr Delay (d2), s/veh	1.9	0.0	10.7	0.5	0.0	0.0	0.9	0.7	0.5	0.1	1.0	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	4.0	2.3	0.0	0.0	2.0	5.4	1.7	0.2	6.0	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	48.9	0.0	54.1	35.5	0.0	0.0	13.4	16.0	13.4	11.6	18.1	14.0
LnGrp LOS	D		D	D			B	B	B	B	B	B
Approach Vol, veh/h	200		110			1190			935			
Approach Delay, s/veh	52.8		35.5			15.2			17.6			
Approach LOS	D		D			B			B			
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.3	21.6	10.5	58.6	12.9	17.9	13.3	55.9				
Change Period (Y+Rc), s	5.5	6.5	5.5	7.0	5.5	6.5	5.5	7.0				
Max Green Setting (Gmax), s	5.0	31.0	18.0	21.5	18.0	18.0	9.9	29.6				
Max Q Clear Time (g_c+l1), s	3.4	0.0	2.5	16.8	7.3	11.3	7.7	17.9				
Green Ext Time (p_c), s	0.0	0.0	0.0	2.3	0.2	0.2	0.1	4.2				
Intersection Summary												
HCM 7th Control Delay, s/veh	20.1											
HCM 7th LOS	C											
Notes												
Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.												

Queues

6: Crowfoot Valley Rd & Sapphire Pointe Blvd

02/03/2026



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	24	138	252	1165	1058	43
v/c Ratio	0.13	0.49	0.54	0.43	0.57	0.05
Control Delay (s/veh)	29.2	11.9	8.3	4.5	15.3	5.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	29.2	11.9	8.3	4.5	15.3	5.0
Queue Length 50th (ft)	10	0	23	82	154	0
Queue Length 95th (ft)	29	44	73	146	285	18
Internal Link Dist (ft)	94			924	775	
Turn Bay Length (ft)	300		600			250
Base Capacity (vph)	455	509	481	2729	1853	849
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.05	0.27	0.52	0.43	0.57	0.05
Intersection Summary						

HCM 7th Signalized Intersection Summary

6: Crowfoot Valley Rd & Sapphire Pointe Blvd

02/03/2026



Movement	EBL	EBR	NBL	NBT	SBT	SBR	
Lane Configurations							
Traffic Volume (veh/h)	22	127	232	1072	973	40	
Future Volume (veh/h)	22	127	232	1072	973	40	
Initial Q (Qb), veh	0	0	0	0	0	0	
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	
Work Zone On Approach	No			No	No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	
Adj Flow Rate, veh/h	24	0	252	1165	1058	43	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Percent Heavy Veh, %	2	2	2	2	2	2	
Cap, veh/h	47		485	2824	2284	1019	
Arrive On Green	0.03	0.00	0.07	0.79	0.64	0.64	
Sat Flow, veh/h	1781	1585	1781	3647	3647	1585	
Grp Volume(v), veh/h	24	0	252	1165	1058	43	
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1777	1777	1585	
Q Serve(g_s), s	0.9	0.0	2.9	7.0	10.6	0.7	
Cycle Q Clear(g_c), s	0.9	0.0	2.9	7.0	10.6	0.7	
Prop In Lane	1.00	1.00	1.00			1.00	
Lane Grp Cap(c), veh/h	47		485	2824	2284	1019	
V/C Ratio(X)	0.51		0.52	0.41	0.46	0.04	
Avail Cap(c_a), veh/h	458		571	2824	2284	1019	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.86	0.86	
Uniform Delay (d), s/veh	33.6	0.0	4.9	2.2	6.4	4.6	
Incr Delay (d2), s/veh	8.1	0.0	0.9	0.4	0.6	0.1	
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	
%ile BackOfQ(50%),veh/ln	0.5	0.0	0.5	0.4	2.6	1.2	
Unsig. Movement Delay, s/veh							
LnGrp Delay(d), s/veh	41.7	0.0	5.8	2.6	6.9	4.7	
LnGrp LOS	D		A	A	A	A	
Approach Vol, veh/h	24			1417	1101		
Approach Delay, s/veh	41.7			3.2	6.9		
Approach LOS	D			A	A		
Timer - Assigned Phs				4	6	7	8
Phs Duration (G+Y+Rc), s				62.6	7.4	10.6	52.0
Change Period (Y+Rc), s				7.0	5.5	5.5	7.0
Max Green Setting (Gmax), s				39.5	18.0	8.5	25.5
Max Q Clear Time (g_c+I1), s				9.0	2.9	4.9	12.6
Green Ext Time (p_c), s				8.9	0.0	0.2	5.5
Intersection Summary							
HCM 7th Control Delay, s/veh			5.1				
HCM 7th LOS			A				
Notes							
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.							

APPENDIX H – Total Future (with site development) Synchro Outputs

Queues

1: Crowfoot Valley Rd & Stroh Rd

02/06/2026

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	40	114	45	357	145	190	57	482	512	192	391	23
v/c Ratio	0.27	0.72	0.16	0.64	0.48	0.46	0.11	0.61	0.53	0.45	0.44	0.03
Control Delay (s/veh)	47.2	70.2	1.3	44.0	42.4	8.8	4.6	15.0	4.3	14.5	21.3	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	47.2	70.2	1.3	44.0	42.4	8.8	4.6	15.0	4.3	14.5	21.3	0.0
Queue Length 50th (ft)	24	72	0	110	85	0	5	102	0	54	165	0
Queue Length 95th (ft)	57	#151	0	146	136	55	12	#443	285	104	285	0
Internal Link Dist (ft)	528			1364			5833			547		
Turn Bay Length (ft)	225		350	650		600	250		500	450		
Base Capacity (vph)	159	167	281	961	521	580	497	790	965	429	896	841
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.25	0.68	0.16	0.37	0.28	0.33	0.11	0.61	0.53	0.45	0.44	0.03

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

HCM 7th Signalized Intersection Summary

1: Crowfoot Valley Rd & Stroh Rd

02/06/2026

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	37	105	41	328	133	175	52	443	471	177	360	21
Future Volume (veh/h)	37	105	41	328	133	175	52	443	471	177	360	21
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	40	114	45	357	145	190	57	482	512	192	391	23
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	142	149	127	530	287	243	497	863	732	361	929	788
Arrive On Green	0.08	0.08	0.08	0.15	0.15	0.15	0.04	0.46	0.46	0.08	0.50	0.50
Sat Flow, veh/h	1781	1870	1585	3456	1870	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	40	114	45	357	145	190	57	482	512	192	391	23
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1728	1870	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	2.1	6.0	2.7	9.8	7.1	11.5	1.6	18.7	25.7	5.5	13.3	0.7
Cycle Q Clear(g_c), s	2.1	6.0	2.7	9.8	7.1	11.5	1.6	18.7	25.7	5.5	13.3	0.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	142	149	127	530	287	243	497	863	732	361	929	788
V/C Ratio(X)	0.28	0.76	0.36	0.67	0.51	0.78	0.11	0.56	0.70	0.53	0.42	0.03
Avail Cap(c_a), veh/h	160	168	143	968	524	444	515	863	732	370	929	788
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.93	0.93	0.93	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.3	45.1	43.6	40.0	38.8	40.7	13.4	19.5	21.4	14.6	16.0	12.8
Incr Delay (d2), s/veh	0.4	13.9	0.6	1.1	1.0	4.1	0.0	2.4	5.1	0.6	1.4	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	3.3	1.1	4.1	3.3	4.6	0.6	7.8	9.5	2.0	5.4	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	43.7	59.0	44.2	41.1	39.9	44.8	13.4	21.9	26.6	15.2	17.4	12.9
LnGrp LOS	D	E	D	D	D	D	B	C	C	B	B	B
Approach Vol, veh/h	199			692			1051			606		
Approach Delay, s/veh	52.6			41.8			23.7			16.5		
Approach LOS	D			D			C			B		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.5	52.2		14.0	9.0	55.7		21.3				
Change Period (Y+Rc), s	5.0	6.0		6.0	5.0	6.0		6.0				
Max Green Setting (Gmax), s	8.0	32.0		9.0	5.0	35.0		28.0				
Max Q Clear Time (g_c+l1), s	7.5	27.7		8.0	3.6	15.3		13.5				
Green Ext Time (p_c), s	0.0	2.4		0.0	0.0	3.0		1.8				
Intersection Summary												
HCM 7th Control Delay, s/veh	29.2											
HCM 7th LOS	C											

Queues

2: Crowfoot Valley Rd & S Chambers Rd/Bayou Gulch Rd

02/06/2026

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	40	143	249	46	466	188	445	765	53	129	585	53
v/c Ratio	0.20	0.20	0.17	0.15	0.65	0.12	0.46	0.47	0.06	0.33	0.38	0.07
Control Delay (s/veh)	25.4	32.7	0.2	24.4	40.8	0.2	10.0	18.6	0.4	10.1	17.3	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	25.4	32.7	0.2	24.4	40.8	0.2	10.0	18.6	0.4	10.1	17.3	0.1
Queue Length 50th (ft)	18	40	0	20	144	0	47	167	0	37	113	0
Queue Length 95th (ft)	38	62	0	43	184	0	m74	272	m3	70	153	0
Internal Link Dist (ft)	496			564			2512			5833		
Turn Bay Length (ft)	550	300		350	300		500	400		550	350	
Base Capacity (vph)	200	1309	1468	310	1305	1599	1021	1641	833	397	1528	800
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.20	0.11	0.17	0.15	0.36	0.12	0.44	0.47	0.06	0.32	0.38	0.07

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

HCM 7th Signalized Intersection Summary

2: Crowfoot Valley Rd & S Chambers Rd/Bayou Gulch Rd

02/06/2026

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	37	132	229	42	429	173	409	704	49	119	538	49
Future Volume (veh/h)	37	132	229	42	429	173	409	704	49	119	538	49
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1767	1870	1752	1796	1870	1885	1826	1870	1900	1841	1856	1841
Adj Flow Rate, veh/h	40	143	0	46	466	0	445	765	53	129	585	53
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	9	2	10	7	2	1	5	2	0	4	3	4
Cap, veh/h	181	643		309	652		956	1706	773	361	1575	697
Arrive On Green	0.03	0.18	0.00	0.04	0.18	0.00	0.03	0.16	0.16	0.06	0.45	0.45
Sat Flow, veh/h	1682	3554	1485	1711	3554	1598	3374	3554	1610	1753	3526	1560
Grp Volume(v), veh/h	40	143	0	46	466	0	445	765	53	129	585	53
Grp Sat Flow(s),veh/h/ln	1682	1777	1485	1711	1777	1598	1687	1777	1610	1753	1763	1560
Q Serve(g_s), s	1.9	3.4	0.0	2.2	12.3	0.0	6.8	19.5	2.8	3.9	11.0	1.9
Cycle Q Clear(g_c), s	1.9	3.4	0.0	2.2	12.3	0.0	6.8	19.5	2.8	3.9	11.0	1.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	181	643		309	652		956	1706	773	361	1575	697
V/C Ratio(X)	0.22	0.22		0.15	0.71		0.47	0.45	0.07	0.36	0.37	0.08
Avail Cap(c_a), veh/h	211	1315		333	1311		1059	1706	773	374	1575	697
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	0.83	0.83	0.83	0.85	0.85	0.85
Uniform Delay (d), s/veh	32.4	34.9	0.0	31.6	38.4	0.0	14.0	30.1	23.1	14.9	18.4	15.9
Incr Delay (d2), s/veh	0.6	0.2	0.0	0.2	2.1	0.0	0.1	0.7	0.1	0.2	0.6	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	1.5	0.0	0.9	5.4	0.0	2.5	9.3	1.0	1.4	4.2	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	33.0	35.2	0.0	31.7	40.5	0.0	14.1	30.8	23.2	15.1	18.9	16.0
LnGrp LOS	C	D		C	D		B	C	C	B	B	B
Approach Vol, veh/h	183			512			1263			767		
Approach Delay, s/veh	34.7			39.7			24.6			18.1		
Approach LOS	C			D			C			B		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.9	24.8	11.3	55.0	9.1	24.6	14.6	51.7				
Change Period (Y+Rc), s	5.5	6.5	5.5	7.0	5.5	6.5	5.5	7.0				
Max Green Setting (Gmax), s	5.1	36.9	6.5	27.0	5.0	37.0	12.2	21.3				
Max Q Clear Time (g_c+l1), s	3.9	14.3	5.9	21.5	4.2	5.4	8.8	13.0				
Green Ext Time (p_c), s	0.0	4.0	0.0	3.3	0.0	1.1	0.3	3.7				
Intersection Summary												
HCM 7th Control Delay, s/veh	26.3											
HCM 7th LOS	C											
Notes												
Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.												

Queues

3: Crowfoot Valley Rd & Access Road 1/N Pinery Pkwy

02/06/2026



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	305	40	88	129	14	828	60	29	779	71
v/c Ratio	0.82	0.07	0.29	0.44	0.03	0.43	0.07	0.08	0.37	0.07
Control Delay (s/veh)	51.7	0.2	30.3	5.1	8.2	8.6	0.2	4.9	8.8	0.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	51.7	0.2	30.3	5.1	8.2	8.6	0.2	4.9	8.8	0.9
Queue Length 50th (ft)	167	0	42	0	3	116	0	7	136	4
Queue Length 95th (ft)	#264	0	81	3	m9	138	1	7	48	0
Internal Link Dist (ft)		265		428		1247			2512	
Turn Bay Length (ft)	650				300		440	500		300
Base Capacity (vph)	380	628	432	472	428	1948	905	347	2114	1009
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.80	0.06	0.20	0.27	0.03	0.43	0.07	0.08	0.37	0.07

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

02/06/2026

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	281	0	37	81	0	119	13	762	55	27	717	65
Future Volume (veh/h)	281	0	37	81	0	119	13	762	55	27	717	65
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1900	1870	1900	1870	1841	1811	1841	1841	1870
Adj Flow Rate, veh/h	305	0	40	88	0	129	14	828	60	29	779	71
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	0	2	0	2	4	6	4	4	2
Cap, veh/h	402	0	329	331	0	163	491	1821	799	227	1381	626
Arrive On Green	0.17	0.00	0.21	0.06	0.00	0.10	0.15	0.52	0.52	0.04	0.53	0.53
Sat Flow, veh/h	1781	0	1585	1810	0	1585	1781	3497	1535	1753	3497	1585
Grp Volume(v), veh/h	305	0	40	88	0	129	14	828	60	29	779	71
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1810	0	1585	1781	1749	1535	1753	1749	1585
Q Serve(g_s), s	14.6	0.0	2.1	4.3	0.0	7.9	0.0	14.9	2.0	1.1	15.0	1.3
Cycle Q Clear(g_c), s	14.6	0.0	2.1	4.3	0.0	7.9	0.0	14.9	2.0	1.1	15.0	1.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	402	0	329	331	0	163	491	1821	799	227	1381	626
V/C Ratio(X)	0.76	0.00	0.12	0.27	0.00	0.79	0.03	0.45	0.08	0.13	0.56	0.11
Avail Cap(c_a), veh/h	439	0	329	550	0	293	491	1821	799	275	1381	626
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.96	0.96	0.96
Uniform Delay (d), s/veh	30.9	0.0	32.2	36.5	0.0	43.8	19.8	15.1	12.0	21.5	17.9	4.9
Incr Delay (d2), s/veh	6.9	0.0	0.2	0.4	0.0	8.2	0.0	0.8	0.2	0.2	1.6	0.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.9	0.0	0.8	1.9	0.0	3.4	0.2	5.4	0.7	0.4	5.1	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	37.8	0.0	32.4	36.9	0.0	52.0	19.8	15.9	12.1	21.7	19.5	5.2
LnGrp LOS	D		C	D		D	B	B	B	C	B	A
Approach Vol, veh/h	345			217			902			879		
Approach Delay, s/veh	37.2			45.9			15.7			18.4		
Approach LOS	D			D			B			B		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.3	56.6	10.9	25.3	19.8	44.0	21.4	14.8				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	5.5	39.1	18.5	18.9	5.1	39.5	18.9	18.5				
Max Q Clear Time (g_c+l1), s	3.1	16.9	6.3	4.1	2.0	17.0	16.6	9.9				
Green Ext Time (p_c), s	0.0	5.4	0.1	0.1	0.0	5.1	0.2	0.4				
Intersection Summary												
HCM 7th Control Delay, s/veh	22.7											
HCM 7th LOS	C											

Queues

4: Crowfoot Valley Rd & Access Road 5/Pradera Pkwy

02/06/2026

										
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	202	80	174	63	28	560	89	75	652	70
v/c Ratio	0.63	0.18	0.53	0.14	0.06	0.28	0.09	0.15	0.30	0.07
Control Delay (s/veh)	41.5	0.9	37.9	0.6	13.3	12.8	0.2	4.5	4.3	0.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	41.5	0.9	37.9	0.6	13.3	12.8	0.2	4.5	4.3	0.7
Queue Length 50th (ft)	109	0	92	0	8	98	0	12	66	0
Queue Length 95th (ft)	168	0	146	0	24	152	0	24	89	0
Internal Link Dist (ft)		355		643		13280			2281	
Turn Bay Length (ft)	300				300		880	450		300
Base Capacity (vph)	349	598	424	673	494	2000	999	514	2179	1046
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.58	0.13	0.41	0.09	0.06	0.28	0.09	0.15	0.30	0.07
Intersection Summary										

02/06/2026

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	186	0	74	160	0	58	26	515	82	69	600	64
Future Volume (veh/h)	186	0	74	160	0	58	26	515	82	69	600	64
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1856	1870	1826	1885	1841	1856	1870
Adj Flow Rate, veh/h	202	0	80	174	0	63	28	560	89	75	652	70
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	3	2	5	1	4	3	2
Cap, veh/h	325	0	117	305	0	97	676	2046	942	301	1287	579
Arrive On Green	0.13	0.00	0.07	0.11	0.00	0.06	0.27	0.59	0.59	0.01	0.12	0.12
Sat Flow, veh/h	1781	0	1585	1781	0	1585	1781	3469	1598	1753	3526	1585
Grp Volume(v), veh/h	202	0	80	174	0	63	28	560	89	75	652	70
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1781	0	1585	1781	1735	1598	1753	1763	1585
Q Serve(g_s), s	10.4	0.0	4.9	8.9	0.0	3.9	0.0	7.9	2.4	3.0	17.3	2.6
Cycle Q Clear(g_c), s	10.4	0.0	4.9	8.9	0.0	3.9	0.0	7.9	2.4	3.0	17.3	2.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	325	0	117	305	0	97	676	2046	942	301	1287	579
V/C Ratio(X)	0.62	0.00	0.68	0.57	0.00	0.65	0.04	0.27	0.09	0.25	0.51	0.12
Avail Cap(c_a), veh/h	378	0	309	470	0	388	676	2046	942	373	1287	579
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.96	0.96	0.96
Uniform Delay (d), s/veh	37.4	0.0	45.2	37.9	0.0	45.9	16.3	10.0	8.9	24.0	35.5	13.0
Incr Delay (d2), s/veh	2.4	0.0	6.8	1.7	0.0	7.1	0.0	0.3	0.2	0.4	1.4	0.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.7	0.0	2.1	3.9	0.0	1.7	0.3	2.6	0.8	1.2	8.3	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	39.9	0.0	52.0	39.6	0.0	53.1	16.3	10.4	9.1	24.4	36.9	13.4
LnGrp LOS	D		D	D		D	B	B	A	C	D	B
Approach Vol, veh/h	282				237				677		797	
Approach Delay, s/veh	43.3				43.2				10.4		33.7	
Approach LOS	D				D				B		C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.9	63.5	15.7	11.9	31.4	41.0	17.0	10.6				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	8.5	33.5	20.5	19.5	5.5	36.5	15.5	24.5				
Max Q Clear Time (g_c+l1), s	5.0	9.9	10.9	6.9	2.0	19.3	12.4	5.9				
Green Ext Time (p_c), s	0.0	3.6	0.3	0.3	0.0	3.8	0.2	0.2				
Intersection Summary												
HCM 7th Control Delay, s/veh	28.3											
HCM 7th LOS	C											

