



January 13, 2025

Mr. Rodrigo Cortina  
Griffin Development LLC  
701 W. Lionshead Circle  
Vail, CO 81657

Re: Red Mountain Ranch  
Eagle, CO  
LSC #240790

Dear Mr. Cortina:

In response to your request, LSC Transportation Consultants, Inc. has prepared this traffic impact analysis for the proposed Red Mountain Ranch development. As shown on Figure 1, the site is located south of US Highway 6 and east of Eby Creek Road in Eagle, Colorado.

## REPORT CONTENTS

The report contains the following: the existing roadway and traffic conditions in the vicinity of the site including the lane geometries, traffic controls, posted speed limits, etc.; the existing weekday peak-hour traffic volumes; the typical weekday site-generated traffic volume projections for the site; the assignment of the projected traffic volumes to the area roadways; the projected background and resulting total traffic volumes on the area roadways; the site's projected traffic impacts; and any recommended roadway improvements to mitigate growth in background traffic or from the impact of the site. All work was completed per the approved CDOT methodology form which is attached for reference.

## LAND USE AND ACCESS

The site is proposed to include 12 single-family detached dwelling units, 12 duplex dwelling units, 42 townhome dwelling units, a 60-room hotel, and a 3,000 square-foot restaurant. Emergency-only access is proposed to US 6 aligning with Nogal Road and full movement access is proposed to the east of Nogal Road. The conceptual site plan is shown in Figure 2.

## ROADWAY AND TRAFFIC CONDITIONS

### Area Roadways

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

- **US Highway 6 (US 6)** is an east-west, two-lane state highway roadway adjacent to the site. It is classified as R-A (Regional Highway) by CDOT. The posted speed limit transitions from

45 mph to 55 mph adjacent to the site. The proposed public access intersection is located in the 55 mph section. The CDOT straight line diagram is attached.

- **Nogal Road** is an east-west, two-lane local access roadway north of the site. The intersection with US 6 is stop-sign controlled with auxiliary turn lanes. The proposed western site access will align with Nogal Road.

### **Existing Traffic Conditions**

Figures 3a and 3b show the existing December, 2024 and July, 2024 traffic volumes, existing traffic control, and lane geometry in the site's vicinity on a typical weekday. The weekday peak-hour traffic volumes and daily traffic counts are from the attached traffic counts conducted by Counter Measures in December, 2024. The traffic volumes in Figure 3a were adjusted higher by a factor of 1.386 based on seasonal CDOT data from the continuous count station (Station ID: 000011). The raw count data and the adjustment calculations are attached.

### **2027 and 2045 Background Traffic**

Figure 4 shows the estimated 2027 background traffic and Figure 5 shows the estimated 2045 background traffic. The CDOT 20-year factor for US 6 is currently 1.33 which would convert to an annual growth rate about 1.44 percent but a higher rate of 2.54 percent was used to be consistent with the January 2020 *Red Mountain Ranch TIA* by McDowell Engineering.

### **Existing, 2027, and 2045 Background Levels of Service**

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

The intersections in the study area were analyzed as appropriate to determine the existing, 2027, and 2045 background levels of service using Synchro. Table 1 shows the level of service analysis results. The level of service reports are attached.

1. **US Highway 6/Nogal Road:** All movements at this unsignalized intersection currently operate at LOS "B" or better during both morning and afternoon peak-hours and are expected to do so through 2045.
2. **US Highway 6/Site Access:** This intersection was analyzed only in the total traffic scenarios.

### **TRIP GENERATION**

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

The site is projected to generate about 1,302 vehicle-trips on the average weekday, with about half entering and half exiting during a 24-hour period. During the morning peak-hour, which

generally occurs for one hour between 6:30 and 8:30 a.m., about 39 vehicles would enter and about 50 vehicles would exit the site. During the afternoon peak-hour, which generally occurs for one hour between 4:00 and 6:00 p.m., about 60 vehicles would enter and about 45 vehicles would exit. These estimates are expected to be reduced due to passby trips as shown in Table 2.

### **TRIP DISTRIBUTION**

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

### **TRIP ASSIGNMENT**

Figure 7a shows the primary site-generated traffic volumes which are the directional distribution percentages (from Figure 6) applied to the primary trip generation estimate (from Table 2).

Figure 7b shows the passby site-generated traffic volumes shown in the passby trip generation estimate (from Table 2).

### **2027 AND 2045 TOTAL TRAFFIC**

Figure 8 shows the 2027 total traffic which is the sum of the 2027 background traffic volumes (from Figure 4) and the site-generated traffic volumes (from Figures 7a and 7b). Figure 8 also shows the 2027 total traffic lane geometry and traffic control and recommended improvements.

Figure 9 shows the 2045 total traffic which is the sum of the 2045 background traffic volumes (from Figure 5) and the site-generated traffic volumes (from Figures 7a and 7b). Figure 9 also shows the 2045 total traffic lane geometry and traffic control and recommended improvements.

### **PROJECTED LEVELS OF SERVICE**

The intersections in the study area were analyzed to determine the 2027 and 2045 total levels of service. Table 1 shows the level of service analysis results. The level of service reports are attached.

- 1. US Highway 6/Nogal Road:** All movements at this unsignalized intersection are expected to operate at LOS "B" or better during both morning and afternoon peak-hours through 2045.
- 2. US Highway 6/Site Access:** All movements at this unsignalized intersection are expected to operate at LOS "B" or better during both morning and afternoon peak-hours through 2045.

**TURN LANE REQUIREMENTS****Eastbound Right-Turn Lane**

This lane is required when the peak-hour turning volume exceeds 25 vph. The peak turning volume is 46 vph so this lane is required. An appropriate length is 320 feet plus a 180-foot transition taper (15:1) based on the posted speed limit of 55 mph.

**Westbound Left-Turn Lane**

This lane is required when the peak-hour turning volume exceeds 10 vph. The peak turning volume is 14 vph so this lane is required. An appropriate length is 345 feet (320 feet for deceleration plus 25 feet for vehicle storage) plus a 180-foot transition taper (15:1) and 55:1 redirect taper.

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

This lane is required when the posted speed limit is greater than 40 mph and the peak-hour turning volume is greater than 50 vph. The peak turning traffic is 12 vph so this lane is not required.

**CONCLUSIONS AND RECOMMENDATIONS****Trip Generation**

1. The site is projected to generate about 1,302 vehicle-trips on the average weekday, with about half entering and half exiting during a 24-hour period. During the morning peak-hour, about 39 vehicles would enter and about 50 vehicles would exit the site. During the afternoon peak-hour, about 60 vehicles would enter and about 45 vehicles would exit. These estimates are expected to be reduced due to passby trips as shown in Table 2.

**Projected Levels of Service**

2. All movements at the intersections analyzed are expected to operate at LOS "B" or better through 2045.

**Conclusions**

3. The impact of the proposed Red Mountain Ranch development can be accommodated by the existing roadway network.
4. CDOT access permit applications should be submitted to CDOT for the public and emergency-only accesses after initial review by the Town of Eagle. These access permits will be for previously issued but expired permits #319170 and #319172. Previously issued and expired permit #319171 will also need to be updated to close an existing access along the US 6 frontage.

We trust our findings will assist you in gaining approval of the proposed Red Mountain Ranch development. Please contact me if you have any questions or need further assistance.

Sincerely,

LSC TRANSPORTATION CONSULTANTS, INC.

By   
Christopher S. McGranahan, PE  
Principal/President  
PROFESSIONAL ENGINEER  
1-13-25

CSM/wc

Enclosures: Tables 1 and 2  
Figures 1 - 9  
CDOT Approved TIS Methodology Form  
CDOT Straight Line Diagram  
Traffic Count Reports  
CDOT Continuous Count Data and Seasonal Adjustment Calculation  
Level of Service Definitions  
Level of Service Reports

G:\Shared drives\Denver Projects 2021-2030\2024\240790-RedMountainRanch\Report\RedMtnRanch-011325.wpd

**Table 1**  
**Intersection Levels of Service Analysis**  
**Red Mountain Ranch**  
**Eagle, CO**  
**LSC #240790; January, 2025**

Intersection # and Location	Traffic Control	July, 2024		2027		2027		2045		2045	
		Existing Traffic Level of Service AM	Existing Traffic Level of Service PM	Background Traffic Level of Service AM	Background Traffic Level of Service PM	Total Traffic Level of Service AM	Total Traffic Level of Service PM	Background Traffic Level of Service AM	Background Traffic Level of Service PM	Total Traffic Level of Service AM	Total Traffic Level of Service PM
1) <u>Highway 6/Nogal Road</u>	TWSC										
EB Left		A	A	A	A	A	A	A	A	A	A
SB Approach		A	B	A	B	B	B	B	B	B	B
Critical Movement Delay (sec./veh.)		9.7	10.4	9.8	10.7	10.2	11.2	10.3	12.1	10.7	12.8
2) <u>Highway 6/Site Access</u>	TWSC										
NB Left		--	--	--	--	B	B	--	--	B	B
NB Right		--	--	--	--	A	A	--	--	B	A
WB Left		--	--	--	--	A	A	--	--	A	A
Critical Movement Delay (sec./veh.)		--	--	--	--	11.1	11.0	--	--	12.9	12.7

**Table 2**  
**ESTIMATED TRAFFIC GENERATION**  
**Red Mountain Ranch**  
**Eagle, CO**  
**LSC #240790; January, 2025**

Trip Generating Category	Quantity	Trip Generation Rates <sup>(1)</sup>						Total Trips Generated					
		Average Weekday	AM Peak-Hour		PM Peak-Hour			Average Weekday	AM Peak-Hour		PM Peak-Hour		
			In	Out	In	Out		In	Out	In	Out		
<b>CURRENTLY PROPOSED LAND USE</b>													
Single-Family Detached Homes <sup>(2)</sup>	12 DU <sup>(3)</sup>	9.43	0.182	0.518	0.592	0.348		113	2	6	7	4	
Duplexes <sup>(4)</sup>	12 DU <sup>(3)</sup>	7.20	0.120	0.360	0.336	0.234		86	1	4	4	3	
Townhomes <sup>(4)</sup>	42 DU <sup>(3)</sup>	7.20	0.120	0.360	0.336	0.234		302	5	15	14	10	
Hotel <sup>(5)</sup>	60 Rooms	7.99	0.258	0.202	0.301	0.289		479	15	12	18	17	
Restaurant <sup>(6)</sup>	3.00 KSF <sup>(7)</sup>	107.20	5.264	4.307	5.521	3.530		322	16	13	17	11	
<b>Total =</b>													
Passby Trips <sup>(8)</sup> =													
<b>Primary Trips =</b>													

Notes:

(1) Source: *Trip Generation*, Institute of Transportation Engineers, 11th Edition, 2021

(2) ITE Land Use No. 210 - Single-Family Detached Housing

(3) DU - Dwelling Units

(4) ITE Land Use No. 215 - Single Family Attached Housing

(5) ITE Land Use No. 310 - Hotel

(6) ITE Land Use No. 932 - High Turnover (Sit-Down) Restaurant

(7) KSF = 1,000 square feet

(8) A passby trip percentage of 43% was assumed for the restaurant use.

