

To: Jim Galovan
Eagle Commercial Partners, LLC

From: Matt Weir, P.E., T.E., PTOE, RSP₁

Re: *Parcel 61 (Lots 1, 2 and 3) & Parcel 77 (Lot 8) Tentative Subdivision Maps*
Folsom Plan Area – West of East Bidwell Street (WEB)
Traffic Evaluation

Date: June 4, 2021

As requested, we have prepared this memorandum to document our evaluation of anticipated traffic conditions and infrastructure needs necessitated by completion of Parcel 61 (Lots 1-3) and Parcel 77 (Lot 8) (collectively referred to as the “Proposed Project”, see **Exhibit 1**) and the assumed near-term development conditions in the Folsom Plan Area. Because of its focus on the location of specific development components, this effort is considered to be a component of the West of East Bidwell (WEB) evaluation conditions previously prepared and presented to you and the City of Folsom¹.

Overview

The primary purpose of this evaluation was to consider the near-term traffic conditions resulting from a specific development scenario which considers the completion of the Proposed Project and 2025 conditions for the remainder of the Folsom Plan Area. Specifically, the purpose of the evaluation was to identify the required infrastructure improvements along Alder Creek Parkway, west of East Bidwell Street including the East Bidwell Street intersection with Alder Creek Parkway. Accordingly, a weekday AM and PM peak-hour intersection Level of Service (LOS) analysis was completed for the following scenarios:

- A. Near-Term (2025)
- B. Near-Term (2025) plus Proposed Project

These analyses were completed for the primary purpose of identifying the infrastructure needed along Alder Creek Parkway, west of East Bidwell Street, to support the construction of the Proposed Project under these near-term conditions. To assist with identifying the need for these infrastructure improvements, the following five (5) intersections were included as the focus of these analyses:

- Alder Creek Parkway [3 intersections]
 - Street ‘A’ (unsignalized, access to North only – *future signal*)
 - Street ‘D’ (unsignalized, no left-turns out)
 - East Bidwell Street (signalized)
- Street ‘B’ [2 intersections]
 - Street ‘A’ (all-way stop controlled, access to South only)
 - Street ‘D’ (all-way stop controlled)

These intersections represent the initial access conditions for the Proposed Project. We understand that additional access locations (i.e., right-turn ingress from East Bidwell Street at Street ‘B’ and/or Parcel 61 (Lot 2)) may be pursued in the future. Those additional access conditions will require their own evaluations at that time to assess the operations and adequacy of the transportation network identified through this assessment.

¹ *Macroscopic Traffic Evaluation Overview Memorandum*, Folsom Plan Area – West of East Bidwell (WEB), Kimley-Horn, February 16, 2021.

Development Assumptions

The following development assumptions were assumed for the portions of the Folsom Plan Area that are expected to develop by 2025, but do not include the Proposed Project. These development assumptions are depicted in **Exhibit 2**, and were provided and analyzed previously. Accordingly, the land use assumed to be occupied by 2025 included:

- 3,667 single-family units
- 768 multi-family units
- 439 active adult units
- 65,000 square-feet (SF) of medical office building
- 28,000 SF of commercial uses

The land use assumptions for Parcel 61 (Lots 1-3) and Parcel 77 (Lot 8) are as follows (see **Exhibit 1**):

- Parcel 61 (Lots 1-3)
 - Lot 1: 123,000 SF Medical Office
182,000 SF Hospital/Surgery Center
80,000 SF Hotel
 - Lot 2: 60,000 SF Hotel
20,000 SF Retail
 - Lot 3: 160,000 SF Office
- Parcel 77 (Lot 8)
 - 100,000 SF Retail

Traffic Data Collection

Baseline weekday AM and PM peak-period turning movement traffic volumes to which the Proposed Project trips were added were collected via StreetLight Data to determine pre-COVID-19 traffic volumes at the existing study intersections. The volumes were synthesized directly from StreetLight and were collected during the month of October 2019 as an aggregate of Tuesday, Wednesday, and Thursday data. Volumes obtained through StreetLight were rounded up to the nearest ten to indicate that these are not field-collected count volumes. All data was reviewed and compared to historic count data to confirm reasonableness and appropriateness for use in this evaluation.

Methodology

To determine the volumes at the study facilities for Near-Term (2025) conditions, the City of Folsom's General Plan Travel Demand Model was used. Land use and roadway network assumptions for 2025 were added to the model to reflect a scenario representative of the anticipated year 2025 conditions. The base model year (2015) and the scenario in which the Near-Term (2025) land use and roadway network assumptions were added were both run. The turning movement volumes at the study intersections were collected for each model run and the growth was added to the traffic counts collected to obtain post-processed volumes at the study intersections (i.e., the "difference method").

For Near-Term (2025) plus Proposed Project conditions, the land use assumptions for the Proposed Project were added to the model scenario representing 2025 conditions in the Folsom Plan Area. The trips originating from and destined to Parcel 61 (Lots 1-3) and Parcel 77 (Lot 8) were tracked through the roadway network to determine the distribution of trips through the study intersections. However, to improve the accuracy of the analysis, the project trips were determined using the *Trip Generation Manual, 10th Edition*, published by the Institute of Transportation Engineers (see **Table 1** below). As shown in **Table 1**, the Proposed Project is estimated to generate 17,526 daily trips, with 1,067 occurring in the AM peak-hour and 1,619 occurring in the PM peak-hour.

Table 1 – Parcel 61 (Lots 1-3) and Parcel 77 (Lot 8) Trip Generation

Land Use (ITE Code)	Size (rooms/ksf)	Daily Trips	AM Peak-Hour				PM Peak-Hour					
			Total Trips	In		Out		Total Trips	In		Out	
				%	Trips	%	Trips		%	Trips	%	Trips
Hotel (310)	350 rooms	2,926	165	59%	97	41%	68	210	51%	107	49%	103
Hospital (610)	182	1,952	162	68%	110	32%	52	177	32%	57	68%	120
General Office Building (710)	160	1,560	186	86%	160	14%	26	184	16%	29	84%	155
Medical-Dental Office Building (720)	123	4,282	342	78%	267	22%	75	426	28%	119	72%	307
Shopping Center (820)	120	6,806	212	62%	131	38%	81	622	48%	299	52%	323
Net New External Trips (Proposed Project):		17,526	1,067		765		302	1,619		611		1,008

Source: Trip Generation Manual, 10th Edition.

While the City’s travel demand model was used to distribute proposed project trips to/from the East Bidwell Street corridor, the provided site plans and engineering judgement were used to distribute proposed project trips to the other study intersections. The turning movement volumes for Near-Term (2025) plus Proposed Project conditions are depicted in **Exhibit 3**.

Analysis Results

To determine the LOS at each of the study intersections, the Synchro/SimTraffic software was used. SimTraffic provides a detailed simulation of corridors and results in more accurate delay and queuing information for roadways with closely spaced intersections. Both Near-Term (2025) and Near-Term (2025) plus Proposed Project conditions were analyzed and the City of Folsom’s LOS threshold of LOS D was used to determine the necessary infrastructure improvements to allow all intersections to operate acceptably and provide adequate storage for the turn lanes’ anticipated queuing. Traffic control assumptions were based on information provided and the Folsom Plan Area’s Specific Plan. The following traffic control assumptions include:

- The Alder Creek Parkway intersections with Street ‘A’ and Street ‘D’ are unsignalized with the side-street approaches stop-controlled
 - Street ‘A’ does not require signalization as part of this project. However, per the Specific Plan, this location will be signalized in the future (by others).
 - Street ‘D’ allows left-turns in, however, due to its proximity to East Bidwell Street, left-turns out are restricted.
- The Alder Creek Parkway intersection East Bidwell Street is signalized and uncoordinated.
- The Street ‘B’ intersections with Street ‘A’ and Street ‘D’ are unsignalized with all approaches stop-controlled (all-way stop controlled).

Exhibit 3 depicts the required geometry at the study intersections and analysis worksheets are shown in **Appendix A**. As shown in **Exhibit 3** and **Exhibit 4**, the following minimum lane geometries are required (Note: a 60-foot taper should be added to each of the required storage lengths to define the total lane):

1. Street ‘B’ intersection with Street ‘A’
 - 150-foot striped northbound left-turn lane from Street ‘A’ to Street ‘B’
 - 150-foot striped westbound left-turn lane from Street ‘B’ to Street ‘A’
 - *Although not required as part of the Proposed Project, right-of-way should be preserved for a future eastbound right turn lane from Street ‘B’ to Street ‘A’*
2. Street ‘B’ intersection with Street ‘D’
 - 150-foot striped eastbound left-turn lane from Street ‘B’ to Parcel 61 (Lot 1)
 - 150-foot striped westbound left-turn lane from Street ‘B’ to Street ‘D’

3. Alder Creek Parkway intersections with Street 'A'
 - o 200-foot striped southbound left-turn lane from Street 'A' to Alder Creek Parkway
 - o 150-foot westbound right-turn lane into Street 'A'
4. Alder Creek Parkway intersections with Street 'D'
 - o 150-foot eastbound right-turn lane into Street 'D'
 - o 150-foot eastbound left-turn lane into Street 'D'
 - o 200-foot westbound left-turn lane from Alder Creek Parkway to Street 'D'
 - o Continuous westbound auxiliary/right-turn lane into Street 'D' extending back to accept the free, southbound right-turn from East Bidwell Street onto westbound Alder Creek Parkway
5. Alder Creek Parkway intersection with East Bidwell Street
 - o Two eastbound left-turn lanes (400-feet)
 - o One eastbound right-turn lane (250-feet)
 - o Two westbound left-turn lanes (250-feet)
 - o One westbound right-turn lane (550-feet or per Dignity study)
 - o Two northbound left-turn lanes (250-feet)
 - o One northbound right-turn lane (150-feet)
 - o Two southbound left-turn lanes (300-feet)
 - o One southbound right-turn lane (300-feet)
 - o Right-turn overlap for the southbound approach

Table 2 and **Table 3** summarize the LOS and queuing results, respectively. As shown in **Table 2**, all intersections are expected to operate at LOS D or better for Near-Term (2025) plus Proposed Project conditions when the above infrastructure improvements are provided. As shown in **Table 3**, the provided storage will contain the vehicle queues with the addition of trips generated by Parcel 61 (Lots 1-3) and Parcel 77 (Lot 8).

