



September 9, 2022

Ms. Krysta Houtchens
Entitlement and Engineering Solutions, Inc.
501 S. Cherry Street, Suite 300
Glendale, CO 80246

Re: K&G Store #2293
Traffic Impact Analysis
Parker, CO
LSC #220740

Dear Ms. Houtchens:

In response to your request, LSC Transportation Consultants, Inc. has prepared this traffic impact analysis for the proposed K&G Store #2293 development. As shown on Figure 1, the site is located south of N. Pinery Parkway and east of Bayou Gulch Road in Parker, Colorado.

REPORT CONTENTS

The report contains the following: the existing roadway and traffic conditions in the vicinity of the site including the lane geometries, traffic controls, posted speed limits, etc.; the existing weekday peak-hour traffic volumes; the existing daily traffic volumes in the area; the typical weekday site-generated traffic volume projections for the site; the assignment of the projected traffic volumes to the area roadways; the projected short-term and long-term background and resulting total traffic volumes on the area roadways; the site's projected traffic impacts; and any recommended roadway improvements to mitigate the site's traffic impacts.

LAND USE AND ACCESS

The site is proposed to include a C-Store and gas station with 16 fueling positions. Access is proposed to N. Pinery Parkway and Bayou Gulch Road as shown in the conceptual site plan in Figure 2. A right-in-only access proposed on N. Pinery Parkway is the only direct access to the site. A right-in/right-out access on Bayou Gulch Road is proposed south of the site so off-site connection to it will be needed in the short term. The site also has indirect access east to Alpine Phlox Street which has connectivity to N. Pinery Parkway.

ROADWAY AND TRAFFIC CONDITIONS

Area Roadways

The major roadways in the site's vicinity are shown on Figure 1 and are described below.

- **N. Pinery Parkway** is an east-west, two-lane collector roadway north of the site. The intersection with Bayou Gulch Road is stop-sign controlled but planned to be signalized when warranted.
- **Bayou Gulch Road** is a north-south, two-lane arterial roadway west of the site. The intersection with N. Pinery Parkway is stop-sign controlled but planned to be signalized when warranted. It is planned to be four lanes by 2042.

Existing Traffic Conditions

Figure 3 shows the existing lane geometries, traffic controls, posted speed limits, and traffic volumes in the site's vicinity on a typical weekday. The weekday peak-hour traffic volumes and daily traffic counts are from the attached traffic counts conducted by Counter Measures in August, 2022.

2024 and 2042 Background Traffic

Figure 4 shows the estimated 2024 background traffic, lane geometry, and traffic control and Figure 5 shows the estimated 2042 background traffic, lane geometry, and traffic control. The 2024 estimates are based on considerable growth based on ongoing home construction in the area. The 2042 estimates are based on the buildout traffic volumes in Figure 10a from the 2018 *Trails at Crowfoot TIA* by LSC less site-generated traffic.

Existing, 2024, and 2042 Background Levels of Service

Level of service (LOS) is a quantitative measure of the level of congestion or delay at an intersection. Level of service is indicated on a scale from "A" to "F." LOS A is indicative of little congestion or delay and LOS F is indicative of a high level of congestion or delay. Attached are specific level of service definitions for signalized and unsignalized intersections.

The intersections in Figures 3 through 5 were analyzed as appropriate to determine the existing, 2024, and 2042 background levels of service using Synchro. Table 1 shows the level of service analysis results. The level of service reports are attached.

1. **N. Pinery Parkway/Bayou Gulch Road:** All movements at this unsignalized intersection currently operate at LOS "A" during both morning and afternoon peak-hours and are expected to operate at LOS "B" or better through 2024. By 2042, this intersection is expected to be signalized and operate at an overall LOS "C" during both peak-hours.
2. **N. Pinery Parkway/Site Access:** All movements at this unsignalized intersection are expected to operate at LOS "A" during both morning and afternoon peak-hours through 2042 because none of the movements are required to yield to others. The existing eastbound right-turn lane on N. Pinery Parkway between Bayou Gulch Road and Alpine Phlox Street will accommodate this proposed access because the access has no outbound movement so no conflicts are expected.
3. **N. Pinery Parkway/Alpine Phlox Street:** All movements at this unsignalized intersection are expected to operate at LOS "B" or better during both morning and afternoon peak-hours through 2042.

4. **Alpine Phlox Street/Internal Collector:** All movements at this unsignalized intersection are expected to operate at LOS “A” during both morning and afternoon peak-hours through 2042.
5. **Bayou Gulch Road/Internal Collector:** All movements at this unsignalized intersection are expected to operate at LOS “B” or better during both morning and afternoon peak-hours through 2042.

TRIP GENERATION

Table 2 shows the estimated average weekday, morning peak-hour, and afternoon peak-hour trip generation for the proposed site based on the rates from *Trip Generation, 11th Edition, 2021* by the Institute of Transportation Engineers (ITE) for the proposed land use.

The site is projected to generate about 4,242 one-way vehicle-trips on the average weekday, with about half entering and half exiting during a 24-hour period. During the morning peak-hour, which generally occurs for one hour between 6:30 and 8:30 a.m., about 128 vehicles would enter and about 128 vehicles would exit the site. During the afternoon peak-hour, which generally occurs for one hour between 4:00 and 6:00 p.m., about 147 vehicles would enter and about 147 vehicles would exit. These totals are expected to be reduced due to pass-by trips as shown in Table 2.

TRIP DISTRIBUTION

Figure 6 shows the estimated directional distribution of the primary site-generated traffic volumes on the area roadways. The estimates were based on the location of the site with respect to the regional population, employment, and activity centers; and the site’s proposed land use.

TRIP ASSIGNMENT

Figure 7a shows the estimated primary site-generated traffic volumes based on the directional distribution percentages (from Figure 6) and the primary trip generation estimate (from Table 2).

Figure 7b shows the estimated passby site-generated traffic volumes based on the passby trip generation estimate (from Table 2) and the existing and projected traffic volumes.

2024 AND 2042 TOTAL TRAFFIC

Figure 8 shows the 2024 total traffic which is the sum of the 2024 background traffic volumes (from Figure 4) and the site-generated traffic volumes (from Figures 7a and 7b). Figure 8 also shows the recommended 2024 lane geometry and traffic control.

Figure 9 shows the 2042 total traffic which is the sum of the 2042 background traffic volumes (from Figure 5) and the site-generated traffic volumes (from Figures 7a and 7b). Figure 9 also shows the recommended 2024 lane geometry and traffic control..

PROJECTED LEVELS OF SERVICE

The intersections in Figures 8 and 9 were analyzed to determine the 2024 and 2042 total levels of service. Table 1 shows the level of service analysis results. The level of service reports are attached.

- 1. N. Pinery Parkway/Bayou Gulch Road:** All movements at this unsignalized intersection are expected to operate at LOS “B” or better during both morning and afternoon peak-hours through 2024. By 2042, this intersection is expected to be signalized and operate at an overall LOS “C” during both peak-hours.
- 2. N. Pinery Parkway/Site Access:** All movements at this unsignalized intersection are expected to operate at LOS “A” during both morning and afternoon peak-hours through 2042 because none of the movements are required to yield to others. The existing eastbound right-turn lane on N. Pinery Parkway between Bayou Gulch Road and Alpine Phlox Street will accommodate this proposed access because the access has no outbound movement so no conflicts are expected.
- 3. N. Pinery Parkway/Alpine Phlox Street:** All movements at this unsignalized intersection are expected to operate at LOS “B” or better during both morning and afternoon peak-hours through 2042.
- 4. Alpine Phlox Street/Internal Collector:** All movements at this unsignalized intersection are expected to operate at LOS “A” during both morning and afternoon peak-hours through 2042.
- 5. Bayou Gulch Road/Internal Collector:** All movements at this unsignalized intersection are expected to operate at LOS “C” or better during both morning and afternoon peak-hours through 2042.

CONCLUSIONS AND RECOMMENDATIONS

Trip Generation

1. The site is projected to generate about 4,242 one-way vehicle-trips on the average week-day, with about half entering and half exiting during a 24-hour period. During the morning peak-hour, about 128 vehicles would enter and about 128 vehicles would exit the site. During the afternoon peak-hour, about 147 vehicles would enter and about 147 vehicles would exit. These totals are expected to be reduced due to pass-by trips as shown in Table 2.

Projected Levels of Service

2. The future signalized N. Pinery Parkway/Bayou Gulch Road intersection is expected to operate at an overall LOS “C” during both peak-hours through 2042.
3. All movements at the unsignalized intersections analyzed are expected to operate at LOS “C” or better during both morning and afternoon peak-hours through 2024 and 2042.

Conclusions

- 4. The impact of the proposed K&G Store #2293 development can be accommodated by the existing and planned roadway network.

Recommended Improvements

- 5. The N. Pinery Parkway/Bayou Gulch Road intersection will be signalized by the Master Developer once warrants are met.
- 6. The roadways surrounding the site will be built out as the area builds out.

* * * * *

We trust our findings will assist you in gaining approval of the proposed K&G Store #2293 development. Please contact me if you have any questions or need further assistance.

Sincerely,

LSC TRANSPORTATION CONSULTANTS, INC.

By  _____
 Christopher S. McGranahan, PE, PTOE
 Principal



CSM/wc

9-9-22

- Enclosures: Tables 1 and 2
 Figures 1 - 9
 Traffic Count Reports
 Figure 10a from 2018 *Trails at Crowfoot TIA* by LSC
 Level of Service Definitions
 Level of Service Reports

**Table 1
Intersection Levels of Service Analysis
K & G Store #2293
Parker, CO
LSC #220740; September, 2022**

Intersection Location	Traffic Control	Existing Traffic		2024 Background Traffic		2024 Total Traffic		2042 Background Traffic		2042 Total Traffic	
		Level of Service	Level of Service	Level of Service	Level of Service	Level of Service	Level of Service	Level of Service	Level of Service	Level of Service	Level of Service
		AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
<u>1) N. Pinery Parkway/Bayou Gulch Road</u>	TWSC										
NB Left		A	A	B	B	B	B	--	--	--	--
NB Through/Right		A	A	B	B	B	B	--	--	--	--
EB Left		A	A	A	A	A	A	--	--	--	--
WB Left		A	A	A	A	A	A	--	--	--	--
SB Left		A	A	B	B	B	B	--	--	--	--
SB Through/Right		A	A	B	B	B	B	--	--	--	--
Critical Movement Delay		9.3	9.4	11.9	10.8	12.4	11.0	--	--	--	--
	Signalized										
EB Left		--	--	--	--	--	--	D	D	D	D
EB Through		--	--	--	--	--	--	D	D	D	D
EB Right		--	--	--	--	--	--	A	A	A	A
WB Left		--	--	--	--	--	--	C	D	C	D
WB Through		--	--	--	--	--	--	D	D	D	D
WB Right		--	--	--	--	--	--	C	B	C	B
NB Left		--	--	--	--	--	--	B	A	B	A
NB Through		--	--	--	--	--	--	C	D	C	D
NB Right		--	--	--	--	--	--	A	A	A	A
SB Left		--	--	--	--	--	--	D	D	D	D
SB Through		--	--	--	--	--	--	B	B	B	B
SB Right		--	--	--	--	--	--	A	A	A	A
Entire Intersection Delay (sec /veh)		--	--	--	--	--	--	26.1	28.6	26.8	29.3
Entire Intersection LOS		--	--	--	--	--	--	C	C	C	C
<u>2) N. Pinery Parkway/Site Access</u>	Right-In-Only										
<u>3) N. Pinery Parkway/Alpine Phlox Street</u>	TWSC										
NB Right	Three-Quarter Movement	--	--	A	A	A	A	B	B	B	B
WB Left		--	--	A	A	A	A	A	A	A	A
SB Right		--	--	A	A	A	A	B	A	B	B
Critical Movement Delay		--	--	8.9	8.7	8.8	8.6	11.1	11.2	11.3	11.4
<u>4) Alpine Phlox Street/Internal Collector</u>	TWSC										
NB Left/Through		--	--	--	--	A	A	A	A	A	A
EB Approach		--	--	--	--	A	A	A	A	A	A
Critical Movement Delay		--	--	--	--	9.1	9.3	8.7	8.9	9.3	9.5
<u>5) Bayou Gulch Road/Internal Collector</u>	TWSC										
WB Right	Right-In/Right-Out	--	--	--	--	A	A	B	B	B	C
Critical Movement Delay		--	--	--	--	9.0	8.9	12.2	14.9	13.5	17.9

Table 2
ESTIMATED TRAFFIC GENERATION
K&G Store #2293
Parker, CO
LSC #220740; September, 2022

Trip Generating Category	Quantity	Trip Generation Rates ⁽¹⁾				Total Trips Generated					
		Average Weekday	AM Peak-Hour In	PM Peak-Hour Out	PM Peak-Hour In	Average Weekday	AM Peak-Hour In	PM Peak-Hour Out	PM Peak-Hour In	PM Peak-Hour Out	
Currently Proposed Land Use											
Gas Station ⁽²⁾	16 VFP ⁽³⁾	265.12	8.030	8.030	9.210	9.210	4,242	128	128	147	147
							2,503	79	79	82	82
							1,739	49	49	65	65
Future Adjacent Land Use											
Retail ⁽⁵⁾	30 KSF ⁽⁶⁾	54.45	1.416	0.944	3.295	3.295	1,634	42	28	99	99

Notes:

- (1) Source: *Trip Generation*, Institute of Transportation Engineers, 11th Edition, 2021.
- (2) ITE Land Use No. 945 - Convenience Store/Gas Station - VFP (16-24)
- (3) VFP = Vehicle Fueling Positions
- (4) Passby trips are assumed to be 59% for daily trips, 62% for morning peak-hour trips, and 56% for afternoon peak-hour trips for the gas station and 34% for the retail land use based on the *Trip Generation Handbook*, 3rd Edition.
- (5) ITE Land Use No. 822 - Strip Retail Plaza (<40k)
- (6) KSF = 1,000 square feet

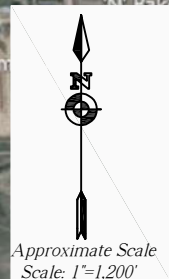


Figure 1
Vicinity Map

K&G Store #2293 (LSC #220740)

