APPENDIX B:
TRAFFIC REPORT

ARNEILL ROAD REDEVELOPMENT PROJECT

Traffic Analysis

April 2006

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DRAFT

ARNEILL ROAD REDEVELOPMENT PROJECT
TRAFFIC ANALYSIS

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ARNEILL ROAD REDEVELOPMENT PROJECT
TRAFFIC ANALYSIS

The Arneill Road Redevelopment Project consists of redevelopment of properties within and surrounding the Ponderosa North and Ponderosa Shopping Centers in the City of Camarillo. This report summarizes the findings of a traffic analysis prepared to identify potential impacts to the surrounding circulation system.

ANALYSIS

The proposed redevelopment area is located in the central portion of the City of Camarillo, bounded by Ponderosa Drive on the north, Daily Drive on the south, Mobil Drive on the west, and Arneill Road on the east as illustrated in Figure 1. The project consists of 490 multi-family units, 7,000 square feet of civic center space, 329,000 square feet of retail uses, and 80,000 square feet of office space in the Camarillo Commons area and 81 additional multi-family units in the Raemere Street neighborhood. The concept plan is illustrated in Figure 2.

EXISTING CONDITIONS

The study area contains a mixture of commercial, office, public, and multi-family residential uses including the post office and a county fire station. The City's General Plan designates all of the area for general commercial development with the exception of the medium density residential area in the southernmost portion of the project area (Raemere Street neighborhood). The study area, with the exception of the existing Raemere Street residential neighborhood, is within the Camarillo Corridor Redevelopment Project area.

Arneill Road, Daily Drive, and Ponderosa Drive are identified as secondary arterials on the City's General Plan Circulation Element. Mobil Avenue and Pickwick Drive are designated as collector streets. The Arneill Road bridge, which crosses over the Ventura Freeway (US-101) south of the project area, was recently rebuilt as part of the Caltrans 101/134 Lewis Road Interchange Reconstruction Project and provides a direct connection between Ventura Boulevard/Old Town Camarillo and the study area.

Peak hour intersection volumes were counted at key intersections in the project vicinity in 2005 and 2006. These counts were collected after the completion of the recent ramp and bridge modifications

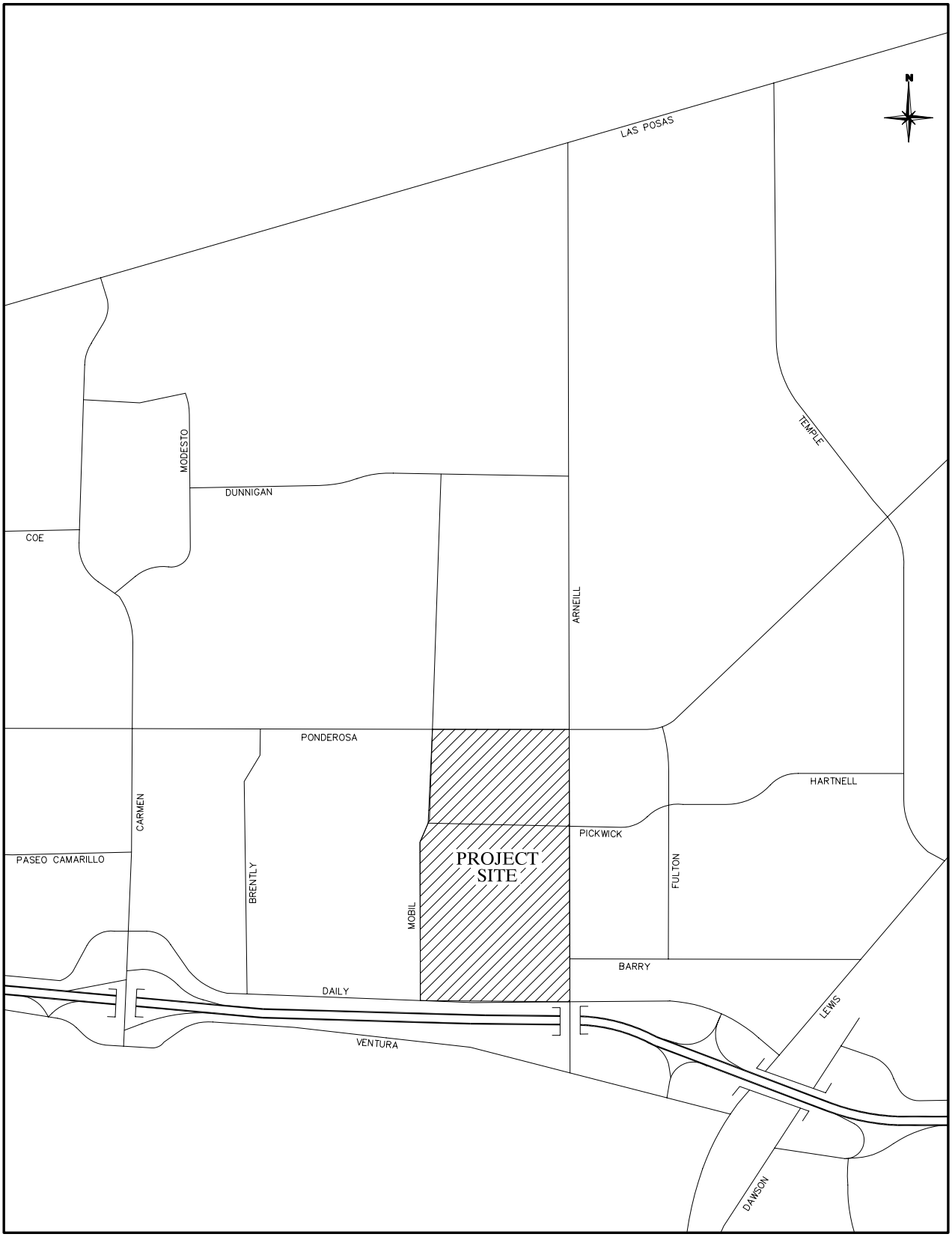


Figure 1

PROJECT LOCATION

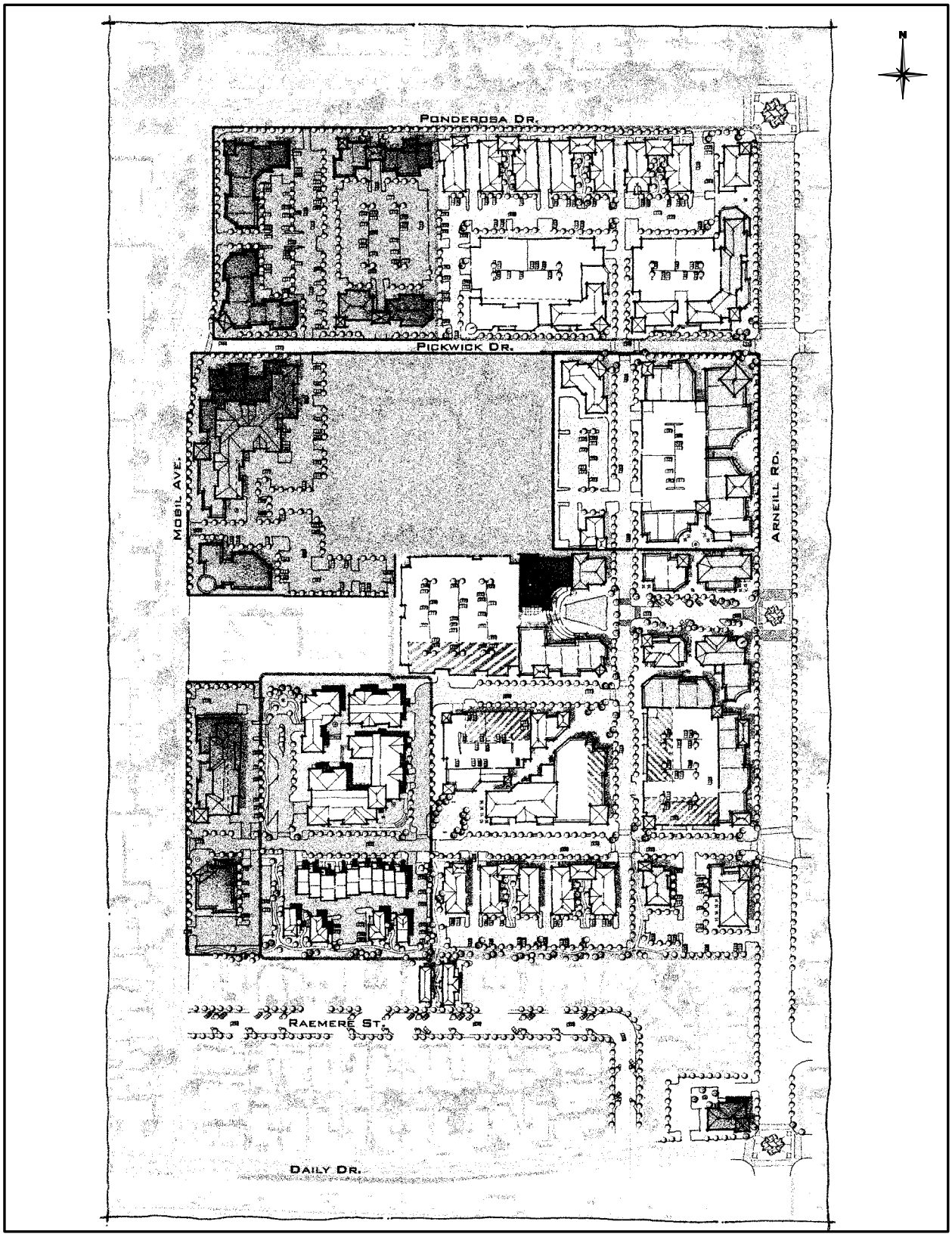


Figure 2

PROPOSED CONCEPT PLAN

and represent existing conditions against which the proposed project will be analyzed. Existing AM and PM peak hour intersection volumes are illustrated in Appendix A.

TRIP GENERATION

Trip generation rates for the proposed redevelopment area were obtained from the Brea Downtown Area mixed-use development project. The project consists of mixed uses of residential, retail, and office components. Table 1 summarizes the land use and trip generation for the proposed project.

As the trip generation summary table indicates, the Camarillo Commons area will generate a total of approximately 23,000 trips daily, of which 870 will occur during the AM peak hour and 2,240 will occur during the PM peak hour. The Raemere Street neighborhood will generate approximately 1,300 trips daily, with 110 generated during the AM peak hour and 140 generated during the PM peak hour. The mixed-use nature of the project will result in an eight percent reduction for internal trips. The proposed project will replace some, but not all, of the existing uses in the project area. Without details of which uses will be replaced or the trips currently generated by these uses, a conservative estimate was made that the existing uses to be replaced currently generate one-third the amount of traffic as the proposed project. Therefore, the total amount of new traffic added to the surrounding circulation system is approximately 14,700 trips daily, of which 580 are generated during the AM peak hour and 1,430 are generated during the PM peak hour.

Trip distribution for the project trips was determined from the Camarillo Area Traffic Model and is illustrated in Figure 3. Project traffic was assigned to the surrounding circulation system according to this distribution. Project-generated peak hour trips are illustrated in Appendix A. The project-generated traffic was added to existing volumes presented in the previous section to obtain existing-plus-project volumes. Existing-plus-project peak hour intersection volumes are illustrated in Appendix A.

IMPACT ANALYSIS

Intersection capacity utilization (ICU) values were determined for existing and existing-plus-project conditions based on existing lane configurations, and the results are presented in Table 2 (actual ICU calculation sheets are included in Appendix B). This table also summarizes the project contribution at each study intersection. The acceptable level of service (LOS) for the City of Camarillo is LOS “D+” (ICU value of .83). A significant project impact is defined as an increase of 30 or more project trips in

Table 1

PROJECT LAND USE AND TRIP GENERATION SUMMARY

LAND USE CATEGORY	AMOUNT	AM PEAK HOUR IN	AM PEAK HOUR OUT	AM PEAK HOUR TOTAL	PM PEAK HOUR IN	PM PEAK HOUR OUT	PM PEAK HOUR TOTAL	ADT
TRIP RATES								
Medium Density Res	DU	.15	.49	.64	.54	.28	.82	8.01
High Density Res	DU	.09	.42	.51	.43	.20	.63	6.47
Civic Center	TSF	3.47	.60	4.07	1.88	5.07	6.95	47.00
General Commercial	TSF	.84	.38	1.22	2.55	2.55	5.10	54.50
General Office	TSF	1.70	.21	1.91	.32	1.54	1.86	14.03
TRIP GENERATION								
Camarillo Commons								
Medium Density Res	298 DU	45	146	191	161	83	244	2,387
High Density Res	192 DU	17	81	98	82	38	120	1,242
Civic Center	7.0 TSF	24	4	28	13	35	48	329
General Commercial	329.0 TSF	277	125	402	839	839	1,678	17,932
General Office	80.0 TSF	136	17	153	26	123	149	1,122
Sub-Total		499	373	872	1,121	1,118	2,239	23,012
Internal Trips (8%)		-40	-30	-70	-90	-90	-180	-1,841
Credit for Existing Uses		-153	-115	-268	-344	-343	-687	-7,062
Raemere Neighborhood								
Medium Density Res	165 DU	25	81	106	89	46	135	1,322
Internal Trips (8%)		-2	-6	-8	-7	-4	-11	-106
Credit for Existing Res	84 DU	-13	-41	-54	-45	-24	-69	-672
Total Trip Generation		**316**	**262**	**578**	**724**	**703**	**1,427**	**14,653**

