

# **HCD Drilling**

## **Traffic Impact Study**

Prepared for:

Darin Weiss  
T-Bone Construction  
1310 Ford Street  
Colorado Springs, CO 80915

JULY 21, 2021

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LSC Transportation Consultants  
Jeffrey C. Hodsdon, P.E.

LSC #S214660



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Site Plan

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DRAFT



LSC TRANSPORTATION CONSULTANTS, INC.  
2504 East Pikes Peak Avenue, Suite 304  
Colorado Springs, CO 80909  
(719) 633-2868  
FAX (719) 633-5430  
E-mail: [lsc@lsctrans.com](mailto:lsc@lsctrans.com)  
Website: <http://www.lsctrans.com>

July 21, 2021

Darin Weiss  
T-Bone Construction  
1310 Ford Street  
Colorado Springs, CO 80915

RE: HCD Drilling  
Traffic Impact Study  
Colorado Springs, CO  
LSC # S214660

Dear Mr. Weiss,

LSC Transportation Consultants, Inc. has prepared this traffic impact study for the proposed HCD Drilling development planned to be located at 6201 East Platte Avenue in Colorado Springs, Colorado. Located at El Paso County parcel ID 5418000069, the 7.13-acre parcel would consist of approximately 17,700 square feet of warehouse space and 4,779 square feet of office space.

HCD Drilling plans to relocate its truck storage along with approximately 20-24 office employees to this site. The company would also employ 15-20 field employees who will travel to/from the site for work via private vehicle. Crews would travel to job sites in company vehicles. One stop-sign-controlled access is proposed for the property, located approximately 220 feet west of the Platte Avenue right-in/right-out (RIRO) access intersection with Motel Road. No direct site access is proposed to Platte Avenue.

This report has been prepared for submittal to El Paso County and CDOT.

## REPORT CONTENTS

The preparation of this report included the following:

- Inventory of existing adjacent and nearby area street system. This included surface conditions, functional classifications, roadway widths, lane configurations, traffic control, posted speed limits, pavement markings, intersection and access spacing, roadway and intersection alignments, auxiliary left- and right-turn lanes, intersection sight distances, etc.;



- Summary of existing morning and late-afternoon peak-hour turning-movement traffic counts at the following intersections:
  - Platte Avenue/Motel Road (right-in/right out (RIRO) access)
  - Motel Road/Platte Avenue frontage road
  - Platte Avenue/Hathaway Drive
  - Hathaway Drive/Platte Avenue frontage road
- Estimates of short-term baseline traffic volumes, with estimated COVID-19 adjustments to current traffic data;
- Review of relevant traffic studies for pertinent information and improvements adjacent to this development. Other recent studies completed in the area and any applicable data/transferrable information/analysis etc. from previous LSC studies adjacent to the site were also utilized;
- Estimates of average weekday and peak-hour trip generation for the proposed development;
- Estimation of directional distribution of site-generated vehicle trips on the area street system, the study-area intersections, and the proposed site access points on Motel Road;
- Projections of site-generated turning-movement traffic volumes at the following “study-area” intersections:
  - Platte Avenue/Motel Road (right-in/right out (RIRO) access)
  - Motel Road/Platte Avenue frontage road
  - Platte Avenue/Hathaway Drive
  - Hathaway Drive/Platte Avenue frontage road
  - Motel Road/proposed site access
- Estimates of short- and long-term background-traffic volumes at the study-area intersections and access points;
- Total traffic (site traffic-plus-background traffic) projections at the study-area intersections for the short and long term;
- Level of service (LOS) analysis at the study-area intersections;
- Evaluation of existing, short-term, and long-term projected intersection volumes to determine the potential need for any new auxiliary right-/left-turn lanes, based on the criteria in CDOT’s *State Highway Access Code*;

- Other recommended improvements/modifications to the study-area streets and intersections, including street system/intersection improvements, intersection traffic control, and/or signage and pavement-marking modifications as required; and
- Summary of compiled data, analysis, findings, and recommendations.

## **PRIOR AREA TRAFFIC REPORTS**

LSC utilized the following previous traffic reports to assist in the production of this report:

- *Freedom Springs* – July 2018 (LSC)

Long-term traffic projections on Hathaway Drive and Platte Avenue from the *Freedom Springs* traffic study have been included in long-term background traffic-volume estimates.

## **LAND USE AND ACCESS**

### **Site Land Use**

Figure 1 shows the site location relative to the adjacent and nearby streets. HCD Drilling plans to relocate its truck storage, along with approximately 20-24 office employees, to this site. Approximately 15-20 work vehicles would also be parked in the “warehouse” portion of the building overnight, with drivers primarily operating at job sites throughout the day. A copy of the site plan is shown in Figure 2.

### **Site Access**

One stop-sign-controlled access is proposed for the property, located approximately 220 feet west of the Platte Avenue RIRO access intersection with Motel Road. No direct site access is proposed to Platte Avenue.

## **ROAD AND TRAFFIC CONDITIONS**

Figure 1 shows the streets adjacent to and in the vicinity of the site. Adjacent streets serving the site are identified below, followed by a brief description of each:

**Platte Avenue (US Highway 24)** is a four-lane east/west state highway that locally extends from Colorado Springs to Falcon. US Highway (Hwy) 24 is classified as an Expressway by the Colorado Department of Transportation and is shown as an Expressway on the County *Major Transportation Corridors Plan (MTCP)*. The US Highway 24/Peterson Road intersection is grade-separated. There is an existing at-grade three-quarter-movement intersection in the vicinity of the site at Hathaway Drive. Figure 28 of CDOT’s *US 24 Planning and Environmental Linkage (PEL) Study* shows that the three-quarter access intersection at US Hwy 24 just south of Hathaway Drive will remain unchanged through 2040.

**Hathaway Drive** is shown as a two-lane Collector on the El Paso County *MTCP*. There are no auxiliary turn lanes at its intersection with Western Drive and the posted speed limit is 30 mph in the vicinity of the site. Approximately 50 feet north of US 24, there is a yield sign-controlled T-intersection. The northbound leg of this intersection is the connection to the three-quarter-movement intersection with US Hwy 24.

**Motel Road** is a two-lane non-arterial street without a posted speed limit in the vicinity of the site. An eastbound right-turn auxiliary turn lane currently exists at both stop-sign-controlled intersections adjacent to the site on Platte Avenue.

### Existing Traffic Volumes

Vehicular turning-movement counts were conducted at the following intersections and dates/times:

- Platte Avenue/RIRO access to Motel Road
  - Tuesday, July 13, 2021 from 6:30 – 8:30 a.m.
  - Tuesday, July 13, 2021 from 4:00 - 6:00 p.m.
- Platte Avenue/ Hathaway Drive (three-quarter-movement access)
  - Tuesday, July 13, 2021 from 6:30 – 8:30 a.m.
  - Tuesday, July 13, 2021 from 4:00 - 6:00 p.m.
- Motel Road/Hathaway Drive (south of Platte Avenue)
  - Wednesday, July 14, 2021 from 6:30 – 8:30 a.m.
  - Wednesday, July 14, 2021 from 4:00 - 6:00 p.m.
- Motel Road/frontage road RIRO access (south of Platte Avenue)
  - Wednesday, July 14, 2021 from 6:30 – 8:30 a.m.
  - Wednesday, July 14, 2021 from 4:00 - 6:00 p.m.

Existing morning and evening weekday peak-hour traffic volumes at these intersections, as well as the estimated existing annual average daily traffic (AADT) volumes adjacent to the site, are shown in Figure 3. Raw count reports are attached.

### Short-Term Baseline Traffic Volumes

Figure 4 shows estimated “short-term baseline” traffic volumes on the study-area streets and at the study-area intersections (short-term peak-hour turning-movement volumes). These estimates do not include the completion of several developments in the vicinity of the site, as those were assumed to have been completed during the long term. Previous LSC traffic counts from February 2018 were also referenced to establish short-term baseline traffic volumes, as those counts were not affected by changes in travel patterns due to the COVID-19 pandemic.

Additionally, a “COVID-19 adjustment factor” of approximately 2 percent per year has been applied to the higher of the February 2018 or July 2021 counts in order to account for growth in the study area that may be affected by remaining effects of the COVID-19 pandemic.

### Field Observations at US Highway 24/Hathaway Drive

LSC conducted field observations of operations at the three-quarter access to US Hwy 24 during both the morning and afternoon peak hours. The eastbound-left/U-turn-lane queue was consistently 6-12 vehicles, with multiple occurrences of additional vehicles arriving at the back of queue as the queue began to clear. In general, drivers making an eastbound-U-turn contributed more towards control delay for this turning movement, often waiting 3-5 minutes before enough of a gap formed upstream on Platte Avenue for them to safely conduct a U-turn.

Several vehicles (mostly heavy vehicles from businesses located on the Motel Road/Platte Avenue frontage road) were observed to turn eastbound-left onto Hathaway Drive rather than waiting in the eastbound-U-turn queue. After turning eastbound-left onto Hathaway Drive, these drivers would immediately make a northbound-U-turn in the wider intersection of Hathaway Drive/Ford Road before turning 180 degrees back towards Platte Avenue to turn southbound-right onto Platte Avenue. This turning-movement combination was observed to be noticeably quicker for vehicles wishing to travel back towards downtown Colorado Springs compared to those drivers completing a standard eastbound-U-turn movement at Platte Avenue/Hathaway Drive.

Northbound- and southbound right-turning vehicles were seen using their respective right-turn acceleration lane to merge into through traffic on Platte Avenue. The eastbound right-turn acceleration lane is continuous to Peterson Avenue (approximately one-quarter mile to the east), while the westbound right-turn acceleration lane is continuous to Valley Drive (about one-quarter mile to the west).

### TRIP GENERATION

Estimates of the existing and projected vehicle trips to be generated by the site have been made using nationally-published average trip-generation rates for land use code “180 – Specialty Trade Contractor” in *Trip Generation, 10<sup>th</sup> Edition, 2017* by the Institute of Transportation Engineers (ITE). Estimates are based on ITE rates with “building square footage” as the predictor variable.

Table 1 below presents a summary of the estimated site trip generation. A detailed trip-generation estimate for the site, including ITE rates for the proposed land use, is presented in Table 3 (attached).

**Table 1: Estimated External Site Vehicle-Trip Generation**

Analysis Period	Weekday		
	In	Out	Total
Morning Peak Hour	25	9	34
Evening Peak Hour	13	27	40
Daily/24-hour	104	104	208

Based on the ITE estimate, the proposed HCD Drilling site could generate about 208 external vehicle trips on the average weekday. During the weekday morning peak hour, approximately 25 vehicles would enter and 9 vehicles would exit the site. Approximately 13 entering vehicles and 27 exiting vehicles are projected for the weekday evening peak hour.

## **TRIP DISTRIBUTION AND ASSIGNMENT**

### **Trip Directional Distribution**

Estimating the directional distribution of site-generated vehicle trips to the study-area roads and intersections is a necessary component in determining the site's traffic impacts. Figure 5 shows the percentages of the site-generated vehicle trips projected to be oriented to and from the site's major approaches. Estimates have been based on the following factors: the proposed land use, the area street and road system serving the site, previously-conducted traffic studies in the vicinity of this site, and the site's geographic location relative to the City of Colorado Springs and the Pikes Peak region.

### **Site-Generated Traffic**

Figure 6 shows the projected site-generated traffic volumes for the weekday morning and evening peak hours. Site-generated traffic volumes at the study-area intersections have been calculated by applying the directional distribution percentages estimated by LSC (from Figure 5) to the trip-generation estimates (from Table 3).

### **Short-Term Baseline-Plus-Site-Generated Traffic Volumes**

Figure 7 shows the sum of the short-term baseline traffic volumes (from Figure 4) and site-generated peak-hour traffic volumes (shown in Figure 6). These volumes represent the projected short-term total traffic, assuming site buildout. Short-term total estimates do not include the completion of several developments in the vicinity of the site, as those were assumed to have been completed during the long term. Previous LSC traffic counts from February 2018 were also referenced to establish short-term baseline traffic volumes, as those counts were not affected by changes in travel patterns due to the COVID-19 pandemic.

### **Estimated Future 2041 Background Traffic Volumes**

Figure 8 shows the projected 20-year background traffic volumes for the year 2041. Estimated 2041 background through traffic volumes on Platte Avenue, Hathaway Drive, and Motel Road are based on projected background growth of undeveloped parcels in the vicinity of the site. Projected short-term and long-term volumes from previous LSC traffic studies in the vicinity of the site were used to estimate future background traffic growth on roadways adjacent to the site. CDOT's 20-year growth factor for Platte Avenue is 1.42, representing a 2.1 percent annual growth rate. Projected 20-year background traffic volumes do **not** include projected traffic to be generated by the proposed HCD Drilling site.

## Future 2041 Total Traffic Volumes

Figure 9 shows the projected 2041 total traffic volumes, which are the sum of 2041 background traffic volumes (from Figure 8) plus the site-generated traffic volumes (from Figure 6).

## LEVEL OF SERVICE ANALYSIS

The following intersections have been analyzed to determine the projected intersection levels of service for short- and long-term traffic scenarios for the morning and evening peak-hour time periods:

- Platte Avenue/Motel Road (right-in/right out (RIRO) access)
- Motel Road/Platte Avenue frontage road
- Platte Avenue/Hathaway Drive
- Hathaway Drive/Platte Avenue frontage road
- Motel Road/proposed site access

Level of service (LOS) is a quantitative measure of the level of congestion or delay at an intersection and is indicated on a scale from “A” to “F.” LOS A is indicative of little congestion or delay. LOS F indicates a high level of congestion or delay. Table 2 shows the level of service delay ranges for signalized and unsignalized intersections.

**Table 2: Intersection Levels of Service Delay Ranges**

Level of Service	Signalized Intersections	Unsignalized Intersections
	Average Control Delay (seconds per vehicle)	Average Control Delay (seconds per vehicle) <sup>(1)</sup>
A	10.0 sec or less	10.0 sec or less
B	10.1-20.0 sec	10.1-15.0 sec
C	20.1-35.0 sec	15.1-25.0 sec
D	35.1-55.0 sec	25.1-35.0 sec
E	55.1-80.0 sec	35.1-50.0 sec
F	80.1 sec or more	50.1 sec or more
(1) For unsignalized intersections, if V/C ratio is greater than 1.0 the level of service is LOS F, regardless of the projected average control delay per vehicle.		

Detailed Synchro reports are attached. A summary of LOS during the weekday morning and evening peak hours for the following unsignalized intersections is shown in the following figures:

- Figure 3: Existing Traffic, Lane Geometry, Traffic Control, and LOS
- Figure 4: Short-Term Baseline Traffic, Lane Geometry, Traffic Control, and LOS
- Figure 7: Short-Term Total Traffic, Lane Geometry, Traffic Control, and LOS
- Figure 8: 2041 Background Traffic, Lane Geometry, Traffic Control, and LOS
- Figure 9: 2041 Background + Site Traffic, Lane Geometry, Traffic Control, and LOS

### **Platte Avenue/Hathaway Drive (Three-Quarter Intersection)**

#### Short Term

The eastbound left-turning movement at this three-quarter-movement intersection currently operates at LOS F and is projected to remain at LOS F during all short-term peak-hour traffic scenarios. All other individual turning movements would operate at LOS D or better during the short term, with or without the addition of site-generated traffic.

Although the *Highway Capacity Manual (HCM)* LOS analysis indicates LOS E or worse, field observations indicate that upstream signals at US Hwy 94 and Marksheffel Road produce gaps in the westbound traffic stream that allow left-turning movements to occur. Please refer to the “Field Observations at US Highway 24/Hathaway Drive” section above for more detail.

#### Long Term

*HCM* analysis indicates that the following individual turning movements at this three-quarter-movement intersection would operate at LOS F during all long-term scenarios, with or without the addition of site-generated traffic:

- Eastbound-left/U-turn, westbound-left/U-turn, northbound-right turn, and southbound-right turn

Synchro *HCM*-calculated control delays are in the LOS F range for this intersection. However, the formula-calculated values likely exceed realistic levels. For additional detail, please refer to the attached *HCM* calculation sheets.

Northbound-to-eastbound right-turn acceleration lanes exist at this access point to Platte Avenue. However, these are not accounted for in the *HCM* LOS results, even though the acceleration lanes would likely reduce delay, assuming drivers used them properly.

Field observations indicate that upstream signals at the US Hwy 94, Marksheffel Road, and Powers Boulevard cross-street intersections produce gaps in the westbound traffic stream that allow left-turning and right-turning movements to occur. Until grade-separated interchanges replace the upstream signalized intersections in the future, these traffic gaps will continue to be generated.

### **Platte Avenue/RIRO Access**

#### Short Term

All major- and minor-street left-turning movements at this intersection currently operate at, and are projected to remain at, LOS D or better during all short-term peak-hour traffic scenarios.

### Long Term

The northbound-right individual turning movement at the stop-sign-controlled intersection of Platte Avenue/RIRO access is projected to operate at LOS E or worse during both long-term peak hours during the long term, with or without the addition of site-generated traffic. Northbound-to-eastbound right-turn acceleration lanes exist at this access point to Platte Avenue. However, these are not accounted for in the *HCM* LOS results, even though the acceleration lanes would likely reduce delay, assuming drivers used them properly.

Additionally, field observations indicate that upstream signals at the US Hwy 94, Marksheffel Road, and Powers Boulevard cross-street intersections produce gaps in the westbound traffic stream that allow left-turning and right-turning movements to occur. Until grade-separated interchanges replace the upstream signalized intersections in the future, these traffic gaps will continue to be generated.

It is not uncommon for minor street approaches on arterials to operate at levels of service E (or even F) during peak periods, as adjacent signal timings favor the major street (Platte Avenue). Despite these LOS E/F individual-movement levels of service for the northbound right-turning movement, analysis results show a volume-to-capacity (v/c) ratio to be below 1.00 during both long-term traffic scenarios.

#### **Motel Road/Proposed Site Access**

All approaches and individual turning movements at the proposed east site access on Motel Road are projected to operate at LOS A through 2041 during both peak hours.

#### **Motel Road/Platte Avenue RIRO Access**

All approaches and individual turning movements at the Motel Road intersection/Platte Avenue RIRO access currently operate at, and are projected to remain at, LOS A through 2041 during both peak hours, with or without the addition of site-generated traffic.

#### **Frontage Road/Hathaway Drive (Three-Quarter Access)**

All approaches and individual turning movements at the Hathaway Drive (three-quarter access)/frontage road intersection south of Platte Avenue currently operate at, and are projected to remain at, LOS A through 2041 during both peak hours, with or without the addition of site-generated traffic.



## **AUXILIARY TURN-LANE ANALYSIS**

The *State Highway Access Code* contain turning-volume thresholds which require auxiliary left- or right-turn lanes by roadway classifications. Roadway classifications for key thoroughfares in the vicinity of the site are based on the *State Highway Access Category Assignment Schedule*.

- Platte Avenue (US Hwy 24) – Expressway
- Motel Road – frontage road

### **Platte Avenue/Hathaway Drive (Three-Quarter-Movement Intersection)**

The addition of site-generated traffic would increase the total entering/exiting traffic volume at this intersection by more than 20 percent. HCD Drilling is projected to increase the existing total traffic volume at Platte Avenue/Hathaway Drive (three-quarter access) by 11 percent compared to short-term baseline background-only traffic scenario.

#### Eastbound Left-Turn Deceleration Lane

The existing eastbound left-turn lane length is 660 feet, consisting of approximately 390 feet of full-width lane plus stacking distance and a 240-foot taper.

CDOT “EX – Expressway” left-turn deceleration lane requirements for 55-mph posted limit at this approach are 922 feet:

- 600 feet of full-width deceleration length
- 100 feet of stacking for turning vehicles (based on projected 2041 volumes)
- 222-foot lane transition taper (18.5:1 ratio)

The existing turn lane does not currently meet CDOT Access Code standards. As such, the existing eastbound left-turn lane would need to be lengthened 262 feet (from its existing 660-foot length) in order to meet CDOT turn-lane design requirements.

#### Westbound Left-Turn Deceleration Lane

The existing westbound left-turn lane length is 600 feet, consisting of approximately 300 feet of full-width lane plus stacking distance and a 300-foot taper.

CDOT “EX – Expressway” left-turn deceleration lane requirements for 55-mph posted limit at this approach are 862 feet:

- 600 feet of full-width deceleration length
- 40 feet of stacking for turning vehicles (based on projected 2041 volumes)
- 222-foot lane transition taper (18.5:1 ratio)

The existing turn lane does not currently meet CDOT Access Code standards. As such, the existing westbound left-turn lane would need to be lengthened 262 feet (from its existing 600-foot

length) in order to meet CDOT turn-lane design requirements. There may be constraints to lengthening this lane, such as the grade difference between eastbound and westbound lanes and/or large sign structures in the center median just to the east of this access location.

#### Eastbound Right-Turn Deceleration Lane

Currently, the eastbound right-turn lane is a continuous deceleration lane extending for approximately 815 feet between the RIRO access (to the west) and the three-quarter movement access at Hathaway Drive. No modifications would be required to the existing eastbound right-turn lane design at this intersection.

#### Northbound-to-Eastbound Right-Turn Acceleration Lane

Currently, the northbound-to-eastbound right-turn acceleration lane is a continuous lane extending for approximately one-quarter mile between this three-quarter access at Hathaway Drive and the eastbound off-ramp to Peterson Boulevard (to the east). No modifications would be required to the existing eastbound right-turn acceleration lane design at this intersection.

#### **Platte Avenue/RIRO Movement Intersection**

The addition of site-generated traffic would increase the total entering/exiting traffic volume at this intersection by more than 20 percent. HCD Drilling is projected to increase the existing total traffic volume at Platte Avenue/RIRO access by 26 percent compared to short-term baseline background-only traffic scenario.

#### Eastbound Right-Turn Deceleration Lane

Currently, the eastbound right-turn deceleration lane on Platte Avenue approaching its RIRO access to Motel Road is 390 feet long, consisting of 130 feet of lane length and a 260-foot approach taper. However, CDOT “EX – Expressway” right-turn deceleration lane requirements for 55-mph posted limit at this approach are 822 feet:

- 600 feet of full-width deceleration length
- 222-foot lane transition taper (18.5:1 ratio)

As such, the existing westbound left-turn lane would need to be lengthened an additional 432 feet (from its existing 390-foot length) in order to meet CDOT turn-lane design requirements. However, the end of the northbound-to-eastbound Powers Boulevard-to-Platte Avenue on-ramp is located about 300 feet west of the current start of the taper for this eastbound right-turn lane. The code requires 300 feet between auxiliary turn lanes. Extending this deceleration lane back in order to form a continuous right-turn lane may not be a better solution, as it would create a “trap right” situation for traffic using the Platte/Powers northbound-to-eastbound on-ramp.

The existing eastbound right-turn deceleration lane does not meet CDOT Access Code standards.

#### Northbound-to-Eastbound Right-Turn Acceleration Lane

Currently, the northbound-to-eastbound right-turn acceleration lane is a continuous lane extending for approximately 815 feet between this RIRO intersection and the three-quarter access at Hathaway Drive (to the east). No modifications would be required to the existing eastbound right-turn acceleration lane design at this intersection.

#### **Motel Road Study-Area Intersections**

Motel Road is likely controlled by CDOT and classified as a frontage road. As such, no auxiliary turn lanes would be required at any of the study -rea intersections. Through traffic volumes are relatively light, the speed limit is unposted (assumed to be 25 mph), and the roadway has a straight alignment with acceptable sight distance in both directions at each study-area intersection on Motel Road. Additionally, traffic control already exists on the eastbound and westbound approaches at each of the study-area intersections with Motel Road, so the widening for additional turn lanes would not be required.

#### **CONCLUSIONS**

- The site is projected to generate about 208 new driveway vehicle trips on the average weekday.
- During the weekday morning peak hour of adjacent street traffic, 25 vehicles would enter the site while 9 vehicles would exit.
- During the weekday evening peak hour of adjacent street traffic, 13 vehicles would enter the site while 27 vehicles would exit.
- Please refer to the “Level of Service” section above for detailed LOS analysis results for individual turning movements and approaches at all studied intersections, during both peak hours through the 2041 horizon year.
- The existing eastbound right-turn deceleration lane at the Platte Avenue/Motel Road RIRO access intersection does not currently meet the minimum design criteria in CDOT’s *State Highway Access Code*. As such, the existing eastbound right-turn deceleration lane would need to be lengthened an additional 432 feet in order to meet CDOT turn-lane design requirements. However, the end of the northbound-to-eastbound Powers Boulevard-to-Platte Avenue on-ramp is located about 300 feet west of the current start of the taper for this eastbound right-turn lane. The code requires 300 feet between auxiliary turn lanes. Extending this deceleration lane back in order to form a continuous right-turn lane may not be a better solution, as it would create a “trap right” situation for

traffic using the Platte/Powers northbound-to-eastbound on-ramp. Please refer to the "Auxiliary Turn Lane Analysis" section for additional detail.

\* \* \* \* \*

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

Respectfully Submitted,

LSC TRANSPORTATION CONSULTANTS, INC.