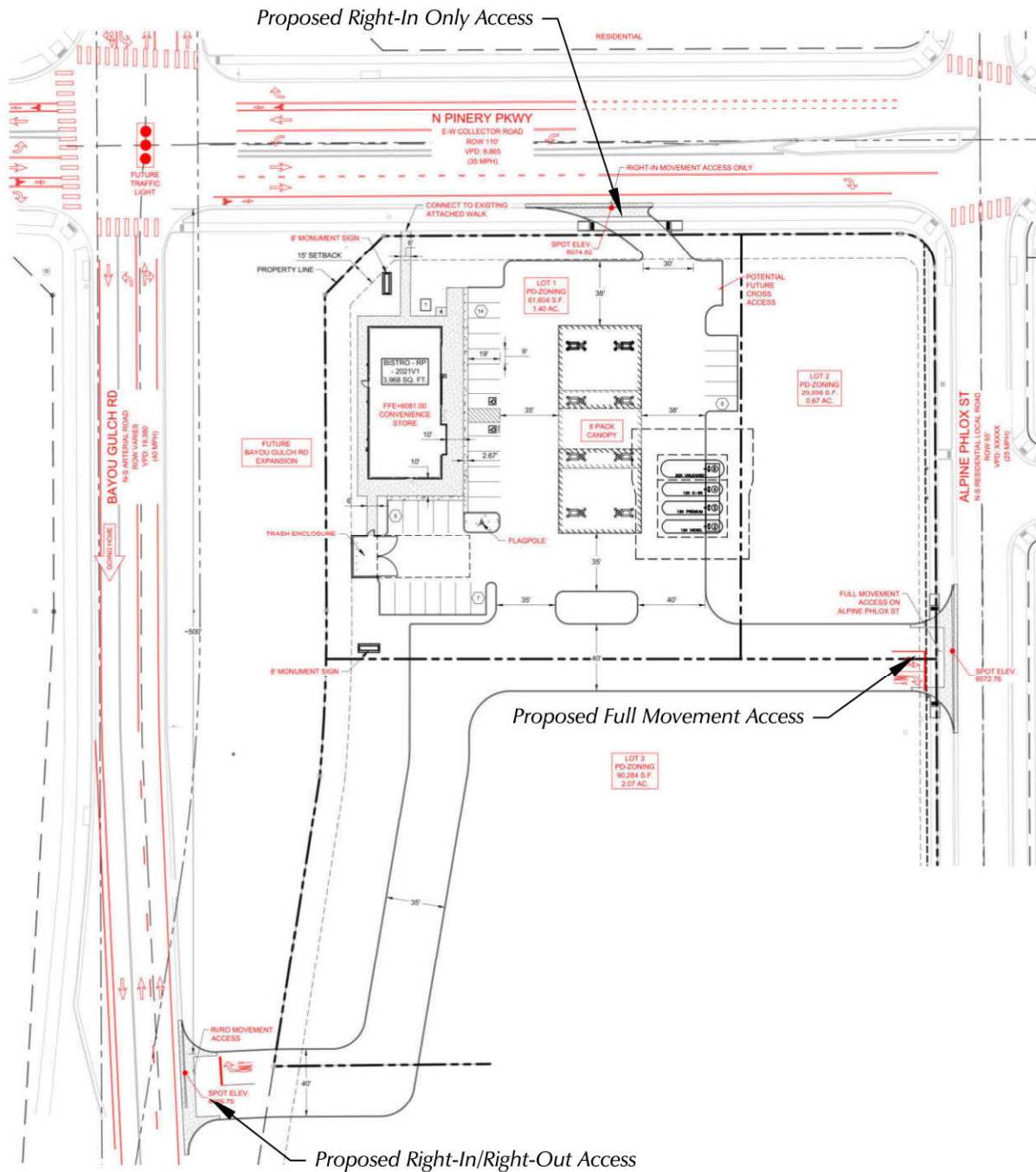
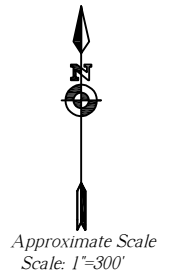
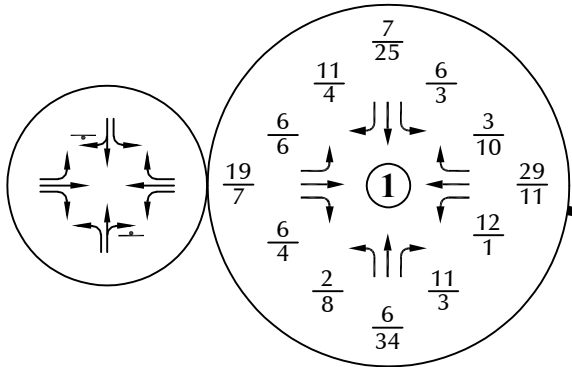


Figure 2
Site Plan
 K&G Store #2293 (LSC #220740)



LEGEND:



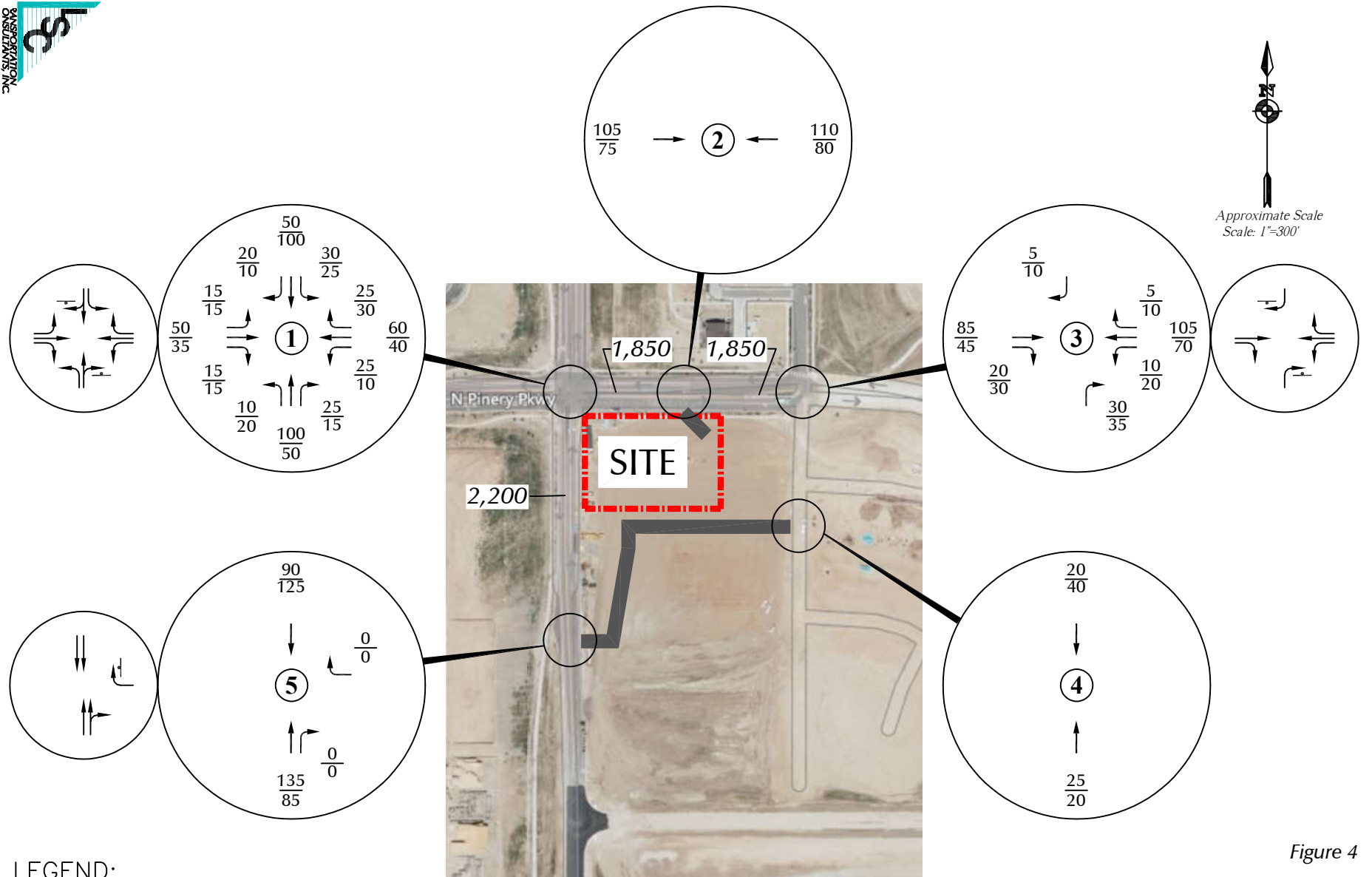
-  = Stop Sign
-  = Expected Speed Limit at Buildout
- $\frac{26}{35}$ = $\frac{\text{AM Peak Hour Traffic}}{\text{PM Peak Hour Traffic}}$
- 1,000 = Average Daily Traffic

Figure 3
**Existing Traffic, Lane
 Geometry and Traffic Control**

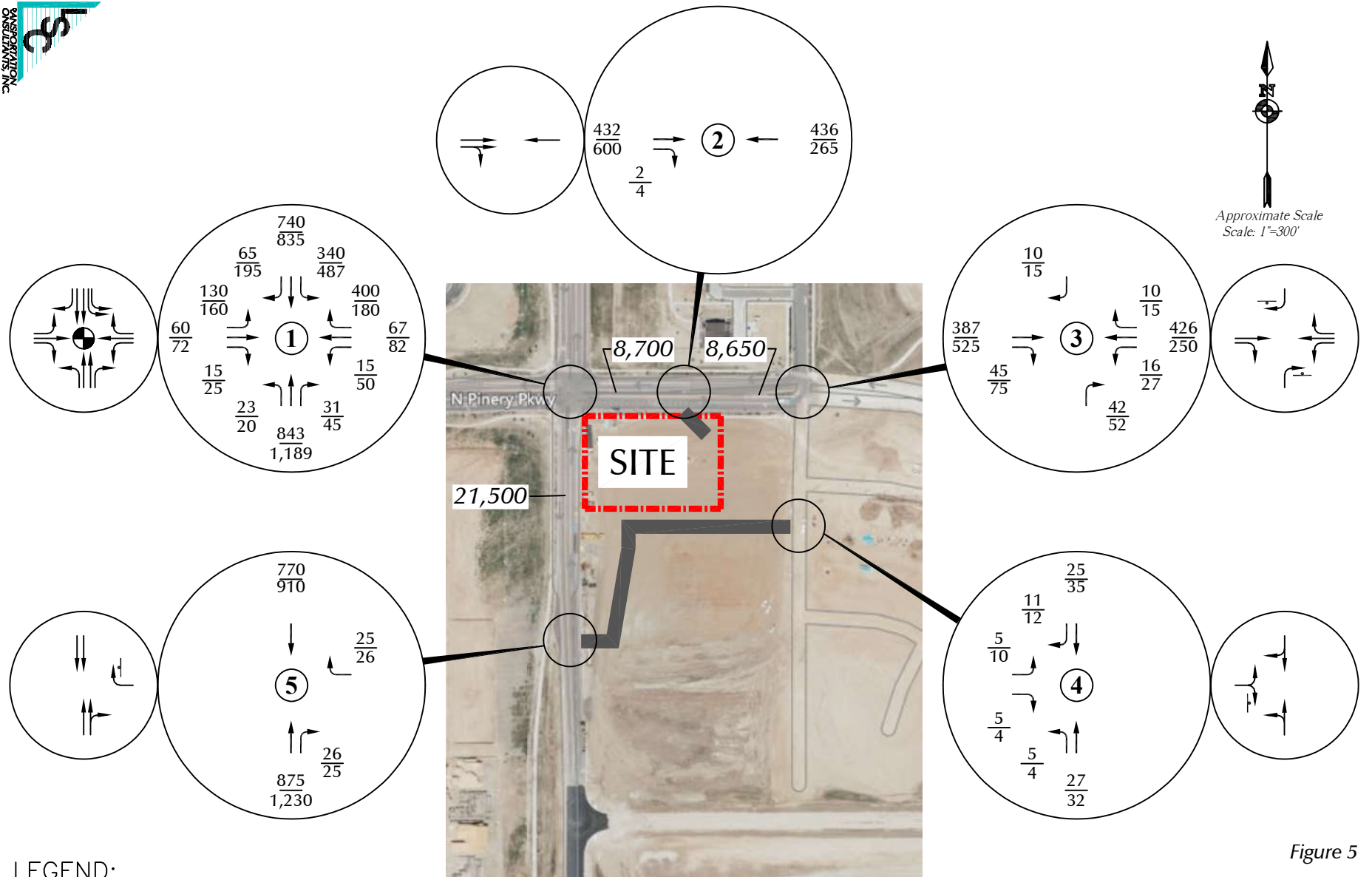
K&G Store #2293 (LSC #220740)



LEGEND:

- ⊥ = Stop Sign
- $\frac{26}{35}$ = $\frac{\text{AM Peak Hour Traffic}}{\text{PM Peak Hour Traffic}}$
- 1,000 = Average Daily Traffic

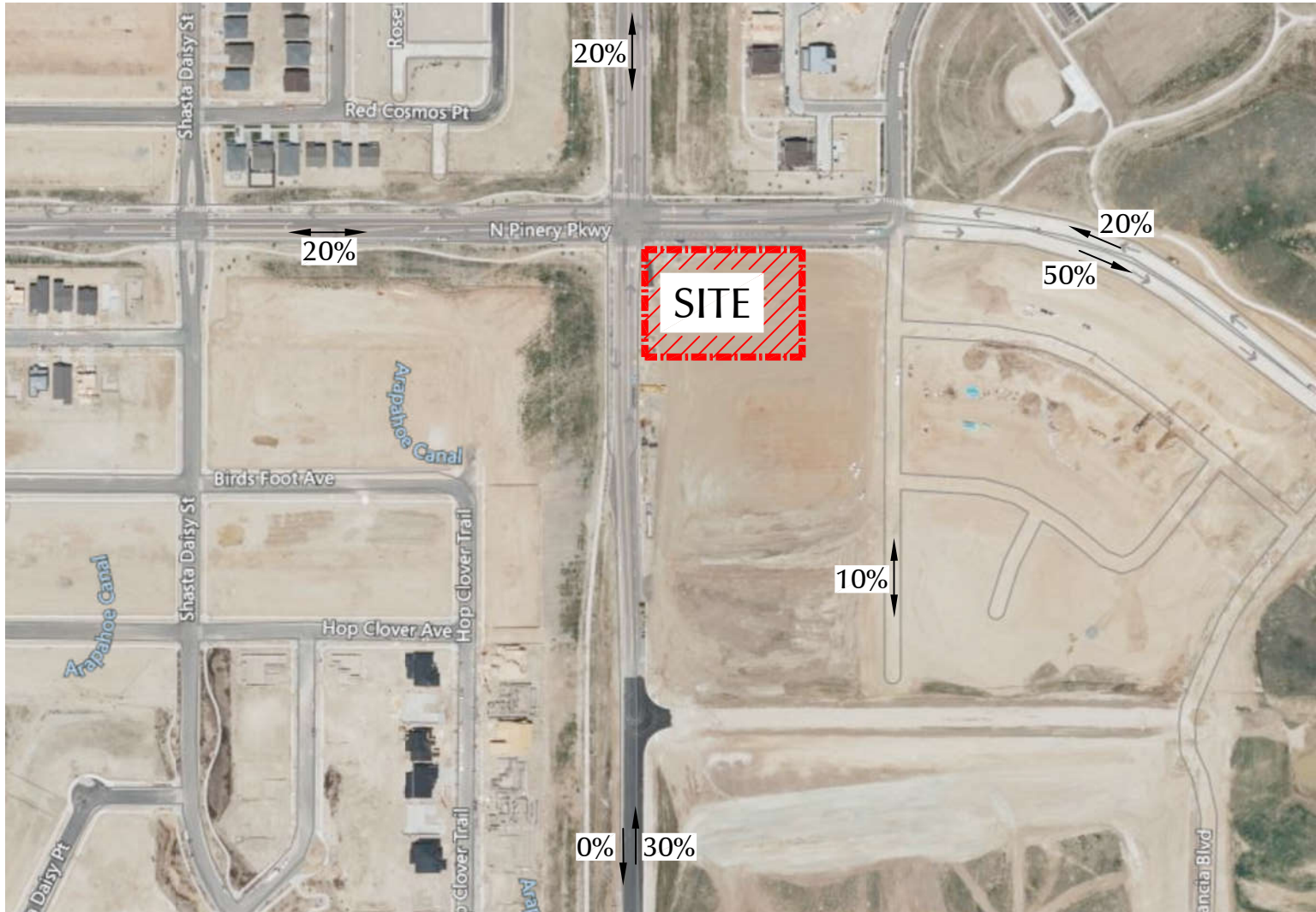
Figure 4
**Year 2024 Background Traffic,
 Lane Geometry and Traffic Control**