Source: Tri-City Traffic Model (Brea Downtown Area)

Abbreviations: ADT – Average Daily Trips
DU – Dwelling Units
TSF – Thousand Square Feet

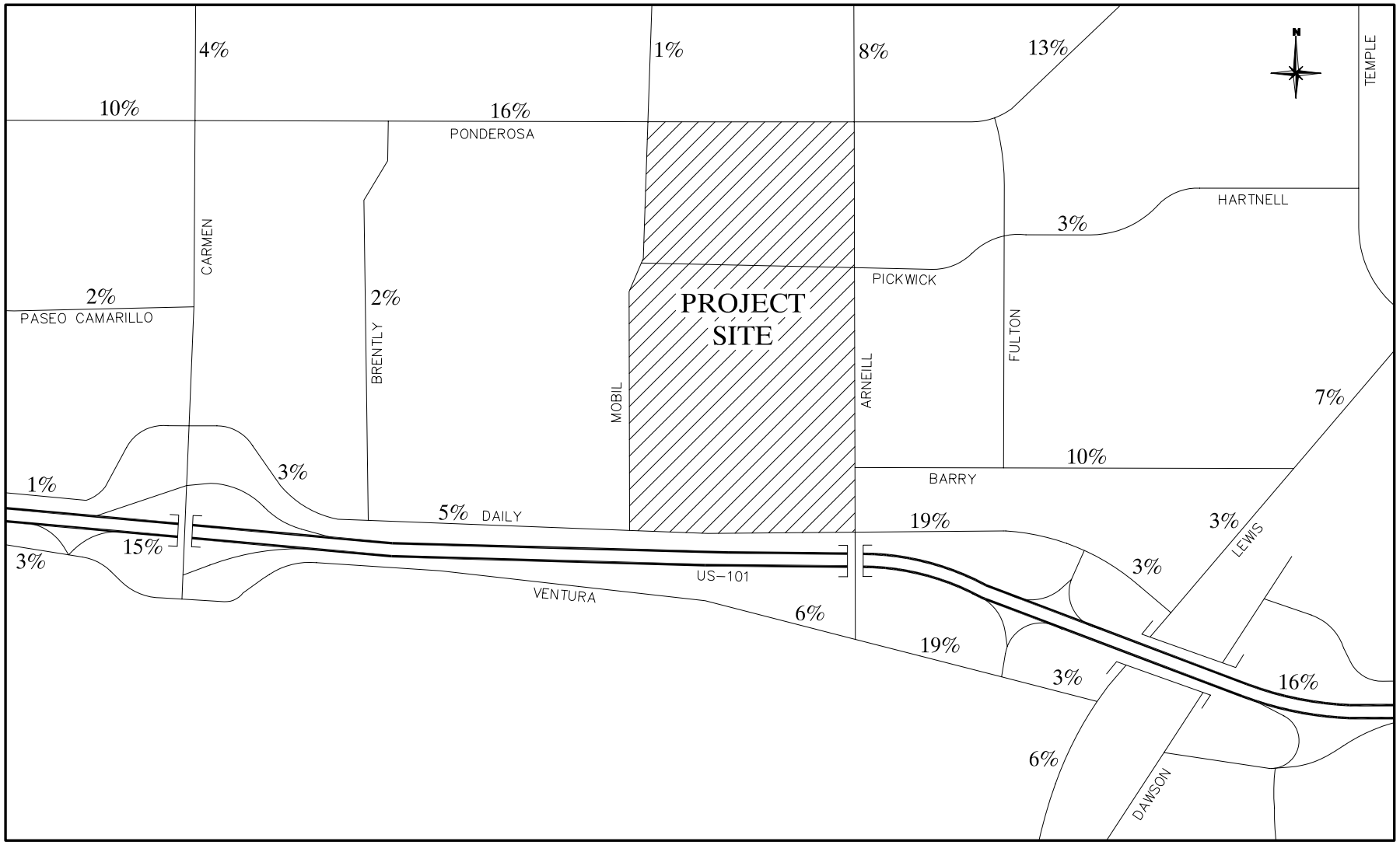


Figure 3

GENERAL PROJECT DISTRIBUTION

Table 2

EXISTING-PLUS-PROJECT ICU AND PROJECT IMPACT SUMMARY

INTERSECTION		EXISTING	EXISTING + PROJECT	PROJECT TRIPS IN CRITICAL MOVEMENT	PROJECT IMPACT ABOVE LEVEL OF SIGNIFICANCE
1. Carmen & Ponderosa	AM	.61	.63	38	No
	PM	.66	.68	92	No
2. Carmen & Daily	AM	.69	.69	4	No
	PM	.90*	.90 *	12	No
3. Carmen & US-101 NB	AM	.45	.45	2	No
	PM	.55	.56	6	No
5. Carmen & Ventura	AM	.41	.41	8	No
	PM	.54	.55	19	No
6. Mobil & Ponderosa	AM	.43	.49	103	No
	PM	.61	.68	171	No
7. Mobil & Pickwick	AM	.29	.32	40	No
	PM	.60	.66	100	No
8. Mobil & Daily	AM	.40	.44	48	No
	PM	.64	.72	133	No
10. Arneill & Ponderosa	AM	.50	.54	133	No
	PM	.71	.77	186	No
11. Arneill & Pickwick	AM	.48	.52	158	No
	PM	.76	.85 *	198	Yes
12. Arneill & Daily	AM	.50	.51	76	No
	PM	.70	.79	212	No
13. Arneill & Ventura	AM	.44	.46	60	No
	PM	.54	.60	157	No
14. US-101 NB & Daily	AM	.40	.41	64	No
	PM	.53	.57	108	No
15. US-101 SB & Ventura	AM	.78	.81	43	Yes
	PM	.77	.84 *	121	Yes
17. Lewis & Daily	AM	.52	.53	11	No
	PM	.49	.49	0	No
18. Lewis & Ventura	AM	.50	.51	17	No
	PM	.58	.59	17	No

* City intersection exceeds LOS “D+” (ICU .83)

Level of service ranges: .00 - .60 A
.61 - .70 B
.71 - .80 C
.81 - .90 D
.91 - 1.00 E
Above 1.00 F

the critical movement at an intersection which operates at LOS “D”, an increase of 20 or more project trips in the critical movement at an intersection which operates at LOS “E”, or an increase of 10 project trips in the critical movement at an intersection which operates at LOS “F”.

As the ICU table indicates, two intersections are significantly impacted by the project. The project will add more than 30 peak hour trips to the critical movements at Arneill Road and Pickwick Drive and at US-101 southbound ramps and Ventura Boulevard which will operate at LOS “D” during the PM peak hour. The project will be responsible for mitigation of short-range impacts at these locations.

INTERSECTION IMPROVEMENTS

The proposed project will have a significant impact on the intersection of Arneill Road and Pickwick Drive during the PM peak hour. Recommended intersection improvements to mitigate project impacts at this location consist of adding a southbound right-turn lane and adding an eastbound right-turn lane. These intersection improvements will result in LOS “C” during the PM peak hour.

The recommended improvement to mitigate project impacts at the intersection of US-101 southbound and Ventura Boulevard consists of widening the westbound approach to provide a defacto right-turn lane onto the southbound on-ramp. The recommended improvement will result in LOS “C” at this location.

In addition to the mitigation measures discussed in this section, the project will be responsible for improving Arneill Road along the project frontage to provide a southbound right-turn lane at Barry Street and at the project entrance midway between Pickwick Drive and Barry Street. The lane configurations at each street exiting the project at Arneill Road site shall consist of an eastbound left-turn lane, an eastbound through lane, and an eastbound right-turn lane.

Internal Circulation

Based upon the proposed land use and trip generation and distribution as outlined by individual zones (as shown in Figure 4) an internal assessment of circulation and roadway capacity was conducted. The total trip generation for each zone was determined and assigned based upon the overall areawide trip distribution pattern. The results indicate the following daily trips can be anticipated on the site’s internal street system.

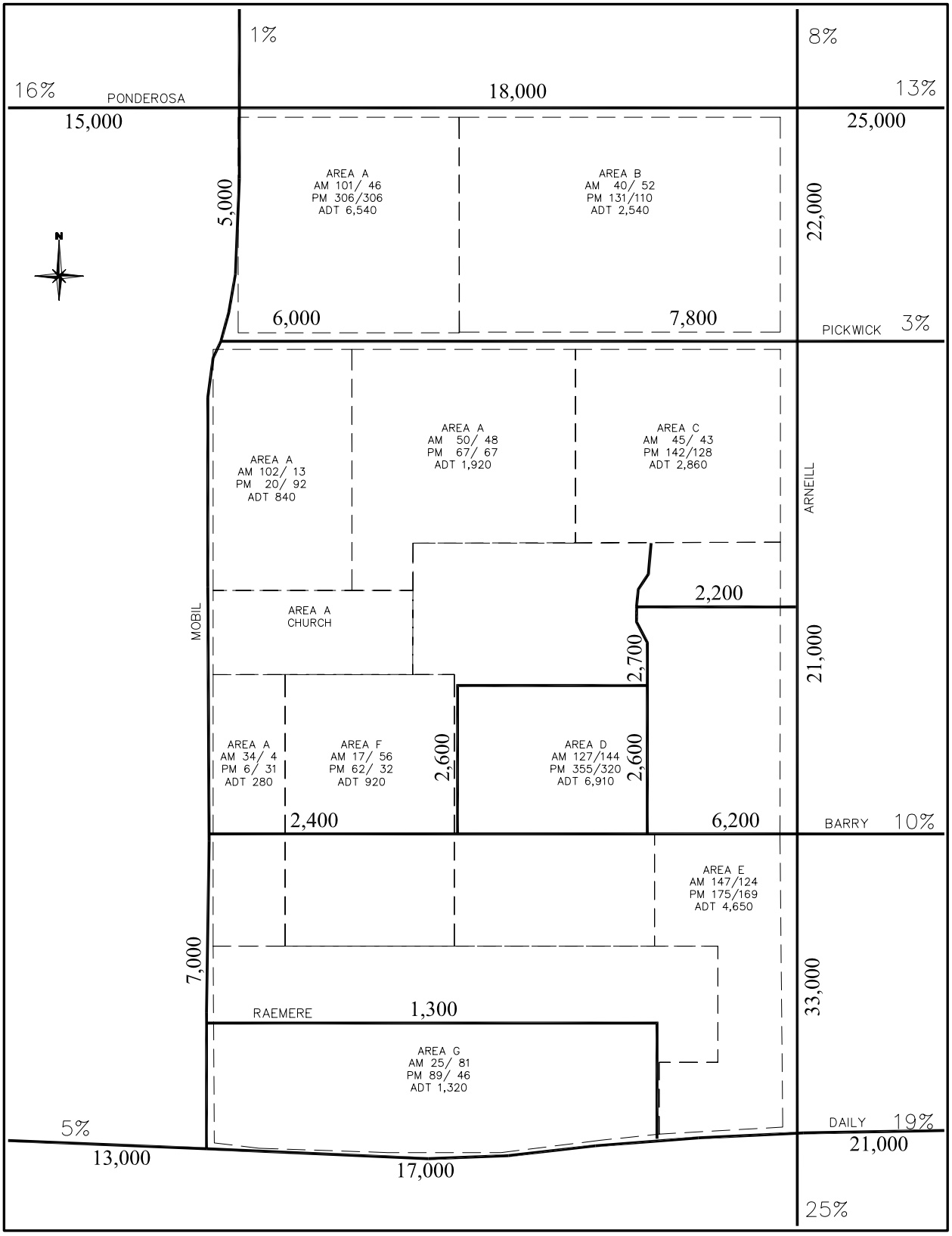


Figure 4

BUILDOUT ADT VOLUMES

Street	ADT Range
Pickwick	6,000 – 7,800
Barry	2,400 – 6,200
Raemere	1,300
Arneill Entrance	2,200
Area D Roads (3)	2,600

The two main internal roadways, Pickwick Drive and Barry Street, are both two lane roadways with a center left turn lane. Their typical roadway cross-section includes a left-turn lane, one through lane and a separate right-turn lane at their signalized intersection with Arneill Road. With this lane configuration the capacity of both Pickwick Drive and Barry Street are estimated at about 12,000 to 15,000 ADT. With projected daily traffic of less than 8,000 ADT on both Pickwick Drive and Barry Street, the level of service, even during peak hour, is expected to be LOS "B" or better. Such volumes will require signalization (which currently exists) at the two intersections on Arneill Drive. In addition, the intersection of Mobil Avenue and Pickwick Drive is also expected to need signalization. The intersection of Barry Street and Mobil Avenue is expected to operate satisfactorily under one-way stop control but signalization would complete a system around the entire Arneill Road development area and enable traffic to flow smoothly on Mobil Avenue and enter and exit Barry Street safely and efficiently.