Intersection

Int Delay, s/veh 24.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	134	18	635	65	18	794
Future Vol, veh/h	134	18	635	65	18	794
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	None
Storage Length	220	0	-	575	575	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	146	20	690	71	20	863

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	1592	-	0
Stage 1	690	-	-
Stage 2	902	-	-
Critical Hdwy	6.63	-	-
Critical Hdwy Stg 1	5.83	-	-
Critical Hdwy Stg 2	5.43	-	-
Follow-up Hdwy	3.519	-	-
Pot Cap-1 Maneuver	~ 107	0	-
Stage 1	460	0	-
Stage 2	395	0	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	~ 105	-	-
Mov Cap-2 Maneuver	~ 105	-	-
Stage 1	460	-	-
Stage 2	386	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	296.74	0	0.21
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBRWBLn1WBLn2	SBL	SBT
Capacity (veh/h)	-	-	105	-
HCM Lane V/C Ratio	-	-	1.387	-
HCM Ctrl Dly (s/v)	-	-	296.7	-
HCM Lane LOS	-	-	F	-
HCM 95th %tile Q(veh)	-	-	10.4	-

Notes

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

Intersection						
Int Delay, s/veh	2.6					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	50	245	81	650	905	23
Future Vol, veh/h	50	245	81	650	905	23
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	None
Storage Length	265	0	600	-	-	250
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	54	266	88	707	984	25

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	1513	- 1009	0 - 0
Stage 1	984	- -	- - -
Stage 2	529	- -	- - -
Critical Hdwy	6.63	- 4.13	- - -
Critical Hdwy Stg 1	5.43	- -	- - -
Critical Hdwy Stg 2	5.83	- -	- - -
Follow-up Hdwy	3.519	- 2.219	- - -
Pot Cap-1 Maneuver	121	0 685	- - -
Stage 1	361	0 -	- - -
Stage 2	556	0 -	- - -
Platoon blocked, %			- - -
Mov Cap-1 Maneuver	105	- 685	- - -
Mov Cap-2 Maneuver	105	- -	- - -
Stage 1	315	- -	- - -
Stage 2	556	- -	- - -

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	71.06	1.22	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	685	-	105	-	-	-
HCM Lane V/C Ratio	0.129	-	0.516	-	-	-
HCM Ctrl Dly (s/v)	11	-	71.1	0	-	-
HCM Lane LOS	B	-	F	A	-	-
HCM 95th %tile Q(veh)	0.4	-	2.3	-	-	-

Intersection

Int Delay, s/veh 0.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	37	13	830	795	40
Future Vol, veh/h	0	37	13	830	795	40
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	300	-	-	300
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	40	14	902	864	43

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	-	432	908
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	6.94	4.14
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	3.32	2.22
Pot Cap-1 Maneuver	0	572	746
Stage 1	0	-	-
Stage 2	0	-	-
Platoon blocked, %			-
Mov Cap-1 Maneuver	-	572	746
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	11.77	0.15	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	746	-	572	-	-
HCM Lane V/C Ratio	0.019	-	0.07	-	-
HCM Ctrl Dly (s/v)	9.9	-	11.8	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗	↘	↗↘	↗↘	↗
Traffic Vol, veh/h	0	25	41	843	656	176
Future Vol, veh/h	0	25	41	843	656	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	300	-	-	300
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	27	45	916	713	191
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	-	357	904	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	4.14	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	0	640	748	-	-	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	640	748	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	NB		SB		
HCM Ctrl Dly, s/v	10.88	0.47		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	748	-	640	-	-	
HCM Lane V/C Ratio	0.06	-	0.042	-	-	
HCM Ctrl Dly (s/v)	10.1	-	10.9	-	-	
HCM Lane LOS	B	-	B	-	-	
HCM 95th %tile Q(veh)	0.2	-	0.1	-	-	

Queues

9: Crowfoot Valley Rd & Access Road 4

02/06/2026



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	193	99	58	767	698	42
v/c Ratio	0.67	0.29	0.11	0.29	0.30	0.04
Control Delay (s/veh)	50.5	9.2	1.3	1.9	4.0	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	50.5	9.2	1.3	1.9	4.0	0.3
Queue Length 50th (ft)	117	0	1	11	40	0
Queue Length 95th (ft)	178	41	m4	18	50	1
Internal Link Dist (ft)	403			2281	1025	
Turn Bay Length (ft)		300	300			300
Base Capacity (vph)	539	551	588	2645	2329	1056
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.36	0.18	0.10	0.29	0.30	0.04

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

HCM 7th Signalized Intersection Summary

9: Crowfoot Valley Rd & Access Road 4

02/06/2026

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	178	91	53	706	642	39
Future Volume (veh/h)	178	91	53	706	642	39
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	193	99	58	767	698	42
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	238	211	586	2760	2458	1096
Arrive On Green	0.13	0.13	0.08	1.00	0.69	0.69
Sat Flow, veh/h	1781	1585	1781	3647	3647	1585
Grp Volume(v), veh/h	193	99	58	767	698	42
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1777	1777	1585
Q Serve(g_s), s	10.5	5.8	0.8	0.0	7.5	0.8
Cycle Q Clear(g_c), s	10.5	5.8	0.8	0.0	7.5	0.8
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	238	211	586	2760	2458	1096
V/C Ratio(X)	0.81	0.47	0.10	0.28	0.28	0.04
Avail Cap(c_a), veh/h	543	483	702	2760	2458	1096
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.94	0.94	1.00	1.00
Uniform Delay (d), s/veh	42.1	40.1	3.5	0.0	5.9	4.9
Incr Delay (d2), s/veh	6.6	1.6	0.1	0.2	0.3	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.0	5.2	0.2	0.1	2.2	0.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	48.7	41.7	3.6	0.2	6.2	4.9
LnGrp LOS	D	D	A	A	A	A
Approach Vol, veh/h	292			825	740	
Approach Delay, s/veh	46.3			0.5	6.1	
Approach LOS	D			A	A	
Timer - Assigned Phs	2			4	5	6
Phs Duration (G+Y+Rc), s	82.2			17.8	8.5	73.7
Change Period (Y+Rc), s	4.5			4.5	4.5	4.5
Max Green Setting (Gmax), s	60.5			30.5	10.5	45.5
Max Q Clear Time (g_c+l1), s	2.0			12.5	2.8	9.5
Green Ext Time (p_c), s	5.4			0.8	0.0	4.8
Intersection Summary						
HCM 7th Control Delay, s/veh			9.9			
HCM 7th LOS			A			

Queues

1: Crowfoot Valley Rd & Stroh Rd

02/06/2026

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	34	129	96	628	76	173	68	523	563	202	621	30
v/c Ratio	0.21	0.76	0.31	0.84	0.19	0.35	0.23	0.70	0.58	0.74	0.73	0.04
Control Delay (s/veh)	52.3	79.6	2.5	54.2	37.5	6.3	8.2	13.0	4.3	38.4	33.6	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	52.3	79.6	2.5	54.2	37.5	6.3	8.2	13.0	4.3	38.4	33.6	0.1
Queue Length 50th (ft)	24	95	0	229	46	0	7	61	32	100	416	0
Queue Length 95th (ft)	57	#192	0	295	87	47	m9	m67	65	#175	548	0
Internal Link Dist (ft)	528			1364			5833			547		
Turn Bay Length (ft)	225		350	650		600	250		500	450		
Base Capacity (vph)	170	179	320	821	445	520	298	753	975	281	865	810
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.20	0.72	0.30	0.76	0.17	0.33	0.23	0.69	0.58	0.72	0.72	0.04

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

HCM 7th Signalized Intersection Summary

1: Crowfoot Valley Rd & Stroh Rd

02/06/2026

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	31	119	88	578	70	159	63	481	518	186	571	28
Future Volume (veh/h)	31	119	88	578	70	159	63	481	518	186	571	28
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	34	129	96	628	76	173	68	523	563	202	621	30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	152	160	135	711	385	326	334	782	663	231	684	579
Arrive On Green	0.09	0.09	0.09	0.21	0.21	0.21	0.14	0.42	0.42	0.09	0.37	0.37
Sat Flow, veh/h	1781	1870	1585	3456	1870	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	34	129	96	628	76	173	68	523	563	202	621	30
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1728	1870	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	2.1	7.9	6.9	20.6	3.9	11.4	0.0	26.4	37.5	9.9	36.9	1.4
Cycle Q Clear(g_c), s	2.1	7.9	6.9	20.6	3.9	11.4	0.0	26.4	37.5	9.9	36.9	1.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	152	160	135	711	385	326	334	782	663	231	684	579
V/C Ratio(X)	0.22	0.81	0.71	0.88	0.20	0.53	0.20	0.67	0.85	0.88	0.91	0.05
Avail Cap(c_a), veh/h	167	176	149	827	448	379	334	782	663	231	799	677
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.68	0.68	0.68	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.9	52.6	52.1	45.1	38.5	41.4	42.7	27.5	30.7	32.3	35.3	24.0
Incr Delay (d2), s/veh	0.3	19.6	10.4	9.7	0.2	1.0	0.1	3.1	9.2	28.3	18.1	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	4.5	3.1	9.6	1.8	4.5	1.7	11.6	14.9	5.8	19.1	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	50.2	72.2	62.4	54.8	38.7	42.4	42.8	30.6	39.8	60.6	53.4	24.2
LnGrp LOS	D	E	E	D	D	D	D	C	D	E	D	C
Approach Vol, veh/h	259			877			1154			853		
Approach Delay, s/veh	65.7			51.0			35.8			54.1		
Approach LOS	E			D			D			D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	16.0	54.9		16.0	22.2	48.8		30.1				
Change Period (Y+Rc), s	5.0	6.0		6.0	6.0	* 6		6.0				
Max Green Setting (Gmax), s	11.0	44.0		11.0	5.0	* 50		28.0				
Max Q Clear Time (g_c+I1), s	11.9	39.5		9.9	2.0	38.9		22.6				
Green Ext Time (p_c), s	0.0	2.7		0.1	0.0	3.9		1.4				
Intersection Summary												
HCM 7th Control Delay, s/veh	47.5											
HCM 7th LOS	D											
Notes												
* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.												

Queues

2: Crowfoot Valley Rd & S Chambers Rd/Bayou Gulch Rd

02/06/2026

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	63	421	566	89	162	132	433	957	68	183	1010	39
v/c Ratio	0.14	0.35	0.39	0.26	0.13	0.08	0.89	0.80	0.11	0.80	0.91	0.07
Control Delay (s/veh)	21.4	30.6	0.8	23.3	28.0	0.1	43.7	33.0	3.9	49.6	41.6	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	21.4	30.6	0.8	23.3	28.0	0.1	43.7	33.0	3.9	49.6	41.6	0.3
Queue Length 50th (ft)	28	127	0	40	45	0	124	289	2	66	346	0
Queue Length 95th (ft)	56	173	0	75	72	0	m#156	m303	m13	m#137	#508	m0
Internal Link Dist (ft)		496			564			2512			5833	
Turn Bay Length (ft)	550		300	350		300	500		400	550		350
Base Capacity (vph)	458	1207	1468	345	1207	1599	487	1198	636	233	1108	583
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.14	0.35	0.39	0.26	0.13	0.08	0.89	0.80	0.11	0.79	0.91	0.07

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

HCM 7th Signalized Intersection Summary

2: Crowfoot Valley Rd & S Chambers Rd/Bayou Gulch Rd

02/06/2026

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	58	387	521	82	149	121	398	880	63	168	929	36
Future Volume (veh/h)	58	387	521	82	149	121	398	880	63	168	929	36
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1767	1870	1752	1796	1870	1885	1826	1870	1900	1841	1856	1841
Adj Flow Rate, veh/h	63	421	0	89	162	0	433	957	68	183	1010	39
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	9	2	10	7	2	1	5	2	0	4	3	4
Cap, veh/h	481	1185		362	1208		504	1160	526	248	1097	485
Arrive On Green	0.04	0.33	0.00	0.04	0.34	0.00	0.03	0.11	0.11	0.09	0.31	0.31
Sat Flow, veh/h	1682	3554	1485	1711	3554	1598	3374	3554	1610	1753	3526	1560
Grp Volume(v), veh/h	63	421	0	89	162	0	433	957	68	183	1010	39
Grp Sat Flow(s),veh/h/ln	1682	1777	1485	1711	1777	1598	1687	1777	1610	1753	1763	1560
Q Serve(g_s), s	2.9	10.5	0.0	4.0	3.7	0.0	9.9	30.9	4.5	8.2	32.4	2.1
Cycle Q Clear(g_c), s	2.9	10.5	0.0	4.0	3.7	0.0	9.9	30.9	4.5	8.2	32.4	2.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	481	1185		362	1208		504	1160	526	248	1097	485
V/C Ratio(X)	0.13	0.36		0.25	0.13		0.86	0.82	0.13	0.74	0.92	0.08
Avail Cap(c_a), veh/h	491	1185		362	1208		524	1197	542	250	1115	493
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	0.59	0.59	0.59	0.58	0.58	0.58
Uniform Delay (d), s/veh	24.1	29.5	0.0	24.5	26.7	0.0	30.7	48.9	37.1	28.6	38.9	28.5
Incr Delay (d2), s/veh	0.1	0.8	0.0	0.3	0.2	0.0	7.8	3.2	0.1	5.7	8.1	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	4.5	0.0	1.6	1.6	0.0	4.7	15.1	1.7	3.6	14.4	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	24.2	30.3	0.0	24.7	26.9	0.0	38.5	52.2	37.3	34.4	47.0	28.6
LnGrp LOS	C	C		C	C		D	D	D	C	D	C
Approach Vol, veh/h	484			251			1458			1232		
Approach Delay, s/veh	29.5			26.2			47.4			44.6		
Approach LOS	C			C			D			D		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.9	46.3	15.7	45.2	10.6	45.5	17.5	43.4				
Change Period (Y+Rc), s	5.5	6.5	5.5	7.0	5.5	6.5	5.5	7.0				
Max Green Setting (Gmax), s	5.1	37.7	10.3	39.4	5.1	37.7	12.7	37.0				
Max Q Clear Time (g_c+I1), s	4.9	5.7	10.2	32.9	6.0	12.5	11.9	34.4				
Green Ext Time (p_c), s	0.0	1.3	0.0	4.6	0.0	3.6	0.1	2.0				

Intersection Summary

HCM 7th Control Delay, s/veh 42.3

HCM 7th LOS D

Notes

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

Queues

3: Crowfoot Valley Rd & Access Road 1/N Pinery Pkwy

02/06/2026



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	415	27	66	74	43	968	86	98	1347	221
v/c Ratio	1.33	0.09	0.19	0.29	0.19	0.49	0.09	0.31	0.63	0.21
Control Delay (s/veh)	205.7	0.6	41.9	2.8	13.5	11.8	2.8	6.3	5.6	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	205.7	0.6	41.9	2.8	13.5	11.8	2.8	6.3	5.6	0.3
Queue Length 50th (ft)	~406	0	43	0	13	204	12	12	97	0
Queue Length 95th (ft)	#604	0	85	0	m37	256	28	m17	m116	m0
Internal Link Dist (ft)		265		428		1247			2512	
Turn Bay Length (ft)	650				300		440	500		300
Base Capacity (vph)	313	480	350	410	228	1971	907	340	2127	1055
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.33	0.06	0.19	0.18	0.19	0.49	0.09	0.29	0.63	0.21

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

02/06/2026

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	382	0	25	61	0	68	40	891	79	90	1239	203
Future Volume (veh/h)	382	0	25	61	0	68	40	891	79	90	1239	203
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1900	1870	1900	1870	1841	1811	1841	1841	1870
Adj Flow Rate, veh/h	415	0	27	66	0	74	43	968	86	98	1347	221
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	0	2	0	2	4	6	4	4	2
Cap, veh/h	377	0	68	421	0	102	416	1946	854	260	1653	749
Arrive On Green	0.18	0.00	0.04	0.20	0.00	0.06	0.13	0.56	0.56	0.10	0.95	0.95
Sat Flow, veh/h	1781	0	1585	1810	0	1585	1781	3497	1535	1753	3497	1585
Grp Volume(v), veh/h	415	0	27	66	0	74	43	968	86	98	1347	221
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1810	0	1585	1781	1749	1535	1753	1749	1585
Q Serve(g_s), s	20.7	0.0	1.9	0.0	0.0	5.4	0.0	19.9	1.2	3.8	10.7	0.6
Cycle Q Clear(g_c), s	20.7	0.0	1.9	0.0	0.0	5.4	0.0	19.9	1.2	3.8	10.7	0.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	377	0	68	421	0	102	416	1946	854	260	1653	749
V/C Ratio(X)	1.10	0.00	0.40	0.16	0.00	0.73	0.10	0.50	0.10	0.38	0.81	0.29
Avail Cap(c_a), veh/h	377	0	280	421	0	244	416	1946	854	330	1653	749
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.65	0.65	0.65
Uniform Delay (d), s/veh	49.8	0.0	54.5	37.6	0.0	53.7	17.1	15.9	1.7	20.1	2.0	0.5
Incr Delay (d2), s/veh	76.7	0.0	3.8	0.2	0.0	9.4	0.1	0.9	0.2	0.6	3.0	0.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	19.2	0.0	0.8	1.5	0.0	2.4	0.6	7.4	1.0	1.4	1.7	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	126.4	0.0	58.3	37.8	0.0	63.1	17.2	16.8	2.0	20.7	5.0	1.1
LnGrp LOS	F		E	D		E	B	B	A	C	A	A
Approach Vol, veh/h	442				140				1097		1666	
Approach Delay, s/veh	122.3				51.2				15.7		5.4	
Approach LOS	F				D				B		A	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.2	69.6	27.7	9.5	20.0	59.8	25.2	12.0				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	10.3	50.0	18.0	20.7	5.0	55.3	20.7	18.0				
Max Q Clear Time (g_c+I1), s	5.8	21.9	2.0	3.9	2.0	12.7	22.7	7.4				
Green Ext Time (p_c), s	0.1	7.1	0.1	0.1	0.0	13.3	0.0	0.2				
Intersection Summary												
HCM 7th Control Delay, s/veh	26.1											
HCM 7th LOS	C											

Queues

4: Crowfoot Valley Rd & Access Road 5/Pradera Pkwy

02/06/2026



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	135	54	133	121	88	777	165	93	695	221
v/c Ratio	0.53	0.13	0.48	0.33	0.18	0.36	0.15	0.20	0.30	0.20
Control Delay (s/veh)	48.5	0.7	45.8	2.4	7.0	11.4	1.9	1.7	1.4	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	48.5	0.7	45.8	2.4	7.0	11.4	1.9	1.7	1.4	0.3
Queue Length 50th (ft)	89	0	88	0	17	137	0	2	12	0
Queue Length 95th (ft)	143	0	140	0	37	197	28	m7	24	0
Internal Link Dist (ft)		666		643		13280			2281	
Turn Bay Length (ft)	300				300		880	450		300
Base Capacity (vph)	270	540	338	585	543	2164	1067	511	2290	1110
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.50	0.10	0.39	0.21	0.16	0.36	0.15	0.18	0.30	0.20