LEGEND:

- ⊥ = Stop Sign
- $\frac{26}{35}$ = AM Peak Hour Traffic / PM Peak Hour Traffic
- 1,000 = Average Daily Traffic

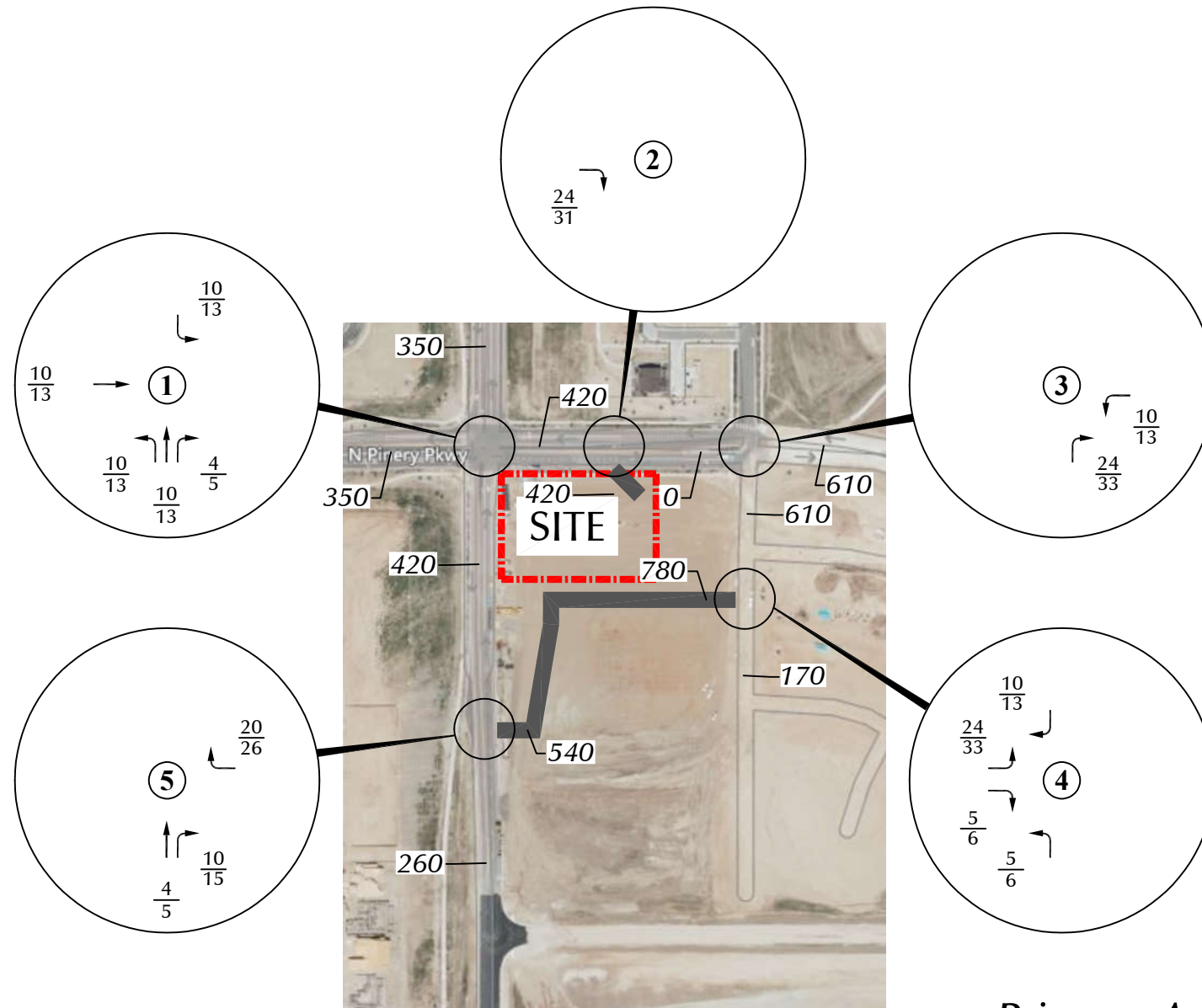
Figure 5
**Year 2042 Background Traffic,
 Lane Geometry and Traffic Control**



Approximate Scale
Scale: 1"=300'

LEGEND:
 = Percent Directional Distribution

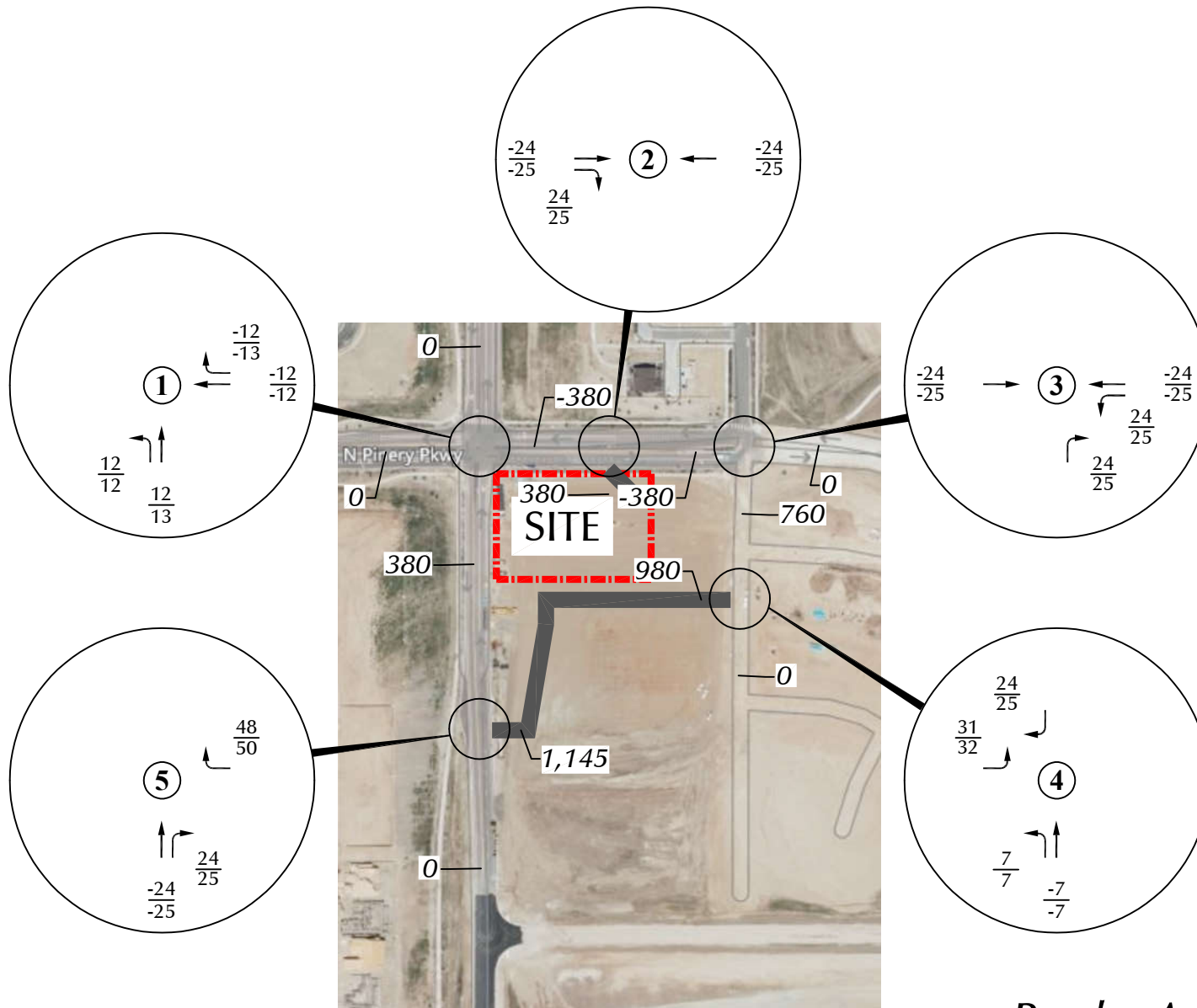
Figure 6
Directional Distribution of Site-Generated Traffic
 K&G Store #2293 (LSC #220740)



Approximate Scale
Scale: 1"=300'

LEGEND:
 $\frac{26}{35}$ = AM Peak Hour Traffic
 $\frac{35}{26}$ = PM Peak Hour Traffic
 1,000 = Average Daily Traffic

Figure 7a
**Primary Assignment
 of Site-Generated Traffic**
 K&G Store #2293 (LSC #220740)

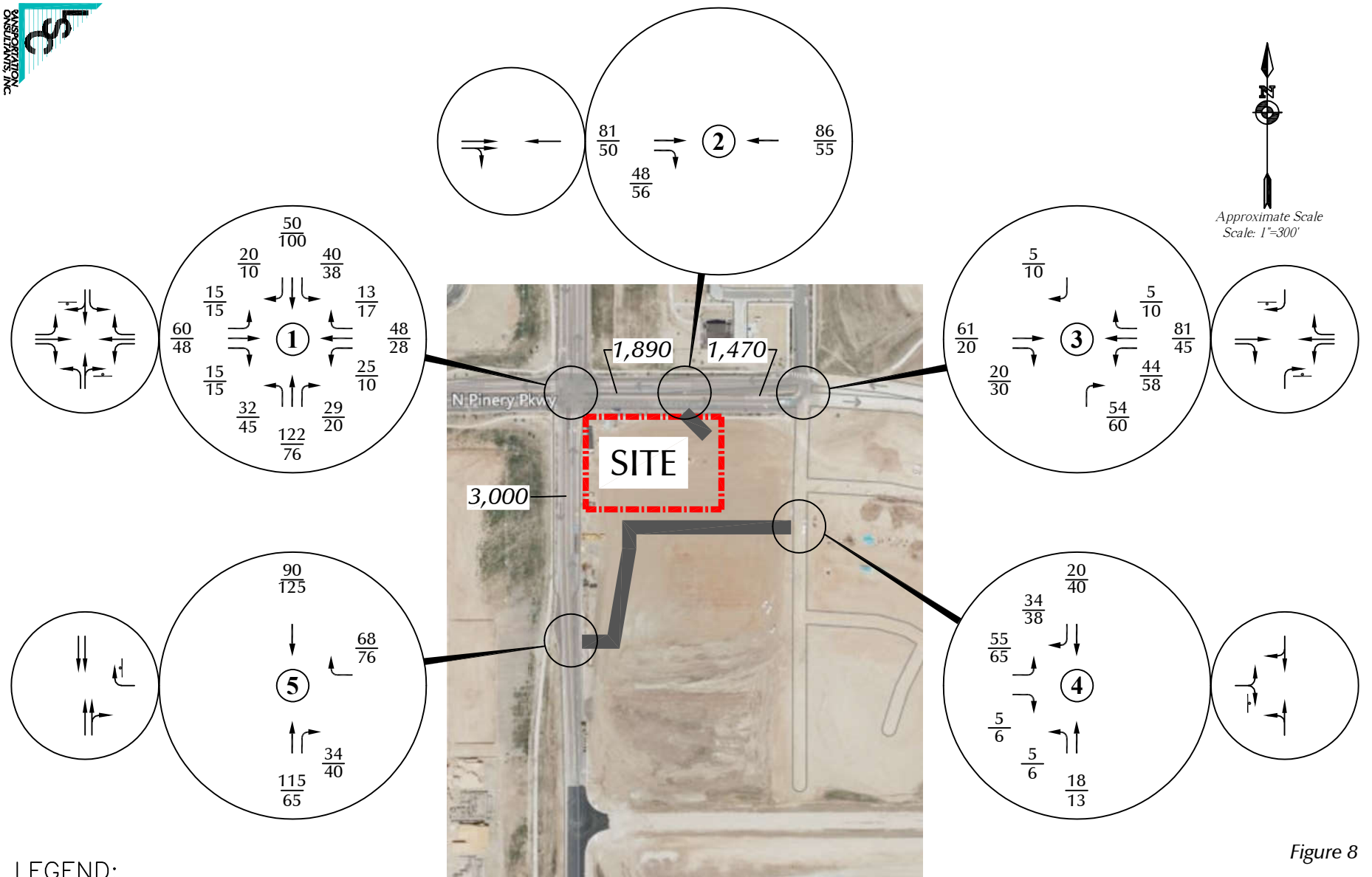


Approximate Scale
Scale: 1"=300'

LEGEND:
 $\frac{26}{35}$ = AM Peak Hour Traffic
 $\frac{35}{35}$ = PM Peak Hour Traffic
 1,000 = Average Daily Traffic

Note: Assumes about 30 percent of passby trips are from NB Bayou Gulch, 30% from WB N. Pinery Road and 30% from EB N. Pinery Road. Ten percent are assumed to occur from the neighborhood streets.