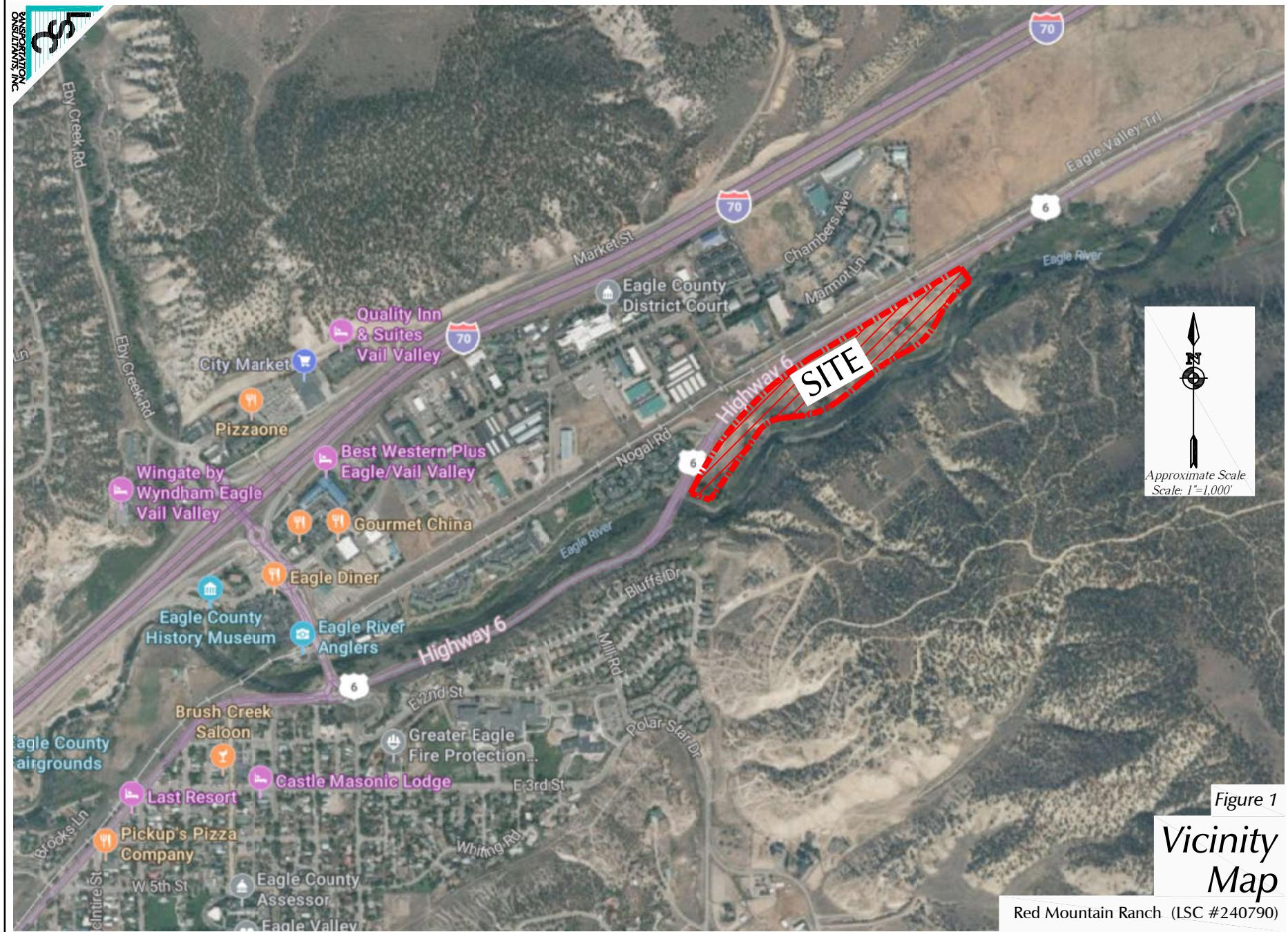


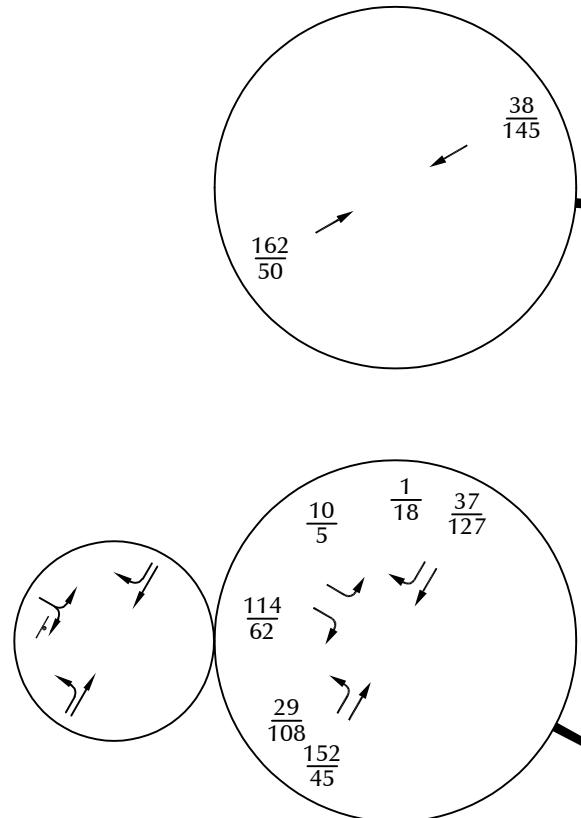
Figure 1

## Vicinity Map

Red Mountain Ranch (LSC #240790)



Figure 2  
**Site Plan**  
Red Mountain Ranch (LSC #240790)



LEGEND:

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

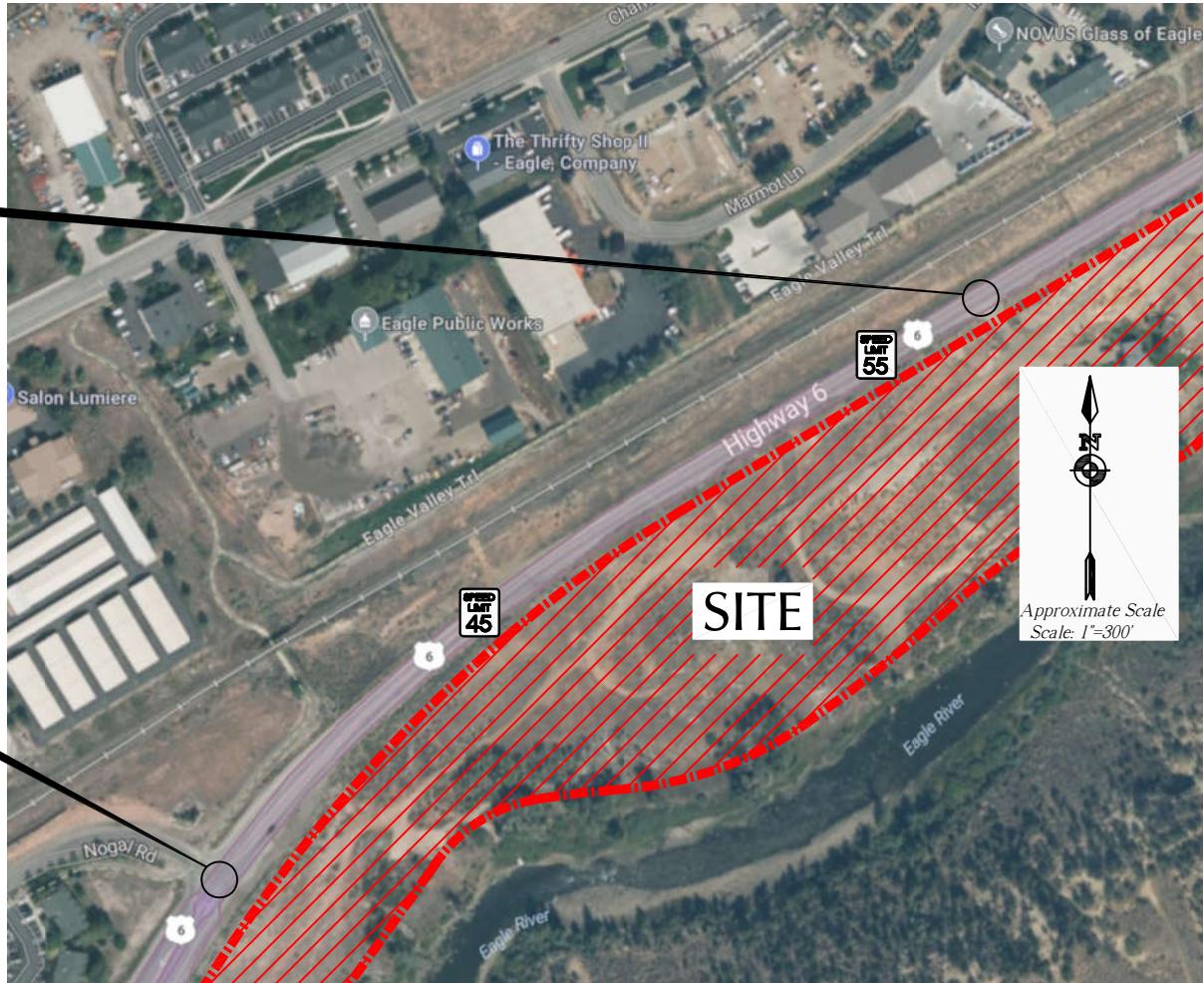
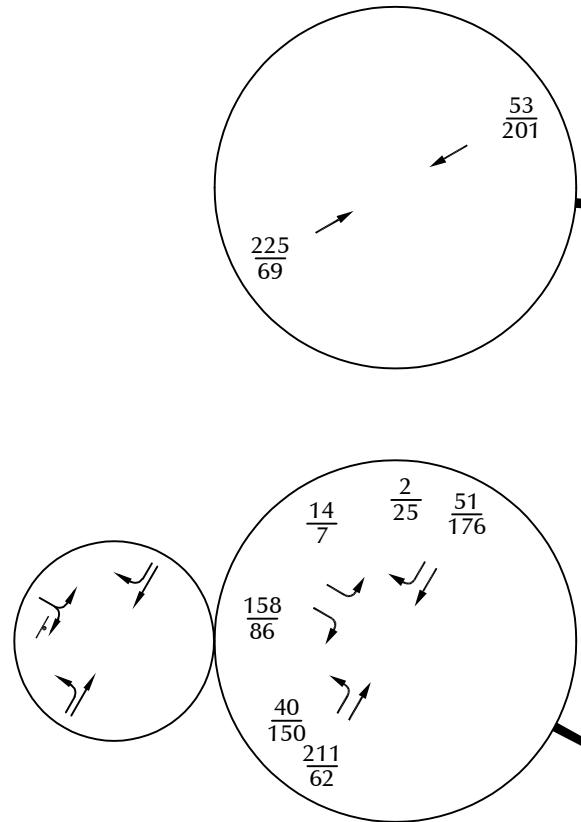


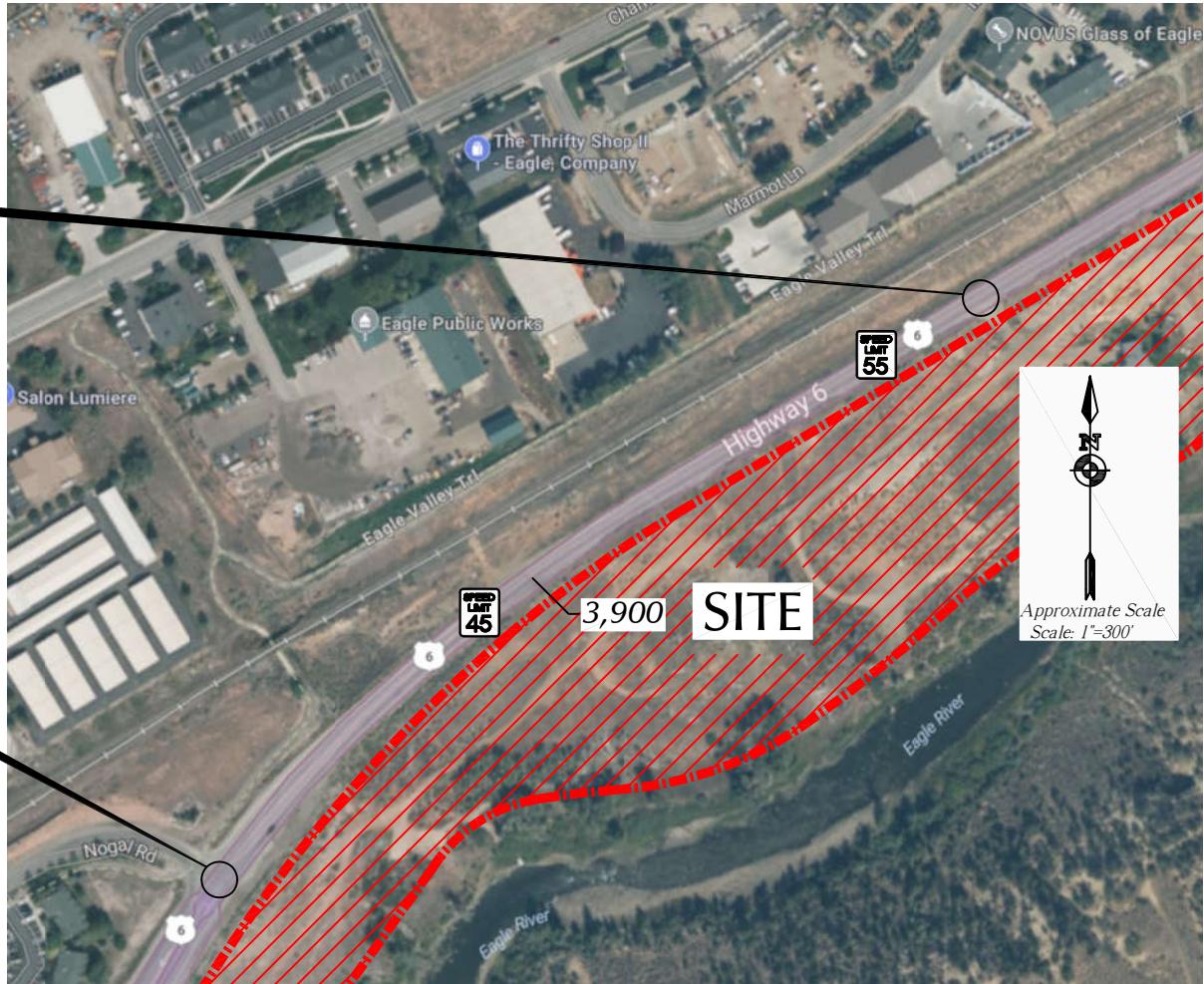
Figure 3a

## Existing December, 2024 Traffic, Lane Geometry and Traffic Control

Red Mountain Ranch (LSC #240790)