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

HCM 7th Signalized Intersection Summary

4: Crowfoot Valley Rd & Access Road 5/Pradera Pkwy

02/06/2026

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	124	0	50	122	0	111	81	715	152	86	639	203
Future Volume (veh/h)	124	0	50	122	0	111	81	715	152	86	639	203
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1856	1870	1826	1885	1841	1856	1870
Adj Flow Rate, veh/h	135	0	54	133	0	121	88	777	165	93	695	221
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	3	2	5	1	4	3	2
Cap, veh/h	238	0	150	298	0	152	703	1497	690	629	1552	698
Arrive On Green	0.08	0.00	0.09	0.09	0.00	0.10	0.23	0.43	0.43	0.47	0.88	0.88
Sat Flow, veh/h	1781	0	1585	1781	0	1585	1781	3469	1598	1753	3526	1585
Grp Volume(v), veh/h	135	0	54	133	0	121	88	777	165	93	695	221
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1781	0	1585	1781	1735	1598	1753	1763	1585
Q Serve(g_s), s	7.9	0.0	3.7	7.7	0.0	8.7	0.0	19.2	5.5	0.0	4.6	1.9
Cycle Q Clear(g_c), s	7.9	0.0	3.7	7.7	0.0	8.7	0.0	19.2	5.5	0.0	4.6	1.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	238	0	150	298	0	152	703	1497	690	629	1552	698
V/C Ratio(X)	0.57	0.00	0.36	0.45	0.00	0.79	0.13	0.52	0.24	0.15	0.45	0.32
Avail Cap(c_a), veh/h	279	0	251	459	0	359	703	1497	690	629	1552	698
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.63	0.63	0.63
Uniform Delay (d), s/veh	43.0	0.0	49.6	42.6	0.0	51.8	9.9	24.4	10.8	11.3	4.2	2.1
Incr Delay (d2), s/veh	2.1	0.0	1.4	1.0	0.0	9.0	0.1	1.3	0.8	0.1	0.6	0.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	0.0	1.5	3.4	0.0	3.8	0.9	7.6	2.8	0.9	1.2	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	45.1	0.0	51.0	43.6	0.0	60.8	10.0	25.6	11.6	11.4	4.8	2.8
LnGrp LOS	D		D	D		E	B	C	B	B	A	A
Approach Vol, veh/h	189			254			1030			1009		
Approach Delay, s/veh	46.8			51.8			22.1			5.0		
Approach LOS	D			D			C			A		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	31.9	55.0	14.5	15.6	30.9	56.0	14.3	15.7				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	9.5	50.5	20.5	18.5	8.5	51.5	12.5	26.5				
Max Q Clear Time (g_c+I1), s	2.0	21.2	9.7	5.7	2.0	6.6	9.9	10.7				
Green Ext Time (p_c), s	0.1	5.8	0.2	0.1	0.1	5.6	0.1	0.5				
Intersection Summary												
HCM 7th Control Delay, s/veh	20.0											
HCM 7th LOS	C											

Intersection

Int Delay, s/veh 24

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	101	16	885	139	18	831
Future Vol, veh/h	101	16	885	139	18	831
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	None
Storage Length	220	0	-	575	575	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	110	17	962	151	20	903

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	1904	-	0
Stage 1	962	-	-
Stage 2	942	-	-
Critical Hdwy	6.63	-	-
Critical Hdwy Stg 1	5.83	-	-
Critical Hdwy Stg 2	5.43	-	-
Follow-up Hdwy	3.519	-	-
Pot Cap-1 Maneuver	~ 68	0	-
Stage 1	332	0	-
Stage 2	378	0	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	~ 65	-	-
Mov Cap-2 Maneuver	~ 65	-	-
Stage 1	332	-	-
Stage 2	366	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	\$ 466.38	0	0.23
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBRWBLn1WBLn2	SBL	SBT
Capacity (veh/h)	-	-	65	-
HCM Lane V/C Ratio	-	-	1.676	-
HCM Ctrl Dly (s/v)	-	-	\$ 466.4	-
HCM Lane LOS	-	-	F	-
HCM 95th %tile Q(veh)	-	-	9.8	-

Notes

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

Intersection						
Int Delay, s/veh	3.6					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	22	127	232	1002	892	40
Future Vol, veh/h	22	127	232	1002	892	40
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	None
Storage Length	265	0	600	-	-	250
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	24	138	252	1089	970	43
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	2018	-	1013	0	-	0
Stage 1	970	-	-	-	-	-
Stage 2	1049	-	-	-	-	-
Critical Hdwy	6.63	-	4.13	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.83	-	-	-	-	-
Follow-up Hdwy	3.519	-	2.219	-	-	-
Pot Cap-1 Maneuver	57	0	682	-	-	-
Stage 1	367	0	-	-	-	-
Stage 2	299	0	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	36	-	682	-	-	-
Mov Cap-2 Maneuver	36	-	-	-	-	-
Stage 1	231	-	-	-	-	-
Stage 2	299	-	-	-	-	-
Approach	EB	NB		SB		
HCM Ctrl Dly, s/v	219	2.51		0		
HCM LOS	F					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	682	-	36	-	-	-
HCM Lane V/C Ratio	0.37	-	0.666	-	-	-
HCM Ctrl Dly (s/v)	13.3	-	219	0	-	-
HCM Lane LOS	B	-	F	A	-	-
HCM 95th %tile Q(veh)	1.7	-	2.3	-	-	-

Intersection

Int Delay, s/veh 0.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	24	41	1010	1220	105
Future Vol, veh/h	0	24	41	1010	1220	105
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	300	-	-	300
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	26	45	1098	1326	114

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	-	663	1440
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	6.94	4.14
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	3.32	2.22
Pot Cap-1 Maneuver	0	404	467
Stage 1	0	-	-
Stage 2	0	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	-	404	467
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	14.53	0.53	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	467	-	404	-	-
HCM Lane V/C Ratio	0.095	-	0.065	-	-
HCM Ctrl Dly (s/v)	13.5	-	14.5	-	-
HCM Lane LOS	B	-	B	-	-
HCM 95th %tile Q(veh)	0.3	-	0.2	-	-

Intersection

Int Delay, s/veh 2

Movement EBL EBR NBL NBT SBT SBRLane Configurations 

Traffic Vol, veh/h 0 256 96 1051 677 567

Future Vol, veh/h 0 256 96 1051 677 567

Conflicting Peds, #/hr 0 0 0 0 0 0

Sign Control Stop Stop Free Free Free Free

RT Channelized - None - None - None

Storage Length - 0 300 - - 300

Veh in Median Storage, # 0 - - 0 0 -

Grade, % 0 - - 0 0 -

Peak Hour Factor 92 92 92 92 92 92

Heavy Vehicles, % 2 2 2 2 2 2

Mvmt Flow 0 278 104 1142 736 616

Major/Minor Minor2 Major1 Major2

Conflicting Flow All - 368 1352 0 - 0

Stage 1 - - - - - -

Stage 2 - - - - - -

Critical Hdwy - 6.94 4.14 - - -

Critical Hdwy Stg 1 - - - - - -

Critical Hdwy Stg 2 - - - - - -

Follow-up Hdwy - 3.32 2.22 - - -

Pot Cap-1 Maneuver 0 629 505 - - -

Stage 1 0 - - - - -

Stage 2 0 - - - - -

Platoon blocked, % - - - - - -

Mov Cap-1 Maneuver - 629 505 - - -

Mov Cap-2 Maneuver - - - - - -

Stage 1 - - - - - -

Stage 2 - - - - - -

Approach EB NB SB

HCM Ctrl Dly, s/v 15.18 1.17 0

HCM LOS C

Minor Lane/Major Mvmt NBL NBT EBLn1 SBT SBR

Capacity (veh/h) 505 - 629 - -

HCM Lane V/C Ratio 0.207 - 0.442 - -

HCM Ctrl Dly (s/v) 14 - 15.2 - -

HCM Lane LOS B - C - -

HCM 95th %tile Q(veh) 0.8 - 2.3 - -

Queues

9: Crowfoot Valley Rd & Access Road 4

02/06/2026



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	372	126	158	875	883	132
v/c Ratio	0.43	0.15	0.67	0.57	0.79	0.22
Control Delay (s/veh)	23.5	4.3	39.9	20.2	26.6	2.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	23.5	4.3	39.9	20.2	26.6	2.1
Queue Length 50th (ft)	177	0	56	165	263	3
Queue Length 95th (ft)	311	38	70	157	296	m10
Internal Link Dist (ft)	789			2281	1025	
Turn Bay Length (ft)		300	300			300
Base Capacity (vph)	863	836	296	1890	1346	683
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.43	0.15	0.53	0.46	0.66	0.19

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

HCM 7th Signalized Intersection Summary

9: Crowfoot Valley Rd & Access Road 4

02/06/2026

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	342	116	145	805	812	121
Future Volume (veh/h)	342	116	145	805	812	121
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	372	126	158	875	883	132
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	947	842	190	1391	1048	468
Arrive On Green	0.53	0.53	0.02	0.13	0.30	0.30
Sat Flow, veh/h	1781	1585	1781	3647	3647	1585
Grp Volume(v), veh/h	372	126	158	875	883	132
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1777	1777	1585
Q Serve(g_s), s	14.5	4.7	4.6	27.3	27.3	7.5
Cycle Q Clear(g_c), s	14.5	4.7	4.6	27.3	27.3	7.5
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	947	842	190	1391	1048	468
V/C Ratio(X)	0.39	0.15	0.83	0.63	0.84	0.28
Avail Cap(c_a), veh/h	947	842	292	1898	1352	603
HCM Platoon Ratio	1.00	1.00	0.33	0.33	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.93	0.93	1.00	1.00
Uniform Delay (d), s/veh	16.2	13.9	54.6	42.9	38.7	31.7
Incr Delay (d2), s/veh	1.2	0.4	10.7	0.4	4.0	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.1	6.1	5.1	13.0	11.8	2.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	17.5	14.3	65.4	43.3	42.7	32.0
LnGrp LOS	B	B	E	D	D	C
Approach Vol, veh/h	498			1033	1015	
Approach Delay, s/veh	16.7			46.7	41.3	
Approach LOS	B			D	D	
Timer - Assigned Phs	2			4	5	6
Phs Duration (G+Y+Rc), s	50.3			66.7	11.3	39.0
Change Period (Y+Rc), s	4.5			4.5	4.5	4.5
Max Green Setting (Gmax), s	62.5			45.5	13.5	44.5
Max Q Clear Time (g_c+I1), s	29.3			16.5	6.6	29.3
Green Ext Time (p_c), s	6.1			1.6	0.2	5.2
Intersection Summary						
HCM 7th Control Delay, s/veh			38.7			
HCM 7th LOS			D			

Queues

1: Crowfoot Valley Rd & Stroh Rd

02/05/2026

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	42	118	51	387	150	198	75	565	582	200	428	24
v/c Ratio	0.27	0.72	0.03	0.70	0.50	0.47	0.15	0.62	0.54	0.51	0.43	0.03
Control Delay (s/veh)	56.6	78.2	0.0	56.4	52.9	9.6	4.8	10.7	3.8	16.4	21.8	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	56.6	78.2	0.0	56.4	52.9	9.6	4.8	10.7	3.8	16.4	21.8	0.0
Queue Length 50th (ft)	32	94	0	154	112	0	9	91	39	67	214	0
Queue Length 95th (ft)	69	159	0	196	171	63	m12	99	73	122	342	0
Internal Link Dist (ft)	528			1364			5833			547		
Turn Bay Length (ft)	225			350	650			600	250			500
Base Capacity (vph)	184	193	1583	768	417	508	500	906	1068	414	989	898
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.23	0.61	0.03	0.50	0.36	0.39	0.15	0.62	0.54	0.48	0.43	0.03

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

HCM 7th Signalized Intersection Summary

1: Crowfoot Valley Rd & Stroh Rd

02/05/2026

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	39	109	47	356	138	182	69	520	535	184	394	22
Future Volume (veh/h)	39	109	47	356	138	182	69	520	535	184	394	22
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	42	118	0	387	150	198	75	565	582	200	428	24
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	140	147		523	283	240	513	970	822	330	1027	870
Arrive On Green	0.08	0.08	0.00	0.15	0.15	0.15	0.04	0.52	0.52	0.07	0.55	0.55
Sat Flow, veh/h	1781	1870	1585	3456	1870	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	42	118	0	387	150	198	75	565	582	200	428	24
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1728	1870	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	2.8	7.8	0.0	13.4	9.3	15.1	2.4	26.1	34.9	6.4	16.7	0.9
Cycle Q Clear(g_c), s	2.8	7.8	0.0	13.4	9.3	15.1	2.4	26.1	34.9	6.4	16.7	0.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	140	147		523	283	240	513	970	822	330	1027	870
V/C Ratio(X)	0.30	0.80		0.74	0.53	0.83	0.15	0.58	0.71	0.61	0.42	0.03
Avail Cap(c_a), veh/h	185	195		774	419	355	519	970	822	366	1027	870
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	0.72	0.72	0.72	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.3	56.6	0.0	50.7	49.0	51.5	13.6	20.8	22.9	16.6	16.5	12.9
Incr Delay (d2), s/veh	0.4	12.1	0.0	1.6	1.1	8.3	0.0	1.8	3.7	1.4	1.2	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	4.1	0.0	5.8	4.3	6.5	0.9	11.0	12.8	2.5	6.9	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	54.8	68.7	0.0	52.3	50.1	59.7	13.7	22.6	26.6	17.9	17.7	13.0
LnGrp LOS	D	E		D	D	E	B	C	C	B	B	B
Approach Vol, veh/h	160				735		1222				652	
Approach Delay, s/veh	65.1				53.8		24.0				17.6	
Approach LOS	E				D		C				B	
Timer - Assigned Phs	1	2			4	5	6	8				
Phs Duration (G+Y+Rc), s	13.5	70.8			15.8	9.6	74.6	24.9				
Change Period (Y+Rc), s	5.0	6.0			6.0	5.0	6.0	6.0				
Max Green Setting (Gmax), s	11.0	50.0			13.0	5.0	56.0	28.0				
Max Q Clear Time (g_c+l1), s	8.4	36.9			9.8	4.4	18.7	17.1				
Green Ext Time (p_c), s	0.0	6.5			0.1	0.0	3.9	1.8				
Intersection Summary												
HCM 7th Control Delay, s/veh	32.8											
HCM 7th LOS	C											
Notes												
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.												

Queues

2: Crowfoot Valley Rd & S Chambers Rd/Bayou Gulch Rd

02/05/2026

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	42	149	286	52	485	196	542	923	71	135	651	55
v/c Ratio	0.13	0.12	0.19	0.10	0.38	0.12	0.78	0.78	0.11	0.61	0.68	0.10
Control Delay (s/veh)	23.2	29.2	0.3	22.8	32.3	0.2	25.5	39.5	3.7	26.4	37.0	2.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	23.2	29.2	0.3	22.8	32.3	0.2	25.5	39.5	3.7	26.4	37.0	2.3
Queue Length 50th (ft)	20	45	0	25	163	0	122	350	4	49	214	2
Queue Length 95th (ft)	45	72	0	53	216	0	162	430	m18	60	264	13
Internal Link Dist (ft)	496			564			2512			5833		
Turn Bay Length (ft)	550		300	350		1000	500		400	550		350
Base Capacity (vph)	330	1284	1468	500	1282	1599	764	1254	654	257	1027	578
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.12	0.19	0.10	0.38	0.12	0.71	0.74	0.11	0.53	0.63	0.10

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

HCM 7th Signalized Intersection Summary

2: Crowfoot Valley Rd & S Chambers Rd/Bayou Gulch Rd

02/05/2026

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	39	137	263	48	446	180	499	849	65	124	599	51
Future Volume (veh/h)	39	137	263	48	446	180	499	849	65	124	599	51
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1767	1870	1752	1796	1870	1885	1826	1870	1900	1841	1856	1841
Adj Flow Rate, veh/h	42	149	0	52	485	0	542	923	71	135	651	55
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	9	2	10	7	2	1	5	2	0	4	3	4
Cap, veh/h	352	1342		531	1351		690	1143	518	220	925	409
Arrive On Green	0.03	0.38	0.00	0.03	0.38	0.00	0.04	0.11	0.11	0.07	0.26	0.26
Sat Flow, veh/h	1682	3554	1485	1711	3554	1598	3374	3554	1610	1753	3526	1560
Grp Volume(v), veh/h	42	149	0	52	485	0	542	923	71	135	651	55
Grp Sat Flow(s),veh/h/ln	1682	1777	1485	1711	1777	1598	1687	1777	1610	1753	1763	1560
Q Serve(g_s), s	1.9	3.4	0.0	2.3	12.2	0.0	13.8	31.7	5.0	6.9	20.9	3.4
Cycle Q Clear(g_c), s	1.9	3.4	0.0	2.3	12.2	0.0	13.8	31.7	5.0	6.9	20.9	3.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	352	1342		531	1351		690	1143	518	220	925	409
V/C Ratio(X)	0.12	0.11		0.10	0.36		0.79	0.81	0.14	0.61	0.70	0.13
Avail Cap(c_a), veh/h	369	1342		544	1351		802	1251	567	271	1015	449
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	0.78	0.78	0.78	0.83	0.83	0.83
Uniform Delay (d), s/veh	23.0	25.3	0.0	22.4	27.8	0.0	32.4	52.1	40.1	33.2	41.7	35.2
Incr Delay (d2), s/veh	0.1	0.2	0.0	0.1	0.7	0.0	2.9	3.5	0.2	0.9	2.3	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	1.4	0.0	0.9	5.2	0.0	6.3	15.6	2.0	2.9	9.0	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	23.2	25.4	0.0	22.5	28.5	0.0	35.3	55.6	40.3	34.0	44.0	35.5
LnGrp LOS	C	C		C	C		D	E	D	C	D	D
Approach Vol, veh/h	191				537				1536			
Approach Delay, s/veh	25.0				28.0				47.7			
Approach LOS	C				C				D			
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.3	54.0	14.4	47.2	9.7	53.7	21.8	39.8				
Change Period (Y+Rc), s	5.5	6.5	5.5	7.0	5.5	6.5	5.5	7.0				
Max Green Setting (Gmax), s	5.1	38.9	12.5	44.0	5.1	38.9	20.5	36.0				
Max Q Clear Time (g_c+l1), s	3.9	14.2	8.9	33.7	4.3	5.4	15.8	22.9				
Green Ext Time (p_c), s	0.0	4.3	0.0	6.5	0.0	1.2	0.5	5.7				
Intersection Summary												
HCM 7th Control Delay, s/veh	41.3											
HCM 7th LOS	D											
Notes												
Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.												

