Traffic Impact Study

Mayberry Communities

Filing 5 Traffic Impact Study

El Paso County, Colorado

February 16, 2023

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Prepared for

Mayberry Communities

Prepared by

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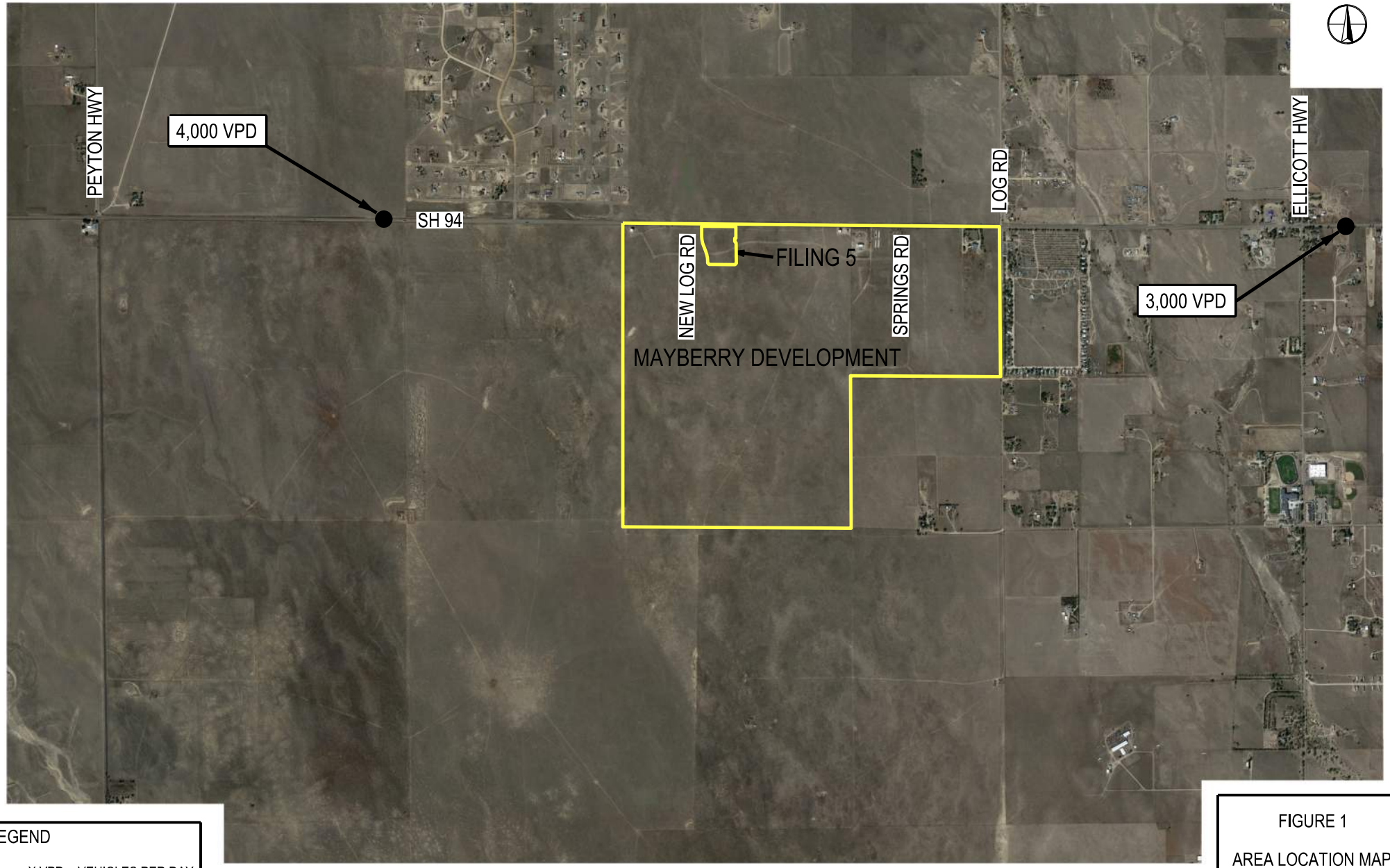
Introduction

Mayberry Communities have retained HDR Engineering, Inc. to perform a Traffic Impact Study (TIS) for the proposed Filing 5 (Tract K) development located in the southeast quadrant of New Log Road and SH 94, as shown in Figure 1. The development is anticipated to consist of the following proposed land uses:

- 38 dwelling units of single-family detached housing
- 108 dwelling units of mid-rise, multi-family housing

The project site is currently vacant, and the development is expected to be complete by 2024. This study serves as part of an update to the approved *2020 - June - Ellicott Town Center Commercial Rezone TIS Report (LSC 194060) (Ref 1)* and uses assumptions and traffic data from the *2022 - September - Mayberry Filing No. 3 (Ref 2)* TIS. Filing 5 is part of the broader proposed Mayberry Communities Development just west of Ellicott between Peyton Highway and Log Road. This community is being developed in phases, and this report details the traffic impacts only due to the Filing 5 phase of development.



LEGEND

X VPD = VEHICLES PER DAY

FIGURE 1

AREA LOCATION MAP

Analysis Assumptions

This traffic impact study uses the Highway Capacity Manual 6 (HCM) (see Appendix A for a brief description of level of service) as a basis for the capacity analysis as well as primary data and engineering judgment, which is required to estimate background traffic, pass-by capture, and internal capture reductions, further described in the following paragraphs.

Directional Distribution

Existing traffic projections are based on data collected for the development of the *2022 - September - Mayberry Filing No. 3*. Turning movement counts were collected for the Peyton Highway/SH 94 intersection (west of Mayberry Communities) and the Ellicott Highway/SH 94 intersection (east of Mayberry Communities).

This study follows the assumption established in the *2022 - September - Mayberry Filing No. 3* that 90% of vehicle trips go to and come from points west of the development, while 10% go to and come from points east of the development. Following the 90/10 assumption, future traffic is then assumed to be proportionally distributed according to the turning movement counts collected at Peyton Highway and Ellicott Highway intersections. These counts provide the basis for the overall directional distribution of traffic approaching and departing the project site, as summarized in Table 1.

Table 1: Forecasted Overall Directional Distribution Site-Oriented Traffic

Direction/Roadway	AM % Overall Distribution	PM % Overall Distribution
SH 94 W	82.4%	76.6%
SH 94 E	5.3%	6.0%
Peyton Hwy S	2.3%	5.9%
Peyton Hwy N	5.3%	7.5%
Ellicott Hwy S	4.0%	2.3%
Ellicott Hwy N	0.6%	1.7%

HDR has not found other studies in the area. Based on current land use at the site, this study does not use pass-by, internal capture, pedestrian, and bicycle reductions.

Filing 3 Roadway Improvements

The LOS analysis is based on the proposed improvements from *2022 - September - Mayberry Filing No. 3.* The roadway network proposed in Filing 3 is assumed to be in place at the time of completion for Filing 5.

New Log Road and SH 94 will be an unsignalized intersection with stop control on the northbound approach. The approaches will be constructed according to the following parameters:

- One left-turn lane and one right-turn lane for the northbound approach on New Log Road
- A through lane and a dedicated right-turn turn lane on the eastbound approach of SH 94
- A dedicated left-turn lane and one through lane on the westbound approach of SH 94

The ability of the roadway network to accommodate the generated traffic of Filing 5 is contingent upon the completion of an internal roadway network comprised of Village Main, Mayberry Drive, and the construction of New Log Road and Springs Road.