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

JAB:jas

Enclosures: Table 3  
Figure 1 - Figure 9  
Site Plan  
Synchro LOS Reports  
Traffic Counts

## Tables

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Value	Units <sup>1</sup>	Trip Generation Rates <sup>2</sup>				
		Average Weekday	A.M.		P.M.	
			In	Out	In	Out
20.372	KSF	10.22	1.23	0.46	0.63	1.3

Adapted from the Institute of Transportation Engineers (ITE) Trip Generation (2017) by the Institute of Transportation Engineers (ITE)

ITE		Value	Units <sup>1</sup>	Trip Generation Rates <sup>2</sup>					Driveway Trips				
				Average	A.M.		P.M.		Average	A.M.		P.M.	
Code	Description			Weekday	In	Out	In	Out	Weekday	In	Out	In	Out
180	Specialty Trade Contractor	20.372	KSF	10.22	1.23	0.46	0.63	1.34	208	25	9	13	27

<sup>1</sup> DU = dwelling units

<sup>2</sup> Source: *Trip Generation* , 10th Edition (2017) by the Institute of Transportation Engineers (ITE)

## Figures

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Not to  
scale





1"=100'  
scale

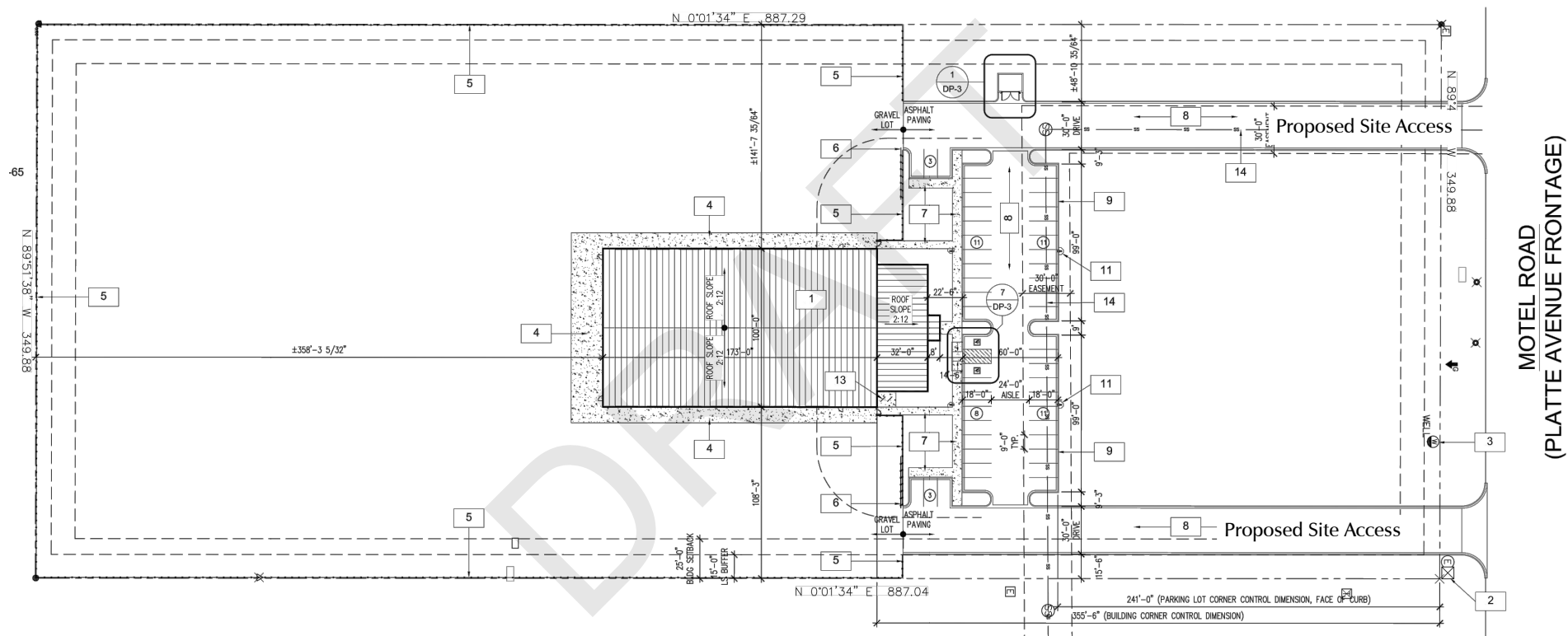


Figure 2  
Site Plan

HCD Drilling (LSC# S214660)



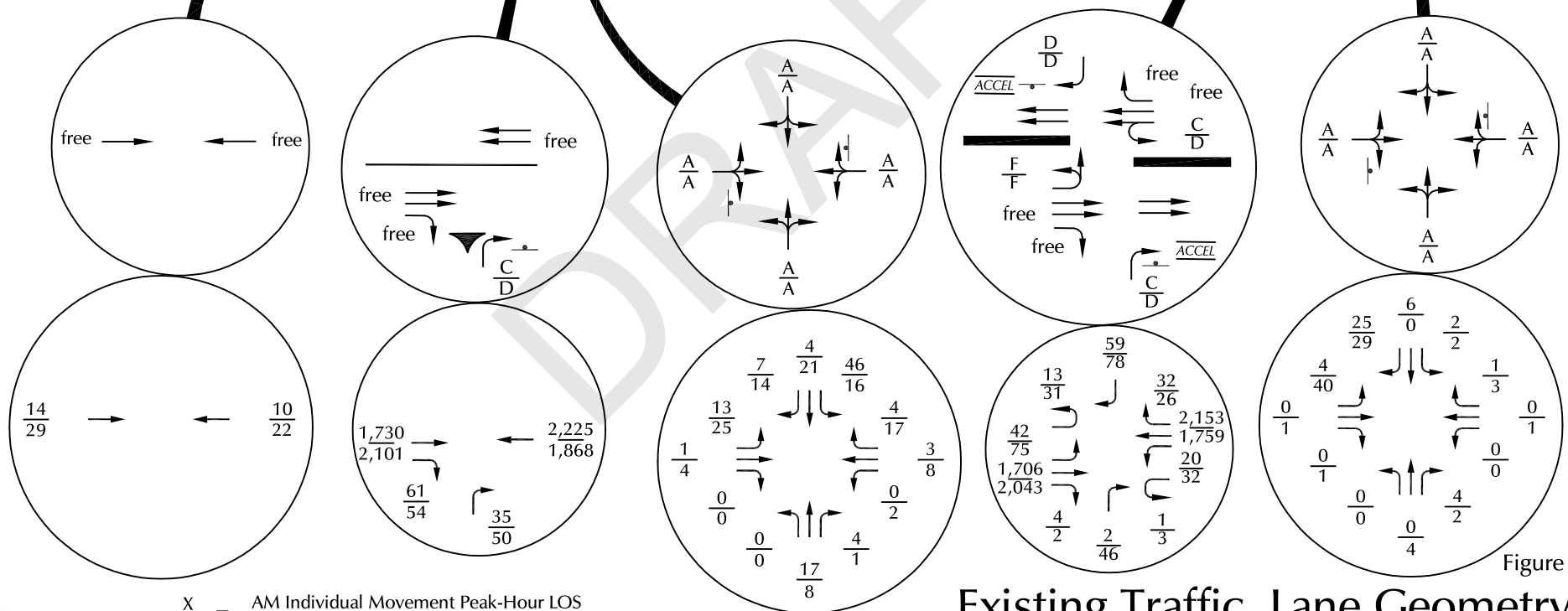
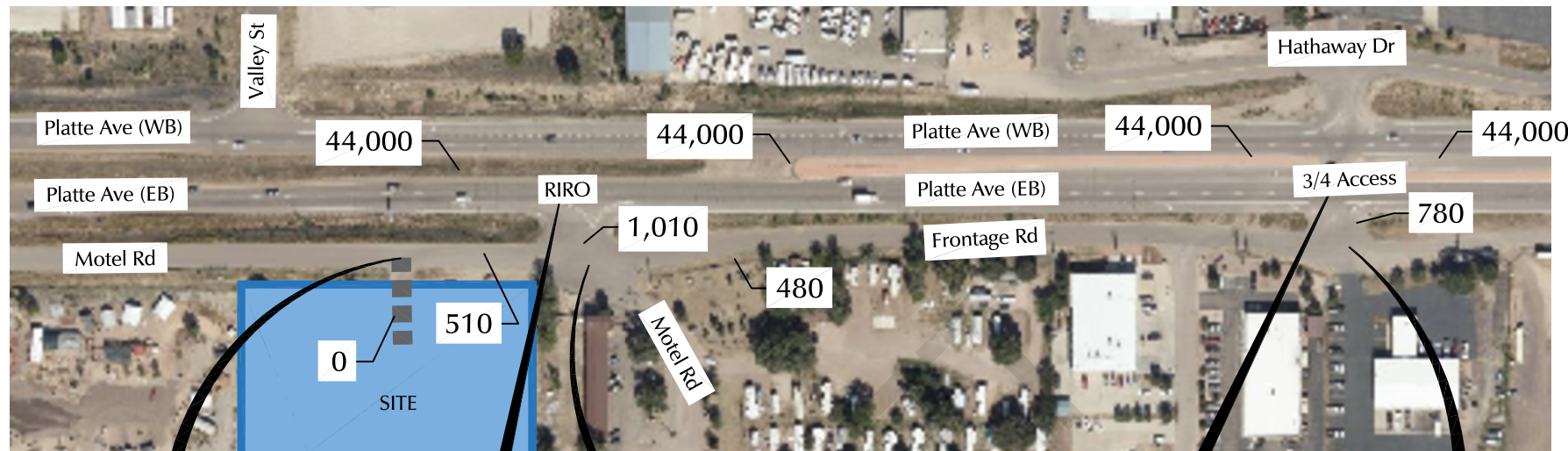


Figure 3

## Existing Traffic, Lane Geometry, Traffic Control, and LOS

Counts by LSC (July 2021)

⊥ = Stop Sign ⊢ = Yield Sign



$\frac{X}{X}$  = AM Individual Movement Peak-Hour LOS  
 $\frac{X}{X}$  = PM Individual Movement Peak-Hour LOS  
 $\frac{XX}{XX}$  = AM Weekday Peak-Hour Traffic (Veh/Hour)  
 $\frac{XX}{XX}$  = PM Weekday Peak-Hour Traffic (Veh/Hour)  
 X,XXX = Average Daily Traffic (Vehicles/Day)

HCD Drilling (LSC# S214660)

Note: Short-term baseline volumes are adjusted estimates for remaining effects of Covid-19 pandemic

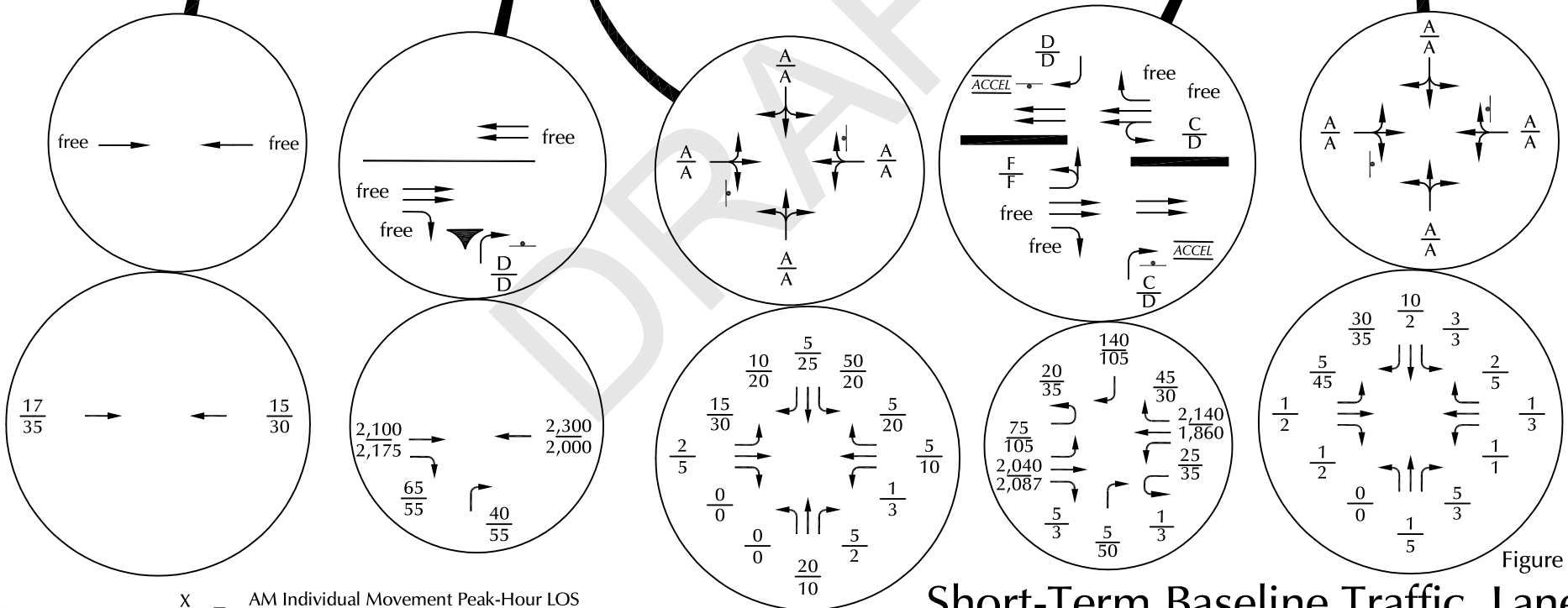
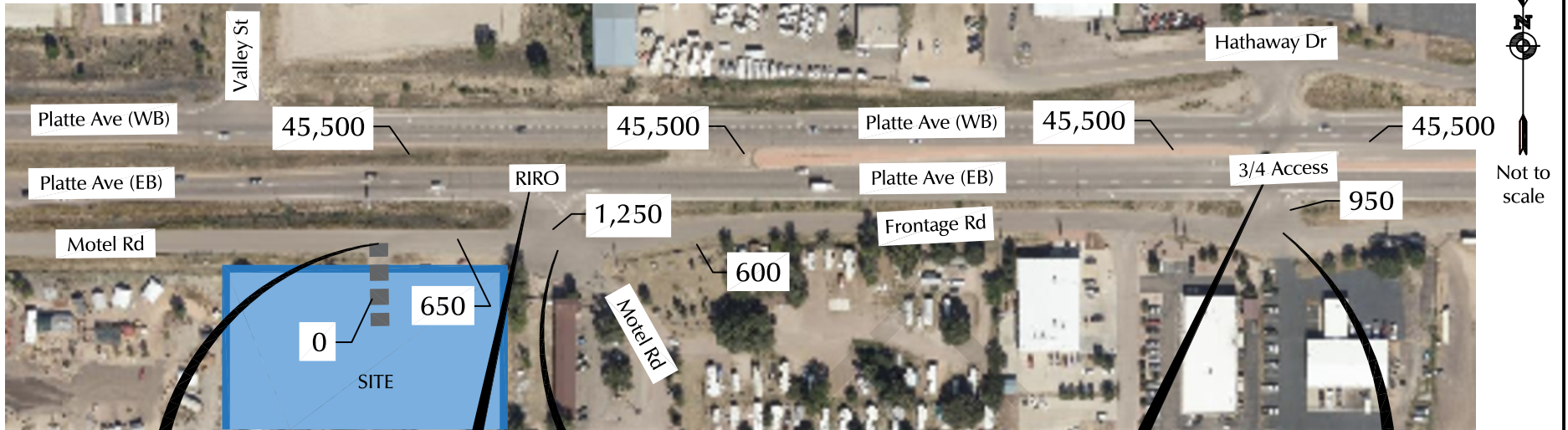


Figure 4

## Short-Term Baseline Traffic, Lane Geometry, Traffic Control, and LOS



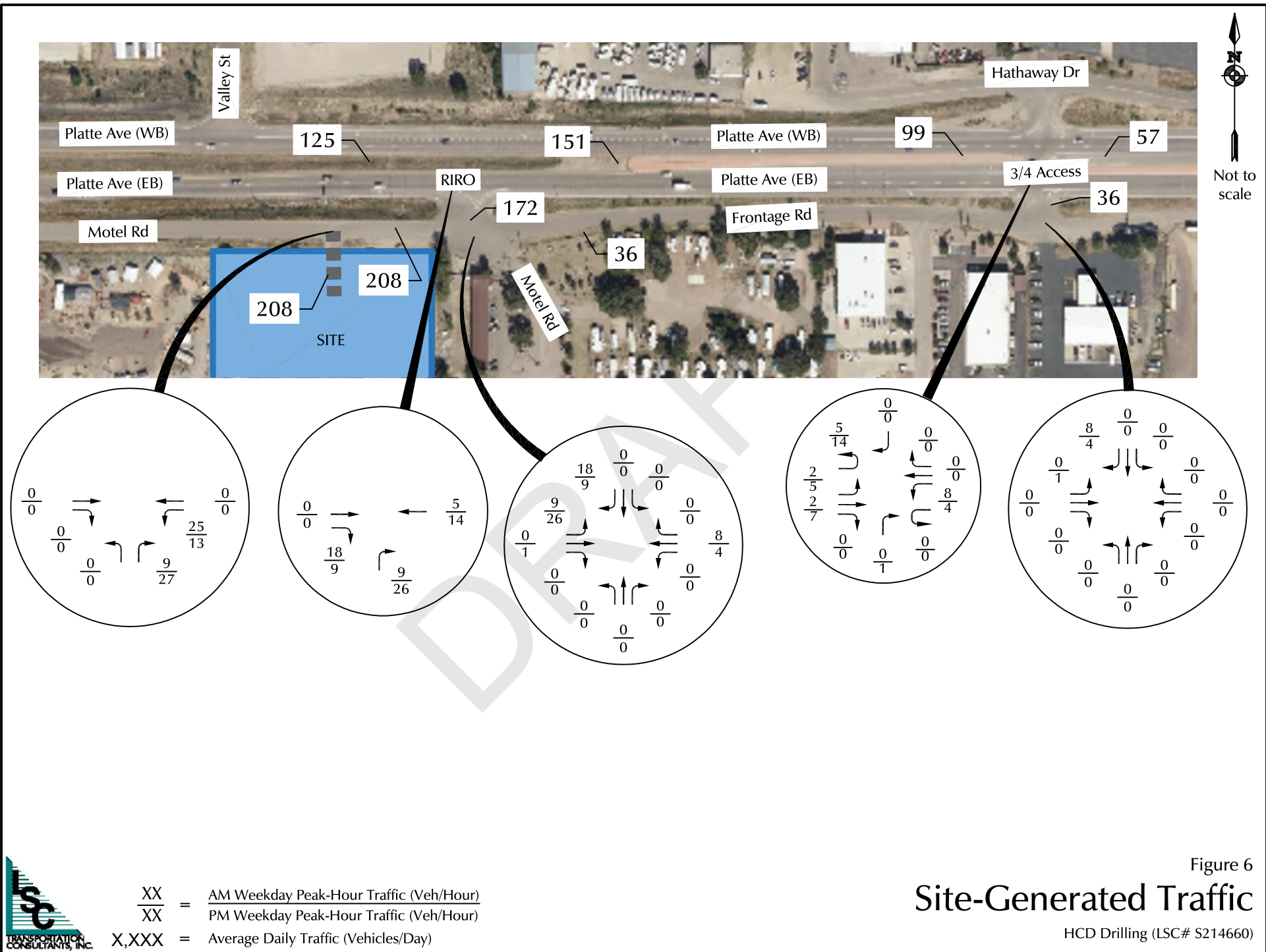
$\frac{X}{X}$  = AM Individual Movement Peak-Hour LOS  
 $\frac{X}{X}$  = PM Individual Movement Peak-Hour LOS  
 $\frac{XX}{XX}$  = AM Weekday Peak-Hour Traffic (Veh/Hour)  
 $\frac{XX}{XX}$  = PM Weekday Peak-Hour Traffic (Veh/Hour)  
 X,XXX = Average Daily Traffic (Vehicles/Day)

$\triangleleft$  = Yield Sign  
 $\blacktriangledown$  = Stop Sign

HCD Drilling (LSC# S214660)







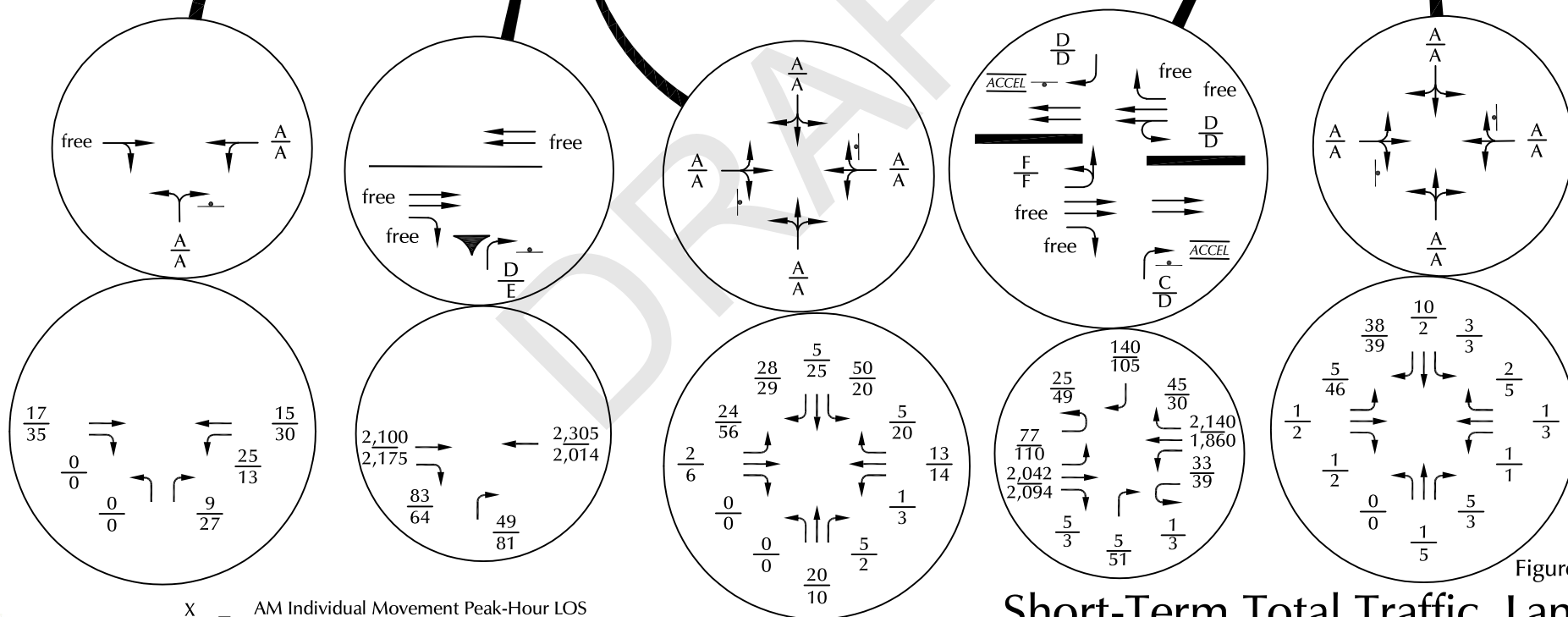
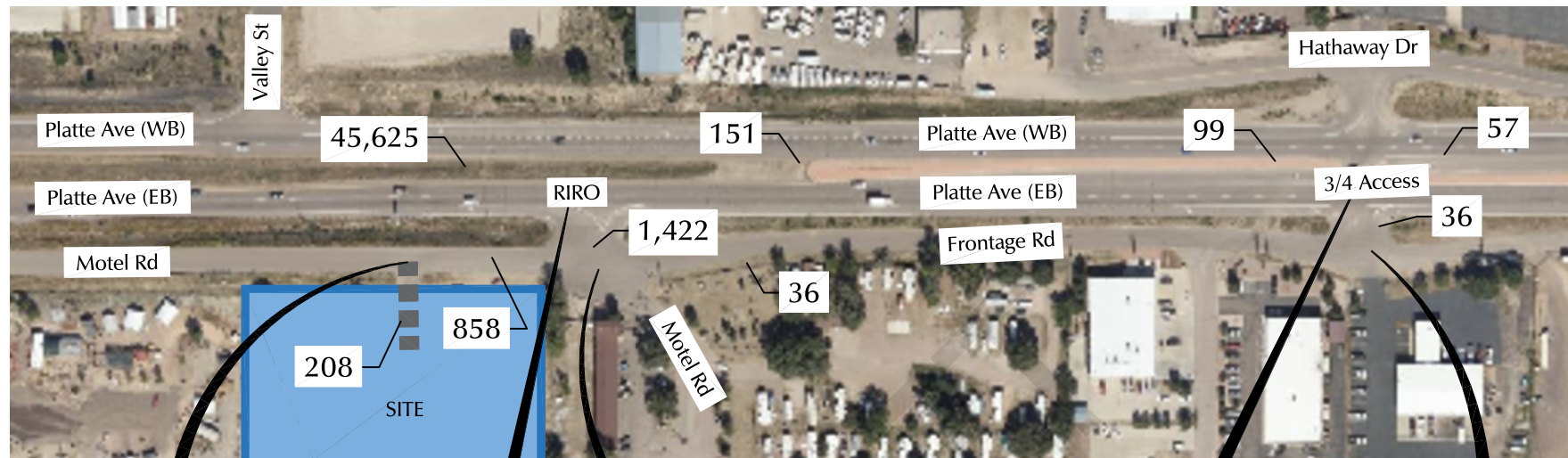


Figure 7

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

$\frac{X}{X}$  = AM Individual Movement Peak-Hour LOS  
 $\frac{X}{X}$  = PM Individual Movement Peak-Hour LOS

$\frac{XX}{XX}$  = AM Weekday Peak-Hour Traffic (Veh/Hour)  
 $\frac{XX}{XX}$  = PM Weekday Peak-Hour Traffic (Veh/Hour)

X,XXX = Average Daily Traffic (Vehicles/Day)

= Yield Sign

= Stop Sign

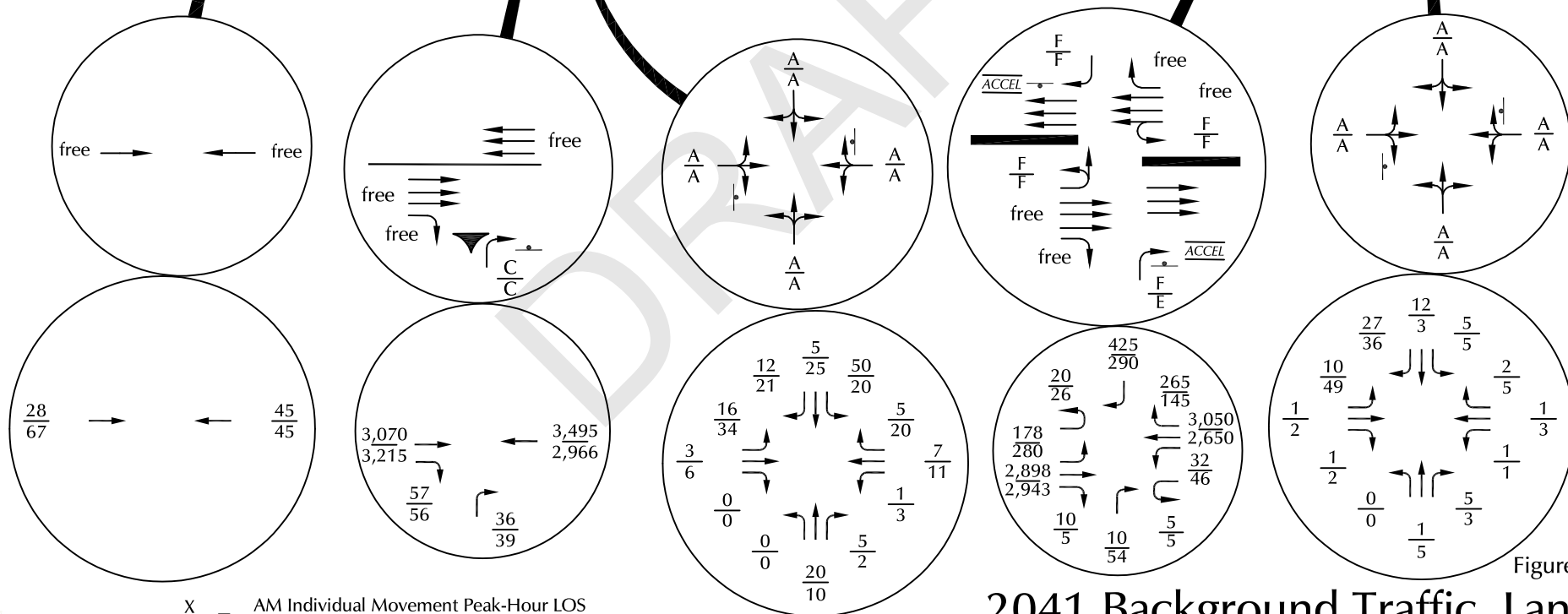
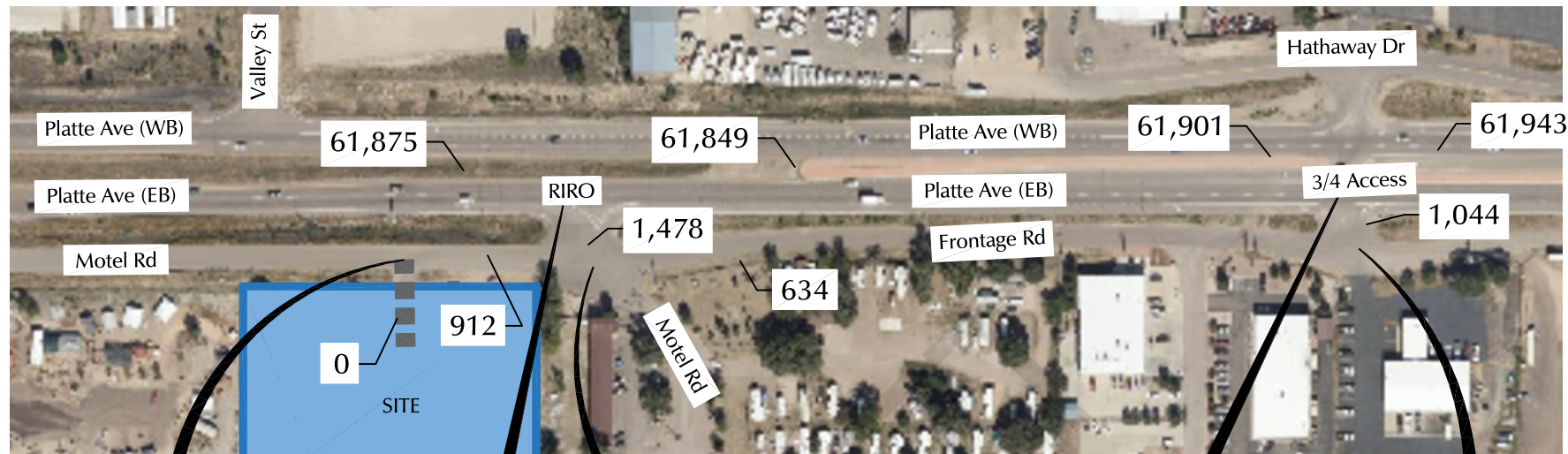