**LEGEND:**

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

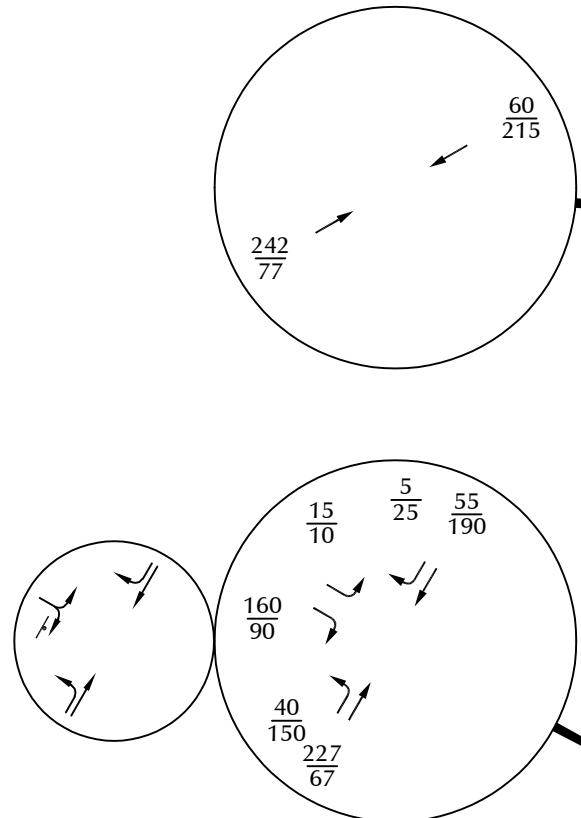


Note: The traffic volumes in Figure 3a were adjusted higher by a factor of 1.386 based on Seasonal CDOT data from continuous count (Station ID: 000011).

## Existing July 2024 Traffic, Lane Geometry and Traffic Control

Red Mountain Ranch (LSC #240790)

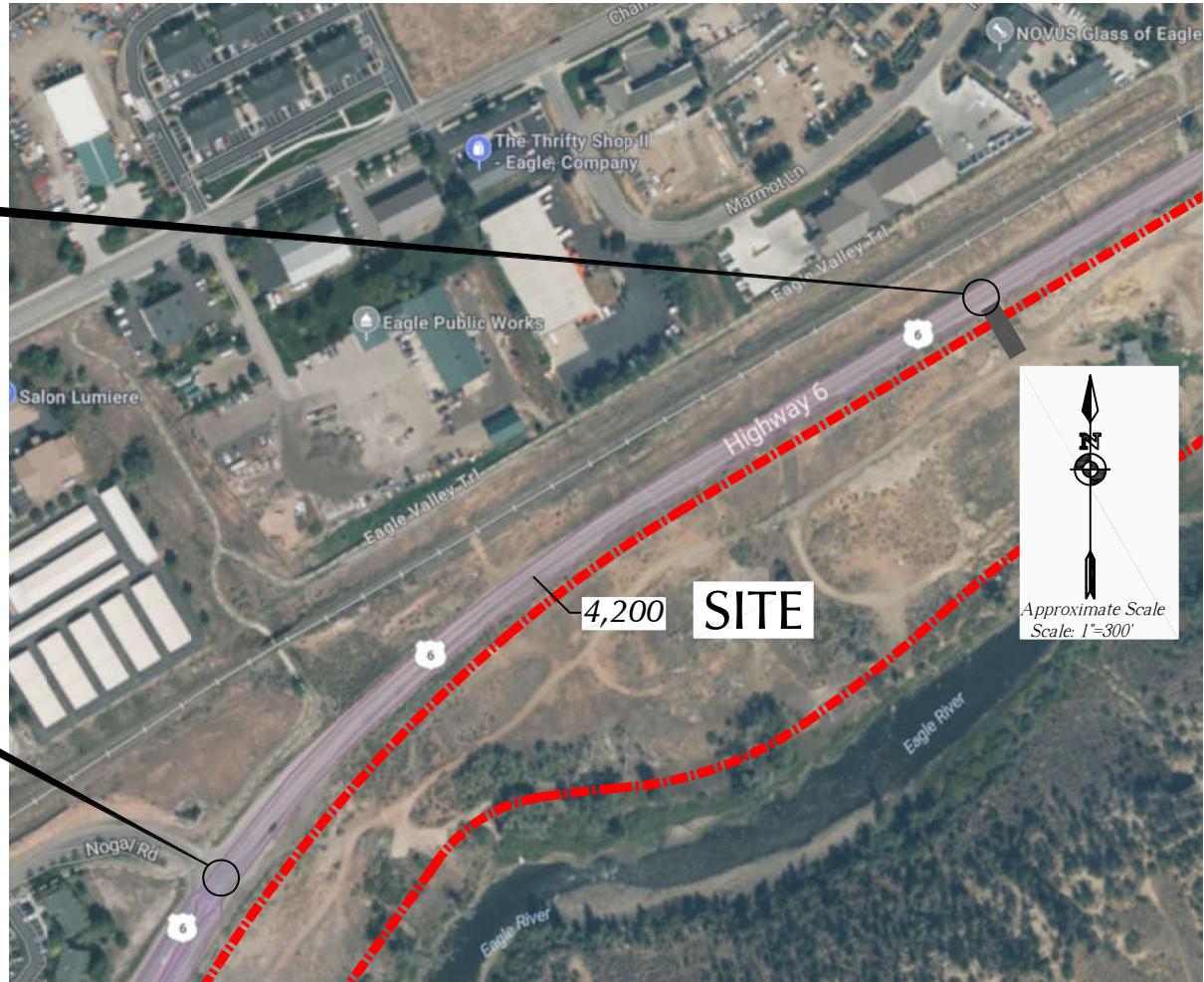
Figure 3b


**LEGEND:**

↓ = Stop Sign

 $\frac{26}{35}$  = AM Peak Hour Traffic  
 PM Peak Hour Traffic

1,000 = Average Daily Traffic

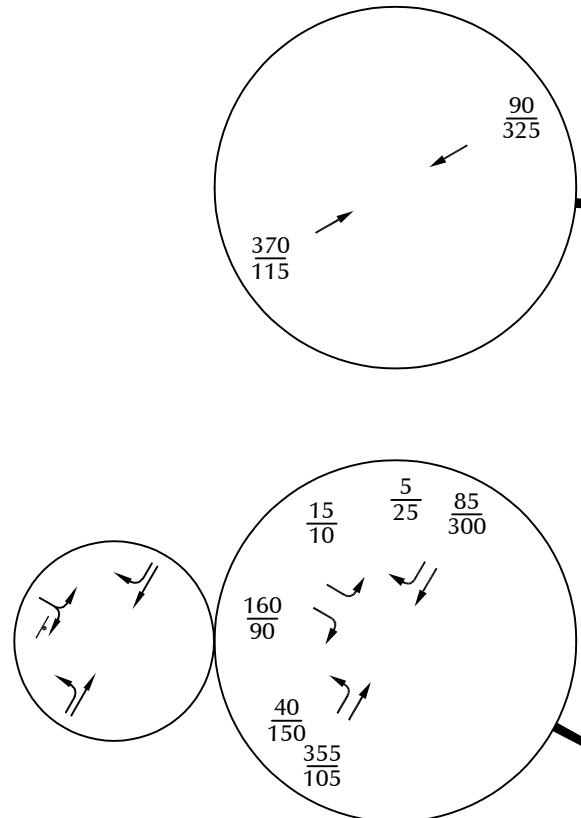


Note: The CDOT 20-year factor for US 6 is currently 1.33 which would convert to an annual growth rate about 1.44 percent but a higher rate of 2.54 percent was used to be consistent with the January 2020 Red Mountain Ranch TIA by McDowell Engineering.

## Year 2027 Background Traffic, Lane Geometry and Traffic Control

Red Mountain Ranch (LSC #240790)

Figure 4

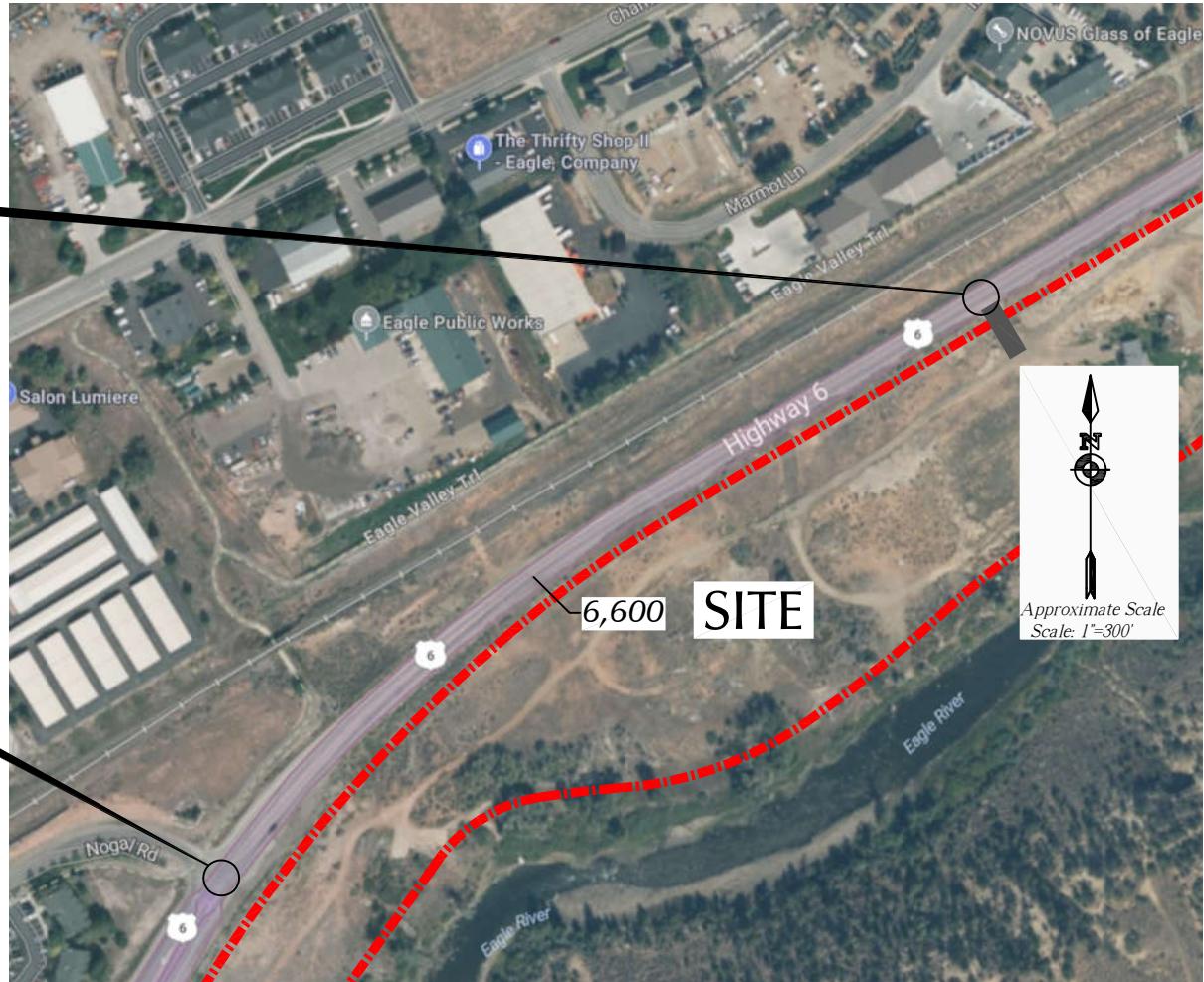


LEGEND:

↑ = Stop Sign

$\frac{26}{35}$  = AM Peak Hour Traffic  
PM Peak Hour Traffic

1,000 = Average Daily Traffic



Note: The CDOT 20-year factor for US 6 is currently 1.33 which would convert to an annual growth rate about 1.44 percent but a higher rate of 2.54 percent was used to be consistent with the January 2020 Red Mountain Ranch TIA by McDowell Engineering.