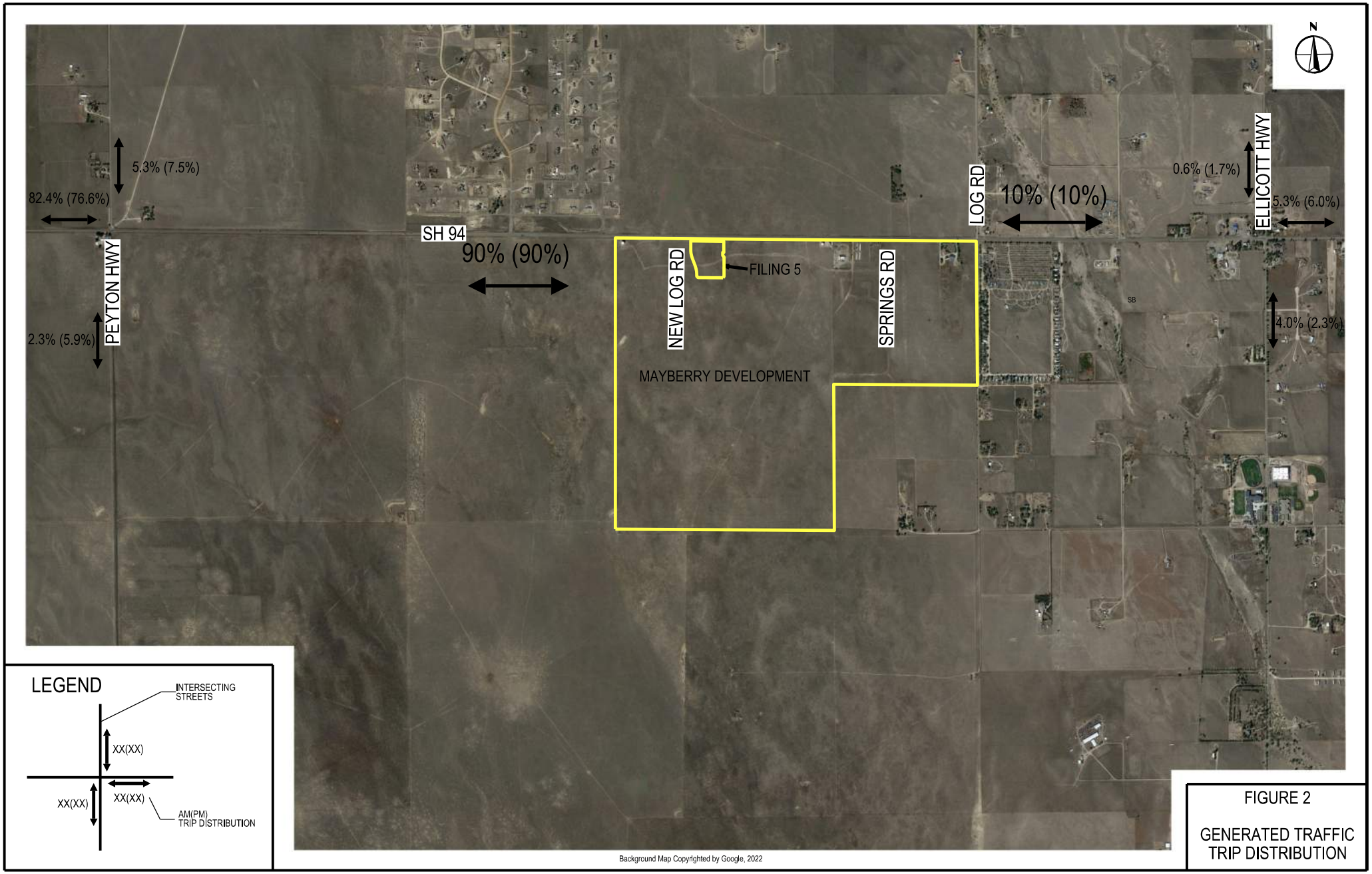


FIGURE 2

GENERATED TRAFFIC TRIP DISTRIBUTION

Existing Thoroughfare System

As indicated on the area location map (Figure 1) and the conceptual site plan (Figure 2), the project is located in the southeast quadrant of New Log Road and SH 94, near Ellicott, CO.

Average daily traffic estimates SH 94 were obtained from the Colorado Department of Transportation (CDOT) Online Transportation Information System (OTIS) (Ref. 3) and turning movement counts provided in the previous TIS dated September 2022. To adequately describe these roadways, further characterization is provided for each adjacent major roadway to the development.

SH 94

CDOT classifies SH 94 as a functional type Minor Arterial and an access control type as a Non-Rural Principal Highway (NR-A) west of County Road 493 and a Regional Highway (R-A) east of County Road 493. The posted speed limit is 65 miles per hour near the development. An OTIS straight-line diagram of SH 94 near the project site is provided in Appendix A. According to CDOT's traffic volume database, the existing daily traffic volume on SH 94 is listed below:

- 4,000 vpd between Peyton Highway and Ellicott Highway
- 3,000 vpd east of Ellicott Highway

Peyton Highway

The El Paso County 2040 Major Transportation Corridor Plan (MTCP)(Ref. 4) classifies Peyton Highway as a Minor Arterial and has a speed limit of 55 mph.

Ellicott Highway

The El Paso County MTCP classifies Ellicott Highway as a Minor Arterial and has a speed limit of 55 mph.

Site and Access Characteristics

As shown in Figure 3, access to Filing 5 will be provided via two full-movement driveways along Marketplace Drive.