Table 2 – Intersection Levels of Service

ID	Intersection	Control	Peak Hour	(1) Interim		(2) Interim plus Proposed Project		
				Delay (sec)	LOS	Delay (sec)	LOS	
1	Street 'A' @ Street 'B'	AWSC	AM	Intersection does not exist in this scenario			5.3	A
			PM				7.6	A
2	Street 'B' @ Street 'D'	AWSC	AM				3.7	A
			PM				4.3	A
3	Alder Creek Parkway @ Street 'A'	SSSC	AM				5.5 (SBL)	A
			PM				12.2 (SBL)	B
4	Alder Creek Parkway @ Street 'D'	SSSC	AM				9.4 (WBL)	A
			PM				18.8 (WBL)	C
5	East Bidwell Street @ Alder Creek Parkway	Signal	AM	31.7	C	36.6	D	
			PM	16.4	C	47.0	D	

Notes: AWSC stands for All Way Stop Controlled. SSSC stands for Side Street Stopped Controlled and the worst movement is reported

Table 3 – Intersection Queuing

Intersection / Analysis Scenario	Movement	AM Peak-Hour		PM Peak-Hour	
		Available Storage (ft)	95 th % Queue (ft)	Available Storage (ft)	95 th % Queue (ft)
#1 , Street 'A' @ Street 'B'	NBL	Interim		-	
		150	66	150	54
#1 , Street 'A' @ Street 'B'	WBL	Interim		-	
		150	59	150	100
#3 , Alder Creek Parkway @ Street "A"	SBL	Interim		-	
		200	53	200	219
#4 , Alder Creek Parkway @ Street "D"	WBL	Interim		-	
		200	42	200	73
#5 , Alder Creek Parkway @ East Bidwell Street	NBL	Interim		-	
		250	138	250	194
#5 , Alder Creek Parkway @ East Bidwell Street	SBL	Interim		100	
		300	208	300	257
#5 , Alder Creek Parkway @ East Bidwell Street	EBL	Interim		-	
		400	147	400	365
#5 , Alder Creek Parkway @ East Bidwell Street	WBL	Interim		84	
		250	52	250	42

Additional Considerations

Future Access Conditions

As noted, the access conditions contemplated in this evaluation are likely to be reevaluated in the future as development advances and more specifics are provided for the Proposed Project’s specific land uses and driveway locations. In particular, right-turn ingress from East Bidwell Street to Street ‘B’ is anticipated to be comprehensively evaluated, both geometrically and operationally, at such time that the development proposals are finalized and in consultation with the City and Caltrans. As such, the omission of said access in this study should not be interpreted as the final access condition. Rather, the project applicant anticipates working closely with the City to comprehensively evaluate the feasibility of incorporating this potentially critical access to Parcel 61. Similarly, future consideration will also be given to right-turn ingress from East Bidwell Street into Parcel 61/Lot 2.

Bus Rapid Transit (BRT)

Alder Creek Parkway is identified as a Bus Rapid Transit (BRT) corridor in the Specific Plan. Accordingly, the corridor's right-of-way width and roadway cross-section are intended to allow for future implementation of this center-running, high-quality transit service. Because there is currently no funding identified for its implementation, this near-term evaluation of the Proposed Project does not comprehensively evaluate the BRT's operations. Nevertheless, the Alder Creek Parkway facility cross-section and the study corridor's intersection traffic control are consistent with the Specific Plan and would not preclude the future implementation of this service.

Summary of Findings

Based on the analyses documented above, we offer the following summary of our findings:

- As shown in **Table 1**, Parcel 61 (Lots 1-3) and Parcel 77 (Lot 8) are estimated to generate 17,526 daily trips, with 1,067 occurring in the AM peak-hour and 1,619 occurring in the PM peak-hour.
- The specified geometrics at the study facilities are the minimum required improvements to allow the study intersections to operate acceptably based on the City of Folsom's LOS threshold (LOS D).
- Future consideration will be given to right-turn ingress from East Bidwell Street to Street 'B' and to Parcel 61 (Lot 2) in consultation with the City and Caltrans. Although omitted from this evaluation, these two access locations are still desirable and will be comprehensively evaluated, both geometrically and operationally, at such time that the development proposals are finalized.
- Bus Rapid Transit (BRT) is identified by the Specific Plan for application along the Alder Creek Parkway corridor. Although not specifically analyzed as part of this Near-Term evaluation, the facility cross-section and the study corridor's intersection traffic control are consistent with the Specific Plan and would not preclude the future implementation of this service.
- **Exhibit 4** provides a graphical depiction of the roadways, intersections, and various turning movements that are required to be constructed to support the completion of Parcel 61 (Lots 1-3) and Parcel 77 (Lot 8).

Attachments

Exhibit 1 – Parcel 61 and Parcel 77 Land Use Overview

Exhibit 2 – Folsom Ranch Year 2025 Occupancy Projection

Exhibit 3 – Near-Term (2025) plus Proposed Project AM and PM Peak-Hour Volumes and Required Infrastructure Improvements

Exhibit 4 – Infrastructure Requirements Overview

Appendix A – Analysis Worksheets for Near-Term (2025) and Near-Term (2025) plus Proposed Project Conditions

Folsom Plan Area - Parcel 61 (Lots 1, 2, and 3) & Parcel 77 (Lot 8) Tentative Subdivision Maps



NOT TO SCALE



LOT 1
 123,000 SF Medical Office
 182,000 SF Hospital/Surgery Center
 80,000 SF Hotel

Lot 1
 RC
 37.27 ± AC (GR.)
 36.00 ± AC (NET)
 34.55 ± AC (NET-NET)
N.A.P.

LOT 2
 60,000 SF Hotel
 20,000 SF Retail

LOT 3
 160,000 SF Office

LOT 8
 100,000 SF Retail

FPASP LOT 60

FPASP LOT 63 MLD

FPASP LOT 64

EASTON VALLEY HOLDINGS, LLC
 072-3190-033

71

FPASP LOT 71 SFHD

158
 LOT 158
 MU

EASTON VALLEY HOLDINGS, LLC
 072-3190-034

66

74
 LOT 74
 MU

160B

75

96B

76

FPASP LOT 76 MLD

160R

FPASP LOT 156 MLD

156 (072-3190-034)