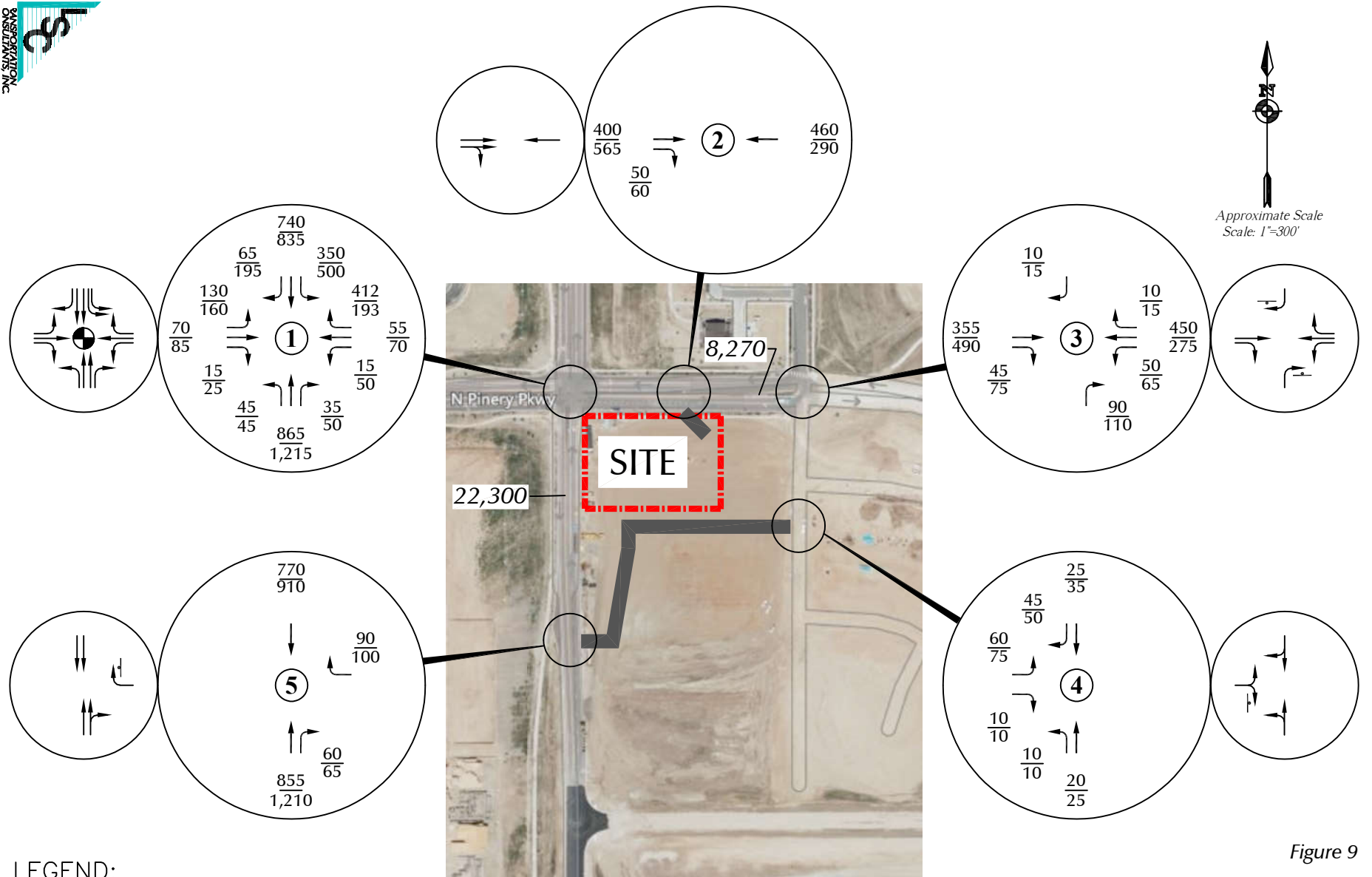
Figure 7b
**Passby Assignment
 of Site-Generated Traffic**



LEGEND:

- ⊥ = Stop Sign
- $\frac{26}{35}$ = $\frac{\text{AM Peak Hour Traffic}}{\text{PM Peak Hour Traffic}}$
- 1,000 = Average Daily Traffic

Figure 8
**Year 2024 Total Traffic,
 Lane Geometry and Traffic Control**



Approximate Scale
Scale: 1"=300'

LEGEND:
 † = Stop Sign
 $\frac{26}{35}$ = AM Peak Hour Traffic / PM Peak Hour Traffic
 1,000 = Average Daily Traffic

Figure 9
**Year 2042 Total Traffic,
 Lane Geometry and Traffic Control**

COUNTER MEASURES INC.

1889 YORK STREET
DENVER.COLORADO
303-333-7409

N/S STREET: BAYOU GULCH RD
E/W STREET: N. PINERY PKWY
CITY: PARKER
COUNTY: DOUGLAS

File Name : BAYOPINERY
Site Code : 0000011
Start Date : 8/10/2022
Page No : 1

Groups Printed- VEHICLES

Start Time	BAYOU GULCH RD Southbound				N. PINERY PKWY Westbound				BAYOU GULCH RD Northbound				N. PINERY PKWY Eastbound				Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	
Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
06:30 AM	0	0	1	0	2	5	4	0	0	0	0	1	0	4	1	0	18
06:45 AM	1	3	4	0	5	11	1	0	0	0	0	0	1	3	1	0	30
Total	1	3	5	0	7	16	5	0	0	0	0	1	1	7	2	0	48
07:00 AM	1	1	3	0	2	11	2	0	1	2	1	1	1	9	1	0	36
07:15 AM	1	2	3	0	4	4	1	0	0	2	2	0	0	4	2	0	25
07:30 AM	2	2	2	0	3	7	0	1	1	0	1	0	4	0	0	0	23
07:45 AM	2	2	3	0	3	7	0	1	0	2	7	1	1	6	3	0	38
Total	6	7	11	0	12	29	3	2	2	6	11	2	6	19	6	0	122
08:00 AM	0	2	0	0	1	6	2	0	1	3	1	1	0	7	0	0	24
08:15 AM	0	4	3	0	3	7	2	0	0	1	3	0	2	3	1	0	29
Total	0	6	3	0	4	13	4	0	1	4	4	1	2	10	1	0	53
04:00 PM	1	6	0	0	0	3	2	0	1	4	0	0	1	3	2	0	23
04:15 PM	1	4	1	0	0	1	3	0	3	9	1	1	3	0	2	0	29
04:30 PM	1	8	3	0	1	6	5	0	0	9	0	0	0	2	1	2	38
04:45 PM	0	5	0	0	0	2	1	1	2	7	2	0	2	1	1	0	24
Total	3	23	4	0	1	12	11	1	6	29	3	1	6	6	6	2	114
05:00 PM	1	8	0	0	0	2	1	0	3	9	0	0	1	4	0	0	29
05:15 PM	0	7	2	0	1	0	3	2	1	9	0	0	0	0	3	0	28
05:30 PM	0	14	1	0	0	2	1	0	1	8	1	0	1	1	2	0	32
05:45 PM	1	1	0	0	0	3	1	1	0	3	1	0	2	1	0	0	14
Total	2	30	3	0	1	7	6	3	5	29	2	0	4	6	5	0	103
Grand Total	12	69	26	0	25	77	29	6	14	68	20	5	19	48	20	2	440
Apprch %	11.2	64.5	24.3	0.0	18.2	56.2	21.2	4.4	13.1	63.6	18.7	4.7	21.3	53.9	22.5	2.2	
Total %	2.7	15.7	5.9	0.0	5.7	17.5	6.6	1.4	3.2	15.5	4.5	1.1	4.3	10.9	4.5	0.5	

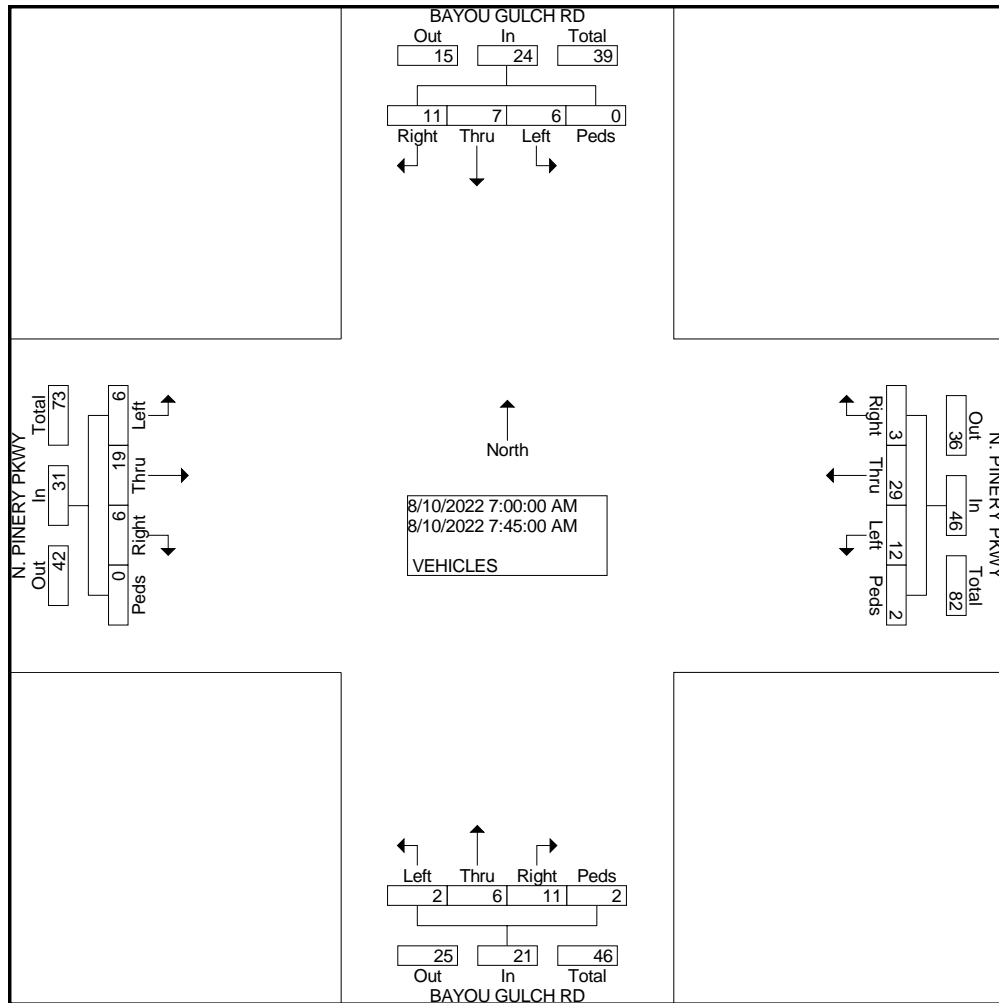
COUNTER MEASURES INC.

1889 YORK STREET
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E/W STREET: N. PINERY PKWY
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File Name : BAYOPINERY
Site Code : 0000011
Start Date : 8/10/2022
Page No : 2

Start Time	BAYOU GULCH RD Southbound					N. PINERY PKWY Westbound					BAYOU GULCH RD Northbound					N. PINERY PKWY Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour From 06:30 AM to 08:15 AM - Peak 1 of 1																					
Intersection	07:00 AM																				
Volume	6	7	11	0	24	12	29	3	2	46	2	6	11	2	21	6	19	6	0	31	122
Percent	25.0	29.2	45.8	0.0		26.1	63.0	6.5	4.3		9.5	28.6	52.4	9.5		19.4	61.3	19.4	0.0		
07:45 Peak Factor																					
High Int. Volume	07:45 AM					07:00 AM					07:45 AM					07:00 AM					
Peak Factor	0.85					0.76					0.52					0.70					0.803
	2	2	3	0	7	2	11	2	0	15	0	2	7	1	10	1	9	1	0	11	
	7					7					5					5					



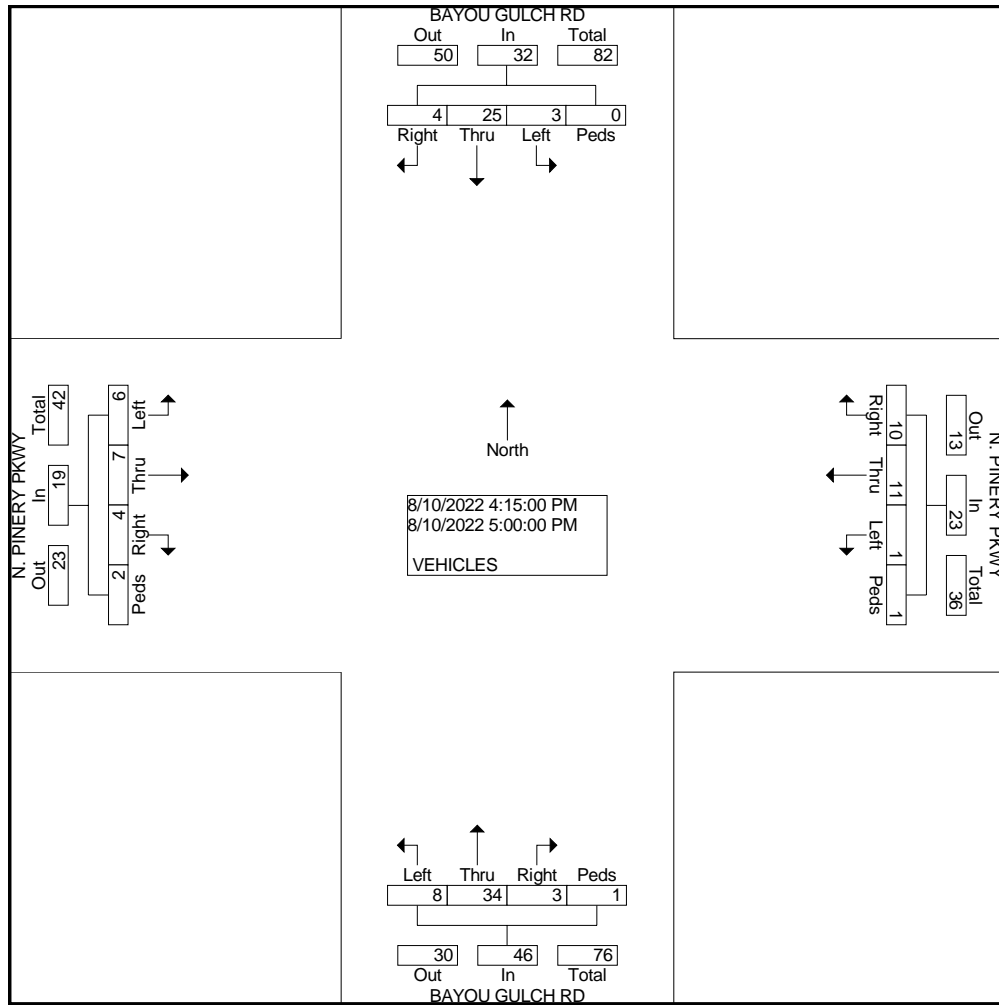
COUNTER MEASURES INC.

1889 YORK STREET
DENVER, COLORADO
303-333-7409

N/S STREET: BAYOU GULCH RD
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CITY: PARKER
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File Name : BAYOPINERY
Site Code : 0000011
Start Date : 8/10/2022
Page No : 3

Start Time	BAYOU GULCH RD Southbound					N. PINERY PKWY Westbound					BAYOU GULCH RD Northbound					N. PINERY PKWY Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Intersect on	04:15 PM																				
Volume	3	25	4	0	32	1	11	10	1	23	8	34	3	1	46	6	7	4	2	19	120
Percent	9.4	78.1	12.5	0.0		4.3	47.8	43.5	4.3		17.4	73.9	6.5	2.2		31.6	36.8	21.1	10.5		
04:30 Volume	1	8	3	0	12	1	6	5	0	12	0	9	0	0	9	0	2	1	2	5	38
Peak Factor	0.789																				
High Int. Volume	04:30 PM					04:30 PM					04:15 PM					04:15 PM					
Peak Factor	0.667					0.479					0.821					0.950					



* A dedicated westbound right-turn lane and a right-turn acceleration lane are needed to mitigate poor levels of service.