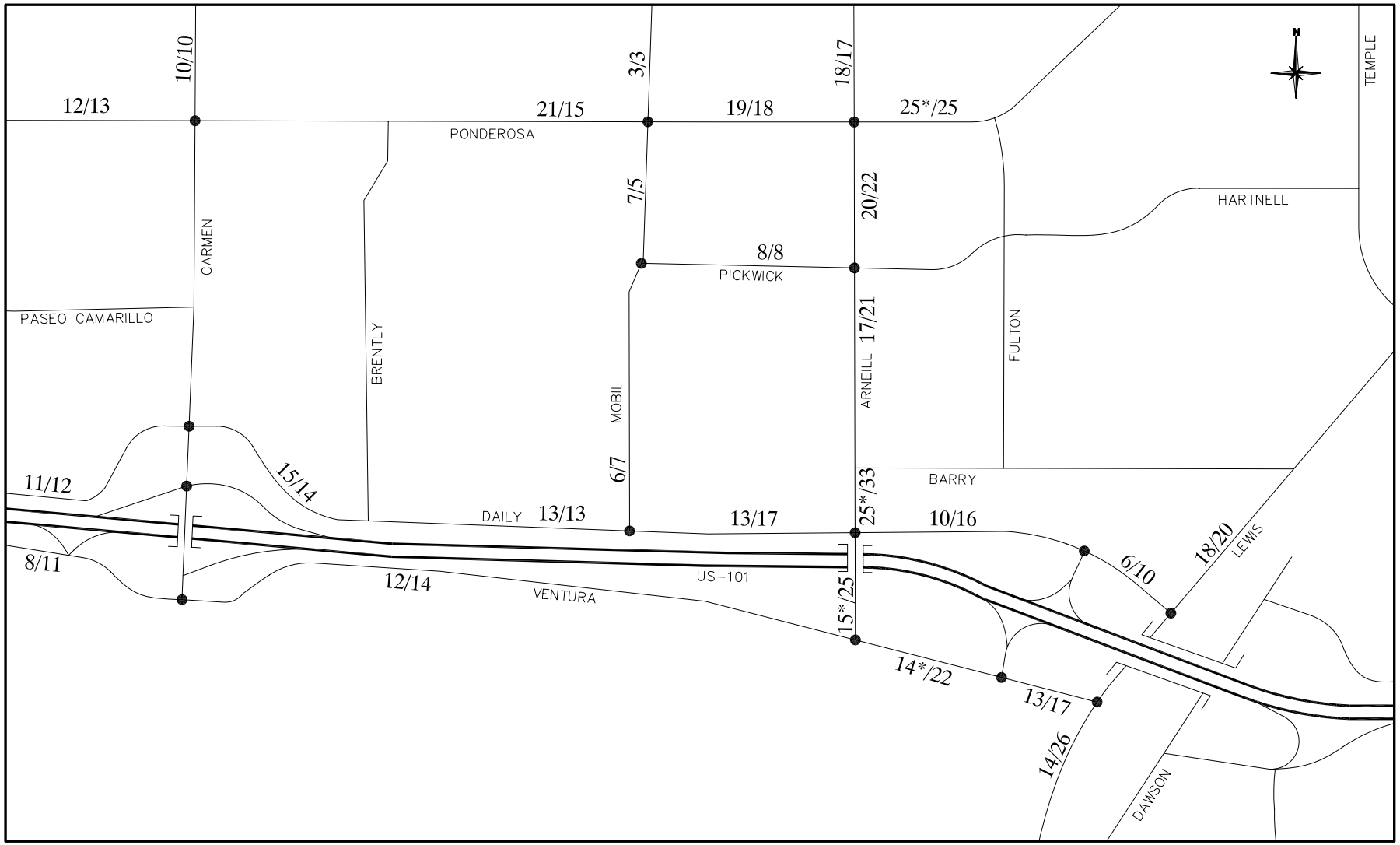
There is one internal intersection on Barry Street immediately east of Area D where all-way stop control may be required. Otherwise, the remaining internal intersection will be adequately served through the installation of stop sign control only on the side streets – i.e., Pickwick Drive and Barry Street will be designated as through routes.

CONCLUSION

The proposed project consists of redeveloping the area bounded by Ponderosa Road, Arneill Road, Daily Drive, and Mobil Avenue with a mix of retail, office, and residential uses. The proposed project will result in an increase of approximately 14,700 daily trips on the surrounding circulation system, of which 580 are generated during the AM peak hour and 1,430 are generated during the PM peak hour. The project was found to have a significant impact on two intersections in the study area under existing conditions, and appropriate mitigation measures were recommended which result in an acceptable level of service (LOS "C") at each location.

APPENDIX A

PEAK HOUR INTERSECTION VOLUMES

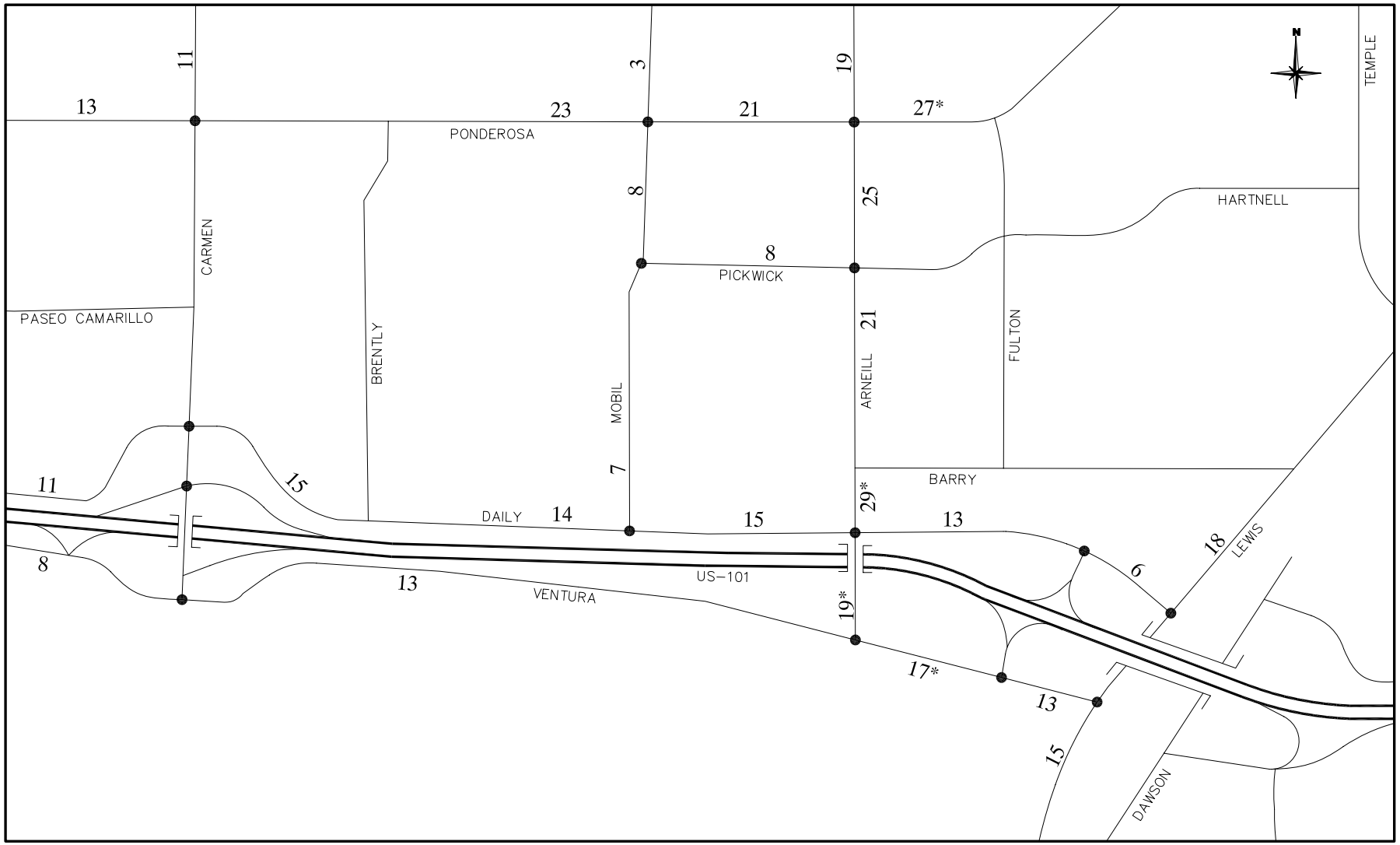


Legend

XX/YY Existing/2020 ADT volume with Project (000s)
* Indicates estimated existing count

Figure 1

ADT VOLUMES (000s)



Legend

XX Existing + Project ADT volume (000s)
* Indicates estimated existing count

Figure 2

EXISTING + PROJECT
ADT VOLUMES (000s)