Queues

3: Crowfoot Valley Rd & Access Road 1/N Pinery Pkwy

02/05/2026



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	305	40	88	129	14	1101	60	29	889	71
v/c Ratio	0.81	0.08	0.33	0.54	0.04	0.53	0.06	0.11	0.41	0.07
Control Delay (s/veh)	58.7	0.4	38.9	11.7	10.1	11.8	0.1	4.5	4.0	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	58.7	0.4	38.9	11.7	10.1	11.8	0.1	4.5	4.0	0.1
Queue Length 50th (ft)	215	0	54	0	4	198	0	3	43	0
Queue Length 95th (ft)	305	0	95	28	m11	276	m0	m6	68	m0
Internal Link Dist (ft)		265		428		1247			2512	
Turn Bay Length (ft)	650				300		440	500		300
Base Capacity (vph)	395	558	346	383	384	2089	969	265	2173	1040
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.77	0.07	0.25	0.34	0.04	0.53	0.06	0.11	0.41	0.07

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

02/05/2026

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	281	0	37	81	0	119	13	1013	55	27	818	65
Future Volume (veh/h)	281	0	37	81	0	119	13	1013	55	27	818	65
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1900	1870	1900	1870	1841	1811	1841	1841	1870
Adj Flow Rate, veh/h	305	0	40	88	0	129	14	1101	60	29	889	71
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	0	2	0	2	4	6	4	4	2
Cap, veh/h	379	0	326	303	0	156	504	1975	867	201	1637	742
Arrive On Green	0.17	0.00	0.21	0.06	0.00	0.10	0.12	0.56	0.56	0.05	0.94	0.94
Sat Flow, veh/h	1781	0	1585	1810	0	1585	1781	3497	1535	1753	3497	1585
Grp Volume(v), veh/h	305	0	40	88	0	129	14	1101	60	29	889	71
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1810	0	1585	1781	1749	1535	1753	1749	1585
Q Serve(g_s), s	18.5	0.0	2.6	5.4	0.0	10.0	0.0	25.0	2.2	1.1	4.1	0.2
Cycle Q Clear(g_c), s	18.5	0.0	2.6	5.4	0.0	10.0	0.0	25.0	2.2	1.1	4.1	0.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	379	0	326	303	0	156	504	1975	867	201	1637	742
V/C Ratio(X)	0.80	0.00	0.12	0.29	0.00	0.83	0.03	0.56	0.07	0.14	0.54	0.10
Avail Cap(c_a), veh/h	436	0	326	456	0	235	504	1975	867	233	1637	742
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.85	0.85	0.85
Uniform Delay (d), s/veh	39.6	0.0	40.4	46.5	0.0	55.3	15.2	17.3	12.3	21.9	2.3	0.6
Incr Delay (d2), s/veh	9.4	0.0	0.2	0.5	0.0	13.9	0.0	1.1	0.2	0.3	1.1	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.1	0.0	1.0	2.5	0.0	4.6	0.2	9.4	0.8	0.5	1.1	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	49.0	0.0	40.6	47.1	0.0	69.2	15.2	18.4	12.5	22.2	3.4	0.9
LnGrp LOS	D		D	D		E	B	B	B	C	A	A
Approach Vol, veh/h	345		217			1175			989			
Approach Delay, s/veh	48.0		60.2			18.1			3.7			
Approach LOS	D		E			B			A			
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.7	75.1	12.0	30.2	19.8	63.0	25.4	16.8				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	5.5	58.1	18.1	25.3	5.1	58.5	24.9	18.5				
Max Q Clear Time (g_c+I1), s	3.1	27.0	7.4	4.6	2.0	6.1	20.5	12.0				
Green Ext Time (p_c), s	0.0	8.5	0.1	0.1	0.0	6.9	0.4	0.3				
Intersection Summary												
HCM 7th Control Delay, s/veh			20.0									
HCM 7th LOS			C									

Queues

4: Crowfoot Valley Rd & Access Road 5/Pradera Pkwy

02/05/2026



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	202	80	174	70	28	615	89	92	760	70
v/c Ratio	0.65	0.20	0.59	0.17	0.06	0.29	0.09	0.18	0.33	0.06
Control Delay (s/veh)	53.0	1.1	50.6	0.9	12.7	12.7	2.7	6.1	6.1	1.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	53.0	1.1	50.6	0.9	12.7	12.7	2.7	6.1	6.1	1.4
Queue Length 50th (ft)	144	0	122	0	9	120	0	19	84	0
Queue Length 95th (ft)	212	0	184	0	25	178	23	31	128	1
Internal Link Dist (ft)	897		643		13280			2281		
Turn Bay Length (ft)	300				300	880		450	300	
Base Capacity (vph)	365	538	381	570	484	2127	1024	523	2322	1080
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.55	0.15	0.46	0.12	0.06	0.29	0.09	0.18	0.33	0.06

Intersection Summary

HCM 7th Signalized Intersection Summary

4: Crowfoot Valley Rd & Access Road 5/Pradera Pkwy

02/05/2026

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	186	0	74	160	0	64	26	566	82	85	699	64
Future Volume (veh/h)	186	0	74	160	0	64	26	566	82	85	699	64
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1856	1870	1826	1885	1841	1856	1870
Adj Flow Rate, veh/h	202	0	80	174	0	70	28	615	89	92	760	70
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	3	2	5	1	4	3	2
Cap, veh/h	300	0	120	285	0	97	630	2171	1000	344	1565	704
Arrive On Green	0.12	0.00	0.08	0.11	0.00	0.06	0.23	0.63	0.63	0.03	0.30	0.30
Sat Flow, veh/h	1781	0	1585	1781	0	1585	1781	3469	1598	1753	3526	1585
Grp Volume(v), veh/h	202	0	80	174	0	70	28	615	89	92	760	70
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1781	0	1585	1781	1735	1598	1753	1763	1585
Q Serve(g_s), s	13.0	0.0	6.1	11.2	0.0	5.4	0.0	10.1	2.8	4.0	22.1	2.6
Cycle Q Clear(g_c), s	13.0	0.0	6.1	11.2	0.0	5.4	0.0	10.1	2.8	4.0	22.1	2.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	300	0	120	285	0	97	630	2171	1000	344	1565	704
V/C Ratio(X)	0.67	0.00	0.67	0.61	0.00	0.72	0.04	0.28	0.09	0.27	0.49	0.10
Avail Cap(c_a), veh/h	402	0	260	427	0	273	630	2171	1000	410	1565	704
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95
Uniform Delay (d), s/veh	47.1	0.0	56.2	47.9	0.0	57.6	17.7	10.6	9.3	22.9	32.2	10.9
Incr Delay (d2), s/veh	2.7	0.0	6.3	2.1	0.0	9.7	0.0	0.3	0.2	0.4	1.0	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.0	0.0	2.7	5.1	0.0	2.4	0.4	3.5	1.0	1.6	9.9	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	49.8	0.0	62.5	50.0	0.0	67.3	17.7	11.0	9.4	23.3	33.2	11.2
LnGrp LOS	D		E	D		E	B	B	A	C	C	B
Approach Vol, veh/h	282				244		732				922	
Approach Delay, s/veh	53.4				55.0		11.0				30.5	
Approach LOS	D				D		B				C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.3	82.7	18.0	13.9	33.0	60.0	19.9	12.1				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	10.5	52.5	23.5	20.5	7.5	55.5	22.5	21.5				
Max Q Clear Time (g_c+l1), s	6.0	12.1	13.2	8.1	2.0	24.1	15.0	7.4				
Green Ext Time (p_c), s	0.1	4.3	0.3	0.3	0.0	5.3	0.3	0.2				
Intersection Summary												
HCM 7th Control Delay, s/veh	29.7											
HCM 7th LOS	C											

Intersection

Int Delay, s/veh 35.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	134	18	686	65	18	893
Future Vol, veh/h	134	18	686	65	18	893
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	None
Storage Length	265	0	-	575	575	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	146	20	746	71	20	971

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	1755	-	0
Stage 1	746	-	-
Stage 2	1010	-	-
Critical Hdwy	6.63	-	-
Critical Hdwy Stg 1	5.83	-	-
Critical Hdwy Stg 2	5.43	-	-
Follow-up Hdwy	3.519	-	-
Pot Cap-1 Maneuver	~ 84	0	-
Stage 1	431	0	-
Stage 2	351	0	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	~ 82	-	-
Mov Cap-2 Maneuver	~ 82	-	-
Stage 1	431	-	-
Stage 2	342	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	\$ 475.8	0	0.19
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBRWBLn1WBLn2	SBL	SBT
Capacity (veh/h)	-	-	82	-
HCM Lane V/C Ratio	-	-	1.768	-
HCM Ctrl Dly (s/v)	-	-	\$ 475.8	-
HCM Lane LOS	-	-	F	-
HCM 95th %tile Q(veh)	-	-	12.3	-

Notes

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

Intersection						
Int Delay, s/veh	3.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	50	245	81	701	1004	23
Future Vol, veh/h	50	245	81	701	1004	23
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	None
Storage Length	265	0	600	-	-	250
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	54	266	88	762	1091	25

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	1648	- 1116	0 - 0
Stage 1	1091	- -	- - -
Stage 2	557	- -	- - -
Critical Hdwy	6.63	- 4.13	- - -
Critical Hdwy Stg 1	5.43	- -	- - -
Critical Hdwy Stg 2	5.83	- -	- - -
Follow-up Hdwy	3.519	- 2.219	- - -
Pot Cap-1 Maneuver	99	0 624	- - -
Stage 1	321	0 -	- - -
Stage 2	538	0 -	- - -
Platoon blocked, %			- - -
Mov Cap-1 Maneuver	85	- 624	- - -
Mov Cap-2 Maneuver	85	- -	- - -
Stage 1	276	- -	- - -
Stage 2	538	- -	- - -

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	103.29	1.21	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	624	-	85	-	-	-
HCM Lane V/C Ratio	0.141	-	0.64	-	-	-
HCM Ctrl Dly (s/v)	11.7	-	103.3	0	-	-
HCM Lane LOS	B	-	F	A	-	-
HCM 95th %tile Q(veh)	0.5	-	3	-	-	-

Intersection												
Int Delay, s/veh	1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations			↱			↱	↱	↱↱	↱	↱	↱↱	↱
Traffic Vol, veh/h	0	0	37	0	0	82	13	999	6	31	865	40
Future Vol, veh/h	0	0	37	0	0	82	13	999	6	31	865	40
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	300	-	300	300	-	300
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	40	0	0	89	14	1086	7	34	940	43
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	-	-	470	-	-	543	984	0	0	1092	0	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.94	-	-	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.32	-	-	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	0	0	540	0	0	484	698	-	-	635	-	-
Stage 1	0	0	-	0	0	-	-	-	-	-	-	-
Stage 2	0	0	-	0	0	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	-	540	-	-	484	698	-	-	635	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Ctrl Dly, s/v	12.2		14.11		0.13		0.36					
HCM LOS	B		B									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR				
Capacity (veh/h)	698	-	-	540	484	635	-	-				
HCM Lane V/C Ratio	0.02	-	-	0.074	0.184	0.053	-	-				
HCM Ctrl Dly (s/v)	10.3	-	-	12.2	14.1	11	-	-				
HCM Lane LOS	B	-	-	B	B	B	-	-				
HCM 95th %tile Q(veh)	0.1	-	-	0.2	0.7	0.2	-	-				

Intersection

Int Delay, s/veh 1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations			↗			↗	↗	↗↗	↗	↗	↗↗	↗
Traffic Vol, veh/h	0	0	25	0	0	82	41	936	12	30	696	176
Future Vol, veh/h	0	0	25	0	0	82	41	936	12	30	696	176
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	300	-	300	300	-	300
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	27	0	0	89	45	1017	13	33	757	191

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	-	-	378	-	-	509	948	0	0	1030	0	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.94	-	-	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.32	-	-	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	0	0	619	0	0	510	720	-	-	670	-	-
Stage 1	0	0	-	0	0	-	-	-	-	-	-	-
Stage 2	0	0	-	0	0	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	-	619	-	-	510	720	-	-	670	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	11.08	13.56	0.43	0.35
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	720	-	-	619	510	670	-
HCM Lane V/C Ratio	0.062	-	-	0.044	0.175	0.049	-
HCM Ctrl Dly (s/v)	10.3	-	-	11.1	13.6	10.6	-
HCM Lane LOS	B	-	-	B	B	B	-
HCM 95th %tile Q(veh)	0.2	-	-	0.1	0.6	0.2	-

Queues

9: Crowfoot Valley Rd & Access Road 4

02/05/2026

										
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	193	99	108	72	58	810	20	26	715	42
v/c Ratio	0.61	0.19	0.50	0.26	0.12	0.32	0.02	0.06	0.32	0.04
Control Delay (s/veh)	50.8	0.8	49.3	2.2	3.3	5.6	0.3	5.3	5.0	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	50.8	0.8	49.3	2.2	3.3	5.6	0.3	5.3	5.0	0.1
Queue Length 50th (ft)	137	0	73	0	11	153	0	4	65	0
Queue Length 95th (ft)	206	0	122	0	m10	203	m1	m10	71	0
Internal Link Dist (ft)		751		860		2281			1025	
Turn Bay Length (ft)	450		300		300		300	300		300
Base Capacity (vph)	344	685	236	430	612	2526	1156	412	2263	1059
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.56	0.14	0.46	0.17	0.09	0.32	0.02	0.06	0.32	0.04
Intersection Summary										
m Volume for 95th percentile queue is metered by upstream signal.										

HCM 7th Signalized Intersection Summary

9: Crowfoot Valley Rd & Access Road 4

02/05/2026

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	178	0	91	99	0	66	53	745	18	24	658	39
Future Volume (veh/h)	178	0	91	99	0	66	53	745	18	24	658	39
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	193	0	99	108	0	72	58	810	20	26	715	42
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	288	0	171	246	0	99	515	2535	1131	473	2265	1010
Arrive On Green	0.12	0.00	0.11	0.07	0.00	0.06	0.04	0.71	0.71	0.64	0.64	0.64
Sat Flow, veh/h	1781	0	1585	1781	0	1585	1781	3554	1585	661	3554	1585
Grp Volume(v), veh/h	193	0	99	108	0	72	58	810	20	26	715	42
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1781	0	1585	1781	1777	1585	661	1777	1585
Q Serve(g_s), s	12.2	0.0	7.4	7.0	0.0	5.6	1.3	10.6	0.5	1.9	11.4	1.2
Cycle Q Clear(g_c), s	12.2	0.0	7.4	7.0	0.0	5.6	1.3	10.6	0.5	3.0	11.4	1.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	288	0	171	246	0	99	515	2535	1131	473	2265	1010
V/C Ratio(X)	0.67	0.00	0.58	0.44	0.00	0.73	0.11	0.32	0.02	0.05	0.32	0.04
Avail Cap(c_a), veh/h	388	0	361	298	0	247	722	2535	1131	473	2265	1010
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.93	0.93	0.93	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.7	0.0	53.1	50.0	0.0	57.6	6.9	6.6	5.2	9.0	10.3	8.4
Incr Delay (d2), s/veh	2.7	0.0	3.1	1.2	0.0	9.8	0.1	0.3	0.0	0.2	0.4	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.6	0.0	3.1	3.2	0.0	2.5	0.4	3.3	0.2	0.3	4.1	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	48.4	0.0	56.2	51.2	0.0	67.3	6.9	7.0	5.2	9.2	10.7	8.5
LnGrp LOS	D		E	D		E	A	A	A	A	B	A
Approach Vol, veh/h	292			180			888			783		
Approach Delay, s/veh	51.0			57.7			6.9			10.5		
Approach LOS	D			E			A			B		
Timer - Assigned Phs	2		3	4		5	6		7	8		
Phs Duration (G+Y+Rc), s	93.7		13.4	18.0		9.5	84.2		19.0	12.3		
Change Period (Y+Rc), s	4.5		4.5	4.5		4.5	4.5		4.5	4.5		
Max Green Setting (Gmax), s	70.5		12.5	28.5		19.5	46.5		21.5	19.5		
Max Q Clear Time (g_c+I1), s	12.6		9.0	9.4		3.3	13.4		14.2	7.6		
Green Ext Time (p_c), s	5.9		0.1	0.5		0.1	5.2		0.3	0.2		
Intersection Summary												
HCM 7th Control Delay, s/veh	18.5											
HCM 7th LOS	B											

Queues

1: Crowfoot Valley Rd & Stroh Rd

02/05/2026

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	35	135	116	703	79	180	82	584	615	210	714	32
v/c Ratio	0.22	0.82	0.07	0.89	0.19	0.36	0.31	0.76	0.61	0.85	0.87	0.04
Control Delay (s/veh)	64.8	99.1	0.1	69.0	45.9	7.9	17.7	21.9	4.9	65.6	49.6	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	64.8	99.1	0.1	69.0	45.9	7.9	17.7	21.9	4.9	65.6	49.6	0.1
Queue Length 50th (ft)	31	127	0	332	60	0	15	119	26	145	605	0
Queue Length 95th (ft)	69	#232	0	#413	108	62	m23	#721	103	227	752	0
Internal Link Dist (ft)		528			1364			5833			547	
Turn Bay Length (ft)	225		350	650		600	250		500	450		
Base Capacity (vph)	169	178	1583	822	446	516	261	770	1015	401	880	807
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.21	0.76	0.07	0.86	0.18	0.35	0.31	0.76	0.61	0.52	0.81	0.04

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

HCM 7th Signalized Intersection Summary

1: Crowfoot Valley Rd & Stroh Rd

02/05/2026

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	32	124	107	647	73	166	75	537	566	193	657	29
Future Volume (veh/h)	32	124	107	647	73	166	75	537	566	193	657	29
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	35	135	0	703	79	180	82	584	615	210	714	32
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	152	159		765	414	351	283	823	698	233	772	654
Arrive On Green	0.09	0.09	0.00	0.22	0.22	0.22	0.12	0.44	0.44	0.10	0.41	0.41
Sat Flow, veh/h	1781	1870	1585	3456	1870	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	35	135	0	703	79	180	82	584	615	210	714	32
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1728	1870	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	2.7	10.4	0.0	29.0	5.0	14.6	0.0	37.1	51.8	11.9	53.0	1.8
Cycle Q Clear(g_c), s	2.7	10.4	0.0	29.0	5.0	14.6	0.0	37.1	51.8	11.9	53.0	1.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	152	159		765	414	351	283	823	698	233	772	654
V/C Ratio(X)	0.23	0.85		0.92	0.19	0.51	0.29	0.71	0.88	0.90	0.93	0.05
Avail Cap(c_a), veh/h	171	179		828	448	380	283	823	698	429	884	749
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	0.75	0.75	0.75	1.00	1.00	1.00
Uniform Delay (d), s/veh	62.3	65.8	0.0	55.6	46.2	49.9	56.1	33.3	37.4	36.9	40.7	25.7
Incr Delay (d2), s/veh	0.3	25.0	0.0	14.3	0.2	0.9	0.2	3.9	11.8	5.0	18.6	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	6.0	0.0	14.0	2.3	5.8	2.6	16.9	21.3	5.3	27.1	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	62.6	90.8	0.0	69.9	46.4	50.8	56.3	37.2	49.2	41.9	59.3	25.9
LnGrp LOS	E	F		E	D	D	E	D	D	D	E	C
Approach Vol, veh/h	170			962			1281			956		
Approach Delay, s/veh	85.0			64.4			44.2			54.4		
Approach LOS	F			E			D			D		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	19.0	70.3		18.4	23.0	66.2		38.3				
Change Period (Y+Rc), s	5.0	6.0		6.0	6.0	* 6		6.0				
Max Green Setting (Gmax), s	30.0	44.0		14.0	5.0	* 69		35.0				
Max Q Clear Time (g_c+I1), s	13.9	53.8		12.4	2.0	55.0		31.0				
Green Ext Time (p_c), s	0.1	0.0		0.1	0.0	5.3		1.3				

Intersection Summary

HCM 7th Control Delay, s/veh	54.9
HCM 7th LOS	D

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

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

Queues

2: Crowfoot Valley Rd & S Chambers Rd/Bayou Gulch Rd

02/05/2026

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	66	438	675	111	168	137	499	1074	82	189	1186	41
v/c Ratio	0.18	0.46	0.46	0.45	0.17	0.09	0.83	0.72	0.11	0.67	0.90	0.06
Control Delay (s/veh)	34.6	46.8	1.0	42.5	41.2	0.1	60.4	25.4	1.3	23.6	47.4	2.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	34.6	46.8	1.0	42.5	41.2	0.1	60.4	25.4	1.3	23.6	47.4	2.7
Queue Length 50th (ft)	43	185	0	74	65	0	185	297	0	91	613	0
Queue Length 95th (ft)	80	240	0	124	98	0	m204	m361	m5	m108	#756	m0
Internal Link Dist (ft)		496			564			2512			5833	
Turn Bay Length (ft)	550		300	350		300	500		400	550		350
Base Capacity (vph)	371	947	1468	247	1006	1599	717	1501	747	399	1317	651
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.18	0.46	0.46	0.45	0.17	0.09	0.70	0.72	0.11	0.47	0.90	0.06