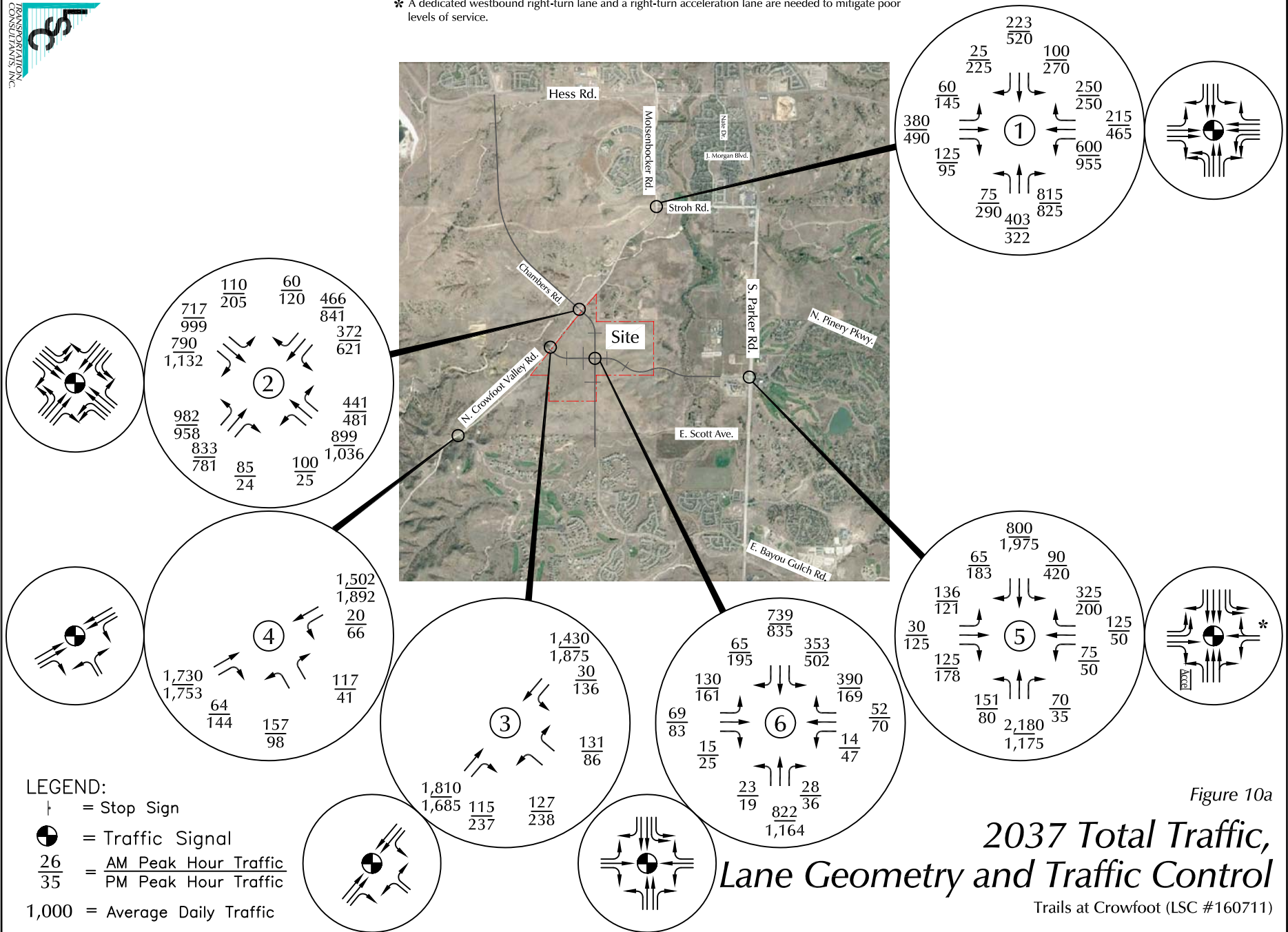


Figure 10a

2037 Total Traffic, Lane Geometry and Traffic Control

Trails at Crowfoot (LSC #160711)

LEVEL OF SERVICE DEFINITIONS

From *Highway Capacity Manual*, Transportation Research Board, 2016, 6th Edition

SIGNALIZED INTERSECTION LEVEL OF SERVICE (LOS)

<u>LOS</u>	<u>Average Vehicle Delay</u> sec/vehicle	<u>Operational Characteristics</u>
A	<10 seconds	Describes operations with low control delay, up to 10 sec/veh. This LOS occurs when progression is extremely favorable and most vehicles arrive during the green phase. Many vehicles do not stop at all. Short cycle lengths may tend to contribute to low delay values.
B	10 to 20 seconds	Describes operations with control delay greater than 10 seconds and up to 20 sec/veh. This level generally occurs with good progression, short cycle lengths, or both. More vehicles stop than with LOS A, causing higher levels of delay.
C	20 to 35 seconds	Describes operations with control delay greater than 20 and up to 35 sec/veh. These higher delays may result from only fair progression, longer cycle length, or both. Individual cycle failures may begin to appear at this level. Cycle failure occurs when a given green phase does not serve queued vehicles, and overflows occur. The number of vehicles stopping is significant at this level, though many still pass through the intersection without stopping.
D	35 to 55 seconds	Describes operations with control delay greater than 35 and up to 55 sec/veh. At LOS D, the influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, and high v/c ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.
E	55 to 80 seconds	Describes operations with control delay greater than 55 and up to 80 sec/veh. These high delay values generally indicate poor progression, long cycle lengths, and high v/c ratios. Individual cycle failures are frequent.
F	>80 seconds	Describes operations with control delay in excess of 80 sec/veh. This level, considered unacceptable to most drivers, often occurs with over-saturation, that is, when arrival flow rates exceed the capacity of lane groups. It may also occur at high v/c ratios with many individual cycle failures. Poor progression and long cycle lengths may also contribute significantly to high delay levels.

LEVEL OF SERVICE DEFINITIONS

From *Highway Capacity Manual*, Transportation Research Board, 2016, 6th Edition

UNSIGNALIZED INTERSECTION LEVEL OF SERVICE (LOS)

Applicable to Two-Way Stop Control, All-Way Stop Control, and Roundabouts

LOS	Average Vehicle Control Delay	<u>Operational Characteristics</u>
A	<10 seconds	Normally, vehicles on the stop-controlled approach only have to wait up to 10 seconds before being able to clear the intersection. Left-turning vehicles on the uncontrolled street do not have to wait to make their turn.
B	10 to 15 seconds	Vehicles on the stop-controlled approach will experience delays before being able to clear the intersection. <u>The delay could be up to 15 seconds.</u> Left-turning vehicles on the uncontrolled street may have to wait to make their turn.
C	15 to 25 seconds	Vehicles on the stop-controlled approach can expect delays in the range of 15 to 25 seconds before clearing the intersection. Motorists may begin to take chances due to the long delays, thereby posing a safety risk to through traffic. <u>Left-turning vehicles on the uncontrolled street will now be required to wait to make their turn causing a queue to be created in the turn lane.</u>
D	25 to 35 seconds	<u>This is the point at which a traffic signal may be warranted for this intersection.</u> The delays for the stop-controlled intersection are not considered to be excessive. The length of the queue may begin to block other public and private access points.
E	35 to 50 seconds	The delays for all critical traffic movements are considered to be unacceptable. The length of the queues for the stop-controlled approaches as well as the left-turn movements are extremely long. <u>There is a high probability that this intersection will meet traffic signal warrants.</u> The ability to install a traffic signal is affected by the location of other existing traffic signals. Consideration may be given to restricting the accesses by eliminating the left-turn movements from and to the stop-controlled approach.
F	>50 seconds	The delay for the critical traffic movements are probably in excess of 100 seconds. The length of the queues are extremely long. Motorists are selecting alternative routes due to the long delays. <u>The only remedy for these long delays is installing a traffic signal or restricting the accesses.</u> The potential for accidents at this intersection are extremely high due to motorist taking more risky chances. If the median permits, motorists begin making two-stage left-turns.

HCM 6th TWSC
1: Bayou Gulch Road & N. Pinery Parkway

Existing
AM Peak

Intersection												
Int Delay, s/veh	4.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	19	6	12	29	3	2	6	11	6	7	11
Future Vol, veh/h	6	19	6	12	29	3	2	6	11	6	7	11
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	340	-	190	200	-	200	335	-	-	250	-	-
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	7	21	7	13	32	3	2	7	12	7	8	12

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	35	0	0	28	0	0	105	96	21	106	100	32
Stage 1	-	-	-	-	-	-	35	35	-	58	58	-
Stage 2	-	-	-	-	-	-	70	61	-	48	42	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1576	-	-	1585	-	-	875	794	1056	873	790	1042
Stage 1	-	-	-	-	-	-	981	866	-	954	847	-
Stage 2	-	-	-	-	-	-	940	844	-	965	860	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1576	-	-	1585	-	-	851	784	1056	849	781	1042
Mov Cap-2 Maneuver	-	-	-	-	-	-	851	784	-	849	781	-
Stage 1	-	-	-	-	-	-	977	863	-	950	840	-
Stage 2	-	-	-	-	-	-	913	837	-	943	857	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.4	2	8.9	9.1
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	851	941	1576	-	-	1585	-	-	849	922
HCM Lane V/C Ratio	0.003	0.02	0.004	-	-	0.008	-	-	0.008	0.021
HCM Control Delay (s)	9.2	8.9	7.3	-	-	7.3	-	-	9.3	9
HCM Lane LOS	A	A	A	-	-	A	-	-	A	A
HCM 95th %tile Q(veh)	0	0.1	0	-	-	0	-	-	0	0.1

HCM 6th TWSC
2: Site Access & N. Pinery Parkway

Existing
AM Peak

Intersection						
Int Delay, s/veh	0					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑	↑	
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	0

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	-	-	2 1
Stage 1	-	-	-	-	1 -
Stage 2	-	-	-	-	1 -
Critical Hdwy	-	-	-	-	6.63 6.93
Critical Hdwy Stg 1	-	-	-	-	5.83 -
Critical Hdwy Stg 2	-	-	-	-	5.43 -
Follow-up Hdwy	-	-	-	-	3.519 3.319
Pot Cap-1 Maneuver	-	-	0	-	1020 1083
Stage 1	-	-	0	-	1022 -
Stage 2	-	-	0	-	1022 -
Platoon blocked, %	-	-	-	-	
Mov Cap-1 Maneuver	-	-	-	-	1020 1083
Mov Cap-2 Maneuver	-	-	-	-	1020 -
Stage 1	-	-	-	-	1022 -
Stage 2	-	-	-	-	1022 -

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

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

HCM 6th TWSC
3: Alpine Phlox Street & N. Pinery Parkway

Existing
AM Peak

Intersection												
Int Delay, s/veh	0											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑	↗	↘	↑	↗			↗			↗
Traffic Vol, veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	200	200	-	200	-	-	0	-	-	0
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	0	0	0	0	0	0	0	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	1	0	0	-	-	1	-	-	1
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	4.12	-	-	-	-	6.22	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	2.218	-	-	-	-	3.318	-	-	3.318
Pot Cap-1 Maneuver	0	-	-	1622	-	-	0	0	1084	0	0	1084
Stage 1	0	-	-	-	-	-	0	0	-	0	0	-
Stage 2	0	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	1622	-	-	-	-	1084	-	-	1084
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	1622	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-	-	-
HCM Control Delay (s)	0	-	-	0	-	-	0
HCM Lane LOS	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	-	-	-	0	-	-	-

HCM 6th TWSC
 4: Alpine Phlox Street & Internal Collector

Existing
 AM Peak

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T			T		T
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	0

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1	1	1	0	-	0
Stage 1	1	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	1022	1084	1622	-	-	-
Stage 1	1022	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	1022	1084	1622	-	-	-
Mov Cap-2 Maneuver	1022	-	-	-	-	-
Stage 1	1022	-	-	-	-	-
Stage 2	-	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1622	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	0	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-

HCM 6th TWSC
5: Bayou Gulch Road & Internal Collector

Existing
AM Peak

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗	↕			↕
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	0

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	-	0	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	6.94	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	3.32	-
Pot Cap-1 Maneuver	0	-	-
Stage 1	0	-	-
Stage 2	0	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	-	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

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

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBT
Capacity (veh/h)	-	-	-
HCM Lane V/C Ratio	-	-	-
HCM Control Delay (s)	-	-	0
HCM Lane LOS	-	-	A
HCM 95th %tile Q(veh)	-	-	-

HCM 6th TWSC
1: Bayou Gulch Road & N. Pinery Parkway

Existing
PM Peak

Intersection												
Int Delay, s/veh	6.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	7	4	1	11	10	8	34	3	3	25	4
Future Vol, veh/h	6	7	4	1	11	10	8	34	3	3	25	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	340	-	190	200	-	200	335	-	-	250	-	-
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	7	8	4	1	12	11	9	37	3	3	27	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	23	0	0	12	0	0	57	47	8	58	40	12
Stage 1	-	-	-	-	-	-	22	22	-	14	14	-
Stage 2	-	-	-	-	-	-	35	25	-	44	26	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1592	-	-	1607	-	-	940	845	1074	939	852	1069
Stage 1	-	-	-	-	-	-	996	877	-	1006	884	-
Stage 2	-	-	-	-	-	-	981	874	-	970	874	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1592	-	-	1607	-	-	910	841	1074	901	848	1069
Mov Cap-2 Maneuver	-	-	-	-	-	-	910	841	-	901	848	-
Stage 1	-	-	-	-	-	-	992	873	-	1002	883	-
Stage 2	-	-	-	-	-	-	946	873	-	922	871	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	2.6			0.3			9.3			9.3		
HCM LOS							A			A		

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	910	856	1592	-	-	1607	-	-	901	873
HCM Lane V/C Ratio	0.01	0.047	0.004	-	-	0.001	-	-	0.004	0.036
HCM Control Delay (s)	9	9.4	7.3	-	-	7.2	-	-	9	9.3
HCM Lane LOS	A	A	A	-	-	A	-	-	A	A
HCM 95th %tile Q(veh)	0	0.1	0	-	-	0	-	-	0	0.1

HCM 6th TWSC
2: Site Access & N. Pinery Parkway

Existing
PM Peak

Intersection						
Int Delay, s/veh	0					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑	↑↓	
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	0

Major/Minor	Major1	Major2	Minor1	Minor2
Conflicting Flow All	0	0	-	2
Stage 1	-	-	-	1
Stage 2	-	-	-	1
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	-	0	-	1020
Stage 1	-	0	-	1022
Stage 2	-	0	-	1022
Platoon blocked, %	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	1020
Mov Cap-2 Maneuver	-	-	-	1020
Stage 1	-	-	-	1022
Stage 2	-	-	-	1022

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

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

HCM 6th TWSC
 3: Alpine Phlox Street & N. Pinery Parkway

Existing
 PM Peak

Intersection												
Int Delay, s/veh	0											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑	↗	↘	↑	↗			↗			↗
Traffic Vol, veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	200	200	-	200	-	-	0	-	-	0
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	0	0	0	0	0	0	0	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	1	0	0	-	-	1	-	-	1
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	4.12	-	-	-	-	6.22	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	2.218	-	-	-	-	3.318	-	-	3.318
Pot Cap-1 Maneuver	0	-	-	1622	-	-	0	0	1084	0	0	1084
Stage 1	0	-	-	-	-	-	0	0	-	0	0	-
Stage 2	0	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	1622	-	-	-	-	1084	-	-	1084
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	1622	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-	-	-
HCM Control Delay (s)	0	-	-	0	-	-	0
HCM Lane LOS	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	-	-	-	0	-	-	-

HCM 6th TWSC
4: Alpine Phlox Street & Internal Collector

Existing
PM Peak

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T			T		T
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	0

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1	1	1	0	-	0
Stage 1	1	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	1022	1084	1622	-	-	-
Stage 1	1022	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	1022	1084	1622	-	-	-
Mov Cap-2 Maneuver	1022	-	-	-	-	-
Stage 1	1022	-	-	-	-	-
Stage 2	-	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1622	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	0	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-

HCM 6th TWSC
5: Bayou Gulch Road & Internal Collector

Existing
PM Peak

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗	↕			↕
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	0

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	-	0	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	6.94	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	3.32	-
Pot Cap-1 Maneuver	0	-	-
Stage 1	0	-	-
Stage 2	0	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	-	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

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

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBT
Capacity (veh/h)	-	-	-
HCM Lane V/C Ratio	-	-	-
HCM Control Delay (s)	-	-	0
HCM Lane LOS	-	-	A
HCM 95th %tile Q(veh)	-	-	-