FIGURE 3

CONCEPTUAL SITE PLAN

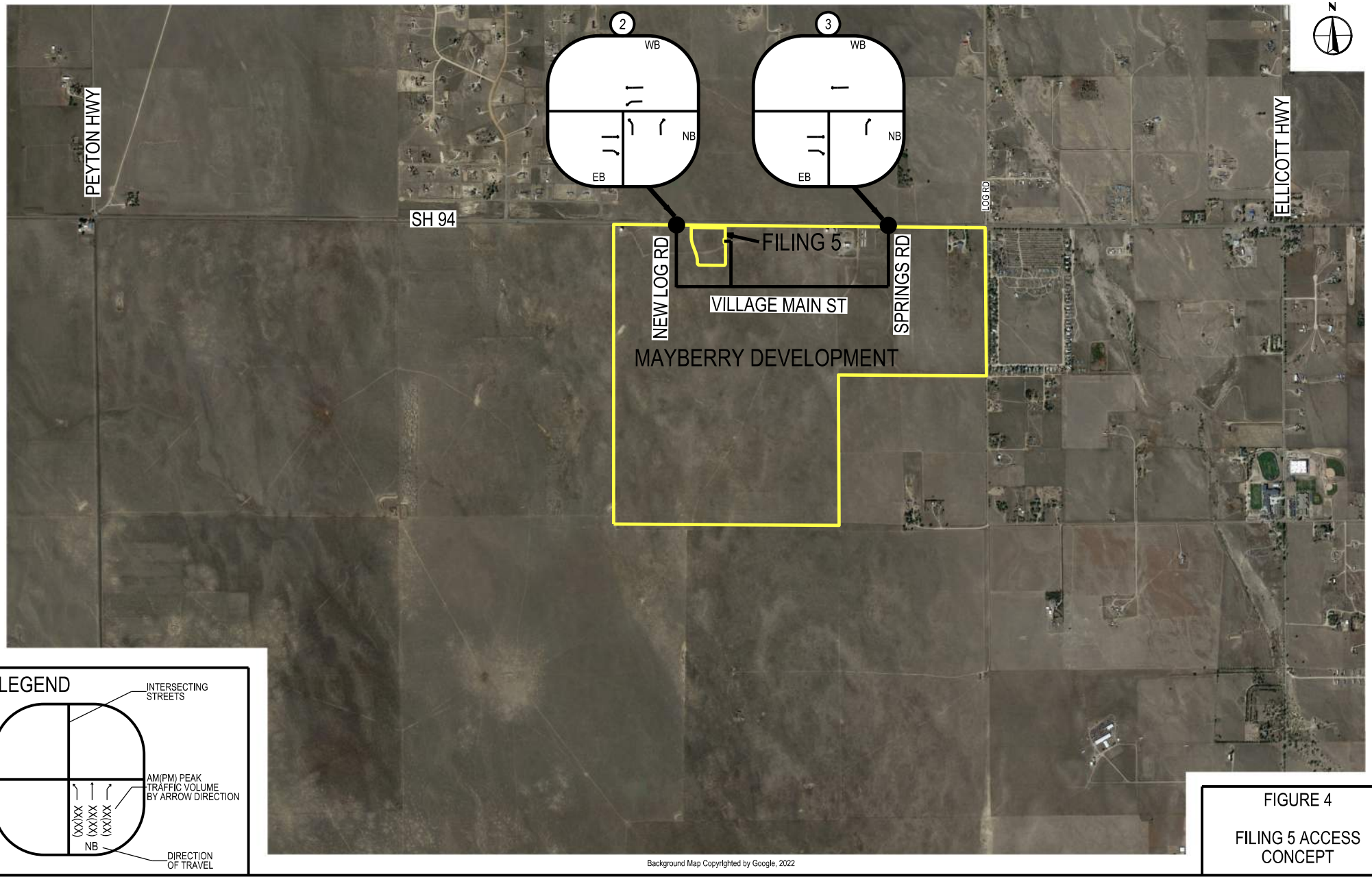


FIGURE 4

FILING 5 ACCESS CONCEPT

Traffic Analysis

To assess the traffic impacts of the proposed development, two (2) time periods (AM Peak Hour and PM Peak Hour) and three (3) travel conditions were evaluated:

- 2024 Forecasted Traffic Conditions
- 2024 Forecasted plus Previous Filing 3 Background Traffic Conditions
- 2024 Background plus Site-Generated Traffic Conditions

Intersections in the vicinity of the site are considered the locations of principal concern because they are the locations of the highest traffic conflict and delay. The standard used to evaluate traffic conditions at intersections is level of service (LOS), which is a qualitative measure of the effect of a number of factors such as speed, the volume of traffic, geometric features, traffic interruptions, freedom to maneuver, safety, driving comfort, convenience, and operating cost.

2024 Forecasted Traffic Conditions

The analysis of existing traffic required the collection of data on the major roadways and intersections. Traffic counts for the following study area intersections were collected in March and August 2022 while schools were in session unless otherwise noted:

- Peyton Highway and SH 94
- Ellicott Highway and SH 94

The existing TMC values were grown by the growth rate provided by OTIS to reach a 2024 forecast year. This process used trends established by prior data for the major roadways and intersections near the project site. The adjusted 2024 existing turning movement counts are provided in Figure 4. Descriptions of existing study intersections are discussed in the following sections as well as the forecasted LOS for the Year 2024. Table 2 provides the summary of both LOS and delay.

Peyton Highway and SH 94

Peyton Highway and SH 94 is currently an unsignalized intersection with stop controls on the northbound and southbound approaches. The northbound and southbound approaches of Peyton Highway provide one left-turn/through/right-turn shared lane. The eastbound and westbound approaches of SH 94 provide one left-turn lane and a through/right-turn shared lane. The northbound leg of the intersection currently operates at LOS B under the existing traffic conditions during both the AM and PM peak periods.

Ellicott Highway and SH 94

Ellicott Highway and SH 94 is currently an unsignalized intersection with stop controls on the northbound and southbound approaches. The northbound and southbound approaches of Ellicott Highway provide one left-turn/through/right-turn shared lane. The eastbound and westbound approaches of SH 94 provide one left-turn lane and a

through/right-turn shared lane. The northbound leg of the intersection currently operates at LOS C under the existing traffic conditions during both the AM and PM peak periods.

Table 2: 2024 Existing Forecasted Level of Service Summary

Intersection	2024 Existing	
	AM	PM
Peyton Highway and SH 94	B (14.1)	B (13.5)
Ellicott Highway and SH 94	C (16.0)	C (15.5)

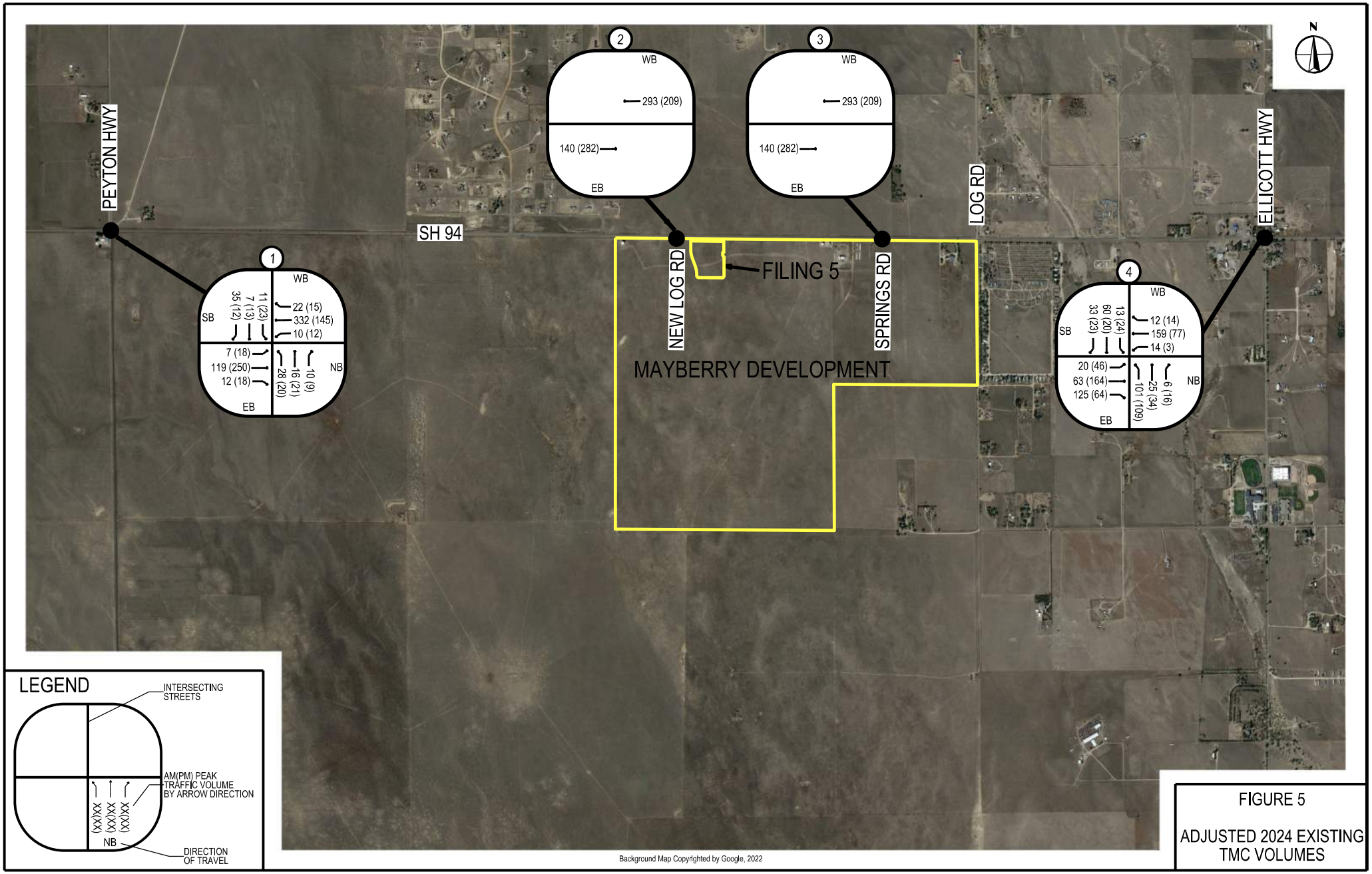


FIGURE 5

ADJUSTED 2024 EXISTING TMC VOLUMES

2024 Existing plus Previous Filing Background Traffic Conditions

The generated traffic from the previous Filings 1, 2, and 3 are assumed to be part of the background traffic. The proposed access roads that will accommodate this traffic are studied for the background traffic and the development traffic to follow. The additional intersections that will be built as part of Mayberry Filing 3 are listed below:

- New Log Road and SH 94
- Spring Road and SH 94

Previous Filing Site-Generated Traffic

Determining the site-generated traffic, or the traffic generated due to the development of the previous Filings, is a major element of this analysis. Unadjusted daily trips and the peak hour traffic associated with these Filings were estimated using recommendations and data contained in the Institute of Transportation Engineers Trip Generation, 11th Edition (Ref. 6).