Figure 8

## 2041 Background Traffic, Lane Geometry, Traffic Control, and LOS



$\frac{X}{X}$  = AM Individual Movement Peak-Hour LOS  
 $\frac{X}{X}$  = PM Individual Movement Peak-Hour LOS  
 $\frac{XX}{XX}$  = AM Weekday Peak-Hour Traffic (Veh/Hour)  
 $\frac{XX}{XX}$  = PM Weekday Peak-Hour Traffic (Veh/Hour)  
 X,XXX = Average Daily Traffic (Vehicles/Day)

= Yield Sign  
 = Stop Sign

HCD Drilling (LSC# S214660)



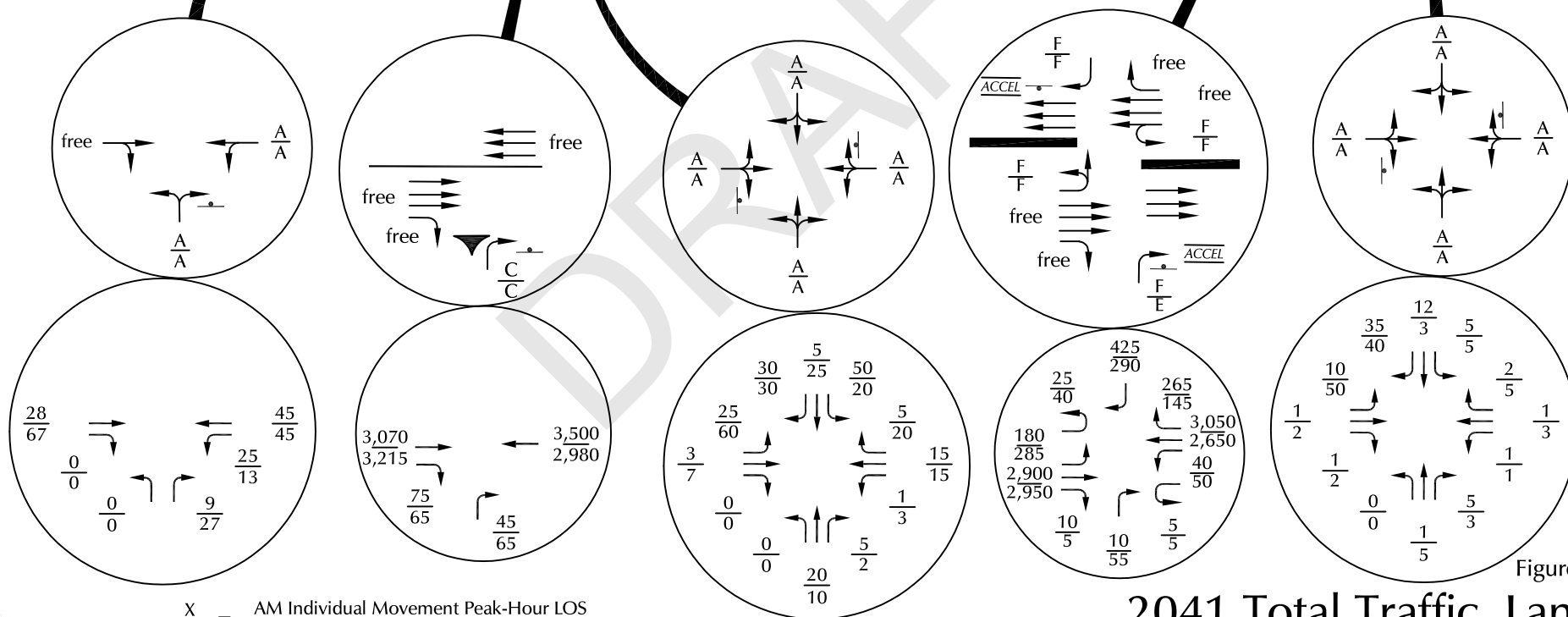
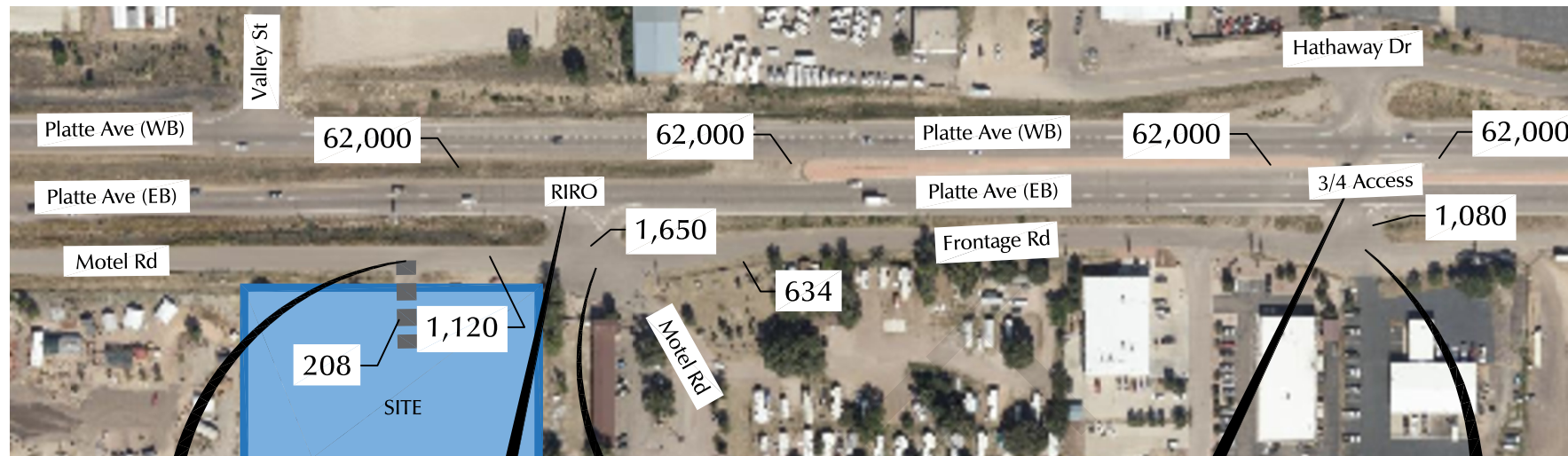


Figure 9

## 2041 Total Traffic, Lane Geometry, Traffic Control, and LOS



$\frac{X}{X}$  = AM Individual Movement Peak-Hour LOS  
 $\frac{X}{X}$  = PM Individual Movement Peak-Hour LOS  
 $\frac{XX}{XX}$  = AM Weekday Peak-Hour Traffic (Veh/Hour)  
 $\frac{XX}{XX}$  = PM Weekday Peak-Hour Traffic (Veh/Hour)  
 X,XXX = Average Daily Traffic (Vehicles/Day)

= Yield Sign  
 = Stop Sign

HCD Drilling (LSC# S214660)



# Site Plan

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DRAFT

VICINITY MAP

HCD DRILLING - NEW BUILDING  
6201 EAST PLATTE AVENUE  
COLORADO SPRINGS, CO 80910

MAJOR DEVELOPMENT PLAN  
TRACT OF LAND LOCATED IN THE NE 1/4 OF SECTION 18,  
TOWNSHIP 14 SOUTH, RANGE 65 WEST OF THE 6TH P.M.  
COUNTY OF EL PASO, STATE OF COLORADO

SITE INFORMATION

EXISTING OWNERSHIP:  
HCD PROPERTIES LLC  
2435 MAJESTIC PLAINS COURT  
COLORADO SPRINGS, CO. 80915

APPLICANT:  
T-BONE CONSTRUCTION, INC.  
1310 FORD STREET  
COLORADO SPRINGS, CO. 80915

SITE ADDRESS:  
6201 EAST PLATTE AVENUE  
COLORADO SPRINGS, CO 80910

LEGAL DESCRIPTION:  
TRACT OF LAND LOCATED IN THE NE 1/4 OF  
SECTION 18, TOWNSHIP 14 SOUTH, RANGE 65  
WEST OF THE 6TH P.M.  
COUNTY OF EL PASO, STATE OF COLORADO

TAX SCHEDULE NO.: 541-8000-069

EXISTING ZONING: CS (COMMERCIAL SERVICE)

SITE AREA: 7.13 ACRES

BUILDING SETBACKS:  
FRONT - 25 FEET  
SIDE - 25 FEET  
REAR - 25 FEET  
LANDSCAPE SETBACK - 10 FEET

PROPOSED BUILDING AND SIZE:  
BUILDING FOOTPRINT - 20,360 S.F.  
BUILDING HEIGHT - +/-35'-10"

PARKING SPACES: (TABLE 6-2)  
VEHICLE STORAGE: 3 SPACES TOTAL  
WAREHOUSE: 18,687 S.F. @ 1/1,000 S.F. = 19  
OFFICE: 4,075 S.F. @ 1/200 S.F. = 21  
TOTAL REQUIRED: 43  
REQUIRED ACCESSIBLE: 1/

AREA CALCULATIONS:  
TOTAL AREA:  
IMPERVIOUS AREA:  
NON-IMPERVIOUS AREA:  
BUILDING AREA:

KEY NOTES:

- 1 PROPOSED 20,360 S.F. BUILDING FOOTPRINT
- 2 EXISTING ELECTRICAL EQUIPMENT
- 3 EXISTING WELL
- 4 PROPOSED CONCRETE APRON
- 5 PROPOSED PERIMETER SECURITY FENCING, SEE DETAIL 9/DP3
- 6 PROPOSED 25' WIDE SLIDING GATE - 2 LOCATIONS, W/ KNOX BOX
- 7 PROPOSED CONCRETE SIDEWALK
- 8 PROPOSED ASPHALT PAVING
- 9 PROPOSED CONCRETE CURB/GUTTER
- 11 PROPOSED PARKING LOT POLE LIGHT - 4 LOCATIONS
- 11 PROPOSED GRAVEL LOT
- 12 PROPOSED SITE DETENTION, SEE CIVIL
- 13 PROPOSED BIKE RACK, SEE DETAIL 8/DP3
- 14 EXISTING SANITARY SEWER LINE AND 30' WIDE EASEMENT

SHEET INDEX		
NUMBER	SHEET NAME	
DP 1	SITE INFO, SITE PLAN,	1 OF XX
DP 2	SITE DETAILS	2 OF XX
DP 3	BUILDING ELEVATIONS	3 OF XX
DP 4	BUILDING FLOOR PLAN	4 OF XX
DP 5	UTILITIES PLAN	5 OF XX
DP 6	GRADING PLAN	6 OF XX
DP 7	LANDSCAPE PLAN	7 OF XX
DP 8	IRRIGATION PLAN	8 OF XX
DP 9	IRRIGATION DETAILS	9 OF XX
DP 10	PHOTOMETRIC PLAN	10 OF XX

DON'S GARDEN SHOP  
DONALD W. HUMPHREY  
6001 E. PLATTE AVE.  
TRACT IN NW3 OF SEC 18-14-65  
ZONED: CS CAD-0  
LAND USE: GARDEN SUPPLY

HAMAN ENTERPRISES LLC  
6055 TERMINAL AVE  
LOT 4 KAY TEE SUB NO 3  
ZONED: I-2 CAD-0  
LAND USE: COMMERCIAL

EDRALLINN LLC  
515 VALLEY STREET  
LOT 2 BLK 1 GIANARELLI SUB NO 1  
ZONED: I-2 CAD-0  
LAND USE: STORAGE WAREHOUSE

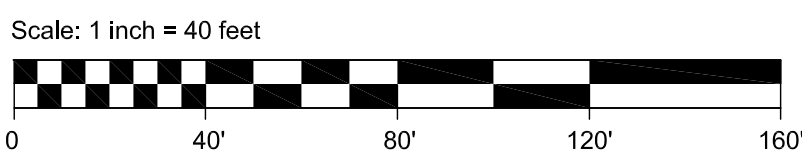
CITY OF COLORADO SPRINGS  
TRACT IN NE4NW4 OF SEC 18-14-65  
ZONED: APD AO APZ1  
LAND USE: VACANT

CITY OF COLORADO SPRINGS  
TRACT IN NE4NW4 OF SEC 18-14-65  
ZONED: APD APZ1 AO  
LAND USE: VACANT

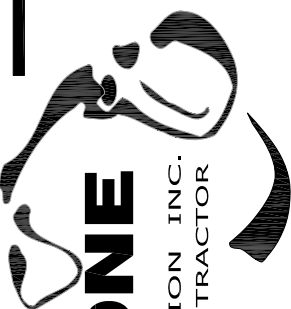
WRANGLER RV & BOAT STORAGE  
BONG CHAN HOLDING LTD  
6255 PLATTE AVE  
E20 OF NE4NW4 EX RE, EX HWY SEC 19-16-66, EX PART TO CITY BY REC #96132240  
ZONED: RR-5 AND CAD-0  
LAND USE: RV STORAGE AND MOTOR PARK



1 SITE PLAN  
1" = 40'-0"



MOTEL ROAD  
(PLATTE AVENUE FRONTAGE)



Design Development  
Consultants @

Revisions		DATE
#	DESCRIPTION	

T1-8049

HCD DRILLING

DP

DATE 03-10-2020  
CHECKED -  
DRAWN BY -

COVER SHEET  
1 OF XX

DP 1

AR DP XX-XXXXX-XXXXXX

# Levels of Service

---

DRAFT

HCM 6th TWSC  
1: RIRO Access & Platte Ave

Existing  
AM

Intersection						
Int Delay, s/veh	0.2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↗		↑↑↑		↗
Traffic Vol, veh/h	1730	61	0	2225	0	35
Future Vol, veh/h	1730	61	0	2225	0	35
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Stop
Storage Length	-	0	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	78	78
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1821	64	0	2342	0	45
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	911
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	-	0	277
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	-	277
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0		20.5	
HCM LOS					C	
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT		
Capacity (veh/h)	277	-	-	-		
HCM Lane V/C Ratio	0.162	-	-	-		
HCM Control Delay (s)	20.5	-	-	-		
HCM Lane LOS	C	-	-	-		
HCM 95th %tile Q(veh)	0.6	-	-	-		

HCM 6th TWSC  
2: 3/4 Access/Hathaway Dr & Platte Ave

Existing  
AM

Intersection														
Int Delay, s/veh	1.9													
Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔	↕↕	↗		↔	↕↕	↗			↗			↗
Traffic Vol, veh/h	13	42	1706	4	1	20	2153	32	0	0	2	0	0	59
Future Vol, veh/h	13	42	1706	4	1	20	2153	32	0	0	2	0	0	59
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	-	None	-	-	-	None	-	-	Stop	-	-	Stop
Storage Length	-	325	-	0	-	300	-	0	-	-	0	-	-	0
Veh in Median Storage, #	-	-	0	-	-	-	0	-	-	0	-	-	0	-
Grade, %	-	-	0	-	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	78	78	78	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	14	44	1796	4	1	21	2266	34	0	0	3	0	0	71
Major/Minor	Major1			Major2			Minor1			Minor2				
Conflicting Flow All	2266	2300	0	0	1796	1800	0	0	-	-	898	-	-	1133
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	6.44	4.14	-	-	6.44	4.14	-	-	-	-	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	2.52	2.22	-	-	2.52	2.22	-	-	-	-	3.32	-	-	3.32
Pot Cap-1 Maneuver	49	215	-	-	101	339	-	-	0	0	282	0	0	197
Stage 1	-	-	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %			-	-			-	-						
Mov Cap-1 Maneuver	95	95	-	-	304	304	-	-	-	-	282	-	-	197
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB				
HCM Control Delay, s	2.8			0.2			17.9			33.2				
HCM LOS							C			D				
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1						
Capacity (veh/h)	282	95	-	-	304	-	-	197						
HCM Lane V/C Ratio	0.009	0.609	-	-	0.073	-	-	0.361						
HCM Control Delay (s)	17.9	89.3	-	-	17.8	-	-	33.2						
HCM Lane LOS	C	F	-	-	C	-	-	D						
HCM 95th %tile Q(veh)	0	2.9	-	-	0.2	-	-	1.5						

HCM 6th TWSC  
3: 3/4 Access & Frontage Rd

Existing  
AM

Intersection												
Int Delay, s/veh	1.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	4	0	0	0	0	1	0	0	4	2	6	25
Future Vol, veh/h	4	0	0	0	0	1	0	0	4	2	6	25
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	78	78	78	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	0	0	0	0	1	0	0	5	3	8	32
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	33	35	24	33	49	3	40	0	0	5	0	0
Stage 1	30	30	-	3	3	-	-	-	-	-	-	-
Stage 2	3	5	-	30	46	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	974	857	1052	974	843	1081	1570	-	-	1616	-	-
Stage 1	987	870	-	1020	893	-	-	-	-	-	-	-
Stage 2	1020	892	-	987	857	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	971	855	1052	972	841	1081	1570	-	-	1616	-	-
Mov Cap-2 Maneuver	971	855	-	972	841	-	-	-	-	-	-	-
Stage 1	987	868	-	1020	893	-	-	-	-	-	-	-
Stage 2	1019	892	-	985	855	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	8.7		8.3			0			0.4			
HCM LOS	A		A									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR					
Capacity (veh/h)	1570	-	-	971 1081	1616	-	-					
HCM Lane V/C Ratio	-	-	-	0.005 0.001	0.002	-	-					
HCM Control Delay (s)	0	-	-	8.7 8.3	7.2	0	-					
HCM Lane LOS	A	-	-	A A	A	A	-					
HCM 95th %tile Q(veh)	0	-	-	0 0	0	-	-					

HCM 6th TWSC  
4: RIRO Access & Motel Rd/Frontage Rd

Existing  
AM

Intersection												
Int Delay, s/veh	2.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	13	1	0	0	3	4	0	17	4	46	4	7
Future Vol, veh/h	13	1	0	0	3	4	0	17	4	46	4	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Yield	Yield	Yield	Yield	Yield	Yield	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	78	78	78	78	78	78	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	17	1	0	0	4	5	0	22	5	55	5	8
Major/Minor							Minor2		Major2			
Conflicting Flow All							119	119	9	0	0	0
Stage 1							119	119	-	-	-	-
Stage 2							0	0	-	-	-	-
Critical Hdwy							6.42	6.52	6.22	4.12	-	-
Critical Hdwy Stg 1							5.42	5.52	-	-	-	-
Critical Hdwy Stg 2							-	-	-	-	-	-
Follow-up Hdwy							3.518	4.018	3.318	2.218	-	-
Pot Cap-1 Maneuver							877	771	1073	-	-	-
Stage 1							906	797	-	-	-	-
Stage 2							-	-	-	-	-	-
Platoon blocked, %											-	-
Mov Cap-1 Maneuver							877	0	1073	-	-	-
Mov Cap-2 Maneuver							877	0	-	-	-	-
Stage 1							906	0	-	-	-	-
Stage 2							-	0	-	-	-	-
Approach							NB		SB			
HCM Control Delay, s							8.4					
HCM LOS							A					
Minor Lane/Major Mvmt	NBLn1	SBL	SBT	SBR								
Capacity (veh/h)	1073	-	-	-								
HCM Lane V/C Ratio	0.025	-	-	-								
HCM Control Delay (s)	8.4	-	-	-								
HCM Lane LOS	A	-	-	-								
HCM 95th %tile Q(veh)	0.1	-	-	-								

HCM 6th TWSC  
1: RIRO Access & Platte Ave









Existing  
PM

Intersection						
Int Delay, s/veh	0.4					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↗		↑↑↑		↗
Traffic Vol, veh/h	2101	54	0	1868	0	50
Future Vol, veh/h	2101	54	0	1868	0	50
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Stop
Storage Length	-	0	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2212	57	0	1966	0	60
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	1106
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	-	0	205
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	-	205
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0		29.7	
HCM LOS					D	
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT		
Capacity (veh/h)	205	-	-	-		
HCM Lane V/C Ratio	0.294	-	-	-		
HCM Control Delay (s)	29.7	-	-	-		
HCM Lane LOS	D	-	-	-		
HCM 95th %tile Q(veh)	1.2	-	-	-		



HCM 6th TWSC  
2: 3/4 Access/Hathaway Dr & Platte Ave

Existing  
PM

Intersection														
Int Delay, s/veh	3.2													
Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations														
Traffic Vol, veh/h	31	75	2043	2	3	32	1759	26	0	0	46	0	0	78
Future Vol, veh/h	31	75	2043	2	3	32	1759	26	0	0	46	0	0	78
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	-	None	-	-	-	None	-	-	Stop	-	-	Stop
Storage Length	-	325	-	0	-	300	-	0	-	-	0	-	-	0
Veh in Median Storage, #	-	-	0	-	-	-	0	-	-	0	-	-	0	-
Grade, %	-	-	0	-	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	78	78	78	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	33	79	2151	2	3	34	1852	27	0	0	59	0	0	94
Major/Minor	Major1			Major2			Minor1			Minor2				
Conflicting Flow All	1852	1879	0	0	2151	2153	0	0	-	-	1076	-	-	926
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	6.44	4.14	-	-	6.44	4.14	-	-	-	-	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	2.52	2.22	-	-	2.52	2.22	-	-	-	-	3.32	-	-	3.32
Pot Cap-1 Maneuver	93	316	-	-	59	246	-	-	0	0	215	0	0	271
Stage 1	-	-	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %			-	-			-	-						
Mov Cap-1 Maneuver	150	150	-	-	179	179	-	-	-	-	215	-	-	271
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB				
HCM Control Delay, s	3.8			0.6			28			25.2				
HCM LOS							D			D				
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1						
Capacity (veh/h)	215	150	-	-	179	-	-	271						
HCM Lane V/C Ratio	0.274	0.744	-	-	0.206	-	-	0.347						
HCM Control Delay (s)	28	78	-	-	30.2	-	-	25.2						
HCM Lane LOS	D	F	-	-	D	-	-	D						
HCM 95th %tile Q(veh)	1.1	4.5	-	-	0.7	-	-	1.5						

HCM 6th TWSC  
3: 3/4 Access & Frontage Rd

Existing  
PM









Intersection												
Int Delay, s/veh	5.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	40	1	1	0	1	3	0	4	2	2	0	29
Future Vol, veh/h	40	1	1	0	1	3	0	4	2	2	0	29
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	78	78	78	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	51	1	1	0	1	4	0	5	3	3	0	37
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	34	33	19	33	50	7	37	0	0	8	0	0
Stage 1	25	25	-	7	7	-	-	-	-	-	-	-
Stage 2	9	8	-	26	43	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	973	860	1059	974	841	1075	1574	-	-	1612	-	-
Stage 1	993	874	-	1015	890	-	-	-	-	-	-	-
Stage 2	1012	889	-	992	859	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	967	858	1059	970	839	1075	1574	-	-	1612	-	-
Mov Cap-2 Maneuver	967	858	-	970	839	-	-	-	-	-	-	-
Stage 1	993	872	-	1015	890	-	-	-	-	-	-	-
Stage 2	1007	889	-	987	857	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	8.9		8.6			0			0.5			
HCM LOS	A		A									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR					
Capacity (veh/h)	1574	-	-	966 1004	1612	-	-					
HCM Lane V/C Ratio	-	-	-	0.056 0.005	0.002	-	-					
HCM Control Delay (s)	0	-	-	8.9 8.6	7.2	0	-					
HCM Lane LOS	A	-	-	A A	A	A	-					
HCM 95th %tile Q(veh)	0	-	-	0.2 0	0	-	-					

HCM 6th TWSC  
4: RIRO Access & Motel Rd/Frontage Rd

Existing  
PM

Intersection												
Int Delay, s/veh	1.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	25	4	0	2	8	17	0	8	1	16	21	14
Future Vol, veh/h	25	4	0	2	8	17	0	8	1	16	21	14
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Yield	Yield	Yield	Yield	Yield	Yield	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	78	78	78	78	78	78	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	32	5	0	3	10	22	0	10	1	19	25	17
Major/Minor							Minor2		Major2			
Conflicting Flow All							72	72	34	0	0	0
Stage 1							72	72	-	-	-	-
Stage 2							0	0	-	-	-	-
Critical Hdwy							6.42	6.52	6.22	4.12	-	-
Critical Hdwy Stg 1							5.42	5.52	-	-	-	-
Critical Hdwy Stg 2							-	-	-	-	-	-
Follow-up Hdwy							3.518	4.018	3.318	2.218	-	-
Pot Cap-1 Maneuver							932	818	1039	-	-	-
Stage 1							951	835	-	-	-	-
Stage 2							-	-	-	-	-	-
Platoon blocked, %											-	-
Mov Cap-1 Maneuver							932	0	1039	-	-	-
Mov Cap-2 Maneuver							932	0	-	-	-	-
Stage 1							951	0	-	-	-	-
Stage 2							-	0	-	-	-	-
Approach							NB		SB			
HCM Control Delay, s							8.5					
HCM LOS							A					
Minor Lane/Major Mvmt	NBLn1	SBL	SBT	SBR								
Capacity (veh/h)	1039	-	-	-								
HCM Lane V/C Ratio	0.011	-	-	-								
HCM Control Delay (s)	8.5	-	-	-								
HCM Lane LOS	A	-	-	-								
HCM 95th %tile Q(veh)	0	-	-	-								

Intersection						
Int Delay, s/veh	0.3					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↗		↑↑↑		↗
Traffic Vol, veh/h	2100	65	0	2300	0	40
Future Vol, veh/h	2100	65	0	2300	0	40
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Stop
Storage Length	-	0	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	78	78
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2211	68	0	2421	0	51
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	1106
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	-	0	205
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	-	205
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0		28.3	
HCM LOS					D	
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT		
Capacity (veh/h)	205	-	-	-		
HCM Lane V/C Ratio	0.25	-	-	-		
HCM Control Delay (s)	28.3	-	-	-		
HCM Lane LOS	D	-	-	-		
HCM 95th %tile Q(veh)	1	-	-	-		









Intersection														
Int Delay, s/veh	13.7													
Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations														
Traffic Vol, veh/h	20	75	2040	5	1	25	2140	45	0	0	5	0	0	140
Future Vol, veh/h	20	75	2040	5	1	25	2140	45	0	0	5	0	0	140
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	-	None	-	-	-	None	-	-	Stop	-	-	Stop
Storage Length	-	325	-	0	-	300	-	0	-	-	0	-	-	0
Veh in Median Storage, #	-	-	0	-	-	-	0	-	-	0	-	-	0	-
Grade, %	-	-	0	-	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	78	78	78	87	87	87
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	21	79	2147	5	1	26	2253	47	0	0	6	0	0	161
Major/Minor	Major1			Major2			Minor1			Minor2				
Conflicting Flow All	2253	2300	0	0	2147	2152	0	0	-	-	1074	-	-	1127
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	6.44	4.14	-	-	6.44	4.14	-	-	-	-	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	2.52	2.22	-	-	2.52	2.22	-	-	-	-	3.32	-	-	3.32
Pot Cap-1 Maneuver	50	215	-	-	59	247	-	-	0	0	216	0	0	199
Stage 1	-	-	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %			-	-			-	-						
Mov Cap-1 Maneuver	56	~ 56	-	-	219	219	-	-	-	-	216	-	-	199
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB				
HCM Control Delay, s	23.4			0.3			22.2			71.9				
HCM LOS							C			F				
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1						
Capacity (veh/h)	216	~ 56	-	-	219	-	-	199						
HCM Lane V/C Ratio	0.03	1.786	-	-	0.125	-	-	0.809						
HCM Control Delay (s)	22.2	526.5	-	-	23.7	-	-	71.9						
HCM Lane LOS	C	F	-	-	C	-	-	F						
HCM 95th %tile Q(veh)	0.1	9.5	-	-	0.4	-	-	5.7						
Notes														
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon								