HCM 6th TWSC
1: Bayou Gulch Road & N. Pinery Parkway

2024 Background
AM Peak

Intersection												
Int Delay, s/veh	6.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↙	↑	↗	↙	↑	↗	↙	↗		↙	↗	
Traffic Vol, veh/h	15	50	15	25	60	25	10	100	25	30	50	20
Future Vol, veh/h	15	50	15	25	60	25	10	100	25	30	50	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	340	-	190	200	-	200	335	-	-	250	-	-
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	16	54	16	27	65	27	11	109	27	33	54	22

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	92	0	0	70	0	0	257	232	54	281	221	65
Stage 1	-	-	-	-	-	-	86	86	-	119	119	-
Stage 2	-	-	-	-	-	-	171	146	-	162	102	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1503	-	-	1531	-	-	696	668	1013	671	678	999
Stage 1	-	-	-	-	-	-	922	824	-	885	797	-
Stage 2	-	-	-	-	-	-	831	776	-	840	811	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1503	-	-	1531	-	-	624	649	1013	557	658	999
Mov Cap-2 Maneuver	-	-	-	-	-	-	624	649	-	557	658	-
Stage 1	-	-	-	-	-	-	912	815	-	875	783	-
Stage 2	-	-	-	-	-	-	743	762	-	701	802	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	1.4			1.7			11.4			10.9		
HCM LOS							B			B		

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	624	699	1503	-	-	1531	-	-	557	729
HCM Lane V/C Ratio	0.017	0.194	0.011	-	-	0.018	-	-	0.059	0.104
HCM Control Delay (s)	10.9	11.4	7.4	-	-	7.4	-	-	11.9	10.5
HCM Lane LOS	B	B	A	-	-	A	-	-	B	B
HCM 95th %tile Q(veh)	0.1	0.7	0	-	-	0.1	-	-	0.2	0.3

HCM 6th TWSC
2: Site Access & N. Pinery Parkway

2024 Background
AM Peak

Intersection						
Int Delay, s/veh	0					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑	↑	
Traffic Vol, veh/h	105	0	0	110	0	0
Future Vol, veh/h	105	0	0	110	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	114	0	0	120	0	0

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	-	-	234 57
Stage 1	-	-	-	-	114 -
Stage 2	-	-	-	-	120 -
Critical Hdwy	-	-	-	-	6.63 6.93
Critical Hdwy Stg 1	-	-	-	-	5.83 -
Critical Hdwy Stg 2	-	-	-	-	5.43 -
Follow-up Hdwy	-	-	-	-	3.519 3.319
Pot Cap-1 Maneuver	-	-	0	-	744 998
Stage 1	-	-	0	-	899 -
Stage 2	-	-	0	-	905 -
Platoon blocked, %	-	-	-	-	
Mov Cap-1 Maneuver	-	-	-	-	744 998
Mov Cap-2 Maneuver	-	-	-	-	744 -
Stage 1	-	-	-	-	899 -
Stage 2	-	-	-	-	905 -

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

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

HCM 6th TWSC
 3: Alpine Phlox Street & N. Pinery Parkway

2024 Background
 AM Peak

Intersection												
Int Delay, s/veh	1.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑	↗	↘	↑	↗			↗			↗
Traffic Vol, veh/h	0	85	20	10	105	5	0	0	30	0	0	5
Future Vol, veh/h	0	85	20	10	105	5	0	0	30	0	0	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	200	200	-	200	-	-	0	-	-	0
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	92	22	11	114	5	0	0	33	0	0	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	114	0	0	-	-	92	-	-	114
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	4.12	-	-	-	-	6.22	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	2.218	-	-	-	-	3.318	-	-	3.318
Pot Cap-1 Maneuver	0	-	-	1475	-	-	0	0	965	0	0	939
Stage 1	0	-	-	-	-	-	0	0	-	0	0	-
Stage 2	0	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	1475	-	-	-	-	965	-	-	939
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0.6			8.9			8.9		
HCM LOS							A			A		

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	965	-	-	1475	-	-	939
HCM Lane V/C Ratio	0.034	-	-	0.007	-	-	0.006
HCM Control Delay (s)	8.9	-	-	7.5	-	-	8.9
HCM Lane LOS	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-	-	0

HCM 6th TWSC
4: Alpine Phlox Street & Internal Collector

2024 Background
AM Peak

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T			T		T
Traffic Vol, veh/h	0	0	0	25	20	0
Future Vol, veh/h	0	0	0	25	20	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	27	22	0

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	49	22	22	0	0
Stage 1	22	-	-	-	-
Stage 2	27	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-
Pot Cap-1 Maneuver	960	1055	1593	-	-
Stage 1	1001	-	-	-	-
Stage 2	996	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	960	1055	1593	-	-
Mov Cap-2 Maneuver	960	-	-	-	-
Stage 1	1001	-	-	-	-
Stage 2	996	-	-	-	-

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

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1593	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	0	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗	↕			↕
Traffic Vol, veh/h	0	0	135	0	0	90
Future Vol, veh/h	0	0	135	0	0	90
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	147	0	0	98

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	-	74	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	6.94	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	3.32	-
Pot Cap-1 Maneuver	0	973	-
Stage 1	0	-	-
Stage 2	0	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	-	973	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

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

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBT
Capacity (veh/h)	-	-	-
HCM Lane V/C Ratio	-	-	-
HCM Control Delay (s)	-	-	0
HCM Lane LOS	-	-	A
HCM 95th %tile Q(veh)	-	-	-

HCM 6th TWSC
1: Bayou Gulch Road & N. Pinery Parkway

2024 Background
PM Peak

Intersection												
Int Delay, s/veh	6.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↙	↑	↗	↙	↑	↗	↙	↗		↙	↗	
Traffic Vol, veh/h	15	35	15	10	40	30	20	50	15	20	100	10
Future Vol, veh/h	15	35	15	10	40	30	20	50	15	20	100	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	340	-	190	200	-	200	335	-	-	250	-	-
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	16	38	16	11	43	33	22	54	16	22	109	11

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	76	0	0	54	0	0	212	168	38	178	151	43
Stage 1	-	-	-	-	-	-	70	70	-	65	65	-
Stage 2	-	-	-	-	-	-	142	98	-	113	86	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1523	-	-	1551	-	-	745	725	1034	784	741	1027
Stage 1	-	-	-	-	-	-	940	837	-	946	841	-
Stage 2	-	-	-	-	-	-	861	814	-	892	824	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1523	-	-	1551	-	-	644	712	1034	717	728	1027
Mov Cap-2 Maneuver	-	-	-	-	-	-	644	712	-	717	728	-
Stage 1	-	-	-	-	-	-	930	828	-	936	835	-
Stage 2	-	-	-	-	-	-	736	808	-	812	815	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	1.7			0.9			10.3			10.6		
HCM LOS							B			B		

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	644	767	1523	-	-	1551	-	-	717	748
HCM Lane V/C Ratio	0.034	0.092	0.011	-	-	0.007	-	-	0.03	0.16
HCM Control Delay (s)	10.8	10.2	7.4	-	-	7.3	-	-	10.2	10.7
HCM Lane LOS	B	B	A	-	-	A	-	-	B	B
HCM 95th %tile Q(veh)	0.1	0.3	0	-	-	0	-	-	0.1	0.6

Intersection						
Int Delay, s/veh	0					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑	↑↓	
Traffic Vol, veh/h	75	0	0	80	0	0
Future Vol, veh/h	75	0	0	80	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	82	0	0	87	0	0

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	-	-	169 41
Stage 1	-	-	-	-	82 -
Stage 2	-	-	-	-	87 -
Critical Hdwy	-	-	-	-	6.63 6.93
Critical Hdwy Stg 1	-	-	-	-	5.83 -
Critical Hdwy Stg 2	-	-	-	-	5.43 -
Follow-up Hdwy	-	-	-	-	3.519 3.319
Pot Cap-1 Maneuver	-	-	0	-	813 1021
Stage 1	-	-	0	-	932 -
Stage 2	-	-	0	-	936 -
Platoon blocked, %	-	-	-	-	
Mov Cap-1 Maneuver	-	-	-	-	813 1021
Mov Cap-2 Maneuver	-	-	-	-	813 -
Stage 1	-	-	-	-	932 -
Stage 2	-	-	-	-	936 -

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

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

HCM 6th TWSC
 3: Alpine Phlox Street & N. Pinery Parkway

2024 Background
 PM Peak

Intersection												
Int Delay, s/veh	2.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑	↗	↘	↑	↗			↗			↗
Traffic Vol, veh/h	0	45	30	20	70	10	0	0	35	0	0	10
Future Vol, veh/h	0	45	30	20	70	10	0	0	35	0	0	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	200	200	-	200	-	-	0	-	-	0
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	49	33	22	76	11	0	0	38	0	0	11

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	82	0	0	-	-	49	-	-	76
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	4.12	-	-	-	-	6.22	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	2.218	-	-	-	-	3.318	-	-	3.318
Pot Cap-1 Maneuver	0	-	-	1515	-	-	0	0	1020	0	0	985
Stage 1	0	-	-	-	-	-	0	0	-	0	0	-
Stage 2	0	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	1515	-	-	-	-	1020	-	-	985
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	1.5	8.7	8.7
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1020	-	-	1515	-	-	985
HCM Lane V/C Ratio	0.037	-	-	0.014	-	-	0.011
HCM Control Delay (s)	8.7	-	-	7.4	-	-	8.7
HCM Lane LOS	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-	-	0

HCM 6th TWSC
4: Alpine Phlox Street & Internal Collector

2024 Background
PM Peak

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T			T		T
Traffic Vol, veh/h	0	0	0	20	40	0
Future Vol, veh/h	0	0	0	20	40	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	22	43	0

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	65	43	43	0	0
Stage 1	43	-	-	-	-
Stage 2	22	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-
Pot Cap-1 Maneuver	941	1027	1566	-	-
Stage 1	979	-	-	-	-
Stage 2	1001	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	941	1027	1566	-	-
Mov Cap-2 Maneuver	941	-	-	-	-
Stage 1	979	-	-	-	-
Stage 2	1001	-	-	-	-

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

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1566	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	0	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-

HCM 6th TWSC
 5: Bayou Gulch Road & Internal Collector

2024 Background
 PM Peak

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗	↕			↕
Traffic Vol, veh/h	0	0	85	0	0	125
Future Vol, veh/h	0	0	85	0	0	125
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	92	0	0	136

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	-	46	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	6.94	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	3.32	-
Pot Cap-1 Maneuver	0	1014	-
Stage 1	0	-	-
Stage 2	0	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	-	1014	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

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

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBT
Capacity (veh/h)	-	-	-
HCM Lane V/C Ratio	-	-	-
HCM Control Delay (s)	-	-	0
HCM Lane LOS	-	-	A
HCM 95th %tile Q(veh)	-	-	-

HCM 6th TWSC
1: Bayou Gulch Road & N. Pinery Parkway

2024 Total
AM Peak

Intersection												
Int Delay, s/veh	7.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↑	↔	↔	↑	↔	↔	↔		↔	↔	
Traffic Vol, veh/h	15	60	15	25	48	13	32	122	29	40	50	20
Future Vol, veh/h	15	60	15	25	48	13	32	122	29	40	50	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	340	-	190	200	-	200	335	-	-	250	-	-
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	16	65	16	27	52	14	35	133	32	43	54	22

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	66	0	0	81	0	0	248	217	65	294	219	52
Stage 1	-	-	-	-	-	-	97	97	-	106	106	-
Stage 2	-	-	-	-	-	-	151	120	-	188	113	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1536	-	-	1517	-	-	706	681	999	658	679	1016
Stage 1	-	-	-	-	-	-	910	815	-	900	807	-
Stage 2	-	-	-	-	-	-	851	796	-	814	802	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1536	-	-	1517	-	-	634	662	999	528	660	1016
Mov Cap-2 Maneuver	-	-	-	-	-	-	634	662	-	528	660	-
Stage 1	-	-	-	-	-	-	901	807	-	891	792	-
Stage 2	-	-	-	-	-	-	762	782	-	652	794	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	1.2			2.2			11.5			11.2		
HCM LOS							B			B		

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	634	708	1536	-	-	1517	-	-	528	733
HCM Lane V/C Ratio	0.055	0.232	0.011	-	-	0.018	-	-	0.082	0.104
HCM Control Delay (s)	11	11.6	7.4	-	-	7.4	-	-	12.4	10.5
HCM Lane LOS	B	B	A	-	-	A	-	-	B	B
HCM 95th %tile Q(veh)	0.2	0.9	0	-	-	0.1	-	-	0.3	0.3

HCM 6th TWSC
2: Site Access & N. Pinery Parkway

2024 Total
AM Peak

Intersection						
Int Delay, s/veh	0					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑	↑	
Traffic Vol, veh/h	81	48	0	86	0	0
Future Vol, veh/h	81	48	0	86	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	88	52	0	93	0	0

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	-	-	207 70
Stage 1	-	-	-	-	114 -
Stage 2	-	-	-	-	93 -
Critical Hdwy	-	-	-	-	6.63 6.93
Critical Hdwy Stg 1	-	-	-	-	5.83 -
Critical Hdwy Stg 2	-	-	-	-	5.43 -
Follow-up Hdwy	-	-	-	-	3.519 3.319
Pot Cap-1 Maneuver	-	-	0	-	772 979
Stage 1	-	-	0	-	899 -
Stage 2	-	-	0	-	930 -
Platoon blocked, %	-	-	-	-	
Mov Cap-1 Maneuver	-	-	-	-	772 979
Mov Cap-2 Maneuver	-	-	-	-	772 -
Stage 1	-	-	-	-	899 -
Stage 2	-	-	-	-	930 -

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

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

HCM 6th TWSC
3: Alpine Phlox Street & N. Pinery Parkway

2024 Total
AM Peak

Intersection												
Int Delay, s/veh	3.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑	↗	↘	↑	↗			↗			↗
Traffic Vol, veh/h	0	61	20	44	81	5	0	0	54	0	0	5
Future Vol, veh/h	0	61	20	44	81	5	0	0	54	0	0	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	200	200	-	200	-	-	0	-	-	0
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	66	22	48	88	5	0	0	59	0	0	5

Major/Minor	Major1		Major2		Minor1		Minor2					
Conflicting Flow All	-	0	0	88	0	0	-	-	66	-	-	88
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	4.12	-	-	-	-	6.22	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	2.218	-	-	-	-	3.318	-	-	3.318
Pot Cap-1 Maneuver	0	-	-	1508	-	-	0	0	998	0	0	970
Stage 1	0	-	-	-	-	-	0	0	-	0	0	-
Stage 2	0	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	1508	-	-	-	-	998	-	-	970
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	2.5	8.8	8.7
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	998	-	-	1508	-	-	970
HCM Lane V/C Ratio	0.059	-	-	0.032	-	-	0.006
HCM Control Delay (s)	8.8	-	-	7.5	-	-	8.7
HCM Lane LOS	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0.2	-	-	0.1	-	-	0

HCM 6th TWSC
4: Alpine Phlox Street & Internal Collector

2024 Total
AM Peak

Intersection						
Int Delay, s/veh	4.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	55	5	5	18	20	34
Future Vol, veh/h	55	5	5	18	20	34
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	60	5	5	20	22	37