These previous Filings generate approximately 2,801 unadjusted daily trips upon build-out. Table 3 provides a detailed traffic generation summary related to the assumed land use plan.

Table 3: Summary of Unadjusted Daily and Peak Hour Trip Generation from Previous Filings

Site	Land Use	Land Use Code	Size	Trip Generation Method[1]	24-Hour Two-Way Volume	AM Peak Hour		PM Peak Hour	
						Enter	Exit	Enter	Exit
Filing 1/1A/3	Single Family Detached Housing	210	240 DU	Fitted Curve	2,257	43	123	143	84
Filing 2	General Light Industrial	110	30 KSF	Fitted Curve	163	21	3	2	15
Filing 4	General Light Industrial	110	88 KSF	Fitted Curve	381	56	8	5	32
Total					2,801	120	134	150	131

[1]Trip Generation is based on the higher of the ITE's average rate and fitted curve method for all land uses.

The LOS summary for the trips generated from the previous Filings are discussed below. Table 4 provides the summary of both LOS and delay. Background plus the previous Filings volumes are shown in Figure 5.

Peyton Highway and SH 94

The intersection will operate at LOS C under 2024 Forecasted plus Previous Filing Background Traffic Conditions during the AM and PM peak periods.

New Log Road and SH 94

New Log Road and SH 94 will be an unsignalized intersection with stop controls on the northbound approach. The northbound approach of New Log Road will provide one left-turn lane and one right-turn lane. The eastbound approach of SH 94 will provide a through lane and a dedicated right-turn turn lane. The westbound approach of SH 94 will provide a dedicated left-turn lane and one through lane. These improvements will be built concurrently with these Filings and will be in place by the time they are occupied. The intersection will operate at LOS C under 2024 Forecasted plus Previous Filing traffic conditions during the AM and PM peak periods.

Springs Road and SH 94

The intersection will operate at LOS A and B under 2024 Forecasted plus Previous Filing conditions during the AM and PM peak periods, respectively. Assuming the connections at both New Log Road and Springs Road are provided

Ellicott Highway and SH 94

The intersection will operate at LOS C under 2024 Forecasted plus Previous Filing traffic conditions during the AM and PM peak periods.

Table 4: Filing 1, 2 and 3 Level of Service Summary

Intersection	2024 Background + Previous Filings	
	AM	PM
Peyton Highway and SH 94	C (16.7)	C (19.8)
New Log Road and SH 94	C (15.2)	C (16.4)
Springs Road and SH 94	A (9.2)	B (10.2)
Ellicott Highway and SH 94	C (16.9)	C (16.5)

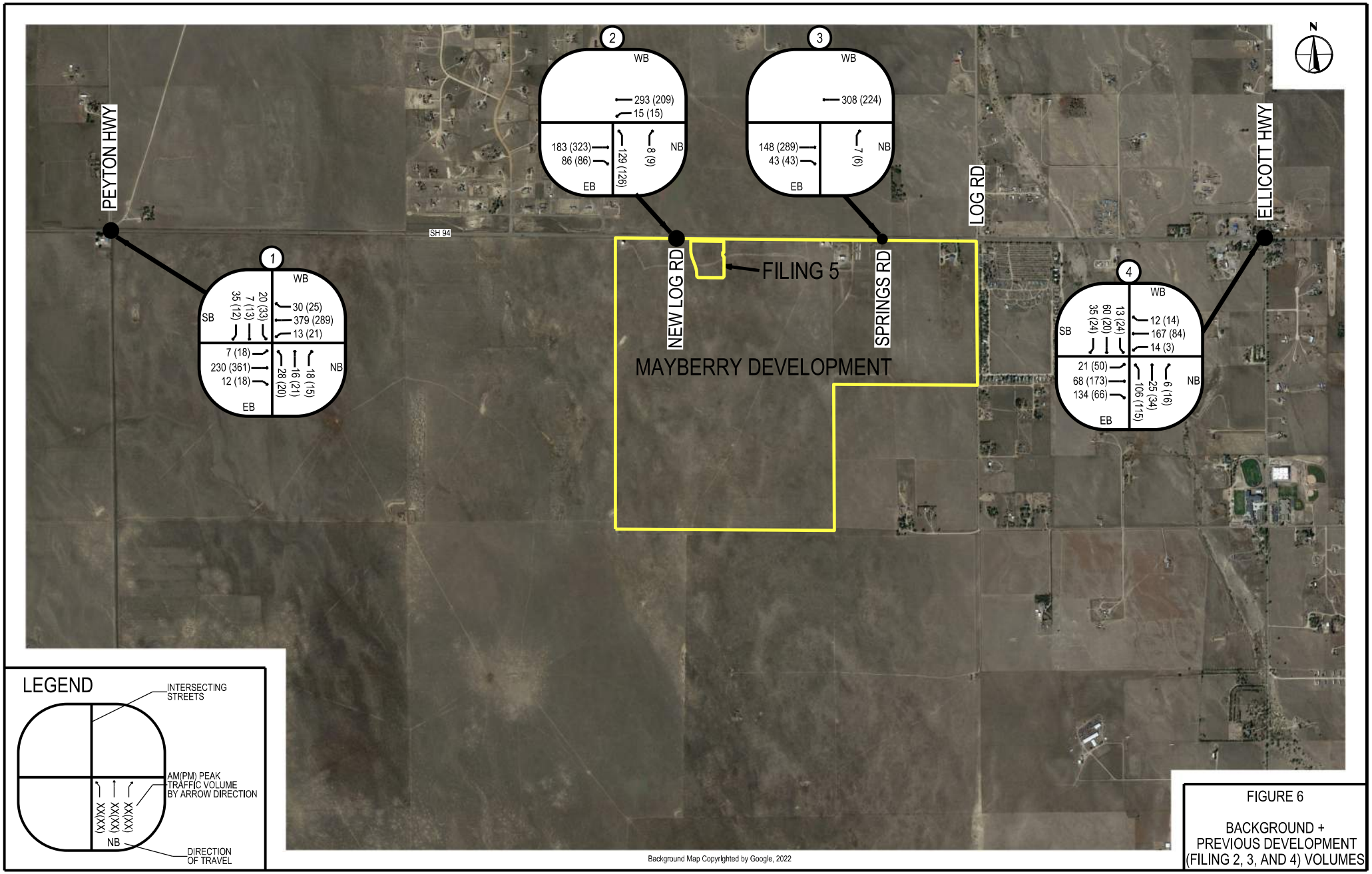


FIGURE 6

BACKGROUND + PREVIOUS DEVELOPMENT (FILING 2, 3, AND 4) VOLUMES

2024 Conditions with Filing 5 Site-Generated Traffic

The proposed Filing 5 is anticipated to be completed in 2024. The forecasted traffic was projected using available information and was used to assess the major roadway impacts and evaluate potential improvements. All analysis assumes the completion of New Log Road and Springs Road improvements upon which previous filings are contingent.

Filing 5 Site Generated Traffic

Unadjusted total trips per day and the peak hour traffic associated with the project were estimated using recommendations and data contained in the Institute of Transportation Engineers Trip Generation, 11th Edition.

