

Please review the for the highest and best uses in the cs zoned district and rewrite the traffic study accordingly.



Add PCD File No. CS202

May 28, 2020

Mr. Louis Ferrante
UDON Holdings, LLC
5801 N. Union Boulevard
Suite 100
Colorado Springs, CO 80918

Please provide the standard County signature blocks.

Please indicate what this site is being rezoned to: from Residential Rural (RR5) to Commercial Service (CS). Also please indicate the size of the site (i.e. 40 acres).

Re: UDON Rezone Traffic Study
El Paso County, Colorado

Dear Mr. Ferrante:

please delete

This traffic study ~~letter~~ has been prepared for a proposed UDON Rezoning project to be located at 12265 CO-94 in El Paso County, Colorado. The existing property contains a residence. This project is proposed to rezone the existing property to include a 2,000 square foot contractor's office for general weekday use. The property would also like to include an area for potential vendors for special events or occasions, likely on weekends and holidays when activities are occurring in the area. For purposes of this traffic analysis, it was considered that a Food Truck Food Court could be present on site. The site will have the ability to accommodate about 20 parking spaces for such an event.

A vicinity map illustrating the location of the property is attached as **Figure 1**. The surrounding area primarily consists of rural residences, vacant and agricultural land, industrial uses, and Aztec Family Raceway. There are auto salvage yards located to the east of the site. The site area is shown in attached **Figure 2**.

This traffic study identifies the amount of traffic associated with this proposed rezoning and the expected trip distribution and traffic assignment along with an operational analysis for the project access intersection along State Highway 94 (SH-94 or CO-94). It is expected that project construction will be completed within a couple of years; therefore, a build out horizon as well as the 2040 long-term twenty-

please indicate whether this access is intended to be a driveway or roadway. If its a roadway, please indicate the anticipated roadway classification.

Existing Roadway Network and Traffic Counts

Regional access to the UDON Rezoning project is provided by CO-94. Direct access to the development will be provided by an access along the south side of CO-94. This future access intersection will operate with stop control on the northbound exiting approach from the future development. CO-94 extends primarily east-west with one through lane in each direction with a speed limit of 65 miles per hour within the project limits. CO-94 provides a double yellow striped centerline within the project limits.

Existing daily and peak hour bi-directional count data was obtained from CDOT traffic information along CO-94 to the east of Space Village Avenue, which is in nearby vicinity of the existing UDON Rezoning property project access. These counts were collected on Thursday, July 11, 2019 and were conducted in one-hour intervals for 24 hours. These counts were adjusted by the annual growth rate to calculate existing 2020 volumes. The daily counts from the Colorado Department of Transportation (CDOT) Online Transportation Information System (OTIS) were used as a basis for providing a directional split of project traffic. Existing lane configuration, and the existing peak hour counts are shown in attached **Figure 3**, with count information attached as well.

Unspecified Development Traffic Growth

Based on information provided on the website for the Colorado Department of Transportation, the 20-year growth factor along CO-94 adjacent to the study area is 1.25 which equates to an annual growth

The traffic report shall analyze the property for the highest and best use. Along with the proposed uses a "worst case" scenario shall be analyzed for the site that shall include any impacts/improvements to the surrounding infrastructure. Please update your study accordingly.

rate of approximately 1.12 percent per year. Traffic information from the CDOT Online Transportation Information System (OTIS) is attached. Based on this, a 1.12 percent annual growth rate was used to calculate future traffic volumes at the study area access intersection. This annual growth rate was used to estimate short term 2022 and long term 2040 traffic volumes at the key intersection.

Trip Generation

Site-generated traffic estimates are determined through a process known as trip generation. Rates and equations are applied to the proposed land use to estimate traffic generated by the development during a specific time interval. The acknowledged source for trip generation rates is the *Trip Generation Manual*¹ published by the Institute of Transportation Engineers (ITE). ITE has established trip rates in nationwide studies of similar land uses. Trip generation is based on the ITE Trip Generation Manual, 10th Edition (most current edition) average rates for Office Building (ITE Code 710) for traffic associated with this development.

Project generated traffic volumes are identified on a weekday daily as well as on a morning peak hour and afternoon peak hour basis. The morning peak hour is the highest one-hour time period of adjacent street traffic during four consecutive 15-minute intervals during the morning peak hour, between 7:00 am and 9:00 am. The afternoon peak hour is the highest one-hour time period of four consecutive 15-minute intervals between the hours of 4:00 pm and 6:00 pm representing the afternoon peak hour. The following **Table 1** summarizes the anticipated weekday peak hour trip generation for the proposed contractor's office project with the trip generation calculation worksheet attached.

Table 1 – UDON Rezoning Project Weekday Traffic Generation

Land Use and Size	Daily Vehicle Trips	Weekday Vehicle Trips					
		AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Office (ITE 710) – 2,000 Square Feet	20	2	0	2	0	2	2

As summarized in **Table 1**, the UDON Rezoning project with a 2,000 square foot office is anticipated to generate approximately 20 new daily weekday trips with 2 of these trips occurring during each of the morning and afternoon peak hours based on ITE equations and data.

As mentioned, the property would like to include services for people attending events and activities within the area on some weekends or holidays. For purposes of this analysis, a food truck food court was considered. As each food truck is approximately 250 feet square feet, and it is anticipated that four food trucks are possible on site with the planned 20 parking spaces of area available, a total "building" area of 1,000 square feet is thought to be possible. For calculation purposes, the ITE average rates for Fast Food Restaurant without Drive Thru (ITE Code 933) was considered to identify an applicable Saturday midday peak hour of generator. This trip generation is shown in **Table 2**.

Table 2 – UDON Rezoning Project Saturday Traffic Generation

Land Use and Size	Saturday Vehicle Trips		
	Midday Peak Hour		
	In	Out	Total
Fast Food Restaurant without Drive-Thru (ITE 933) – 1,000 Square Feet	27	28	55

¹ Institute of Transportation Engineers, *Trip Generation Manual*, Tenth Edition, Washington DC, 2017.

? There was no mention of a campground in the previous pages. Revise accordingly

As summarized in **Table 2**, the UDON Rezoning property when hosting a food truck food court (assumed as 1,000 square feet of fast food restaurant without drive thru for purposes of calculation) is anticipated to generate approximately 55 Saturday midday peak hour trips based on ITE equations and data.