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

HCM 7th Signalized Intersection Summary

2: Crowfoot Valley Rd & S Chambers Rd/Bayou Gulch Rd

02/05/2026

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	61	403	621	102	155	126	459	988	75	174	1091	38
Future Volume (veh/h)	61	403	621	102	155	126	459	988	75	174	1091	38
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1767	1870	1752	1796	1870	1885	1826	1870	1900	1841	1856	1841
Adj Flow Rate, veh/h	66	438	0	111	168	0	499	1074	82	189	1186	41
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	9	2	10	7	2	1	5	2	0	4	3	4
Cap, veh/h	440	1144		316	1139		549	1391	630	268	1217	538
Arrive On Green	0.04	0.32	0.00	0.03	0.32	0.00	0.17	0.52	0.52	0.08	0.35	0.35
Sat Flow, veh/h	1682	3554	1485	1711	3554	1598	3374	3554	1610	1753	3526	1560
Grp Volume(v), veh/h	66	438	0	111	168	0	499	1074	82	189	1186	41
Grp Sat Flow(s),veh/h/ln	1682	1777	1485	1711	1777	1598	1687	1777	1610	1753	1763	1560
Q Serve(g_s), s	3.8	13.9	0.0	5.1	4.9	0.0	16.3	35.4	3.8	10.1	48.5	2.6
Cycle Q Clear(g_c), s	3.8	13.9	0.0	5.1	4.9	0.0	16.3	35.4	3.8	10.1	48.5	2.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	440	1144		316	1139		549	1391	630	268	1217	538
V/C Ratio(X)	0.15	0.38		0.35	0.15		0.91	0.77	0.13	0.71	0.97	0.08
Avail Cap(c_a), veh/h	440	1144		316	1139		745	1391	630	420	1217	538
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	0.60	0.60	0.60	0.46	0.46	0.46
Uniform Delay (d), s/veh	31.5	38.3	0.0	35.5	35.4	0.0	41.0	29.8	22.2	31.3	47.2	32.1
Incr Delay (d2), s/veh	0.2	1.0	0.0	0.5	0.3	0.0	6.6	1.9	0.1	0.6	12.2	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	6.1	0.0	0.8	2.2	0.0	5.2	13.3	1.4	4.1	22.4	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	31.7	39.3	0.0	36.0	35.6	0.0	47.6	31.7	22.3	31.9	59.4	32.2
LnGrp LOS	C	D		D	D		D	C	C	C	E	C
Approach Vol, veh/h	504			279			1655			1416		
Approach Delay, s/veh	38.3			35.8			36.0			54.9		
Approach LOS	D			D			D			D		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.8	53.3	17.8	64.2	10.6	53.5	24.5	57.4				
Change Period (Y+Rc), s	5.5	6.5	5.5	7.0	5.5	6.5	5.5	7.0				
Max Green Setting (Gmax), s	5.3	38.3	24.9	53.0	5.1	38.5	27.5	50.4				
Max Q Clear Time (g_c+I1), s	5.8	6.9	12.1	37.4	7.1	15.9	18.3	50.5				
Green Ext Time (p_c), s	0.0	1.4	0.2	10.1	0.0	3.6	0.7	0.0				

Intersection Summary

HCM 7th Control Delay, s/veh 43.3
 HCM 7th LOS D

Notes

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

Queues

3: Crowfoot Valley Rd & Access Road 1/N Pinery Pkwy

02/05/2026



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	415	27	66	74	43	1165	86	98	1653	221
v/c Ratio	1.25	0.07	0.29	0.34	0.32	0.56	0.09	0.31	0.75	0.21
Control Delay (s/veh)	179.1	0.4	48.9	4.2	15.8	13.4	1.9	8.1	10.7	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	179.1	0.4	48.9	4.2	15.8	13.4	1.9	8.1	10.7	0.4
Queue Length 50th (ft)	~436	0	50	0	15	257	8	17	180	0
Queue Length 95th (ft)	#649	0	93	0	m27	327	m18	m23	260	m0
Internal Link Dist (ft)		265		428		1247			2512	
Turn Bay Length (ft)	650				300		440	500		300
Base Capacity (vph)	332	454	305	342	136	2094	964	318	2212	1075
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.25	0.06	0.22	0.22	0.32	0.56	0.09	0.31	0.75	0.21

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

02/05/2026

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	382	0	25	61	0	68	40	1072	79	90	1521	203
Future Volume (veh/h)	382	0	25	61	0	68	40	1072	79	90	1521	203
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1900	1870	1900	1870	1841	1811	1841	1841	1870
Adj Flow Rate, veh/h	415	0	27	66	0	74	43	1165	86	98	1653	221
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	0	2	0	2	4	6	4	4	2
Cap, veh/h	368	0	286	222	0	96	211	1811	795	393	2168	982
Arrive On Green	0.17	0.00	0.18	0.05	0.00	0.06	0.03	0.52	0.52	0.26	1.00	1.00
Sat Flow, veh/h	1781	0	1585	1810	0	1585	1781	3497	1535	1753	3497	1585
Grp Volume(v), veh/h	415	0	27	66	0	74	43	1165	86	98	1653	221
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1810	0	1585	1781	1749	1535	1753	1749	1585
Q Serve(g_s), s	24.5	0.0	2.1	4.9	0.0	6.7	1.8	35.2	3.2	0.0	0.0	0.0
Cycle Q Clear(g_c), s	24.5	0.0	2.1	4.9	0.0	6.7	1.8	35.2	3.2	0.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	368	0	286	222	0	96	211	1811	795	393	2168	982
V/C Ratio(X)	1.13	0.00	0.09	0.30	0.00	0.77	0.20	0.64	0.11	0.25	0.76	0.22
Avail Cap(c_a), veh/h	368	0	286	358	0	195	222	1811	795	393	2168	982
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.62	0.62	0.62
Uniform Delay (d), s/veh	54.1	0.0	49.9	60.2	0.0	67.5	18.7	25.5	10.7	28.2	0.0	0.0
Incr Delay (d2), s/veh	86.3	0.0	0.1	0.7	0.0	11.9	0.5	1.8	0.3	0.2	1.6	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.6	0.0	0.8	2.3	0.0	3.0	0.8	14.2	1.5	2.2	0.5	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	140.5	0.0	50.0	60.9	0.0	79.5	19.1	27.2	11.0	28.4	1.6	0.3
LnGrp LOS	F		D	E		E	B	C	B	C	A	A
Approach Vol, veh/h	442			140			1294			1972		
Approach Delay, s/veh	135.0			70.7			25.9			2.8		
Approach LOS	F			E			C			A		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	23.5	80.1	11.5	30.9	8.6	95.0	29.0	13.4				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	9.9	75.6	18.0	24.5	5.0	80.5	24.5	18.0				
Max Q Clear Time (g_c+I1), s	2.0	37.2	6.9	4.1	3.8	2.0	26.5	8.7				
Green Ext Time (p_c), s	0.1	9.8	0.1	0.1	0.0	21.6	0.0	0.2				
Intersection Summary												
HCM 7th Control Delay, s/veh	28.2											
HCM 7th LOS	C											

Queues

4: Crowfoot Valley Rd & Access Road 5/Pradera Pkwy

02/05/2026

										
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	135	54	133	141	88	902	165	105	780	221
v/c Ratio	0.60	0.15	0.56	0.43	0.19	0.39	0.15	0.22	0.32	0.19
Control Delay (s/veh)	68.9	0.9	66.7	4.1	6.4	12.0	1.7	1.7	3.3	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	68.9	0.9	66.7	4.1	6.4	12.0	1.7	1.7	3.3	0.4
Queue Length 50th (ft)	118	0	116	0	17	188	0	2	35	0
Queue Length 95th (ft)	179	0	176	0	37	262	28	6	45	1
Internal Link Dist (ft)	743		643		13280				2281	
Turn Bay Length (ft)	300				300		880	450		300
Base Capacity (vph)	288	494	301	476	505	2289	1120	509	2454	1174
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.47	0.11	0.44	0.30	0.17	0.39	0.15	0.21	0.32	0.19
Intersection Summary										

02/05/2026

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	124	0	50	122	0	130	81	830	152	97	718	203
Future Volume (veh/h)	124	0	50	122	0	130	81	830	152	97	718	203
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1856	1870	1826	1885	1841	1856	1870
Adj Flow Rate, veh/h	135	0	54	133	0	141	88	902	165	105	780	221
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	3	2	5	1	4	3	2
Cap, veh/h	160	0	77	260	0	165	650	1723	793	584	1871	841
Arrive On Green	0.06	0.00	0.05	0.12	0.00	0.10	0.18	0.50	0.50	0.43	1.00	1.00
Sat Flow, veh/h	1781	0	1585	1781	0	1585	1781	3469	1598	1753	3526	1585
Grp Volume(v), veh/h	135	0	54	133	0	141	88	902	165	105	780	221
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1781	0	1585	1781	1735	1598	1753	1763	1585
Q Serve(g_s), s	6.9	0.0	4.9	5.9	0.0	12.8	0.0	25.8	8.5	0.0	0.0	0.0
Cycle Q Clear(g_c), s	6.9	0.0	4.9	5.9	0.0	12.8	0.0	25.8	8.5	0.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	160	0	77	260	0	165	650	1723	793	584	1871	841
V/C Ratio(X)	0.85	0.00	0.70	0.51	0.00	0.86	0.14	0.52	0.21	0.18	0.42	0.26
Avail Cap(c_a), veh/h	287	0	223	313	0	244	650	1723	793	584	1871	841
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.88	0.88	0.88
Uniform Delay (d), s/veh	66.2	0.0	68.4	58.3	0.0	64.4	9.0	25.0	20.6	14.3	0.0	0.0
Incr Delay (d2), s/veh	11.4	0.0	11.2	1.6	0.0	17.4	0.1	1.1	0.6	0.1	0.6	0.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.5	0.0	2.2	4.6	0.0	5.9	1.0	10.4	3.3	1.4	0.2	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	77.6	0.0	79.6	59.9	0.0	81.8	9.1	26.1	21.2	14.4	0.6	0.7
LnGrp LOS	E		E	E		F	A	C	C	B	A	A
Approach Vol, veh/h	189			274			1155			1106		
Approach Delay, s/veh	78.2			71.1			24.1			1.9		
Approach LOS	E			E			C			A		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	35.8	77.0	21.6	11.6	30.8	82.0	13.5	19.7				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	13.5	72.5	21.5	20.5	8.5	77.5	19.5	22.5				
Max Q Clear Time (g_c+l1), s	2.0	27.8	7.9	6.9	2.0	2.0	8.9	14.8				
Green Ext Time (p_c), s	0.2	7.4	0.3	0.2	0.1	6.5	0.2	0.4				
Intersection Summary												
HCM 7th Control Delay, s/veh	23.6											
HCM 7th LOS	C											

Intersection

Int Delay, s/veh 36.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	101	16	1000	139	18	910
Future Vol, veh/h	101	16	1000	139	18	910
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	None
Storage Length	265	0	-	575	575	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	110	17	1087	151	20	989

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	2115	-	0 1238 0
Stage 1	1087	-	- - -
Stage 2	1028	-	- - -
Critical Hdwy	6.63	-	- 4.13 -
Critical Hdwy Stg 1	5.83	-	- - -
Critical Hdwy Stg 2	5.43	-	- - -
Follow-up Hdwy	3.519	-	- 2.219 -
Pot Cap-1 Maneuver	~ 49	0	- 560 -
Stage 1	286	0	- - -
Stage 2	344	0	- - -
Platoon blocked, %		-	- -
Mov Cap-1 Maneuver	~ 48	-	- 560 -
Mov Cap-2 Maneuver	~ 48	-	- - -
Stage 1	286	-	- - -
Stage 2	332	-	- - -

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	\$ 782.66	0	0.23
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBRWBLn1WBLn2	SBL	SBT
Capacity (veh/h)	-	- 48	- 560	-
HCM Lane V/C Ratio	-	- 2.31	- 0.035	-
HCM Ctrl Dly (s/v)	-	-\$ 782.7	0 11.7	-
HCM Lane LOS	-	- F	A B	-
HCM 95th %tile Q(veh)	-	- 11.4	- 0.1	-

Notes

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

Intersection

Int Delay, s/veh 4.5

Movement EBL EBR NBL NBT SBT SBRLane Configurations 

Traffic Vol, veh/h 22 127 232 1117 971 40

Future Vol, veh/h 22 127 232 1117 971 40

Conflicting Peds, #/hr 0 0 0 0 0 0

Sign Control Stop Stop Free Free Free Free

RT Channelized - Free - None - None

Storage Length 265 0 600 - - 250

Veh in Median Storage, # 0 - - 0 0 -

Grade, % 0 - - 0 0 -

Peak Hour Factor 92 92 92 92 92 92

Heavy Vehicles, % 2 2 2 2 2 2

Mvmt Flow 24 138 252 1214 1055 43

Major/Minor Minor2 Major1 Major2

Conflicting Flow All 2167 - 1099 0 - 0

Stage 1 1055 - - - - -

Stage 2 1111 - - - - -

Critical Hdwy 6.63 - 4.13 - - -

Critical Hdwy Stg 1 5.43 - - - - -

Critical Hdwy Stg 2 5.83 - - - - -

Follow-up Hdwy 3.519 - 2.219 - - -

Pot Cap-1 Maneuver 46 0 633 - - -

Stage 1 334 0 - - - -

Stage 2 277 0 - - - -

Platoon blocked, % - - -

Mov Cap-1 Maneuver 27 - 633 - - -

Mov Cap-2 Maneuver 27 - - - - -

Stage 1 201 - - - - -

Stage 2 277 - - - - -

Approach EB NB SB

HCM Ctrl Dly, s/v \$ 336.74 2.48 0

HCM LOS F

Minor Lane/Major Mvmt NBL NBT EBLn1 EBLn2 SBT SBR

Capacity (veh/h) 633 - 27 - - -

HCM Lane V/C Ratio 0.398 - 0.873 - - -

HCM Ctrl Dly (s/v) 14.4 \$ 336.7 0 - -

HCM Lane LOS B - F A - -

HCM 95th %tile Q(veh) 1.9 - 2.8 - - -

Notes

~: Volume exceeds capacity \$: Delay exceeds 300s

+: Computation Not Defined *: All major volume in platoon

Intersection												
Int Delay, s/veh	1.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations			↗			↗	↗	↗↗	↗	↗	↗↗	↗
Traffic Vol, veh/h	0	0	24	0	0	57	41	1134	19	93	1409	105
Future Vol, veh/h	0	0	24	0	0	57	41	1134	19	93	1409	105
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	300	-	300	300	-	300
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	26	0	0	62	45	1233	21	101	1532	114

Major/Minor	Minor2		Minor1		Major1		Major2	
Conflicting Flow All	-	-	766	-	-	616	1646	0
Stage 1	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.94	-	-	6.94	4.14	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.32	-	-	3.32	2.22	-
Pot Cap-1 Maneuver	0	0	345	0	0	433	389	-
Stage 1	0	0	-	0	0	-	-	-
Stage 2	0	0	-	0	0	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	345	-	-	433	389	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	16.27	14.69	0.53	0.75
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	389	-	-	345	433	551	-
HCM Lane V/C Ratio	0.115	-	-	0.076	0.143	0.183	-
HCM Ctrl Dly (s/v)	15.4	-	-	16.3	14.7	13	-
HCM Lane LOS	C	-	-	C	B	B	-
HCM 95th %tile Q(veh)	0.4	-	-	0.2	0.5	0.7	-

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	0	0	256	0	0	57	96	1137	37	93	773	567
Future Vol, veh/h	0	0	256	0	0	57	96	1137	37	93	773	567
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	300	-	300	300	-	300
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	278	0	0	62	104	1236	40	101	840	616

Major/Minor	Minor2		Minor1		Major1		Major2	
Conflicting Flow All	-	-	420	-	-	618	1457	0
Stage 1	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.94	-	-	6.94	4.14	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.32	-	-	3.32	2.22	-
Pot Cap-1 Maneuver	0	0	582	0	0	432	460	-
Stage 1	0	0	-	0	0	-	-	-
Stage 2	0	0	-	0	0	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	582	-	-	432	460	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	16.73	14.72	1.14	0.86
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	460	-	-	582	432	540	-
HCM Lane V/C Ratio	0.227	-	-	0.478	0.143	0.187	-
HCM Ctrl Dly (s/v)	15.1	-	-	16.7	14.7	13.2	-
HCM Lane LOS	C	-	-	C	B	B	-
HCM 95th %tile Q(veh)	0.9	-	-	2.6	0.5	0.7	-

Queues

9: Crowfoot Valley Rd & Access Road 4

02/05/2026



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	372	126	74	49	158	960	61	80	907	132
v/c Ratio	0.83	0.22	0.55	0.20	0.42	0.48	0.06	0.24	0.46	0.14
Control Delay (s/veh)	63.5	0.9	58.5	1.8	15.1	15.8	0.1	5.3	10.1	1.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	63.5	0.9	58.5	1.8	15.1	15.8	0.1	5.3	10.1	1.5
Queue Length 50th (ft)	309	0	51	0	51	188	0	11	158	6
Queue Length 95th (ft)	429	0	92	0	99	223	0	m15	240	m21
Internal Link Dist (ft)		884		805		2281			1025	
Turn Bay Length (ft)	450		300		300		300	300		300
Base Capacity (vph)	473	713	134	370	460	2020	951	340	1955	940
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.79	0.18	0.55	0.13	0.34	0.48	0.06	0.24	0.46	0.14

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

HCM 7th Signalized Intersection Summary

9: Crowfoot Valley Rd & Access Road 4

02/05/2026

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	342	0	116	68	0	45	145	883	56	74	834	121
Future Volume (veh/h)	342	0	116	68	0	45	145	883	56	74	834	121
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	372	0	126	74	0	49	158	960	61	80	907	132
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	444	0	330	190	0	71	372	2090	932	382	2020	901
Arrive On Green	0.21	0.00	0.21	0.05	0.00	0.05	0.07	0.78	0.78	0.03	0.57	0.57
Sat Flow, veh/h	1781	0	1585	1781	0	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	372	0	126	74	0	49	158	960	61	80	907	132
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1781	0	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	28.2	0.0	10.0	5.7	0.0	4.4	5.4	13.4	1.3	2.7	21.6	5.7
Cycle Q Clear(g_c), s	28.2	0.0	10.0	5.7	0.0	4.4	5.4	13.4	1.3	2.7	21.6	5.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	444	0	330	190	0	71	372	2090	932	382	2020	901
V/C Ratio(X)	0.84	0.00	0.38	0.39	0.00	0.69	0.43	0.46	0.07	0.21	0.45	0.15
Avail Cap(c_a), veh/h	502	0	511	190	0	201	515	2090	932	415	2020	901
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.91	0.91	0.91	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.5	0.0	49.7	62.8	0.0	68.7	13.4	8.0	6.7	12.6	18.3	14.8
Incr Delay (d2), s/veh	10.8	0.0	0.7	1.3	0.0	11.1	0.7	0.7	0.1	0.3	0.7	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.9	0.0	4.1	2.7	0.0	2.0	2.0	4.0	0.5	1.1	8.6	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	60.3	0.0	50.4	64.0	0.0	79.8	14.1	8.7	6.8	12.9	19.0	15.2
LnGrp LOS	E		D	E		E	B	A	A	B	B	B
Approach Vol, veh/h	498			123			1179			1119		
Approach Delay, s/veh	57.8			70.3			9.3			18.1		
Approach LOS	E			E			A			B		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.3	90.4	11.4	34.9	12.2	87.5	35.2	11.1				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	7.5	66.5	6.9	47.1	19.5	54.5	35.5	18.5				
Max Q Clear Time (g_c+l1), s	4.7	15.4	7.7	12.0	7.4	23.6	30.2	6.4				
Green Ext Time (p_c), s	0.0	7.5	0.0	0.8	0.3	6.9	0.6	0.1				
Intersection Summary												
HCM 7th Control Delay, s/veh	23.5											
HCM 7th LOS	C											