## Year 2045 Background Traffic, Lane Geometry and Traffic Control

Red Mountain Ranch (LSC #240790)

Figure 5



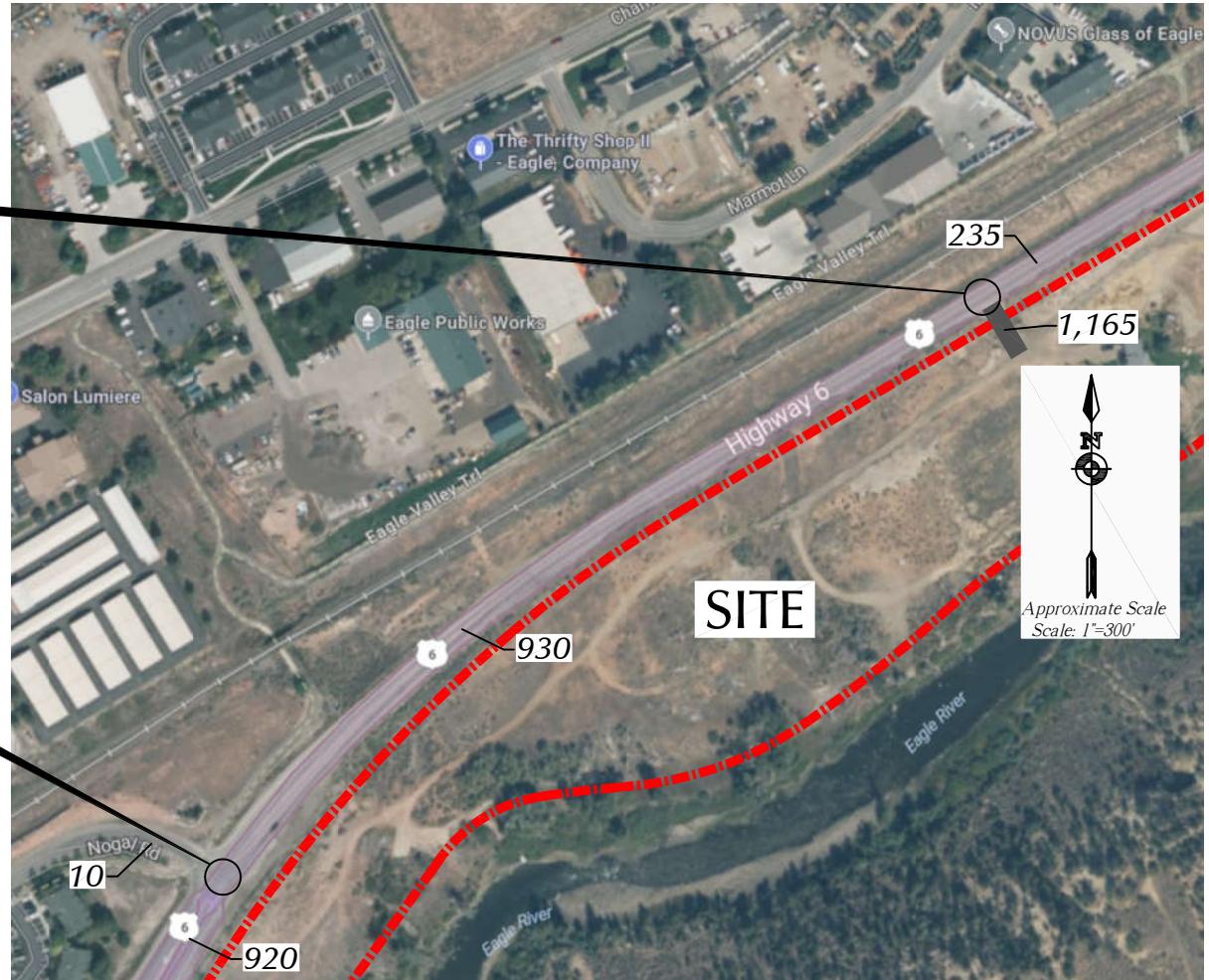
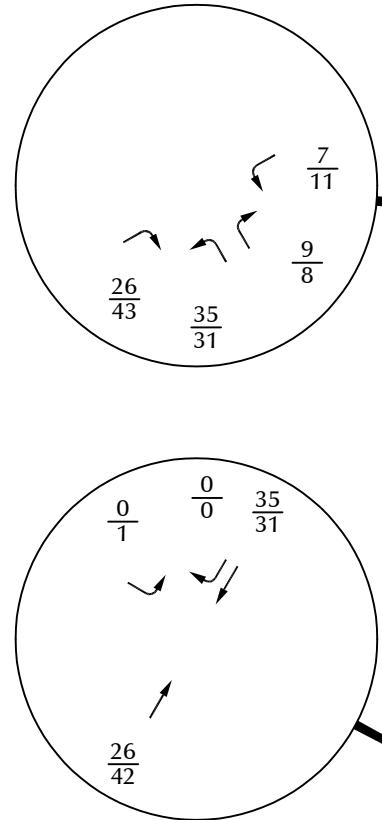
Figure 6

## LEGEND:

↔ = Percent Directional Distribution

## Directional Distribution of Primary Site-Generated Traffic

Red Mountain Ranch (LSC #240790)

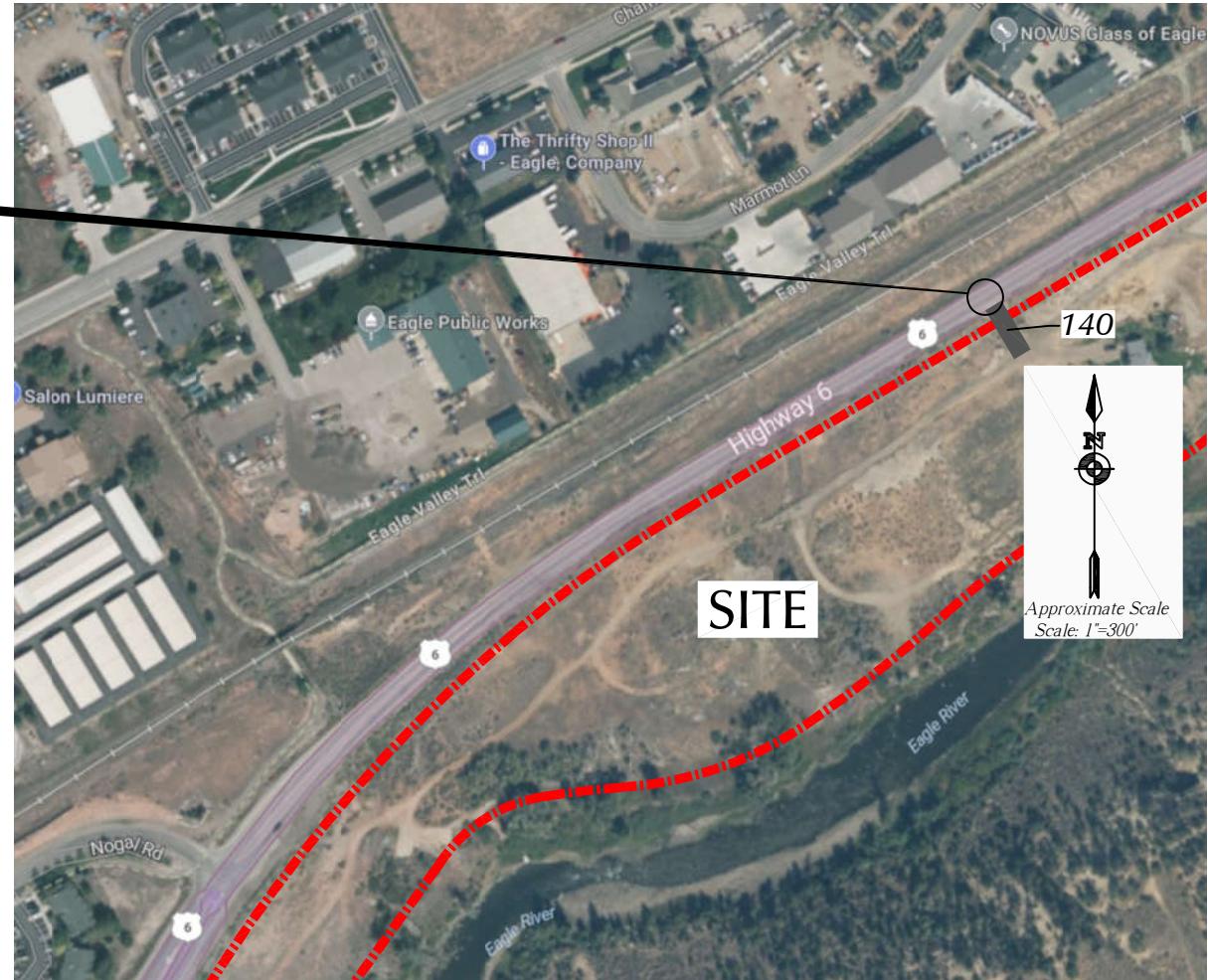
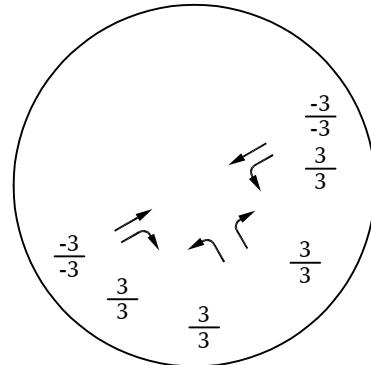

**LEGEND:**

$\frac{26}{35}$  = AM Peak Hour Traffic  
 $\frac{35}{31}$  = PM Peak Hour Traffic  
 1,000 = Average Daily Traffic

Figure 7a

## Assignment of Primary Site-Generated Traffic

Red Mountain Ranch (LSC #240790)

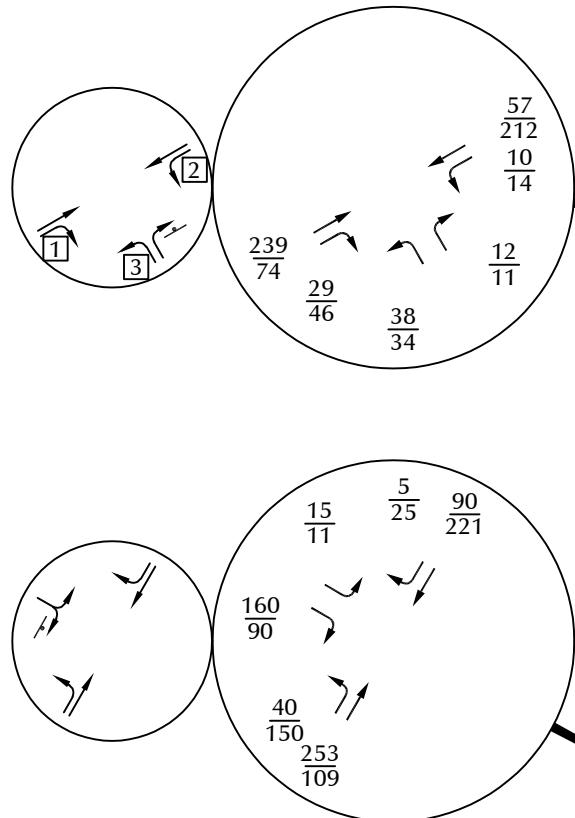

**LEGEND:**

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

Figure 7b  
*Assignment of  
Passby Site-Generated Traffic*  
 Red Mountain Ranch (LSC #240790)

## Recommended Improvements:

- 1 EB RT = 320 feet + 180-foot transition taper (15:1).
- 2 WB LT = 345 feet + 180-foot transition taper (15:1) and 55:1 redirect taper.
- 3 Provide two short approach lanes to US Highway 6 - one for left-turn and one for right-turn.