Distribution, Assignment, and Total Traffic

Distribution of site traffic was based on the area street system characteristics, existing traffic patterns and volumes, and the proposed access system for the project. As mentioned previously, the traffic volumes from CDOT OTIS were used as a basis for providing a directional split of project traffic. The distribution of traffic is a means to quantify the percentage of site-generated traffic that approaches the site from a given direction and departs the site back to the original source. Project traffic originating from either direction can access the site. As identified from the counts from CDOT OTIS, approximately 63 percent of the UDON Rezone trips arrive from and depart to the west. **Figure 4** illustrates the expected trip distribution for the proposed **campground expansion project**.

Traffic assignment was obtained by applying the project trip distribution to the estimated project traffic generation of the development shown in the trip generation table. The traffic assignment is shown in **Figure 5**. Site traffic volumes were added to the 2022 and 2040 background volumes to represent estimated build-out year and long-term traffic conditions. These total traffic volumes for 2022 and 2040 are illustrated in **Figure 6** and **Figure 7**.

Please include in your narrative how the background traffic volumes were determined.

Traffic Operations Analysis

Kimley-Horn’s analysis of traffic operations in the site vicinity was conducted to determine potential capacity deficiencies at the project key intersections for the 2022 build-out and 2040 long term horizons. The acknowledged source for determining overall capacity is the *Highway Capacity Manual*².

Capacity analysis results are listed in terms of Level of Service (LOS). LOS is a qualitative term describing operating conditions a driver will experience while traveling on a particular street or highway during a specific time interval. It ranges from A (very little delay) to F (long delays and congestion). For intersections and roadways in this study area, typical traffic study practice identifies overall intersection LOS D and movement or approach LOS E as the minimum thresholds for acceptable operations. The following **Table 3** shows the definition of level of service for signalized and unsignalized intersections.

Table 3 – Level of Service Definitions

Level of Service	Signalized Intersection Average Total Delay (sec/veh)	Unsignalized Intersection Average Total Delay (sec/veh)
A	≤ 10	≤ 10
B	> 10 and ≤ 20	> 10 and ≤ 15
C	> 20 and ≤ 35	> 15 and ≤ 25
D	> 35 and ≤ 55	> 25 and ≤ 35
E	> 55 and ≤ 80	> 35 and ≤ 50
F	> 80	> 50

² Transportation Research Board, *Highway Capacity Manual*, Sixth Edition, Washington DC, 2016.

CO-94 and Project Access Intersection

The existing CO-94 and Project Access intersection is proposed to operate with stop control along the northbound exiting approach. With completion of the rezone project, all movements at the proposed access intersection are expected to operate acceptably with LOS D or better during the peak hours throughout the 2040 horizon. **Table 3** provides the results of the level of service analysis for this intersection with LOS worksheets attached.

Table 3 – CO-94 and Project Access Intersection LOS Results

Scenario	AM Peak Hour		PM Peak Hour	
	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
2020 Background Plus Project				
Northbound Approach	0.0	A	20.0	C
Westbound Left	10.2	B	0.0	A
2040 Background Plus Project				
Northbound Approach	0.0	A	27.2	D
Westbound Left	11.3	B	0.0	A

CDOT Access Permit and Turn Lane Evaluation

The need or threshold for requiring an access permit along CDOT roadways occurs when a new access is proposed or if project traffic is anticipated to increase existing access traffic volumes by more than 20 percent. Whether this is a new access to serve the property or not, it is believed that CDOT will require an Access Permit.

Since CO-94 is a state owned and maintained facility, it is recommended that auxiliary turn lanes along CO-94 be constructed in accordance with the current CDOT State Highway Access Code (SHAC). CDOT categorizes the segment of CO-94 adjacent to the property as NR-A: Non-Rural Principal Highway. CO-94 has a posted speed limit of 65 miles per hour (mph) within the project limits. According to the State Highway Access Code for category NR-A roadways, the following thresholds apply:

- A left turn deceleration lane is required for any access with a projected average peak hour left turn ingress volume greater than 10 vehicles per hour (vph).
- A right turn deceleration lane is required for any access with a projected peak hour right turning volume greater than 25 vph.
- A right turn acceleration lane is required for any access with a projected peak hour right turning volume greater than 50 vph when the posted speed on the highway is greater than 40 mph.

Based on traffic projections and the above thresholds, auxiliary turn lane requirements were calculated for the CO-94 full movement access to the property. CO-94 provides one lane of travel in each direction and has a posted speed limit of 65 mph within the study area. Due to the small amount of traffic being added to the existing roadway no acceleration or deceleration lanes are required based on the CDOT SHAC to accommodate the general weekday traffic volumes. It should be noted that in special event conditions on a Saturday midday peak hour of the generator, the 10 vehicles per hour threshold on the westbound left turn entrance may be exceeded for the threshold for a left turn deceleration lane. It is believed that neither an eastbound right turn deceleration lane nor eastbound acceleration lane would be warranted based on the anticipated development and 20 total parking spaces.

Conclusions and Recommendations

In summary, this traffic study letter provides project traffic generation estimates to identify potential project traffic related impacts on the local street system with the proposed UDON Rezoning project. Based on the analysis presented in this study, Kimley-Horn believes the proposed UDON Rezoning project will be successfully incorporated into the existing and future roadway network. Based on the results of this study, it is recommended that the access intersection along CO-94 be stop controlled, and that a R1-1 "STOP" sign be installed on the northbound approach exiting the property. The recommended intersection lane configurations and control for the project development are illustrated in **Figure 8**. If you have any questions or require anything further, please feel free to call me at (303) 228-2304.

Sincerely,

KIMLEY-HORN AND ASSOCIATES, INC.