Intersection												
Int Delay, s/veh	4.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Traffic Vol, veh/h	40	5	1	1	1	2	0	1	5	3	10	30
Future Vol, veh/h	40	5	1	1	1	2	0	1	5	3	10	30
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	78	78	78	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	51	6	1	1	1	3	0	1	6	4	13	38
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	46	47	32	48	63	4	51	0	0	7	0	0
Stage 1	40	40	-	4	4	-	-	-	-	-	-	-
Stage 2	6	7	-	44	59	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	955	845	1042	953	828	1080	1555	-	-	1614	-	-
Stage 1	975	862	-	1018	892	-	-	-	-	-	-	-
Stage 2	1016	890	-	970	846	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	949	842	1042	944	826	1080	1555	-	-	1614	-	-
Mov Cap-2 Maneuver	949	842	-	944	826	-	-	-	-	-	-	-
Stage 1	975	859	-	1018	892	-	-	-	-	-	-	-
Stage 2	1012	890	-	959	843	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	9.1		8.7			0			0.5			
HCM LOS	A		A									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR				
Capacity (veh/h)	1555	-	-	938	970	1614	-	-				
HCM Lane V/C Ratio	-	-	-	0.063	0.005	0.002	-	-				
HCM Control Delay (s)	0	-	-	9.1	8.7	7.2	0	-				
HCM Lane LOS	A	-	-	A	A	A	A	-				
HCM 95th %tile Q(veh)	0	-	-	0.2	0	0	-	-				

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	15	2	0	1	5	5	0	20	5	50	5	10
Future Vol, veh/h	15	2	0	1	5	5	0	20	5	50	5	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Yield	Yield	Yield	Yield	Yield	Yield	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	78	78	78	78	78	78	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	19	3	0	1	6	6	0	26	6	60	6	12
Major/Minor							Minor2		Major2			
Conflicting Flow All							132	132	12	0	0	0
Stage 1							132	132	-	-	-	-
Stage 2							0	0	-	-	-	-
Critical Hdwy							6.42	6.52	6.22	4.12	-	-
Critical Hdwy Stg 1							5.42	5.52	-	-	-	-
Critical Hdwy Stg 2							-	-	-	-	-	-
Follow-up Hdwy							3.518	4.018	3.318	2.218	-	-
Pot Cap-1 Maneuver							862	759	1069	-	-	-
Stage 1							894	787	-	-	-	-
Stage 2							-	-	-	-	-	-
Platoon blocked, %											-	-
Mov Cap-1 Maneuver							862	0	1069	-	-	-
Mov Cap-2 Maneuver							862	0	-	-	-	-
Stage 1							894	0	-	-	-	-
Stage 2							-	0	-	-	-	-
Approach							NB		SB			
HCM Control Delay, s							8.5					
HCM LOS							A					
Minor Lane/Major Mvmt	NBLn1	SBL	SBT	SBR								
Capacity (veh/h)	1069	-	-	-								
HCM Lane V/C Ratio	0.03	-	-	-								
HCM Control Delay (s)	8.5	-	-	-								
HCM Lane LOS	A	-	-	-								
HCM 95th %tile Q(veh)	0.1	-	-	-								

Intersection						
Int Delay, s/veh	0.5					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↗		↑↑↑		↗
Traffic Vol, veh/h	2175	55	0	2000	0	55
Future Vol, veh/h	2175	55	0	2000	0	55
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Stop
Storage Length	-	0	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	78	78
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2289	58	0	2105	0	71
Major/Minor	Major1	Major2	Minor1			
Conflicting Flow All	0	0	-	-	-	1145
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	-	0	193
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	-	193
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	WB	NB			
HCM Control Delay, s	0	0	34			
HCM LOS	D					
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT		
Capacity (veh/h)	193	-	-	-		
HCM Lane V/C Ratio	0.365	-	-	-		
HCM Control Delay (s)	34	-	-	-		
HCM Lane LOS	D	-	-	-		
HCM 95th %tile Q(veh)	1.6	-	-	-		



Intersection														
Int Delay, s/veh	8.2													
Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations														
Traffic Vol, veh/h	35	105	2087	3	3	35	1860	30	0	0	50	0	0	105
Future Vol, veh/h	35	105	2087	3	3	35	1860	30	0	0	50	0	0	105
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	-	None	-	-	-	None	-	-	Stop	-	-	Stop
Storage Length	-	325	-	0	-	300	-	0	-	-	0	-	-	0
Veh in Median Storage, #	-	-	0	-	-	-	0	-	-	0	-	-	0	-
Grade, %	-	-	0	-	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	83	83	83	87	87	87
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	37	111	2197	3	3	37	1958	32	0	0	60	0	0	121
Major/Minor	Major1			Major2			Minor1			Minor2				
Conflicting Flow All	1958	1990	0	0	2197	2200	0	0	-	-	1099	-	-	979
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	6.44	4.14	-	-	6.44	4.14	-	-	-	-	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	2.52	2.22	-	-	2.52	2.22	-	-	-	-	3.32	-	-	3.32
Pot Cap-1 Maneuver	79	286	-	-	55	236	-	-	0	0	207	0	0	249
Stage 1	-	-	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %			-	-			-	-						
Mov Cap-1 Maneuver	124	124	-	-	173	173	-	-	-	-	207	-	-	249
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB				
HCM Control Delay, s	13			0.6			29.4			32.3				
HCM LOS							D			D				
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1						
Capacity (veh/h)	207	124	-	-	173	-	-	249						
HCM Lane V/C Ratio	0.291	1.188	-	-	0.231	-	-	0.485						
HCM Control Delay (s)	29.4	207.6	-	-	32	-	-	32.3						
HCM Lane LOS	D	F	-	-	D	-	-	D						
HCM 95th %tile Q(veh)	1.2	9	-	-	0.9	-	-	2.4						

Intersection												
Int Delay, s/veh	5.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	45	2	2	1	3	5	0	5	3	3	2	35
Future Vol, veh/h	45	2	2	1	3	5	0	5	3	3	2	35
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	78	78	78	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	58	3	3	1	4	6	0	6	4	4	3	45
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	47	44	26	45	64	8	48	0	0	10	0	0
Stage 1	34	34	-	8	8	-	-	-	-	-	-	-
Stage 2	13	10	-	37	56	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	954	848	1050	957	827	1074	1559	-	-	1610	-	-
Stage 1	982	867	-	1013	889	-	-	-	-	-	-	-
Stage 2	1007	887	-	978	848	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	943	845	1050	950	825	1074	1559	-	-	1610	-	-
Mov Cap-2 Maneuver	943	845	-	950	825	-	-	-	-	-	-	-
Stage 1	982	864	-	1013	889	-	-	-	-	-	-	-
Stage 2	997	887	-	970	845	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	9.1		8.8			0			0.5			
HCM LOS	A		A									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR					
Capacity (veh/h)	1559	-	-	942 963	1610	-	-					
HCM Lane V/C Ratio	-	-	-	0.067 0.012	0.002	-	-					
HCM Control Delay (s)	0	-	-	9.1 8.8	7.2	0	-					
HCM Lane LOS	A	-	-	A A	A A	-	-					
HCM 95th %tile Q(veh)	0	-	-	0.2 0	0	-	-					

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	30	5	0	3	10	20	0	10	2	20	25	20
Future Vol, veh/h	30	5	0	3	10	20	0	10	2	20	25	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Yield	Yield	Yield	Yield	Yield	Yield	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	78	78	78	78	78	78	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	38	6	0	4	13	26	0	13	3	24	30	24
Major/Minor							Minor2		Major2			
Conflicting Flow All							90	90	42	0	0	0
Stage 1							90	90	-	-	-	-
Stage 2							0	0	-	-	-	-
Critical Hdwy							6.42	6.52	6.22	4.12	-	-
Critical Hdwy Stg 1							5.42	5.52	-	-	-	-
Critical Hdwy Stg 2							-	-	-	-	-	-
Follow-up Hdwy							3.518	4.018	3.318	2.218	-	-
Pot Cap-1 Maneuver							910	800	1029	-	-	-
Stage 1							934	820	-	-	-	-
Stage 2							-	-	-	-	-	-
Platoon blocked, %											-	-
Mov Cap-1 Maneuver							910	0	1029	-	-	-
Mov Cap-2 Maneuver							910	0	-	-	-	-
Stage 1							934	0	-	-	-	-
Stage 2							-	0	-	-	-	-
Approach							NB		SB			
HCM Control Delay, s							8.6					
HCM LOS							A					
Minor Lane/Major Mvmt	NBLn1	SBL	SBT	SBR								
Capacity (veh/h)	1029	-	-	-								
HCM Lane V/C Ratio	0.015	-	-	-								
HCM Control Delay (s)	8.6	-	-	-								
HCM Lane LOS	A	-	-	-								
HCM 95th %tile Q(veh)	0	-	-	-								

Intersection						
Int Delay, s/veh	0.5					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↗		↑↑↑		↗
Traffic Vol, veh/h	2175	55	0	2000	0	55
Future Vol, veh/h	2175	55	0	2000	0	55
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Stop
Storage Length	-	0	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	78	78
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2289	58	0	2105	0	71
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	1145
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	-	0	193
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	-	193
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0		34	
HCM LOS					D	
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT		
Capacity (veh/h)	193	-	-	-		
HCM Lane V/C Ratio	0.365	-	-	-		
HCM Control Delay (s)	34	-	-	-		
HCM Lane LOS	D	-	-	-		
HCM 95th %tile Q(veh)	1.6	-	-	-		

HCM 6th TWSC  
2: 3/4 Access/Hathaway Dr & Platte Ave

Short-Term Baseline + Site  
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Intersection														
Int Delay, s/veh	18.3													
Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔	↕↕	↗		↔	↕↕	↗			↗			↗
Traffic Vol, veh/h	25	77	2042	5	1	33	2140	45	0	0	5	0	0	140
Future Vol, veh/h	25	77	2042	5	1	33	2140	45	0	0	5	0	0	140
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	-	None	-	-	-	None	-	-	Stop	-	-	Stop
Storage Length	-	325	-	0	-	300	-	0	-	-	0	-	-	0
Veh in Median Storage, #	-	-	0	-	-	-	0	-	-	0	-	-	0	-
Grade, %	-	-	0	-	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	78	78	78	87	87	87
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	26	81	2149	5	1	35	2253	47	0	0	6	0	0	161
Major/Minor	Major1			Major2			Minor1			Minor2				
Conflicting Flow All	2253	2300	0	0	2149	2154	0	0	-	-	1075	-	-	1127
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	6.44	4.14	-	-	6.44	4.14	-	-	-	-	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	2.52	2.22	-	-	2.52	2.22	-	-	-	-	3.32	-	-	3.32
Pot Cap-1 Maneuver	50	215	-	-	59	246	-	-	0	0	215	0	0	199
Stage 1	-	-	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %			-	-			-	-						
Mov Cap-1 Maneuver	50	~ 50	-	-	225	225	-	-	-	-	215	-	-	199
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB				
HCM Control Delay, s	33			0.4			22.3			71.9				
HCM LOS							C			F				
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1						
Capacity (veh/h)	215	~ 50	-	-	225	-	-	199						
HCM Lane V/C Ratio	0.03	2.147	-	-	0.159	-	-	0.809						
HCM Control Delay (s)	22.3	696.2	-	-	24	-	-	71.9						
HCM Lane LOS	C	F	-	-	C	-	-	F						
HCM 95th %tile Q(veh)	0.1	10.9	-	-	0.6	-	-	5.7						
Notes														
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon								

HCM 6th TWSC  
3: 3/4 Access & Frontage Rd

Short-Term Baseline + Site  
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Intersection												
Int Delay, s/veh	1.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	5	1	1	1	1	2	0	1	5	3	10	38
Future Vol, veh/h	5	1	1	1	1	2	0	1	5	3	10	38
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	78	78	78	78	78	78	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	6	1	1	1	1	3	0	1	6	4	12	46
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	49	50	35	48	70	4	58	0	0	7	0	0
Stage 1	43	43	-	4	4	-	-	-	-	-	-	-
Stage 2	6	7	-	44	66	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	951	841	1038	953	821	1080	1546	-	-	1614	-	-
Stage 1	971	859	-	1018	892	-	-	-	-	-	-	-
Stage 2	1016	890	-	970	840	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	945	838	1038	948	819	1080	1546	-	-	1614	-	-
Mov Cap-2 Maneuver	945	838	-	948	819	-	-	-	-	-	-	-
Stage 1	971	856	-	1018	892	-	-	-	-	-	-	-
Stage 2	1012	890	-	964	837	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	8.9		8.7			0			0.4			
HCM LOS	A		A									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR				
Capacity (veh/h)	1546	-	-	940	969	1614	-	-				
HCM Lane V/C Ratio	-	-	-	0.01	0.005	0.002	-	-				
HCM Control Delay (s)	0	-	-	8.9	8.7	7.2	0	-				
HCM Lane LOS	A	-	-	A	A	A	A	-				
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-				

Intersection												
Int Delay, s/veh	2.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	24	2	0	1	13	5	0	20	5	50	5	28
Future Vol, veh/h	24	2	0	1	13	5	0	20	5	50	5	28
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Yield	Yield	Yield	Yield	Yield	Yield	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	78	78	78	78	78	78	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	31	3	0	1	17	6	0	26	6	60	6	34
Major/Minor							Minor2		Major2			
Conflicting Flow All							143	143	23	0	0	0
Stage 1							143	143	-	-	-	-
Stage 2							0	0	-	-	-	-
Critical Hdwy							6.42	6.52	6.22	4.12	-	-
Critical Hdwy Stg 1							5.42	5.52	-	-	-	-
Critical Hdwy Stg 2							-	-	-	-	-	-
Follow-up Hdwy							3.518	4.018	3.318	2.218	-	-
Pot Cap-1 Maneuver							850	748	1054	-	-	-
Stage 1							884	779	-	-	-	-
Stage 2							-	-	-	-	-	-
Platoon blocked, %											-	-
Mov Cap-1 Maneuver							850	0	1054	-	-	-
Mov Cap-2 Maneuver							850	0	-	-	-	-
Stage 1							884	0	-	-	-	-
Stage 2							-	0	-	-	-	-
Approach							NB		SB			
HCM Control Delay, s							8.5					
HCM LOS							A					
Minor Lane/Major Mvmt	NBLn1	SBL	SBT	SBR								
Capacity (veh/h)	1054	-	-	-								
HCM Lane V/C Ratio	0.03	-	-	-								
HCM Control Delay (s)	8.5	-	-	-								
HCM Lane LOS	A	-	-	-								
HCM 95th %tile Q(veh)	0.1	-	-	-								









Intersection						
Int Delay, s/veh	3.9					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	17	0	25	15	0	9
Future Vol, veh/h	17	0	25	15	0	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	22	0	32	19	0	12
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	22	0	105	22
Stage 1	-	-	-	-	22	-
Stage 2	-	-	-	-	83	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1593	-	893	1055
Stage 1	-	-	-	-	1001	-
Stage 2	-	-	-	-	940	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1593	-	875	1055
Mov Cap-2 Maneuver	-	-	-	-	875	-
Stage 1	-	-	-	-	1001	-
Stage 2	-	-	-	-	921	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		4.6		8.5	
HCM LOS	A					
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	1055	-	-	1593	-	
HCM Lane V/C Ratio	0.011	-	-	0.02	-	
HCM Control Delay (s)	8.5	-	-	7.3	0	
HCM Lane LOS	A	-	-	A	A	
HCM 95th %tile Q(veh)	0	-	-	0.1	-	



Intersection						
Int Delay, s/veh	0.9					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↗		↑↑↑		↗
Traffic Vol, veh/h	2175	64	0	2014	0	81
Future Vol, veh/h	2175	64	0	2014	0	81
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Stop
Storage Length	-	0	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2289	67	0	2120	0	98
Major/Minor	Major1	Major2	Minor1			
Conflicting Flow All	0	0	-	-	-	1145
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	-	0	193
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	-	193
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0		41.3	
HCM LOS					E	
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT		
Capacity (veh/h)	193	-	-	-		
HCM Lane V/C Ratio	0.506	-	-	-		
HCM Control Delay (s)	41.3	-	-	-		
HCM Lane LOS	E	-	-	-		
HCM 95th %tile Q(veh)	2.5	-	-	-		

HCM 6th TWSC  
2: 3/4 Access/Hathaway Dr & Platte Ave

Short-Term Baseline + Site  
PM




Intersection														
Int Delay, s/veh	14													
Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations														
Traffic Vol, veh/h	49	110	2094	3	3	39	1860	30	0	0	3	0	0	105
Future Vol, veh/h	49	110	2094	3	3	39	1860	30	0	0	3	0	0	105
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	-	None	-	-	-	None	-	-	Stop	-	-	Stop
Storage Length	-	325	-	0	-	300	-	0	-	-	0	-	-	0
Veh in Median Storage, #	-	-	0	-	-	-	0	-	-	0	-	-	0	-
Grade, %	-	-	0	-	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	78	78	78	87	87	87
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	52	116	2204	3	3	41	1958	32	0	0	4	0	0	121
Major/Minor	Major1			Major2			Minor1			Minor2				
Conflicting Flow All	1958	1990	0	0	2204	2207	0	0	-	-	1102	-	-	979
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	6.44	4.14	-	-	6.44	4.14	-	-	-	-	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	2.52	2.22	-	-	2.52	2.22	-	-	-	-	3.32	-	-	3.32
Pot Cap-1 Maneuver	79	286	-	-	54	235	-	-	0	0	206	0	0	249
Stage 1	-	-	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %			-	-			-	-			-	-	-	-
Mov Cap-1 Maneuver	110	~ 110	-	-	189	189	-	-	-	-	206	-	-	249
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB				
HCM Control Delay, s	24.5			0.6			22.8			32.3				
HCM LOS							C			D				
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1						
Capacity (veh/h)	206 ~ 110	-	-	-	189	-	-	249						
HCM Lane V/C Ratio	0.019 1.522	-	-	-	0.234	-	-	0.485						
HCM Control Delay (s)	22.8\$ 347.4	-	-	-	29.8	-	-	32.3						
HCM Lane LOS	C F	-	-	-	D	-	-	D						
HCM 95th %tile Q(veh)	0.1 12.3	-	-	-	0.9	-	-	2.4						
Notes														
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon								

HCM 6th TWSC  
3: 3/4 Access & Frontage Rd

Short-Term Baseline + Site  
PM

Intersection												
Int Delay, s/veh	4.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	46	2	2	1	3	5	0	5	3	3	2	39
Future Vol, veh/h	46	2	2	1	3	5	0	5	3	3	2	39
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	78	78	78	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	55	2	2	1	4	6	0	6	4	4	3	50
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	49	46	28	46	69	8	53	0	0	10	0	0
Stage 1	36	36	-	8	8	-	-	-	-	-	-	-
Stage 2	13	10	-	38	61	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	951	846	1047	955	822	1074	1553	-	-	1610	-	-
Stage 1	980	865	-	1013	889	-	-	-	-	-	-	-
Stage 2	1007	887	-	977	844	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	940	843	1047	948	820	1074	1553	-	-	1610	-	-
Mov Cap-2 Maneuver	940	843	-	948	820	-	-	-	-	-	-	-
Stage 1	980	862	-	1013	889	-	-	-	-	-	-	-
Stage 2	997	887	-	969	841	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	9.1		8.8			0			0.5			
HCM LOS	A		A									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR				
Capacity (veh/h)	1553	-	-	940	961	1610	-	-				
HCM Lane V/C Ratio	-	-	-	0.064	0.012	0.002	-	-				
HCM Control Delay (s)	0	-	-	9.1	8.8	7.2	0	-				
HCM Lane LOS	A	-	-	A	A	A	A	-				
HCM 95th %tile Q(veh)	0	-	-	0.2	0	0	-	-				

Intersection												
Int Delay, s/veh	1.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	56	6	0	3	14	20	0	10	2	20	25	29
Future Vol, veh/h	56	6	0	3	14	20	0	10	2	20	25	29
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Yield	Yield	Yield	Yield	Yield	Yield	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	78	78	78	78	78	78	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	72	8	0	4	18	26	0	13	3	24	30	35
Major/Minor							Minor2		Major2			
Conflicting Flow All							96	96	48	0	0	0
Stage 1							96	96	-	-	-	-
Stage 2							0	0	-	-	-	-
Critical Hdwy							6.42	6.52	6.22	4.12	-	-
Critical Hdwy Stg 1							5.42	5.52	-	-	-	-
Critical Hdwy Stg 2							-	-	-	-	-	-
Follow-up Hdwy							3.518	4.018	3.318	2.218	-	-
Pot Cap-1 Maneuver							903	794	1021	-	-	-
Stage 1							928	815	-	-	-	-
Stage 2							-	-	-	-	-	-
Platoon blocked, %											-	-
Mov Cap-1 Maneuver							903	0	1021	-	-	-
Mov Cap-2 Maneuver							903	0	-	-	-	-
Stage 1							928	0	-	-	-	-
Stage 2							-	0	-	-	-	-
Approach							NB		SB			
HCM Control Delay, s							8.6					
HCM LOS							A					
Minor Lane/Major Mvmt	NBLn1	SBL	SBT	SBR								
Capacity (veh/h)	1021	-	-	-								
HCM Lane V/C Ratio	0.015	-	-	-								
HCM Control Delay (s)	8.6	-	-	-								
HCM Lane LOS	A	-	-	-								
HCM 95th %tile Q(veh)	0	-	-	-								

Intersection						
Int Delay, s/veh	4.4					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	35	0	13	0	0	27
Future Vol, veh/h	35	0	13	0	0	27
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	45	0	17	0	0	35
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	45	0	79	45
Stage 1	-	-	-	-	45	-
Stage 2	-	-	-	-	34	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1563	-	924	1025
Stage 1	-	-	-	-	977	-
Stage 2	-	-	-	-	988	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1563	-	914	1025
Mov Cap-2 Maneuver	-	-	-	-	914	-
Stage 1	-	-	-	-	977	-
Stage 2	-	-	-	-	977	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		7.3		8.6	
HCM LOS					A	
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	1025	-	-	1563	-	
HCM Lane V/C Ratio	0.034	-	-	0.011	-	
HCM Control Delay (s)	8.6	-	-	7.3	0	
HCM Lane LOS	A	-	-	A	A	
HCM 95th %tile Q(veh)	0.1	-	-	0	-	

Lanes, Volumes, Timings  
1: RIRO Access & Platte Ave

2041 Background  
AM

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑	↗		↑↑↑		↗
Traffic Volume (vph)	3070	57	0	3495	0	36
Future Volume (vph)	3070	57	0	3495	0	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	1.00	1.00	0.86	1.00	1.00
Frt		0.850				0.865
Flt Protected						
Satd. Flow (prot)	5085	1583	0	6408	0	1611
Flt Permitted						
Satd. Flow (perm)	5085	1583	0	6408	0	1611
Link Speed (mph)	55			55	25	
Link Distance (ft)	1642			917	110	
Travel Time (s)	20.4			11.4	3.0	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.83	0.83
Adj. Flow (vph)	3232	60	0	3679	0	43
Shared Lane Traffic (%)						
Lane Group Flow (vph)	3232	60	0	3679	0	43
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	30			30	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	69.3%			ICU Level of Service C		
Analysis Period (min)	15					

Intersection														
Int Delay, s/veh	144.8													
Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔ ↑↑↑	↔ ↑↑↑	↔ ↑		↔ ↑↑↑	↔ ↑↑↑	↔ ↑			↔ ↑			↔ ↑
Traffic Vol, veh/h	20	178	2898	10	5	32	3050	265	0	0	10	0	0	425
Future Vol, veh/h	20	178	2898	10	5	32	3050	265	0	0	10	0	0	425
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	-	None	-	-	-	None	-	-	Stop	-	-	Stop
Storage Length	-	325	-	0	-	300	-	0	-	-	0	-	-	0
Veh in Median Storage, #	-	-	0	-	-	-	0	-	-	0	-	-	0	-
Grade, %	-	-	0	-	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	78	78	78	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	21	187	3051	11	5	34	3211	279	0	0	13	0	0	462
Major/Minor	Major1			Major2			Minor1			Minor2				
Conflicting Flow All	2344	3490	0	0	2227	3062	0	0	-	-	1526	-	-	1606
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	5.64	5.34	-	-	5.64	5.34	-	-	-	-	7.14	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	2.32	3.12	-	-	2.32	3.12	-	-	-	-	3.92	-	-	3.92
Pot Cap-1 Maneuver	76	~ 21	-	-	89	35	-	-	0	0	91	0	0	~ 80
Stage 1	-	-	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver ~ -130 ~ -130	-	-	-	-	38	38	-	-	-	-	91	-	-	~ 80
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB				
HCM Control Delay, s				3.5			50.9			\$ 2251.6				
HCM LOS							F			F				
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1						
Capacity (veh/h)	91	+	-	-	38	-	-	80						
HCM Lane V/C Ratio	0.141	-	-	-	1.025	-	-	5.774						
HCM Control Delay (s)	50.9	-	-	-	\$ 316.6	-	-	\$ 2251.6						
HCM Lane LOS	F	-	-	-	F	-	-	F						
HCM 95th %tile Q(veh)	0.5	-	-	-	3.9	-	-	51.1						
Notes														
~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    *: All major volume in platoon														

Intersection												
Int Delay, s/veh	4.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Traffic Vol, veh/h	46	2	2	1	3	5	0	5	3	3	2	39
Future Vol, veh/h	46	2	2	1	3	5	0	5	3	3	2	39
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	78	78	78	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	55	2	2	1	4	6	0	6	4	4	3	50
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	49	46	28	46	69	8	53	0	0	10	0	0
Stage 1	36	36	-	8	8	-	-	-	-	-	-	-
Stage 2	13	10	-	38	61	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	951	846	1047	955	822	1074	1553	-	-	1610	-	-
Stage 1	980	865	-	1013	889	-	-	-	-	-	-	-
Stage 2	1007	887	-	977	844	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	940	843	1047	948	820	1074	1553	-	-	1610	-	-
Mov Cap-2 Maneuver	940	843	-	948	820	-	-	-	-	-	-	-
Stage 1	980	862	-	1013	889	-	-	-	-	-	-	-
Stage 2	997	887	-	969	841	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	9.1		8.8			0			0.5			
HCM LOS	A		A									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR				
Capacity (veh/h)	1553	-	-	940	961	1610	-	-				
HCM Lane V/C Ratio	-	-	-	0.064	0.012	0.002	-	-				
HCM Control Delay (s)	0	-	-	9.1	8.8	7.2	0	-				
HCM Lane LOS	A	-	-	A	A	A	A	-				
HCM 95th %tile Q(veh)	0	-	-	0.2	0	0	-	-				