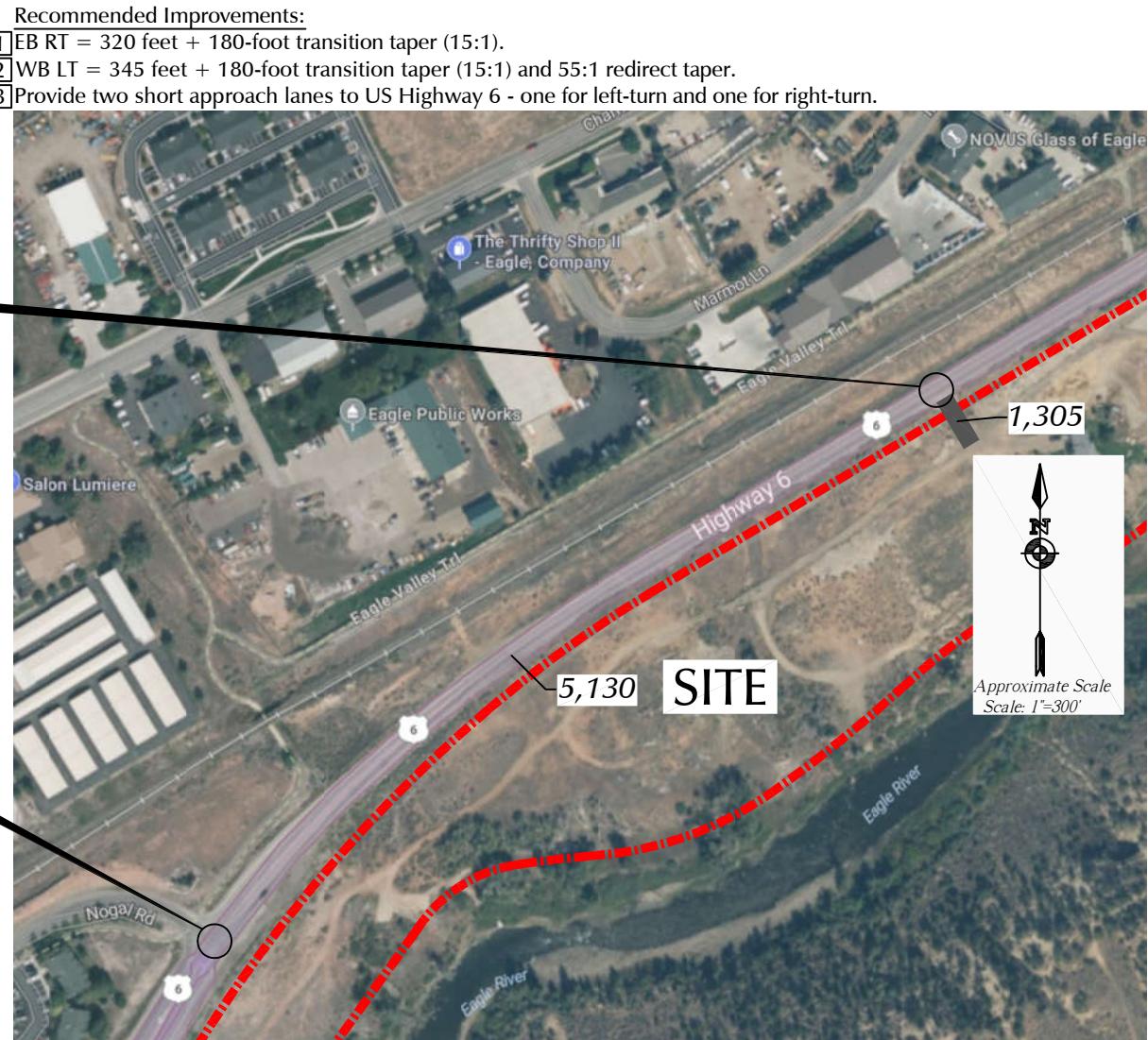


## LEGEND:

↑ = Stop Sign

$\frac{26}{35}$  = AM Peak Hour Traffic  
PM Peak Hour Traffic

1,000 = Average Daily Traffic



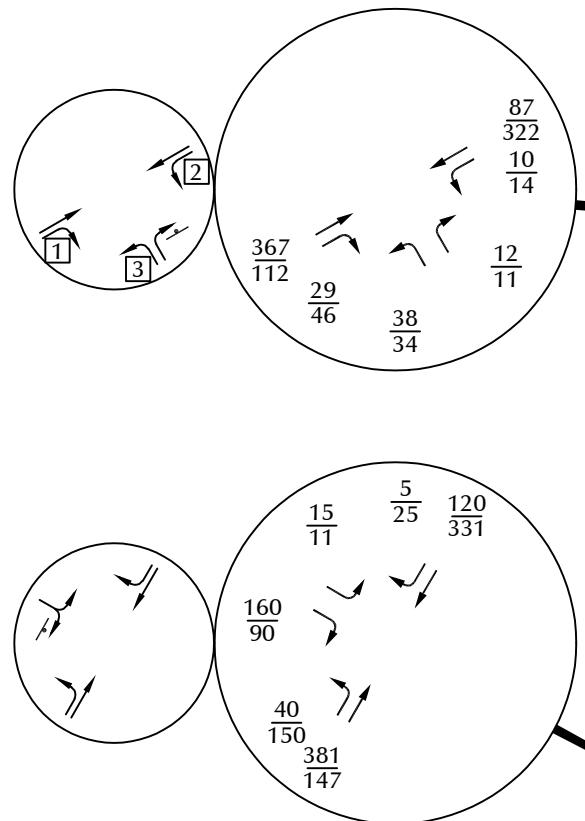
Note: These volumes are the sum of the volumes in Figures 4, 7a and 7b.

Figure 8  
Year 2027 Total Traffic,  
Lane Geometry and Traffic Control

Red Mountain Ranch (LSC #240790)

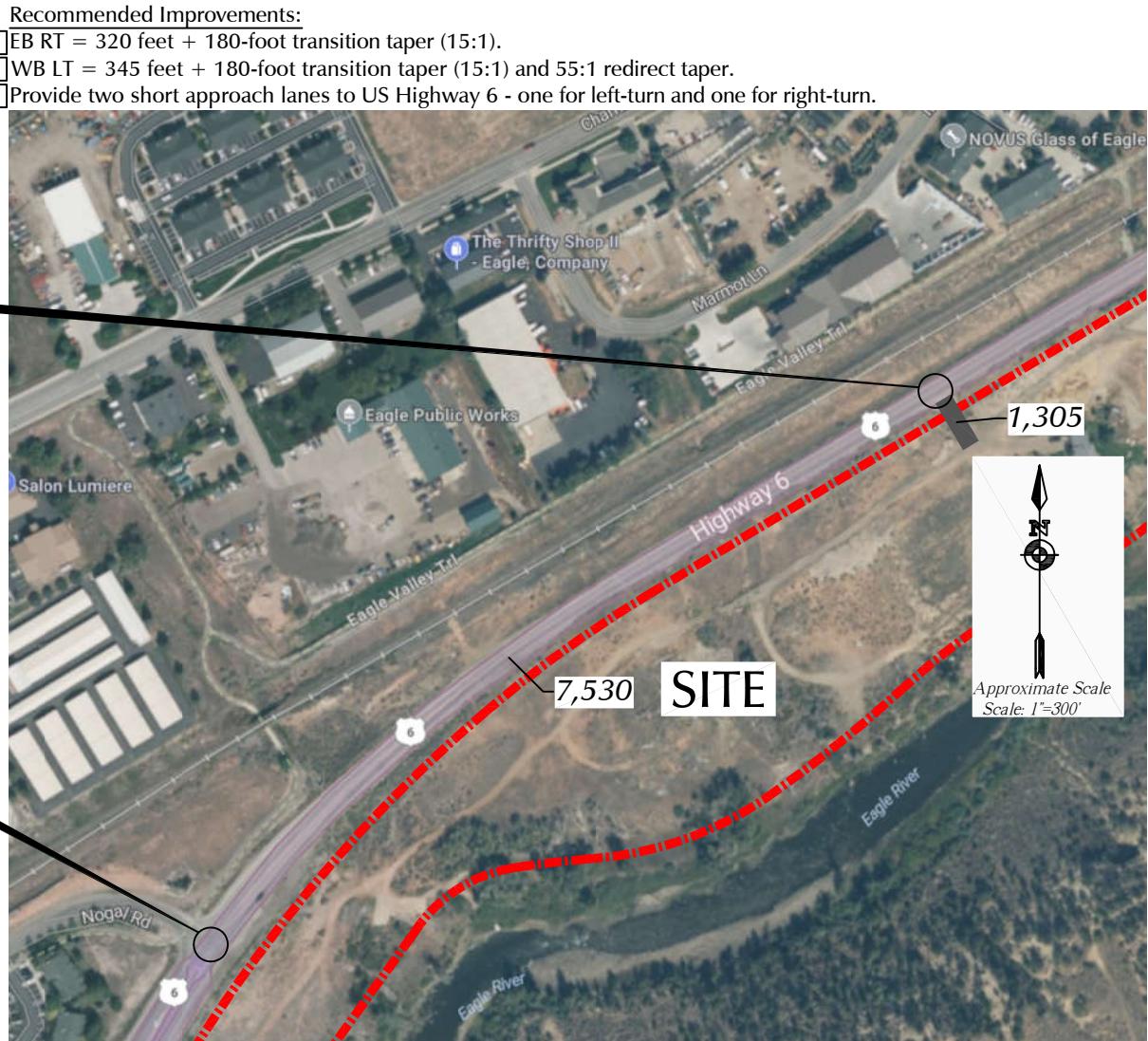
## Recommended Improvements:

- 1 EB RT = 320 feet + 180-foot transition taper (15:1).
- 2 WB LT = 345 feet + 180-foot transition taper (15:1) and 55:1 redirect taper.
- 3 Provide two short approach lanes to US Highway 6 - one for left-turn and one for right-turn.



## LEGEND:

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



Note: These volumes are the sum of the volumes in Figures 5, 7a and 7b.

Figure 9  
**Year 2045 Total Traffic,  
 Lane Geometry and Traffic Control**

Red Mountain Ranch (LSC #240790)



## Transportation Impact Study Methodology Form

Prior to starting a traffic impact study, a Methodology Form must be submitted for review and signed by the Region 3 Access Engineer. It shall be included as part of the study.

CONTACT INFORMATION	
Consultant:	Name: _____
	Telephone: _____
	Email: _____
Developer/Owner Name: _____	

PROJECT INFORMATION	
Project Name	_____
Project Location	_____
Project Description (Attached proposed site plan)	_____
State Highway	_____
County	_____
Mile Post	_____
Posted Speed Limit	_____

TIS ASSUMPTIONS			
Study Years	Current Year:	Buildout Year:	Long Term Year:
Traffic Assessment Level (Provide justification)	_____		
Study Intersections	1.	6.	_____
	2.	7.	_____
	3.	8.	_____
	4.	9.	_____
	5.	10.	_____
Future Growth Rate	<input type="checkbox"/> OTIS Plus review of prior TIA	<input type="checkbox"/> Regional TDM	<input type="checkbox"/> Other
Seasonal Adjustment Factor	_____		



**COLORADO**  
Department of Transportation

Region 3

**ASSUMPTIONS CONTINUED**

Project Trip Distribution <i>(State assumptions and attach sketch that shows individual movements.)</i>				
Trip Reduction Percentage	Internal Capture:		Pass By:	
	Multi-Modal:		Other:	
Study Time Periods <i>(Check all that apply)</i>	<input type="checkbox"/> AM (7-9)		<input type="checkbox"/> PM (4-6)	<input type="checkbox"/> Weekday
	<input type="checkbox"/> SAT (Midday)		<input type="checkbox"/> Other	
Existing and Proposed ITE Trip Generation Land Use	932 - High Turnover Sit-Down Restaurant			
Analysis Methods <i>(Check all that apply)</i>	<input type="checkbox"/> Synchro or <input type="checkbox"/> HCS <i>(isolated intersections only)</i>		<input type="checkbox"/> SimTraffic or <input type="checkbox"/> Other <i>(closely spaced intersections or when known/expected queuing issue)</i>	
	<input type="checkbox"/> Signal Warrants		<input type="checkbox"/> Pedestrian/Transit/Bicycle	
	<input type="checkbox"/> Safety/Sight Distance		<input type="checkbox"/> Queuing and Storage	
	<input type="checkbox"/> Other			
Notes and Other Assumptions				
Crash Data	CDOT will perform a crash data analysis for the highway in the vicinity of the proposed access and provide to the consultant. As a part of the study consultant shall recommend mitigation measures for any identified safety issues.			
Simulation Input Files	Consultant to provide computer files used for analysis with a signed and sealed copy of the study.			

**CDOT INTERNAL USE ONLY**

Review Comments

Revise and Resubmit

Engineer Signature/Date  Approved



1 SF-B SITE SKETCH  
SCALE: 1" = 80'-0"

## SHEET NOTES

- A PROPOSED HOTEL ON PARCEL 2 (N.I.S.)
- B PROPOSED GREENHOUSE ON PARCEL 2 (N.I.S.)
- C PROPOSED BEER GARDEN ON PARCEL 2 (N.I.S.)