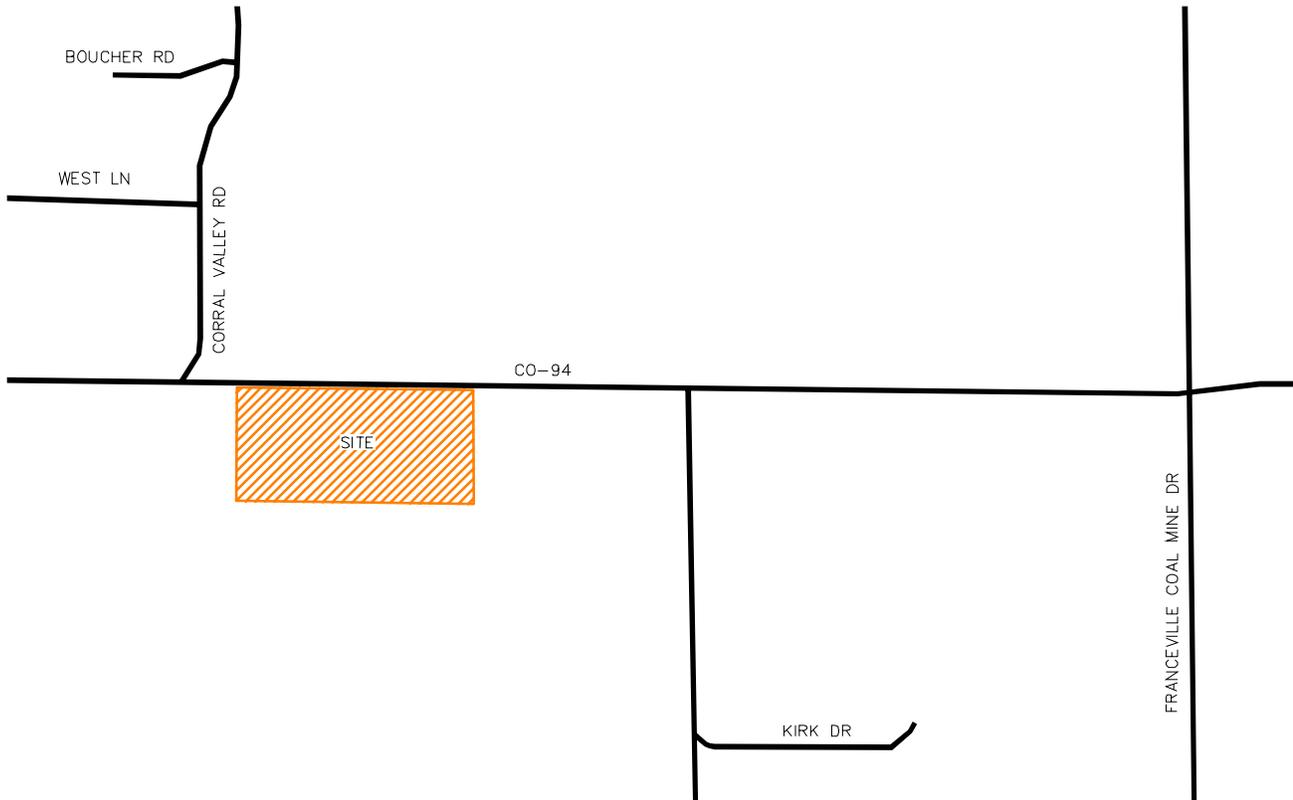


Curtis D. Rowe, P.E., PTOE
Vice President



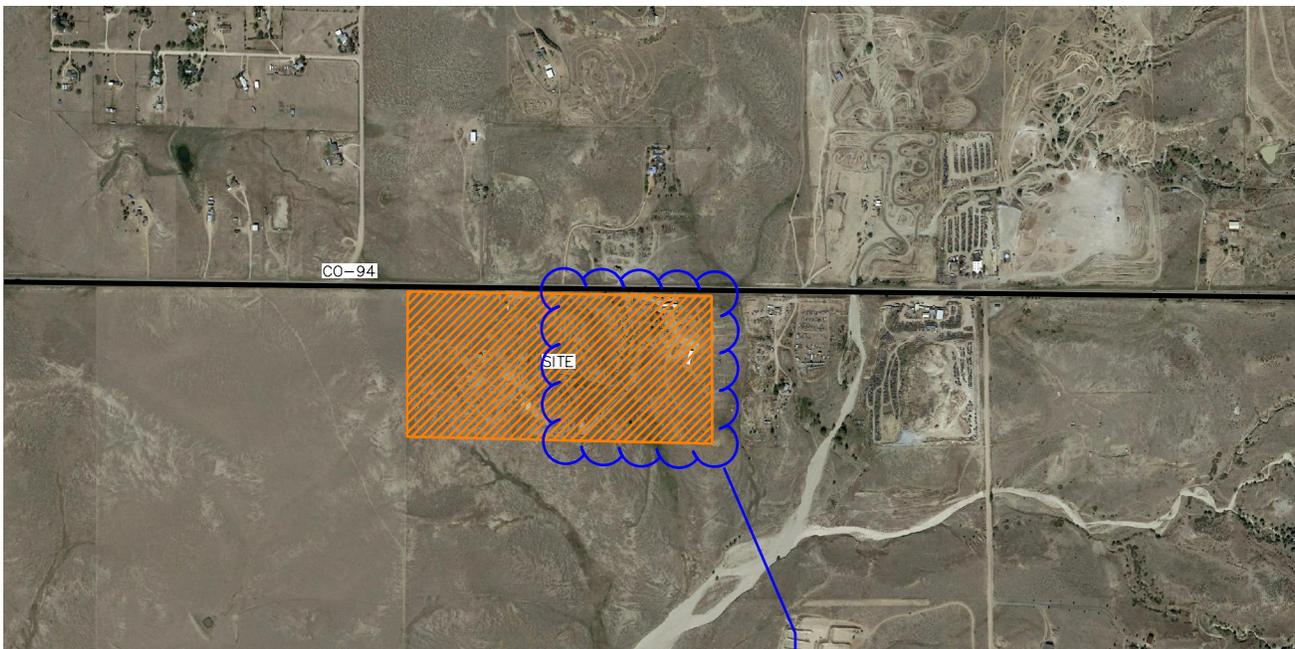
Please address the following:

- Clearly state in the text what the ADT is at the proposed access at full development, and long term.
- State whether the MTCP or other approved corridor study calls for the construction of improvements in the immediate area.
- State whether or not any improvements affected by the project are reimbursable under the current MTCP
- State what the sight distance is for the access and whether it can be met. If it cannot be met, state the required modifications so that it can be met. Also, indicate the anticipated location of the access. Is the access location appropriate?
- State what the current applicable Transportation Impact Fees are.
- provide discussion of Pedestrian & bicycle facilities. Are there any sidewalks or trails along HWY 94? Is there anything indicated in the MTCP or hwy 94 access management plan? etc.