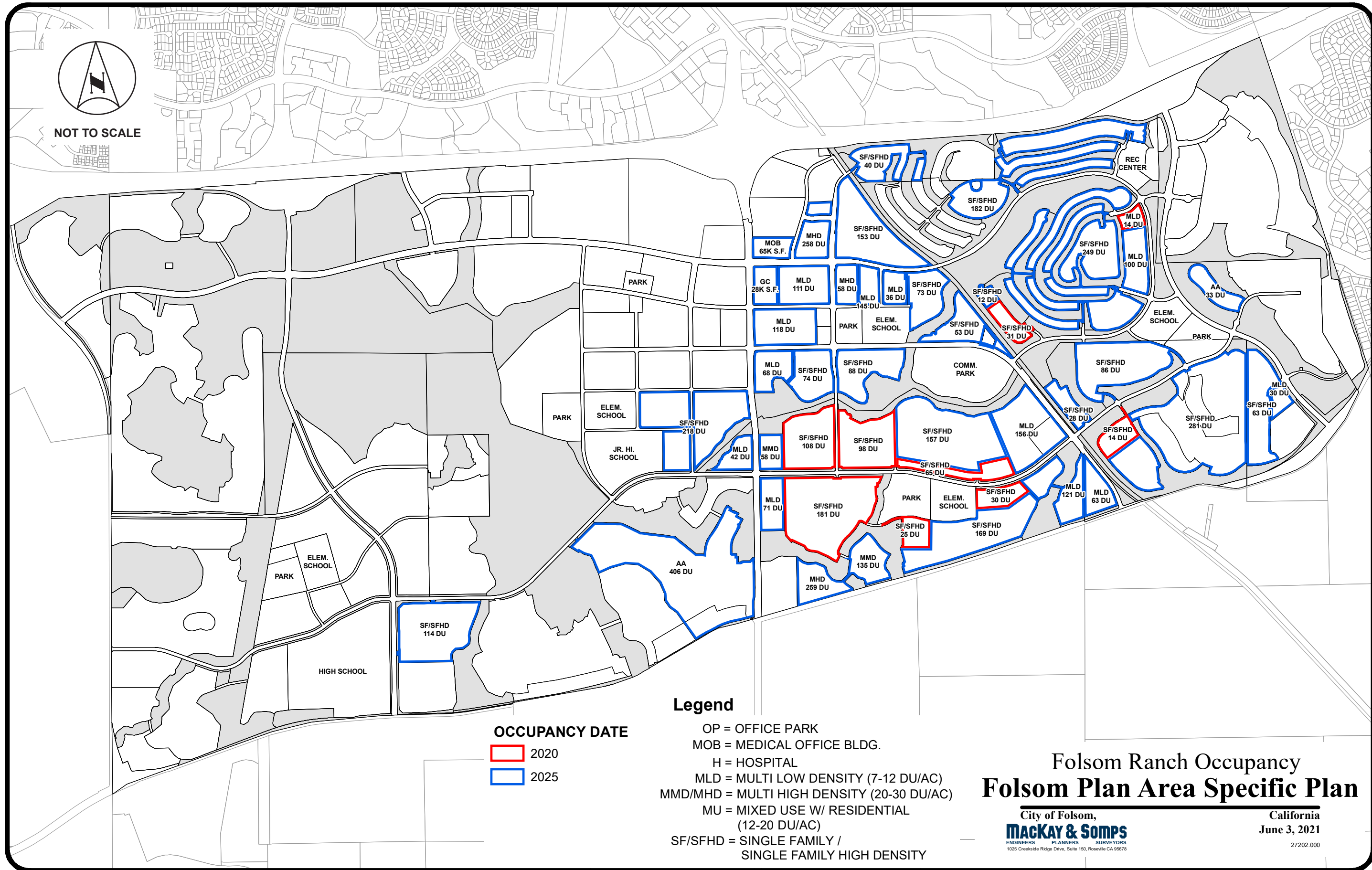
FPASP LOT 157 MHD

157

79B

EAGLE COMMERCIAL PARTNERS LLC
 072-3670-010

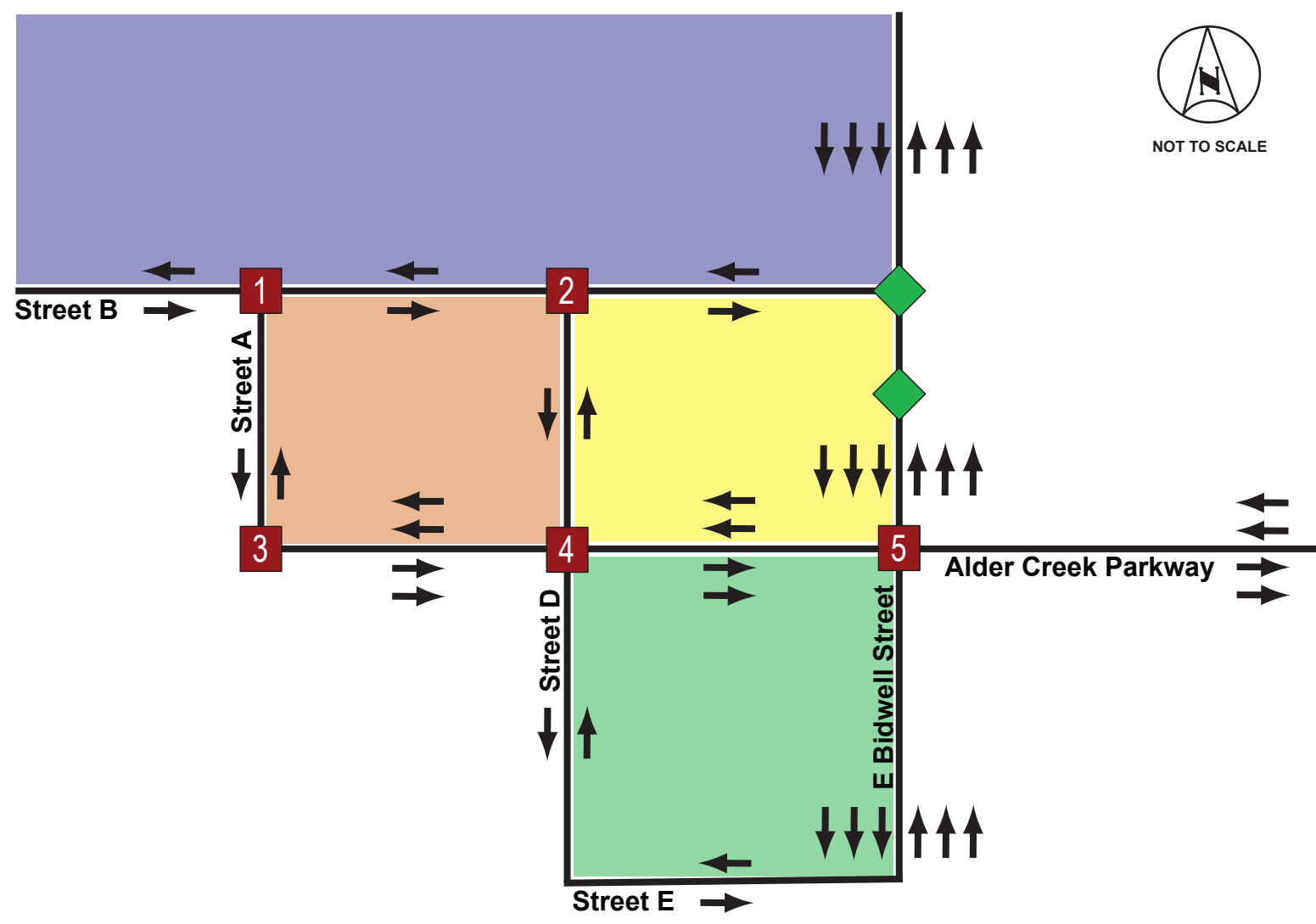
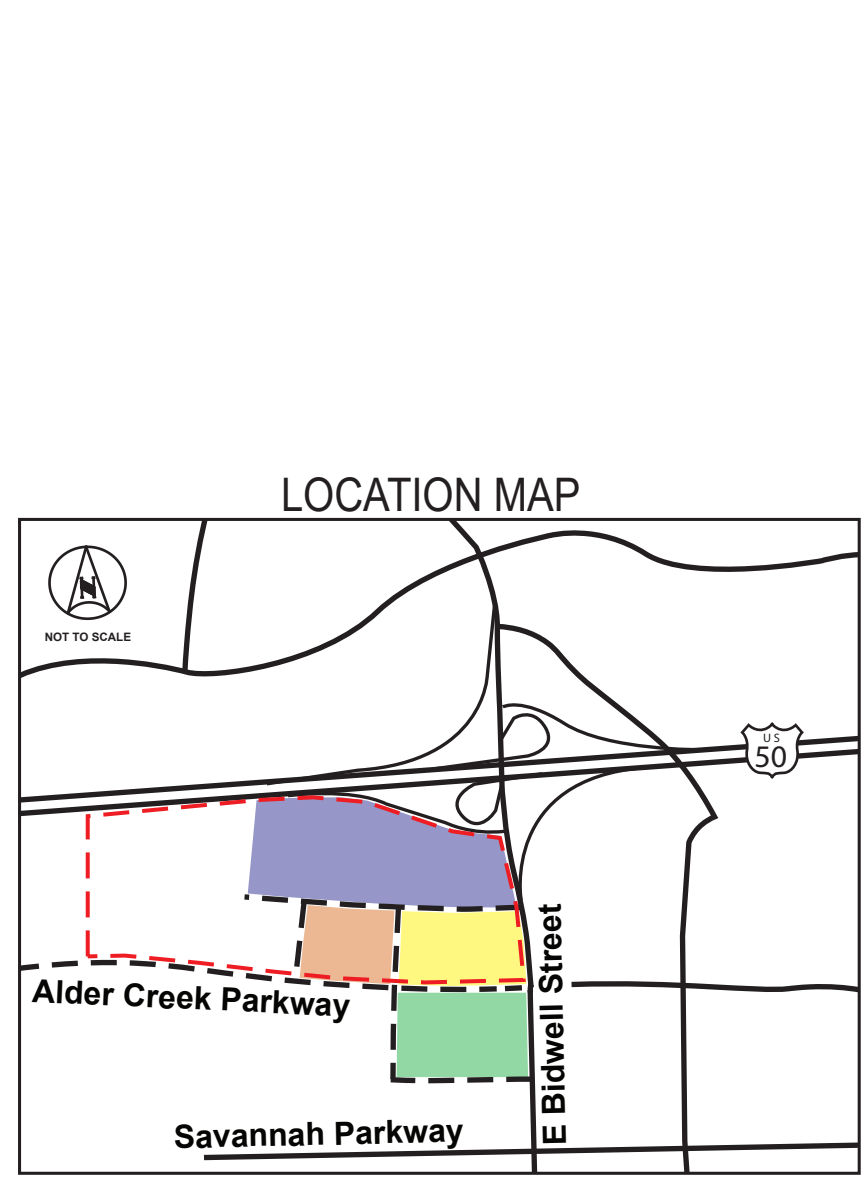
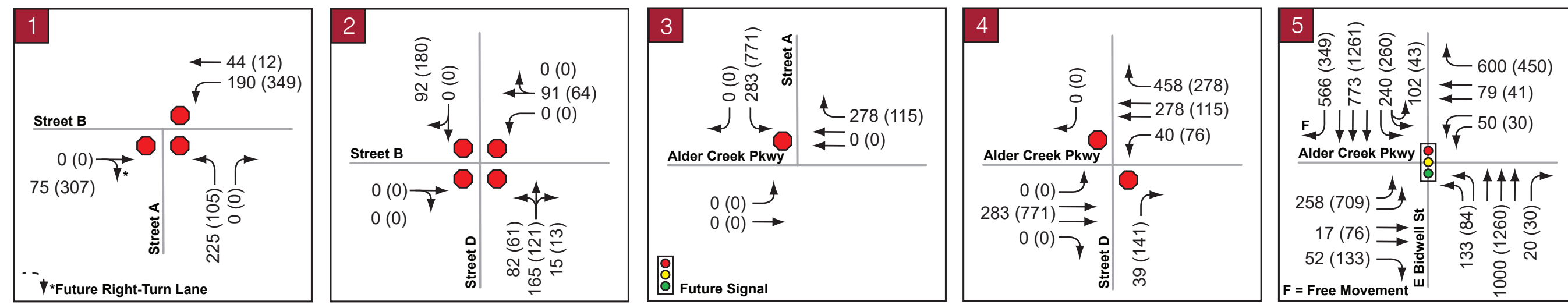
Basemap Source: Conceptual Site Plan, MCG Architecture, 03/31/2021