PROJECT  
**RED MOUNTAIN  
RANCH (SITE)**  
17500 US-6, Eagle, CO 81631

ARCHITECT/  
GENERAL CONTRACTOR  
**tres birds**

## PROJECT TEAM

MIKE MOORE  
303-324-3622  
MM@TRESBIRDS.COM

DOUG NEWBY  
720-563-7286  
DN@TRESBIRDS.COM

DAVID HOFFMAN  
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## NOT FOR CONSTRUCTION

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## CONSULTANTS

STRUCTURAL ENGINEERING  
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JHOHMANN@KLAA.COM  
303-384-9910

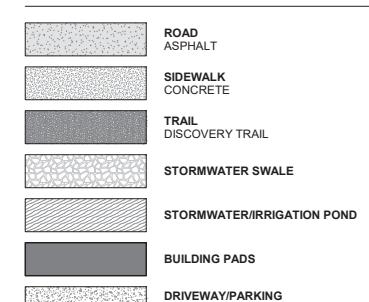
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303-501-1217

ECOLOGY  
BIRCH ECOLOGY  
HEATHER HOUSTON  
HEATHER@BIRCHECOLOGY.COM  
720-350-2530

## LEGEND



ISSUANCE  
**100%  
SCHEMATIC  
DESIGN**

ISSUE DATE  
**11.15.2024**

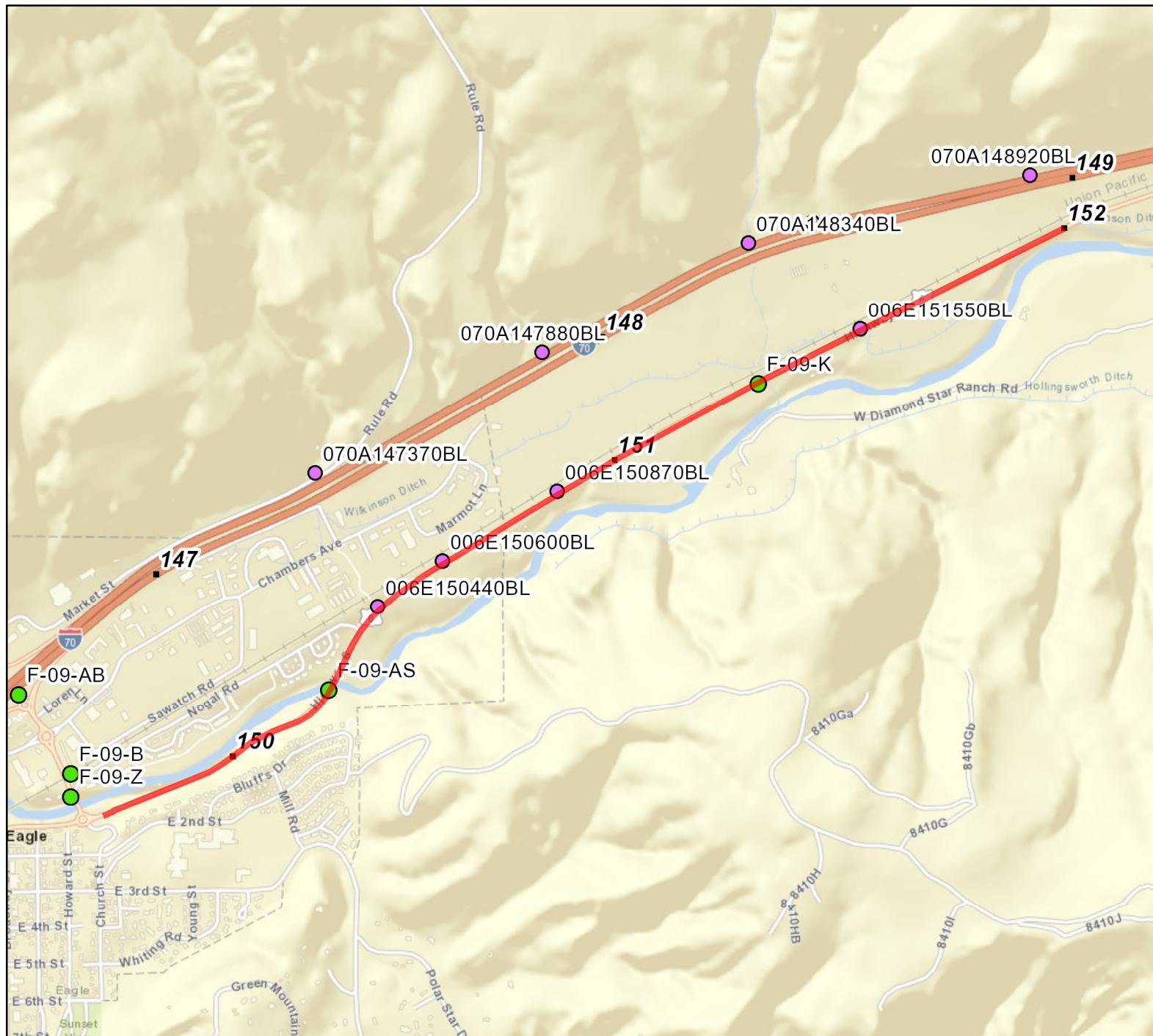
REVISION HISTORY

- — — PARCEL BOUNDARY LINE
- — — PROPERTY LINE  
SPECIFIC TO INDIVIDUAL UNITS
- — — 75' STREAM SETBACK
- — — 100 YEAR FLOOD PLAIN
- — — AVERAGE HIGH WATER LINE

DRAWING SHEET TITLE  
**SF-B SITE**

**SK-003**

# Route 006E From 149 to 152



## Legend

Route

Milepoint

## Structures

Major Structure

Minor Structure

Created:

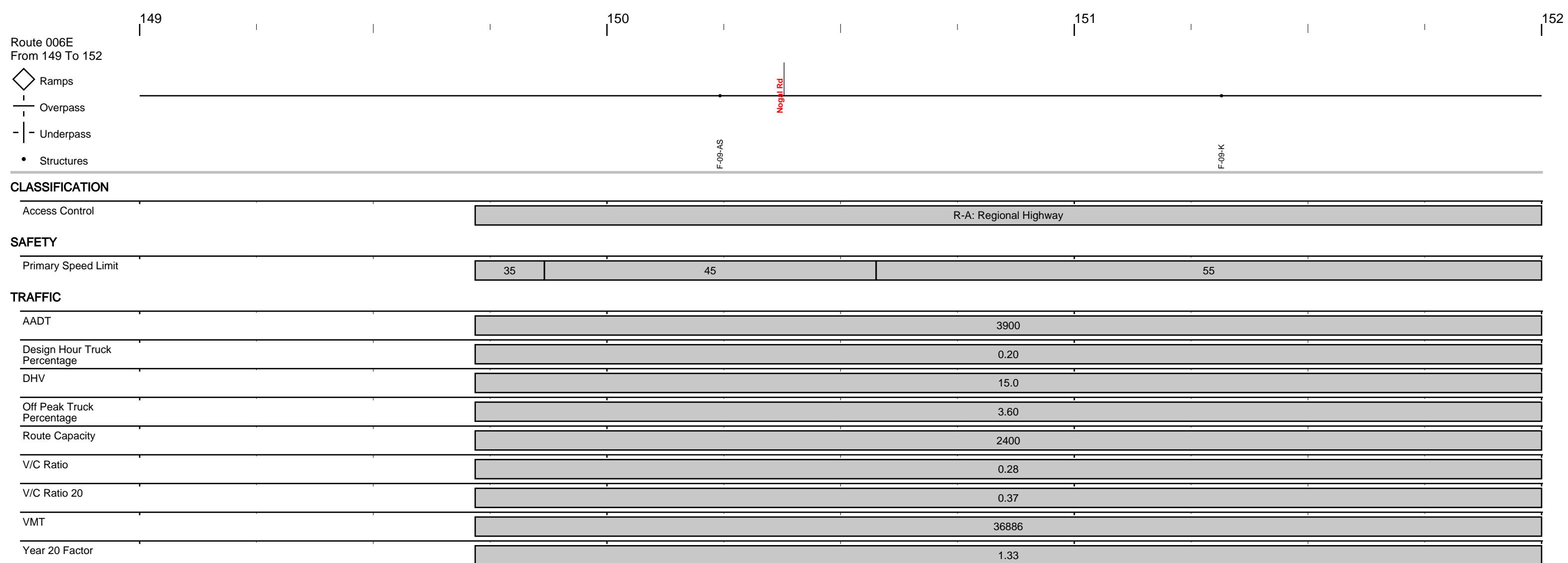
Date: 12/14/2024

Time: 5:07:08 AM

0 0.15 0.3 0.45 0.6  
Miles



The information contained in this map is based on the most currently available data and has been checked for accuracy. CDOT does not guarantee the accuracy of any information presented, is not liable in any respect for any errors or omissions, and is not responsible for determining "fitness for use".



It may appear that information is missing from the straight line diagram. If so, reduce the number of miles/page and re-submit the request.

# COUNTER MEASURES INC

1889 YORK ST  
DENVER COLORADO  
303-333-7409

N/S STREET: NOGAL RD  
E/W STREET: HWY 6  
CITY: EAGLE  
COUNTY: EAGLE

File Name : NOGAL RD HWY 6 EAGLE  
Site Code : 00000025  
Start Date : 12/11/2024  
Page No : 1

### Groups Printed- Unshifted

Start Time	NOGAL RD SOUTHBOUND				HWY 6 WESTBOUND				NO ACCESS NORTHBOUND				HWY 6 EASTBOUND				Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	
06:30 AM	1	0	11	0	0	5	0	0	0	0	0	0	2	5	0	0	24
06:45 AM	4	0	21	0	0	4	1	0	0	0	0	0	1	8	0	0	39
Total	5	0	32	0	0	9	1	0	0	0	0	0	3	13	0	0	63
07:00 AM	4	0	20	0	0	6	0	0	0	0	0	0	3	17	0	0	50
07:15 AM	2	0	19	0	0	4	0	0	0	0	0	0	2	36	0	0	63
07:30 AM	3	0	33	0	0	7	1	0	0	0	0	0	7	62	0	0	113
07:45 AM	3	0	42	0	0	16	0	1	0	0	0	0	11	27	0	0	100
Total	12	0	114	0	0	33	1	1	0	0	0	0	23	142	0	0	326
08:00 AM	2	0	20	0	0	10	0	0	0	0	0	0	9	27	0	0	68
08:15 AM	8	0	16	0	0	7	1	0	0	0	0	0	7	19	0	0	58
Total	10	0	36	0	0	17	1	0	0	0	0	0	16	46	0	0	126
04:00 PM	0	0	17	0	0	21	2	1	0	0	0	0	23	16	0	0	80
04:15 PM	4	0	9	0	0	22	2	1	0	0	0	0	31	16	0	0	85
04:30 PM	0	0	12	0	0	28	2	0	0	0	0	0	22	11	0	0	75
04:45 PM	3	0	22	0	0	30	4	0	0	0	0	0	28	16	0	0	103
Total	7	0	60	0	0	101	10	2	0	0	0	0	104	59	0	0	343
05:00 PM	1	0	12	0	0	34	5	1	0	0	0	0	20	12	0	0	85
05:15 PM	0	0	10	0	0	27	3	0	0	0	0	0	29	10	0	0	79
05:30 PM	1	0	18	0	0	36	6	0	0	0	0	0	31	7	0	0	99
Total	2	0	40	0	0	97	14	1	0	0	0	0	80	29	0	0	263
Grand Total	36	0	282	0	0	257	27	4	0	0	0	0	226	289	0	0	1121
Apprch %	11.3	0	88.7	0	0	89.2	9.4	1.4	0	0	0	0	43.9	56.1	0	0	
Total %	3.2	0	25.2	0	0	22.9	2.4	0.4	0	0	0	0	20.2	25.8	0	0	