UDON REZONE
VICINITY MAP

FIGURE 1

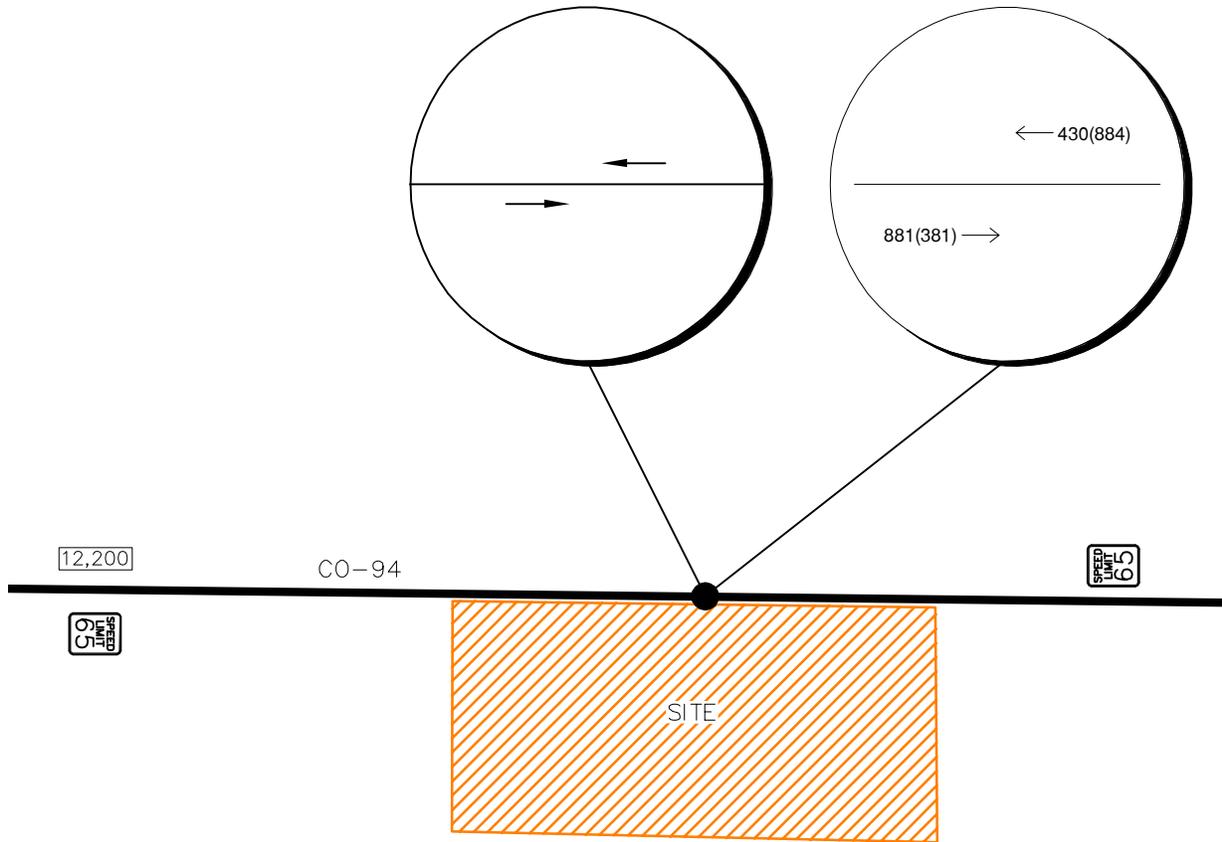


It appears that the extents of the site is limited to the clouded area. Please revise the site area. Typical throughout the attached figures.

UDON REZONE
SITE AREA

FIGURE 2

Counts adjusted from
Thursday, July 11, 2019
7:00–8:00 AM (4:00–5:00 PM)

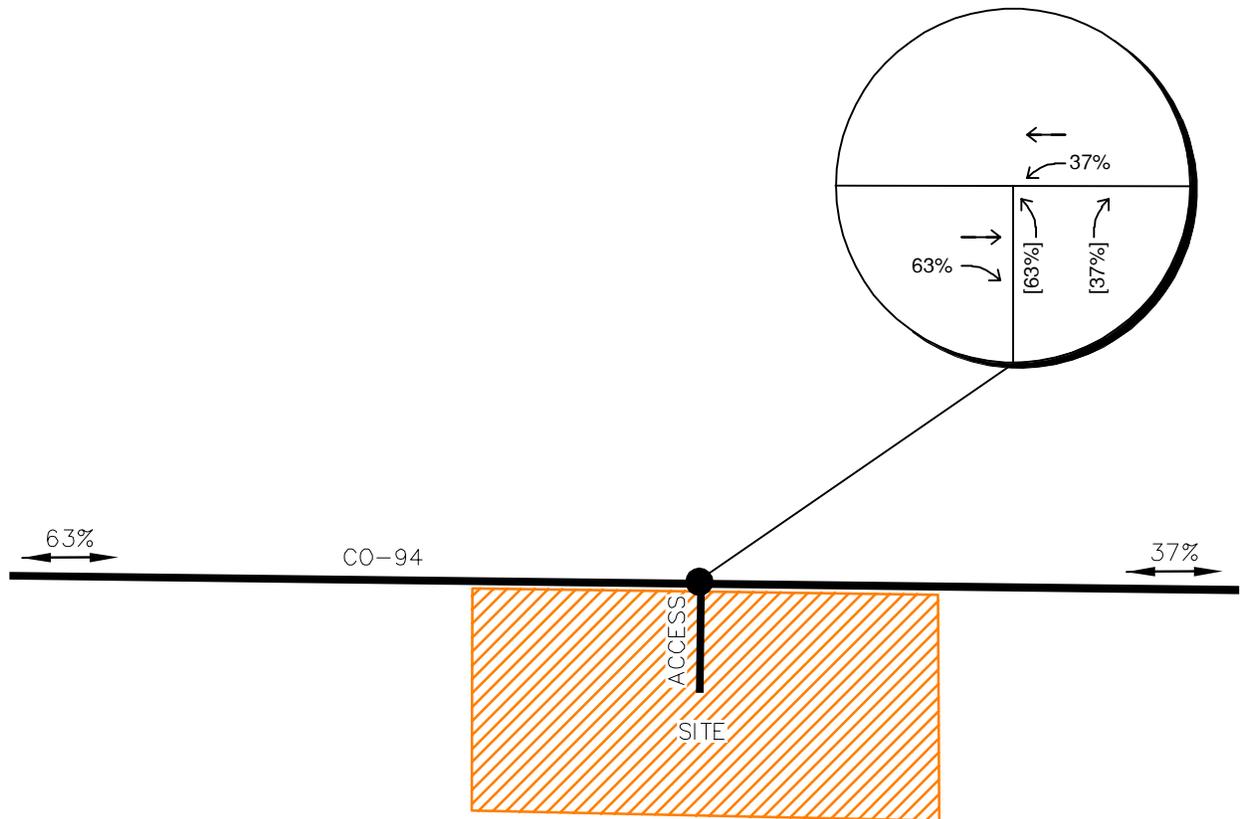


LEGEND

-  Study Area Key Intersection
-  Stop Controlled Approach
-  Roadway Speed Limit
- XX(XX) Weekday AM(PM)
Peak Hour Traffic Volumes
-  Daily Traffic Volume