Intersection												
Int Delay, s/veh	2.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	16	3	0	1	7	5	0	20	5	50	5	12
Future Vol, veh/h	16	3	0	1	7	5	0	20	5	50	5	12
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Yield	Yield	Yield	Yield	Yield	Yield	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	78	78	78	78	78	78	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	21	4	0	1	9	6	0	26	6	60	6	14
Major/Minor							Minor2		Major2			
Conflicting Flow All							133	133	13	0	0	0
Stage 1							133	133	-	-	-	-
Stage 2							0	0	-	-	-	-
Critical Hdwy							6.42	6.52	6.22	4.12	-	-
Critical Hdwy Stg 1							5.42	5.52	-	-	-	-
Critical Hdwy Stg 2							-	-	-	-	-	-
Follow-up Hdwy							3.518	4.018	3.318	2.218	-	-
Pot Cap-1 Maneuver							861	758	1067	-	-	-
Stage 1							893	786	-	-	-	-
Stage 2							-	-	-	-	-	-
Platoon blocked, %											-	-
Mov Cap-1 Maneuver							861	0	1067	-	-	-
Mov Cap-2 Maneuver							861	0	-	-	-	-
Stage 1							893	0	-	-	-	-
Stage 2							-	0	-	-	-	-
Approach							NB		SB			
HCM Control Delay, s							8.5					
HCM LOS							A					
Minor Lane/Major Mvmt	NBLn1	SBL	SBT	SBR								
Capacity (veh/h)	1067	-	-	-								
HCM Lane V/C Ratio	0.03	-	-	-								
HCM Control Delay (s)	8.5	-	-	-								
HCM Lane LOS	A	-	-	-								
HCM 95th %tile Q(veh)	0.1	-	-	-								

Lanes, Volumes, Timings  
1: RIRO Access & Platte Ave

2041 Background  
PM

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑	↗		↑↑↑		↗
Traffic Volume (vph)	3215	56	0	2966	0	39
Future Volume (vph)	3215	56	0	2966	0	39
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	1.00	1.00	0.86	1.00	1.00
Frt		0.850				0.865
Flt Protected						
Satd. Flow (prot)	5085	1583	0	6408	0	1611
Flt Permitted						
Satd. Flow (perm)	5085	1583	0	6408	0	1611
Link Speed (mph)	55			55	25	
Link Distance (ft)	1642			917	110	
Travel Time (s)	20.4			11.4	3.0	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.83	0.83
Adj. Flow (vph)	3384	59	0	3122	0	47
Shared Lane Traffic (%)						
Lane Group Flow (vph)	3384	59	0	3122	0	47
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	30			30	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	72.1%			ICU Level of Service C		
Analysis Period (min)	15					

Intersection														
Int Delay, s/veh	46.3													
Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔	↑↑↑	↗		↔	↑↑↑	↗			↗			↗
Traffic Vol, veh/h	26	280	2943	5	5	46	2650	145	0	0	5	0	0	290
Future Vol, veh/h	26	280	2943	5	5	46	2650	145	0	0	5	0	0	290
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	-	None	-	-	-	None	-	-	Stop	-	-	Stop
Storage Length	-	325	-	0	-	300	-	0	-	-	0	-	-	0
Veh in Median Storage, #	-	-	0	-	-	-	0	-	-	0	-	-	0	-
Grade, %	-	-	0	-	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	78	78	78	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	27	295	3098	5	5	48	2789	153	0	0	6	0	0	315
Major/Minor	Major1				Major2				Minor1			Minor2		
Conflicting Flow All	2036	2942	0	0	2261	3103	0	0	-	-	1549	-	-	1395
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	5.64	5.34	-	-	5.64	5.34	-	-	-	-	7.14	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	2.32	3.12	-	-	2.32	3.12	-	-	-	-	3.92	-	-	3.92
Pot Cap-1 Maneuver	115	~ 41	-	-	85	~ 33	-	-	0	0	88	0	0	~ 112
Stage 1	-	-	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %			-	-			-	-						
Mov Cap-1 Maneuver	~ -50	~ -50	-	-	35	~ 35	-	-	-	-	88	-	-	~ 112
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Approach	EB				WB				NB			SB		
HCM Control Delay, s					9.3				49.1			\$ 900.8		
HCM LOS									E			F		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1						
Capacity (veh/h)	88	+	-	-	~ 35	-	-	112						
HCM Lane V/C Ratio	0.073	-	-	-	1.534	-	-	2.814						
HCM Control Delay (s)	49.1	-	-	-	\$ 519.8	-	-	\$ 900.8						
HCM Lane LOS	E	-	-	-	F	-	-	F						
HCM 95th %tile Q(veh)	0.2	-	-	-	5.8	-	-	29.4						
Notes														
~: Volume exceeds capacity		\$: Delay exceeds 300s				+: Computation Not Defined				*: All major volume in platoon				

Intersection												
Int Delay, s/veh	5.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Traffic Vol, veh/h	49	2	2	1	3	5	0	0	3	0	0	36
Future Vol, veh/h	49	2	2	1	3	5	0	0	3	0	0	36
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	78	78	78	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	59	2	2	1	4	6	0	0	4	0	0	46
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	30	27	23	27	48	2	46	0	0	4	0	0
Stage 1	23	23	-	2	2	-	-	-	-	-	-	-
Stage 2	7	4	-	25	46	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	979	866	1054	983	844	1082	1562	-	-	1618	-	-
Stage 1	995	876	-	1021	894	-	-	-	-	-	-	-
Stage 2	1015	892	-	993	857	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	970	866	1054	979	844	1082	1562	-	-	1618	-	-
Mov Cap-2 Maneuver	970	866	-	979	844	-	-	-	-	-	-	-
Stage 1	995	876	-	1021	894	-	-	-	-	-	-	-
Stage 2	1005	892	-	988	857	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	9		8.7			0			0			
HCM LOS	A		A									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR					
Capacity (veh/h)	1562	-	-	969	979	1618	-	-				
HCM Lane V/C Ratio	-	-	-	0.066	0.012	-	-	-				
HCM Control Delay (s)	0	-	-	9	8.7	0	-	-				
HCM Lane LOS	A	-	-	A	A	A	-	-				
HCM 95th %tile Q(veh)	0	-	-	0.2	0	0	-	-				

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	34	6	0	3	11	20	0	10	2	20	25	21
Future Vol, veh/h	34	6	0	3	11	20	0	10	2	20	25	21
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Yield	Yield	Yield	Yield	Yield	Yield	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	78	78	78	78	78	78	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	44	8	0	4	14	26	0	13	3	24	30	25
Major/Minor							Minor2		Major2			
Conflicting Flow All							91	91	43	0	0	0
Stage 1							91	91	-	-	-	-
Stage 2							0	0	-	-	-	-
Critical Hdwy							6.42	6.52	6.22	4.12	-	-
Critical Hdwy Stg 1							5.42	5.52	-	-	-	-
Critical Hdwy Stg 2							-	-	-	-	-	-
Follow-up Hdwy							3.518	4.018	3.318	2.218	-	-
Pot Cap-1 Maneuver							909	799	1027	-	-	-
Stage 1							933	820	-	-	-	-
Stage 2							-	-	-	-	-	-
Platoon blocked, %											-	-
Mov Cap-1 Maneuver							909	0	1027	-	-	-
Mov Cap-2 Maneuver							909	0	-	-	-	-
Stage 1							933	0	-	-	-	-
Stage 2							-	0	-	-	-	-
Approach							NB		SB			
HCM Control Delay, s							8.6					
HCM LOS							A					
Minor Lane/Major Mvmt	NBLn1	SBL	SBT	SBR								
Capacity (veh/h)	1027	-	-	-								
HCM Lane V/C Ratio	0.015	-	-	-								
HCM Control Delay (s)	8.6	-	-	-								
HCM Lane LOS	A	-	-	-								
HCM 95th %tile Q(veh)	0	-	-	-								

Lanes, Volumes, Timings  
1: RIRO Access & Platte Ave

2041 Background + Site  
AM




	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑	↗		↑↑↑		↗
Traffic Volume (vph)	3070	75	0	3500	0	45
Future Volume (vph)	3070	75	0	3500	0	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	1.00	1.00	0.86	1.00	1.00
Frt		0.850				0.865
Flt Protected						
Satd. Flow (prot)	5085	1583	0	6408	0	1611
Flt Permitted						
Satd. Flow (perm)	5085	1583	0	6408	0	1611
Link Speed (mph)	55			55	25	
Link Distance (ft)	1642			917	110	
Travel Time (s)	20.4			11.4	3.0	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.83	0.83
Adj. Flow (vph)	3232	79	0	3684	0	54
Shared Lane Traffic (%)						
Lane Group Flow (vph)	3232	79	0	3684	0	54
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	30			30	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	69.3%			ICU Level of Service C		
Analysis Period (min)	15					

Intersection														
Int Delay, s/veh	145.4													
Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔	↑↑↑	↗		↔	↑↑↑	↗			↗			↗
Traffic Vol, veh/h	25	180	2900	10	5	40	3050	265	0	0	10	0	0	425
Future Vol, veh/h	25	180	2900	10	5	40	3050	265	0	0	10	0	0	425
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	-	None	-	-	-	None	-	-	Stop	-	-	Stop
Storage Length	-	325	-	0	-	300	-	0	-	-	0	-	-	0
Veh in Median Storage, #	-	-	0	-	-	-	0	-	-	0	-	-	0	-
Grade, %	-	-	0	-	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	78	78	78	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	26	189	3053	11	5	42	3211	279	0	0	13	0	0	462
Major/Minor	Major1			Major2			Minor1			Minor2				
Conflicting Flow All	2344	3490	0	0	2228	3064	0	0	-	-	1527	-	-	1606
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	5.64	5.34	-	-	5.64	5.34	-	-	-	-	7.14	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	2.32	3.12	-	-	2.32	3.12	-	-	-	-	3.92	-	-	3.92
Pot Cap-1 Maneuver	76	~ 21	-	-	89	~ 35	-	-	0	0	91	0	0	~ 80
Stage 1	-	-	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %			-	-			-	-						
Mov Cap-1 Maneuver	~ -52	~ -52	-	-	37	~ 37	-	-	-	-	91	-	-	~ 80
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB				
HCM Control Delay, s				5.4			50.9			\$ 2251.6				
HCM LOS							F			F				
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1						
Capacity (veh/h)	91	+	-	-	~ 37	-	-	80						
HCM Lane V/C Ratio	0.141	-	-	-	1.28	-	-	5.774						
HCM Control Delay (s)	50.9	-	-	-	\$ 404.7	-	-	\$ 2251.6						
HCM Lane LOS	F	-	-	-	F	-	-	F						
HCM 95th %tile Q(veh)	0.5	-	-	-	4.9	-	-	51.1						
Notes														
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined		*: All major volume in platoon								

Intersection												
Int Delay, s/veh	2.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	1	1	1	1	2	0	0	5	0	0	35
Future Vol, veh/h	10	1	1	1	1	2	0	0	5	0	0	35
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	78	78	78	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	12	1	1	1	1	3	0	0	6	0	0	45
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	28	29	23	27	48	3	45	0	0	6	0	0
Stage 1	23	23	-	3	3	-	-	-	-	-	-	-
Stage 2	5	6	-	24	45	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	981	864	1054	983	844	1081	1563	-	-	1615	-	-
Stage 1	995	876	-	1020	893	-	-	-	-	-	-	-
Stage 2	1017	891	-	994	857	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	977	864	1054	981	844	1081	1563	-	-	1615	-	-
Mov Cap-2 Maneuver	977	864	-	981	844	-	-	-	-	-	-	-
Stage 1	995	876	-	1020	893	-	-	-	-	-	-	-
Stage 2	1013	891	-	991	857	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	8.8		8.7			0			0			
HCM LOS	A		A									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR				
Capacity (veh/h)	1563	-	-	972	987	1615	-	-				
HCM Lane V/C Ratio	-	-	-	0.015	0.005	-	-	-				
HCM Control Delay (s)	0	-	-	8.8	8.7	0	-	-				
HCM Lane LOS	A	-	-	A	A	A	-	-				
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-				



Intersection												
Int Delay, s/veh	2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	25	3	0	1	15	5	0	20	5	50	5	30
Future Vol, veh/h	25	3	0	1	15	5	0	20	5	50	5	30
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Yield	Yield	Yield	Yield	Yield	Yield	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	78	78	78	78	78	78	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	32	4	0	1	19	6	0	26	6	60	6	36
Major/Minor							Minor2		Major2			
Conflicting Flow All							144	144	24	0	0	0
Stage 1							144	144	-	-	-	-
Stage 2							0	0	-	-	-	-
Critical Hdwy							6.42	6.52	6.22	4.12	-	-
Critical Hdwy Stg 1							5.42	5.52	-	-	-	-
Critical Hdwy Stg 2							-	-	-	-	-	-
Follow-up Hdwy							3.518	4.018	3.318	2.218	-	-
Pot Cap-1 Maneuver							849	747	1052	-	-	-
Stage 1							883	778	-	-	-	-
Stage 2							-	-	-	-	-	-
Platoon blocked, %											-	-
Mov Cap-1 Maneuver							849	0	1052	-	-	-
Mov Cap-2 Maneuver							849	0	-	-	-	-
Stage 1							883	0	-	-	-	-
Stage 2							-	0	-	-	-	-
Approach							NB		SB			
HCM Control Delay, s							8.5					
HCM LOS							A					
Minor Lane/Major Mvmt	NBLn1	SBL	SBT	SBR								
Capacity (veh/h)	1052	-	-	-								
HCM Lane V/C Ratio	0.03	-	-	-								
HCM Control Delay (s)	8.5	-	-	-								
HCM Lane LOS	A	-	-	-								
HCM 95th %tile Q(veh)	0.1	-	-	-								

Intersection						
Int Delay, s/veh	2.4					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	28	0	25	45	0	9
Future Vol, veh/h	28	0	25	45	0	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	83	83	78	78
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	36	0	30	54	0	12
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	36	0	150	36
Stage 1	-	-	-	-	36	-
Stage 2	-	-	-	-	114	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1575	-	842	1037
Stage 1	-	-	-	-	986	-
Stage 2	-	-	-	-	911	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1575	-	825	1037
Mov Cap-2 Maneuver	-	-	-	-	825	-
Stage 1	-	-	-	-	986	-
Stage 2	-	-	-	-	893	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		2.6		8.5	
HCM LOS	A					
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	1037	-	-	1575	-	
HCM Lane V/C Ratio	0.011	-	-	0.019	-	
HCM Control Delay (s)	8.5	-	-	7.3	0	
HCM Lane LOS	A	-	-	A	A	
HCM 95th %tile Q(veh)	0	-	-	0.1	-	

Lanes, Volumes, Timings  
1: RIRO Access & Platte Ave




2041 Background + Site  
PM

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑	↗		↑↑↑		↗
Traffic Volume (vph)	3215	65	0	2980	0	65
Future Volume (vph)	3215	65	0	2980	0	65
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	1.00	1.00	0.86	1.00	1.00
Frt		0.850				0.865
Flt Protected						
Satd. Flow (prot)	5085	1583	0	6408	0	1611
Flt Permitted						
Satd. Flow (perm)	5085	1583	0	6408	0	1611
Link Speed (mph)	55			55	25	
Link Distance (ft)	1642			917	110	
Travel Time (s)	20.4			11.4	3.0	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.83	0.83
Adj. Flow (vph)	3384	68	0	3137	0	78
Shared Lane Traffic (%)						
Lane Group Flow (vph)	3384	68	0	3137	0	78
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	30			30	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	72.8%			ICU Level of Service C		
Analysis Period (min)	15					

Intersection																			
Int Delay, s/veh	46.8																		
Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR					
Lane Configurations		↔	↑↑↑	↗		↔	↑↑↑	↗			↗			↗					
Traffic Vol, veh/h	40	285	2950	5	5	50	2650	145	0	0	5	0	0	290					
Future Vol, veh/h	40	285	2950	5	5	50	2650	145	0	0	5	0	0	290					
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop					
RT Channelized	-	-	-	None	-	-	-	None	-	-	Stop	-	-	Stop					
Storage Length	-	325	-	0	-	300	-	0	-	-	0	-	-	0					
Veh in Median Storage, #	-	-	0	-	-	-	0	-	-	0	-	-	0	-					
Grade, %	-	-	0	-	-	-	0	-	-	0	-	-	0	-					
Peak Hour Factor	95	95	95	95	95	95	95	95	78	78	78	92	92	92					
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2					
Mvmt Flow	42	300	3105	5	5	53	2789	153	0	0	6	0	0	315					
Major/Minor	Major1			Major2			Minor1			Minor2									
Conflicting Flow All	2036	2942	0	0	2267	3110	0	0	-	-	1553	-	-	1395					
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Critical Hdwy	5.64	5.34	-	-	5.64	5.34	-	-	-	-	7.14	-	-	7.14					
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Follow-up Hdwy	2.32	3.12	-	-	2.32	3.12	-	-	-	-	3.92	-	-	3.92					
Pot Cap-1 Maneuver	115	~ 41	-	-	85	~ 33	-	-	0	0	87	0	0	~ 112					
Stage 1	-	-	-	-	-	-	-	-	0	0	-	0	0	-					
Stage 2	-	-	-	-	-	-	-	-	0	0	-	0	0	-					
Platoon blocked, %			-	-			-	-											
Mov Cap-1 Maneuver	~ -25	~ -25	-	-	35	~ 35	-	-	-	-	87	-	-	~ 112					
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Approach	EB			WB			NB			SB									
HCM Control Delay, s				11			49.6			\$ 900.8									
HCM LOS							E			F									
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1											
Capacity (veh/h)	87	+	-	-	~ 35	-	-	112											
HCM Lane V/C Ratio	0.074	-	-	-	1.654	-	-	2.814											
HCM Control Delay (s)	49.6	-	-	-	\$ 572	-	-	\$ 900.8											
HCM Lane LOS	E	-	-	-	F	-	-	F											
HCM 95th %tile Q(veh)	0.2	-	-	-	6.3	-	-	29.4											
Notes																			
~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    *: All major volume in platoon																			

Intersection												
Int Delay, s/veh	5.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	50	2	2	1	3	5	0	0	3	0	0	40
Future Vol, veh/h	50	2	2	1	3	5	0	0	3	0	0	40
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	78	78	78	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	60	2	2	1	4	6	0	0	4	0	0	51
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	33	30	26	30	53	2	51	0	0	4	0	0
Stage 1	26	26	-	2	2	-	-	-	-	-	-	-
Stage 2	7	4	-	28	51	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	974	863	1050	979	838	1082	1555	-	-	1618	-	-
Stage 1	992	874	-	1021	894	-	-	-	-	-	-	-
Stage 2	1015	892	-	989	852	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	965	863	1050	975	838	1082	1555	-	-	1618	-	-
Mov Cap-2 Maneuver	965	863	-	975	838	-	-	-	-	-	-	-
Stage 1	992	874	-	1021	894	-	-	-	-	-	-	-
Stage 2	1005	892	-	984	852	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s	9		8.7			0			0			
HCM LOS	A		A									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR					
Capacity (veh/h)	1555	-	-	964	975	1618	-	-				
HCM Lane V/C Ratio	-	-	-	0.067	0.012	-	-	-				
HCM Control Delay (s)	0	-	-	9	8.7	0	-	-				
HCM Lane LOS	A	-	-	A	A	A	-	-				
HCM 95th %tile Q(veh)	0	-	-	0.2	0	0	-	-				

Intersection												
Int Delay, s/veh	1.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	60	7	0	3	15	20	0	10	2	20	25	30
Future Vol, veh/h	60	7	0	3	15	20	0	10	2	20	25	30
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Yield	Yield	Yield	Yield	Yield	Yield	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	78	78	78	78	78	78	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	72	8	0	4	19	26	0	13	3	24	30	36
Major/Minor							Minor2		Major2			
Conflicting Flow All							96	96	48	0	0	0
Stage 1							96	96	-	-	-	-
Stage 2							0	0	-	-	-	-
Critical Hdwy							6.42	6.52	6.22	4.12	-	-
Critical Hdwy Stg 1							5.42	5.52	-	-	-	-
Critical Hdwy Stg 2							-	-	-	-	-	-
Follow-up Hdwy							3.518	4.018	3.318	2.218	-	-
Pot Cap-1 Maneuver							903	794	1021	-	-	-
Stage 1							928	815	-	-	-	-
Stage 2							-	-	-	-	-	-
Platoon blocked, %											-	-
Mov Cap-1 Maneuver							903	0	1021	-	-	-
Mov Cap-2 Maneuver							903	0	-	-	-	-
Stage 1							928	0	-	-	-	-
Stage 2							-	0	-	-	-	-
Approach							NB		SB			
HCM Control Delay, s							8.6					
HCM LOS							A					
Minor Lane/Major Mvmt	NBLn1	SBL	SBT	SBR								
Capacity (veh/h)	1021	-	-	-								
HCM Lane V/C Ratio	0.015	-	-	-								
HCM Control Delay (s)	8.6	-	-	-								
HCM Lane LOS	A	-	-	-								
HCM 95th %tile Q(veh)	0	-	-	-								

Intersection						
Int Delay, s/veh	2.2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	67	0	13	45	0	27
Future Vol, veh/h	67	0	13	45	0	27
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	78	78	83	83	78	78
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	86	0	16	54	0	35
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	86	0	172	86
Stage 1	-	-	-	-	86	-
Stage 2	-	-	-	-	86	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1510	-	818	973
Stage 1	-	-	-	-	937	-
Stage 2	-	-	-	-	937	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1510	-	809	973
Mov Cap-2 Maneuver	-	-	-	-	809	-
Stage 1	-	-	-	-	937	-
Stage 2	-	-	-	-	927	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		1.7		8.8	
HCM LOS	A					
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	973	-	-	1510	-	
HCM Lane V/C Ratio	0.036	-	-	0.01	-	
HCM Control Delay (s)	8.8	-	-	7.4	0	
HCM Lane LOS	A	-	-	A	A	
HCM 95th %tile Q(veh)	0.1	-	-	0	-	

# Signing and Striping Plans

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DRAFT



# Traffic Counts

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DRAFT

# LSC Transportation Consultants, Inc.

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

File Name : Hathaway Dr - Platte Ave AM  
Site Code : S214660  
Start Date : 7/13/2021  
Page No : 1

## Groups Printed- Unshifted

Start Time	Hathaway Dr Southbound					Platte Ave Westbound					Hathaway Dr Northbound					Platte Ave Eastbound					Int. Total
	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	
06:30 AM	0	0	16	0	16	6	3	5	0	14	0	0	0	0	0	10	398	0	2	410	440
06:45 AM	0	0	15	0	15	11	0	6	0	17	0	0	0	0	0	15	418	0	2	435	467
Total	0	0	31	0	31	17	3	11	0	31	0	0	0	0	0	25	816	0	4	845	907
07:00 AM	0	0	18	0	18	5	0	3	1	9	0	0	0	0	0	9	471	2	2	484	511
07:15 AM	0	0	10	0	10	10	0	6	0	16	0	0	2	0	2	8	419	2	7	436	464
07:30 AM	0	0	17	0	17	6	0	3	0	9	0	0	4	0	4	18	362	2	5	387	417
07:45 AM	0	1	14	0	15	9	0	7	0	16	0	1	4	0	5	20	344	1	8	373	409
Total	0	1	59	0	60	30	0	19	1	50	0	1	10	0	11	55	1596	7	22	1680	1801
08:00 AM	0	0	13	0	13	6	0	6	0	12	0	0	12	0	12	15	281	0	9	305	342
08:15 AM	0	0	6	0	6	3	0	1	0	4	0	0	4	0	4	14	259	0	7	280	294
Grand Total	0	1	109	0	110	56	3	37	1	97	0	1	26	0	27	109	2952	7	42	3110	3344
Apprch %	0	0.9	99.1	0		57.7	3.1	38.1	1		0	3.7	96.3	0		3.5	94.9	0.2	1.4		
Total %	0	0	3.3	0	3.3	1.7	0.1	1.1	0	2.9	0	0	0.8	0	0.8	3.3	88.3	0.2	1.3	93	

# LSC Transportation Consultants, Inc.

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

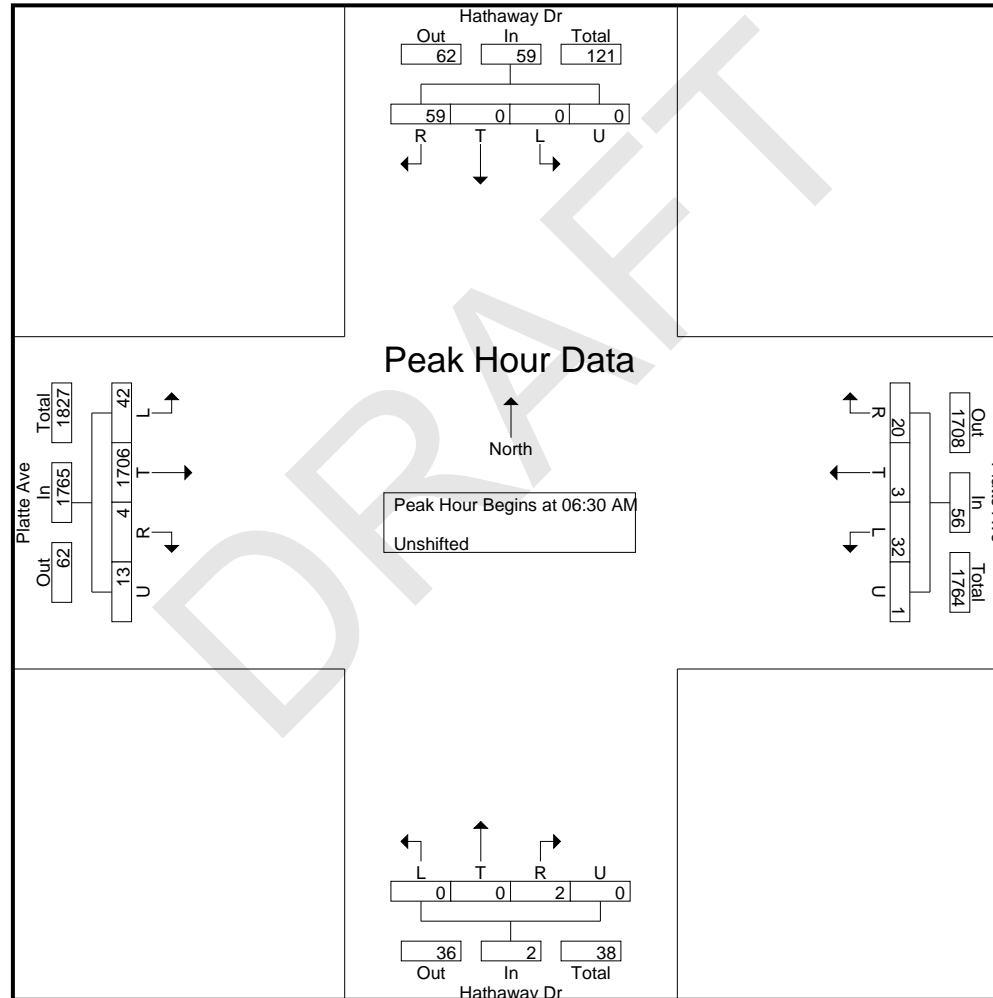
File Name : Hathaway Dr - Platte Ave AM  
Site Code : S214660  
Start Date : 7/13/2021  
Page No : 2

	Hathaway Dr Southbound					Platte Ave Westbound					Hathaway Dr Northbound					Platte Ave Eastbound					
Start Time	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	Int. Total
<b>Peak Hour Analysis From 6:30:00 AM to 8:15:00 AM - Peak 1 of 1</b>																					
Peak Hour for Entire Intersection Begins at 6:30:00 AM																					
6:30:00 AM	0	0	16	0	16	6	3	5	0	14	0	0	0	0	0	10	398	0	2	410	440
6:45:00 AM	0	0	15	0	15	11	0	6	0	17	0	0	0	0	0	15	418	0	2	435	467
7:00:00 AM	0	0	18	0	18	5	0	3	1	9	0	0	0	0	0	9	471	2	2	484	511
7:15:00 AM	0	0	10	0	10	10	0	6	0	16	0	0	2	0	2	8	419	2	7	436	464
Total Volume	0	0	59	0	59	32	3	20	1	56	0	0	2	0	2	42	1706	4	13	1765	1882
% App. Total	0	0	100	0		57.1	5.4	35.7	1.8		0	0	100	0		2.4	96.7	0.2	0.7		
PHF	.000	.000	.819	.000	.819	.727	.250	.833	.250	.824	.000	.000	.250	.000	.250	.700	.906	.500	.464	.912	.921