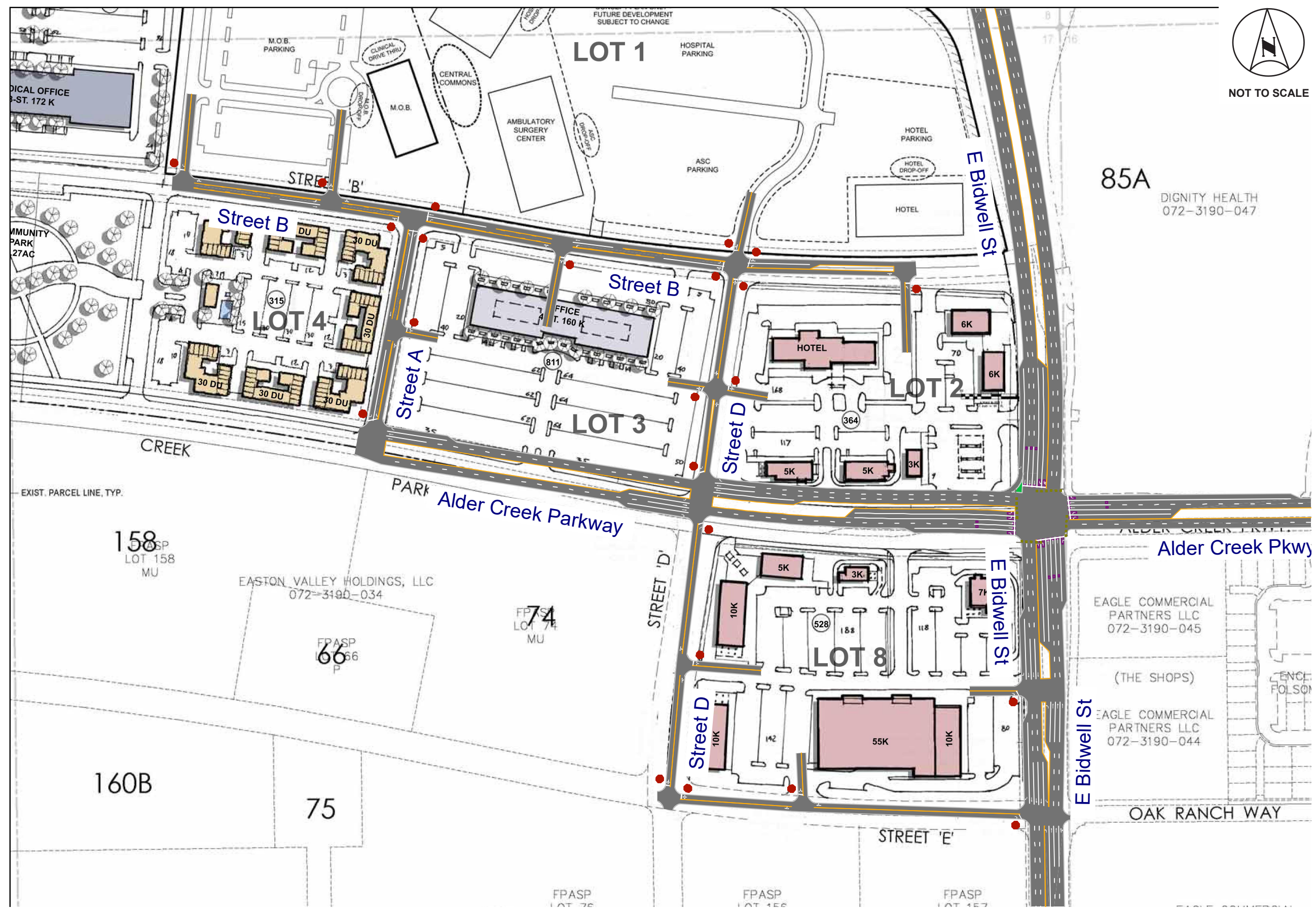
Folsom Ranch Occupancy Folsom Plan Area Specific Plan

City of Folsom,
MACKEY & SOMPS
ENGINEERS PLANNERS SURVEYORS
1025 Creekside Ridge Drive, Suite 150, Roseville CA 95678

California
June 3, 2021
27202.000



LEGEND	
#	Study Intersection
◆	Future Access
XX (XX)	AM (PM) Peak-hour Turning Movement Volumes
🚦	Signalized Study Intersection
⬮	Stop-controlled Approach
- - -	Parcel 61
■ (Purple)	Parcel 61, Lot 1
■ (Yellow)	Parcel 61, Lot 2
■ (Orange)	Parcel 61, Lot 3
■ (Green)	Parcel 77, Lot 8
➡	Through Lane



Appendix A

Analysis Worksheets for Near-Term (2025) and Near-Term (2025) plus Proposed Project Conditions

Summary of All Intervals

Run Number	1	10	2	3	4	5	6
Start Time	6:50	6:50	6:50	6:50	6:50	6:50	6:50
End Time	8:00	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	70	70	70	70	70	70	70
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4	4
Vehs Entered	3670	3676	3698	3771	3651	3697	3677
Vehs Exited	3675	3652	3716	3729	3659	3684	3658
Starting Vehs	105	81	105	87	114	113	83
Ending Vehs	100	105	87	129	106	126	102
Travel Distance (mi)	2413	2402	2414	2462	2387	2396	2385
Travel Time (hr)	96.7	117.9	102.8	108.1	123.9	108.9	97.0
Total Delay (hr)	33.3	54.7	39.0	43.5	61.0	45.4	33.6
Total Stops	3425	3359	3403	3386	3307	3398	3424
Fuel Used (gal)	98.1	102.3	99.5	102.3	103.5	101.4	97.6

Summary of All Intervals

Run Number	7	8	9	Avg
Start Time	6:50	6:50	6:50	6:50
End Time	8:00	8:00	8:00	8:00
Total Time (min)	70	70	70	70
Time Recorded (min)	60	60	60	60
# of Intervals	5	5	5	5
# of Recorded Intervals	4	4	4	4
Vehs Entered	3786	3578	3621	3681
Vehs Exited	3743	3564	3625	3670
Starting Vehs	87	73	95	93
Ending Vehs	130	87	91	107
Travel Distance (mi)	2437	2323	2370	2399
Travel Time (hr)	114.9	92.5	97.0	106.0
Total Delay (hr)	50.8	31.0	34.5	42.7
Total Stops	3480	3261	3368	3380
Fuel Used (gal)	103.2	94.5	97.0	99.9

Interval #0 Information Seeding

Start Time	6:50
End Time	7:00
Total Time (min)	10
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording

Start Time	7:00
End Time	7:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	10	2	3	4	5	6
Vehs Entered	919	926	920	926	904	893	880
Vehs Exited	943	907	914	920	905	917	871
Starting Vehs	105	81	105	87	114	113	83
Ending Vehs	81	100	111	93	113	89	92
Travel Distance (mi)	614	598	607	600	583	599	572
Travel Time (hr)	25.7	24.0	25.0	22.6	26.6	23.1	22.3
Total Delay (hr)	9.6	8.3	8.9	6.8	11.1	7.4	6.9
Total Stops	910	825	889	812	837	821	843
Fuel Used (gal)	25.1	23.7	24.7	24.2	24.6	24.3	23.3

Interval #1 Information Recording

Start Time	7:00
End Time	7:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	7	8	9	Avg
Vehs Entered	907	847	940	906
Vehs Exited	913	827	938	905
Starting Vehs	87	73	95	93
Ending Vehs	81	93	97	96
Travel Distance (mi)	596	547	611	593
Travel Time (hr)	22.9	20.8	27.1	24.0
Total Delay (hr)	7.2	6.3	10.9	8.3
Total Stops	805	725	932	840
Fuel Used (gal)	24.1	21.5	25.4	24.1

Interval #2 Information

Start Time	7:15
End Time	7:30
Total Time (min)	15

Volumes adjusted by PHF, Growth Factors.

Run Number	1	10	2	3	4	5	6
Vehs Entered	932	985	970	981	980	951	974
Vehs Exited	895	955	955	957	951	920	962
Starting Vehs	81	100	111	93	113	89	92
Ending Vehs	118	130	126	117	142	120	104
Travel Distance (mi)	594	632	616	645	628	595	628
Travel Time (hr)	22.7	31.8	25.9	25.9	33.0	28.2	24.8
Total Delay (hr)	7.1	15.1	9.7	9.0	16.5	12.2	8.2
Total Stops	837	940	851	892	886	899	888
Fuel Used (gal)	24.0	27.5	25.1	26.0	27.1	25.5	25.4

Interval #2 Information

Start Time	7:15
End Time	7:30
Total Time (min)	15

Volumes adjusted by PHF, Growth Factors.