UDON REZONE
EXISTING LANE CONFIGURATIONS &
TRAFFIC VOLUMES

FIGURE 3

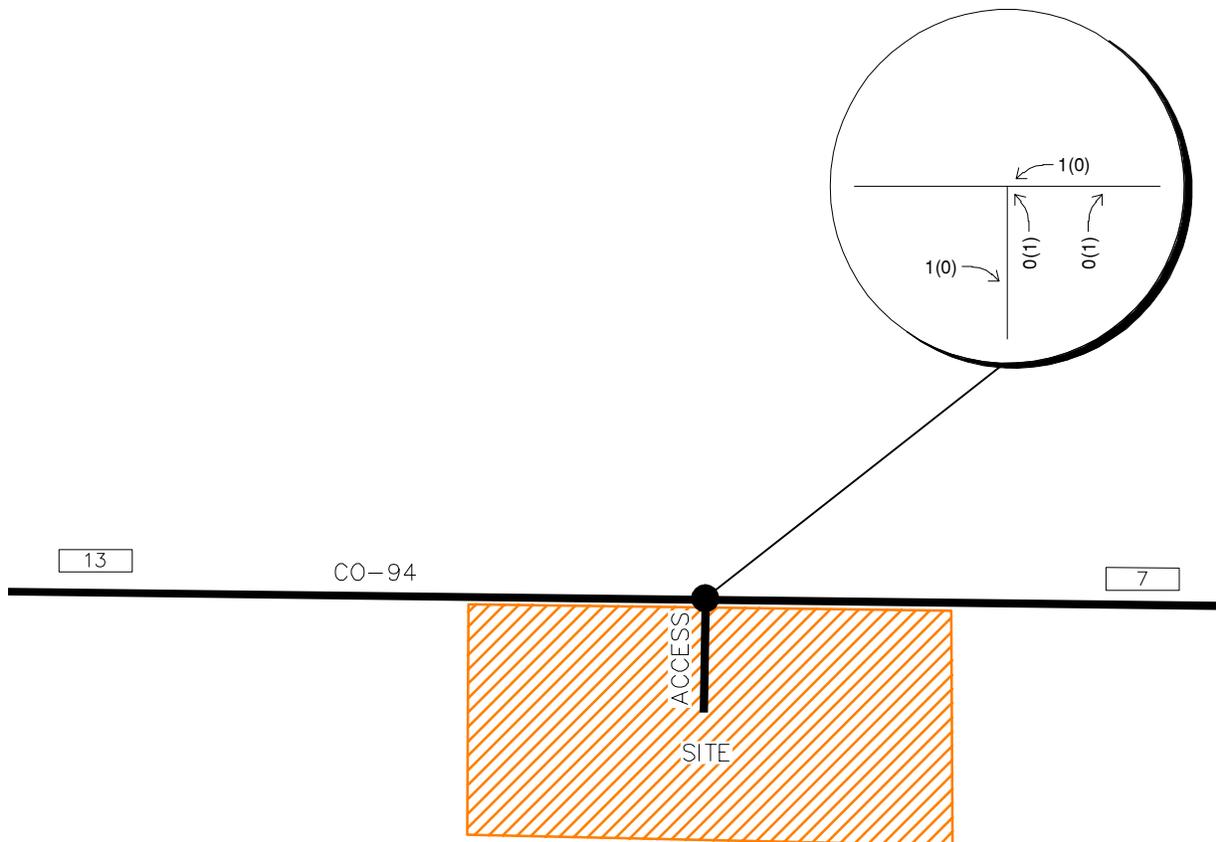


LEGEND

- Study Area Key Intersection
- XX% External Trip Distribution Percentage
- XX%[XX%] Entering[Exiting] Trip Distribution Percentage