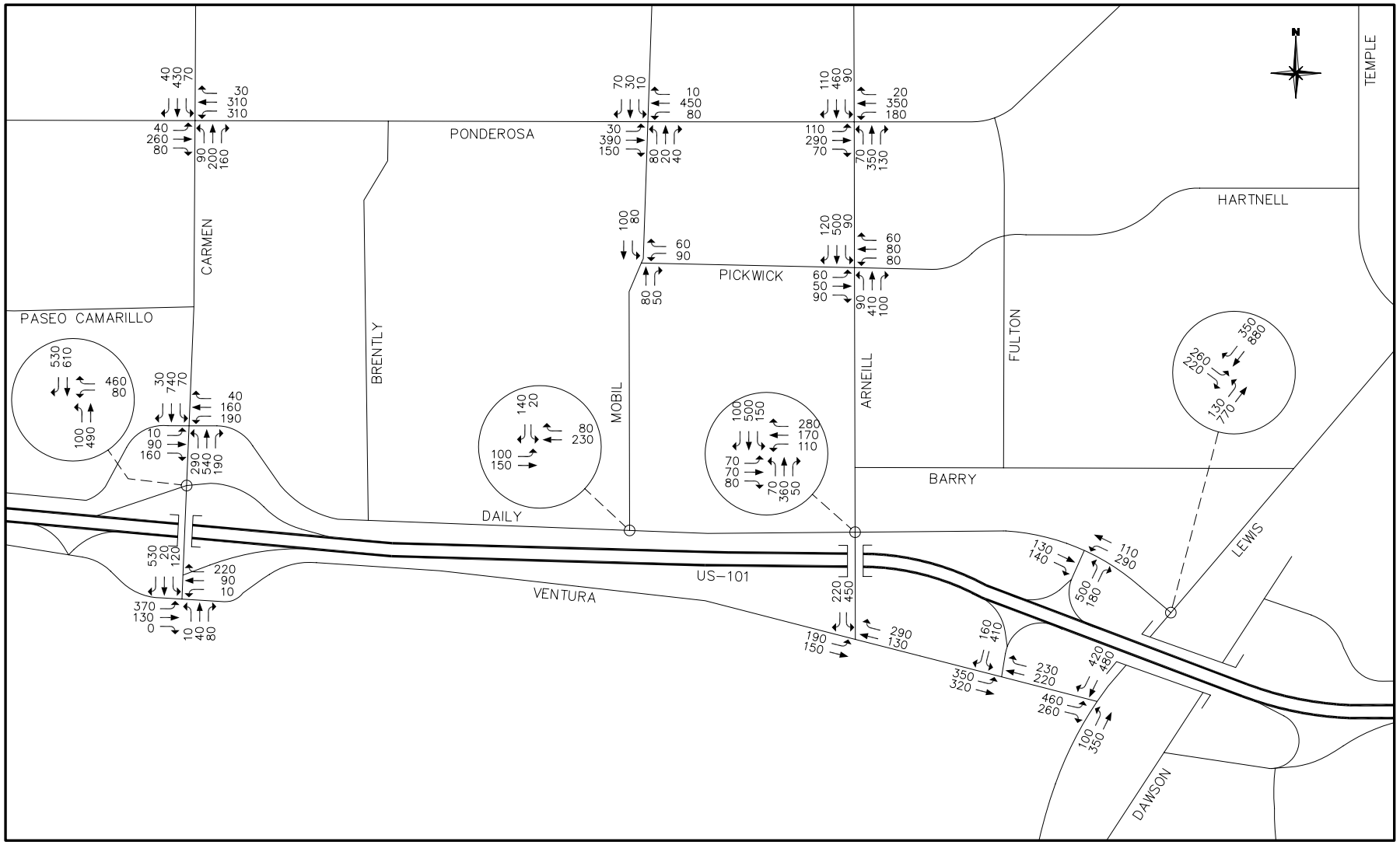


Figure A-1

EXISTING AM PEAK HOUR VOLUMES

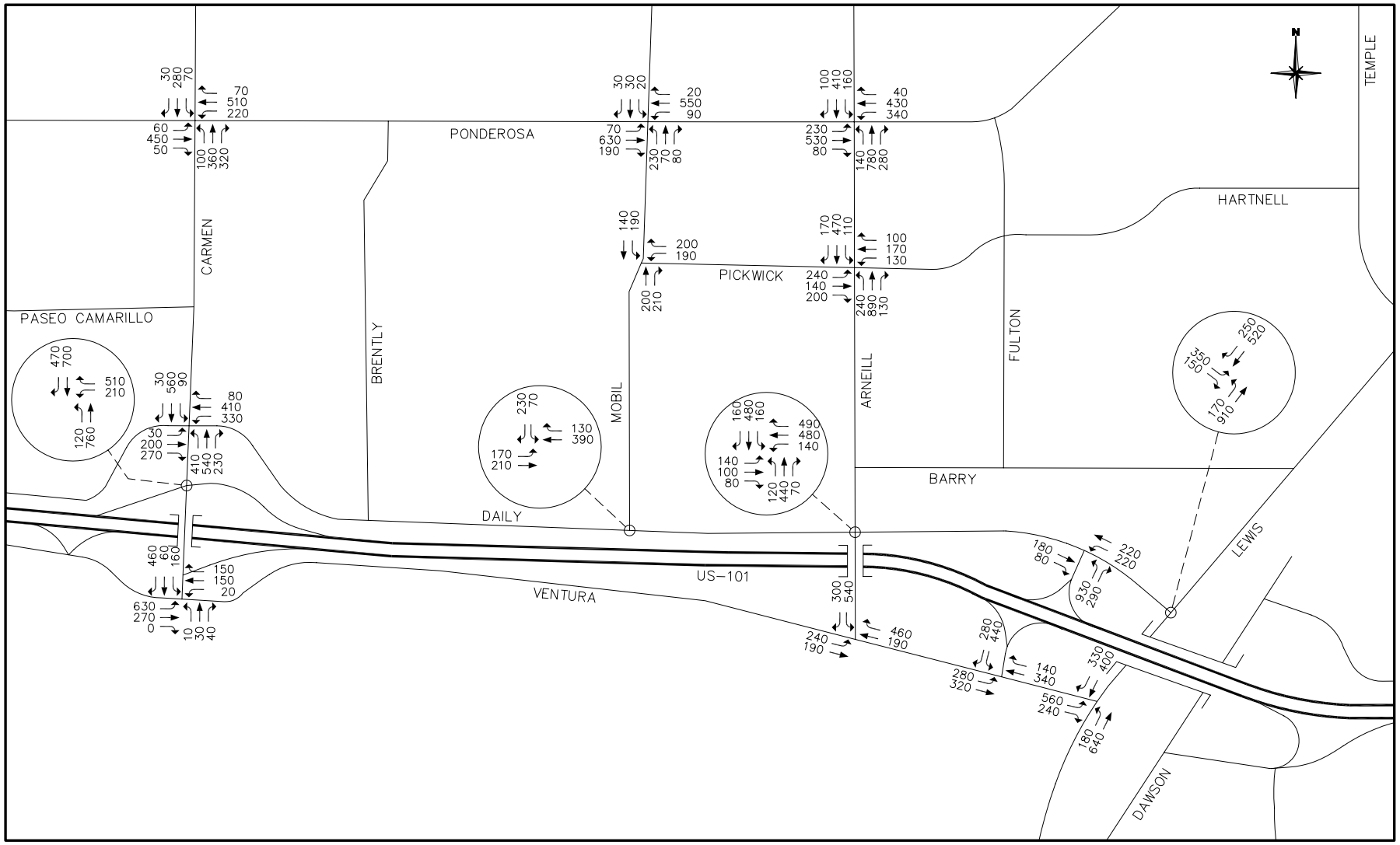


Figure A-2

EXISTING PM PEAK HOUR VOLUMES

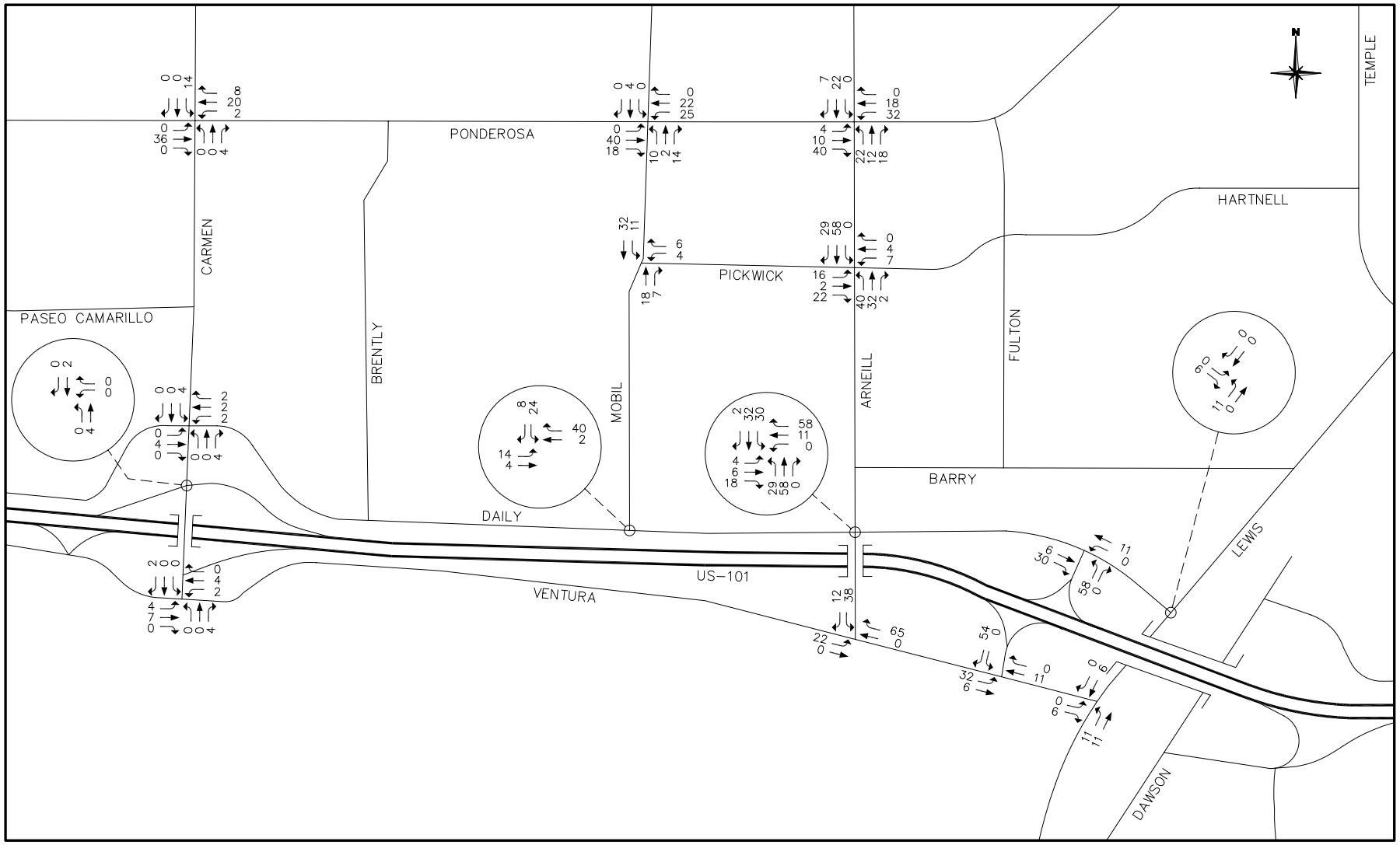


Figure A-3

PROJECT-GENERATED AM PEAK HOUR TRIPS

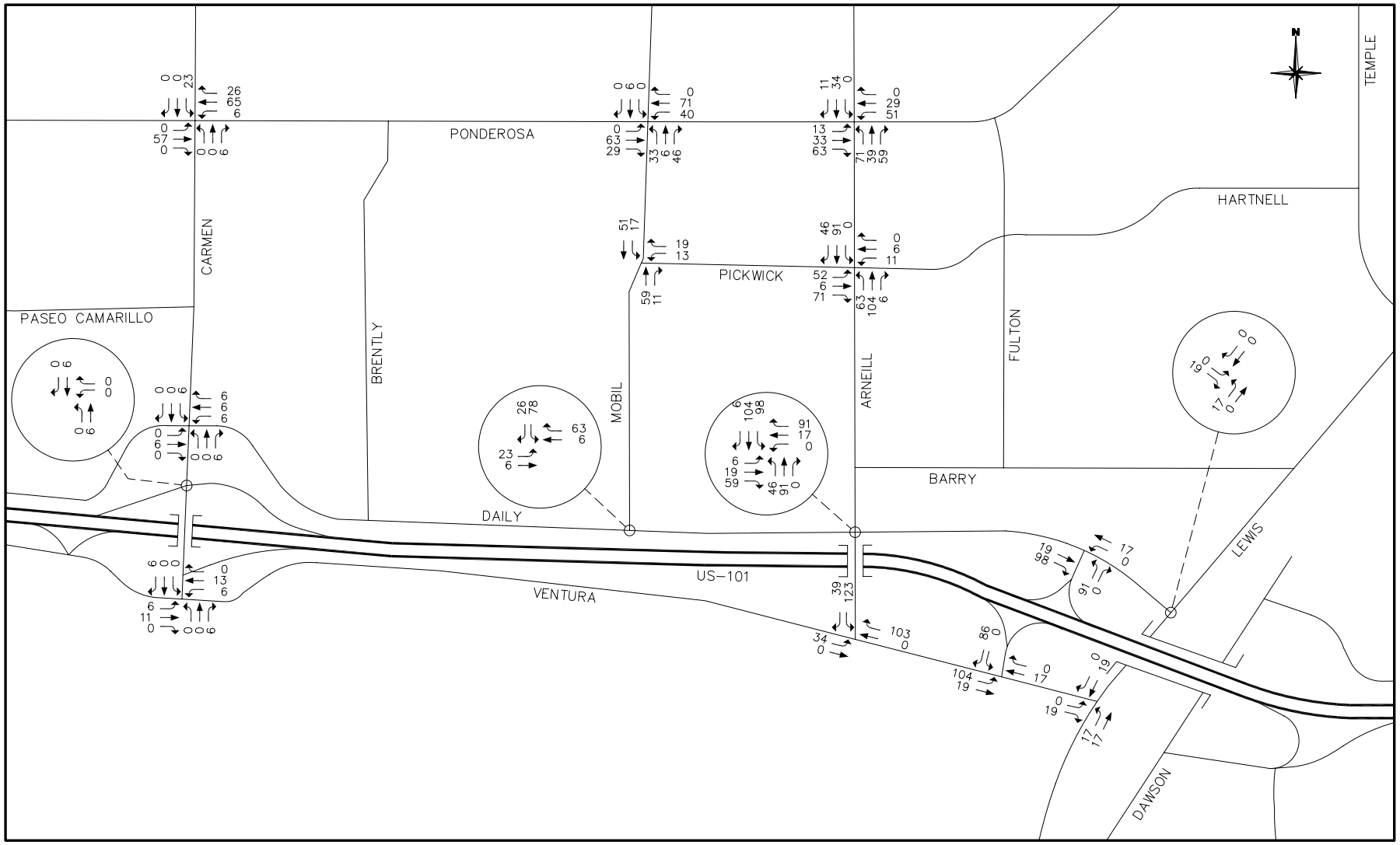


Figure A-4

PROJECT-GENERATED PM PEAK HOUR TRIPS

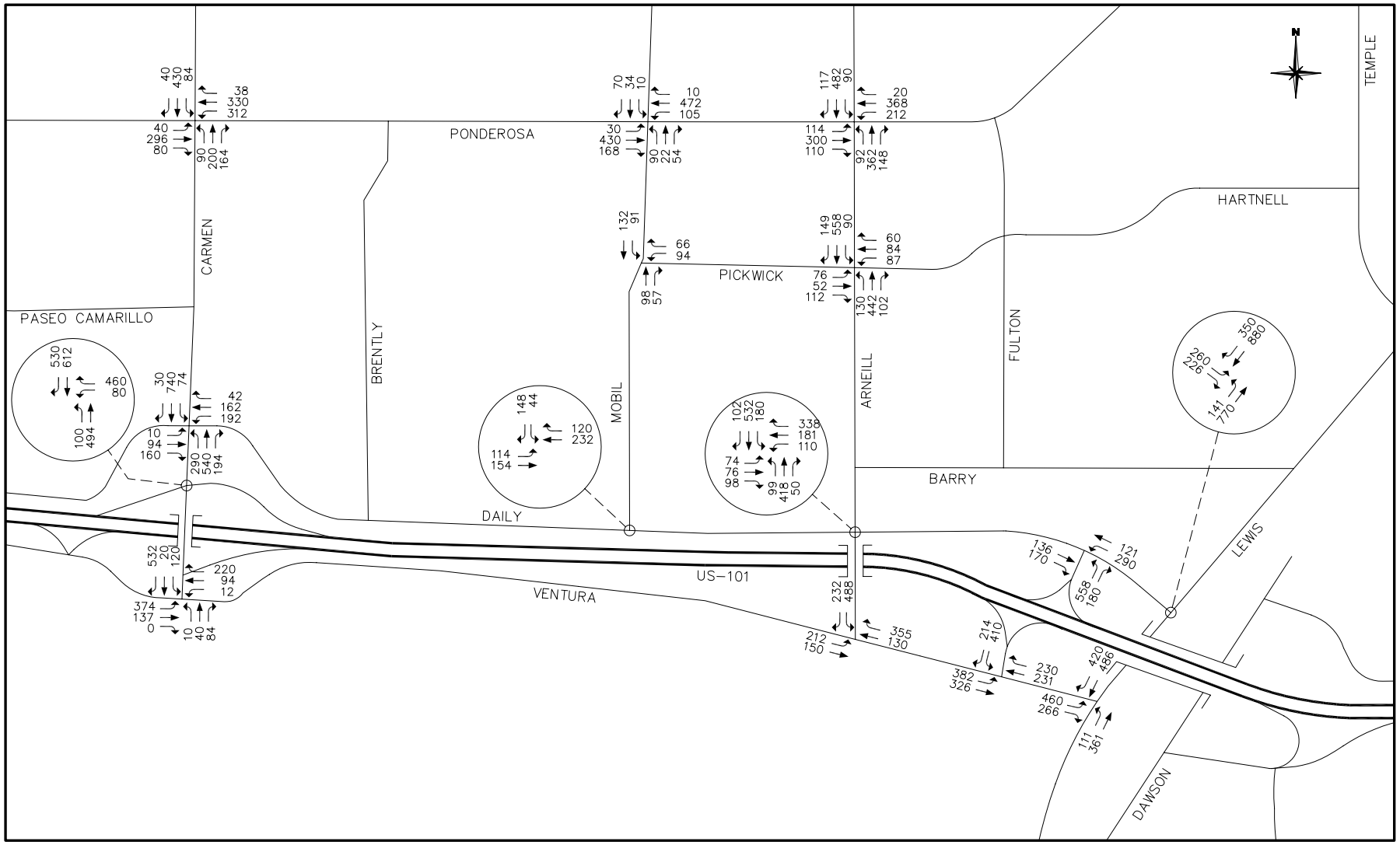


Figure A-5

EXISTING PLUS PROJECT
AM PEAK HOUR VOLUMES

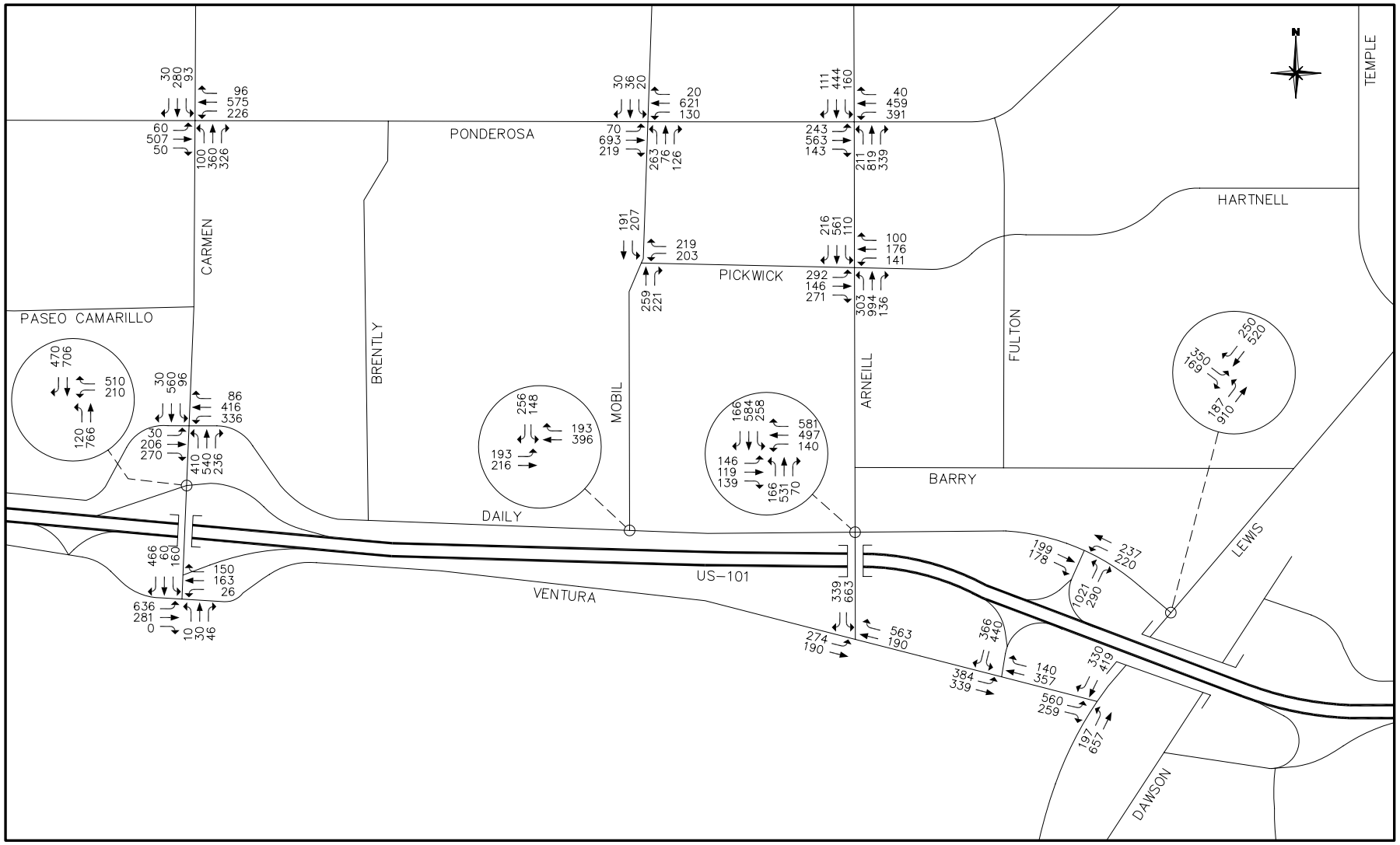


Figure A-6

EXISTING PLUS PROJECT
PM PEAK HOUR VOLUMES

APPENDIX B

INTERSECTION CAPACITY UTILIZATION WORKSHEETS

Peak hour intersection volume/capacity ratios are calculated by means of intersection capacity utilization (ICU) values. ICU calculations were performed for the intersections shown in Figure B-1. For simplicity, signalization is assumed at each intersection. Precise ICU calculations of existing non-signalized intersections would require a more detailed analysis.

The procedure is based on the critical movement methodology, and shows the amount of capacity utilized by each critical move. A capacity of 1600 vehicles per hour (VPH) per lane is assumed together with a .10 clearance interval. A "de-facto" right-turn lane is used in the ICU calculation for cases where a curb lane is wide enough to separately serve both thru and right-turn traffic (typically with a width of 19 feet from curb to outside of thru-lane with parking prohibited during peak periods). Such lanes are treated the same as striped right-turn lanes during the ICU calculations, but they are denoted on the ICU calculation worksheets using the letter "d" in place of a numerical entry for right-turn lanes.

The methodology also incorporates a check for right-turn capacity utilization. Both right-turn-on-green (RTOG) and right-turn-on-red (RTOR) capacity availability are calculated and checked against the total right-turn capacity need. If insufficient capacity is available, then an adjustment is made to the total capacity utilization value. The following example shows how this adjustment is made.

Example For Northbound Right

1. Right-Turn-On-Green (RTOG)

If NBT is critical move, then:
RTOG = V/C (NBT)
Otherwise,
RTOG = V/C (NBL) + V/C (SBT) - V/C (SBL)

2. Right-Turn-On-Red (RTOR)

If WBL is critical move, then:
RTOR = V/C (WBL)
Otherwise,
RTOR = V/C (EBL) + V/C (WBT) - V/C (EBT)

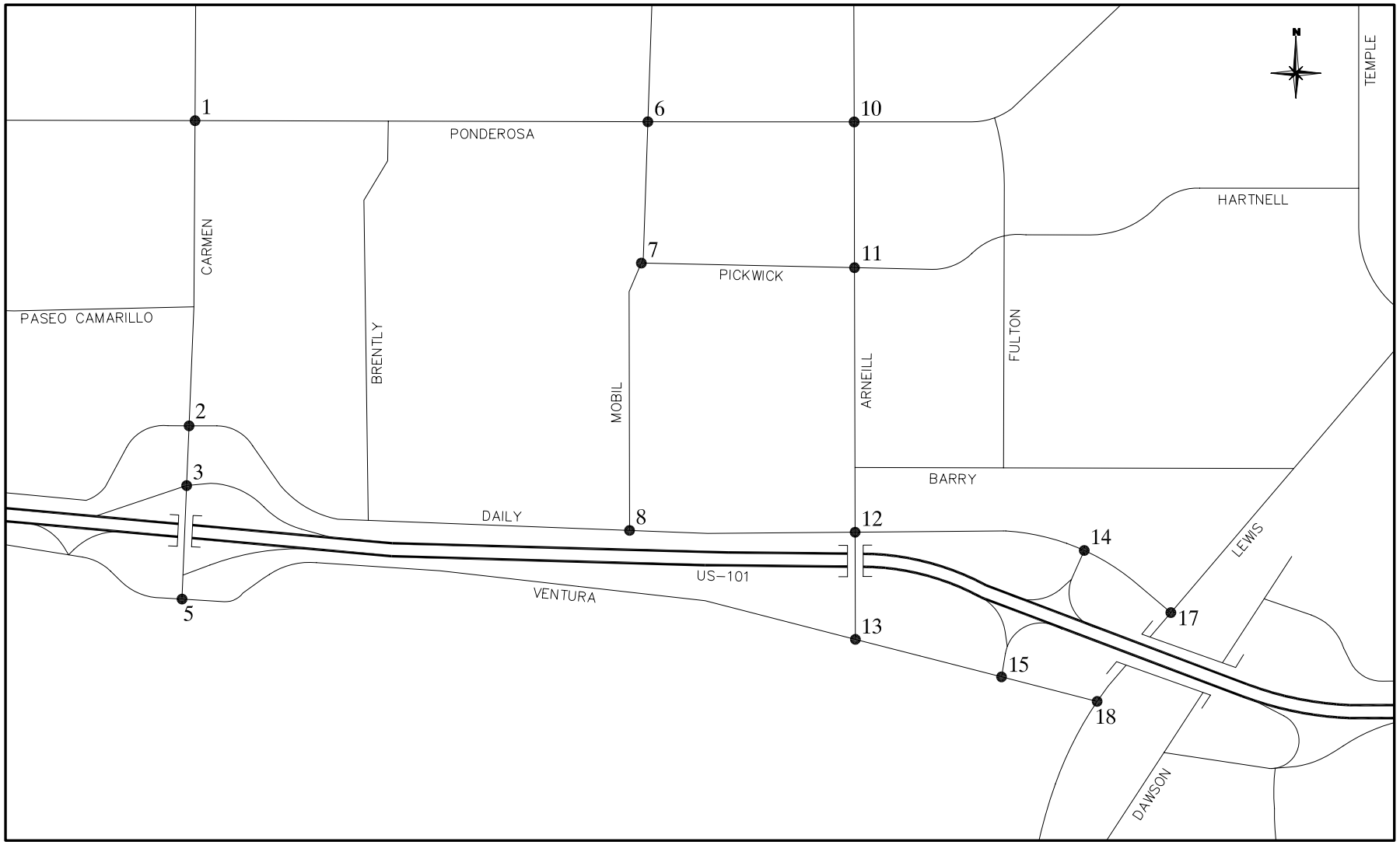


Figure B-1

STUDY INTERSECTION LOCATIONS

3. Right-Turn Overlap Adjustment

If the northbound right is assumed to overlap with the adjacent westbound left, adjustments to the RTOG and RTOR values are made as follows:

RTOG = RTOG + V/C (WBL)
RTOR = RTOR - V/C (WBL)

4. Total Right-Turn Capacity (RTC) Availability For NBR

RTC = RTOG + factor x RTOR
Where factor = RTOR saturation flow factor (75%)

Right-turn adjustment is then as follows: Additional ICU = V/C (NBR) - RTC