Queues

1: Crowfoot Valley Rd & Stroh Rd

02/05/2026

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	57	160	73	522	202	266	113	858	809	270	632	33
v/c Ratio	0.29	0.77	0.24	0.81	0.58	0.52	0.28	0.59	0.51	0.70	0.37	0.04
Control Delay (s/veh)	59.7	83.9	1.8	64.8	58.3	9.0	8.7	16.1	3.9	27.2	24.0	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	59.7	83.9	1.8	64.8	58.3	9.0	8.7	16.1	3.9	27.2	24.0	0.1
Queue Length 50th (ft)	48	143	0	234	167	0	12	153	57	121	195	0
Queue Length 95th (ft)	92	219	0	299	252	77	m41	448	117	193	246	0
Internal Link Dist (ft)	528			1364			5833			547		
Turn Bay Length (ft)	225	350		650	600		250	500		450		
Base Capacity (vph)	240	252	342	696	378	533	404	1446	1583	446	1736	832
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.24	0.63	0.21	0.75	0.53	0.50	0.28	0.59	0.51	0.61	0.36	0.04

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

HCM 7th Signalized Intersection Summary

1: Crowfoot Valley Rd & Stroh Rd

02/05/2026

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	52	147	67	480	186	245	104	789	744	248	581	30
Future Volume (veh/h)	52	147	67	480	186	245	104	789	744	248	581	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	57	160	0	522	202	0	113	858	0	270	632	33
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	179	187		590	319		450	1685		410	1854	827
Arrive On Green	0.10	0.10	0.00	0.17	0.17	0.00	0.04	0.47	0.00	0.09	0.52	0.52
Sat Flow, veh/h	1781	1870	1585	3456	1870	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	57	160	0	522	202	0	113	858	0	270	632	33
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1728	1870	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	4.2	11.8	0.0	20.7	14.1	0.0	4.6	23.4	0.0	10.5	14.5	1.4
Cycle Q Clear(g_c), s	4.2	11.8	0.0	20.7	14.1	0.0	4.6	23.4	0.0	10.5	14.5	1.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	179	187		590	319		450	1685		410	1854	827
V/C Ratio(X)	0.32	0.85		0.88	0.63		0.25	0.51		0.66	0.34	0.04
Avail Cap(c_a), veh/h	242	254		691	374		450	1685		554	1854	827
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	0.65	0.65	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.5	62.0	0.0	56.7	54.0	0.0	17.7	25.5	0.0	18.6	19.5	16.3
Incr Delay (d2), s/veh	0.4	14.6	0.0	11.3	2.2	0.0	0.1	0.7	0.0	0.7	0.5	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	6.3	0.0	9.8	6.7	0.0	1.8	9.6	0.0	4.1	5.8	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	58.9	76.6	0.0	68.0	56.1	0.0	17.8	26.2	0.0	19.3	20.0	16.4
LnGrp LOS	E	E		E	E		B	C		B	B	B
Approach Vol, veh/h	217				724		971				935	
Approach Delay, s/veh	72.0				64.7		25.3				19.6	
Approach LOS	E				E		C				B	
Timer - Assigned Phs	1	2			4	5	6	8				
Phs Duration (G+Y+Rc), s	17.7	72.4			20.0	11.0	79.1	29.9				
Change Period (Y+Rc), s	5.0	6.0			6.0	5.0	6.0	6.0				
Max Green Setting (Gmax), s	24.0	46.0			19.0	6.0	64.0	28.0				
Max Q Clear Time (g_c+I1), s	12.5	25.4			13.8	6.6	16.5	22.7				
Green Ext Time (p_c), s	0.2	7.4			0.3	0.0	6.5	1.3				
Intersection Summary												
HCM 7th Control Delay, s/veh	37.0											
HCM 7th LOS	D											
Notes												
Unsignalized Delay for [NBR, EBR, WBR] is excluded from calculations of the approach delay and intersection delay.												

Queues

2: Crowfoot Valley Rd & S Chambers Rd/Bayou Gulch Rd

02/05/2026

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	57	200	384	71	652	263	773	1379	104	180	936	74
v/c Ratio	0.44	0.24	0.26	0.22	0.79	0.16	0.84	0.81	0.13	0.81	0.70	0.11
Control Delay (s/veh)	44.1	43.6	0.4	35.9	57.8	0.2	57.7	27.7	3.9	61.3	31.8	2.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	44.1	43.6	0.4	35.9	57.8	0.2	57.7	27.7	3.9	61.3	31.8	2.9
Queue Length 50th (ft)	37	77	0	46	294	0	241	546	10	73	435	6
Queue Length 95th (ft)	69	110	0	82	354	0	m262	640	m19	m#236	#555	m17
Internal Link Dist (ft)		496			564			2512			5833	
Turn Bay Length (ft)	550		300	350		300	500		400	550		350
Base Capacity (vph)	130	935	1468	318	935	1599	1187	1696	832	225	1333	687
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.44	0.21	0.26	0.22	0.70	0.16	0.65	0.81	0.13	0.80	0.70	0.11

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

HCM 7th Signalized Intersection Summary

2: Crowfoot Valley Rd & S Chambers Rd/Bayou Gulch Rd

02/05/2026

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	52	184	353	65	600	242	711	1269	96	166	861	68
Future Volume (veh/h)	52	184	353	65	600	242	711	1269	96	166	861	68
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1767	1870	1752	1796	1870	1885	1826	1870	1900	1841	1856	1841
Adj Flow Rate, veh/h	57	200	0	71	652	0	773	1379	104	180	936	74
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	9	2	10	7	2	1	5	2	0	4	3	4
Cap, veh/h	143	774		307	774		883	1762	798	227	1380	611
Arrive On Green	0.04	0.22	0.00	0.04	0.22	0.00	0.06	0.16	0.16	0.08	0.39	0.39
Sat Flow, veh/h	1682	3554	1485	1711	3554	1598	4904	3554	1610	1753	3526	1560
Grp Volume(v), veh/h	57	200	0	71	652	0	773	1379	104	180	936	74
Grp Sat Flow(s),veh/h/ln	1682	1777	1485	1711	1777	1598	1635	1777	1610	1753	1763	1560
Q Serve(g_s), s	3.7	6.5	0.0	4.5	24.6	0.0	21.9	52.1	7.7	8.5	30.8	4.2
Cycle Q Clear(g_c), s	3.7	6.5	0.0	4.5	24.6	0.0	21.9	52.1	7.7	8.5	30.8	4.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	143	774		307	774		883	1762	798	227	1380	611
V/C Ratio(X)	0.40	0.26		0.23	0.84		0.88	0.78	0.13	0.79	0.68	0.12
Avail Cap(c_a), veh/h	143	939		307	939		1201	1762	798	246	1380	611
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	0.54	0.54	0.54	0.82	0.82	0.82
Uniform Delay (d), s/veh	42.7	45.4	0.0	40.8	52.4	0.0	64.3	51.3	32.7	30.8	35.3	27.2
Incr Delay (d2), s/veh	1.8	0.2	0.0	0.3	6.5	0.0	2.6	1.9	0.2	11.2	2.2	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	2.9	0.0	1.9	11.5	0.0	9.8	25.2	0.0	4.1	13.1	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	44.5	45.6	0.0	41.1	59.0	0.0	66.8	53.2	32.9	42.0	37.5	27.6
LnGrp LOS	D	D		D	E		E	D	C	D	D	C
Approach Vol, veh/h	257			723			2256			1190		
Approach Delay, s/veh	45.4			57.2			57.0			37.6		
Approach LOS	D			E			E			D		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.5	37.0	16.1	76.4	10.5	37.0	30.7	61.8				
Change Period (Y+Rc), s	5.5	6.5	5.5	7.0	5.5	6.5	5.5	7.0				
Max Green Setting (Gmax), s	5.0	37.0	12.1	61.4	5.0	37.0	34.3	39.2				
Max Q Clear Time (g_c+I1), s	5.7	26.6	10.5	54.1	6.5	8.5	23.9	32.8				
Green Ext Time (p_c), s	0.0	3.9	0.0	6.2	0.0	1.6	1.3	4.4				
Intersection Summary												
HCM 7th Control Delay, s/veh				51.1								
HCM 7th LOS				D								
Notes												
Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.												

Queues

3: Crowfoot Valley Rd & Access Road 1/N Pinery Pkwy

02/05/2026



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	492	102	88	129	37	1635	60	29	1222	139
v/c Ratio	0.91	0.25	0.41	0.64	0.14	0.74	0.06	0.20	0.56	0.13
Control Delay (s/veh)	79.6	1.4	47.5	27.8	10.0	13.6	1.1	8.5	8.6	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	79.6	1.4	47.5	27.8	10.0	13.6	1.1	8.5	8.6	0.4
Queue Length 50th (ft)	229	0	65	11	11	323	3	3	67	0
Queue Length 95th (ft)	#324	0	106	76	m24	463	11	m6	87	m0
Internal Link Dist (ft)		390		428		1247			2512	
Turn Bay Length (ft)	650				300		440	500		300
Base Capacity (vph)	551	442	307	309	271	2219	1004	148	2199	1053
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.89	0.23	0.29	0.42	0.14	0.74	0.06	0.20	0.56	0.13

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

02/05/2026

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	453	0	94	81	0	119	34	1504	55	27	1124	128
Future Volume (veh/h)	453	0	94	81	0	119	34	1504	55	27	1124	128
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1900	1870	1900	1870	1841	1811	1841	1841	1870
Adj Flow Rate, veh/h	492	0	102	88	0	129	37	1635	60	29	1222	139
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	0	2	0	2	4	6	4	4	2
Cap, veh/h	539	0	307	283	0	152	280	2082	914	132	1909	865
Arrive On Green	0.16	0.00	0.19	0.06	0.00	0.10	0.07	0.60	0.60	0.02	0.37	0.37
Sat Flow, veh/h	3456	0	1585	1810	0	1585	1781	3497	1535	1753	3497	1585
Grp Volume(v), veh/h	492	0	102	88	0	129	37	1635	60	29	1222	139
Grp Sat Flow(s),veh/h/ln	1728	0	1585	1810	0	1585	1781	1749	1535	1753	1749	1585
Q Serve(g_s), s	19.6	0.0	7.8	6.1	0.0	11.2	0.0	49.7	2.3	1.1	40.5	4.3
Cycle Q Clear(g_c), s	19.6	0.0	7.8	6.1	0.0	11.2	0.0	49.7	2.3	1.1	40.5	4.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	539	0	307	283	0	152	280	2082	914	132	1909	865
V/C Ratio(X)	0.91	0.00	0.33	0.31	0.00	0.85	0.13	0.79	0.07	0.22	0.64	0.16
Avail Cap(c_a), veh/h	555	0	307	410	0	204	280	2082	914	152	1909	865
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.81	0.81	0.81
Uniform Delay (d), s/veh	58.2	0.0	48.7	52.6	0.0	62.3	36.1	21.5	11.9	26.7	33.0	6.1
Incr Delay (d2), s/veh	19.4	0.0	0.6	0.6	0.0	21.3	0.2	3.1	0.1	0.7	1.3	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.0	0.0	3.2	2.8	0.0	5.4	0.9	19.3	0.8	0.5	18.0	3.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	77.5	0.0	49.3	53.2	0.0	83.5	36.3	24.6	12.1	27.4	34.4	6.4
LnGrp LOS	E		D	D		F	D	C	B	C	C	A
Approach Vol, veh/h	594			217			1732			1390		
Approach Delay, s/veh	72.7			71.2			24.4			31.4		
Approach LOS	E			E			C			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.9	87.9	12.7	31.6	14.8	80.9	26.3	17.9				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	5.0	76.5	18.0	22.5	5.1	76.4	22.5	18.0				
Max Q Clear Time (g_c+l1), s	3.1	51.7	8.1	9.8	2.0	42.5	21.6	13.2				
Green Ext Time (p_c), s	0.0	13.2	0.1	0.4	0.0	10.5	0.2	0.2				
Intersection Summary												
HCM 7th Control Delay, s/veh	36.8											
HCM 7th LOS	D											

Queues

4: Crowfoot Valley Rd & Access Road 5/Pradera Pkwy

02/05/2026

										
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	451	206	174	82	63	923	89	92	1063	161
v/c Ratio	0.78	0.75	0.54	0.54	0.19	0.46	0.09	0.28	0.50	0.16
Control Delay (s/veh)	65.4	30.2	55.1	30.9	10.1	9.9	0.3	7.8	9.4	1.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	65.4	30.2	55.1	30.9	10.1	9.9	0.3	7.8	9.4	1.4
Queue Length 50th (ft)	205	29	133	11	10	76	0	15	216	0
Queue Length 95th (ft)	254	109	184	64	18	88	3	40	357	7
Internal Link Dist (ft)		613		643		13280			2297	
Turn Bay Length (ft)	300				300		880	450		300
Base Capacity (vph)	747	459	339	284	337	2014	985	351	2146	1031
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.60	0.45	0.51	0.29	0.19	0.46	0.09	0.26	0.50	0.16
Intersection Summary										

HCM 7th Signalized Intersection Summary

4: Crowfoot Valley Rd & Access Road 5/Pradera Pkwy

02/05/2026

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	415	29	160	160	11	64	58	849	82	85	978	148
Future Volume (veh/h)	415	29	160	160	11	64	58	849	82	85	978	148
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1856	1870	1826	1885	1841	1856	1870
Adj Flow Rate, veh/h	451	32	174	174	12	70	63	923	89	92	1063	161
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	3	2	5	1	4	3	2
Cap, veh/h	559	36	197	201	16	91	452	2081	958	260	1624	730
Arrive On Green	0.16	0.14	0.14	0.08	0.07	0.07	0.18	0.60	0.60	0.01	0.15	0.15
Sat Flow, veh/h	3456	252	1371	1781	237	1384	1781	3469	1598	1753	3526	1585
Grp Volume(v), veh/h	451	0	206	174	0	82	63	923	89	92	1063	161
Grp Sat Flow(s),veh/h/ln	1728	0	1624	1781	0	1621	1781	1735	1598	1753	1763	1585
Q Serve(g_s), s	17.6	0.0	17.4	9.4	0.0	7.0	0.0	20.3	2.1	4.3	39.7	12.5
Cycle Q Clear(g_c), s	17.6	0.0	17.4	9.4	0.0	7.0	0.0	20.3	2.1	4.3	39.7	12.5
Prop In Lane	1.00		0.84	1.00		0.85	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	559	0	233	201	0	106	452	2081	958	260	1624	730
V/C Ratio(X)	0.81	0.00	0.88	0.87	0.00	0.77	0.14	0.44	0.09	0.35	0.65	0.22
Avail Cap(c_a), veh/h	753	0	319	338	0	226	452	2081	958	314	1624	730
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.90	0.90	0.90	0.89	0.89	0.89
Uniform Delay (d), s/veh	56.5	0.0	58.8	61.7	0.0	64.4	34.8	15.3	4.7	25.8	48.9	37.3
Incr Delay (d2), s/veh	4.7	0.0	19.0	11.7	0.0	11.1	0.1	0.6	0.2	0.7	1.8	0.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.1	0.0	8.4	6.7	0.0	3.2	1.6	7.6	1.2	1.8	19.1	5.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	61.3	0.0	77.8	73.4	0.0	75.5	34.9	15.9	4.9	26.6	50.7	37.9
LnGrp LOS	E		E	E		E	C	B	A	C	D	D
Approach Vol, veh/h	657		256			1075			1316			
Approach Delay, s/veh	66.4		74.1			16.1			47.5			
Approach LOS	E		E			B			D			
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.7	88.5	16.2	24.6	30.1	69.0	27.2	13.7				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	10.5	61.5	22.5	27.5	7.5	64.5	30.5	19.5				
Max Q Clear Time (g_c+l1), s	6.3	22.3	11.4	19.4	2.0	41.7	19.6	9.0				
Green Ext Time (p_c), s	0.1	7.1	0.3	0.7	0.0	7.8	1.3	0.2				
Intersection Summary												
HCM 7th Control Delay, s/veh	43.1											
HCM 7th LOS	D											

Queues

5: Crowfoot Valley Rd & Canyonside Blvd/Macanta Blvd

02/05/2026

										
Lane Group	EBL	EBR	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	78	236	146	20	208	1010	71	20	1298	70
v/c Ratio	0.25	0.59	0.78	0.05	0.73	0.46	0.07	0.05	0.65	0.07
Control Delay (s/veh)	61.6	7.6	89.8	0.2	49.9	11.6	0.1	6.9	9.6	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	61.6	7.6	89.8	0.2	49.9	11.6	0.1	6.9	9.6	0.1
Queue Length 50th (ft)	35	0	135	0	107	156	0	3	174	0
Queue Length 95th (ft)	62	16	#281	0	158	178	0	m8	206	0
Internal Link Dist (ft)						775			13280	
Turn Bay Length (ft)	200	200	265	265	300		575	575		300
Base Capacity (vph)	322	478	186	484	354	2182	1043	465	2010	970
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.24	0.49	0.78	0.04	0.59	0.46	0.07	0.04	0.65	0.07

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

HCM 7th Signalized Intersection Summary

5: Crowfoot Valley Rd & Canyonside Blvd/Macanta Blvd

02/05/2026

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 							 			 	
Traffic Volume (veh/h)	72	0	217	134	0	18	191	929	65	18	1194	64
Future Volume (veh/h)	72	0	217	134	0	18	191	929	65	18	1194	64
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	78	0	236	146	0	20	208	1010	71	20	1298	70
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	444	247	209	185	134	113	244	1739	776	403	1884	841
Arrive On Green	0.13	0.00	0.13	0.08	0.00	0.07	0.09	0.49	0.49	0.12	0.53	0.53
Sat Flow, veh/h	3456	1870	1585	1781	1870	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	78	0	236	146	0	20	208	1010	71	20	1298	70
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1781	1870	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	2.8	0.0	18.5	10.5	0.0	1.7	9.9	28.4	2.3	0.0	37.8	1.6
Cycle Q Clear(g_c), s	2.8	0.0	18.5	10.5	0.0	1.7	9.9	28.4	2.3	0.0	37.8	1.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	444	247	209	185	134	113	244	1739	776	403	1884	841
V/C Ratio(X)	0.18	0.00	1.13	0.79	0.00	0.18	0.85	0.58	0.09	0.05	0.69	0.08
Avail Cap(c_a), veh/h	444	247	209	185	294	249	354	1739	776	423	1884	841
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.89	0.89	0.89	0.86	0.86	0.86
Uniform Delay (d), s/veh	54.4	0.0	60.8	65.1	0.0	61.1	31.5	25.5	8.8	27.1	24.3	4.4
Incr Delay (d2), s/veh	0.2	0.0	100.4	20.1	0.0	0.7	11.4	1.3	0.2	0.0	1.8	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.0	13.1	6.3	0.0	0.7	4.8	11.6	1.2	0.4	15.3	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	54.6	0.0	161.2	85.2	0.0	61.9	43.0	26.8	9.0	27.1	26.1	4.6
LnGrp LOS	D		F	F		E	D	C	A	C	C	A
Approach Vol, veh/h	314			166			1289			1388		
Approach Delay, s/veh	134.7			82.4			28.4			25.1		
Approach LOS	F			F			C			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	24.5	16.5	23.5	75.5	16.0	25.0	17.8	81.2				
Change Period (Y+Rc), s	6.5	* 6.5	7.0	* 7	5.5	6.5	5.5	7.0				
Max Green Setting (Gmax), s	7.0	* 22	18.0	* 69	10.5	18.5	20.9	65.6				
Max Q Clear Time (g_c+I1), s	4.8	3.7	2.0	30.4	12.5	20.5	11.9	39.8				
Green Ext Time (p_c), s	0.0	0.0	0.0	7.9	0.0	0.0	0.3	10.0				