UDON REZONE
 PROJECT TRIP DISTRIBUTION

FIGURE 4

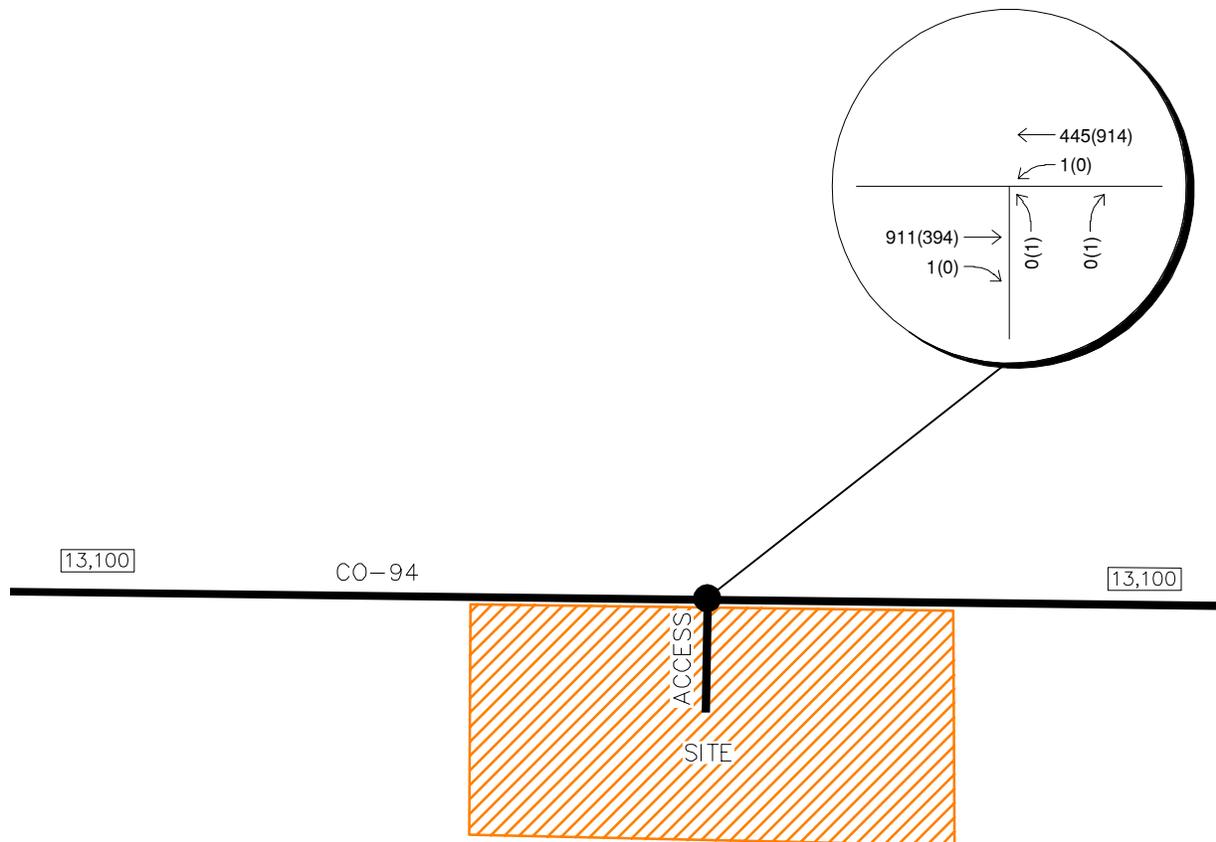


LEGEND

- Study Area Key Intersection
- xxx(xxx) Weekday AM(PM)
Peak Hour Traffic Volumes
- xx,x00 Estimated Daily Traffic Volume

UDON REZONE
 PROJECT TRAFFIC ASSIGNMENT

FIGURE 5

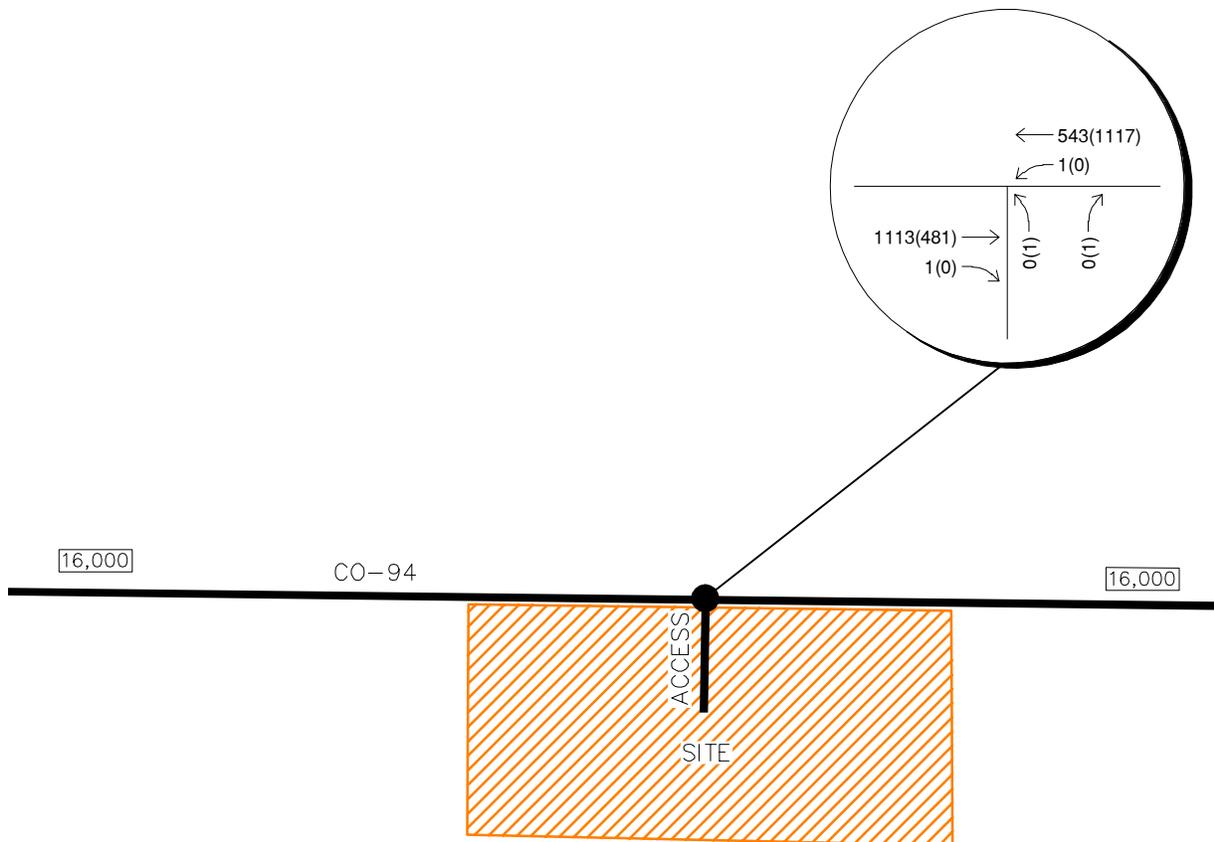


LEGEND

- Study Area Key Intersection
- xxx(XXX) Weekday AM(PM) Peak Hour Traffic Volumes
- xx,x00 Estimated Daily Traffic Volume