A zero or negative value indicates that adequate capacity is available and no adjustment is necessary. A positive value indicates that the available RTOR and RTOG capacity does not adequately accommodate the right-turn V/C, therefore the right-turn is essentially considered to be a critical movement. In such cases, the right-turn adjustment is noted on the ICU worksheet and it is included in the total capacity utilization value. When it is determined that a right-turn adjustment is required for more than one right-turn movement, the word "multi" is printed on the worksheet instead of an actual right-turn movement reference, and the right-turn adjustments are cumulatively added to the total capacity utilization value. In such cases, further operational evaluation is typically carried out to determine if under actual operational conditions, the critical right-turns would operate simultaneously, and therefore a right-turn adjustment credit should be applied.

Shared Lane V/C Methodology

For intersection approaches where shared usage of a lane is permitted by more than one turn movement (e.g., left/thru, thru/right, left/thru/right), the individual turn volumes are evaluated to determine whether dedication of the shared lane is warranted to any one given turn movement. The following example demonstrates how this evaluation is carried out:

Example for Shared Left/Thru Lane

1. Average Lane Volume (ALV)

$$ALV = \frac{\text{Left-Turn Volume + Thru Volume}}{\text{Total Left + Thru Approach Lanes (including shared lane)}}$$

2. ALV for Each Approach

$$\text{ALV (Left)} = \frac{\text{Left-Turn Volume}}{\text{Left Approach Lanes (including shared lane)}}$$

$$\text{ALV (Thru)} = \frac{\text{Thru Volume}}{\text{Thru Approach Lanes (including shared lane)}}$$

3. Lane Dedication is Warranted

If ALV (Left) is greater than ALV then full dedication of the shared lane to the left-turn approach is warranted. Left-turn and thru V/C ratios for this case are calculated as follows:

$$\text{V/C (Left)} = \frac{\text{Left-Turn Volume}}{\text{Left Approach Capacity (including shared lane)}}$$

$$\text{V/C (Thru)} = \frac{\text{Thru Volume}}{\text{Thru Approach Capacity (excluding shared lane)}}$$

Similarly, if ALV (Thru) is greater than ALV then full dedication to the thru approach is warranted, and left-turn and thru V/C ratios are calculated as follows:

$$\text{V/C (Left)} = \frac{\text{Left-Turn Volume}}{\text{Left Approach Capacity (excluding shared lane)}}$$

$$\text{V/C (Thru)} = \frac{\text{Thru Volume}}{\text{Thru Approach Capacity (including shared lane)}}$$

4. Lane Dedication is not Warranted

If ALV (Left) and ALV (Thru) are both less than ALV, the left/thru lane is assumed to be truly shared and each left, left/thru or thru approach lane carries an evenly distributed volume of traffic equal to ALV. A combined left/thru V/C ratio is calculated as follows:

$$\text{V/C (Left/Thru)} = \frac{\text{Left-Turn Volume + Thru Volume}}{\text{Total Left + Thru Approach Capacity (including shared lane)}}$$

This V/C (Left/Thru) ratio is assigned as the V/C (Thru) ratio for the critical movement analysis and ICU summary listing.