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	71	41	59	0	-	0
Stage 1	41	-	-	-	-	-
Stage 2	30	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	933	1030	1545	-	-	-
Stage 1	981	-	-	-	-	-
Stage 2	993	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	930	1030	1545	-	-	-
Mov Cap-2 Maneuver	930	-	-	-	-	-
Stage 1	978	-	-	-	-	-
Stage 2	993	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.1	1.6	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1545	-	938	-	-
HCM Lane V/C Ratio	0.004	-	0.07	-	-
HCM Control Delay (s)	7.3	0	9.1	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

HCM 6th TWSC
 5: Bayou Gulch Road & Internal Collector

2024 Total
 AM Peak

Intersection						
Int Delay, s/veh	2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗	↕			↕
Traffic Vol, veh/h	0	68	115	34	0	90
Future Vol, veh/h	0	68	115	34	0	90
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	74	125	37	0	98

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	-	81	0	0	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-
Pot Cap-1 Maneuver	0	963	-	-	0
Stage 1	0	-	-	-	0
Stage 2	0	-	-	-	0
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	-	963	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBT
Capacity (veh/h)	-	-	963
HCM Lane V/C Ratio	-	-	0.077
HCM Control Delay (s)	-	-	9
HCM Lane LOS	-	-	A
HCM 95th %tile Q(veh)	-	-	0.2

HCM 6th TWSC
1: Bayou Gulch Road & N. Pinery Parkway

2024 Total
PM Peak

Intersection												
Int Delay, s/veh	7.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↙	↑	↗	↙	↑	↗	↙	↗		↙	↗	
Traffic Vol, veh/h	15	48	15	10	28	17	45	76	20	38	100	10
Future Vol, veh/h	15	48	15	10	28	17	45	76	20	38	100	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	340	-	190	200	-	200	335	-	-	250	-	-
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	16	52	16	11	30	18	49	83	22	41	109	11

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	48	0	0	68	0	0	205	154	52	197	152	30
Stage 1	-	-	-	-	-	-	84	84	-	52	52	-
Stage 2	-	-	-	-	-	-	121	70	-	145	100	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1559	-	-	1533	-	-	753	738	1016	762	740	1044
Stage 1	-	-	-	-	-	-	924	825	-	961	852	-
Stage 2	-	-	-	-	-	-	883	837	-	858	812	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1559	-	-	1533	-	-	651	725	1016	672	727	1044
Mov Cap-2 Maneuver	-	-	-	-	-	-	651	725	-	672	727	-
Stage 1	-	-	-	-	-	-	915	817	-	951	846	-
Stage 2	-	-	-	-	-	-	756	831	-	747	804	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	1.4			1.3			10.6			10.7		
HCM LOS							B			B		

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	651	771	1559	-	-	1533	-	-	672	748
HCM Lane V/C Ratio	0.075	0.135	0.01	-	-	0.007	-	-	0.061	0.16
HCM Control Delay (s)	11	10.4	7.3	-	-	7.4	-	-	10.7	10.7
HCM Lane LOS	B	B	A	-	-	A	-	-	B	B
HCM 95th %tile Q(veh)	0.2	0.5	0	-	-	0	-	-	0.2	0.6

HCM 6th TWSC
2: Site Access & N. Pinery Parkway

2024 Total
PM Peak

Intersection						
Int Delay, s/veh	0					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑	↑	
Traffic Vol, veh/h	50	56	0	55	0	0
Future Vol, veh/h	50	56	0	55	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	54	61	0	60	0	0

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	-	-	145 58
Stage 1	-	-	-	-	85 -
Stage 2	-	-	-	-	60 -
Critical Hdwy	-	-	-	-	6.63 6.93
Critical Hdwy Stg 1	-	-	-	-	5.83 -
Critical Hdwy Stg 2	-	-	-	-	5.43 -
Follow-up Hdwy	-	-	-	-	3.519 3.319
Pot Cap-1 Maneuver	-	-	0	-	840 996
Stage 1	-	-	0	-	929 -
Stage 2	-	-	0	-	962 -
Platoon blocked, %	-	-	-	-	
Mov Cap-1 Maneuver	-	-	-	-	840 996
Mov Cap-2 Maneuver	-	-	-	-	840 -
Stage 1	-	-	-	-	929 -
Stage 2	-	-	-	-	962 -

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

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

HCM 6th TWSC
 3: Alpine Phlox Street & N. Pinery Parkway

2024 Total
 PM Peak

Intersection												
Int Delay, s/veh	4.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑	↗	↘	↑	↗			↗			↗
Traffic Vol, veh/h	0	20	30	58	45	10	0	0	60	0	0	10
Future Vol, veh/h	0	20	30	58	45	10	0	0	60	0	0	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	200	200	-	200	-	-	0	-	-	0
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	22	33	63	49	11	0	0	65	0	0	11

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	55	0	0	-	-	22	-	-	49
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	4.12	-	-	-	-	6.22	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	2.218	-	-	-	-	3.318	-	-	3.318
Pot Cap-1 Maneuver	0	-	-	1550	-	-	0	0	1055	0	0	1020
Stage 1	0	-	-	-	-	-	0	0	-	0	0	-
Stage 2	0	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	1550	-	-	-	-	1055	-	-	1020
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			3.8			8.6			8.6		
HCM LOS							A			A		

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1055	-	-	1550	-	-	1020
HCM Lane V/C Ratio	0.062	-	-	0.041	-	-	0.011
HCM Control Delay (s)	8.6	-	-	7.4	-	-	8.6
HCM Lane LOS	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0.2	-	-	0.1	-	-	0

HCM 6th TWSC
4: Alpine Phlox Street & Internal Collector

2024 Total
PM Peak

Intersection						
Int Delay, s/veh	4.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	65	6	6	13	40	38
Future Vol, veh/h	65	6	6	13	40	38
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	71	7	7	14	43	41

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	92	64	84	0	0
Stage 1	64	-	-	-	-
Stage 2	28	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-
Pot Cap-1 Maneuver	908	1000	1513	-	-
Stage 1	959	-	-	-	-
Stage 2	995	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	903	1000	1513	-	-
Mov Cap-2 Maneuver	903	-	-	-	-
Stage 1	954	-	-	-	-
Stage 2	995	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.3	2.3	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1513	-	910	-	-
HCM Lane V/C Ratio	0.004	-	0.085	-	-
HCM Control Delay (s)	7.4	0	9.3	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.3	-	-

HCM 6th TWSC
5: Bayou Gulch Road & Internal Collector

2024 Total
PM Peak

Intersection						
Int Delay, s/veh	2.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗	↕			↕
Traffic Vol, veh/h	0	76	65	40	0	125
Future Vol, veh/h	0	76	65	40	0	125
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	83	71	43	0	136

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	-	57	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	6.94	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	3.32	-
Pot Cap-1 Maneuver	0	997	-
Stage 1	0	-	-
Stage 2	0	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	-	997	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

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

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBT
Capacity (veh/h)	-	-	997
HCM Lane V/C Ratio	-	-	0.083
HCM Control Delay (s)	-	-	8.9
HCM Lane LOS	-	-	A
HCM 95th %tile Q(veh)	-	-	0.3

Timings
1: Bayou Gulch Road & N. Pinery Parkway

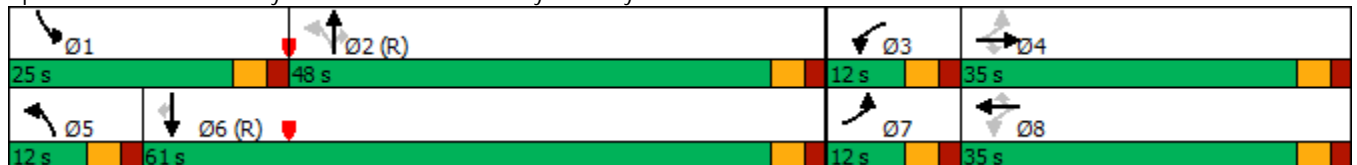
2042 Background
AM Peak

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	130	60	15	15	67	400	23	843	31	340	740	65
Future Volume (vph)	130	60	15	15	67	400	23	843	31	340	740	65
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	23.0	23.0	10.0	23.0	23.0	10.0	23.0	23.0	10.0	23.0	23.0
Total Split (s)	12.0	35.0	35.0	12.0	35.0	35.0	12.0	48.0	48.0	25.0	61.0	61.0
Total Split (%)	10.0%	29.2%	29.2%	10.0%	29.2%	29.2%	10.0%	40.0%	40.0%	20.8%	50.8%	50.8%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.5	-1.0	-1.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	3.5	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effect Green (s)	28.0	24.8	24.8	24.8	17.6	17.6	67.0	59.9	59.9	19.0	75.5	75.5
Actuated g/C Ratio	0.23	0.21	0.21	0.21	0.15	0.15	0.56	0.50	0.50	0.16	0.63	0.63
v/c Ratio	0.47	0.17	0.04	0.05	0.27	0.85	0.06	0.52	0.04	0.68	0.36	0.07
Control Delay	40.6	38.9	0.1	29.7	44.5	27.7	10.1	23.9	0.1	54.1	13.7	1.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	40.6	38.9	0.1	29.7	44.5	27.7	10.1	23.9	0.1	54.1	13.7	1.1
LOS	D	D	A	C	D	C	B	C	A	D	B	A
Approach Delay		37.2			30.1			22.7			25.0	
Approach LOS		D			C			C			C	

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green
 Natural Cycle: 70
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.85
 Intersection Signal Delay: 26.1
 Intersection Capacity Utilization 65.3%
 Analysis Period (min) 15
 Intersection LOS: C
 ICU Level of Service C

Splits and Phases: 1: Bayou Gulch Road & N. Pinery Parkway



HCM 6th TWSC
2: Site Access & N. Pinery Parkway

2042 Background
AM Peak

Intersection						
Int Delay, s/veh	0					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑	↑	
Traffic Vol, veh/h	432	2	0	436	0	0
Future Vol, veh/h	432	2	0	436	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	470	2	0	474	0	0

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	-	-	945 236
Stage 1	-	-	-	-	471 -
Stage 2	-	-	-	-	474 -
Critical Hdwy	-	-	-	-	6.63 6.93
Critical Hdwy Stg 1	-	-	-	-	5.83 -
Critical Hdwy Stg 2	-	-	-	-	5.43 -
Follow-up Hdwy	-	-	-	-	3.519 3.319
Pot Cap-1 Maneuver	-	-	0	-	391 *919
Stage 1	-	-	0	-	849 -
Stage 2	-	-	0	-	625 -
Platoon blocked, %	-	-	-	-	1 1
Mov Cap-1 Maneuver	-	-	-	-	391 *919
Mov Cap-2 Maneuver	-	-	-	-	391 -
Stage 1	-	-	-	-	849 -
Stage 2	-	-	-	-	625 -

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

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

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

HCM 6th TWSC
 3: Alpine Phlox Street & N. Pinery Parkway

2042 Background
 AM Peak

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	387	45	16	426	10	0	0	42	0	0	10
Future Vol, veh/h	0	387	45	16	426	10	0	0	42	0	0	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	200	200	-	200	-	-	0	-	-	0
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	421	49	17	463	11	0	0	46	0	0	11

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	470	0	0	-	-	421	-	-	463
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	4.12	-	-	-	-	6.22	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	2.218	-	-	-	-	3.318	-	-	3.318
Pot Cap-1 Maneuver	0	-	-	1108	-	-	0	0	*764	0	0	599
Stage 1	0	-	-	-	-	-	0	0	-	0	0	-
Stage 2	0	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-	1	-	-			1			
Mov Cap-1 Maneuver	-	-	-	1108	-	-	-	-	*764	-	-	599
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0.3			10			11.1		
HCM LOS							B			B		

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	764	-	-	1108	-	-	599
HCM Lane V/C Ratio	0.06	-	-	0.016	-	-	0.018
HCM Control Delay (s)	10	-	-	8.3	-	-	11.1
HCM Lane LOS	B	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.2	-	-	0	-	-	0.1

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

HCM 6th TWSC
4: Alpine Phlox Street & Internal Collector

2042 Background
AM Peak

Intersection						
Int Delay, s/veh	1.6					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T			T		T
Traffic Vol, veh/h	5	5	5	27	25	11
Future Vol, veh/h	5	5	5	27	25	11
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	5	5	5	29	27	12

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	72	33	39	0	0
Stage 1	33	-	-	-	-
Stage 2	39	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-
Pot Cap-1 Maneuver	932	1041	1571	-	-
Stage 1	989	-	-	-	-
Stage 2	983	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	929	1041	1571	-	-
Mov Cap-2 Maneuver	929	-	-	-	-
Stage 1	986	-	-	-	-
Stage 2	983	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.7	1.1	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1571	-	982	-	-
HCM Lane V/C Ratio	0.003	-	0.011	-	-
HCM Control Delay (s)	7.3	0	8.7	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection						
Int Delay, s/veh	0.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗	↕			↕
Traffic Vol, veh/h	0	25	875	26	0	770
Future Vol, veh/h	0	25	875	26	0	770
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	27	951	28	0	837

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	-	490	0	0	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-
Pot Cap-1 Maneuver	0	524	-	-	0
Stage 1	0	-	-	-	0
Stage 2	0	-	-	-	0
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	-	524	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.2	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBT
Capacity (veh/h)	-	-	524
HCM Lane V/C Ratio	-	-	0.052
HCM Control Delay (s)	-	-	12.2
HCM Lane LOS	-	-	B
HCM 95th %tile Q(veh)	-	-	0.2

HCM 6th TWSC
2: Site Access & N. Pinery Parkway

2042 Background
PM Peak

Intersection						
Int Delay, s/veh	0					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑	↑↓	
Traffic Vol, veh/h	600	4	0	265	0	0
Future Vol, veh/h	600	4	0	265	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	652	4	0	288	0	0

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	-	-	942 328
Stage 1	-	-	-	-	654 -
Stage 2	-	-	-	-	288 -
Critical Hdwy	-	-	-	-	6.63 6.93
Critical Hdwy Stg 1	-	-	-	-	5.83 -
Critical Hdwy Stg 2	-	-	-	-	5.43 -
Follow-up Hdwy	-	-	-	-	3.519 3.319
Pot Cap-1 Maneuver	-	-	0	-	*492 *841
Stage 1	-	-	0	-	*794 -
Stage 2	-	-	0	-	*760 -
Platoon blocked, %	-	-	-	-	1 1
Mov Cap-1 Maneuver	-	-	-	-	*492 *841
Mov Cap-2 Maneuver	-	-	-	-	*492 -
Stage 1	-	-	-	-	*794 -
Stage 2	-	-	-	-	*760 -

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

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

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

HCM 6th TWSC
 3: Alpine Phlox Street & N. Pinery Parkway

2042 Background
 PM Peak

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	525	75	27	250	15	0	0	52	0	0	15
Future Vol, veh/h	0	525	75	27	250	15	0	0	52	0	0	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	200	200	-	200	-	-	0	-	-	0
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	571	82	29	272	16	0	0	57	0	0	16

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	653	0	0	-	-	571	-	-	272
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	4.12	-	-	-	-	6.22	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	2.218	-	-	-	-	3.318	-	-	3.318
Pot Cap-1 Maneuver	0	-	-	909	-	-	0	0	*633	0	0	767
Stage 1	0	-	-	-	-	-	0	0	-	0	0	-
Stage 2	0	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %	-	-	-	1	-	-	-	-	1	-	-	-
Mov Cap-1 Maneuver	-	-	-	909	-	-	-	-	*633	-	-	767
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0.8			11.2			9.8		
HCM LOS							B			A		