UDON REZONE
 2022 TOTAL TRAFFIC VOLUMES

FIGURE 6

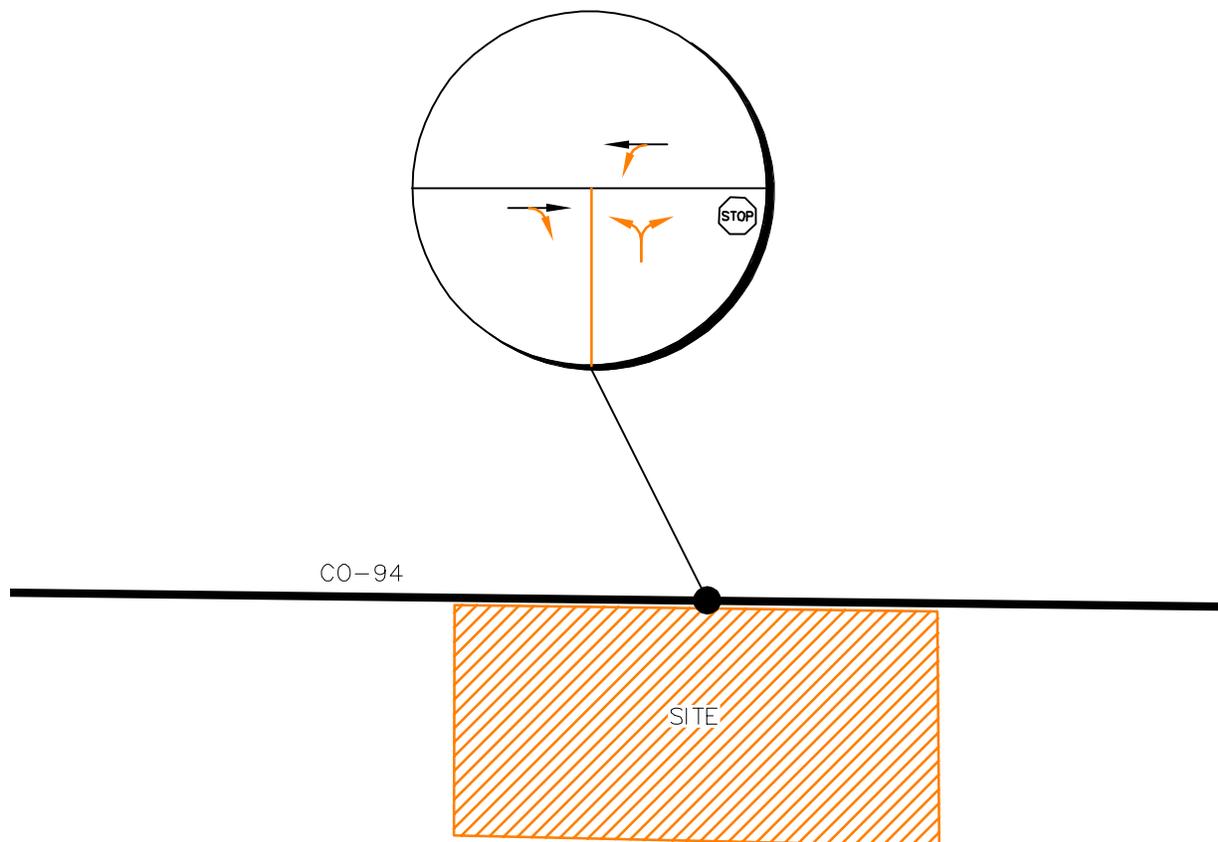


LEGEND

- Study Area Key Intersection
- xxx(XXX) Weekday AM(PM) Peak Hour Traffic Volumes
- xx,x00 Estimated Daily Traffic Volume

UDON REZONE
 2040 TOTAL TRAFFIC VOLUMES

FIGURE 7



LEGEND

- Study Area Key Intersection
- ⬡ STOP Stop Controlled Approach
- ← Improvement

UDON REZONE
RECOMMENDED LANE CONFIGURATIONS

FIGURE 8

2019 CDOT Traffic Volume Data
 Thursday, July 11, 2019
 On SH-94 E/O Space Village Ave CR 2804

COUNTDIR	HOUR0	HOUR1	HOUR2	HOUR3	HOUR4	HOUR5	HOUR6	HOUR7	HOUR8	HOUR9	HOUR10	HOUR11	HOUR12	HOUR13	HOUR14	HOUR15	HOUR16	HOUR17	HOUR18	HOUR19	HOUR20	HOUR21	HOUR22	HOUR23	Total
P (EB)	22	23	16	13	93	272	747	871	439	262	248	222	286	246	282	292	377	429	309	224	155	129	95	52	6104
S (WB)	17	6	9	14	48	169	370	425	316	293	274	325	289	297	443	670	874	572	320	150	94	56	39	50	6120
Total	39	29	25	27	141	441	1117	1296	755	555	522	547	575	543	725	962	1251	1001	629	374	249	185	134	102	12224
Hour	12:00-1:00	1:00-2:00	2:00-3:00	3:00-4:00	4:00-5:00	5:00-6:00	6:00-7:00	7:00-8:00	8:00-9:00	9:00-10:00	10:00-11:00	11:00-12:00	12:00-1:00	1:00-2:00	2:00-3:00	3:00-4:00	4:00-5:00	5:00-6:00	6:00-7:00	7:00-8:00	8:00-9:00	9:00-10:00	10:00-11:00	11:00-12:00	

CDOT Traffic Projection - 12265 Highway 94 Rezone

ROUTE	REFPT	ENDREFPT	LENGTH	AADT	AADTYR	YR20FACTOR	DHV	LOCATION
094A	1	8.085	7.077	11000	2018	1.25	12.5	ON SH 94 E/O SPACE VILLAGE AVE CR 2804

Annual Growth 1.12%

Project Udon Rezone
 Subject Trip Generation for Office Building
 Designed by TES Date May 26, 2020 Job No. 196020000.000
 Checked by _____ Date _____ Sheet No. 1 of 1

TRIP GENERATION MANUAL TECHNIQUES

ITE Trip Generation Manual 10th Edition, Average Rates

Land Use Code - General Office Building (710)

Independant Variable - 1000 Square Feet (X)

SF = 2,000

X = 2.000

T = Average Vehicle Trip Ends

Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m. (700 Series Page 4)

(T) = 1.16 (X)		Directional Distribution:	86% ent.	14% exit.
(T) = 1.16 *	(2.0)	T = 2	Average Vehicle Trip Ends	
		2 entering	0	exiting
		2 + 0 = 2		

Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m. (700 Series Page 5)

(T) = 1.15 (X)		Directional Distribution:	16% ent.	84% exit.
(T) = 1.15 *	(2.0)	T = 2	Average Vehicle Trip Ends	
		0 entering	2	exiting
		0 + 2 = 2		

Weekday (700 Series Page 3)

Average Weekday		Directional Distribution:	50% ent.	50% exit.
(T) = 9.74 (X)		T = 20	Average Vehicle Trip Ends	
(T) = 9.74 *	(2.0)	10 entering	10	exiting
		10 + 10 = 20		