Run Number	7	8	9	Avg
Vehs Entered	1020	922	944	966
Vehs Exited	973	930	941	944
Starting Vehs	81	93	97	96
Ending Vehs	128	85	100	119
Travel Distance (mi)	643	596	618	620
Travel Time (hr)	27.4	23.8	26.0	27.0
Total Delay (hr)	10.5	8.0	9.7	10.6
Total Stops	927	892	873	888
Fuel Used (gal)	26.1	24.6	25.6	25.7

Interval #3 Information

Start Time	7:30
End Time	7:45
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	10	2	3	4	5	6
Vehs Entered	914	885	878	930	889	933	850
Vehs Exited	944	899	909	926	907	940	868
Starting Vehs	118	130	126	117	142	120	104
Ending Vehs	88	116	95	121	124	113	86
Travel Distance (mi)	619	598	578	601	582	602	554
Travel Time (hr)	25.0	32.6	25.4	27.3	32.3	27.1	22.2
Total Delay (hr)	8.7	16.9	10.0	11.5	16.9	11.1	7.5
Total Stops	875	797	810	808	781	835	779
Fuel Used (gal)	25.4	26.3	24.3	25.1	25.8	25.3	22.8

Interval #3 Information

Start Time	7:30
End Time	7:45
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	7	8	9	Avg
Vehs Entered	931	899	803	892
Vehs Exited	933	868	825	903
Starting Vehs	128	85	100	119
Ending Vehs	126	116	78	107
Travel Distance (mi)	593	579	537	584
Travel Time (hr)	30.8	23.2	20.8	26.7
Total Delay (hr)	15.2	7.8	6.7	11.2
Total Stops	918	822	723	814
Fuel Used (gal)	26.0	23.6	21.8	24.6

Interval #4 Information

Start Time	7:45
End Time	8:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	10	2	3	4	5	6
Vehs Entered	905	880	930	934	878	920	973
Vehs Exited	893	891	938	926	896	907	957
Starting Vehs	88	116	95	121	124	113	86
Ending Vehs	100	105	87	129	106	126	102
Travel Distance (mi)	587	573	613	616	594	600	631
Travel Time (hr)	23.4	29.5	26.5	32.3	32.1	30.5	27.7
Total Delay (hr)	7.9	14.4	10.3	16.2	16.5	14.7	11.0
Total Stops	803	797	853	874	803	843	914
Fuel Used (gal)	23.5	24.8	25.5	27.0	26.0	26.3	26.2

Interval #4 Information

Start Time	7:45
End Time	8:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	7	8	9	Avg
Vehs Entered	928	910	934	920
Vehs Exited	924	939	921	919
Starting Vehs	126	116	78	107
Ending Vehs	130	87	91	107
Travel Distance (mi)	606	601	604	602
Travel Time (hr)	33.8	24.8	23.0	28.4
Total Delay (hr)	17.8	8.9	7.2	12.5
Total Stops	830	822	840	835
Fuel Used (gal)	27.0	24.8	24.3	25.5

5: E Bidwell St & Alder Creek Pkwy Performance by movement

Movement	WBL	WBR	NBT	NBR	SBL	SBT	All
Denied Delay (hr)	0.0	0.1	0.1	0.0	0.0	0.0	0.1
Denied Del/Veh (s)	0.4	0.4	0.2	2.1	0.0	0.0	0.2
Total Delay (hr)	0.4	18.7	3.2	0.0	1.1	0.4	23.8
Total Del/Veh (s)	26.7	109.6	11.0	5.3	16.1	1.8	31.7

6: E Bidwell St & US-50 EB Ramps Performance by movement

Movement	EBL	EBR	NBT	SBT	All
Denied Delay (hr)	0.0	0.3	0.0	0.0	0.3
Denied Del/Veh (s)	0.3	3.0	0.0	0.0	0.3
Total Delay (hr)	2.3	0.7	3.2	1.6	7.8
Total Del/Veh (s)	18.4	8.5	7.0	8.6	9.2

7: E Bidwell St & US-50 WB Ramps Performance by movement

Movement	WBL	WBR	NBT	SBT	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.1
Denied Del/Veh (s)	0.6	0.3	0.0	0.1	0.1
Total Delay (hr)	1.2	1.9	3.6	0.7	7.5
Total Del/Veh (s)	15.9	12.1	7.6	7.1	9.2

Total Network Performance

Denied Delay (hr)	0.5
Denied Del/Veh (s)	0.5
Total Delay (hr)	42.1
Total Del/Veh (s)	40.2

Intersection: 5: E Bidwell St & Alder Creek Pkwy

Movement	WB	WB	WB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	L	R	T	T	R	L	L	T	T
Maximum Queue (ft)	39	731	937	178	170	35	94	114	88	74
Average Queue (ft)	5	160	568	99	75	8	37	63	22	18
95th Queue (ft)	24	696	1138	157	137	29	76	93	65	50
Link Distance (ft)		1197	1197	1708	1708				466	466
Upstream Blk Time (%)		1	5							
Queuing Penalty (veh)		0	0							
Storage Bay Dist (ft)	250					250	250	250		
Storage Blk Time (%)										
Queuing Penalty (veh)										

Intersection: 6: E Bidwell St & US-50 EB Ramps

Movement	EB	EB	EB	NB	NB	SB	SB
Directions Served	L	L	R	T	TR	T	T
Maximum Queue (ft)	144	147	173	204	201	124	108
Average Queue (ft)	80	84	71	100	99	59	53
95th Queue (ft)	123	128	129	167	170	109	98
Link Distance (ft)	922	922		919	919	1018	1018
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)			400				
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 7: E Bidwell St & US-50 WB Ramps

Movement	WB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	L	R	R	T	TR	T	T
Maximum Queue (ft)	109	99	144	150	167	181	143	71
Average Queue (ft)	51	61	75	85	85	93	63	13
95th Queue (ft)	94	92	122	130	141	153	116	49
Link Distance (ft)		1313	1313		1018	1018	246	246
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	380			380				
Storage Blk Time (%)								
Queuing Penalty (veh)								

Network Summary

Network wide Queuing Penalty: 0

Summary of All Intervals

Run Number	1	10	2	3	4	5	6
Start Time	6:50	6:50	6:50	6:50	6:50	6:50	6:50
End Time	8:00	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	70	70	70	70	70	70	70
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4	4
Vehs Entered	3961	3935	3897	3894	3924	3920	3965
Vehs Exited	3967	3955	3919	3896	3917	3912	3955
Starting Vehs	117	140	116	111	108	106	120
Ending Vehs	111	120	94	109	115	114	130
Travel Distance (mi)	3013	2987	2939	2939	2954	2979	2990
Travel Time (hr)	121.8	131.5	128.9	121.9	123.7	119.9	150.0
Total Delay (hr)	43.6	54.3	52.8	45.4	47.3	42.8	72.6
Total Stops	4395	4442	4433	4396	4304	4369	4745
Fuel Used (gal)	116.0	118.4	116.5	114.0	114.5	115.3	122.8

Summary of All Intervals

Run Number	7	8	9	Avg
Start Time	6:50	6:50	6:50	6:50
End Time	8:00	8:00	8:00	8:00
Total Time (min)	70	70	70	70
Time Recorded (min)	60	60	60	60
# of Intervals	5	5	5	5
# of Recorded Intervals	4	4	4	4
Vehs Entered	4005	3875	3994	3936
Vehs Exited	3993	3906	3989	3942
Starting Vehs	116	130	121	119
Ending Vehs	128	99	126	113
Travel Distance (mi)	3022	2945	3022	2979
Travel Time (hr)	126.7	121.9	127.5	127.4
Total Delay (hr)	48.5	45.6	48.7	50.2
Total Stops	4546	4325	4584	4456
Fuel Used (gal)	117.5	114.2	117.3	116.7

Interval #0 Information Seeding

Start Time	6:50
End Time	7:00
Total Time (min)	10
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording

Start Time	7:00
End Time	7:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	10	2	3	4	5	6
Vehs Entered	962	985	975	950	983	935	968
Vehs Exited	957	1009	975	928	969	939	966
Starting Vehs	117	140	116	111	108	106	120
Ending Vehs	122	116	116	133	122	102	122
Travel Distance (mi)	732	756	740	716	736	718	729
Travel Time (hr)	29.0	30.3	32.4	27.2	28.3	27.7	29.5
Total Delay (hr)	10.1	10.7	13.2	8.6	9.2	9.2	10.3
Total Stops	1039	1112	1118	1025	1058	1004	1073
Fuel Used (gal)	28.2	29.0	29.4	27.0	27.8	27.4	28.3

Interval #1 Information Recording

Start Time	7:00
End Time	7:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	7	8	9	Avg
Vehs Entered	1001	940	1029	973
Vehs Exited	1000	958	1005	971
Starting Vehs	116	130	121	119
Ending Vehs	117	112	145	118
Travel Distance (mi)	750	717	767	736
Travel Time (hr)	30.2	30.8	31.8	29.7
Total Delay (hr)	10.9	12.0	11.8	10.6
Total Stops	1081	1071	1196	1077
Fuel Used (gal)	28.9	28.1	29.5	28.4

Interval #2 Information

Start Time	7:15
End Time	7:30
Total Time (min)	15

Volumes adjusted by PHF, Growth Factors.

Run Number	1	10	2	3	4	5	6
Vehs Entered	1010	1057	1059	1013	1050	1043	1034
Vehs Exited	1009	1000	1007	1015	1045	1008	970
Starting Vehs	122	116	116	133	122	102	122
Ending Vehs	123	173	168	131	127	137	186
Travel Distance (mi)	764	778	785	750	803	787	752
Travel Time (hr)	32.0	33.5	38.7	34.6	33.6	31.2	41.1
Total Delay (hr)	12.3	13.2	18.8	15.1	13.0	11.0	21.9
Total Stops	1168	1201	1277	1219	1179	1131	1248
Fuel Used (gal)	29.6	30.5	32.0	30.0	31.1	30.5	31.7

Interval #2 Information

Start Time	7:15
End Time	7:30
Total Time (min)	15

Volumes adjusted by PHF, Growth Factors.