# LSC Transportation Consultants, Inc.

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

File Name : Hathaway Dr - Platte Ave AM  
Site Code : S214660  
Start Date : 7/13/2021  
Page No : 3



# LSC Transportation Consultants, Inc.

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

File Name : Hathaway Dr - Platte Ave AM  
Site Code : S214660  
Start Date : 7/13/2021  
Page No : 4

	Hathaway Dr Southbound					Platte Ave Westbound					Hathaway Dr Northbound					Platte Ave Eastbound					
Start Time	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	Int. Total
Peak Hour Analysis From 6:30:00 AM to 8:15:00 AM - Peak 1 of 1																					
Peak Hour for Each Approach Begins at:																					
	6:45:00 AM					6:30:00 AM					7:30:00 AM					6:30:00 AM					
+0 mins.	0	0	15	0	15	6	3	5	0	14	0	0	4	0	4	10	398	0	2	410	
+5 mins.	0	0	18	0	18	11	0	6	0	17	0	1	4	0	5	15	418	0	2	435	
+10 mins.	0	0	10	0	10	5	0	3	1	9	0	0	12	0	12	9	471	2	2	484	
+15 mins.	0	0	17	0	17	10	0	6	0	16	0	0	4	0	4	8	419	2	7	436	
Total Volume	0	0	60	0	60	32	3	20	1	56	0	1	24	0	25	42	1706	4	13	1765	
% App. Total	0	0	100	0		57.1	5.4	35.7	1.8		0	4	96	0		2.4	96.7	0.2	0.7		
PHF	.000	.000	.833	.000	.833	.727	.250	.833	.250	.824	.000	.250	.500	.000	.521	.700	.906	.500	.464	.912	

# LSC Transportation Consultants, Inc.

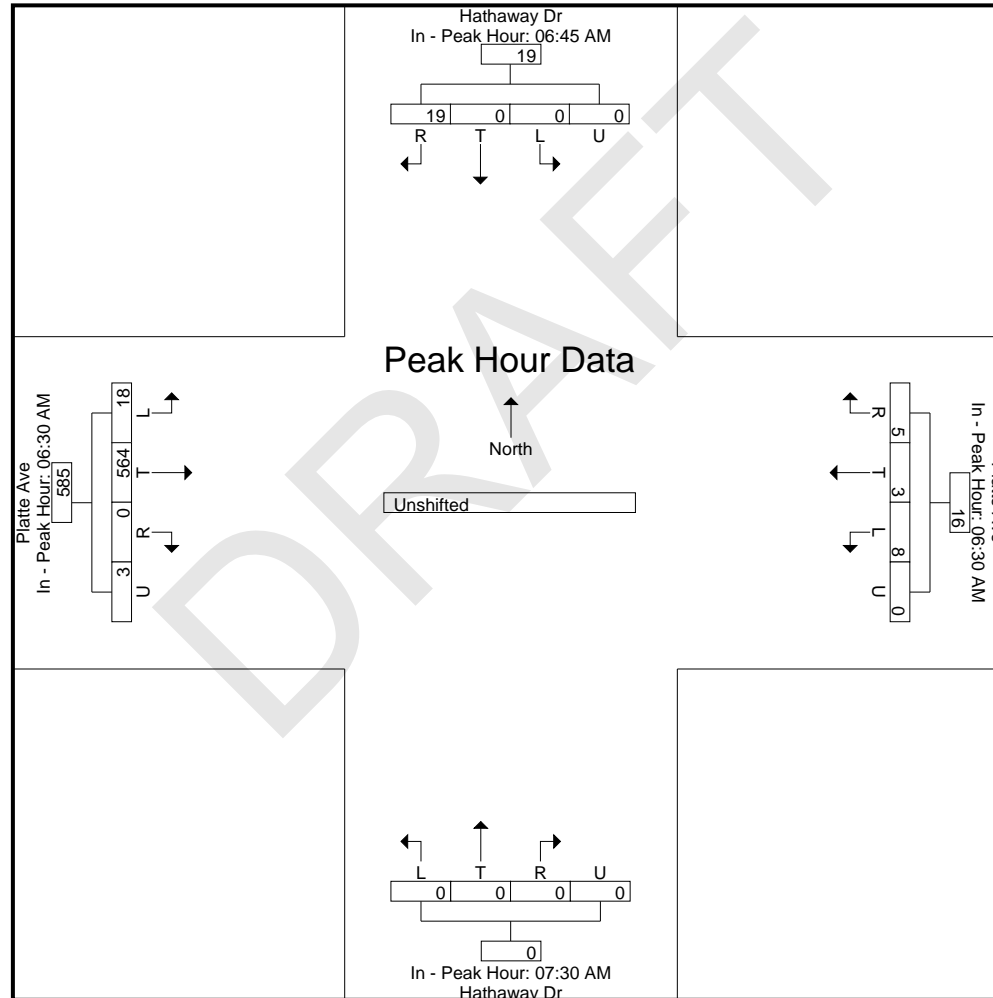
545 E Pikes Peak Ave, Suite 210  
Colorado Springs, CO 80905  
719-633-2868

File Name : Hathaway Dr - Platte Ave AM

Site Code : S214660

Start Date : 7/13/2021

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# LSC Transportation Consultants, Inc.

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

File Name : Hathaway Dr - Platte Ave PM  
Site Code : S214660  
Start Date : 7/13/2021  
Page No : 1

## Groups Printed- Unshifted

Start Time	HathawayDr Southbound					Platte Ave Westbound					Hathaway Dr Northbound					Platte Ave Eastbound					Int. Total
	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	
04:00 PM	0	0	21	0	21	7	1	5	1	14	0	0	14	0	14	18	418	3	3	442	491
04:15 PM	0	0	13	0	13	9	0	4	1	14	0	0	17	0	17	23	478	0	5	506	550
04:30 PM	0	0	21	0	21	8	0	7	1	16	0	0	7	0	7	14	520	1	4	539	583
04:45 PM	0	0	24	1	25	11	1	11	1	24	0	0	13	0	13	14	550	0	4	568	630
Total	0	0	79	1	80	35	2	27	4	68	0	0	51	0	51	69	1966	4	16	2055	2254
05:00 PM	0	0	20	0	20	4	0	4	2	10	0	0	9	0	9	24	495	1	18	538	577
05:15 PM	0	0	15	0	15	3	0	2	0	5	0	0	8	0	8	16	471	1	9	497	525
05:30 PM	0	0	8	0	8	2	0	7	0	9	0	0	5	0	5	20	463	0	4	487	509
05:45 PM	0	0	6	0	6	3	0	1	0	4	0	0	4	0	4	15	430	0	8	453	467
Total	0	0	49	0	49	12	0	14	2	28	0	0	26	0	26	75	1859	2	39	1975	2078
Grand Total	0	0	128	1	129	47	2	41	6	96	0	0	77	0	77	144	3825	6	55	4030	4332
Apprch %	0	0	99.2	0.8		49	2.1	42.7	6.2		0	0	100	0		3.6	94.9	0.1	1.4		
Total %	0	0	3	0	3	1.1	0	0.9	0.1	2.2	0	0	1.8	0	1.8	3.3	88.3	0.1	1.3	93	

# LSC Transportation Consultants, Inc.

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

File Name : Hathaway Dr - Platte Ave PM  
Site Code : S214660  
Start Date : 7/13/2021  
Page No : 2

	HathawayDr Southbound					Platte Ave Westbound					Hathaway Dr Northbound					Platte Ave Eastbound					
Start Time	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	Int. Total
<b>Peak Hour Analysis From 4:00:00 PM to 5:45:00 PM - Peak 1 of 1</b>																					
Peak Hour for Entire Intersection Begins at 4:15:00 PM																					
4:15:00 PM	0	0	13	0	13	9	0	4	1	14	0	0	17	0	17	23	478	0	5	506	550
4:30:00 PM	0	0	21	0	21	8	0	7	1	16	0	0	7	0	7	14	520	1	4	539	583
4:45:00 PM	0	0	24	1	25	11	1	11	1	24	0	0	13	0	13	14	550	0	4	568	630
5:00:00 PM	0	0	20	0	20	4	0	4	2	10	0	0	9	0	9	24	495	1	18	538	577
Total Volume	0	0	78	1	79	32	1	26	5	64	0	0	46	0	46	75	2043	2	31	2151	2340
% App. Total	0	0	98.7	1.3		50	1.6	40.6	7.8		0	0	100	0		3.5	95	0.1	1.4		
PHF	.000	.000	.813	.250	.790	.727	.250	.591	.625	.667	.000	.000	.676	.000	.676	.781	.929	.500	.431	.947	.929



# LSC Transportation Consultants, Inc.

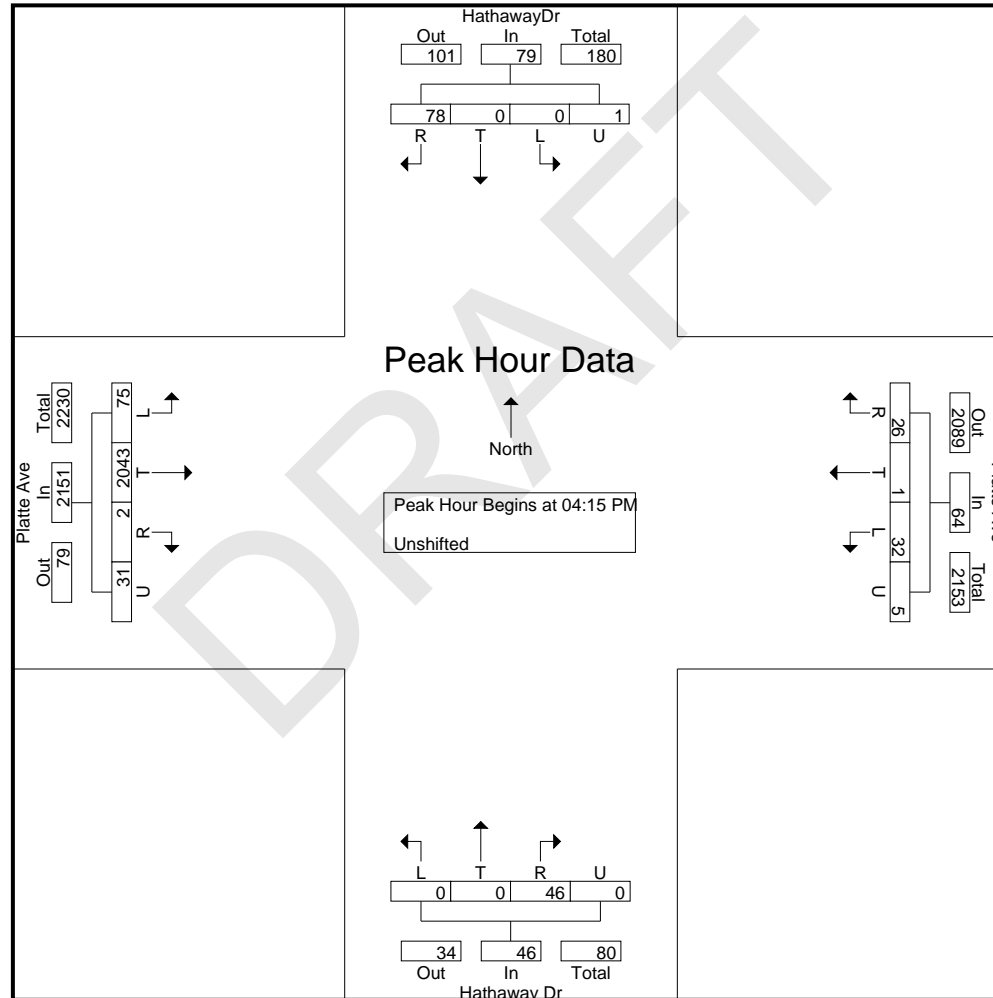
545 E Pikes Peak Ave, Suite 210  
Colorado Springs, CO 80905  
719-633-2868

File Name : Hathaway Dr - Platte Ave PM

Site Code : S214660

Start Date : 7/13/2021

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# LSC Transportation Consultants, Inc.

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

File Name : Hathaway Dr - Platte Ave PM  
Site Code : S214660  
Start Date : 7/13/2021  
Page No : 4

	HathawayDr Southbound					Platte Ave Westbound					Hathaway Dr Northbound					Platte Ave Eastbound					
Start Time	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	Int. Total
<b>Peak Hour Analysis From 4:00:00 PM to 5:45:00 PM - Peak 1 of 1</b>																					
Peak Hour for Each Approach Begins at:																					
	4:30:00 PM					4:00:00 PM					4:00:00 PM					4:15:00 PM					
+0 mins.	0	0	21	0	21	7	<b>1</b>	5	<b>1</b>	14	0	0	14	0	14	23	478	0	5	506	
+5 mins.	0	0	<b>24</b>	<b>1</b>	<b>25</b>	9	0	4	1	14	0	0	<b>17</b>	0	<b>17</b>	14	520	<b>1</b>	4	539	
+10 mins.	0	0	20	0	20	8	0	7	1	16	0	0	7	0	7	14	<b>550</b>	0	4	<b>568</b>	
+15 mins.	0	0	15	0	15	<b>11</b>	1	<b>11</b>	1	<b>24</b>	0	0	13	0	13	<b>24</b>	495	1	<b>18</b>	538	
Total Volume	0	0	80	1	81	35	2	27	4	68	0	0	51	0	51	75	2043	2	31	2151	
% App. Total	0	0	98.8	1.2		51.5	2.9	39.7	5.9		0	0	100	0		3.5	95	0.1	1.4		
PHF	.000	.000	.833	.250	.810	.795	.500	.614	1.000	.708	.000	.000	.750	.000	.750	.781	.929	.500	.431	.947	

# LSC Transportation Consultants, Inc.

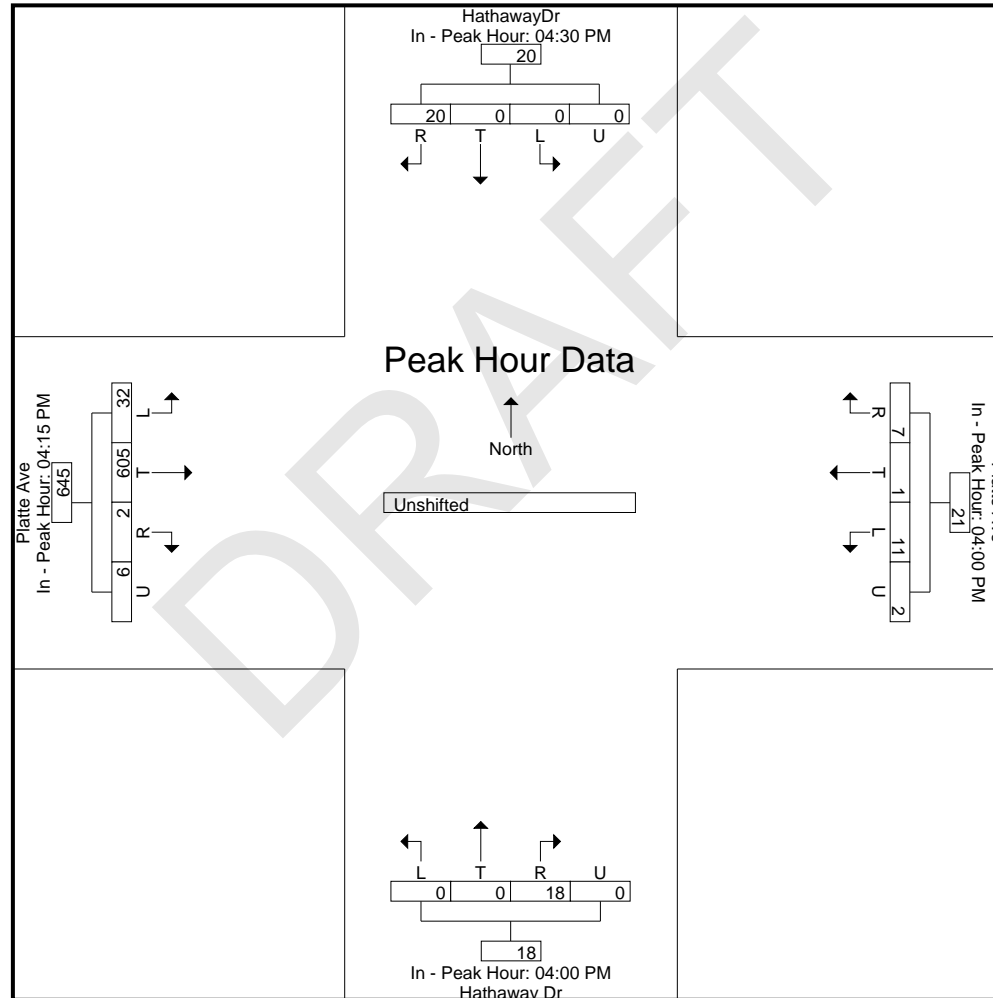
545 E Pikes Peak Ave, Suite 210  
Colorado Springs, CO 80905  
719-633-2868

File Name : Hathaway Dr - Platte Ave PM

Site Code : S214660

Start Date : 7/13/2021

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# LSC Transportation Consultants, Inc.

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

File Name : Hathaway Dr - Platte Frontage Rd AM1  
Site Code : S214660  
Start Date : 7/13/2021  
Page No : 1

## Groups Printed- Bank 1

	Hathaway Dr Southbound					East Frontage Rd Westbound					Diesel Rapair Northbound					West Frontage Rd Eastbound					
Start Time	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	Int. Total
06:30 AM	0	1	4	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
06:45 AM	0	0	9	0	9	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	10
Total	0	1	13	0	14	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	15
07:00 AM	1	1	5	0	7	0	0	0	0	0	0	0	1	0	1	1	0	0	0	1	9
07:15 AM	1	4	7	0	12	0	0	1	0	1	0	0	2	0	2	3	0	0	0	3	18
07:30 AM	0	1	7	0	8	0	0	0	0	0	0	1	0	0	1	3	0	0	0	3	12
07:45 AM	1	0	9	0	10	0	0	0	0	0	0	1	0	0	1	3	0	5	0	8	19
Total	3	6	28	0	37	0	0	1	0	1	0	2	3	0	5	10	0	5	0	15	58
08:00 AM	0	0	6	0	6	0	0	0	0	0	0	1	0	0	1	10	0	0	0	10	17
08:15 AM	0	1	2	0	3	0	0	0	0	0	0	0	0	0	0	4	0	0	0	4	7
Grand Total	3	8	49	0	60	0	0	1	0	1	0	3	4	0	7	24	0	5	0	29	97
Apprch %	5	13.3	81.7	0		0	0	100	0		0	42.9	57.1	0		82.8	0	17.2	0		
Total %	3.1	8.2	50.5	0	61.9	0	0	1	0	1	0	3.1	4.1	0	7.2	24.7	0	5.2	0	29.9	

# LSC Transportation Consultants, Inc.

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

File Name : Hathaway Dr - Platte Frontage Rd AM1  
Site Code : S214660  
Start Date : 7/13/2021  
Page No : 2

	Hathaway Dr Southbound					East Frontage Rd Westbound					Diesel Rapair Northbound					West Frontage Rd Eastbound					
Start Time	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	Int. Total
<b>Peak Hour Analysis From 6:30:00 AM to 8:15:00 AM - Peak 1 of 1</b>																					
Peak Hour for Entire Intersection Begins at 7:15:00 AM																					
7:15:00 AM	1	4	7	0	12	0	0	1	0	1	0	0	2	0	2	3	0	0	0	3	18
7:30:00 AM	0	1	7	0	8	0	0	0	0	0	0	1	0	0	1	3	0	0	0	3	12
7:45:00 AM	1	0	9	0	10	0	0	0	0	0	0	1	0	0	1	3	0	5	0	8	19
8:00:00 AM	0	0	6	0	6	0	0	0	0	0	0	1	0	0	1	10	0	0	0	10	17
Total Volume	2	5	29	0	36	0	0	1	0	1	0	3	2	0	5	19	0	5	0	24	66
% App. Total	5.6	13.9	80.6	0		0	0	100	0		0	60	40	0		79.2	0	20.8	0		
PHF	.500	.313	.806	.000	.750	.000	.000	.250	.000	.250	.000	.750	.250	.000	.625	.475	.000	.250	.000	.600	.868

# LSC Transportation Consultants, Inc.

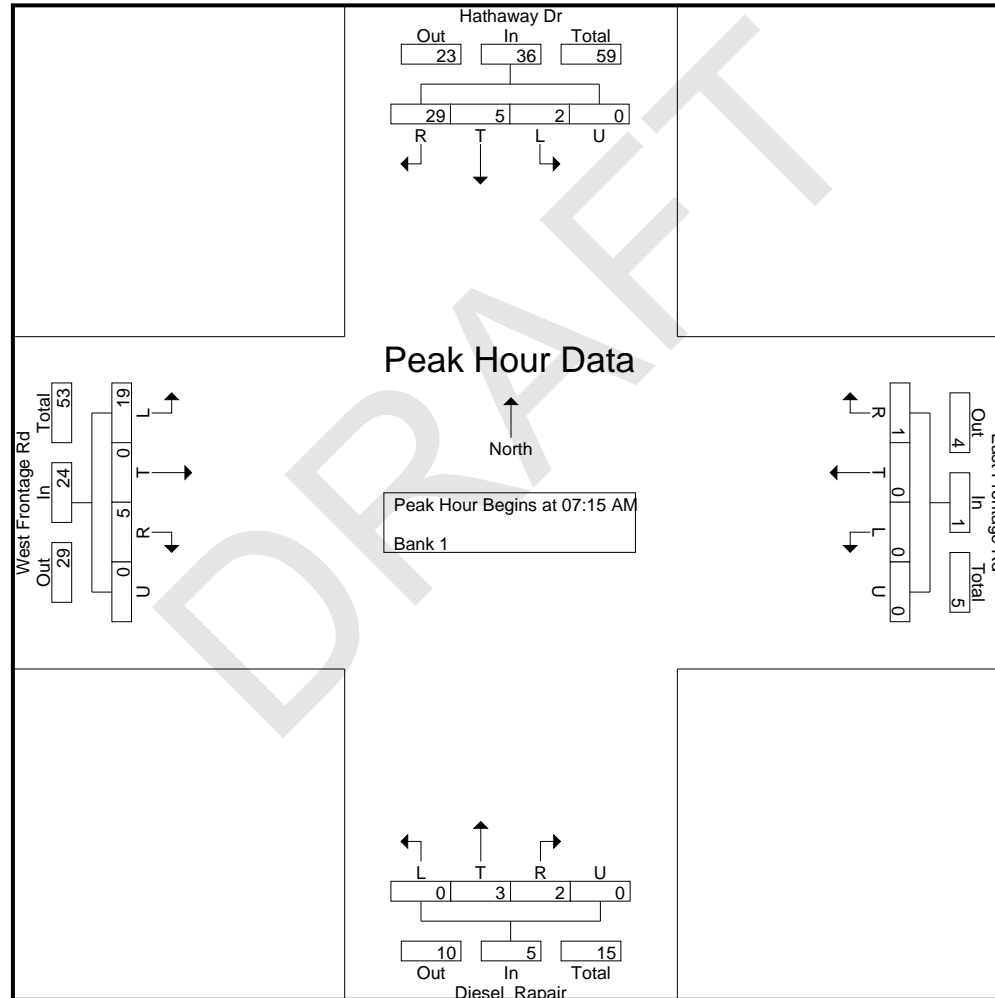
545 E Pikes Peak Ave, Suite 210  
Colorado Springs, CO 80905  
719-633-2868

File Name : Hathaway Dr - Platte Frontage Rd AM1

Site Code : S214660

Start Date : 7/13/2021

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# LSC Transportation Consultants, Inc.

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

File Name : Hathaway Dr - Platte Frontage Rd AM1  
Site Code : S214660  
Start Date : 7/13/2021  
Page No : 4

	Hathaway Dr Southbound					East Frontage Rd Westbound					Diesel Rapair Northbound					West Frontage Rd Eastbound					
Start Time	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	Int. Total
<b>Peak Hour Analysis From 6:30:00 AM to 8:15:00 AM - Peak 1 of 1</b>																					
Peak Hour for Each Approach Begins at:																					
	7:00:00 AM					6:30:00 AM					6:45:00 AM					7:30:00 AM					
+0 mins.	1	1	5	0	7	0	0	0	0	0	0	0	1	0	1	3	0	0	0	3	
+5 mins.	1	4	7	0	12	0	0	0	0	0	0	0	1	0	1	3	0	5	0	8	
+10 mins.	0	1	7	0	8	0	0	0	0	0	0	0	2	0	2	10	0	0	0	10	
+15 mins.	1	0	9	0	10	0	0	1	0	1	0	1	0	0	1	4	0	0	0	4	
Total Volume	3	6	28	0	37	0	0	1	0	1	0	1	4	0	5	20	0	5	0	25	
% App. Total	8.1	16.2	75.7	0		0	0	100	0		0	20	80	0		80	0	20	0		
PHF	.750	.375	.778	.000	.771	.000	.000	.250	.000	.250	.000	.250	.500	.000	.625	.500	.000	.250	.000	.625	

# LSC Transportation Consultants, Inc.

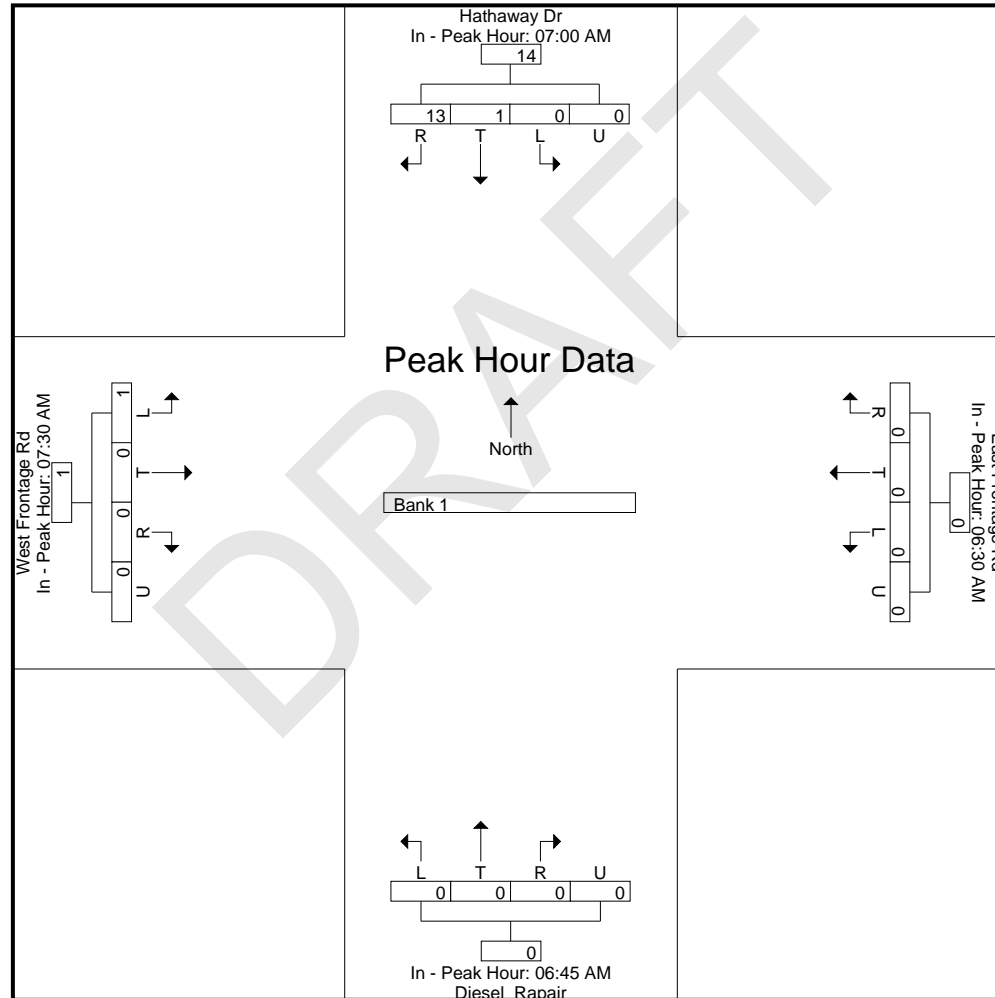
545 E Pikes Peak Ave, Suite 210  
Colorado Springs, CO 80905  
719-633-2868

File Name : Hathaway Dr - Platte Frontage Rd AM1

Site Code : S214660

Start Date : 7/13/2021

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# LSC Transportation Consultants, Inc.