The proposed project will generate approximately 1,489 unadjusted daily trips upon build-out. Table 5 provides a detailed traffic production summary directly related to the assumed land use plan.

Table 5: Summary of Unadjusted Daily and Peak Hour Trip Generation from Filing 5

Site	Land Use	Land Use Code	Size	Trip Generation Method[1]	24-Hour Two-Way Volume	AM Peak Hour		PM Peak Hour	
						Enter	Exit	Enter	Exit
Filing 5	Multifamily Housing (Low-Rise)	220	108 DU	Fitted Curve	1,075	17	54	55	32
	Single Family Attached	215	38 DU	Fitted Curve	239	4	10	11	8
Total					1,314	21	64	66	40

[1]Trip Generation is based on the higher of the ITE's average rate and fitted curve method for all land uses.
[2]Trips to and from the proposed clubhouse development are assumed to be internal and included in ITE trip generation values and assumed to include a small clubhouse office that has negligible impact on trip generation

The LOS summary for the trips generated from Filing 5 are discussed below. Table 6 provides the summary of both LOS and delay. Filing 5 generated volumes are shown in Figure 6, and Background + Filing 3 + Filing 5 volumes are shown in Figure 7.

Peyton Highway and SH 94

The intersection will operate at LOS C under 2024 site plus forecasted traffic conditions during the AM and PM peak periods. There are no improvements recommended at this intersection as part of this TIS.

New Log Road and SH 94

The intersection will operate at LOS C under 2024 site plus forecasted traffic conditions during the AM and PM peak periods with the improvements identified in the previous

section. Assuming the connections at both New Log Road and Springs Road are provided, there are no improvements recommended at this intersection as part of this TIS.

Springs Road and SH 94

The intersection will operate at LOS A and B under 2024 site plus forecasted traffic conditions during the AM and PM peak periods, respectively. Assuming the connections at both New Log Road and Springs Road are provided, there are no improvements recommended at this intersection as part of this TIS.

Ellicott Highway and SH 94

The intersection will operate at LOS C under 2024 site plus forecasted traffic conditions during the AM and PM peak periods. There are no improvements recommended at this intersection as part of this TIS.

Table 6: Filing 5 Level of Service Summary

Intersection	2024 Background + Previous Filings + Filing 5	
	AM	PM
Peyton Highway and SH 94	C (17.8)	C (23.1)
New Log Road and SH 94	C (17.2)	C (18.6)
Springs Road and SH 94	A (9.3)	B (10.2)
Ellicott Highway and SH 94	C (17.1)	C (16.8)