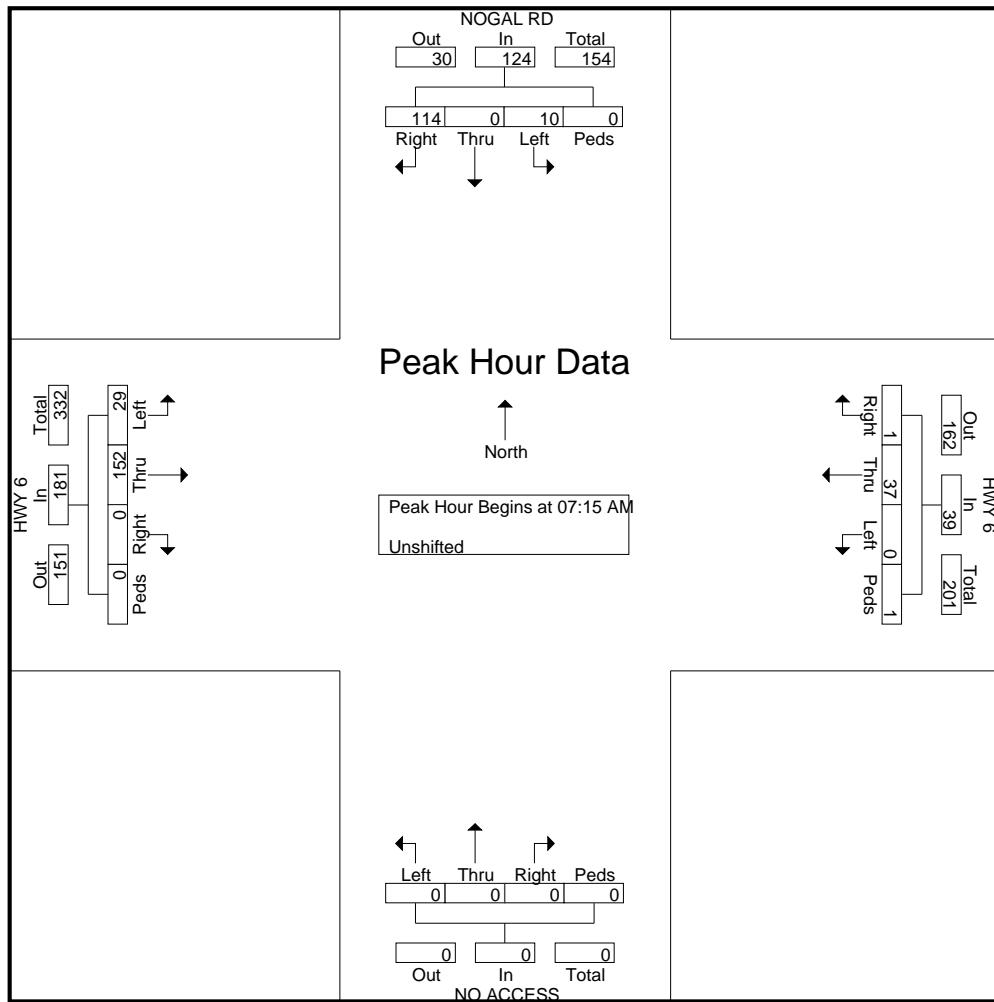
# COUNTER MEASURES INC

1889 YORK ST  
DENVER COLORADO  
303-333-7409

N/S STREET: NOGAL RD  
E/W STREET: HWY 6  
CITY: EAGLE  
COUNTY: EAGLE

File Name : NOGAL RD HWY 6 EAGLE  
Site Code : 00000025  
Start Date : 12/11/2024  
Page No : 2

Start Time	NOGAL RD SOUTHBOUND					HWY 6 WESTBOUND					NO ACCESS NORTHBOUND					HWY 6 EASTBOUND					
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:15 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	2	0	19	0	21	0	4	0	0	4	0	0	0	0	0	2	36	0	0	38	63
07:30 AM	3	0	33	0	36	0	7	1	0	8	0	0	0	0	0	7	62	0	0	69	113
07:45 AM	3	0	42	0	45	0	16	0	1	17	0	0	0	0	0	11	27	0	0	38	100
08:00 AM	2	0	20	0	22	0	10	0	0	10	0	0	0	0	0	9	27	0	0	36	68
Total Volume	10	0	114	0	124	0	37	1	1	39	0	0	0	0	0	29	152	0	0	181	344
% App. Total	8.1	0	91.9	0	0	0	94.9	2.6	2.6	0	0	0	0	0	0	16	84	0	0	0	0
PHF	.833	.000	.679	.000	.689	.000	.578	.250	.250	.574	.000	.000	.000	.000	.000	.659	.613	.000	.000	.656	.761



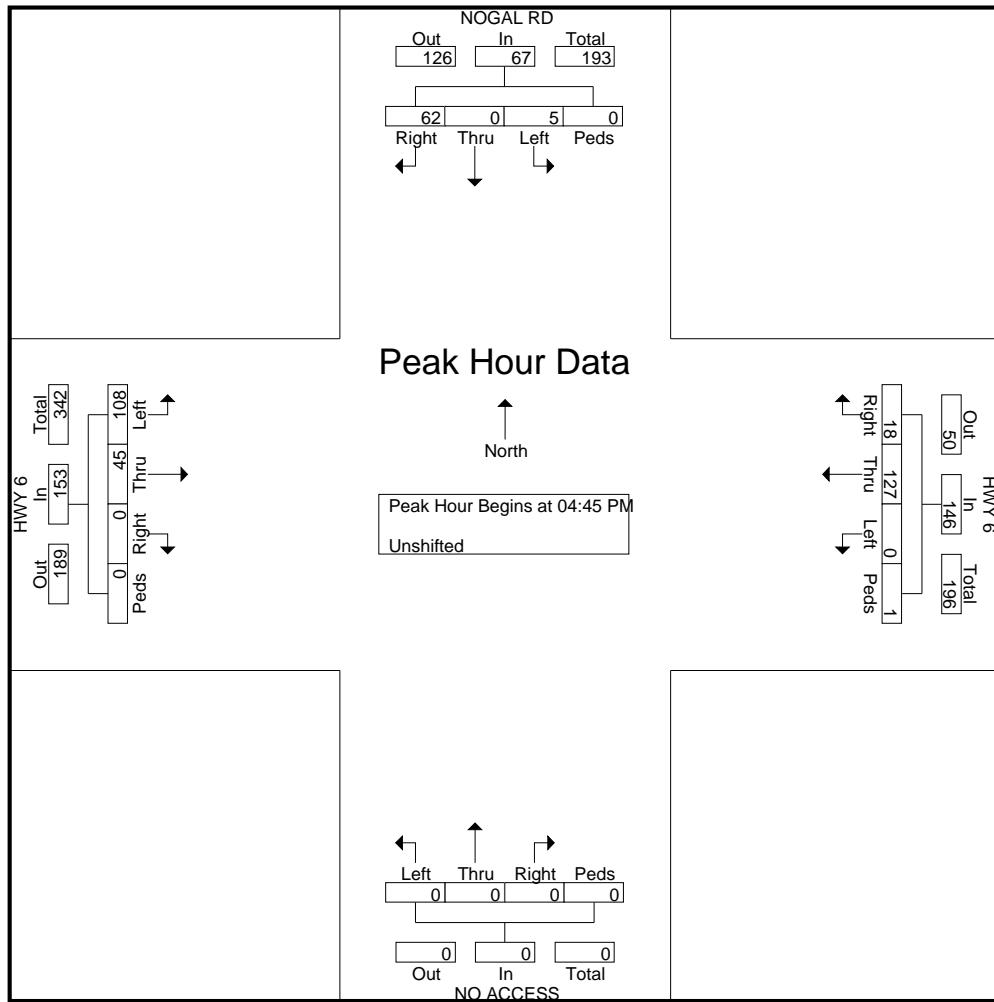
# COUNTER MEASURES INC

1889 YORK ST  
DENVER COLORADO  
303-333-7409

N/S STREET: NOGAL RD  
E/W STREET: HWY 6  
CITY: EAGLE  
COUNTY: EAGLE

File Name : NOGAL RD HWY 6 EAGLE  
Site Code : 00000025  
Start Date : 12/11/2024  
Page No : 3

Start Time	NOGAL RD SOUTHBOUND					HWY 6 WESTBOUND					NO ACCESS NORTHBOUND					HWY 6 EASTBOUND					
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	3	0	22	0	25	0	30	4	0	34	0	0	0	0	0	28	16	0	0	44	103
05:00 PM	1	0	12	0	13	0	34	5	1	40	0	0	0	0	0	20	12	0	0	32	85
05:15 PM	0	0	10	0	10	0	27	3	0	30	0	0	0	0	0	29	10	0	0	39	79
05:30 PM	1	0	18	0	19	0	36	6	0	42	0	0	0	0	0	31	7	0	0	38	99
Total Volume	5	0	62	0	67	0	127	18	1	146	0	0	0	0	0	108	45	0	0	153	366
% App. Total	7.5	0	92.5	0	0	0	87	12.3	0.7	0	0	0	0	0	0	70.6	29.4	0	0	0	366
PHF	.417	.000	.705	.000	.670	.000	.882	.750	.250	.869	.000	.000	.000	.000	.000	.871	.703	.000	.000	.869	.888



**CDOT CONTINUOUS COUNT DATA**  
**I-70 Northwest of SH 131 Wolcott (Station ID: 000011)**

STATION ID	COUNT CAL YR	JAN COUNT	FEB COUNT	MAR COUNT	APR COUNT	MAY COUNT	JUN COUNT	JUL COUNT	AUG COUNT	SEP COUNT	OCT COUNT	NOV COUNT	DEC COUNT
11	2024	24599	26348	28636	27598	31699	35277	37063	35273	33292	30521	25011	
11	2023	25318	27442	28837	27527	30139	34140	35558	33604	31508	30156	26525	25651
11	2022	24486	24843	29366	26912	28616	33694	34262	33264	32983	29877	26727	25384
11	2021	24064	24697	29156	28675	32013	35571	34096	25913	32666	30062	27745	25939
11	2020	25212	24948	20794	14355	23111	28892	32426	24820	31220	30163	24252	23951
11	2019	24754	24526	26836	26614	29111	33505	34978	34099	32049	29503	25247	25706
11	2018	23833	23879	28066	25227	29140	31990	32973	31668	31171	27693	24967	24944
11	2017	21883	23391	27430	24926	27503	32675	33346	31620	29830	27045	25064	24946
11	2016	22470	20829	25512	23563	27800	31702	33354	32044	30647	27020	23524	23246
11	2015	21420	20606	25633	23457	25290	29571	32273	29663	28616	25758	21938	23347
11	2014	19821	19902	23275	21317	23761	27277	29877	28696	26362	24408	20203	21459
11	2013	19541	19101	22792	20349	23523	21059	28327	27702	24218	22205	19886	20527
11	2012	19531	19755	23271	20611	23037	26496	27976	27526	24666	22125	20449	18208
11	2011	18928	18957	21794	19271	21061	25090	27358	27519	25481	22004	19863	20684
11	2010	19580	19845	20536	20416	22368	25691	28091	27231	24872	20956	19086	19337
11	2009	20473	21084	22687	20734	22971	26494	28787	27696	25134	22138	20205	19814
11	2008	21786	22880	24374	22791	24524	26906	28666	28362	25861	23962	20539	19436
11	2007	21395	21353	23637	22582	24265	27268	29439	26065	23595	22722	22460	20238
11	2006	19845	18485	23220	22153	21138	26740	28011	27524	25338	20618	21992	20939
11	2005	19470	21207	22943	21288	23505	27502	26983	26646	24940	22596	20515	19588
11	2004	18910	18951	22690	21136	22659	24727	28076	27149	24787	22388	19567	19931
11	2003	18431	17949	18942	20692	22441	25869	27729	27381	23831	22323	18017	18767
11	2002	17455	18639	20925	20125	22250	23241	25979	25025	21984	21313	18322	19105
11	2001								18732	19138	18973	18976	17924

Seasonal Adjustment Factor = 
$$\frac{35,558 \text{ vpd}}{25,651 \text{ vpd}} = 1.386$$

## LEVEL OF SERVICE DEFINITIONS

From *Highway Capacity Manual*, Transportation Research Board

### UNSIGNALIZED INTERSECTION LEVEL OF SERVICE (LOS)

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

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

Intersection

Int Delay, s/veh 4.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↑	↑	↑	↑	Y	Y
Traffic Vol, veh/h	40	211	51	2	14	158
Future Vol, veh/h	40	211	51	2	14	158
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	-	-	0	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	45	240	58	2	16	180

Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	60	0	-	0	388	58
Stage 1	-	-	-	-	58	-
Stage 2	-	-	-	-	330	-
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	1544	-	-	-	616	1008
Stage 1	-	-	-	-	965	-
Stage 2	-	-	-	-	728	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	1544	-	-	-	598	1008
Mov Cap-2 Maneuver	-	-	-	-	598	-
Stage 1	-	-	-	-	937	-
Stage 2	-	-	-	-	728	-

Approach	EB	WB	SB			
HCM Control Delay, s	1.2	0	9.7			
HCM LOS			A			

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1544	-	-	-	955	
HCM Lane V/C Ratio	0.029	-	-	-	0.205	
HCM Control Delay (s)	7.4	-	-	-	9.7	
HCM Lane LOS	A	-	-	-	A	
HCM 95th %tile Q(veh)	0.1	-	-	-	0.8	

Intersection

Int Delay, s/veh 4.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↑	↑	↑	↑	↑	↑
Traffic Vol, veh/h	150	62	176	25	7	86
Future Vol, veh/h	150	62	176	25	7	86
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	-	-	0	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	170	70	200	28	8	98

Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	228	0	-	0	610	200
Stage 1	-	-	-	-	200	-
Stage 2	-	-	-	-	410	-
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	1340	-	-	-	458	841
Stage 1	-	-	-	-	834	-
Stage 2	-	-	-	-	670	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	1340	-	-	-	400	841
Mov Cap-2 Maneuver	-	-	-	-	400	-
Stage 1	-	-	-	-	728	-
Stage 2	-	-	-	-	670	-

Approach	EB	WB	SB
HCM Control Delay, s	5.7	0	10.4
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1340	-	-	-	777
HCM Lane V/C Ratio	0.127	-	-	-	0.136
HCM Control Delay (s)	8.1	-	-	-	10.4
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.4	-	-	-	0.5