Saturday, Peak Hour of Generator (700 Series Page 9)

Daily Weekday		Directional Distribution:	54% ent.	46% exit.
(T) = 0.53 (X)		T = 2	Average Vehicle Trip Ends	
(T) = 0.53 *	(2.0)	1 entering	1	exiting
		1 + 1 = 2		

Project UDON Rezone
 Subject Trip Generation for Fast-Food Restaurant without Drive-Through Window
 Designed by TES Date May 28, 2020 Job No. 196020000
 Checked by _____ Date _____ Sheet No. 1 of 1

TRIP GENERATION MANUAL TECHNIQUES

ITE Trip Generation Manual 10th Edition, Average Rate Equations

Land Use Code - Fast Food Restaurant Without Drive-Through Window (933)

Independant Variable - 1000 Square Feet Gross Floor Area (X)

Gross Floor Area = 1,000 Square Feet

X = 1.000

T = Average Vehicle Trip Ends

Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m. (900 Series page 132)

Average Weekday		Directional Distribution:	60% ent.	40% exit.
T = 25.10 (X)		T = 25	Average Vehicle Trip Ends	
T = 25.10 *	1.000	15 entering	10	exiting
		15 + 10 =	25	

Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m. (900 Series page 133)

Average Weekday		Directional Distribution:	50% ent.	50% exit.
T = 28.34 (X)		T = 28	Average Vehicle Trip Ends	
T = 28.34 *	1.000	14 entering	14	exiting
		14 + 14 =	28	

Weekday (900 Series page 131)

Average Weekday		Directional Distribution:	50% entering, 50% exiting	
T = 346.23 (X)		T = 348	Average Vehicle Trip Ends	
T = 346.23 *	1.000	174 entering	174	exiting
		174 + 174 =	348	

Saturday Peak Hour of Generator (900 Series page 137)

		Directional Distribution:	49% ent.	51% exit.
T = 54.60 (X)		T = 55	Average Vehicle Trip Ends	
T = 54.60 *	1.000	27 entering	28	exiting
		27 + 28 =	55	

Non Pass-By Trip Volumes (Per ITE Trip Generation Handbook, 3rd Edition September 2017)

AM Peak Hour =	51%	Non-Pass By	PM Peak Hour =	50%	Non-Pass By
	IN	Out	Total		
AM Peak	8	5	13		
PM Peak	7	7	14		
Daily	87	87	174		PM Peak Hour Rate Applied to Daily

Pass-By Trip Volumes (Per ITE Trip Generation Handbook, 3rd Edition September 2017)

AM Peak Hour =	49%	Pass By	PM Peak Hour =	50%	Pass By
	IN	Out	Total		
AM Peak	7	5	12		
PM Peak	7	7	14		
Daily	87	87	174		PM Peak Hour Rate Applied to Daily

Intersection						
Int Delay, s/veh	0					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↑		↑	↑	
Traffic Vol, veh/h	911	1	1	445	0	0
Future Vol, veh/h	911	1	1	445	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	800	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	990	1	1	484	0	0

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	991	0	1476
Stage 1	-	-	-	-	990
Stage 2	-	-	-	-	486
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	-	-	698	-	139
Stage 1	-	-	-	-	360
Stage 2	-	-	-	-	618
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	698	-	139
Mov Cap-2 Maneuver	-	-	-	-	139
Stage 1	-	-	-	-	360
Stage 2	-	-	-	-	617

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

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	698	-
HCM Lane V/C Ratio	-	-	-	0.002	-
HCM Control Delay (s)	0	-	-	10.2	0
HCM Lane LOS	A	-	-	B	A
HCM 95th %tile Q(veh)	-	-	-	0	-

Intersection						
Int Delay, s/veh	0					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↑		↑	↑	
Traffic Vol, veh/h	394	0	0	914	1	1
Future Vol, veh/h	394	0	0	914	1	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	800	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	428	0	0	993	1	1

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	428	0	1421
Stage 1	-	-	-	-	428
Stage 2	-	-	-	-	993
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	-	-	1131	-	150
Stage 1	-	-	-	-	657
Stage 2	-	-	-	-	359
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1131	-	150
Mov Cap-2 Maneuver	-	-	-	-	150
Stage 1	-	-	-	-	657
Stage 2	-	-	-	-	359

Approach	EB	WB	NB
HCM Control Delay, s	0	0	20
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	242	-	-	1131	-
HCM Lane V/C Ratio	0.009	-	-	-	-
HCM Control Delay (s)	20	-	-	0	-
HCM Lane LOS	C	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection						
Int Delay, s/veh	0					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↑		↑	↑	
Traffic Vol, veh/h	1113	1	1	543	0	0
Future Vol, veh/h	1113	1	1	543	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	800	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1210	1	1	590	0	0

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	1211	0	1802
Stage 1	-	-	-	-	1210
Stage 2	-	-	-	-	592
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	-	-	576	-	88
Stage 1	-	-	-	-	282
Stage 2	-	-	-	-	553
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	576	-	88
Mov Cap-2 Maneuver	-	-	-	-	88
Stage 1	-	-	-	-	282
Stage 2	-	-	-	-	551

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

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	576	-
HCM Lane V/C Ratio	-	-	-	0.002	-
HCM Control Delay (s)	0	-	-	11.3	0
HCM Lane LOS	A	-	-	B	A
HCM 95th %tile Q(veh)	-	-	-	0	-

Intersection						
Int Delay, s/veh	0					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↑		↑	↑	
Traffic Vol, veh/h	481	0	0	1117	1	1
Future Vol, veh/h	481	0	0	1117	1	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	800	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	523	0	0	1214	1	1

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	523	0	1737
Stage 1	-	-	-	-	523
Stage 2	-	-	-	-	1214
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	-	-	1043	-	96
Stage 1	-	-	-	-	595
Stage 2	-	-	-	-	281
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1043	-	96
Mov Cap-2 Maneuver	-	-	-	-	96
Stage 1	-	-	-	-	595
Stage 2	-	-	-	-	281

Approach	EB	WB	NB
HCM Control Delay, s	0	0	27.2
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	164	-	-	1043	-
HCM Lane V/C Ratio	0.013	-	-	-	-
HCM Control Delay (s)	27.2	-	-	0	-
HCM Lane LOS	D	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-