Run Number	7	8	9	Avg
Vehs Entered	1072	1064	1011	1041
Vehs Exited	1046	1013	1024	1013
Starting Vehs	117	112	145	118
Ending Vehs	143	163	132	145
Travel Distance (mi)	807	791	781	780
Travel Time (hr)	36.3	34.1	36.2	35.1
Total Delay (hr)	15.3	13.6	15.8	15.0
Total Stops	1331	1244	1230	1225
Fuel Used (gal)	31.8	31.1	31.5	31.0

Interval #3 Information

Start Time	7:30
End Time	7:45
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	10	2	3	4	5	6
Vehs Entered	995	956	912	988	958	971	982
Vehs Exited	997	1005	969	978	990	993	1025
Starting Vehs	123	173	168	131	127	137	186
Ending Vehs	121	124	111	141	95	115	143
Travel Distance (mi)	774	740	702	749	719	739	766
Travel Time (hr)	31.1	38.1	29.9	31.5	33.7	29.8	41.2
Total Delay (hr)	10.8	19.0	11.6	11.7	15.2	10.8	21.5
Total Stops	1123	1130	1006	1141	1098	1061	1227
Fuel Used (gal)	30.0	30.4	27.9	29.5	28.9	28.5	32.1

Interval #3 Information

Start Time	7:30
End Time	7:45
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	7	8	9	Avg
Vehs Entered	968	951	951	961
Vehs Exited	1007	1008	945	991
Starting Vehs	143	163	132	145
Ending Vehs	104	106	138	118
Travel Distance (mi)	758	746	695	739
Travel Time (hr)	32.6	31.3	27.8	32.7
Total Delay (hr)	13.0	11.9	9.6	13.5
Total Stops	1127	1120	1024	1107
Fuel Used (gal)	29.8	29.2	26.5	29.3

Interval #4 Information

Start Time	7:45
End Time	8:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	10	2	3	4	5	6
Vehs Entered	994	937	951	943	933	971	981
Vehs Exited	1004	941	968	975	913	972	994
Starting Vehs	121	124	111	141	95	115	143
Ending Vehs	111	120	94	109	115	114	130
Travel Distance (mi)	743	713	712	723	695	735	743
Travel Time (hr)	29.6	29.6	27.9	28.6	28.1	31.1	38.2
Total Delay (hr)	10.4	11.3	9.3	10.0	9.9	11.8	19.0
Total Stops	1065	999	1032	1011	969	1173	1197
Fuel Used (gal)	28.2	28.4	27.2	27.5	26.7	28.9	30.7

Interval #4 Information

Start Time	7:45
End Time	8:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	7	8	9	Avg
Vehs Entered	964	920	1003	959
Vehs Exited	940	927	1015	964
Starting Vehs	104	106	138	118
Ending Vehs	128	99	126	113
Travel Distance (mi)	708	691	779	724
Travel Time (hr)	27.6	25.8	31.7	29.8
Total Delay (hr)	9.3	8.0	11.5	11.1
Total Stops	1007	890	1134	1047
Fuel Used (gal)	27.0	25.9	29.8	28.0

1: Street A & Street B Performance by movement

Movement	EBR	WBL	WBT	NBL	NBT	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.0	0.0	0.0	0.0	0.0
Total Delay (hr)	0.1	0.4	0.1	0.4	0.0	0.9
Total Del/Veh (s)	3.5	6.5	6.8	5.7	0.3	5.3

2: Street B Performance by movement

Movement	WBT	NBL	NBT	NBR	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.0	0.0	0.0	0.1	0.0
Total Delay (hr)	0.1	0.1	0.3	0.0	0.1	0.6
Total Del/Veh (s)	6.6	5.1	3.0	3.3	3.1	3.7

3: Alder Creek Parkway & Street A Performance by movement

Movement	WBR	SBL	All
Denied Delay (hr)	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0
Total Delay (hr)	0.1	0.4	0.5
Total Del/Veh (s)	1.1	5.5	3.3

4: Street D & Alder Creek Parkway Performance by movement

Movement	EBT	WBL	WBT	WBR	NBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.0
Total Delay (hr)	0.1	0.1	0.4	0.8	0.0	1.4
Total Del/Veh (s)	0.8	9.4	4.7	5.9	3.0	4.3

5: E Bidwell St & Alder Creek Parkway/Alder Creek Pkwy Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.1	0.2	0.1
Denied Del/Veh (s)	0.1	0.0	0.1	3.1	1.1	3.2	1.2	0.1	0.8	2.2	2.2	0.4
Total Delay (hr)	3.4	0.1	0.1	0.4	0.5	10.3	1.8	11.2	0.0	1.6	4.3	5.8
Total Del/Veh (s)	45.3	23.3	5.2	30.4	25.0	59.6	46.3	38.7	8.2	58.3	60.0	26.3

5: E Bidwell St & Alder Creek Parkway/Alder Creek Pkwy Performance by movement

Movement	SBR	All
Denied Delay (hr)	0.4	1.3
Denied Del/Veh (s)	2.2	1.2
Total Delay (hr)	1.5	41.2
Total Del/Veh (s)	9.1	36.6

Total Network Performance

Denied Delay (hr)	1.4
Denied Del/Veh (s)	1.2
Total Delay (hr)	48.8
Total Del/Veh (s)	43.3

Intersection: 1: Street A & Street B

Movement	EB	WB	WB	NB
Directions Served	TR	L	T	L
Maximum Queue (ft)	64	69	56	78
Average Queue (ft)	31	39	26	43
95th Queue (ft)	54	59	50	66
Link Distance (ft)	692		750	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		150		100
Storage Blk Time (%)				0
Queuing Penalty (veh)				0

Intersection: 2: Street B

Movement	WB	NB	NB	SB
Directions Served	T	L	TR	TR
Maximum Queue (ft)	54	54	67	67
Average Queue (ft)	31	30	35	36
95th Queue (ft)	52	47	54	58
Link Distance (ft)	308		514	108
Upstream Blk Time (%)				0
Queuing Penalty (veh)				0
Storage Bay Dist (ft)		100		
Storage Blk Time (%)			0	
Queuing Penalty (veh)			0	

Intersection: 3: Alder Creek Parkway & Street A

Movement	SB
Directions Served	L
Maximum Queue (ft)	62
Average Queue (ft)	33
95th Queue (ft)	53
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	300
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 4: Street D & Alder Creek Parkway

Movement	WB	NB
Directions Served	L	R
Maximum Queue (ft)	50	44
Average Queue (ft)	14	18
95th Queue (ft)	42	37
Link Distance (ft)	485	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)	250	
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 5: E Bidwell St & Alder Creek Parkway/Alder Creek Pkwy

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	L	T	T	R	L	L	T	T	R	L	L
Maximum Queue (ft)	164	184	34	35	55	35	59	413	742	551	71	164
Average Queue (ft)	78	91	6	6	22	6	26	88	202	319	13	74
95th Queue (ft)	139	147	24	26	48	25	52	559	782	589	42	138
Link Distance (ft)			755	755				1122	1122			
Upstream Blk Time (%)								1	3			
Queuing Penalty (veh)								0	0			
Storage Bay Dist (ft)	350	350			250	250	250			550	250	250
Storage Blk Time (%)									0	13		
Queuing Penalty (veh)									2	5		

Intersection: 5: E Bidwell St & Alder Creek Parkway/Alder Creek Pkwy

Movement	NB	NB	NB	NB	SB	SB	SB	SB	SB	SB		
Directions Served	T	T	T	R	UL	L	T	T	T	R		
Maximum Queue (ft)	243	250	240	27	217	220	164	170	168	203		
Average Queue (ft)	148	157	142	6	114	126	97	107	101	75		
95th Queue (ft)	221	228	220	20	201	208	145	153	151	169		
Link Distance (ft)	3033	3033	3033				1468	1468	1468			
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)					250	300	300			250		
Storage Blk Time (%)	0			1	0	0					0	
Queuing Penalty (veh)	1			0	0	0					0	

Network Summary

Network wide Queuing Penalty: 9

Interval #1 Information Recording

Start Time	5:00
End Time	5:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	10	2	3	4	5	6
Vehs Entered	1330	1391	1402	1319	1374	1347	1367
Vehs Exited	1325	1363	1372	1311	1392	1334	1340
Starting Vehs	145	142	148	147	173	138	124
Ending Vehs	150	170	178	155	155	151	151
Travel Distance (mi)	924	970	956	902	970	904	925
Travel Time (hr)	36.1	38.3	41.5	34.9	38.3	37.1	36.1
Total Delay (hr)	12.9	14.0	17.4	12.2	14.1	14.2	12.6
Total Stops	1208	1303	1362	1190	1253	1274	1197
Fuel Used (gal)	35.4	37.8	37.8	35.3	38.1	35.6	35.6

Interval #1 Information Recording

Start Time	5:00
End Time	5:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	7	8	9	Avg
Vehs Entered	1324	1302	1384	1355
Vehs Exited	1323	1292	1382	1344
Starting Vehs	158	133	155	146
Ending Vehs	159	143	157	154
Travel Distance (mi)	899	870	940	926
Travel Time (hr)	36.3	34.8	38.1	37.2
Total Delay (hr)	13.4	12.7	14.4	13.8
Total Stops	1229	1241	1357	1262
Fuel Used (gal)	35.3	34.3	36.8	36.2

Interval #2 Information

Start Time	5:15
End Time	5:30
Total Time (min)	15

Volumes adjusted by PHF, Growth Factors.

Run Number	1	10	2	3	4	5	6
Vehs Entered	1435	1410	1435	1489	1471	1391	1488
Vehs Exited	1434	1422	1426	1437	1444	1386	1470
Starting Vehs	150	170	178	155	155	151	151
Ending Vehs	151	158	187	207	182	156	169
Travel Distance (mi)	1013	978	1008	985	1017	965	1001
Travel Time (hr)	40.1	43.5	43.0	45.0	41.5	39.6	44.0
Total Delay (hr)	14.9	18.8	17.8	20.1	16.0	15.2	18.6
Total Stops	1331	1521	1410	1490	1388	1353	1556
Fuel Used (gal)	39.2	39.0	39.8	39.7	39.9	37.8	39.6

Interval #2 Information

Start Time	5:15
End Time	5:30
Total Time (min)	15

Volumes adjusted by PHF, Growth Factors.