If split phasing has not been designated for this approach, the relative proportion of V/C (Thru) that is attributed to the left-turn volume is estimated as follows:

If approach has more than one left-turn (including shared lane), then:

V/C (Left) = V/C (Thru)

If approach has only one left-turn lane (shared lane), then:

$$V/C\ (Left) = \frac{\text{Left-Turn Volume}}{\text{Single Approach Lane Capacity}}$$

If this left-turn movement is determined to be a critical movement, the V/C (Left) value is posted in brackets on the ICU summary printout.

These same steps are carried out for shared thru/right lanes. If full dedication of a shared thru/right lane to the right-turn movement is warranted, the right-turn V/C value calculated in step three is checked against the RTOR and RTOG capacity availability if the option to include right-turns in the V/C ratio calculations is selected. If the V/C value that is determined using the shared lane methodology described here is reduced due to RTOR and RTOG capacity availability, the V/C value for the thru/right lanes is posted in brackets.

When an approach contains more than one shared lane (e.g., left/thru and thru/right), steps one and two listed above are carried out for the three turn movements combined. Step four is carried out if dedication is not warranted for either of the shared lanes. If dedication of one of the shared lanes is warranted to one movement or another, step three is carried out for the two movements involved, and then steps one through four are repeated for the two movements involved in the other shared lane.

Several intersections currently operate with protected/permitted left-turn phasing. These left-turn movements are adjusted assuming 100-second cycle lengths and one and one-half vehicles turning left during the permitted left-turn phase. The left turn volumes at such locations have been reduced accordingly.

1. Carmen & Ponderosa

Existing

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1600	90	.06*	100	.06
NBT	2	3200	200	.11	360	.21*
NBR	0	0	160		320	
SBL	1	1600	70	.05	70	.05*
SBT	2	3200	430	.15*	280	.10
SBR	0	0	40		30	
EBL	1	1600	40	.05	60	.05
EBT	2	3200	260	.11*	450	.16*
EBR	0	0	80		50	
WBL	1	1600	310	.19*	220	.14*
WBT	2	3200	310	.11	510	.18
WBR	0	0	30		70	
Clearance Interval				.10*		.10*

TOTAL CAPACITY UTILIZATION .61 .66

Existing + Project

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1600	90	.06*	100	.06
NBT	2	3200	200	.11	360	.22*
NBR	0	0	165		328	
SBL	1	1600	91	.06	104	.07*
SBT	2	3200	430	.15*	280	.10
SBR	0	0	40		30	
EBL	1	1600	40	.05	60	.05
EBT	2	3200	314	.12*	535	.18*
EBR	0	0	80		50	
WBL	1	1600	313	.20*	230	.14*
WBT	2	3200	340	.12	608	.22
WBR	0	0	42		109	
Clearance Interval				.10*		.10*

TOTAL CAPACITY UTILIZATION .63 .71

Existing + Project (Reduction for Exist Uses)

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1600	90	.06*	100	.06
NBT	2	3200	200	.11	360	.21*
NBR	0	0	164		326	
SBL	1	1600	84	.05	93	.06*
SBT	2	3200	430	.15*	280	.10
SBR	0	0	40		30	
EBL	1	1600	40	.05	60	.05
EBT	2	3200	296	.12*	507	.17*
EBR	0	0	80		50	
WBL	1	1600	312	.20*	226	.14*
WBT	2	3200	330	.12	575	.21
WBR	0	0	38		96	
Clearance Interval				.10*		.10*

TOTAL CAPACITY UTILIZATION .63 .68

2. Carmen & Daily

Existing

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1600	290	.18*	410	.26*
NBT	2	3200	540	.23	540	.24
NBR	0	0	190		230	
SBL	1	1600	70	.05	90	.06
SBT	2	3200	740	.23*	560	.18*
SBR	1	1600	30	.05	30	.05
EBL	1	1600	10	.05*	30	.05*
EBT	1	1600	90	.06	200	.13
EBR	1	1600	160	.10	270	.17
WBL	2	3200	190	.06	330	.10
WBT	1	1600	160	.13*	410	.31*
WBR	0	0	40		80	
Clearance Interval				.10*		.10*

TOTAL CAPACITY UTILIZATION .69 .90

Existing + Project

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1600	290	.18*	410	.26*
NBT	2	3200	540	.23	540	.24
NBR	0	0	195		238	
SBL	1	1600	75	.05	98	.06
SBT	2	3200	740	.23*	560	.18*
SBR	1	1600	30	.05	30	.05
EBL	1	1600	10	.05*	30	.05*
EBT	1	1600	95	.06	208	.13
EBR	1	1600	160	.10	270	.17
WBL	2	3200	193	.06	340	.11
WBT	1	1600	163	.13*	420	.32*
WBR	0	0	43		90	
Clearance Interval				.10*		.10*

TOTAL CAPACITY UTILIZATION .69 .91

Existing + Project (Reduction for Exist Uses)

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1600	290	.18*	410	.26*
NBT	2	3200	540	.23	540	.24
NBR	0	0	194		236	
SBL	1	1600	74	.05	96	.06
SBT	2	3200	740	.23*	560	.18*
SBR	1	1600	30	.05	30	.05
EBL	1	1600	10	.05*	30	.05*
EBT	1	1600	94	.06	206	.13
EBR	1	1600	160	.10	270	.17
WBL	2	3200	192	.06	336	.11
WBT	1	1600	162	.13*	416	.31*
WBR	0	0	42		86	
Clearance Interval				.10*		.10*

TOTAL CAPACITY UTILIZATION .69 .90

3. Carmen & US-101 NB Ramps

Existing

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1600	100	.06*	120	.08*
NBT	2	3200	490	.15	760	.24
NBR	0	0	0		0	
SBL	0	0	0		0	
SBT	1.5	4800	610	.24*	700	.24*
SBR	1.5		530		470	
EBL	0	0	0		0	
EBT	0	0	0		0	
EBR	0	0	0		0	
WBL	0	0	80		210	
WBT	1	1600	0	.05*	0	.13*
WBR	2	3200	460	.14	510	.16
Clearance Interval				.10*		.10*

TOTAL CAPACITY UTILIZATION .45 .55

Existing + Project

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1600	100	.06*	120	.08*
NBT	2	3200	495	.15	768	.24
NBR	0	0	0		0	
SBL	0	0	0		0	
SBT	1.5	4800	613	.24*	710	.25*
SBR	1.5		530		470	
EBL	0	0	0		0	
EBT	0	0	0		0	
EBR	0	0	0		0	
WBL	0	0	80		210	
WBT	1	1600	0	.05*	0	.13*
WBR	2	3200	460	.14	510	.16
Clearance Interval				.10*		.10*

TOTAL CAPACITY UTILIZATION .45 .56

Existing + Project (Reduction for Exist Uses)

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1600	100	.06*	120	.08*
NBT	2	3200	494	.15	766	.24
NBR	0	0	0		0	
SBL	0	0	0		0	
SBT	1.5	4800	612	.24*	706	.25*
SBR	1.5		530		470	
EBL	0	0	0		0	
EBT	0	0	0		0	
EBR	0	0	0		0	
WBL	0	0	80		210	
WBT	1	1600	0	.05*	0	.13*
WBR	2	3200	460	.14	510	.16
Clearance Interval				.10*		.10*

TOTAL CAPACITY UTILIZATION .45 .56

5. Carmen & Ventura

Existing

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1600	10	.05	10	.05
NBT	2	3200	40	.05*	30	.05*
NBR	1	1600	80	.05	40	.05
SBL	1	1600	120	.08*	160	.10*
SBT	1	1600	20	.05	60	.05
SBR	f		530		460	
EBL	2	3200	370	.12*	630	.20*
EBT	1	1600	130	.08	270	.17
EBR	1	1600	0	.00	0	.00
WBL	1	1600	10	.05	20	.05
WBT	1	1600	90	.06*	150	.09*
WBR	1	1600	220	.14	150	.09
Right Turn Adjustment			WBR	.02*		
Clearance Interval				.08*		.10*

TOTAL CAPACITY UTILIZATION .41 .54

Existing + Project

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1600	10	.05	10	.05
NBT	2	3200	40	.05*	30	.05*
NBR	1	1600	85	.05	48	.05
SBL	1	1600	120	.08*	160	.10*
SBT	1	1600	20	.05	60	.05
SBR	f		533		470	
EBL	2	3200	375	.12*	638	.20*
EBT	1	1600	141	.09	287	.18
EBR	1	1600	0	.00	0	.00
WBL	1	1600	13	.05	30	.05
WBT	1	1600	96	.06*	169	.11*
WBR	1	1600	220	.14	150	.09
Right Turn Adjustment			WBR	.02*		
Clearance Interval				.08*		.10*

TOTAL CAPACITY UTILIZATION .41 .56

Existing + Project (Reduction for Exist Uses)

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1600	10	.05	10	.05
NBT	2	3200	40	.05*	30	.05*
NBR	1	1600	84	.05	46	.05
SBL	1	1600	120	.08*	160	.10*
SBT	1	1600	20	.05	60	.05
SBR	f		532		466	
EBL	2	3200	374	.12*	636	.20*
EBT	1	1600	137	.09	281	.18
EBR	1	1600	0	.00	0	.00
WBL	1	1600	12	.05	26	.05
WBT	1	1600	94	.06*	163	.10*
WBR	1	1600	220	.14	150	.09
Right Turn Adjustment			WBR	.02*		
Clearance Interval				.08*		.10*

TOTAL CAPACITY UTILIZATION .41 .55

6. Mobil & Ponderosa

Existing

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1600	80	.05	230	.14*
NBT	1	1600	20	.05*	70	.09
NBR	0	0	40		80	
SBL	1	1600	10	.05	20	.05
SBT	1	1600	30	.06*	30	.05*
SBR	0	0	70		30	
EBL	1	1600	30	.05	70	.05
EBT	2	3200	390	.17*	630	.26*
EBR	0	0	150		190	
WBL	1	1600	80	.05*	90	.06*
WBT	2	3200	450	.14	550	.18
WBR	0	0	10		20	
Clearance Interval				.10*		.10*

Note: Assumes N/S Split Phasing

TOTAL CAPACITY UTILIZATION .43 .61

Existing + Project

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1600	95	.06*	279	.17*
NBT	1	1600	23	.05	80	.14
NBR	0	0	61		148	
SBL	1	1600	10	.05	20	.05
SBT	1	1600	35	.07*	38	.05*
SBR	0	0	70		30	
EBL	1	1600	30	.05	70	.05
EBT	2	3200	449	.20*	723	.30*
EBR	0	0	177		233	
WBL	1	1600	117	.07*	150	.09*
WBT	2	3200	483	.15	657	.21
WBR	0	0	10		20	
Clearance Interval				.10*		.10*

Note: Assumes N/S Split Phasing

TOTAL CAPACITY UTILIZATION .50 .71

Existing + Project (Reduction for Exist Uses)

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1600	90	.06*	263	.16*
NBT	1	1600	22	.05	76	.13
NBR	0	0	54		126	
SBL	1	1600	10	.05	20	.05
SBT	1	1600	34	.07*	36	.05*
SBR	0	0	70		30	
EBL	1	1600	30	.05	70	.05
EBT	2	3200	430	.19*	693	.29*
EBR	0	0	168		219	
WBL	1	1600	105	.07*	130	.08*
WBT	2	3200	472	.15	621	.20
WBR	0	0	10		20	
Clearance Interval				.10*		.10*

Note: Assumes N/S Split Phasing

TOTAL CAPACITY UTILIZATION .49 .68

7. Mobil & Pickwick

Existing

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	0	0	0		0	
NBT	1	1600	80	.08*	200	.26*
NBR	0	0	50		210	
SBL	1	1600	80	.05*	190	.12*
SBT	1	1600	100	.06	140	.09
SBR	0	0	0		0	
EBL	0	0	0		0	
EBT	0	0	0		0	
EBR	0	0	0		0	
WBL	1	1600	90	.06*	190	.12*
WBT	0	0	0		0	
WBR	1	1600	60	.05	200	.13
Clearance Interval				.10*		.10*

TOTAL CAPACITY UTILIZATION .29 .60

Existing + Project

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	0	0	0		0	
NBT	1	1600	107	.11*	288	.32*
NBR	0	0	61		227	
SBL	1	1600	96	.06*	215	.13*
SBT	1	1600	148	.09	217	.14
SBR	0	0	0		0	
EBL	0	0	0		0	
EBT	0	0	0		0	
EBR	0	0	0		0	
WBL	1	1600	96	.06*	209	.13*
WBT	0	0	0		0	
WBR	1	1600	69	.05	229	.14
Clearance Interval				.10*		.10*

TOTAL CAPACITY UTILIZATION .33 .68

Existing + Project (Reduction for Exist Uses)