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	633	-	-	909	-	-	767
HCM Lane V/C Ratio	0.089	-	-	0.032	-	-	0.021
HCM Control Delay (s)	11.2	-	-	9.1	-	-	9.8
HCM Lane LOS	B	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0.3	-	-	0.1	-	-	0.1

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

HCM 6th TWSC
4: Alpine Phlox Street & Internal Collector

2042 Background
PM Peak

Intersection						
Int Delay, s/veh	1.6					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T			T		T
Traffic Vol, veh/h	10	4	4	32	35	12
Future Vol, veh/h	10	4	4	32	35	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	4	4	35	38	13

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	88	45	51	0	0
Stage 1	45	-	-	-	-
Stage 2	43	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-
Pot Cap-1 Maneuver	913	1025	1555	-	-
Stage 1	977	-	-	-	-
Stage 2	979	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	910	1025	1555	-	-
Mov Cap-2 Maneuver	910	-	-	-	-
Stage 1	974	-	-	-	-
Stage 2	979	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.9	0.8	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1555	-	940	-	-
HCM Lane V/C Ratio	0.003	-	0.016	-	-
HCM Control Delay (s)	7.3	0	8.9	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection						
Int Delay, s/veh	0.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗	↕			↕
Traffic Vol, veh/h	0	26	1230	25	0	910
Future Vol, veh/h	0	26	1230	25	0	910
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	28	1337	27	0	989

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	-	682	0	0	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-
Pot Cap-1 Maneuver	0	392	-	-	0
Stage 1	0	-	-	-	0
Stage 2	0	-	-	-	0
Platoon blocked, %					
Mov Cap-1 Maneuver	-	392	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBT
Capacity (veh/h)	-	-	392
HCM Lane V/C Ratio	-	-	0.072
HCM Control Delay (s)	-	-	14.9
HCM Lane LOS	-	-	B
HCM 95th %tile Q(veh)	-	-	0.2

Timings

2042 Total

1: Bayou Gulch Road & N. Pinery Parkway

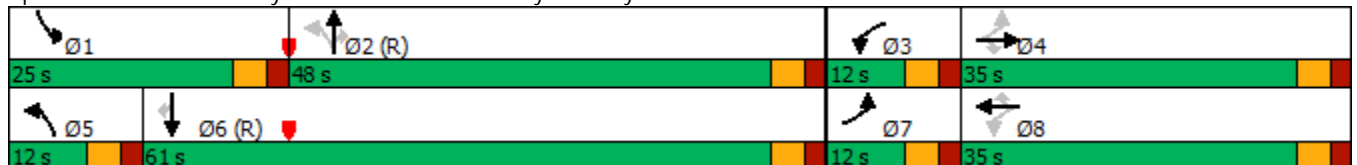
AM Peak

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	130	70	15	15	55	412	45	865	35	350	740	65
Future Volume (vph)	130	70	15	15	55	412	45	865	35	350	740	65
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	23.0	23.0	10.0	23.0	23.0	10.0	23.0	23.0	10.0	23.0	23.0
Total Split (s)	12.0	35.0	35.0	12.0	35.0	35.0	12.0	48.0	48.0	25.0	61.0	61.0
Total Split (%)	10.0%	29.2%	29.2%	10.0%	29.2%	29.2%	10.0%	40.0%	40.0%	20.8%	50.8%	50.8%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.5	-1.0	-1.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	3.5	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effect Green (s)	28.8	25.6	25.6	25.6	18.3	18.3	66.3	58.9	58.9	19.3	72.3	72.3
Actuated g/C Ratio	0.24	0.21	0.21	0.21	0.15	0.15	0.55	0.49	0.49	0.16	0.60	0.60
v/c Ratio	0.45	0.19	0.03	0.05	0.21	0.86	0.11	0.54	0.04	0.69	0.38	0.07
Control Delay	39.4	38.7	0.1	29.2	42.3	29.6	10.5	25.0	0.1	54.2	15.0	1.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	39.4	38.7	0.1	29.2	42.3	29.6	10.5	25.0	0.1	54.2	15.0	1.1
LOS	D	D	A	C	D	C	B	C	A	D	B	A
Approach Delay		36.5			31.1			23.3			26.1	
Approach LOS		D			C			C			C	

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green
 Natural Cycle: 70
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.86
 Intersection Signal Delay: 26.8
 Intersection LOS: C
 Intersection Capacity Utilization 66.6%
 ICU Level of Service C
 Analysis Period (min) 15

Splits and Phases: 1: Bayou Gulch Road & N. Pinery Parkway



HCM 6th TWSC
2: Site Access & N. Pinery Parkway

2042 Total
AM Peak

Intersection						
Int Delay, s/veh	0					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑	↑	
Traffic Vol, veh/h	400	50	0	460	0	0
Future Vol, veh/h	400	50	0	460	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	435	54	0	500	0	0

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	-	-	962 245
Stage 1	-	-	-	-	462 -
Stage 2	-	-	-	-	500 -
Critical Hdwy	-	-	-	-	6.63 6.93
Critical Hdwy Stg 1	-	-	-	-	5.83 -
Critical Hdwy Stg 2	-	-	-	-	5.43 -
Follow-up Hdwy	-	-	-	-	3.519 3.319
Pot Cap-1 Maneuver	-	-	0	-	381 *919
Stage 1	-	-	0	-	859 -
Stage 2	-	-	0	-	608 -
Platoon blocked, %	-	-	-	-	1 1
Mov Cap-1 Maneuver	-	-	-	-	381 *919
Mov Cap-2 Maneuver	-	-	-	-	381 -
Stage 1	-	-	-	-	859 -
Stage 2	-	-	-	-	608 -

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

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

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

HCM 6th TWSC
 3: Alpine Phlox Street & N. Pinery Parkway

2042 Total
 AM Peak

Intersection												
Int Delay, s/veh	1.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑	↑	↑	↑	↑			↑			↑
Traffic Vol, veh/h	0	355	45	50	450	10	0	0	90	0	0	10
Future Vol, veh/h	0	355	45	50	450	10	0	0	90	0	0	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	200	200	-	200	-	-	0	-	-	0
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	386	49	54	489	11	0	0	98	0	0	11

Major/Minor	Major1		Major2		Minor1		Minor2					
Conflicting Flow All	-	0	0	435	0	0	-	-	386	-	-	489
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	4.12	-	-	-	-	6.22	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	2.218	-	-	-	-	3.318	-	-	3.318
Pot Cap-1 Maneuver	0	-	-	1145	-	-	0	0	*790	0	0	579
Stage 1	0	-	-	-	-	-	0	0	-	0	0	-
Stage 2	0	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-	1	-	-			1			
Mov Cap-1 Maneuver	-	-	-	1145	-	-	-	-	*790	-	-	579
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.8	10.2	11.3
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	790	-	-	1145	-	-	579
HCM Lane V/C Ratio	0.124	-	-	0.047	-	-	0.019
HCM Control Delay (s)	10.2	-	-	8.3	-	-	11.3
HCM Lane LOS	B	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.4	-	-	0.1	-	-	0.1

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

HCM 6th TWSC
4: Alpine Phlox Street & Internal Collector

2042 Total
AM Peak

Intersection						
Int Delay, s/veh	4.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T			T		T
Traffic Vol, veh/h	60	10	10	20	25	45
Future Vol, veh/h	60	10	10	20	25	45
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
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	65	11	11	22	27	49

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	96	52	76	0	0
Stage 1	52	-	-	-	-
Stage 2	44	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-
Pot Cap-1 Maneuver	903	1016	1523	-	-
Stage 1	970	-	-	-	-
Stage 2	978	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	897	1016	1523	-	-
Mov Cap-2 Maneuver	897	-	-	-	-
Stage 1	963	-	-	-	-
Stage 2	978	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.3	2.5	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1523	-	912	-	-
HCM Lane V/C Ratio	0.007	-	0.083	-	-
HCM Control Delay (s)	7.4	0	9.3	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.3	-	-

HCM 6th TWSC
5: Bayou Gulch Road & Internal Collector

2042 Total
AM Peak

Intersection						
Int Delay, s/veh	0.7					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗	↕			↕
Traffic Vol, veh/h	0	90	855	60	0	770
Future Vol, veh/h	0	90	855	60	0	770
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	98	929	65	0	837

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	-	497	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	519	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	519	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.5	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBT
Capacity (veh/h)	-	-	519
HCM Lane V/C Ratio	-	-	0.188
HCM Control Delay (s)	-	-	13.5
HCM Lane LOS	-	-	B
HCM 95th %tile Q(veh)	-	-	0.7

Timings

2042 Total

1: Bayou Gulch Road & N. Pinery Parkway

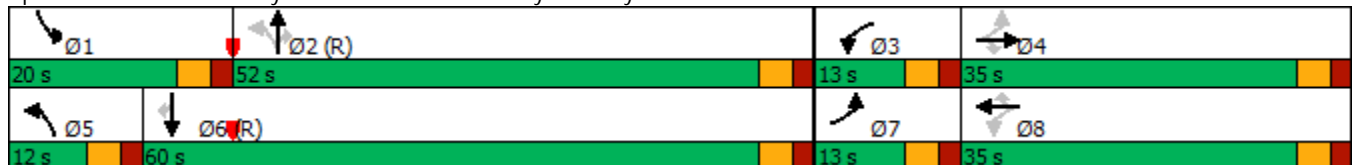
PM Peak

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	160	85	25	50	70	193	45	1215	50	500	835	195
Future Volume (vph)	160	85	25	50	70	193	45	1215	50	500	835	195
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	23.0	23.0	10.0	23.0	23.0	10.0	23.0	23.0	10.0	23.0	23.0
Total Split (s)	13.0	35.0	35.0	13.0	35.0	35.0	12.0	52.0	52.0	20.0	60.0	60.0
Total Split (%)	10.8%	29.2%	29.2%	10.8%	29.2%	29.2%	10.0%	43.3%	43.3%	16.7%	50.0%	50.0%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-2.0	-1.0	-1.0	-1.0	-2.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0
Total Lost Time (s)	3.0	4.0	4.0	4.0	3.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effect Green (s)	23.8	14.8	14.8	20.4	13.0	12.0	59.3	51.8	51.8	31.2	77.6	77.6
Actuated g/C Ratio	0.20	0.12	0.12	0.17	0.11	0.10	0.49	0.43	0.43	0.26	0.65	0.65
v/c Ratio	0.65	0.40	0.08	0.21	0.38	0.61	0.13	0.87	0.07	0.61	0.40	0.19
Control Delay	53.0	54.7	0.5	39.5	54.0	14.2	9.3	38.4	0.2	43.0	11.7	1.9
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	53.0	54.7	0.5	39.5	54.0	14.2	9.3	38.4	0.2	43.0	11.7	1.9
LOS	D	D	A	D	D	B	A	D	A	D	B	A
Approach Delay		48.7			27.1			35.9			20.7	
Approach LOS		D			C			D			C	

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green
 Natural Cycle: 90
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.87
 Intersection Signal Delay: 29.3
 Intersection LOS: C
 Intersection Capacity Utilization 73.4%
 ICU Level of Service D
 Analysis Period (min) 15

Splits and Phases: 1: Bayou Gulch Road & N. Pinery Parkway



HCM 6th TWSC
2: Site Access & N. Pinery Parkway

2042 Total
PM Peak

Intersection						
Int Delay, s/veh	0					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑	↑↓	
Traffic Vol, veh/h	565	60	0	290	0	0
Future Vol, veh/h	565	60	0	290	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	614	65	0	315	0	0

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	-	-	962 340
Stage 1	-	-	-	-	647 -
Stage 2	-	-	-	-	315 -
Critical Hdwy	-	-	-	-	6.63 6.93
Critical Hdwy Stg 1	-	-	-	-	5.83 -
Critical Hdwy Stg 2	-	-	-	-	5.43 -
Follow-up Hdwy	-	-	-	-	3.519 3.319
Pot Cap-1 Maneuver	-	-	0	-	440 *867
Stage 1	-	-	0	-	765 -
Stage 2	-	-	0	-	739 -
Platoon blocked, %	-	-	-	-	1 1
Mov Cap-1 Maneuver	-	-	-	-	440 *867
Mov Cap-2 Maneuver	-	-	-	-	440 -
Stage 1	-	-	-	-	765 -
Stage 2	-	-	-	-	739 -

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

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

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

HCM 6th TWSC
 3: Alpine Phlox Street & N. Pinery Parkway

2042 Total
 PM Peak

Intersection												
Int Delay, s/veh	1.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑	↑	↑	↑	↑			↑			↑
Traffic Vol, veh/h	0	490	75	65	275	15	0	0	110	0	0	15
Future Vol, veh/h	0	490	75	65	275	15	0	0	110	0	0	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	200	200	-	200	-	-	0	-	-	0
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	533	82	71	299	16	0	0	120	0	0	16

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	615	0	0	-	-	533	-	-	299
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	4.12	-	-	-	-	6.22	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	2.218	-	-	-	-	3.318	-	-	3.318
Pot Cap-1 Maneuver	0	-	-	943	-	-	0	0	*685	0	0	741
Stage 1	0	-	-	-	-	-	0	0	-	0	0	-
Stage 2	0	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-	1	-	-			1			
Mov Cap-1 Maneuver	-	-	-	943	-	-	-	-	*685	-	-	741
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	1.7	11.4	10
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	685	-	-	943	-	-	741
HCM Lane V/C Ratio	0.175	-	-	0.075	-	-	0.022
HCM Control Delay (s)	11.4	-	-	9.1	-	-	10
HCM Lane LOS	B	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.6	-	-	0.2	-	-	0.1

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

HCM 6th TWSC
4: Alpine Phlox Street & Internal Collector

2042 Total
PM Peak

Intersection						
Int Delay, s/veh	4.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T			T		T
Traffic Vol, veh/h	75	10	10	25	35	50
Future Vol, veh/h	75	10	10	25	35	50
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	82	11	11	27	38	54

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	114	65	92	0	0
Stage 1	65	-	-	-	-
Stage 2	49	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-
Pot Cap-1 Maneuver	882	999	1503	-	-
Stage 1	958	-	-	-	-
Stage 2	973	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	876	999	1503	-	-
Mov Cap-2 Maneuver	876	-	-	-	-
Stage 1	951	-	-	-	-
Stage 2	973	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.5	2.1	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1503	-	889	-	-
HCM Lane V/C Ratio	0.007	-	0.104	-	-
HCM Control Delay (s)	7.4	0	9.5	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.3	-	-

HCM 6th TWSC
5: Bayou Gulch Road & Internal Collector

2042 Total
PM Peak

Intersection						
Int Delay, s/veh	0.8					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗	↕			↕
Traffic Vol, veh/h	0	100	1210	65	0	910
Future Vol, veh/h	0	100	1210	65	0	910
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	109	1315	71	0	989

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	-	693	0	0	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-
Pot Cap-1 Maneuver	0	386	-	-	0
Stage 1	0	-	-	-	0
Stage 2	0	-	-	-	0
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	-	386	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBT
Capacity (veh/h)	-	-	386
HCM Lane V/C Ratio	-	-	0.282
HCM Control Delay (s)	-	-	17.9
HCM Lane LOS	-	-	C
HCM 95th %tile Q(veh)	-	-	1.1