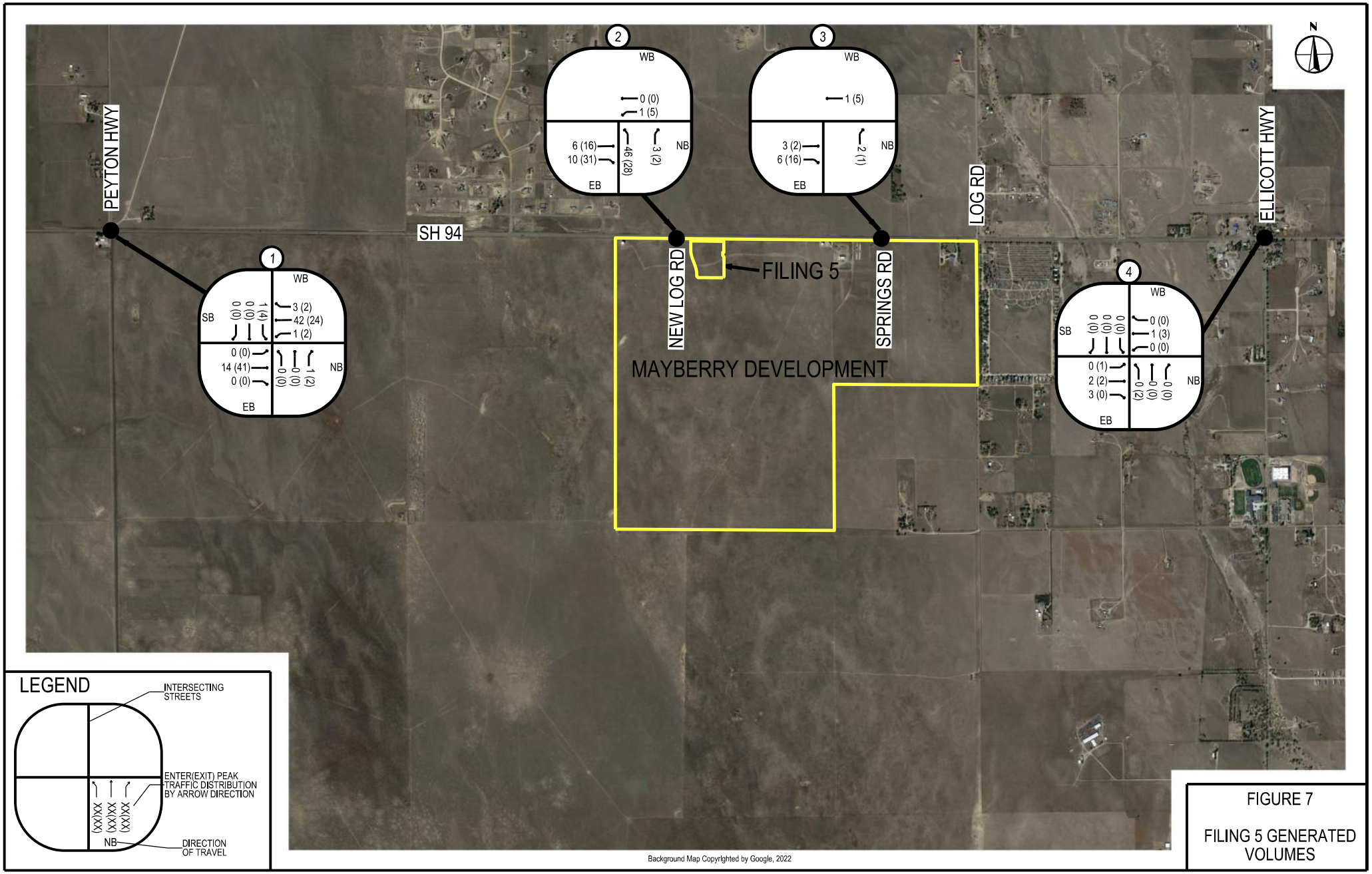


FIGURE 7

FILING 5 GENERATED VOLUMES

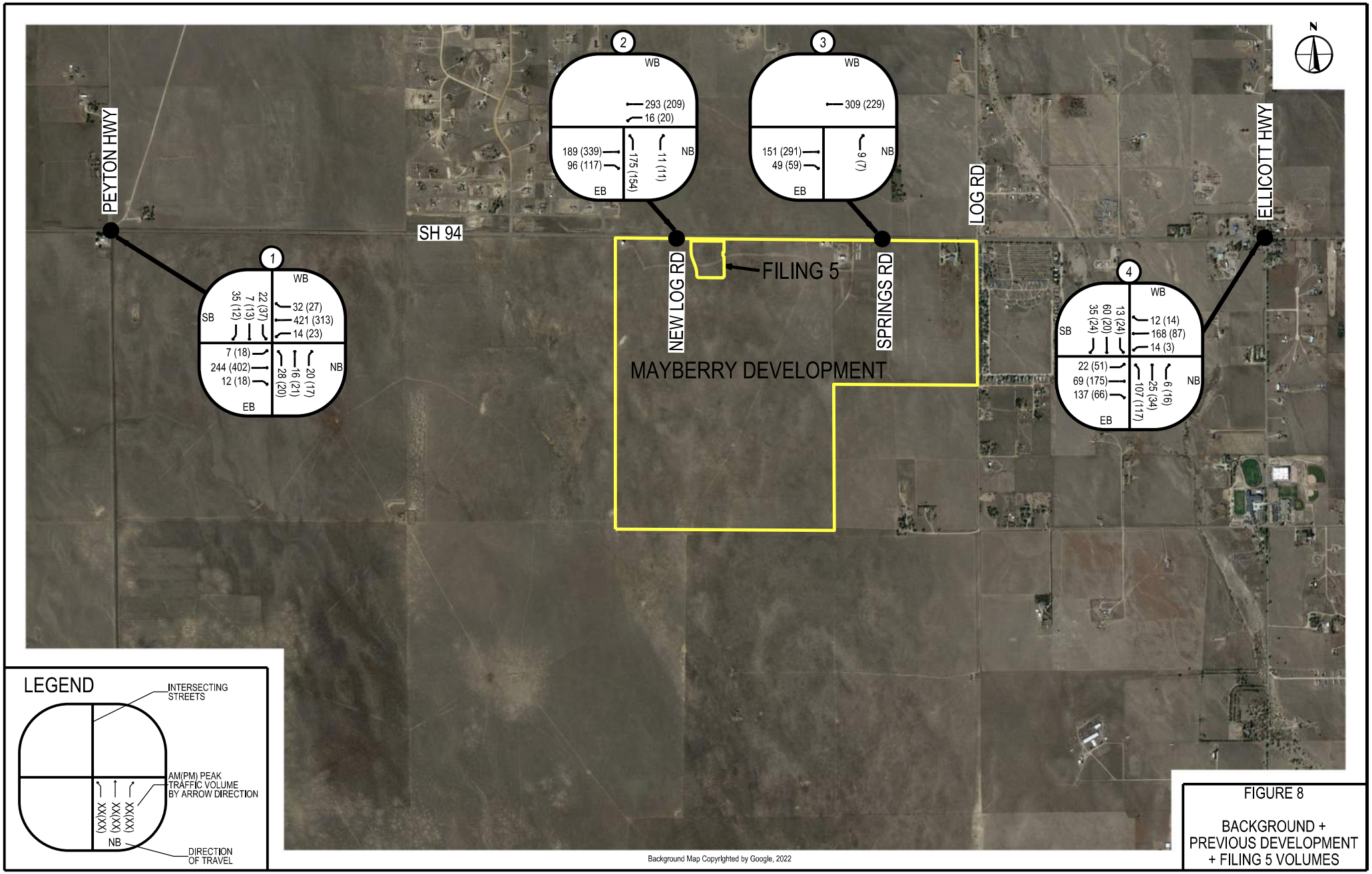


FIGURE 8

BACKGROUND + PREVIOUS DEVELOPMENT + FILING 5 VOLUMES

Summary of Findings

Intersections adjacent to the development on SH 94 will operate at LOS C or better for all scenarios analyzed in this TIA. Therefore, the infrastructure that is anticipated to be in place by the time Filing 3 and Filing 5 are developed and occupied will have the capacity to handle the generated traffic. No improvements are needed for the addition of Filing 5 to the Mayberry Communities Development. Intersection LOS and delay results are presented in Table 7.

Table 7: Level of Service Summary

Intersection	2024 Existing		2024 Background + Previous Filings		2024 Background + Previous Filings + Filing 5	
	AM	PM	AM	PM	AM	PM
Highest delay minor street approach is reported for all unsignalized intersections.						
Peyton Highway and SH 94	B (14.1)	B (13.5)	C (16.7)	C (19.8)	C (17.8)	C (23.1)
New Log Road and SH 94	-	-	C (15.2)	C (16.4)	C (17.2)	C (18.6)
Springs Road and SH 94	-	-	A (9.2)	B (10.2)	A (9.3)	B (10.2)
Ellicott Highway and SH 94	C (16.0)	C (15.5)	C (16.9)	C (16.5)	C (17.1)	C (16.8)

References

1. 2020 - June - Ellicott Town Center Commercial Rezone TIS Report

2. 2022 - September - Mayberry Filing No. 3

3. El Paso County 2016 Major Transportation Corridor Plan Update

4. Transportation Research Board 2016 Highway Capacity Manual, 6th Edition, Washington, D.C.

5. Trafficware Ltd 2017 Synchro 11, Sugar Land, Texas

6. Institute of Transportation Engineers 2017 Trip Generation Manual, An Informational Report, 11th Edition, Washington D.C.

Appendix A: Highway Capacity Manual Description

HCM Unsignalized Intersection Level of Service

Unsignalized intersections were analyzed for this study. Unsignalized intersection LOS is defined in terms of average control delay and, in some cases, volume to capacity (v/c) ratio. Control delay is that portion of total delay attributed to traffic control measures, either traffic signals or stop signs. Control delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay.

For two-way stop-controlled intersections, the analysis method assumes that major street-through traffic is not affected by minor street flows. Major street left-turning traffic and the traffic on the minor approaches will be affected by opposing movements. Stop or yield signs are used to assign the right-of-way to the major street, and this designation forces drivers on the controlled street to judgmentally select gaps in the major street flow through which to execute crossing or turning maneuvers. Thus, the capacity of the controlled legs is based on two factors:

- The distribution of gaps in the major street traffic stream.
- Driver judgment in selecting gaps through which to execute their desired maneuvers.

The LOS procedure computes a capacity for each movement based on the critical time gap required to complete the maneuver and the volume of traffic that is opposing the movement. The average control delay for any particular movement is calculated as a function of the capacity of the approach and the degree of saturation (v/c ratio). The degree of saturation is defined as the volume for a movement, expressed as an hourly flow rate, divided by the movement's capacity, expressed as an hourly flow rate. With the HCM 6 methodology (Ref. 5), overall intersection LOS is best quantified based on minor street movement average control delay. The HCM 6 methodology adjusts individual movement delay to account for a degree of saturation (v/c ratio) that is greater than 1.0. Those movements are assigned a LOS of F, regardless of the average control delay. Engineering judgment must be used to determine which minor street movement controls for overall intersection LOS and whether unacceptable LOS on minor street movements appropriately reflects unacceptable LOS for the overall intersection.

Table 2 shows the relationship between the average control delay and the LOS. The LOS range for unsignalized intersections is different than that for signalized intersections, and this difference is because drivers expect different levels of performance from other kinds of transportation facilities. Unsignalized intersections carry less traffic volume than signalized intersections, and delays at unsignalized intersections are variable. For these reasons, control delay would be less for an unsignalized intersection than for a signalized intersection. The overall approach LOS is computed as a weighted average of the vehicle delay for each movement; therefore, an approach may have an overall LOS of C or D and have individual movements, which are LOS E or F.

Analysis was performed using the microcomputer program "Synchro 11" (Ref. 6), based on the procedures contained in the Highway Capacity Manual.