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	0	0	0		0	
NBT	1	1600	98	.10*	259	.30*
NBR	0	0	57		221	
SBL	1	1600	91	.06*	207	.13*
SBT	1	1600	132	.08	191	.12
SBR	0	0	0		0	
EBL	0	0	0		0	
EBT	0	0	0		0	
EBR	0	0	0		0	
WBL	1	1600	94	.06*	203	.13*
WBT	0	0	0		0	
WBR	1	1600	66	.05	219	.14
Clearance Interval				.10*		.10*

TOTAL CAPACITY UTILIZATION .32 .66

8. Mobil & Daily

Existing

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	0	0	0		0	
NBT	0	0	0		0	
NBR	0	0	0		0	
SBL	0	0	20		70	
SBT	1	1600	0	.10*	0	.19*
SBR	0	0	140		230	
EBL	1	1600	100	.06*	170	.11*
EBT	1	1600	150	.09	210	.13
EBR	0	0	0		0	
WBL	0	0	0		0	
WBT	1	1600	230	.14*	390	.24*
WBR	1	1600	80	.05	130	.08
Clearance Interval				.10*		.10*

TOTAL CAPACITY UTILIZATION .40 .64

Existing + Project

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	0	0	0		0	
NBT	0	0	0		0	
NBR	0	0	0		0	
SBL	0	0	56		187	
SBT	1	1600	0	.13*	0	.29*
SBR	0	0	152		269	
EBL	1	1600	121	.08*	204	.13*
EBT	1	1600	155	.10	218	.14
EBR	0	0	0		0	
WBL	0	0	0		0	
WBT	1	1600	233	.15*	400	.25*
WBR	1	1600	139	.09	223	.14
Clearance Interval				.10*		.10*

TOTAL CAPACITY UTILIZATION .46 .77

Existing + Project (Reduction for Exist Uses)

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	0	0	0		0	
NBT	0	0	0		0	
NBR	0	0	0		0	
SBL	0	0	44		148	
SBT	1	1600	0	.12*	0	.25*
SBR	0	0	148		256	
EBL	1	1600	114	.07*	193	.12*
EBT	1	1600	154	.10	216	.14
EBR	0	0	0		0	
WBL	0	0	0		0	
WBT	1	1600	232	.15*	396	.25*
WBR	1	1600	120	.08	193	.12
Clearance Interval				.10*		.10*

TOTAL CAPACITY UTILIZATION .44 .72

10. Arneill & Ponderosa

Existing

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1600	16	.05*	86	.05
NBT	2	3200	350	.11	780	.24*
NBR	1	1600	130	.08	280	.18
SBL	1	1600	36	.05	106	.07*
SBT	2	3200	460	.18*	410	.16
SBR	0	0	110		100	
EBL	2	3200	110	.05*	230	.07
EBT	2	3200	290	.11	530	.19*
EBR	0	0	70		80	
WBL	2	3200	180	.06	340	.11*
WBT	2	3200	350	.12*	430	.15
WBR	0	0	20		40	
Clearance Interval				.10*		.10*

Note: Assumes N/S Prot/Perm Phasing

TOTAL CAPACITY UTILIZATION .50 .71

Existing + Project

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1600	49	.05*	193	.12
NBT	2	3200	368	.12	838	.26*
NBR	1	1600	157	.10	368	.23
SBL	1	1600	36	.05	106	.07*
SBT	2	3200	492	.19*	461	.18
SBR	0	0	121		117	
EBL	2	3200	116	.05	249	.08
EBT	2	3200	305	.14*	579	.24*
EBR	0	0	129		173	
WBL	2	3200	228	.07*	417	.13*
WBT	2	3200	377	.12	473	.16
WBR	0	0	20		40	
Clearance Interval				.10*		.10*

Note: Assumes N/S Prot/Perm Phasing

TOTAL CAPACITY UTILIZATION .55 .80

Existing + Project (Reduction for Exist Uses)

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1600	38	.05*	157	.10
NBT	2	3200	362	.11	819	.26*
NBR	1	1600	148	.09	339	.21
SBL	1	1600	36	.05	106	.07*
SBT	2	3200	482	.19*	444	.17
SBR	0	0	117		111	
EBL	2	3200	114	.05	243	.08
EBT	2	3200	300	.13*	563	.22*
EBR	0	0	110		143	
WBL	2	3200	212	.07*	391	.12*
WBT	2	3200	368	.12	459	.16
WBR	0	0	20		40	
Clearance Interval				.10*		.10*

Note: Assumes N/S Prot/Perm Phasing

TOTAL CAPACITY UTILIZATION .54 .77

11. Arneill & Pickwick

Existing

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1600	36	.05*	186	.12
NBT	2	3200	410	.16	890	.32*
NBR	0	0	100		130	
SBL	1	1600	36	.05	56	.05*
SBT	2	3200	500	.19*	470	.20
SBR	0	0	120		170	
EBL	1	1600	60	.05	240	.15
EBT	1	1600	50	.09*	140	.21*
EBR	0	0	90		200	
WBL	1	1600	80	.05*	130	.08*
WBT	1	1600	80	.05	170	.11
WBR	1	1600	60	.05	100	.06
Clearance Interval				.10*		.10*

Note: Assumes N/S Prot/Perm Phasing

TOTAL CAPACITY UTILIZATION .48 .76

Existing + Project

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1600	95	.06*	279	.17*
NBT	2	3200	458	.18	1046	.37
NBR	0	0	103		140	
SBL	1	1600	36	.05	56	.05
SBT	2	3200	586	.23*	606	.26*
SBR	0	0	163		238	
EBL	1	1600	84	.05	318	.20
EBT	1	1600	53	.11*	150	.29*
EBR	0	0	123		307	
WBL	1	1600	91	.06*	147	.09*
WBT	1	1600	85	.05	178	.11
WBR	1	1600	60	.05	100	.06
Clearance Interval				.10*		.10*

Note: Assumes N/S Prot/Perm Phasing

TOTAL CAPACITY UTILIZATION .56 .91

Existing + Project (Reduction for Exist Uses)

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1600	76	.05*	249	.16
NBT	2	3200	442	.17	994	.35*
NBR	0	0	102		136	
SBL	1	1600	36	.05	56	.05*
SBT	2	3200	558	.22*	561	.24
SBR	0	0	149		216	
EBL	1	1600	76	.05	292	.18
EBT	1	1600	52	.10*	146	.26*
EBR	0	0	112		271	
WBL	1	1600	87	.05*	141	.09*
WBT	1	1600	84	.05	176	.11
WBR	1	1600	60	.05	100	.06
Clearance Interval				.10*		.10*

Note: Assumes N/S Prot/Perm Phasing

TOTAL CAPACITY UTILIZATION .52 .85

Existing + Project w/Mitigation

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1600	76	.05*	249	.16
NBT	2	3200	442	.17	994	.35*
NBR	0	0	102		136	
SBL	1	1600	36	.05	56	.05*
SBT	2	3200	558	.17*	561	.18
SBR	1	1600	149	.09	216	.14
EBL	1	1600	76	.05*	292	.18*
EBT	1	1600	52	.05	146	.09
EBR	1	1600	112	.07	271	.17
WBL	1	1600	87	.05	141	.09
WBT	1	1600	84	.05*	176	.11*
WBR	1	1600	60	.05	100	.06
Clearance Interval				.10*		.10*

Note: Assumes N/S Prot/Perm Phasing

TOTAL CAPACITY UTILIZATION .42 .79

12. Arneill & Daily

Existing

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1600	16	.05*	66	.05*
NBT	2	3200	360	.13	440	.16
NBR	0	0	50		70	
SBL	1	1600	96	.06	106	.07
SBT	2	3200	500	.19*	480	.20*
SBR	0	0	100		160	
EBL	1	1600	16	.05*	86	.05*
EBT	1	1600	70	.09	100	.11
EBR	0	0	80		80	
WBL	1	1600	56	.05	86	.05
WBT	1	1600	170	.11*	480	.30*
WBR	1	1600	280	.18	490	.31
Clearance Interval				.10*		.10*

Note: Assumes N/S, E/W Prot/Perm Phasing

TOTAL CAPACITY UTILIZATION .50 .70

Existing + Project

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1600	59	.05*	134	.08
NBT	2	3200	446	.16	576	.20*
NBR	0	0	50		70	
SBL	1	1600	141	.09	252	.16*
SBT	2	3200	548	.20*	636	.25
SBR	0	0	103		170	
EBL	1	1600	21	.05*	94	.06*
EBT	1	1600	79	.12	129	.19
EBR	0	0	107		168	
WBL	1	1600	56	.05	86	.05
WBT	1	1600	186	.12*	505	.32*
WBR	1	1600	366	.23	626	.39
Right Turn Adjustment			WBR	.04*		
Clearance Interval				.06*		.10*

Note: Assumes N/S, E/W Prot/Perm Phasing

TOTAL CAPACITY UTILIZATION .52 .84

Existing + Project (Reduction for Exist Uses)

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1600	43	.05*	112	.07
NBT	2	3200	418	.15	531	.19*
NBR	0	0	50		70	
SBL	1	1600	126	.08	204	.13*
SBT	2	3200	532	.20*	584	.23
SBR	0	0	102		166	
EBL	1	1600	20	.05*	92	.06*
EBT	1	1600	76	.11	119	.16
EBR	0	0	98		139	
WBL	1	1600	56	.05	86	.05
WBT	1	1600	181	.11*	497	.31*
WBR	1	1600	338	.21	581	.36
Right Turn Adjustment			WBR	.02*		
Clearance Interval				.08*		.10*

Note: Assumes N/S, E/W Prot/Perm Phasing

TOTAL CAPACITY UTILIZATION .51 .79

13. Arneill & Ventura

Existing

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	0	0	0		0	
NBT	0	0	0		0	
NBR	0	0	0		0	
SBL	2	3200	450	.14*	540	.17*
SBT	0	0	0		0	
SBR	1	1600	220	.14	300	.19
EBL	1	1600	190	.12*	240	.15*
EBT	1	1600	150	.09	190	.12
EBR	0	0	0		0	
WBL	0	0	0		0	
WBT	1	1600	130	.08*	190	.12*
WBR	1	1600	290	.18	460	.29
Right Turn Adjustment					WBR	.04*
Clearance Interval				.10*		.06*
TOTAL CAPACITY UTILIZATION				**.44**		**.54**

Existing + Project

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	0	0	0		0	
NBT	0	0	0		0	
NBR	0	0	0		0	
SBL	2	3200	507	.16*	725	.23*
SBT	0	0	0		0	
SBR	1	1600	238	.15	358	.22
EBL	1	1600	222	.14*	291	.18*
EBT	1	1600	150	.09	190	.12
EBR	0	0	0		0	
WBL	0	0	0		0	
WBT	1	1600	130	.08*	190	.12*
WBR	1	1600	386	.24	613	.38
Right Turn Adjustment			WBR	.04*	WBR	.09*
Clearance Interval				.06*		.01*
TOTAL CAPACITY UTILIZATION				**.48**		**.63**

Existing + Project (Reduction for Exist Uses)

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	0	0	0		0	
NBT	0	0	0		0	
NBR	0	0	0		0	
SBL	2	3200	488	.15*	663	.21*
SBT	0	0	0		0	
SBR	1	1600	232	.15	339	.21
EBL	1	1600	212	.13*	274	.17*
EBT	1	1600	150	.09	190	.12
EBR	0	0	0		0	
WBL	0	0	0		0	
WBT	1	1600	130	.08*	190	.12*
WBR	1	1600	355	.22	563	.35
Right Turn Adjustment			WBR	.03*	WBR	.07*
Clearance Interval				.07*		.03*
TOTAL CAPACITY UTILIZATION				**.46**		**.60**

14. US-101 NB Off (Lewis) & Daily

Existing

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3200	500	.16*	930	.29*
NBT	0	0	0		0	
NBR	1	1600	180	.11	290	.18
SBL	0	0	0		0	
SBT	0	0	0		0	
SBR	0	0	0		0	
EBL	0	0	0		0	
EBT	2	3200	130	.05*	180	.06
EBR	1	1600	140	.09	80	.05
WBL	2	3200	290	.09*	220	.07
WBT	1	1600	110	.07	220	.14*
WBR	0	0	0		0	
Clearance Interval				.10*		.10*

TOTAL CAPACITY UTILIZATION .40 .53

Existing + Project

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3200	586	.18*	1066	.33*
NBT	0	0	0		0	
NBR	1	1600	180	.11	290	.18
SBL	0	0	0		0	
SBT	0	0	0		0	
SBR	0	0	0		0	
EBL	0	0	0		0	
EBT	2	3200	139	.05*	209	.07
EBR	1	1600	185	.12	226	.14
WBL	2	3200	290	.09*	220	.07
WBT	1	1600	126	.08	245	.15*
WBR	0	0	0		0	
Clearance Interval				.10*		.10*

TOTAL CAPACITY UTILIZATION .42 .58

Existing + Project (Reduction for Exist Uses)

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	2	3200	558	.17*	1021	.32*
NBT	0	0	0		0	
NBR	1	1600	180	.11	290	.18
SBL	0	0	0		0	
SBT	0	0	0		0	
SBR	0	0	0		0	
EBL	0	0	0		0	
EBT	2	3200	136	.05*	199	.06
EBR	1	1600	170	.11	178	.11
WBL	2	3200	290	.09*	220	.07
WBT	1	1600	121	.08	237	.15*
WBR	0	0	0		0	
Clearance Interval				.10*		.10*