Intersection Summary

HCM 7th Control Delay, s/veh	40.3
HCM 7th LOS	D

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Queues

6: Crowfoot Valley Rd & Sapphire Pointe Blvd

02/05/2026



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	54	266	88	1234	1654	25
v/c Ratio	0.18	0.60	0.30	0.47	0.81	0.03
Control Delay (s/veh)	51.9	17.8	14.0	7.8	12.9	2.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	51.9	17.8	14.0	7.8	12.9	2.4
Queue Length 50th (ft)	43	39	18	207	161	1
Queue Length 95th (ft)	85	133	63	246	202	m1
Internal Link Dist (ft)	267			924	775	
Turn Bay Length (ft)	300		600			250
Base Capacity (vph)	297	446	291	2628	2034	918
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.18	0.60	0.30	0.47	0.81	0.03

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

HCM 7th Signalized Intersection Summary

6: Crowfoot Valley Rd & Sapphire Pointe Blvd

02/05/2026



Movement	EBL	EBR	NBL	NBT	SBT	SBR	
Lane Configurations							
Traffic Volume (veh/h)	50	245	81	1135	1522	23	
Future Volume (veh/h)	50	245	81	1135	1522	23	
Initial Q (Qb), veh	0	0	0	0	0	0	
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	
Work Zone On Approach	No			No	No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	
Adj Flow Rate, veh/h	54	266	88	1234	1654	25	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Percent Heavy Veh, %	2	2	2	2	2	2	
Cap, veh/h	299	266	450	2640	2043	911	
Arrive On Green	0.17	0.17	0.13	0.74	1.00	1.00	
Sat Flow, veh/h	1781	1585	1781	3647	3647	1585	
Grp Volume(v), veh/h	54	266	88	1234	1654	25	
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1777	1777	1585	
Q Serve(g_s), s	3.6	23.5	2.1	19.2	0.0	0.0	
Cycle Q Clear(g_c), s	3.6	23.5	2.1	19.2	0.0	0.0	
Prop In Lane	1.00	1.00	1.00			1.00	
Lane Grp Cap(c), veh/h	299	266	450	2640	2043	911	
V/C Ratio(X)	0.18	1.00	0.20	0.47	0.81	0.03	
Avail Cap(c_a), veh/h	299	266	450	2640	2043	911	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00	
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.71	0.71	
Uniform Delay (d), s/veh	50.0	58.2	5.9	7.1	0.0	0.0	
Incr Delay (d2), s/veh	1.3	55.1	1.0	0.6	2.6	0.0	
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	
%ile BackOfQ(50%),veh/ln	1.8	23.0	0.8	6.1	0.7	1.0	
Unsig. Movement Delay, s/veh							
LnGrp Delay(d), s/veh	51.3	113.4	6.9	7.7	2.6	0.0	
LnGrp LOS	D	F	A	A	A	A	
Approach Vol, veh/h	320			1322	1679		
Approach Delay, s/veh	102.9			7.6	2.5		
Approach LOS	F			A	A		
Timer - Assigned Phs				4	6	7	8
Phs Duration (G+Y+Rc), s				111.0	29.0	23.5	87.5
Change Period (Y+Rc), s				7.0	5.5	5.5	7.0
Max Green Setting (Gmax), s				104.0	23.5	18.0	80.5
Max Q Clear Time (g_c+I1), s				21.2	25.5	4.1	2.0
Green Ext Time (p_c), s				11.0	0.0	0.1	19.6
Intersection Summary							
HCM 7th Control Delay, s/veh			14.2				
HCM 7th LOS			B				

Intersection

Int Delay, s/veh 0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations			↗			↗	↗	↗↗	↗	↗	↗↗	↗
Traffic Vol, veh/h	0	0	37	0	0	82	13	1511	6	31	1228	40
Future Vol, veh/h	0	0	37	0	0	82	13	1511	6	31	1228	40
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	300	-	300	300	-	300
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	40	0	0	89	14	1642	7	34	1335	43

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	-	-	667	-	-	821	1378	0	0	1649	0	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.94	-	-	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.32	-	-	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	0	0	*736	0	0	*661	654	-	-	506	-	-
Stage 1	0	0	-	0	0	-	-	-	-	-	-	-
Stage 2	0	0	-	0	0	-	-	-	-	-	-	-
Platoon blocked, %			0			0	0	-	-	0	-	-
Mov Cap-1 Maneuver	-	-	*736	-	-	*661	654	-	-	506	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	10.17	11.3	0.09	0.3
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	654	-	-	736	661	506	-
HCM Lane V/C Ratio	0.022	-	-	0.055	0.135	0.067	-
HCM Ctrl Dly (s/v)	10.6	-	-	10.2	11.3	12.6	-
HCM Lane LOS	B	-	-	B	B	B	-
HCM 95th %tile Q(veh)	0.1	-	-	0.2	0.5	0.2	-

Notes

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

Intersection

Int Delay, s/veh 0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations			↗			↗	↗	↗↗	↗	↗	↗↗	↗
Traffic Vol, veh/h	0	0	25	0	0	82	41	1448	12	30	1059	176
Future Vol, veh/h	0	0	25	0	0	82	41	1448	12	30	1059	176
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	300	-	300	300	-	300
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	27	0	0	89	45	1574	13	33	1151	191

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	-	-	576	-	-	787	1342	0	0	1587	0	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.94	-	-	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.32	-	-	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	0	0	*796	0	0	*676	632	-	-	541	-	-
Stage 1	0	0	-	0	0	-	-	-	-	-	-	-
Stage 2	0	0	-	0	0	-	-	-	-	-	-	-
Platoon blocked, %			0			0	0	-	-	0	-	-
Mov Cap-1 Maneuver	-	-	*796	-	-	*676	632	-	-	541	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	9.68	11.13	0.3	0.29
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR	
Capacity (veh/h)	632	-	-	796	676	541	-	-
HCM Lane V/C Ratio	0.071	-	-	0.034	0.132	0.06	-	-
HCM Ctrl Dly (s/v)	11.1	-	-	9.7	11.1	12.1	-	-
HCM Lane LOS	B	-	-	A	B	B	-	-
HCM 95th %tile Q(veh)	0.2	-	-	0.1	0.5	0.2	-	-

Notes

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

Queues

9: Crowfoot Valley Rd & Access Road 4

02/05/2026



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	193	99	108	72	58	1366	20	26	1110	42
v/c Ratio	0.53	0.35	0.49	0.41	0.16	0.50	0.02	0.11	0.44	0.04
Control Delay (s/veh)	64.9	3.3	61.5	8.7	2.9	4.2	0.1	3.9	3.3	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	64.9	3.3	61.5	8.7	2.9	4.2	0.1	3.9	3.3	0.1
Queue Length 50th (ft)	88	0	88	0	6	111	0	3	70	0
Queue Length 95th (ft)	126	0	144	11	m8	143	m0	m6	88	m0
Internal Link Dist (ft)		979		889		2297			938	
Turn Bay Length (ft)	450		300		300		300	300		300
Base Capacity (vph)	454	478	237	331	377	2726	1238	240	2496	1150
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.43	0.21	0.46	0.22	0.15	0.50	0.02	0.11	0.44	0.04

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

HCM 7th Signalized Intersection Summary

9: Crowfoot Valley Rd & Access Road 4

02/05/2026

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	178	0	91	99	0	66	53	1257	18	24	1021	39
Future Volume (veh/h)	178	0	91	99	0	66	53	1257	18	24	1021	39
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	193	0	99	108	0	72	58	1366	20	26	1110	42
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	249	0	124	148	0	96	388	2740	1222	255	2512	1121
Arrive On Green	0.07	0.00	0.08	0.05	0.00	0.06	0.02	0.52	0.52	0.71	0.71	0.71
Sat Flow, veh/h	3456	0	1585	1781	0	1585	1781	3554	1585	390	3554	1585
Grp Volume(v), veh/h	193	0	99	108	0	72	58	1366	20	26	1110	42
Grp Sat Flow(s),veh/h/ln	1728	0	1585	1781	0	1585	1781	1777	1585	390	1777	1585
Q Serve(g_s), s	7.7	0.0	8.6	4.2	0.0	6.3	1.2	35.0	0.9	4.8	18.6	0.6
Cycle Q Clear(g_c), s	7.7	0.0	8.6	4.2	0.0	6.3	1.2	35.0	0.9	30.8	18.6	0.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	249	0	124	148	0	96	388	2740	1222	255	2512	1121
V/C Ratio(X)	0.78	0.00	0.80	0.73	0.00	0.75	0.15	0.50	0.02	0.10	0.44	0.04
Avail Cap(c_a), veh/h	457	0	289	223	0	232	440	2740	1222	255	2512	1121
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.80	0.80	0.80	1.00	1.00	1.00
Uniform Delay (d), s/veh	63.9	0.0	63.4	63.6	0.0	64.7	6.2	16.2	8.0	17.2	8.7	1.8
Incr Delay (d2), s/veh	5.2	0.0	10.9	6.8	0.0	11.1	0.1	0.5	0.0	0.8	0.6	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	0.0	3.9	4.0	0.0	2.8	0.4	15.2	0.3	0.5	6.3	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	69.0	0.0	74.3	70.4	0.0	75.8	6.3	16.7	8.0	18.0	9.3	1.8
LnGrp LOS	E		E	E		E	A	B	A	B	A	A
Approach Vol, veh/h	292			180			1444			1178		
Approach Delay, s/veh	70.8			72.6			16.2			9.2		
Approach LOS	E			E			B			A		
Timer - Assigned Phs	2		3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	112.4		12.1	15.5	9.0	103.5	14.6	13.0				
Change Period (Y+Rc), s	4.5		4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	87.5		13.5	25.5	8.5	74.5	18.5	20.5				
Max Q Clear Time (g_c+I1), s	37.0		6.2	10.6	3.2	32.8	9.7	8.3				
Green Ext Time (p_c), s	12.7		0.1	0.4	0.0	9.7	0.4	0.2				
Intersection Summary												
HCM 7th Control Delay, s/veh			22.0									
HCM 7th LOS			C									

Queues

1: Crowfoot Valley Rd & Stroh Rd

02/05/2026

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	47	180	162	953	107	242	108	811	815	283	1027	42
v/c Ratio	0.24	0.87	0.56	0.93	0.19	0.38	0.62	0.74	0.51	0.86	0.73	0.06
Control Delay (s/veh)	67.5	105.3	24.1	69.5	42.4	6.2	29.3	36.1	4.7	57.6	44.7	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	67.5	105.3	24.1	69.5	42.4	6.2	29.3	36.1	4.7	57.6	44.7	0.2
Queue Length 50th (ft)	45	186	31	495	83	0	41	449	54	201	488	0
Queue Length 95th (ft)	89	#317	109	#613	136	66	m37	535	213	#348	572	0
Internal Link Dist (ft)		528			1364			5833			547	
Turn Bay Length (ft)	225		350	650		600	250		500	450		
Base Capacity (vph)	211	222	303	1052	570	652	176	1092	1583	347	1422	692
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.22	0.81	0.53	0.91	0.19	0.37	0.61	0.74	0.51	0.82	0.72	0.06

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

HCM 7th Signalized Intersection Summary

1: Crowfoot Valley Rd & Stroh Rd

02/05/2026

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	43	166	149	877	98	223	99	746	750	260	945	39
Future Volume (veh/h)	43	166	149	877	98	223	99	746	750	260	945	39
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	47	180	0	953	107	0	108	811	0	283	1027	42
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	193	202		1007	545		215	1220		348	1468	655
Arrive On Green	0.11	0.11	0.00	0.29	0.29	0.00	0.04	0.34	0.00	0.11	0.41	0.41
Sat Flow, veh/h	1781	1870	1585	3456	1870	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	47	180	0	953	107	0	108	811	0	283	1027	42
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1728	1870	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	3.9	15.2	0.0	43.2	6.9	0.0	6.3	31.1	0.0	16.0	38.2	2.6
Cycle Q Clear(g_c), s	3.9	15.2	0.0	43.2	6.9	0.0	6.3	31.1	0.0	16.0	38.2	2.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	193	202		1007	545		215	1220		348	1468	655
V/C Ratio(X)	0.24	0.89		0.95	0.20		0.50	0.66		0.81	0.70	0.06
Avail Cap(c_a), veh/h	212	222		1058	573		215	1220		412	1468	655
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	0.57	0.57	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	65.4	70.4	0.0	55.5	42.6	0.0	34.9	44.7	0.0	32.7	38.8	28.3
Incr Delay (d2), s/veh	0.2	29.4	0.0	15.9	0.1	0.0	0.4	1.7	0.0	8.7	2.8	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	8.9	0.0	20.8	3.2	0.0	2.7	13.6	0.0	7.5	16.7	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	65.6	99.8	0.0	71.4	42.8	0.0	35.3	46.4	0.0	41.4	41.6	28.5
LnGrp LOS	E	F		E	D		D	D		D	D	C
Approach Vol, veh/h					1060				919			
Approach Delay, s/veh	92.7				68.5				45.1			
Approach LOS	F				E				D			
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	23.2	60.9		23.3	12.0	72.1		52.6				
Change Period (Y+Rc), s	5.0	6.0		6.0	5.0	6.0		6.0				
Max Green Setting (Gmax), s	24.0	45.0		19.0	7.0	62.0		49.0				
Max Q Clear Time (g_c+I1), s	18.0	33.1		17.2	8.3	40.2		45.2				
Green Ext Time (p_c), s	0.1	5.1		0.1	0.0	9.5		1.4				
Intersection Summary												
HCM 7th Control Delay, s/veh	53.6											
HCM 7th LOS	D											
Notes												
Unsignalized Delay for [NBR, EBR, WBR] is excluded from calculations of the approach delay and intersection delay.												

Queues

2: Crowfoot Valley Rd & S Chambers Rd/Bayou Gulch Rd

02/05/2026

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	89	589	914	149	226	184	651	1455	104	255	1674	55
v/c Ratio	0.37	0.90	0.62	1.43	0.34	0.12	0.83	0.86	0.13	0.84	1.03	0.07
Control Delay (s/veh)	52.4	80.6	2.0	279.6	58.1	0.1	80.5	35.3	4.7	61.9	56.8	1.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	52.4	80.6	2.0	279.6	58.1	0.1	80.5	35.3	4.7	61.9	56.8	1.3
Queue Length 50th (ft)	73	318	0	~157	108	0	256	549	3	191	~975	0
Queue Length 95th (ft)	125	#413	0	#309	152	0	m285	m#889	m14	m242	#1185	m2
Internal Link Dist (ft)		496			564			2512			5833	
Turn Bay Length (ft)	550		300	350		300	500		400	550		350
Base Capacity (vph)	242	674	1468	104	674	1599	1148	1693	824	454	1627	774
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.37	0.87	0.62	1.43	0.34	0.12	0.57	0.86	0.13	0.56	1.03	0.07

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

HCM 7th Signalized Intersection Summary

2: Crowfoot Valley Rd & S Chambers Rd/Bayou Gulch Rd

02/05/2026

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	82	542	841	137	208	169	599	1339	96	235	1540	51
Future Volume (veh/h)	82	542	841	137	208	169	599	1339	96	235	1540	51
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1767	1870	1752	1796	1870	1885	1826	1870	1900	1841	1856	1841
Adj Flow Rate, veh/h	89	589	0	149	226	0	651	1455	104	255	1674	55
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	9	2	10	7	2	1	5	2	0	4	3	4
Cap, veh/h	241	646		119	646		731	1929	874	294	1697	751
Arrive On Green	0.03	0.18	0.00	0.03	0.18	0.00	0.20	0.72	0.72	0.09	0.48	0.48
Sat Flow, veh/h	1682	3554	1485	1711	3554	1598	4904	3554	1610	1753	3526	1560
Grp Volume(v), veh/h	89	589	0	149	226	0	651	1455	104	255	1674	55
Grp Sat Flow(s),veh/h/ln	1682	1777	1485	1711	1777	1598	1635	1777	1610	1753	1763	1560
Q Serve(g_s), s	5.5	26.0	0.0	5.5	8.9	0.0	20.7	40.0	3.1	11.7	75.0	3.0
Cycle Q Clear(g_c), s	5.5	26.0	0.0	5.5	8.9	0.0	20.7	40.0	3.1	11.7	75.0	3.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	241	646		119	646		731	1929	874	294	1697	751
V/C Ratio(X)	0.37	0.91		1.25	0.35		0.89	0.75	0.12	0.87	0.99	0.07
Avail Cap(c_a), veh/h	241	677		119	677		1162	1929	874	556	1697	751
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	0.50	0.50	0.50	0.50	0.50	0.50
Uniform Delay (d), s/veh	53.9	64.2	0.0	64.1	57.2	0.0	62.9	15.7	10.6	27.2	41.0	22.3
Incr Delay (d2), s/veh	0.9	16.6	0.0	164.4	0.5	0.0	1.8	1.4	0.1	1.6	12.5	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	13.1	0.0	7.7	4.0	0.0	8.2	12.1	1.1	4.7	33.7	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	54.8	80.8	0.0	228.5	57.6	0.0	64.7	17.1	10.7	28.7	53.5	22.4
LnGrp LOS	D	F		F	E		E	B	B	C	D	C
Approach Vol, veh/h	678		375				2210		1984			
Approach Delay, s/veh	77.4		125.5				30.8		49.5			
Approach LOS	E		F				C		D			
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.0	35.6	19.5	93.9	11.0	35.6	29.4	84.0				
Change Period (Y+Rc), s	5.5	6.5	5.5	7.0	5.5	6.5	5.5	7.0				
Max Green Setting (Gmax), s	5.5	30.5	37.9	61.6	5.5	30.5	37.9	61.6				
Max Q Clear Time (g_c+I1), s	7.5	10.9	13.7	42.0	7.5	28.0	22.7	77.0				
Green Ext Time (p_c), s	0.0	1.7	0.3	15.3	0.0	1.1	1.2	0.0				
Intersection Summary												
HCM 7th Control Delay, s/veh	50.7											
HCM 7th LOS	D											
Notes												
Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.												