Run Number	7	8	9	Avg
Vehs Entered	1495	1471	1428	1450
Vehs Exited	1473	1417	1409	1432
Starting Vehs	159	143	157	154
Ending Vehs	181	197	176	176
Travel Distance (mi)	1034	997	959	996
Travel Time (hr)	46.9	41.1	39.5	42.4
Total Delay (hr)	21.0	16.2	15.3	17.4
Total Stops	1562	1386	1341	1433
Fuel Used (gal)	41.8	38.6	37.5	39.3

Interval #3 Information

Start Time	5:30
End Time	5:45
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	10	2	3	4	5	6
Vehs Entered	1323	1361	1378	1330	1274	1416	1354
Vehs Exited	1343	1374	1421	1365	1308	1378	1362
Starting Vehs	151	158	187	207	182	156	169
Ending Vehs	131	145	144	172	148	194	161
Travel Distance (mi)	894	942	943	935	894	952	900
Travel Time (hr)	36.2	41.1	39.6	41.7	35.2	40.3	38.5
Total Delay (hr)	13.4	17.3	15.6	18.2	12.8	16.1	15.5
Total Stops	1266	1354	1355	1267	1222	1392	1243
Fuel Used (gal)	35.1	37.3	37.2	37.5	34.8	37.7	35.7

Interval #3 Information

Start Time	5:30
End Time	5:45
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	7	8	9	Avg
Vehs Entered	1338	1283	1301	1336
Vehs Exited	1373	1303	1363	1359
Starting Vehs	181	197	176	176
Ending Vehs	146	177	114	153
Travel Distance (mi)	964	900	935	926
Travel Time (hr)	41.1	37.9	39.1	39.1
Total Delay (hr)	16.9	15.2	15.7	15.7
Total Stops	1304	1182	1323	1289
Fuel Used (gal)	38.8	36.1	37.4	36.8

Interval #4 Information

Start Time	5:45
End Time	6:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	1	10	2	3	4	5	6
Vehs Entered	1334	1346	1359	1384	1296	1364	1304
Vehs Exited	1340	1329	1342	1415	1310	1389	1292
Starting Vehs	131	145	144	172	148	194	161
Ending Vehs	125	162	161	141	134	169	173
Travel Distance (mi)	954	933	950	1001	894	946	914
Travel Time (hr)	36.4	37.5	37.4	41.0	35.3	42.2	40.3
Total Delay (hr)	12.7	13.8	13.4	16.2	12.8	18.5	17.4
Total Stops	1219	1267	1226	1328	1182	1282	1203
Fuel Used (gal)	36.6	36.3	37.1	39.6	34.3	38.1	36.0

Interval #4 Information

Start Time	5:45
End Time	6:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	7	8	9	Avg
Vehs Entered	1269	1340	1303	1330
Vehs Exited	1289	1376	1288	1337
Starting Vehs	146	177	114	153
Ending Vehs	126	141	129	146
Travel Distance (mi)	879	931	916	932
Travel Time (hr)	32.8	37.7	35.4	37.6
Total Delay (hr)	10.9	14.3	12.6	14.3
Total Stops	1081	1311	1192	1228
Fuel Used (gal)	34.2	37.0	35.4	36.5

5: E Bidwell St & Alder Creek Pkwy Performance by movement

Movement	WBL	WBR	NBT	NBR	SBL	SBT	All
Denied Delay (hr)	0.0	0.0	0.1	0.0	0.0	0.0	0.1
Denied Del/Veh (s)	0.2	0.3	0.2	0.8	0.0	0.0	0.1
Total Delay (hr)	0.2	8.7	4.1	0.1	1.3	0.6	15.0
Total Del/Veh (s)	23.8	67.2	11.2	6.4	17.3	1.9	16.4

6: E Bidwell St & US-50 EB Ramps Performance by movement

Movement	EBL	EBR	NBT	SBT	All
Denied Delay (hr)	0.1	0.3	0.0	0.0	0.5
Denied Del/Veh (s)	0.5	2.4	0.0	0.0	0.4
Total Delay (hr)	5.7	2.1	6.1	5.4	19.3
Total Del/Veh (s)	20.2	16.0	12.5	13.1	14.7

7: E Bidwell St & US-50 WB Ramps Performance by movement

Movement	WBL	WBR	NBT	SBT	All
Denied Delay (hr)	0.1	0.1	0.0	0.1	0.2
Denied Del/Veh (s)	0.6	0.4	0.0	0.2	0.2
Total Delay (hr)	1.9	3.5	11.1	3.7	20.2
Total Del/Veh (s)	17.1	17.8	18.0	12.3	16.5

Total Network Performance

Denied Delay (hr)	0.8
Denied Del/Veh (s)	0.5
Total Delay (hr)	60.3
Total Del/Veh (s)	38.7

Intersection: 5: E Bidwell St & Alder Creek Pkwy

Movement	WB	WB	WB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	L	R	T	T	R	L	L	T	T
Maximum Queue (ft)	28	85	591	186	180	54	100	111	102	85
Average Queue (ft)	2	20	302	100	78	11	43	67	30	22
95th Queue (ft)	15	84	613	160	146	38	83	100	85	66
Link Distance (ft)		907	907	3178	3178				395	395
Upstream Blk Time (%)			0							
Queuing Penalty (veh)			0							
Storage Bay Dist (ft)	250					250	250	250		
Storage Blk Time (%)					0					
Queuing Penalty (veh)					0					

Intersection: 6: E Bidwell St & US-50 EB Ramps

Movement	EB	EB	EB	NB	NB	B2	SB	SB
Directions Served	L	L	R	T	TR	T	T	T
Maximum Queue (ft)	278	303	290	249	265	4	243	244
Average Queue (ft)	170	182	141	164	168	0	130	125
95th Queue (ft)	246	265	247	239	241	4	216	209
Link Distance (ft)	922	922		736	736	395	1018	1018
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)			400					
Storage Blk Time (%)			0					
Queuing Penalty (veh)			1					

Intersection: 7: E Bidwell St & US-50 WB Ramps

Movement	WB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	L	R	R	T	TR	T	T	T
Maximum Queue (ft)	137	139	193	213	395	403	262	215	148
Average Queue (ft)	68	83	118	126	210	216	175	129	32
95th Queue (ft)	116	125	178	188	344	346	253	215	114
Link Distance (ft)		1313	1313		1018	1018	246	246	246
Upstream Blk Time (%)							1	0	
Queuing Penalty (veh)							0	0	
Storage Bay Dist (ft)	380			380					
Storage Blk Time (%)									
Queuing Penalty (veh)									

Network Summary

Network wide Queuing Penalty: 1

Summary of All Intervals

Run Number	10	12	13	14	15	2	3
Start Time	4:50	4:50	4:50	4:50	4:50	4:50	4:50
End Time	6:00	6:00	6:00	6:00	6:00	6:00	6:00
Total Time (min)	70	70	70	70	70	70	70
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4	4
Vehs Entered	4708	4670	4828	4864	4794	4816	4678
Vehs Exited	4716	4667	4804	4832	4765	4807	4670
Starting Vehs	172	161	177	148	166	151	160
Ending Vehs	164	164	201	180	195	160	168
Travel Distance (mi)	3752	3717	3842	3867	3794	3850	3728
Travel Time (hr)	165.3	166.8	174.6	186.9	173.5	175.6	163.6
Total Delay (hr)	70.3	72.0	77.2	88.8	77.0	78.0	69.5
Total Stops	5990	6142	6547	6874	6315	6658	5922
Fuel Used (gal)	147.7	146.7	152.0	155.7	151.2	153.0	146.4

Summary of All Intervals

Run Number	5	7	9	Avg
Start Time	4:50	4:50	4:50	4:50
End Time	6:00	6:00	6:00	6:00
Total Time (min)	70	70	70	70
Time Recorded (min)	60	60	60	60
# of Intervals	5	5	5	5
# of Recorded Intervals	4	4	4	4
Vehs Entered	4803	4799	4848	4780
Vehs Exited	4830	4799	4804	4771
Starting Vehs	178	153	154	162
Ending Vehs	151	153	198	172
Travel Distance (mi)	3819	3802	3850	3802
Travel Time (hr)	172.8	181.9	187.6	174.9
Total Delay (hr)	76.0	86.1	90.3	78.5
Total Stops	6514	6541	6824	6432
Fuel Used (gal)	151.4	153.1	155.0	151.2

Interval #0 Information Seeding

Start Time	4:50
End Time	5:00
Total Time (min)	10
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording

Start Time	5:00
End Time	5:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	10	12	13	14	15	2	3
Vehs Entered	1138	1135	1188	1237	1169	1190	1148
Vehs Exited	1169	1154	1183	1198	1153	1196	1152
Starting Vehs	172	161	177	148	166	151	160
Ending Vehs	141	142	182	187	182	145	156
Travel Distance (mi)	922	914	960	967	924	962	922
Travel Time (hr)	40.7	39.4	42.8	45.5	38.8	41.5	39.4
Total Delay (hr)	17.3	16.0	18.6	21.0	15.5	17.2	16.1
Total Stops	1481	1454	1638	1706	1437	1570	1430
Fuel Used (gal)	36.4	35.8	37.8	38.7	36.1	37.6	35.6

Interval #1 Information Recording

Start Time	5:00
End Time	5:15
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	5	7	9	Avg
Vehs Entered	1186	1146	1205	1171
Vehs Exited	1216	1154	1163	1176
Starting Vehs	178	153	154	162
Ending Vehs	148	145	196	158
Travel Distance (mi)	949	911	951	938
Travel Time (hr)	41.5	38.4	39.1	40.7
Total Delay (hr)	17.5	15.5	15.3	17.0
Total Stops	1479	1437	1494	1511
Fuel Used (gal)	37.4	35.3	36.8	36.7

Interval #2 Information

Start Time	5:15
End Time	5:30
Total Time (min)	15

Volumes adjusted by PHF, Growth Factors.