Intersection

Int Delay, s/veh 4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↑	↑	↑	↑	↑	↑
Traffic Vol, veh/h	40	227	55	5	15	160
Future Vol, veh/h	40	227	55	5	15	160
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	-	-	0	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	45	258	63	6	17	182

Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	69	0	-	0	411	63
Stage 1	-	-	-	-	63	-
Stage 2	-	-	-	-	348	-
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	1532	-	-	-	597	1002
Stage 1	-	-	-	-	960	-
Stage 2	-	-	-	-	715	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	1532	-	-	-	580	1002
Mov Cap-2 Maneuver	-	-	-	-	580	-
Stage 1	-	-	-	-	932	-
Stage 2	-	-	-	-	715	-

Approach	EB	WB	SB			
HCM Control Delay, s	1.1	0	9.8			
HCM LOS			A			

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1532	-	-	-	943	
HCM Lane V/C Ratio	0.03	-	-	-	0.211	
HCM Control Delay (s)	7.4	-	-	-	9.8	
HCM Lane LOS	A	-	-	-	A	
HCM 95th %tile Q(veh)	0.1	-	-	-	0.8	

Intersection

Int Delay, s/veh 4.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↑	↑	↑	↑	↑	↑
Traffic Vol, veh/h	150	67	190	25	10	90
Future Vol, veh/h	150	67	190	25	10	90
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	-	-	0	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	170	76	216	28	11	102

Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	244	0	-	0	632	216
Stage 1	-	-	-	-	216	-
Stage 2	-	-	-	-	416	-
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	1322	-	-	-	444	824
Stage 1	-	-	-	-	820	-
Stage 2	-	-	-	-	666	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	1322	-	-	-	387	824
Mov Cap-2 Maneuver	-	-	-	-	387	-
Stage 1	-	-	-	-	714	-
Stage 2	-	-	-	-	666	-

Approach	EB	WB	SB
HCM Control Delay, s	5.6	0	10.7
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1322	-	-	-	740
HCM Lane V/C Ratio	0.129	-	-	-	0.154
HCM Control Delay (s)	8.1	-	-	-	10.7
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.4	-	-	-	0.5

Intersection

Int Delay, s/veh 3.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↑	↑	↑	↑	Y	Y
Traffic Vol, veh/h	40	258	94	5	15	160
Future Vol, veh/h	40	258	94	5	15	160
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	-	-	0	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	45	293	107	6	17	182

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	113	0	-
Stage 1	-	-	107
Stage 2	-	-	383
Critical Hdwy	4.12	-	-
Critical Hdwy Stg 1	-	-	5.42
Critical Hdwy Stg 2	-	-	5.42
Follow-up Hdwy	2.218	-	-
Pot Cap-1 Maneuver	1476	-	-
Stage 1	-	-	917
Stage 2	-	-	689
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1476	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	889
Stage 2	-	-	689

Approach	EB	WB	SB
HCM Control Delay, s	1	0	10.2
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1476	-	-	-	885
HCM Lane V/C Ratio	0.031	-	-	-	0.225
HCM Control Delay (s)	7.5	-	-	-	10.2
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.9

Intersection

Int Delay, s/veh 1.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗	↖	↑	↖	↗
Traffic Vol, veh/h	239	34	10	58	41	13
Future Vol, veh/h	239	34	10	58	41	13
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	0	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	272	39	11	66	47	15

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	311	0	360
Stage 1	-	-	-	-	272
Stage 2	-	-	-	-	88
Critical Hdwy	-	-	4.12	-	6.42
Critical Hdwy Stg 1	-	-	-	-	5.42
Critical Hdwy Stg 2	-	-	-	-	5.42
Follow-up Hdwy	-	-	2.218	-	3.518
Pot Cap-1 Maneuver	-	-	1249	-	639
Stage 1	-	-	-	-	774
Stage 2	-	-	-	-	935
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1249	-	633
Mov Cap-2 Maneuver	-	-	-	-	633
Stage 1	-	-	-	-	774
Stage 2	-	-	-	-	927

Approach	EB	WB	NB
HCM Control Delay, s	0	1.2	10.8
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	633	767	-	-	1249	-
HCM Lane V/C Ratio	0.074	0.019	-	-	0.009	-
HCM Control Delay (s)	11.1	9.8	-	-	7.9	-
HCM Lane LOS	B	A	-	-	A	-
HCM 95th %tile Q(veh)	0.2	0.1	-	-	0	-

Intersection

Int Delay, s/veh 3.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↑	↑	↑	↑	Y	Y
Traffic Vol, veh/h	150	117	229	26	11	90
Future Vol, veh/h	150	117	229	26	11	90
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	-	-	0	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	170	133	260	30	13	102

Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	290	0	-	0	733	260
Stage 1	-	-	-	-	260	-
Stage 2	-	-	-	-	473	-
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	1272	-	-	-	388	779
Stage 1	-	-	-	-	783	-
Stage 2	-	-	-	-	627	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	1272	-	-	-	336	779
Mov Cap-2 Maneuver	-	-	-	-	336	-
Stage 1	-	-	-	-	678	-
Stage 2	-	-	-	-	627	-

Approach	EB	WB	SB
HCM Control Delay, s	4.6	0	11.4
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1272	-	-	-	681
HCM Lane V/C Ratio	0.134	-	-	-	0.169
HCM Control Delay (s)	8.3	-	-	-	11.4
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.5	-	-	-	0.6

Intersection

Int Delay, s/veh 1.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗	↖	↑	↖	↗
Traffic Vol, veh/h	74	54	15	213	42	13
Future Vol, veh/h	74	54	15	213	42	13
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	0	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	84	61	17	242	48	15

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	145	0	360
Stage 1	-	-	-	-	84
Stage 2	-	-	-	-	276
Critical Hdwy	-	-	4.12	-	6.42
Critical Hdwy Stg 1	-	-	-	-	5.42
Critical Hdwy Stg 2	-	-	-	-	5.42
Follow-up Hdwy	-	-	2.218	-	3.518
Pot Cap-1 Maneuver	-	-	1437	-	639
Stage 1	-	-	-	-	939
Stage 2	-	-	-	-	771
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1437	-	631
Mov Cap-2 Maneuver	-	-	-	-	631
Stage 1	-	-	-	-	939
Stage 2	-	-	-	-	762

Approach	EB	WB	NB
HCM Control Delay, s	0	0.5	10.6
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	631	975	-	-	1437	-
HCM Lane V/C Ratio	0.076	0.015	-	-	0.012	-
HCM Control Delay (s)	11.2	8.7	-	-	7.5	-
HCM Lane LOS	B	A	-	-	A	-
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-

Intersection

Int Delay, s/veh 3.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↑	↑	↑	↑	Y	Y
Traffic Vol, veh/h	40	355	85	5	15	160
Future Vol, veh/h	40	355	85	5	15	160
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	-	-	0	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	45	403	97	6	17	182

Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	103	0	-	0	590	97
Stage 1	-	-	-	-	97	-
Stage 2	-	-	-	-	493	-
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	1489	-	-	-	470	959
Stage 1	-	-	-	-	927	-
Stage 2	-	-	-	-	614	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	1489	-	-	-	456	959
Mov Cap-2 Maneuver	-	-	-	-	456	-
Stage 1	-	-	-	-	899	-
Stage 2	-	-	-	-	614	-

Approach	EB	WB	SB
HCM Control Delay, s	0.8	0	10.3
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1489	-	-	-	876
HCM Lane V/C Ratio	0.031	-	-	-	0.227
HCM Control Delay (s)	7.5	-	-	-	10.3
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.9

Intersection

Int Delay, s/veh 3.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↑	↑	↑	↑	Y	Y
Traffic Vol, veh/h	150	105	300	25	10	90
Future Vol, veh/h	150	105	300	25	10	90
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	-	-	0	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	170	119	341	28	11	102

Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	369	0	-	0	800	341
Stage 1	-	-	-	-	341	-
Stage 2	-	-	-	-	459	-
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	1190	-	-	-	354	701
Stage 1	-	-	-	-	720	-
Stage 2	-	-	-	-	636	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	1190	-	-	-	303	701
Mov Cap-2 Maneuver	-	-	-	-	303	-
Stage 1	-	-	-	-	617	-
Stage 2	-	-	-	-	636	-

Approach	EB	WB	SB
HCM Control Delay, s	5	0	12.1
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1190	-	-	-	620
HCM Lane V/C Ratio	0.143	-	-	-	0.183
HCM Control Delay (s)	8.5	-	-	-	12.1
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.5	-	-	-	0.7

Intersection

Int Delay, s/veh 3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↑	↑	↑	↑	Y	Y
Traffic Vol, veh/h	40	386	124	5	15	160
Future Vol, veh/h	40	386	124	5	15	160
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	-	-	0	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	45	439	141	6	17	182

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	147	0	-
Stage 1	-	-	141
Stage 2	-	-	529
Critical Hdwy	4.12	-	-
Critical Hdwy Stg 1	-	-	5.42
Critical Hdwy Stg 2	-	-	5.42
Follow-up Hdwy	2.218	-	-
Pot Cap-1 Maneuver	1435	-	-
Stage 1	-	-	886
Stage 2	-	-	591
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1435	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	859
Stage 2	-	-	591

Approach	EB	WB	SB		
HCM Control Delay, s	0.7	0	10.8		
HCM LOS			B		
<hr/>					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1435	-	-	-	821
HCM Lane V/C Ratio	0.032	-	-	-	0.242
HCM Control Delay (s)	7.6	-	-	-	10.8
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.9

Intersection

Int Delay, s/veh 1.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗	↖	↑	↖	↗
Traffic Vol, veh/h	367	34	10	88	41	13
Future Vol, veh/h	367	34	10	88	41	13
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	0	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	417	39	11	100	47	15

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	456	0	539
Stage 1	-	-	-	-	417
Stage 2	-	-	-	-	122
Critical Hdwy	-	-	4.12	-	6.42
Critical Hdwy Stg 1	-	-	-	-	5.42
Critical Hdwy Stg 2	-	-	-	-	5.42
Follow-up Hdwy	-	-	2.218	-	3.518
Pot Cap-1 Maneuver	-	-	1105	-	503
Stage 1	-	-	-	-	665
Stage 2	-	-	-	-	903
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1105	-	498
Mov Cap-2 Maneuver	-	-	-	-	498
Stage 1	-	-	-	-	665
Stage 2	-	-	-	-	894

Approach EB WB NB

HCM Control Delay, s 0 0.8 12.5

HCM LOS B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	498	636	-	-	1105	-
HCM Lane V/C Ratio	0.094	0.023	-	-	0.01	-
HCM Control Delay (s)	13	10.8	-	-	8.3	-
HCM Lane LOS	B	B	-	-	A	-
HCM 95th %tile Q(veh)	0.3	0.1	-	-	0	-

Intersection

Int Delay, s/veh 3.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↑	↑	↑	↑	Y	Y
Traffic Vol, veh/h	150	155	339	26	11	90
Future Vol, veh/h	150	155	339	26	11	90
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	-	-	0	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	170	176	385	30	13	102

Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	415	0	-	0	901	385
Stage 1	-	-	-	-	385	-
Stage 2	-	-	-	-	516	-
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	1144	-	-	-	309	663
Stage 1	-	-	-	-	688	-
Stage 2	-	-	-	-	599	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	1144	-	-	-	263	663
Mov Cap-2 Maneuver	-	-	-	-	263	-
Stage 1	-	-	-	-	585	-
Stage 2	-	-	-	-	599	-

Approach	EB	WB	SB
HCM Control Delay, s	4.3	0	12.9
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1144	-	-	-	569
HCM Lane V/C Ratio	0.149	-	-	-	0.202
HCM Control Delay (s)	8.7	-	-	-	12.9
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.5	-	-	-	0.7

Intersection

Int Delay, s/veh 1.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↗	↖	↑	↖	↗
Traffic Vol, veh/h	112	54	15	323	42	13
Future Vol, veh/h	112	54	15	323	42	13
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	0	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	127	61	17	367	48	15

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	188	0	528 127
Stage 1	-	-	-	-	127 -
Stage 2	-	-	-	-	401 -
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	-	-	1386	-	511 923
Stage 1	-	-	-	-	899 -
Stage 2	-	-	-	-	676 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1386	-	505 923
Mov Cap-2 Maneuver	-	-	-	-	505 -
Stage 1	-	-	-	-	899 -
Stage 2	-	-	-	-	668 -

Approach	EB	WB	NB
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HCM Control Delay, s 0 0.3 12

HCM LOS B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	505	923	-	-	1386	-
HCM Lane V/C Ratio	0.095	0.016	-	-	0.012	-
HCM Control Delay (s)	12.9	9	-	-	7.6	-
HCM Lane LOS	B	A	-	-	A	-
HCM 95th %tile Q(veh)	0.3	0	-	-	0	-