Queues

3: Crowfoot Valley Rd & Access Road 1/N Pinery Pkwy

02/05/2026



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	545	71	66	74	114	1592	86	98	2209	430
v/c Ratio	1.06	0.20	0.40	0.40	0.57	0.71	0.08	0.46	1.03	0.40
Control Delay (s/veh)	120.7	1.3	60.4	6.5	45.0	14.3	1.5	14.8	35.2	0.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	120.7	1.3	60.4	6.5	45.0	14.3	1.5	14.8	35.2	0.5
Queue Length 50th (ft)	~322	0	57	0	66	438	2	17	~1292	0
Queue Length 95th (ft)	#444	0	103	0	m122	427	m10	m20	m#1289	m0
Internal Link Dist (ft)		390		428		1247			2512	
Turn Bay Length (ft)	650				300		440	500		300
Base Capacity (vph)	512	388	250	299	200	2243	1020	213	2141	1076
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.06	0.18	0.26	0.25	0.57	0.71	0.08	0.46	1.03	0.40

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

02/05/2026

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 			 	 		 	 		 		
Traffic Volume (veh/h)	501	0	65	61	0	68	105	1465	79	90	2032	396
Future Volume (veh/h)	501	0	65	61	0	68	105	1465	79	90	2032	396
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1900	1870	1900	1870	1841	1811	1841	1841	1870
Adj Flow Rate, veh/h	545	0	71	66	0	74	114	1592	86	98	2209	430
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	0	2	0	2	4	6	4	4	2
Cap, veh/h	516	0	257	210	0	94	173	1987	872	295	2233	1012
Arrive On Green	0.15	0.00	0.16	0.05	0.00	0.06	0.04	0.57	0.57	0.22	1.00	1.00
Sat Flow, veh/h	3456	0	1585	1810	0	1585	1781	3497	1535	1753	3497	1585
Grp Volume(v), veh/h	545	0	71	66	0	74	114	1592	86	98	2209	430
Grp Sat Flow(s),veh/h/ln	1728	0	1585	1810	0	1585	1781	1749	1535	1753	1749	1585
Q Serve(g_s), s	23.9	0.0	6.3	5.4	0.0	7.4	4.9	57.7	3.1	0.0	0.0	0.0
Cycle Q Clear(g_c), s	23.9	0.0	6.3	5.4	0.0	7.4	4.9	57.7	3.1	0.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	516	0	257	210	0	94	173	1987	872	295	2233	1012
V/C Ratio(X)	1.06	0.00	0.28	0.31	0.00	0.78	0.66	0.80	0.10	0.33	0.99	0.42
Avail Cap(c_a), veh/h	516	0	257	329	0	178	173	1987	872	295	2233	1012
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.28	0.28	0.28
Uniform Delay (d), s/veh	68.1	0.0	58.8	66.3	0.0	74.2	18.1	27.4	9.2	46.5	0.0	0.0
Incr Delay (d2), s/veh	55.1	0.0	0.6	0.8	0.0	13.1	8.7	3.5	0.2	0.2	7.9	0.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	14.5	0.0	2.6	2.6	0.0	3.3	2.4	23.5	1.5	3.1	2.4	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	123.2	0.0	59.4	67.1	0.0	87.3	26.8	30.9	9.4	46.7	7.9	0.4
LnGrp LOS	F		E	E		F	C	C	A	D	A	A
Approach Vol, veh/h	616			140			1792			2737		
Approach Delay, s/veh	115.8			77.8			29.6			8.1		
Approach LOS	F			E			C			A		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	22.2	95.4	12.0	30.4	10.9	106.7	28.4	14.0				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	9.2	90.9	18.0	23.9	6.4	93.7	23.9	18.0				
Max Q Clear Time (g_c+I1), s	2.0	59.7	7.4	8.3	6.9	2.0	25.9	9.4				
Green Ext Time (p_c), s	0.1	14.5	0.1	0.3	0.0	47.1	0.0	0.2				
Intersection Summary												
HCM 7th Control Delay, s/veh	29.8											
HCM 7th LOS	C											

Queues

4: Crowfoot Valley Rd & Access Road 5/Pradera Pkwy

02/05/2026



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	307	140	133	176	192	1228	165	105	1099	501
v/c Ratio	0.73	0.69	0.44	0.77	0.51	0.56	0.15	0.41	0.53	0.44
Control Delay (s/veh)	78.2	34.8	60.5	50.2	15.9	11.2	0.8	10.0	6.0	1.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	78.2	34.8	60.5	50.2	15.9	11.2	0.8	10.0	6.0	1.1
Queue Length 50th (ft)	162	23	117	72	32	156	0	7	65	0
Queue Length 95th (ft)	209	95	164	154	81	176	11	m30	273	12
Internal Link Dist (ft)		823		643		13280			2297	
Turn Bay Length (ft)	300				300		880	450		300
Base Capacity (vph)	508	377	315	329	439	2199	1082	312	2088	1137
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.60	0.37	0.42	0.53	0.44	0.56	0.15	0.34	0.53	0.44

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

02/05/2026

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	282	20	109	122	32	130	177	1130	152	97	1011	461
Future Volume (veh/h)	282	20	109	122	32	130	177	1130	152	97	1011	461
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1856	1870	1826	1885	1841	1856	1870
Adj Flow Rate, veh/h	307	22	118	133	35	141	192	1228	165	105	1099	501
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	3	2	5	1	4	3	2
Cap, veh/h	359	26	138	280	39	158	516	1789	824	382	1664	748
Arrive On Green	0.10	0.10	0.10	0.12	0.12	0.12	0.19	0.52	0.52	0.29	0.94	0.94
Sat Flow, veh/h	3456	255	1369	1781	325	1310	1781	3469	1598	1753	3526	1585
Grp Volume(v), veh/h	307	0	140	133	0	176	192	1228	165	105	1099	501
Grp Sat Flow(s),veh/h/ln	1728	0	1624	1781	0	1635	1781	1735	1598	1753	1763	1585
Q Serve(g_s), s	14.0	0.0	13.6	5.5	0.0	17.0	0.0	42.5	8.9	0.0	7.5	7.7
Cycle Q Clear(g_c), s	14.0	0.0	13.6	5.5	0.0	17.0	0.0	42.5	8.9	0.0	7.5	7.7
Prop In Lane	1.00		0.84	1.00		0.80	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	359	0	164	280	0	197	516	1789	824	382	1664	748
V/C Ratio(X)	0.85	0.00	0.86	0.47	0.00	0.89	0.37	0.69	0.20	0.27	0.66	0.67
Avail Cap(c_a), veh/h	508	0	279	280	0	240	516	1789	824	382	1664	748
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.81	0.81	0.81	0.72	0.72	0.72
Uniform Delay (d), s/veh	70.5	0.0	70.8	62.5	0.0	69.3	29.8	29.1	20.9	35.8	2.6	2.6
Incr Delay (d2), s/veh	9.8	0.0	12.0	1.2	0.0	27.9	0.4	1.8	0.4	0.3	1.5	3.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.7	0.0	6.2	5.0	0.0	8.6	6.2	17.3	3.4	2.8	1.5	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	80.3	0.0	82.8	63.7	0.0	97.2	30.2	30.8	21.4	36.1	4.1	6.0
LnGrp LOS	F		F	E		F	C	C	C	D	A	A
Approach Vol, veh/h	447					309		1585		1705		
Approach Delay, s/veh	81.1					82.8		29.8		6.6		
Approach LOS	F					F		C		A		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	28.1	87.0	24.3	20.6	35.1	80.0	21.1	23.8				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	12.5	82.5	19.5	27.5	19.5	75.5	23.5	23.5				
Max Q Clear Time (g_c+I1), s	2.0	44.5	7.5	15.6	2.0	9.7	16.0	19.0				
Green Ext Time (p_c), s	0.1	11.0	0.2	0.5	0.4	12.5	0.6	0.3				
Intersection Summary												
HCM 7th Control Delay, s/veh	29.7											
HCM 7th LOS	C											

Queues

5: Crowfoot Valley Rd & Canyonside Blvd/Macanta Blvd

02/05/2026

											
Lane Group	EBL	EBR	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Group Flow (vph)	50	150	110	17	207	1467	151	20	1298	74	
v/c Ratio	0.12	0.47	0.55	0.05	0.65	0.58	0.13	0.09	0.57	0.07	
Control Delay (s/veh)	57.8	4.9	74.6	0.3	18.9	7.0	0.6	3.2	7.1	0.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	57.8	4.9	74.6	0.3	18.9	7.1	0.6	3.2	7.1	0.2	
Queue Length 50th (ft)	23	0	107	0	24	329	1	1	144	0	
Queue Length 95th (ft)	43	0	166	0	66	512	15	m3	179	1	
Internal Link Dist (ft)						775					13280
Turn Bay Length (ft)	200	200	265	265	300			575	575	300	
Base Capacity (vph)	404	391	208	432	405	2517	1169	365	2281	1055	
Starvation Cap Reductn	0	0	0	0	0	204	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.12	0.38	0.53	0.04	0.51	0.63	0.13	0.05	0.57	0.07	
Intersection Summary											
m Volume for 95th percentile queue is metered by upstream signal.											

HCM 7th Signalized Intersection Summary

5: Crowfoot Valley Rd & Canyonside Blvd/Macanta Blvd

02/05/2026

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 							 			 	
Traffic Volume (veh/h)	46	0	138	101	0	16	190	1350	139	18	1194	68
Future Volume (veh/h)	46	0	138	101	0	16	190	1350	139	18	1194	68
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	50	0	150	110	0	17	207	1467	151	20	1298	74
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	467	177	150	178	117	99	327	2452	1094	248	2379	1061
Arrive On Green	0.06	0.00	0.09	0.03	0.00	0.06	0.05	0.69	0.69	0.03	0.67	0.67
Sat Flow, veh/h	3456	1870	1585	1781	1870	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	50	0	150	110	0	17	207	1467	151	20	1298	74
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1781	1870	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	0.0	0.0	13.0	0.0	0.0	1.4	5.9	34.9	3.4	0.5	30.4	1.5
Cycle Q Clear(g_c), s	0.0	0.0	13.0	0.0	0.0	1.4	5.9	34.9	3.4	0.5	30.4	1.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	467	177	150	178	117	99	327	2452	1094	248	2379	1061
V/C Ratio(X)	0.11	0.00	1.00	0.62	0.00	0.17	0.63	0.60	0.14	0.08	0.55	0.07
Avail Cap(c_a), veh/h	467	216	183	228	269	228	474	2452	1094	393	2379	1061
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.74	0.74	0.74	0.84	0.84	0.84
Uniform Delay (d), s/veh	62.9	0.0	53.5	71.6	0.0	55.9	13.1	13.1	3.6	10.6	13.8	3.0
Incr Delay (d2), s/veh	0.1	0.0	62.0	3.5	0.0	0.8	1.5	0.8	0.2	0.1	0.8	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	7.7	4.6	0.0	0.7	2.2	12.8	1.6	0.2	11.4	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	63.0	0.0	115.6	75.1	0.0	56.7	14.6	13.9	3.8	10.7	14.5	3.1
LnGrp LOS	E		F	E		E	B	B	A	B	B	A
Approach Vol, veh/h	200			127			1825			1392		
Approach Delay, s/veh	102.4			72.6			13.1			13.9		
Approach LOS	F			E			B			B		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	15.6	16.5	10.5	117.4	10.5	21.6	13.8	114.1				
Change Period (Y+Rc), s	5.5	6.5	5.5	7.0	5.5	6.5	5.5	7.0				
Max Green Setting (Gmax), s	5.0	23.0	18.0	89.5	9.5	18.5	21.5	86.0				
Max Q Clear Time (g_c+l1), s	2.0	3.4	2.5	36.9	2.0	15.0	7.9	32.4				
Green Ext Time (p_c), s	0.0	0.0	0.0	15.5	0.1	0.1	0.4	12.1				
Intersection Summary												
HCM 7th Control Delay, s/veh	20.6											
HCM 7th LOS	C											

Queues

6: Crowfoot Valley Rd & Sapphire Pointe Blvd

02/05/2026



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	24	138	252	1801	1514	43
v/c Ratio	0.11	0.44	0.60	0.64	0.74	0.05
Control Delay (s/veh)	64.1	13.7	32.6	7.8	14.7	2.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	64.1	13.7	32.6	7.8	14.7	2.3
Queue Length 50th (ft)	23	0	132	348	416	1
Queue Length 95th (ft)	54	68	232	398	204	m4
Internal Link Dist (ft)	267			924	775	
Turn Bay Length (ft)	300		600			250
Base Capacity (vph)	215	314	420	2831	2057	933
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.11	0.44	0.60	0.64	0.74	0.05

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

HCM 7th Signalized Intersection Summary
6: Crowfoot Valley Rd & Sapphire Pointe Blvd

02/05/2026



Movement	EBL	EBR	NBL	NBT	SBT	SBR	
Lane Configurations							
Traffic Volume (veh/h)	22	127	232	1657	1393	40	
Future Volume (veh/h)	22	127	232	1657	1393	40	
Initial Q (Qb), veh	0	0	0	0	0	0	
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	
Work Zone On Approach	No			No	No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	
Adj Flow Rate, veh/h	24	138	252	1801	1514	43	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Percent Heavy Veh, %	2	2	2	2	2	2	
Cap, veh/h	217	193	566	2843	2066	921	
Arrive On Green	0.12	0.12	0.18	0.80	1.00	1.00	
Sat Flow, veh/h	1781	1585	1781	3647	3647	1585	
Grp Volume(v), veh/h	24	138	252	1801	1514	43	
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1777	1777	1585	
Q Serve(g_s), s	1.9	13.4	5.8	32.9	0.0	0.0	
Cycle Q Clear(g_c), s	1.9	13.4	5.8	32.9	0.0	0.0	
Prop In Lane	1.00	1.00	1.00			1.00	
Lane Grp Cap(c), veh/h	217	193	566	2843	2066	921	
V/C Ratio(X)	0.11	0.71	0.45	0.63	0.73	0.05	
Avail Cap(c_a), veh/h	217	193	566	2843	2066	921	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00	
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.81	0.81	
Uniform Delay (d), s/veh	62.5	67.6	4.6	6.5	0.0	0.0	
Incr Delay (d2), s/veh	1.0	20.1	2.5	1.1	1.9	0.1	
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	
%ile BackOfQ(50%),veh/ln	0.9	12.6	2.2	9.7	0.5	1.9	
Unsig. Movement Delay, s/veh							
LnGrp Delay(d), s/veh	63.6	87.7	7.2	7.6	1.9	0.1	
LnGrp LOS	E	F	A	A	A	A	
Approach Vol, veh/h	162			2053	1557		
Approach Delay, s/veh	84.1			7.5	1.9		
Approach LOS	F			A	A		
Timer - Assigned Phs				4	6	7	8
Phs Duration (G+Y+Rc), s				135.0	25.0	35.0	100.0
Change Period (Y+Rc), s				7.0	5.5	5.5	7.0
Max Green Setting (Gmax), s				128.0	19.5	29.5	93.0
Max Q Clear Time (g_c+I1), s				34.9	15.4	7.8	2.0
Green Ext Time (p_c), s				24.0	0.2	0.6	16.6
Intersection Summary							
HCM 7th Control Delay, s/veh			8.5				
HCM 7th LOS			A				

Intersection

Int Delay, s/veh 0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations			↗			↗	↗	↗	↗	↗	↗	↗
Traffic Vol, veh/h	0	0	24	0	0	57	41	1592	19	93	1960	105
Future Vol, veh/h	0	0	24	0	0	57	41	1592	19	93	1960	105
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	300	-	300	300	-	300
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	26	0	0	62	45	1730	21	101	2130	114

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	-	-	1065	-	-	865	2245	0	0	1751	0	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.94	-	-	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.32	-	-	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	0	0	*530	0	0	*635	225	-	-	452	-	-
Stage 1	0	0	-	0	0	-	-	-	-	-	-	-
Stage 2	0	0	-	0	0	-	-	-	-	-	-	-
Platoon blocked, %			1			0	1	-	-	0	-	-
Mov Cap-1 Maneuver	-	-	*530	-	-	*635	225	-	-	452	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	12.15	11.28	0.62	0.66
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	225	-	-	530	635	452	-
HCM Lane V/C Ratio	0.198	-	-	0.049	0.098	0.223	-
HCM Ctrl Dly (s/v)	24.9	-	-	12.1	11.3	15.2	-
HCM Lane LOS	C	-	-	B	B	C	-
HCM 95th %tile Q(veh)	0.7	-	-	0.2	0.3	0.8	-

Notes

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

Intersection												
Int Delay, s/veh	2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations			↗			↗	↗	↗	↗	↗	↗	↗
Traffic Vol, veh/h	0	0	256	0	0	57	96	1595	37	93	1324	567
Future Vol, veh/h	0	0	256	0	0	57	96	1595	37	93	1324	567
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	300	-	300	300	-	300
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	278	0	0	62	104	1734	40	101	1439	616

Major/Minor	Minor2		Minor1		Major1		Major2	
Conflicting Flow All	-	-	720	-	-	867	2055	0
Stage 1	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.94	-	-	6.94	4.14	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.32	-	-	3.32	2.22	-
Pot Cap-1 Maneuver	0	0	*714	0	0	*635	275	-
Stage 1	0	0	-	0	0	-	-	-
Stage 2	0	0	-	0	0	-	-	-
Platoon blocked, %			0			0	0	-
Mov Cap-1 Maneuver	-	-	*714	-	-	*635	275	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	13.23	11.28	1.44	0.74
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	275	-	-	714	635	437	-
HCM Lane V/C Ratio	0.379	-	-	0.39	0.098	0.231	-
HCM Ctrl Dly (s/v)	25.9	-	-	13.2	11.3	15.7	-
HCM Lane LOS	D	-	-	B	B	C	-
HCM 95th %tile Q(veh)	1.7	-	-	1.9	0.3	0.9	-

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

Queues

9: Crowfoot Valley Rd & Access Road 4

02/05/2026



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	372	126	74	49	158	1458	61	80	1505	132
v/c Ratio	0.85	0.38	0.62	0.32	0.56	0.54	0.05	0.47	0.65	0.12
Control Delay (s/veh)	85.9	4.2	80.4	5.5	19.2	5.7	0.9	10.3	5.9	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	85.9	4.2	80.4	5.5	19.2	5.7	0.9	10.3	5.9	0.4
Queue Length 50th (ft)	197	0	66	0	31	154	0	21	291	4
Queue Length 95th (ft)	#267	8	116	0	64	212	m8	m20	m242	m3
Internal Link Dist (ft)		694		896		2297			938	
Turn Bay Length (ft)	450		300		300		300	300		300
Base Capacity (vph)	461	470	120	268	280	2709	1228	170	2333	1081
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.81	0.27	0.62	0.18	0.56	0.54	0.05	0.47	0.65	0.12

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

HCM 7th Signalized Intersection Summary

9: Crowfoot Valley Rd & Access Road 4

02/05/2026

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	342	0	116	68	0	45	145	1341	56	74	1385	121
Future Volume (veh/h)	342	0	116	68	0	45	145	1341	56	74	1385	121
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	372	0	126	74	0	49	158	1458	61	80	1505	132
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	418	0	194	175	0	69	401	2669	1190	238	1999	892
Arrive On Green	0.12	0.00	0.12	0.04	0.00	0.04	0.32	1.00	1.00	0.56	0.56	0.56
Sat Flow, veh/h	3456	0	1585	1781	0	1585	1781	3554	1585	344	3554	1585
Grp Volume(v), veh/h	372	0	126	74	0	49	158	1458	61	80	1505	132
Grp Sat Flow(s),veh/h/ln	1728	0	1585	1781	0	1585	1781	1777	1585	344	1777	1585
Q Serve(g_s), s	17.0	0.0	12.1	6.3	0.0	4.9	0.0	0.0	0.0	21.2	51.4	3.8
Cycle Q Clear(g_c), s	17.0	0.0	12.1	6.3	0.0	4.9	0.0	0.0	0.0	21.2	51.4	3.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	418	0	194	175	0	69	401	2669	1190	238	1999	892
V/C Ratio(X)	0.89	0.00	0.65	0.42	0.00	0.71	0.39	0.55	0.05	0.34	0.75	0.15
Avail Cap(c_a), veh/h	464	0	325	175	0	178	401	2669	1190	238	1999	892
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.78	0.78	0.78	1.00	1.00	1.00
Uniform Delay (d), s/veh	69.3	0.0	66.9	69.8	0.0	75.5	37.5	0.0	0.0	20.0	26.6	5.9
Incr Delay (d2), s/veh	17.8	0.0	3.6	1.6	0.0	12.4	0.5	0.6	0.1	3.8	2.7	0.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.6	0.0	5.1	3.0	0.0	2.2	4.3	0.2	0.0	1.9	21.2	2.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	87.1	0.0	70.5	71.4	0.0	87.9	38.0	0.6	0.1	23.7	29.2	6.3
LnGrp LOS	F		E	E		F	D	A	A	C	C	A
Approach Vol, veh/h	498			123			1677			1717		
Approach Delay, s/veh	82.9			78.0			4.1			27.2		
Approach LOS	F			E			A			C		
Timer - Assigned Phs	2			3			4			5		
Phs Duration (G+Y+Rc), s	124.7			11.2			24.1			30.2		
Change Period (Y+Rc), s	4.5			4.5			4.5			4.5		
Max Green Setting (Gmax), s	107.0			6.7			32.8			12.5		
Max Q Clear Time (g_c+I1), s	2.0			8.3			14.1			2.0		
Green Ext Time (p_c), s	15.6			0.0			0.6			0.3		
Intersection Summary												
HCM 7th Control Delay, s/veh				26.0								
HCM 7th LOS				C								