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

File Name : Hathaway Dr - Platte Frontage Rd AM  
Site Code : S214660  
Start Date : 7/13/2021  
Page No : 1

## Groups Printed- Bank 1

	HathawayDr Southbound					East Frontage Rd Westbound					Diesel Repair Northbound					West Frontage Rd Eastbound					
Start Time	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	Int. Total
04:00 PM	2	1	7	0	10	0	0	0	0	0	0	0	0	0	0	14	0	0	0	14	24
04:15 PM	0	0	9	0	9	0	0	2	0	2	0	3	0	0	3	11	0	0	0	11	25
04:30 PM	1	0	6	0	7	0	0	0	0	0	0	0	1	0	1	10	1	0	0	11	19
04:45 PM	1	0	11	0	12	0	1	1	0	2	0	1	1	0	2	10	0	1	0	11	27
Total	4	1	33	0	38	0	1	3	0	4	0	4	2	0	6	45	1	1	0	47	95
05:00 PM	0	0	3	0	3	0	0	0	0	0	0	0	0	0	0	9	0	0	0	9	12
05:15 PM	0	0	4	0	4	0	0	1	0	1	0	0	0	0	0	7	0	0	0	7	12
05:30 PM	0	1	1	0	2	0	1	1	0	2	0	2	0	0	2	1	0	0	0	1	7
05:45 PM	0	0	3	0	3	0	0	0	0	0	0	1	0	0	1	4	1	0	0	5	9
Total	0	1	11	0	12	0	1	2	0	3	0	3	0	0	3	21	1	0	0	22	40
Grand Total	4	2	44	0	50	0	2	5	0	7	0	7	2	0	9	66	2	1	0	69	135
Apprch %	8	4	88	0		0	28.6	71.4	0		0	77.8	22.2	0		95.7	2.9	1.4	0		
Total %	3	1.5	32.6	0	37	0	1.5	3.7	0	5.2	0	5.2	1.5	0	6.7	48.9	1.5	0.7	0	51.1	

# LSC Transportation Consultants, Inc.

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

File Name : Hathaway Dr - Platte Frontage Rd AM  
Site Code : S214660  
Start Date : 7/13/2021  
Page No : 2

	HathawayDr Southbound					East Frontage Rd Westbound					Diesel Repair Northbound					West Frontage Rd Eastbound					
Start Time	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	Int. Total
<b>Peak Hour Analysis From 4:00:00 PM to 5:45:00 PM - Peak 1 of 1</b>																					
Peak Hour for Entire Intersection Begins at 4:00:00 PM																					
4:00:00 PM	2	1	7	0	10	0	0	0	0	0	0	0	0	0	0	14	0	0	0	14	24
4:15:00 PM	0	0	9	0	9	0	0	2	0	2	0	3	0	0	3	11	0	0	0	11	25
4:30:00 PM	1	0	6	0	7	0	0	0	0	0	0	0	1	0	1	10	1	0	0	11	19
4:45:00 PM	1	0	11	0	12	0	1	1	0	2	0	1	1	0	2	10	0	1	0	11	27
Total Volume	4	1	33	0	38	0	1	3	0	4	0	4	2	0	6	45	1	1	0	47	95
% App. Total	10.5	2.6	86.8	0		0	25	75	0		0	66.7	33.3	0		95.7	2.1	2.1	0		
PHF	.500	.250	.750	.000	.792	.000	.250	.375	.000	.500	.000	.333	.500	.000	.500	.804	.250	.250	.000	.839	.880

# LSC Transportation Consultants, Inc.

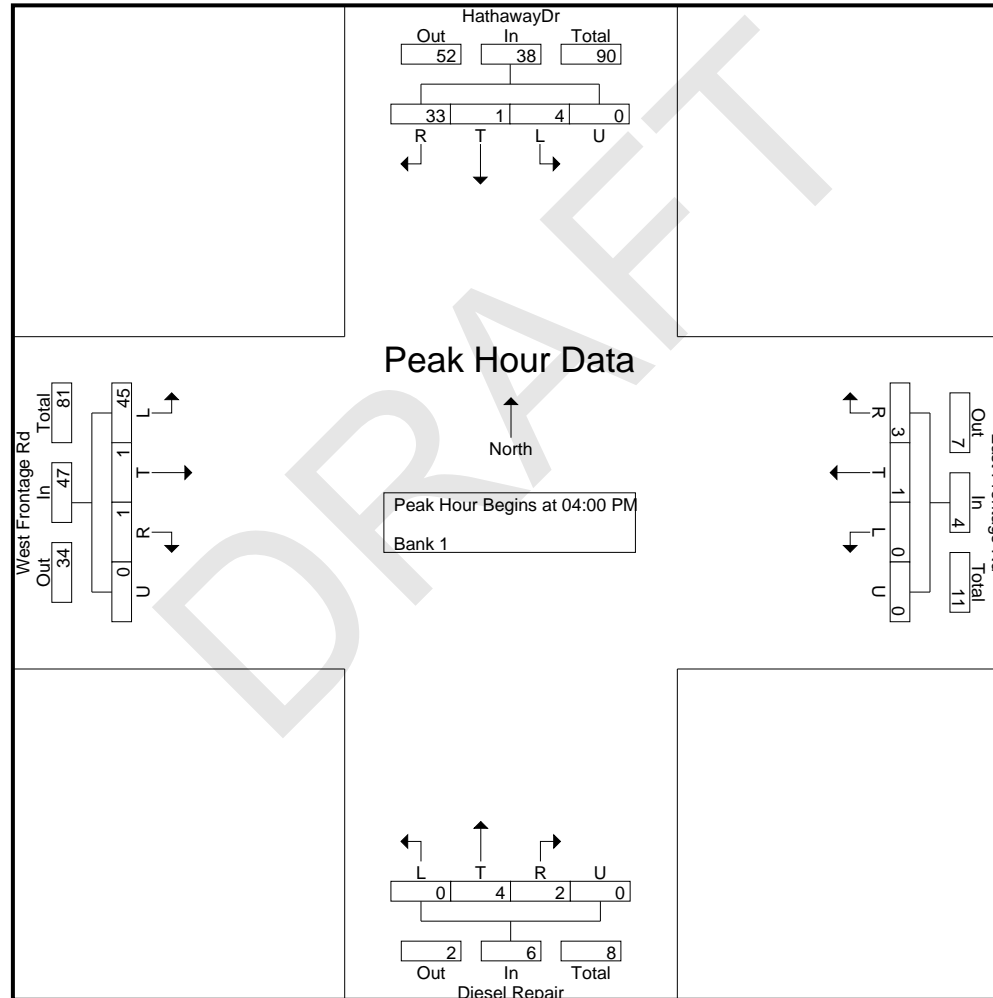
545 E Pikes Peak Ave, Suite 210  
Colorado Springs, CO 80905  
719-633-2868

File Name : Hathaway Dr - Platte Frontage Rd AM

Site Code : S214660

Start Date : 7/13/2021

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# LSC Transportation Consultants, Inc.

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

File Name : Hathaway Dr - Platte Frontage Rd AM  
Site Code : S214660  
Start Date : 7/13/2021  
Page No : 4

	HathawayDr Southbound					East Frontage Rd Westbound					Diesel Repair Northbound					West Frontage Rd Eastbound					
Start Time	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	Int. Total
<b>Peak Hour Analysis From 4:00:00 PM to 5:45:00 PM - Peak 1 of 1</b>																					
Peak Hour for Each Approach Begins at:																					
	4:00:00 PM					4:45:00 PM					4:00:00 PM					4:00:00 PM					
+0 mins.	2	1	7	0	10	0	1	1	0	2	0	0	0	0	0	14	0	0	0	0	14
+5 mins.	0	0	9	0	9	0	0	0	0	0	0	3	0	0	3	11	0	0	0	0	11
+10 mins.	1	0	6	0	7	0	0	1	0	1	0	0	1	0	1	10	1	0	0	0	11
+15 mins.	1	0	11	0	12	0	1	1	0	2	0	1	1	0	2	10	0	1	0	0	11
Total Volume	4	1	33	0	38	0	2	3	0	5	0	4	2	0	6	45	1	1	0	0	47
% App. Total	10.5	2.6	86.8	0		0	40	60	0		0	66.7	33.3	0		95.7	2.1	2.1	0		
PHF	.500	.250	.750	.000	.792	.000	.500	.750	.000	.625	.000	.333	.500	.000	.500	.804	.250	.250	.000		.839

# LSC Transportation Consultants, Inc.

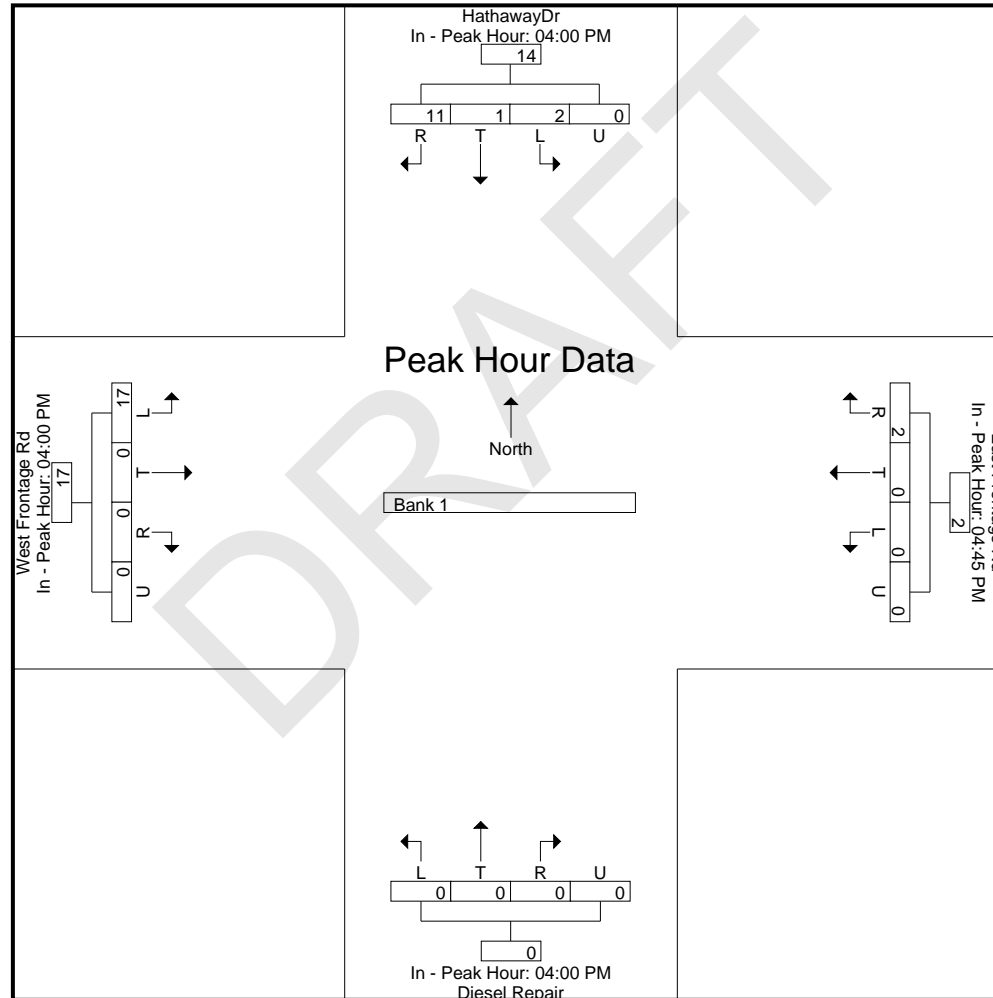
545 E Pikes Peak Ave, Suite 210  
Colorado Springs, CO 80905  
719-633-2868

File Name : Hathaway Dr - Platte Frontage Rd AM

Site Code : S214660

Start Date : 7/13/2021

Page No : 5



# LSC Transportation Consultants, Inc.

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

File Name : Motel Rd - Platte Ave AM  
Site Code : S214610  
Start Date : 7/14/2021  
Page No : 1

## Groups Printed- Unshifted

Start Time	Southbound					Platte Ave Westbound					Motel Rd Northbound					Platte Ave Eastbound					Int. Total
	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	
06:30 AM	0	0	0	0	0	0	531	0	0	531	0	0	6	0	6	0	0	10	0	10	547
06:45 AM	1	0	0	0	1	0	559	0	0	559	0	0	10	0	10	0	0	16	0	16	586
Total	1	0	0	0	1	0	1090	0	0	1090	0	0	16	0	16	0	0	26	0	26	1133
07:00 AM	0	0	0	0	0	0	537	0	0	537	0	0	8	0	8	0	0	20	0	20	565
07:15 AM	0	0	0	0	0	0	598	0	0	598	0	0	11	0	11	0	0	15	0	15	624
07:30 AM	0	0	0	0	0	0	674	0	0	674	0	0	8	0	8	0	0	18	0	18	700
07:45 AM	0	0	0	0	0	0	565	0	0	565	0	0	7	0	7	0	0	12	0	12	584
Total	0	0	0	0	0	0	2374	0	0	2374	0	0	34	0	34	0	0	65	0	65	2473
08:00 AM	1	0	0	0	1	0	471	0	0	471	0	0	21	0	21	0	0	7	0	7	500
08:15 AM	0	0	0	0	0	0	476	0	0	476	0	0	11	0	11	0	0	12	0	12	499
Grand Total	2	0	0	0	2	0	4411	0	0	4411	0	0	82	0	82	0	0	110	0	110	4605
Apprch %	100	0	0	0		0	100	0	0		0	0	100	0		0	0	100	0		
Total %	0	0	0	0	0	0	95.8	0	0	95.8	0	0	1.8	0	1.8	0	0	2.4	0	2.4	

# LSC Transportation Consultants, Inc.

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

File Name : Motel Rd - Platte Ave AM  
Site Code : S214610  
Start Date : 7/14/2021  
Page No : 2

	Southbound					Platte Ave Westbound					Motel Rd Northbound					Platte Ave Eastbound					
Start Time	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	Int. Total
<b>Peak Hour Analysis From 6:30:00 AM to 8:15:00 AM - Peak 1 of 1</b>																					
Peak Hour for Entire Intersection Begins at 6:45:00 AM																					
6:45:00 AM	1	0	0	0	1	0	559	0	0	559	0	0	10	0	10	0	0	16	0	16	586
7:00:00 AM	0	0	0	0	0	0	537	0	0	537	0	0	8	0	8	0	0	20	0	20	565
7:15:00 AM	0	0	0	0	0	0	598	0	0	598	0	0	11	0	11	0	0	15	0	15	624
7:30:00 AM	0	0	0	0	0	0	674	0	0	674	0	0	8	0	8	0	0	18	0	18	700
Total Volume	1	0	0	0	1	0	2368	0	0	2368	0	0	37	0	37	0	0	69	0	69	2475
% App. Total	100	0	0	0		0	100	0	0		0	0	100	0		0	0	100	0		
PHF	.250	.000	.000	.000	.250	.000	.878	.000	.000	.878	.000	.000	.841	.000	.841	.000	.000	.863	.000	.863	.884

# LSC Transportation Consultants, Inc.

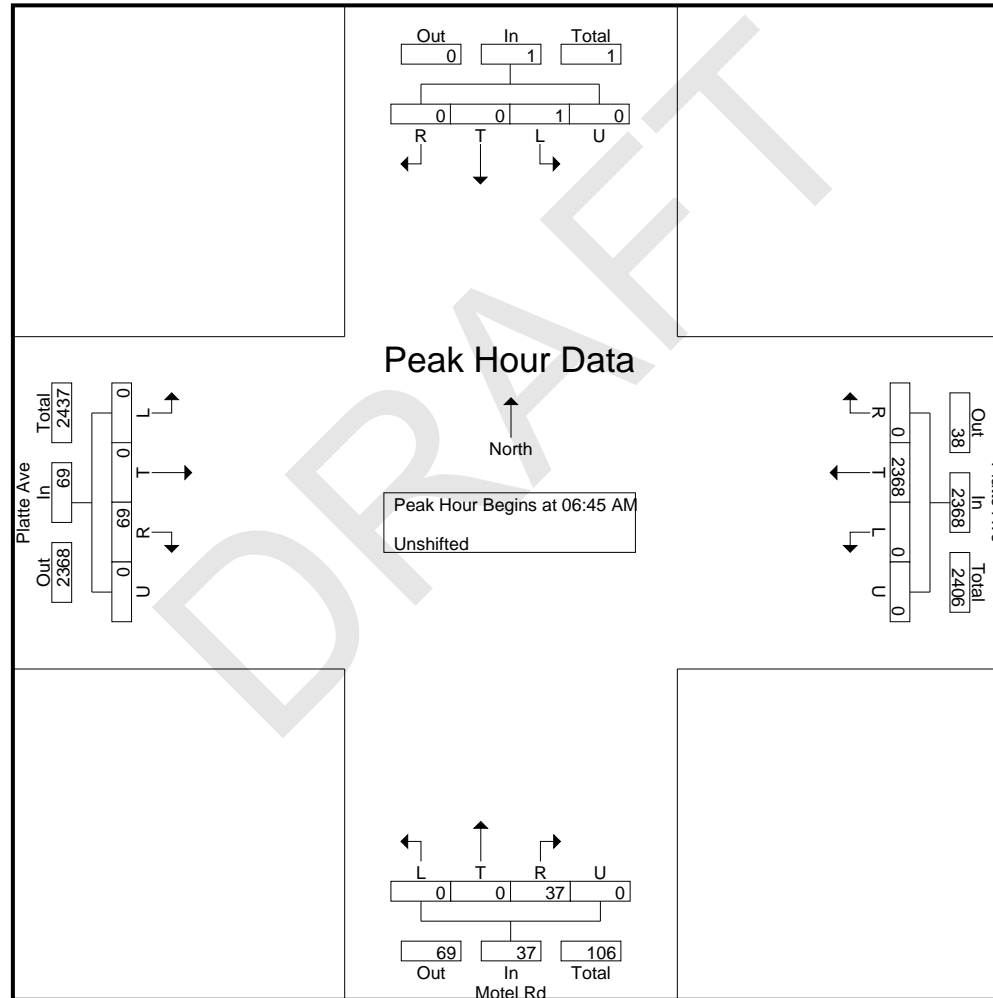
545 E Pikes Peak Ave, Suite 210  
Colorado Springs, CO 80905  
719-633-2868

File Name : Motel Rd - Platte Ave AM

Site Code : S214610

Start Date : 7/14/2021

Page No : 3





# LSC Transportation Consultants, Inc.

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

File Name : Motel Rd - Platte Ave AM  
Site Code : S214610  
Start Date : 7/14/2021  
Page No : 4

	Southbound					Platte Ave Westbound					Motel Rd Northbound					Platte Ave Eastbound					
Start Time	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	Int. Total
Peak Hour Analysis From 6:30:00 AM to 8:15:00 AM - Peak 1 of 1																					
Peak Hour for Each Approach Begins at:																					
	6:30:00 AM					7:00:00 AM					7:15:00 AM					6:45:00 AM					
+0 mins.	0	0	0	0	0	0	537	0	0	537	0	0	11	0	11	0	0	16	0	16	
+5 mins.	1	0	0	0	1	0	598	0	0	598	0	0	8	0	8	0	0	20	0	20	
+10 mins.	0	0	0	0	0	0	674	0	0	674	0	0	7	0	7	0	0	15	0	15	
+15 mins.	0	0	0	0	0	0	565	0	0	565	0	0	21	0	21	0	0	18	0	18	
Total Volume	1	0	0	0	1	0	2374	0	0	2374	0	0	47	0	47	0	0	69	0	69	
% App. Total	100	0	0	0		0	100	0	0		0	0	100	0		0	0	100	0		
PHF	.250	.000	.000	.000	.250	.000	.881	.000	.000	.881	.000	.000	.560	.000	.560	.000	.000	.863	.000	.863	

# LSC Transportation Consultants, Inc.

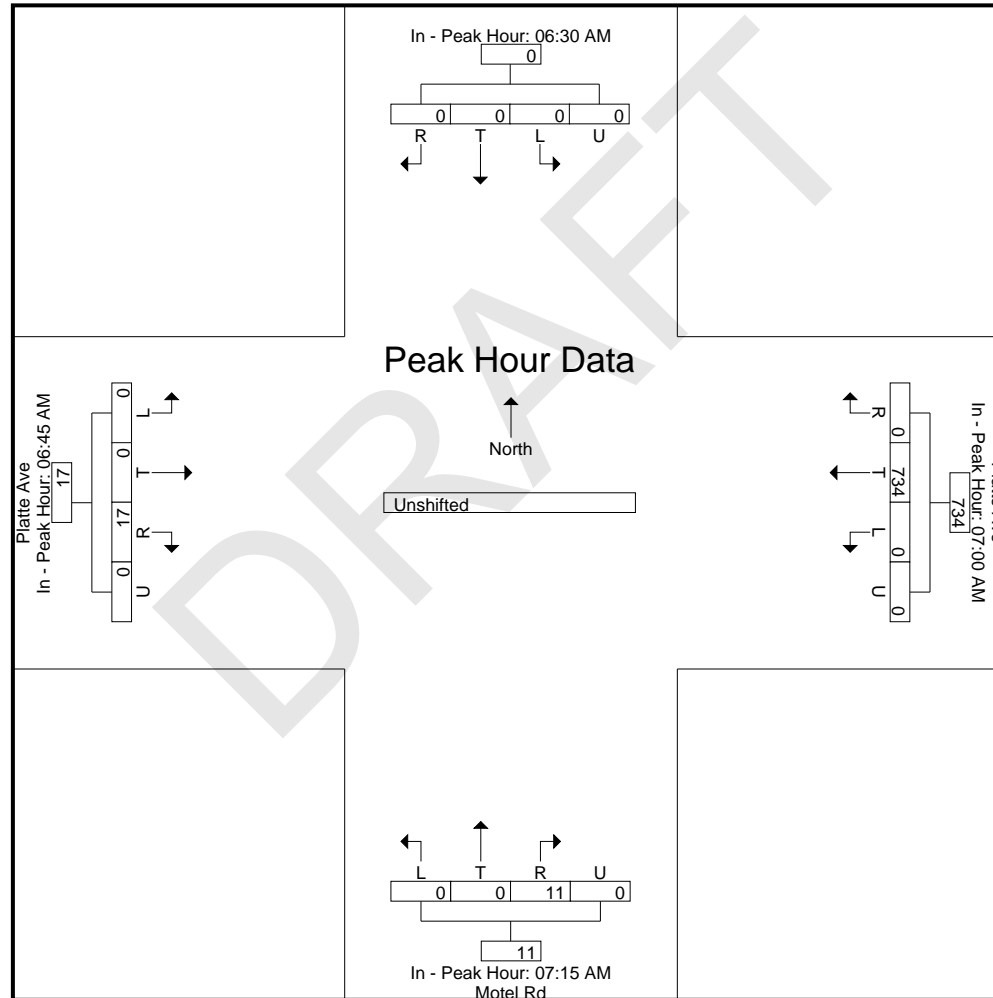
545 E Pikes Peak Ave, Suite 210  
Colorado Springs, CO 80905  
719-633-2868

File Name : Motel Rd - Platte Ave AM

Site Code : S214610

Start Date : 7/14/2021

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# LSC Transportation Consultants, Inc.