Table 1: Unsignalized Intersection: Level of Service Measurement

Level of Service	Control Delay Per Vehicle (sec)
A	< 10
B	> 10 and < 15
C	> 15 and < 25
D	> 25 and < 35
E	> 35 and < 50
F	> 50

Appendix B: Synchro Outputs

Intersection	
Int Delay, s/veh	3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	183	86	15	293	129	8
Future Vol, veh/h	183	86	15	293	129	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	570	570	-	0	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	199	93	16	318	140	9

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	292	0	549	199
Stage 1	-	-	-	-	199	-
Stage 2	-	-	-	-	350	-
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	-	-	1270	-	497	842
Stage 1	-	-	-	-	835	-
Stage 2	-	-	-	-	713	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1270	-	491	842
Mov Cap-2 Maneuver	-	-	-	-	491	-
Stage 1	-	-	-	-	835	-
Stage 2	-	-	-	-	704	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.4	14.9
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	491	842	-	-	1270	-
HCM Lane V/C Ratio	0.286	0.01	-	-	0.013	-
HCM Control Delay (s)	15.2	9.3	-	-	7.9	-
HCM Lane LOS	C	A	-	-	A	-
HCM 95th %tile Q(veh)	1.2	0	-	-	0	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	148	43	0	308	0	7
Future Vol, veh/h	148	43	0	308	0	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	161	47	0	335	0	8

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	185
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.318
Pot Cap-1 Maneuver	-	-	0	-	0	857
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	857
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	9.2
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	857	-	-	-
HCM Lane V/C Ratio	0.009	-	-	-
HCM Control Delay (s)	9.2	-	-	-
HCM Lane LOS	A	-	-	-
HCM 95th %tile Q(veh)	0	-	-	-

Intersection	
Int Delay, s/veh	6.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	21	68	134	14	167	12	106	25	6	13	60	35
Future Vol, veh/h	21	68	134	14	167	12	106	25	6	13	60	35
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	400	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	23	74	146	15	182	13	115	27	7	14	65	38

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	195	0	0	220	0	0	463	418	147	429	485	189
Stage 1	-	-	-	-	-	-	193	193	-	219	219	-
Stage 2	-	-	-	-	-	-	270	225	-	210	266	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1378	-	-	1349	-	-	509	526	900	536	482	853
Stage 1	-	-	-	-	-	-	809	741	-	783	722	-
Stage 2	-	-	-	-	-	-	736	718	-	792	689	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1378	-	-	1349	-	-	426	511	900	500	469	853
Mov Cap-2 Maneuver	-	-	-	-	-	-	426	511	-	500	469	-
Stage 1	-	-	-	-	-	-	795	728	-	770	714	-
Stage 2	-	-	-	-	-	-	632	710	-	744	677	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.7	0.6	16.9	13.2
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	450	1378	-	-	1349	-	-	554
HCM Lane V/C Ratio	0.331	0.017	-	-	0.011	-	-	0.212
HCM Control Delay (s)	16.9	7.7	-	-	7.7	-	-	13.2
HCM Lane LOS	C	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	1.4	0.1	-	-	0	-	-	0.8

Intersection	
Int Delay, s/veh	2.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	230	12	13	379	30	28	16	18	20	7	35
Future Vol, veh/h	7	230	12	13	379	30	28	16	18	20	7	35
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	532	-	-	532	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	8	250	13	14	412	33	30	17	20	22	8	38

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	445	0	0	263	0	0	753	746	257	748	736	429
Stage 1	-	-	-	-	-	-	273	273	-	457	457	-
Stage 2	-	-	-	-	-	-	480	473	-	291	279	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1115	-	-	1301	-	-	326	342	782	329	346	626
Stage 1	-	-	-	-	-	-	733	684	-	583	568	-
Stage 2	-	-	-	-	-	-	567	558	-	717	680	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1115	-	-	1301	-	-	297	336	782	304	340	626
Mov Cap-2 Maneuver	-	-	-	-	-	-	297	336	-	304	340	-
Stage 1	-	-	-	-	-	-	728	679	-	579	562	-
Stage 2	-	-	-	-	-	-	520	552	-	676	675	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.2	16.7	14.8
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	376	1115	-	-	1301	-	-	436
HCM Lane V/C Ratio	0.179	0.007	-	-	0.011	-	-	0.155
HCM Control Delay (s)	16.7	8.3	-	-	7.8	-	-	14.8
HCM Lane LOS	C	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.6	0	-	-	0	-	-	0.5

Intersection	
Int Delay, s/veh	3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	323	86	15	209	126	9
Future Vol, veh/h	323	86	15	209	126	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	-	570	570	-	0	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	351	93	16	227	137	10

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	444	0	610	351
Stage 1	-	-	-	-	351	-
Stage 2	-	-	-	-	259	-
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	-	-	1116	-	458	692
Stage 1	-	-	-	-	713	-
Stage 2	-	-	-	-	784	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1116	-	452	692
Mov Cap-2 Maneuver	-	-	-	-	452	-
Stage 1	-	-	-	-	713	-
Stage 2	-	-	-	-	773	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.6	16
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	452	692	-	-	1116	-
HCM Lane V/C Ratio	0.303	0.014	-	-	0.015	-
HCM Control Delay (s)	16.4	10.3	-	-	8.3	-
HCM Lane LOS	C	B	-	-	A	-
HCM 95th %tile Q(veh)	1.3	0	-	-	0	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	289	43	0	224	0	6
Future Vol, veh/h	289	43	0	224	0	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	314	47	0	243	0	7

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	338
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.318
Pot Cap-1 Maneuver	-	-	0	-	0	704
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	704
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	704	-	-	-
HCM Lane V/C Ratio	0.009	-	-	-
HCM Control Delay (s)	10.2	-	-	-
HCM Lane LOS	B	-	-	-
HCM 95th %tile Q(veh)	0	-	-	-

Intersection	
Int Delay, s/veh	6.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	50	173	66	3	84	14	115	34	16	24	20	24
Future Vol, veh/h	50	173	66	3	84	14	115	34	16	24	20	24
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	400	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	54	188	72	3	91	15	125	37	17	26	22	26

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	106	0	0	260	0	0	461	444	224	464	473	99
Stage 1	-	-	-	-	-	-	332	332	-	105	105	-
Stage 2	-	-	-	-	-	-	129	112	-	359	368	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1485	-	-	1304	-	-	511	508	815	508	490	957
Stage 1	-	-	-	-	-	-	681	644	-	901	808	-
Stage 2	-	-	-	-	-	-	875	803	-	659	621	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1485	-	-	1304	-	-	466	489	815	455	471	957
Mov Cap-2 Maneuver	-	-	-	-	-	-	466	489	-	455	471	-
Stage 1	-	-	-	-	-	-	656	621	-	869	806	-
Stage 2	-	-	-	-	-	-	826	801	-	584	599	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.3	0.2	16.5	12.3
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	491	1485	-	-	1304	-	-	565
HCM Lane V/C Ratio	0.365	0.037	-	-	0.003	-	-	0.131
HCM Control Delay (s)	16.5	7.5	-	-	7.8	-	-	12.3
HCM Lane LOS	C	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	1.7	0.1	-	-	0	-	-	0.4

Intersection	
Int Delay, s/veh	3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	18	361	18	21	289	25	20	21	15	33	13	12
Future Vol, veh/h	18	361	18	21	289	25	20	21	15	33	13	12
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	532	-	-	532	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	20	392	20	23	314	27	22	23	16	36	14	13

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	341	0	0	412	0	0	829	829	402	836	826	328
Stage 1	-	-	-	-	-	-	442	442	-	374	374	-
Stage 2	-	-	-	-	-	-	387	387	-	462	452	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1218	-	-	1147	-	-	290	306	648	287	307	713
Stage 1	-	-	-	-	-	-	594	576	-	647	618	-
Stage 2	-	-	-	-	-	-	637	610	-	580	570	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1218	-	-	1147	-	-	267	295	648	256	296	713
Mov Cap-2 Maneuver	-	-	-	-	-	-	267	295	-	256	296	-
Stage 1	-	-	-	-	-	-	584	567	-	637	606	-
Stage 2	-	-	-	-	-	-	599	598	-	534	561	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.4	0.5	18.3	19.8
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	331	1218	-	-	1147	-	-	306
HCM Lane V/C Ratio	0.184	0.016	-	-	0.02	-	-	0.206
HCM Control Delay (s)	18.3	8	-	-	8.2	-	-	19.8
HCM Lane LOS	C	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.7	0	-	-	0.1	-	-	0.8

Intersection	
Int Delay, s/veh	4.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	189	96	16	293	175	11
Future Vol, veh/h	189	96	16	293	175	11
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	570	570	-	0	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	205	104	17	318	190	12