TOTAL CAPACITY UTILIZATION .41 .57

15. US-101 SB (Lewis) & Ventura

Existing

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	0	0	10		10	
NBT	1	1600	10	.05*	10	.05*
NBR	0	0	10		20	
SBL	2	3200	410	.13*	440	.14*
SBT	0	0	20		0	
SBR	1	1600	160	.10	280	.18
EBL	1	1600	350	.22*	280	.18*
EBT	1	1600	320	.20	320	.20
EBR	1	1600	50	.05	30	.05
WBL	1	1600	70	.05	30	.05
WBT	1	1600	220	.28*	340	.30*
WBR	0	0	230		140	
Clearance Interval				.10*		.10*

TOTAL CAPACITY UTILIZATION .78 .77

Existing + Project

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	0	0	10		10	
NBT	1	1600	10	.05*	10	.05*
NBR	0	0	10		20	
SBL	2	3200	410	.13*	440	.14*
SBT	0	0	20		0	
SBR	1	1600	240	.15	408	.26
EBL	1	1600	398	.25*	436	.27*
EBT	1	1600	329	.21	349	.22
EBR	1	1600	50	.05	30	.05
WBL	1	1600	70	.05	30	.05
WBT	1	1600	236	.29*	365	.32*
WBR	0	0	230		140	
Clearance Interval				.10*		.10*

TOTAL CAPACITY UTILIZATION .82 .88

Existing + Project (Reduction for Exist Uses)

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	0	0	10		10	
NBT	1	1600	10	.05*	10	.05*
NBR	0	0	10		20	
SBL	2	3200	410	.13*	440	.14*
SBT	0	0	20		0	
SBR	1	1600	214	.13	366	.23
EBL	1	1600	382	.24*	384	.24*
EBT	1	1600	326	.20	339	.21
EBR	1	1600	50	.05	30	.05
WBL	1	1600	70	.05	30	.05
WBT	1	1600	231	.29*	357	.31*
WBR	0	0	230		140	
Clearance Interval				.10*		.10*

TOTAL CAPACITY UTILIZATION .81 .84

Existing + Project w/Mitigation

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	0	0	10		10	
NBT	1	1600	10	.05*	10	.05*
NBR	0	0	10		20	
SBL	2	3200	410	.13*	440	.14*
SBT	0	0	20		0	
SBR	1	1600	214	.13	366	.23
EBL	1	1600	382	.24*	384	.24*
EBT	1	1600	326	.20	339	.21
EBR	1	1600	50	.05	30	.05
WBL	1	1600	70	.05	30	.05
WBT	1	1600	231	.14*	357	.22*
WBR	d	1600	230	.14	140	.09
Clearance Interval				.10*		.10*

TOTAL CAPACITY UTILIZATION .66 .75

17. Lewis & Daily

Existing

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1600	130	.08*	170	.11
NBT	2	3200	770	.24	910	.28*
NBR	0	0	0		0	
SBL	0	0	0		0	
SBT	3	4800	880	.26*	520	.16
SBR	0	0	350		250	
EBL	2	3200	260	.08*	350	.11*
EBT	0	0	0		0	
EBR	1	1600	220	.14	150	.09
WBL	0	0	0		0	
WBT	0	0	0		0	
WBR	0	0	0		0	
Clearance Interval				.10*		.10*

TOTAL CAPACITY UTILIZATION .52 .49

Existing + Project

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1600	146	.09*	195	.12
NBT	2	3200	770	.24	910	.28*
NBR	0	0	0		0	
SBL	0	0	0		0	
SBT	3	4800	880	.26*	520	.16
SBR	0	0	350		250	
EBL	2	3200	260	.08*	350	.11*
EBT	0	0	0		0	
EBR	1	1600	229	.14	179	.11
WBL	0	0	0		0	
WBT	0	0	0		0	
WBR	0	0	0		0	
Clearance Interval				.10*		.10*

TOTAL CAPACITY UTILIZATION .53 .49

Existing + Project (Reduction for Exist Uses)

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1600	141	.09*	187	.12
NBT	2	3200	770	.24	910	.28*
NBR	0	0	0		0	
SBL	0	0	0		0	
SBT	3	4800	880	.26*	520	.16
SBR	0	0	350		250	
EBL	2	3200	260	.08*	350	.11*
EBT	0	0	0		0	
EBR	1	1600	226	.14	169	.11
WBL	0	0	0		0	
WBT	0	0	0		0	
WBR	0	0	0		0	
Clearance Interval				.10*		.10*

TOTAL CAPACITY UTILIZATION .53 .49

18. Lewis & Ventura

Existing

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1600	100	.06*	180	.11
NBT	2	3200	350	.11	640	.20*
NBR	0	0	10		10	
SBL	1	1600	10	.05	10	.05*
SBT	2	3200	480	.15*	400	.13
SBR	1	1600	420	.26	330	.21
EBL	2	3200	460	.14*	560	.18*
EBT	0	0	10		10	
EBR	1	1600	260	.16	240	.15
WBL	0	0	10		10	
WBT	1	1600	10	.05*	20	.05*
WBR	0	0	10		20	
Clearance Interval				.10*		.10*

TOTAL CAPACITY UTILIZATION .50 .58

Existing + Project

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1600	116	.07*	205	.13
NBT	2	3200	366	.12	665	.21*
NBR	0	0	10		10	
SBL	1	1600	10	.05	10	.05*
SBT	2	3200	489	.15*	429	.13
SBR	1	1600	420	.26	330	.21
EBL	2	3200	460	.14*	560	.18*
EBT	0	0	10		10	
EBR	1	1600	269	.17	269	.17
WBL	0	0	10		10	
WBT	1	1600	10	.05*	20	.05*
WBR	0	0	10		20	
Clearance Interval				.10*		.10*

TOTAL CAPACITY UTILIZATION .51 .59

Existing + Project (Reduction for Exist Uses)

	LANES	CAPACITY	AM PK HOUR VOL	AM PK HOUR V/C	PM PK HOUR VOL	PM PK HOUR V/C
NBL	1	1600	111	.07*	197	.12
NBT	2	3200	361	.12	657	.21*
NBR	0	0	10		10	
SBL	1	1600	10	.05	10	.05*
SBT	2	3200	486	.15*	419	.13
SBR	1	1600	420	.26	330	.21
EBL	2	3200	460	.14*	560	.18*
EBT	0	0	10		10	
EBR	1	1600	266	.17	259	.16
WBL	0	0	10		10	
WBT	1	1600	10	.05*	20	.05*
WBR	0	0	10		20	
Clearance Interval				.10*		.10*

TOTAL CAPACITY UTILIZATION .51 .59

APPENDIX C

LAND USE AND TRIP GENERATION

ADT AND PEAK HOUR TRIP RATE SUMMARY

	Land Use Type	Units	-- AM Peak Hour -- In	Out	Total	-- PM Peak Hour -- In	Out	Total	ADT
1	Low Density Residential	DU	0.19	0.55	0.74	0.66	0.35	1.01	9.55
2	Medium Density Residential	DU	0.15	0.49	0.64	0.54	0.28	0.82	8.01
3	High Density Residential	DU	0.09	0.42	0.51	0.43	0.20	0.63	6.47
4	Civic/Cultural Center	TSF	3.47	0.60	4.07	1.88	5.07	6.95	47.00
5	General Commercial	TSF	0.84	0.38	1.22	2.55	2.55	5.10	54.50
6	Fast Food w/Drive-Thru	TSF	28.43	27.22	55.65	19.00	17.54	36.54	632.12
7	General Office	TSF	1.70	0.21	1.91	0.32	1.54	1.86	14.03
8	Post Office	TSF	2.29	2.20	4.49	3.06	3.06	6.12	87.12
9	Fire Station	TSF	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	Church	TSF	0.00	0.00	0.00	0.00	0.00	0.00	0.00

EXISTING ARNEILL RD REDEV ZONAL LAND USE AND TRIP GENERATION

Zone		Land Use Type	Units	-- AM Peak Hour -- In	Out	Total	-- PM Peak Hour -- In	Out	Total	ADT
1	5	General Commercial	120.00 TSF	101	46	147	306	306	612	6540
	7	General Office	80.00 TSF	136	17	153	26	123	149	1122
	8	Post Office	22.00 TSF	50	48	98	67	67	134	1917
	9	Fire Station	10.00 TSF	0	0	0	0	0	0	0
	10	Church	25.00 TSF	0	0	0	0	0	0	0
		SUB-TOTAL		287	111	398	399	496	895	9579
2	5	General Commercial	57.00 TSF	48	22	70	145	145	290	3107
		SUB-TOTAL		48	22	70	145	145	290	3107
3	5	General Commercial	23.00 TSF	19	9	28	59	59	118	1254
		SUB-TOTAL		19	9	28	59	59	118	1254
4	5	General Commercial	128.00 TSF	108	49	157	326	326	652	6976
		SUB-TOTAL		108	49	157	326	326	652	6976
5	6	Fast Food w/Drive-Thru	4.00 TSF	114	109	223	76	70	146	2528
	7	General Office	15.00 TSF	26	3	29	5	23	28	210
		SUB-TOTAL		140	112	252	81	93	174	2738
6	5	General Commercial	24.00 TSF	20	9	29	61	61	122	1308
		SUB-TOTAL		20	9	29	61	61	122	1308
7	2	Medium Density Residential	84.00 DU	13	41	54	45	24	69	673
		SUB-TOTAL		13	41	54	45	24	69	673

EXISTING ARNEILL RD REDEV LAND USE AND TRIP GENERATION SUMMARY

	Land Use Type	Units	-- AM Peak Hour -- In	Out	Total	-- PM Peak Hour -- In	Out	Total	ADT
2	Medium Density Residential	84.00 DU	13	41	54	45	24	69	673
5	General Commercial	352.00 TSF	296	135	431	897	897	1794	19185
6	Fast Food w/Drive-Thru	4.00 TSF	114	109	223	76	70	146	2528
7	General Office	95.00 TSF	162	20	182	31	146	177	1332
8	Post Office	22.00 TSF	50	48	98	67	67	134	1917
9	Fire Station	10.00 TSF	0	0	0	0	0	0	0
10	Church	25.00 TSF	0	0	0	0	0	0	0
	TOTAL		635	353	988	1116	1204	2320	25635

PROPOSED ARNEILL RD REDEV ZONAL LAND USE AND TRIP GENERATION

Zone		Land Use Type	Units	-- AM Peak Hour -- In	Out	Total	-- PM Peak Hour -- In	Out	Total	ADT
1	5	General Commercial	120.00 TSF	101	46	147	306	306	612	6540
	7	General Office	80.00 TSF	136	17	153	26	123	149	1122
	8	Post Office	22.00 TSF	50	48	98	67	67	134	1917
	9	Fire Station	10.00 TSF	0	0	0	0	0	0	0
	10	Church	25.00 TSF	0	0	0	0	0	0	0
		SUB-TOTAL		287	111	398	399	496	895	9579
2	2	Medium Density Residential	58.00 DU	9	28	37	31	16	47	465
	3	High Density Residential	25.00 DU	2	11	13	11	5	16	162
	5	General Commercial	35.00 TSF	29	13	42	89	89	178	1908
		SUB-TOTAL		40	52	92	131	110	241	2535
3	2	Medium Density Residential	17.00 DU	3	8	11	9	5	14	136
	3	High Density Residential	42.00 DU	4	18	22	18	8	26	272
	5	General Commercial	45.00 TSF	38	17	55	115	115	230	2453
		SUB-TOTAL		45	43	88	142	128	270	2861
4	2	Medium Density Residential	108.00 DU	16	53	69	58	30	88	865
	3	High Density Residential	125.00 DU	11	53	64	54	25	79	809
	4	Civic/Cultural Center	7.00 TSF	24	4	28	13	35	48	329
	5	General Commercial	90.00 TSF	76	34	110	230	230	460	4905
		SUB-TOTAL		127	144	271	355	320	675	6908
5	5	General Commercial	39.00 TSF	33	15	48	99	99	198	2126
	6	Fast Food w/Drive-Thru	4.00 TSF	114	109	223	76	70	146	2528
		SUB-TOTAL		147	124	271	175	169	344	4654
6	2	Medium Density Residential	115.00 DU	17	56	73	62	32	94	921
		SUB-TOTAL		17	56	73	62	32	94	921
7	2	Medium Density Residential	165.00 DU	25	81	106	89	46	135	1322
		SUB-TOTAL		25	81	106	89	46	135	1322

PROPOSED ARNEILL RD REDEV LAND USE AND TRIP GENERATION SUMMARY

	Land Use Type	Units	-- AM Peak Hour -- In	Out	Total	-- PM Peak Hour -- In	Out	Total	ADT
2	Medium Density Residential	463.00 DU	70	226	296	249	129	378	3709
3	High Density Residential	192.00 DU	17	82	99	83	38	121	1243
4	Civic/Cultural Center	7.00 TSF	24	4	28	13	35	48	329
5	General Commercial	329.00 TSF	277	125	402	839	839	1678	17932
6	Fast Food w/Drive-Thru	4.00 TSF	114	109	223	76	70	146	2528
7	General Office	80.00 TSF	136	17	153	26	123	149	1122
8	Post Office	22.00 TSF	50	48	98	67	67	134	1917
9	Fire Station	10.00 TSF	0	0	0	0	0	0	0
10	Church	25.00 TSF	0	0	0	0	0	0	0
	TOTAL		688	611	1299	1353	1301	2654	28780

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