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

File Name : Motel Rd - Platte Ave PM1

Site Code : S214660

Start Date : 7/14/2021

Page No : 1

## Groups Printed- Unshifted

Start Time	Southbound					Platte Ave Westbound					Motel Rd Northbound					Platte Ave Eastbound					Int. Total
	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	
04:00 PM	0	0	0	0	0	1	461	0	0	462	0	0	12	0	12	0	0	10	0	10	484
04:15 PM	0	0	0	0	0	1	451	0	0	452	0	0	17	0	17	0	0	20	0	20	489
04:30 PM	0	0	0	0	0	0	460	0	0	460	0	0	8	0	8	0	0	16	0	16	484
04:45 PM	1	0	0	0	1	0	525	0	0	525	0	0	12	0	12	0	0	12	0	12	550
Total	1	0	0	0	1	2	1897	0	0	1899	0	0	49	0	49	0	0	58	0	58	2007
05:00 PM	0	0	0	0	0	0	432	0	0	432	0	0	13	0	13	0	0	6	0	6	451
05:15 PM	0	0	0	0	0	0	445	0	0	445	0	0	13	0	13	0	0	5	0	5	463
05:30 PM	0	0	0	0	0	0	450	0	0	450	0	0	8	0	8	0	0	11	0	11	469
05:45 PM	0	0	0	0	0	0	407	0	0	407	0	0	7	0	7	0	0	10	0	10	424
Total	0	0	0	0	0	0	1734	0	0	1734	0	0	41	0	41	0	0	32	0	32	1807
Grand Total	1	0	0	0	1	2	3631	0	0	3633	0	0	90	0	90	0	0	90	0	90	3814
Apprch %	100	0	0	0		0.1	99.9	0	0		0	0	100	0		0	0	100	0		
Total %	0	0	0	0	0	0.1	95.2	0	0	95.3	0	0	2.4	0	2.4	0	0	2.4	0	2.4	

# LSC Transportation Consultants, Inc.

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

File Name : Motel Rd - Platte Ave PM1

Site Code : S214660

Start Date : 7/14/2021

Page No : 2

	Southbound					Platte Ave Westbound					Motel Rd Northbound					Platte Ave Eastbound					
Start Time	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	Int. Total
<b>Peak Hour Analysis From 4:00:00 PM to 5:45:00 PM - Peak 1 of 1</b>																					
Peak Hour for Entire Intersection Begins at 4:00:00 PM																					
4:00:00 PM	0	0	0	0	0	1	461	0	0	462	0	0	12	0	12	0	0	10	0	10	484
4:15:00 PM	0	0	0	0	0	1	451	0	0	452	0	0	17	0	17	0	0	20	0	20	489
4:30:00 PM	0	0	0	0	0	0	460	0	0	460	0	0	8	0	8	0	0	16	0	16	484
4:45:00 PM	1	0	0	0	1	0	525	0	0	525	0	0	12	0	12	0	0	12	0	12	550
Total Volume	1	0	0	0	1	2	1897	0	0	1899	0	0	49	0	49	0	0	58	0	58	2007
% App. Total	100	0	0	0		0.1	99.9	0	0		0	0	100	0		0	0	100	0		
PHF	.250	.000	.000	.000	.250	.500	.903	.000	.000	.904	.000	.000	.721	.000	.721	.000	.000	.725	.000	.725	.912

# LSC Transportation Consultants, Inc.

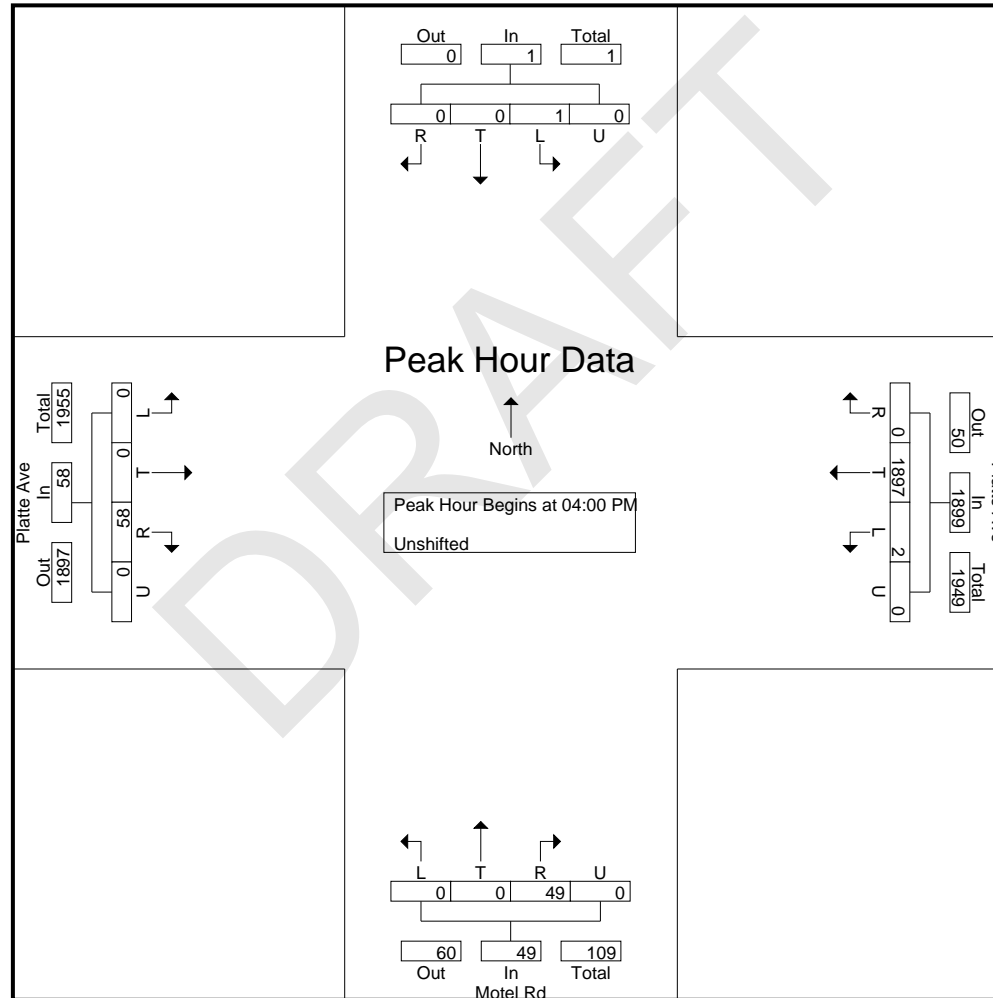
545 E Pikes Peak Ave, Suite 210  
Colorado Springs, CO 80905  
719-633-2868

File Name : Motel Rd - Platte Ave PM1

Site Code : S214660

Start Date : 7/14/2021

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# LSC Transportation Consultants, Inc.

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

File Name : Motel Rd - Platte Ave PM1  
Site Code : S214660  
Start Date : 7/14/2021  
Page No : 4

	Southbound					Platte Ave Westbound					Motel Rd Northbound					Platte Ave Eastbound					
Start Time	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	Int. Total
<b>Peak Hour Analysis From 4:00:00 PM to 5:45:00 PM - Peak 1 of 1</b>																					
Peak Hour for Each Approach Begins at:																					
	4:00:00 PM					4:00:00 PM					4:15:00 PM					4:00:00 PM					
+0 mins.	0	0	0	0	0	1	461	0	0	462	0	0	17	0	17	0	0	10	0	10	
+5 mins.	0	0	0	0	0	1	451	0	0	452	0	0	8	0	8	0	0	20	0	20	
+10 mins.	0	0	0	0	0	0	460	0	0	460	0	0	12	0	12	0	0	16	0	16	
+15 mins.	1	0	0	0	1	0	525	0	0	525	0	0	13	0	13	0	0	12	0	12	
Total Volume	1	0	0	0	1	2	1897	0	0	1899	0	0	50	0	50	0	0	58	0	58	
% App. Total	100	0	0	0		0.1	99.9	0	0		0	0	100	0		0	0	100	0		
PHF	.250	.000	.000	.000	.250	.500	.903	.000	.000	.904	.000	.000	.735	.000	.735	.000	.000	.725	.000	.725	

# LSC Transportation Consultants, Inc.

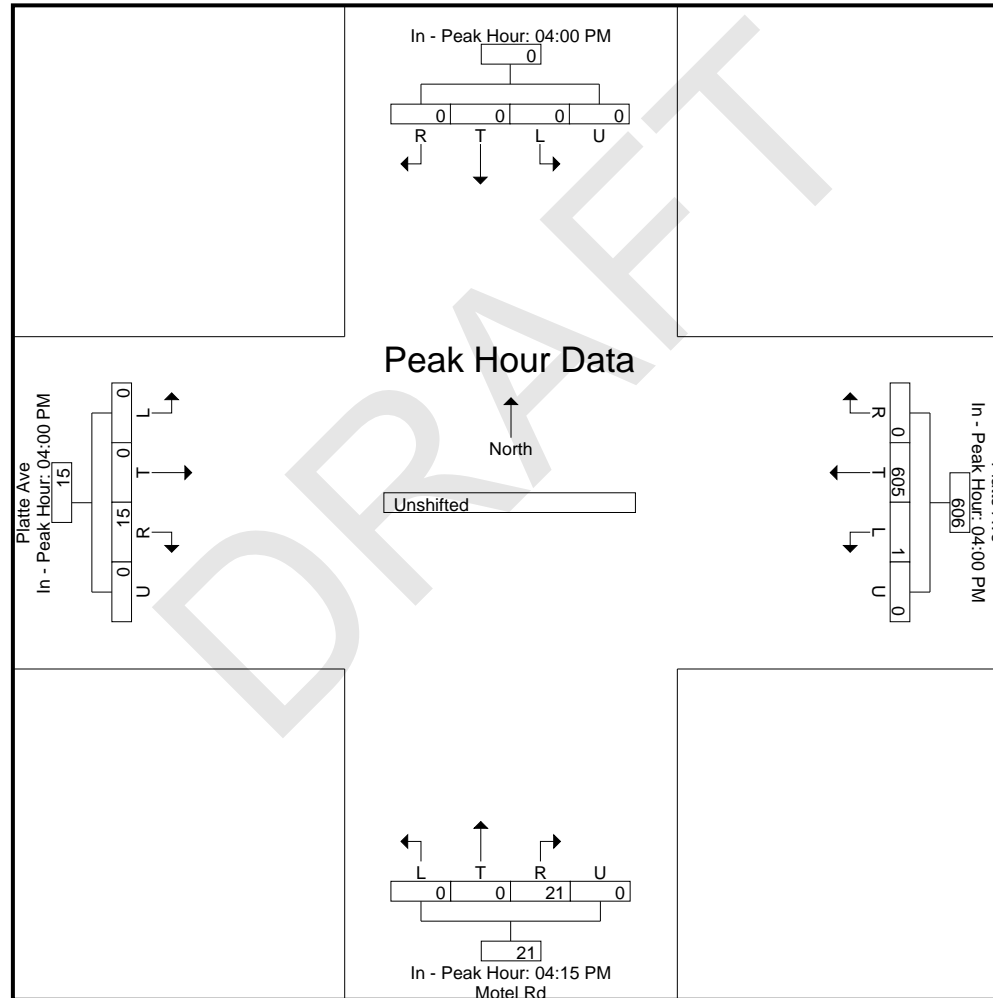
545 E Pikes Peak Ave, Suite 210  
Colorado Springs, CO 80905  
719-633-2868

File Name : Motel Rd - Platte Ave PM1

Site Code : S214660

Start Date : 7/14/2021

Page No : 5



# LSC Transportation Consultants, Inc.

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

File Name : Motel Rd - Platte Frontage Rd AM  
Site Code : S214610  
Start Date : 7/14/2021  
Page No : 1

## Groups Printed- Bank 1

Start Time	Motel Rd Southbound					East Frontage Rd Westbound					Motel Rd Northbound					West Frontage Rd Eastbound					Int. Total
	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	
06:30 AM	8	0	2	0	10	0	1	0	0	1	0	3	0	0	3	3	1	0	0	4	18
06:45 AM	12	1	2	0	15	0	1	2	0	3	0	5	0	0	5	3	0	0	0	3	26
Total	20	1	4	0	25	0	2	2	0	4	0	8	0	0	8	6	1	0	0	7	44
07:00 AM	13	1	3	0	17	0	0	1	0	1	0	5	4	0	9	2	0	0	0	2	29
07:15 AM	13	2	0	0	15	0	1	1	0	2	0	4	0	0	4	5	0	0	0	5	26
07:30 AM	11	0	7	0	18	0	1	1	0	2	0	6	1	0	7	1	0	0	0	1	28
07:45 AM	10	0	2	0	12	1	1	5	0	7	0	0	1	0	1	2	0	0	0	2	22
Total	47	3	12	0	62	1	3	8	0	12	0	15	6	0	21	10	0	0	0	10	105
08:00 AM	4	1	2	0	7	0	1	12	0	13	0	6	0	0	6	4	0	0	0	4	30
08:15 AM	9	1	2	0	12	1	2	4	0	7	0	5	1	0	6	2	0	0	0	2	27
Grand Total	80	6	20	0	106	2	8	26	0	36	0	34	7	0	41	22	1	0	0	23	206
Apprch %	75.5	5.7	18.9	0		5.6	22.2	72.2	0		0	82.9	17.1	0		95.7	4.3	0	0		
Total %	38.8	2.9	9.7	0	51.5	1	3.9	12.6	0	17.5	0	16.5	3.4	0	19.9	10.7	0.5	0	0	11.2	



# LSC Transportation Consultants, Inc.

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

File Name : Motel Rd - Platte Frontage Rd AM  
Site Code : S214610  
Start Date : 7/14/2021  
Page No : 2

	Motel Rd Southbound					East Frontage Rd Westbound					Motel Rd Northbound					West Frontage Rd Eastbound					
Start Time	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	Int. Total
<b>Peak Hour Analysis From 6:30:00 AM to 8:15:00 AM - Peak 1 of 1</b>																					
Peak Hour for Entire Intersection Begins at 6:45:00 AM																					
6:45:00 AM	12	1	2	0	15	0	1	2	0	3	0	5	0	0	5	3	0	0	0	3	26
7:00:00 AM	13	1	3	0	17	0	0	1	0	1	0	5	4	0	9	2	0	0	0	2	29
7:15:00 AM	13	2	0	0	15	0	1	1	0	2	0	4	0	0	4	5	0	0	0	5	26
7:30:00 AM	11	0	7	0	18	0	1	1	0	2	0	6	1	0	7	1	0	0	0	1	28
Total Volume	49	4	12	0	65	0	3	5	0	8	0	20	5	0	25	11	0	0	0	11	109
% App. Total	75.4	6.2	18.5	0		0	37.5	62.5	0		0	80	20	0		100	0	0	0		
PHF	.942	.500	.429	.000	.903	.000	.750	.625	.000	.667	.000	.833	.313	.000	.694	.550	.000	.000	.000	.550	.940

# LSC Transportation Consultants, Inc.

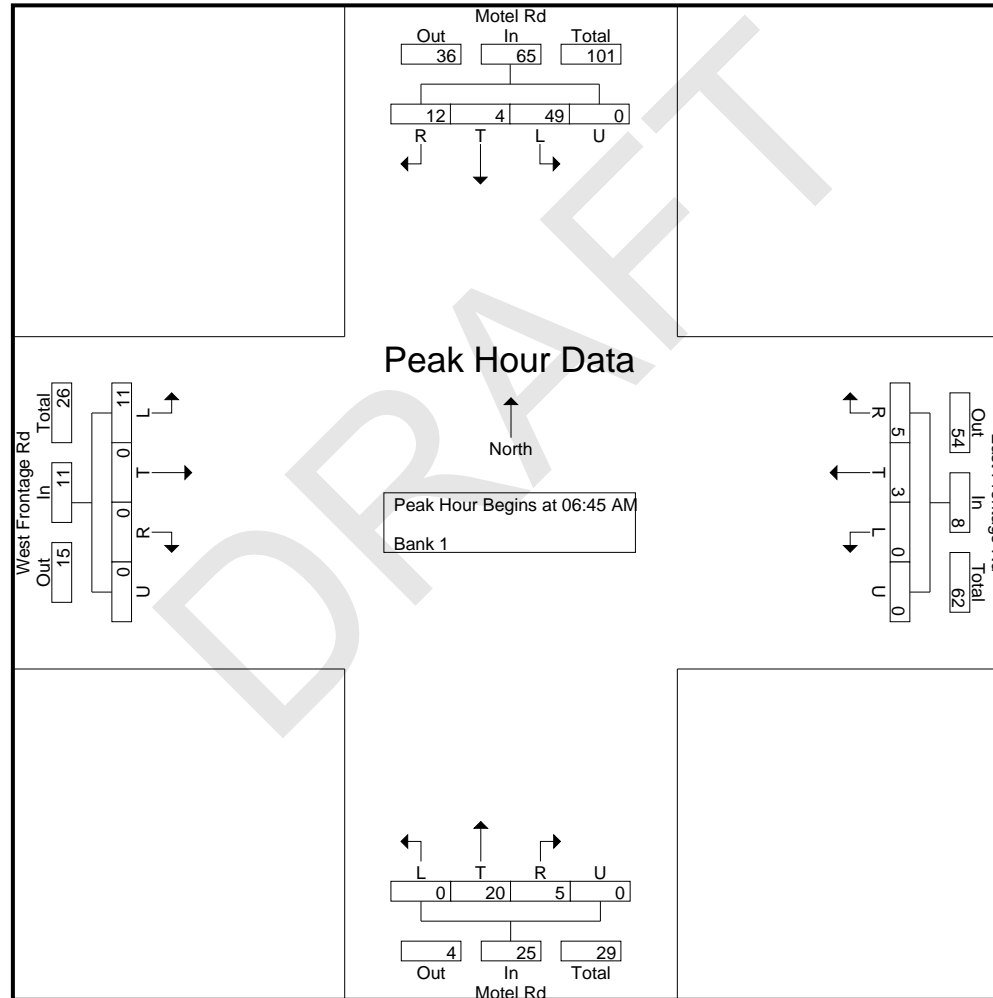
545 E Pikes Peak Ave, Suite 210  
Colorado Springs, CO 80905  
719-633-2868

File Name : Motel Rd - Platte Frontage Rd AM

Site Code : S214610

Start Date : 7/14/2021

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# LSC Transportation Consultants, Inc.

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

File Name : Motel Rd - Platte Frontage Rd AM  
Site Code : S214610  
Start Date : 7/14/2021  
Page No : 4

	Motel Rd Southbound					East Frontage Rd Westbound					Motel Rd Northbound					West Frontage Rd Eastbound					
Start Time	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	Int. Total
Peak Hour Analysis From 6:30:00 AM to 8:15:00 AM - Peak 1 of 1																					
Peak Hour for Each Approach Begins at:																					
	6:45:00 AM					7:30:00 AM					6:45:00 AM					6:30:00 AM					
+0 mins.	12	1	2	0	15	0	1	1	0	2	0	5	0	0	5	3	1	0	0	4	
+5 mins.	13	1	3	0	17	1	1	5	0	7	0	5	4	0	9	3	0	0	0	3	
+10 mins.	13	2	0	0	15	0	1	12	0	13	0	4	0	0	4	2	0	0	0	2	
+15 mins.	11	0	7	0	18	1	2	4	0	7	0	6	1	0	7	5	0	0	0	5	
Total Volume	49	4	12	0	65	2	5	22	0	29	0	20	5	0	25	13	1	0	0	14	
% App. Total	75.4	6.2	18.5	0		6.9	17.2	75.9	0		0	80	20	0		92.9	7.1	0	0		
PHF	.942	.500	.429	.000	.903	.500	.625	.458	.000	.558	.000	.833	.313	.000	.694	.650	.250	.000	.000	.700	

# LSC Transportation Consultants, Inc.

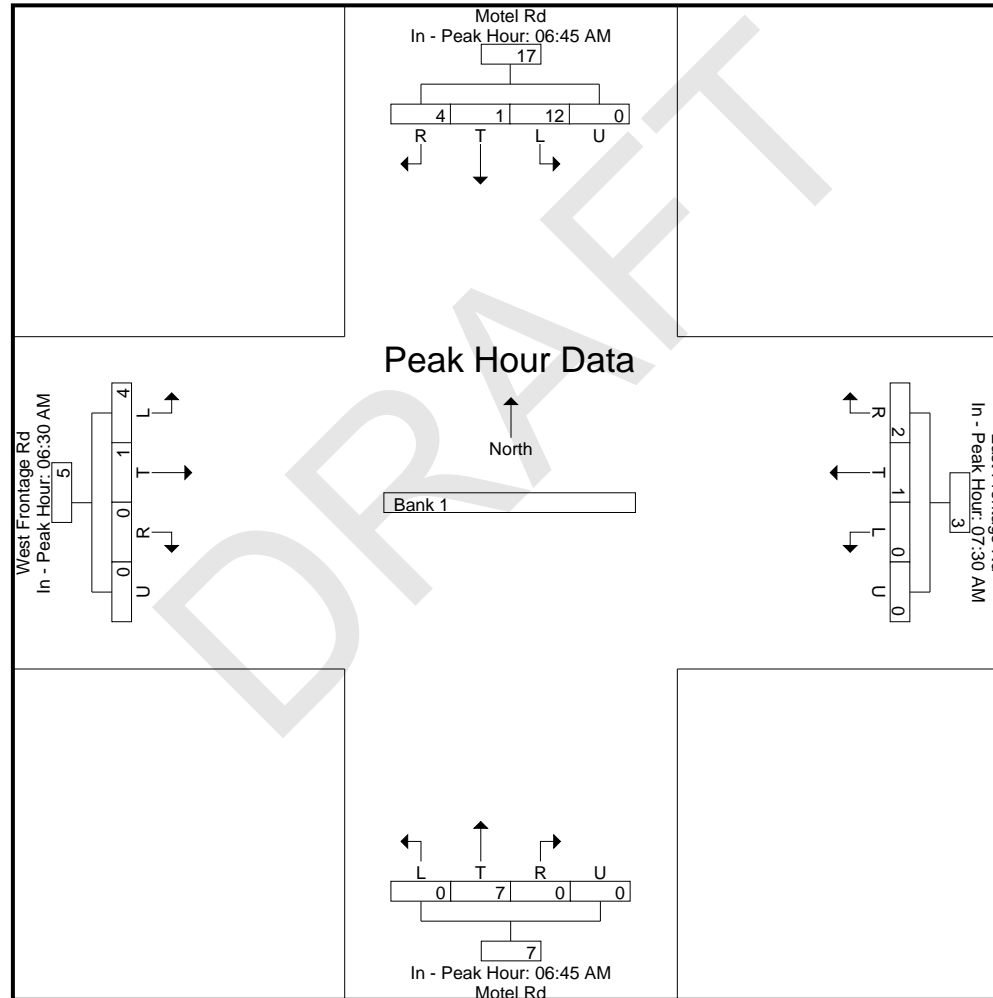
545 E Pikes Peak Ave, Suite 210  
Colorado Springs, CO 80905  
719-633-2868

File Name : Motel Rd - Platte Frontage Rd AM

Site Code : S214610

Start Date : 7/14/2021

Page No : 5



# LSC Transportation Consultants, Inc.

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

File Name : Motel Rd - Platte Ave PM  
Site Code : S214660  
Start Date : 7/14/2021  
Page No : 1

## Groups Printed- Bank 1

Start Time	Motel Rd Southbound					N Frontage Rd Westbound					Motel Rd Northbound					S Frontage rd Eastbound					Int. Total
	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	
04:00 PM	2	4	5	0	11	0	2	5	0	7	0	3	0	0	3	4	1	1	0	6	27
04:15 PM	9	0	9	0	18	0	3	5	0	8	0	2	1	0	3	10	0	0	0	10	39
04:30 PM	3	10	3	0	16	1	0	3	0	4	0	0	0	0	0	5	2	0	0	7	27
04:45 PM	1	9	1	0	11	1	2	1	0	4	0	5	0	0	5	6	1	0	0	7	27
Total	15	23	18	0	56	2	7	14	0	23	0	10	1	0	11	25	4	1	0	30	120
05:00 PM	3	2	1	0	6	0	3	8	0	11	0	1	0	0	1	4	1	0	0	5	23
05:15 PM	1	4	0	0	5	0	0	7	0	7	0	2	0	0	2	4	0	0	0	4	18
05:30 PM	2	6	3	0	11	1	1	4	0	6	0	3	0	0	3	1	0	0	0	1	21
05:45 PM	2	7	1	0	10	5	1	2	0	8	0	4	1	0	5	1	1	0	0	2	25
Total	8	19	5	0	32	6	5	21	0	32	0	10	1	0	11	10	2	0	0	12	87
Grand Total	23	42	23	0	88	8	12	35	0	55	0	20	2	0	22	35	6	1	0	42	207
Apprch %	26.1	47.7	26.1	0		14.5	21.8	63.6	0		0	90.9	9.1	0		83.3	14.3	2.4	0		
Total %	11.1	20.3	11.1	0	42.5	3.9	5.8	16.9	0	26.6	0	9.7	1	0	10.6	16.9	2.9	0.5	0	20.3	

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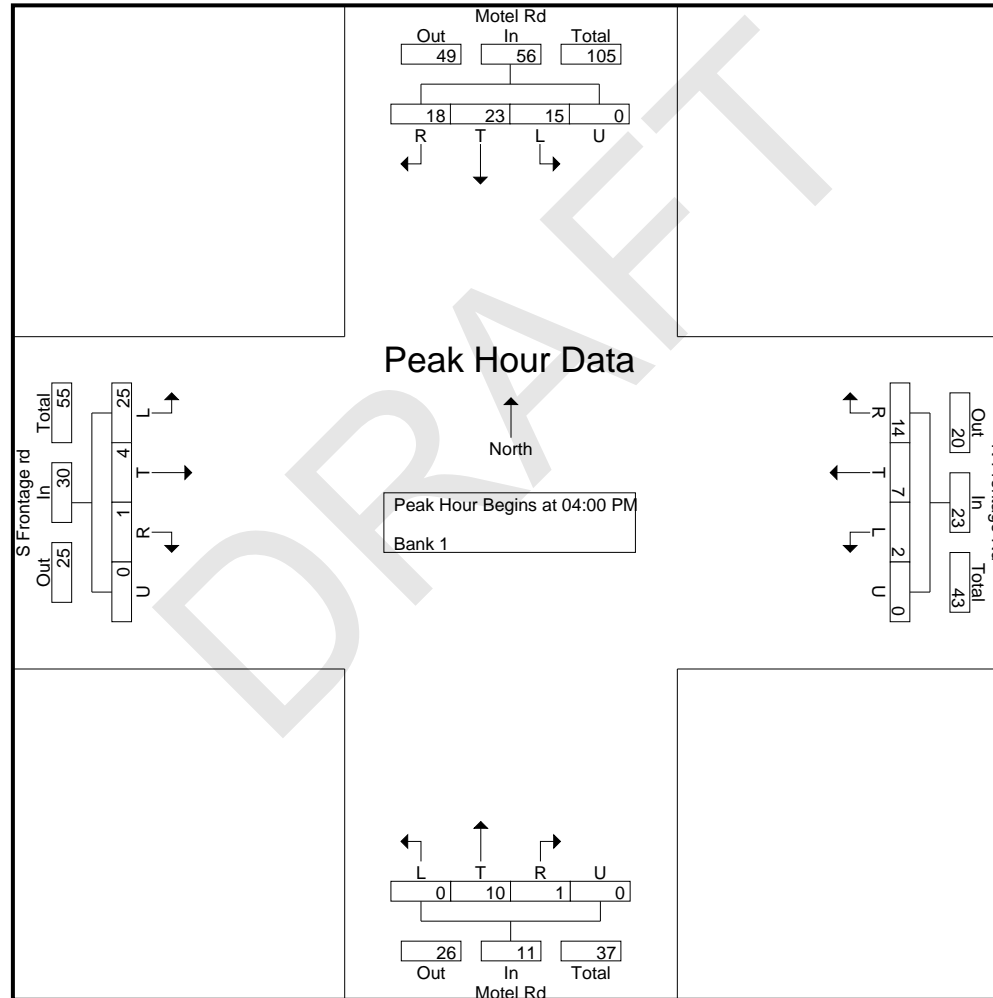
File Name : Motel Rd - Platte Ave PM  
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	Motel Rd Southbound					N Frontage Rd Westbound					Motel Rd Northbound					S Frontage rd Eastbound					
Start Time	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	Int. Total
<b>Peak Hour Analysis From 4:00:00 PM to 5:45:00 PM - Peak 1 of 1</b>																					
Peak Hour for Entire Intersection Begins at 4:00:00 PM																					
4:00:00 PM	2	4	5	0	11	0	2	5	0	7	0	3	0	0	3	4	1	1	0	6	27
4:15:00 PM	9	0	9	0	18	0	3	5	0	8	0	2	1	0	3	10	0	0	0	10	39
4:30:00 PM	3	10	3	0	16	1	0	3	0	4	0	0	0	0	0	5	2	0	0	7	27
4:45:00 PM	1	9	1	0	11	1	2	1	0	4	0	5	0	0	5	6	1	0	0	7	27
Total Volume	15	23	18	0	56	2	7	14	0	23	0	10	1	0	11	25	4	1	0	30	120
% App. Total	26.8	41.1	32.1	0		8.7	30.4	60.9	0		0	90.9	9.1	0		83.3	13.3	3.3	0		
PHF	.417	.575	.500	.000	.778	.500	.583	.700	.000	.719	.000	.500	.250	.000	.550	.625	.500	.250	.000	.750	.769

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	Motel Rd Southbound					N Frontage Rd Westbound					Motel Rd Northbound					S Frontage rd Eastbound					
Start Time	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	Int. Total
Peak Hour Analysis From 4:00:00 PM to 5:45:00 PM - Peak 1 of 1																					
Peak Hour for Each Approach Begins at:																					
	4:00:00 PM					5:00:00 PM					4:00:00 PM					4:00:00 PM					
+0 mins.	2	4	5	0	11	0	3	8	0	11	0	3	0	0	3	4	1	1	0	6	
+5 mins.	9	0	9	0	18	0	0	7	0	7	0	2	1	0	3	10	0	0	0	10	
+10 mins.	3	10	3	0	16	1	1	4	0	6	0	0	0	0	0	5	2	0	0	7	
+15 mins.	1	9	1	0	11	5	1	2	0	8	0	5	0	0	5	6	1	0	0	7	
Total Volume	15	23	18	0	56	6	5	21	0	32	0	10	1	0	11	25	4	1	0	30	
% App. Total	26.8	41.1	32.1	0		18.8	15.6	65.6	0		0	90.9	9.1	0		83.3	13.3	3.3	0		
PHF	.417	.575	.500	.000	.778	.300	.417	.656	.000	.727	.000	.500	.250	.000	.550	.625	.500	.250	.000	.750	



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File Name : Motel Rd - Platte Ave PM

Site Code : S214660

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