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	309	0	557	205
Stage 1	-	-	-	-	205	-
Stage 2	-	-	-	-	352	-
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	-	-	1252	-	491	836
Stage 1	-	-	-	-	829	-
Stage 2	-	-	-	-	712	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1252	-	484	836
Mov Cap-2 Maneuver	-	-	-	-	484	-
Stage 1	-	-	-	-	829	-
Stage 2	-	-	-	-	702	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.4	16.7
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	484	836	-	-	1252	-
HCM Lane V/C Ratio	0.393	0.014	-	-	0.014	-
HCM Control Delay (s)	17.2	9.4	-	-	7.9	-
HCM Lane LOS	C	A	-	-	A	-
HCM 95th %tile Q(veh)	1.8	0	-	-	0	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	151	49	0	309	0	9
Future Vol, veh/h	151	49	0	309	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	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	164	53	0	336	0	10

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	191
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.318
Pot Cap-1 Maneuver	-	-	0	-	0	851
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	851
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	851	-	-	-
HCM Lane V/C Ratio	0.011	-	-	-
HCM Control Delay (s)	9.3	-	-	-
HCM Lane LOS	A	-	-	-
HCM 95th %tile Q(veh)	0	-	-	-

Intersection	
Int Delay, s/veh	6.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	22	69	137	14	168	12	107	25	6	13	60	35
Future Vol, veh/h	22	69	137	14	168	12	107	25	6	13	60	35
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	400	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	24	75	149	15	183	13	116	27	7	14	65	38

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	196	0	0	224	0	0	469	424	150	435	492	190
Stage 1	-	-	-	-	-	-	198	198	-	220	220	-
Stage 2	-	-	-	-	-	-	271	226	-	215	272	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1377	-	-	1345	-	-	505	522	896	531	478	852
Stage 1	-	-	-	-	-	-	804	737	-	782	721	-
Stage 2	-	-	-	-	-	-	735	717	-	787	685	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1377	-	-	1345	-	-	422	507	896	495	465	852
Mov Cap-2 Maneuver	-	-	-	-	-	-	422	507	-	495	465	-
Stage 1	-	-	-	-	-	-	790	724	-	769	713	-
Stage 2	-	-	-	-	-	-	631	709	-	739	673	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.7	0.6	17.1	13.3
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	446	1377	-	-	1345	-	-	550
HCM Lane V/C Ratio	0.336	0.017	-	-	0.011	-	-	0.213
HCM Control Delay (s)	17.1	7.7	-	-	7.7	-	-	13.3
HCM Lane LOS	C	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	1.5	0.1	-	-	0	-	-	0.8

Intersection	
Int Delay, s/veh	2.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	244	12	14	421	32	28	16	20	22	7	35
Future Vol, veh/h	7	244	12	14	421	32	28	16	20	22	7	35
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	532	-	-	532	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	8	265	13	15	458	35	30	17	22	24	8	38

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	493	0	0	278	0	0	817	811	272	813	800	476
Stage 1	-	-	-	-	-	-	288	288	-	506	506	-
Stage 2	-	-	-	-	-	-	529	523	-	307	294	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1071	-	-	1285	-	-	295	313	767	297	318	589
Stage 1	-	-	-	-	-	-	720	674	-	549	540	-
Stage 2	-	-	-	-	-	-	533	530	-	703	670	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1071	-	-	1285	-	-	267	307	767	272	312	589
Mov Cap-2 Maneuver	-	-	-	-	-	-	267	307	-	272	312	-
Stage 1	-	-	-	-	-	-	715	669	-	545	534	-
Stage 2	-	-	-	-	-	-	486	524	-	660	665	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.2	17.8	16.1
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	350	1071	-	-	1285	-	-	393
HCM Lane V/C Ratio	0.199	0.007	-	-	0.012	-	-	0.177
HCM Control Delay (s)	17.8	8.4	-	-	7.8	-	-	16.1
HCM Lane LOS	C	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.7	0	-	-	0	-	-	0.6

Intersection	
Int Delay, s/veh	3.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	339	117	20	209	154	11
Future Vol, veh/h	339	117	20	209	154	11
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	570	570	-	0	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	368	127	22	227	167	12

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	495	0	639	368
Stage 1	-	-	-	-	368	-
Stage 2	-	-	-	-	271	-
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	-	-	1069	-	440	677
Stage 1	-	-	-	-	700	-
Stage 2	-	-	-	-	775	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1069	-	431	677
Mov Cap-2 Maneuver	-	-	-	-	431	-
Stage 1	-	-	-	-	700	-
Stage 2	-	-	-	-	759	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.7	18.1
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	431	677	-	-	1069	-
HCM Lane V/C Ratio	0.388	0.018	-	-	0.02	-
HCM Control Delay (s)	18.6	10.4	-	-	8.4	-
HCM Lane LOS	C	B	-	-	A	-
HCM 95th %tile Q(veh)	1.8	0.1	-	-	0.1	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	291	59	0	229	0	7
Future Vol, veh/h	291	59	0	229	0	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	316	64	0	249	0	8

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	348
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.318
Pot Cap-1 Maneuver	-	-	0	-	0	695
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	695
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	695	-	-	-
HCM Lane V/C Ratio	0.011	-	-	-
HCM Control Delay (s)	10.2	-	-	-
HCM Lane LOS	B	-	-	-
HCM 95th %tile Q(veh)	0	-	-	-

Intersection	
Int Delay, s/veh	6.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	51	175	66	3	87	14	117	34	16	24	20	24
Future Vol, veh/h	51	175	66	3	87	14	117	34	16	24	20	24
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	400	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	55	190	72	3	95	15	127	37	17	26	22	26

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	110	0	0	262	0	0	469	452	226	472	481	103
Stage 1	-	-	-	-	-	-	336	336	-	109	109	-
Stage 2	-	-	-	-	-	-	133	116	-	363	372	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1480	-	-	1302	-	-	505	503	813	502	485	952
Stage 1	-	-	-	-	-	-	678	642	-	896	805	-
Stage 2	-	-	-	-	-	-	870	800	-	656	619	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1480	-	-	1302	-	-	460	483	813	449	466	952
Mov Cap-2 Maneuver	-	-	-	-	-	-	460	483	-	449	466	-
Stage 1	-	-	-	-	-	-	653	618	-	863	803	-
Stage 2	-	-	-	-	-	-	821	798	-	581	596	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.3	0.2	16.8	12.4
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	485	1480	-	-	1302	-	-	559
HCM Lane V/C Ratio	0.374	0.037	-	-	0.003	-	-	0.132
HCM Control Delay (s)	16.8	7.5	-	-	7.8	-	-	12.4
HCM Lane LOS	C	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	1.7	0.1	-	-	0	-	-	0.5

Intersection	
Int Delay, s/veh	3.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	18	402	18	23	313	32	20	21	17	37	13	12
Future Vol, veh/h	18	402	18	23	313	32	20	21	17	37	13	12
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	532	-	-	532	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	20	437	20	25	340	35	22	23	18	40	14	13

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	375	0	0	457	0	0	908	912	447	916	905	358
Stage 1	-	-	-	-	-	-	487	487	-	408	408	-
Stage 2	-	-	-	-	-	-	421	425	-	508	497	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1183	-	-	1104	-	-	256	274	612	253	276	686
Stage 1	-	-	-	-	-	-	562	550	-	620	597	-
Stage 2	-	-	-	-	-	-	610	586	-	547	545	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1183	-	-	1104	-	-	234	263	612	222	265	686
Mov Cap-2 Maneuver	-	-	-	-	-	-	234	263	-	222	265	-
Stage 1	-	-	-	-	-	-	552	541	-	609	583	-
Stage 2	-	-	-	-	-	-	571	573	-	500	536	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	0.5	20.2	23.1
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	300	1183	-	-	1104	-	-	266
HCM Lane V/C Ratio	0.21	0.017	-	-	0.023	-	-	0.253
HCM Control Delay (s)	20.2	8.1	-	-	8.3	-	-	23.1
HCM Lane LOS	C	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.8	0.1	-	-	0.1	-	-	1