Run Number	10	12	13	14	15	2	3
Vehs Entered	1229	1244	1249	1243	1259	1289	1222
Vehs Exited	1190	1185	1231	1226	1221	1229	1191
Starting Vehs	141	142	182	187	182	145	156
Ending Vehs	180	201	200	204	220	205	187
Travel Distance (mi)	957	965	988	980	993	1000	964
Travel Time (hr)	42.4	43.6	44.3	49.0	45.5	51.4	42.3
Total Delay (hr)	17.8	18.9	19.3	24.1	20.0	26.0	17.9
Total Stops	1581	1672	1631	1713	1722	2033	1518
Fuel Used (gal)	37.6	38.2	38.9	39.7	39.7	41.2	37.9

Interval #2 Information

Start Time	5:15
End Time	5:30
Total Time (min)	15

Volumes adjusted by PHF, Growth Factors.

Run Number	5	7	9	Avg
Vehs Entered	1285	1293	1281	1257
Vehs Exited	1253	1241	1258	1222
Starting Vehs	148	145	196	158
Ending Vehs	180	197	219	198
Travel Distance (mi)	1010	1017	1011	988
Travel Time (hr)	48.6	50.3	48.4	46.6
Total Delay (hr)	23.0	24.6	22.8	21.4
Total Stops	1852	1859	1805	1735
Fuel Used (gal)	40.4	41.2	40.3	39.5

Interval #3 Information

Start Time	5:30
End Time	5:45
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	10	12	13	14	15	2	3
Vehs Entered	1166	1122	1118	1200	1129	1154	1126
Vehs Exited	1187	1151	1150	1203	1170	1192	1134
Starting Vehs	180	201	200	204	220	205	187
Ending Vehs	159	172	168	201	179	167	179
Travel Distance (mi)	933	909	891	967	907	939	896
Travel Time (hr)	41.4	41.9	40.4	45.7	44.0	42.4	40.1
Total Delay (hr)	18.1	18.9	17.5	21.1	20.9	18.4	17.2
Total Stops	1431	1489	1471	1698	1546	1553	1499
Fuel Used (gal)	36.9	36.2	35.1	38.7	36.8	37.2	35.5

Interval #3 Information

Start Time	5:30
End Time	5:45
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	5	7	9	Avg
Vehs Entered	1178	1173	1171	1154
Vehs Exited	1200	1194	1186	1177
Starting Vehs	180	197	219	198
Ending Vehs	158	176	204	174
Travel Distance (mi)	947	926	937	925
Travel Time (hr)	43.4	48.0	51.2	43.8
Total Delay (hr)	19.5	24.4	27.7	20.4
Total Stops	1619	1670	1836	1582
Fuel Used (gal)	37.9	38.4	39.0	37.2

Interval #4 Information

Start Time	5:45
End Time	6:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	10	12	13	14	15	2	3
Vehs Entered	1175	1169	1273	1184	1237	1183	1182
Vehs Exited	1170	1177	1240	1205	1221	1190	1193
Starting Vehs	159	172	168	201	179	167	179
Ending Vehs	164	164	201	180	195	160	168
Travel Distance (mi)	939	930	1003	954	970	949	946
Travel Time (hr)	40.7	41.9	47.1	46.7	45.2	40.4	41.9
Total Delay (hr)	17.1	18.2	21.8	22.6	20.6	16.4	18.2
Total Stops	1497	1527	1807	1757	1610	1502	1475
Fuel Used (gal)	36.8	36.5	40.3	38.7	38.6	37.0	37.4

Interval #4 Information

Start Time	5:45
End Time	6:00
Total Time (min)	15

Volumes adjusted by Growth Factors.

Run Number	5	7	9	Avg
Vehs Entered	1154	1187	1191	1191
Vehs Exited	1161	1210	1197	1195
Starting Vehs	158	176	204	174
Ending Vehs	151	153	198	172
Travel Distance (mi)	912	947	950	950
Travel Time (hr)	39.4	45.3	48.9	43.7
Total Delay (hr)	15.9	21.6	24.5	19.7
Total Stops	1564	1575	1689	1601
Fuel Used (gal)	35.8	38.3	38.9	37.8

1: Street A & Street B Performance by movement

Movement	EBR	WBL	WBT	NBL	NBT	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.1
Denied Del/Veh (s)	0.3	0.4	0.1	0.0	0.0	0.3
Total Delay (hr)	0.6	0.9	0.0	0.2	0.0	1.7
Total Del/Veh (s)	7.1	8.9	7.3	5.8	0.2	7.6

2: Street B Performance by movement

Movement	WBT	NBL	NBT	NBR	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.1	0.0	0.0	0.0	0.2	0.1
Total Delay (hr)	0.2	0.1	0.2	0.0	0.2	0.7
Total Del/Veh (s)	6.7	5.2	3.9	3.2	3.5	4.3

3: Alder Creek Parkway & Street A Performance by movement

Movement	WBR	SBL	All
Denied Delay (hr)	0.0	0.1	0.1
Denied Del/Veh (s)	0.0	0.4	0.3
Total Delay (hr)	0.0	2.6	2.7
Total Del/Veh (s)	0.4	12.2	10.7

4: Street D & Alder Creek Parkway Performance by movement

Movement	EBT	WBL	WBT	WBR	NBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.2	0.0
Total Delay (hr)	0.3	0.4	0.1	0.3	0.3	1.5
Total Del/Veh (s)	1.4	18.8	3.6	4.4	8.5	3.9

5: E Bidwell St & Alder Creek Parkway/Alder Creek Pkwy Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.2	0.1
Denied Del/Veh (s)	0.0	0.0	0.0	2.9	0.6	3.1	1.1	0.1	1.0	2.0	2.0	0.3
Total Delay (hr)	13.3	0.4	0.3	0.3	0.4	7.4	1.4	19.4	0.1	1.2	7.8	11.5
Total Del/Veh (s)	65.6	18.2	8.5	37.5	29.9	57.0	58.9	52.8	12.4	102.8	100.9	31.4

5: E Bidwell St & Alder Creek Parkway/Alder Creek Pkwy Performance by movement

Movement	SBR	All
Denied Delay (hr)	0.2	1.0
Denied Del/Veh (s)	2.0	0.7
Total Delay (hr)	0.7	64.2
Total Del/Veh (s)	7.2	47.0

Total Network Performance

Denied Delay (hr)	1.2
Denied Del/Veh (s)	0.9
Total Delay (hr)	77.4
Total Del/Veh (s)	56.3

Intersection: 1: Street A & Street B

Movement	EB	WB	WB	NB
Directions Served	TR	L	T	L
Maximum Queue (ft)	141	128	31	65
Average Queue (ft)	67	61	11	34
95th Queue (ft)	111	100	35	54
Link Distance (ft)	692		750	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		150		100
Storage Blk Time (%)		0		0
Queuing Penalty (veh)		0		0

Intersection: 2: Street B

Movement	WB	NB	NB	SB
Directions Served	T	L	TR	TR
Maximum Queue (ft)	66	53	64	99
Average Queue (ft)	34	26	33	49
95th Queue (ft)	55	46	50	78
Link Distance (ft)	308		514	108
Upstream Blk Time (%)				0
Queuing Penalty (veh)				0
Storage Bay Dist (ft)		100		
Storage Blk Time (%)		0	0	
Queuing Penalty (veh)		0	0	

Intersection: 3: Alder Creek Parkway & Street A

Movement	SB	SB
Directions Served	L	R
Maximum Queue (ft)	265	25
Average Queue (ft)	113	1
95th Queue (ft)	219	25
Link Distance (ft)		470
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)	300	
Storage Blk Time (%)	0	
Queuing Penalty (veh)	0	

Intersection: 4: Street D & Alder Creek Parkway

Movement	EB	WB	NB
Directions Served	T	L	R
Maximum Queue (ft)	6	91	90
Average Queue (ft)	0	38	39
95th Queue (ft)	4	73	71
Link Distance (ft)	774		485
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)		250	
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 5: E Bidwell St & Alder Creek Parkway/Alder Creek Pkwy

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	L	T	T	R	L	L	T	T	R	L	L
Maximum Queue (ft)	351	362	413	67	98	30	51	98	326	488	60	226
Average Queue (ft)	249	254	81	28	42	3	17	10	51	273	15	72
95th Queue (ft)	363	365	336	62	82	18	42	103	279	484	44	194
Link Distance (ft)			755	755				1122	1122			
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	350	350			250	250	250			550	250	250
Storage Blk Time (%)	1	3	1						0	3		0
Queuing Penalty (veh)	0	1	7						0	1		0

Intersection: 5: E Bidwell St & Alder Creek Parkway/Alder Creek Pkwy

Movement	NB	NB	NB	NB	SB	SB	SB	SB	SB	SB
Directions Served	T	T	T	R	UL	L	T	T	T	R
Maximum Queue (ft)	382	375	393	208	251	252	289	278	282	194
Average Queue (ft)	234	243	240	27	145	159	170	181	182	21
95th Queue (ft)	375	380	384	135	251	257	248	251	257	104
Link Distance (ft)	3033	3033	3033				1468	1468	1468	
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)				250	300	300				250
Storage Blk Time (%)	10		12	0	0	1	0		1	0
Queuing Penalty (veh)	8		4	0	1	3	0		3	0

Network Summary

Network wide Queuing Penalty: 29