JN:04560 - Apple Valley General Plan Circulation Element Traffic Study
Existing Traffic Condtions
With Existing Geometry

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #23 Apple Valley Road (NS) / Bear Valley Road (EW)

Cycle (sec):	130	Critical Vol./Cap.(X):	0.495
Loss Time (sec):	8 (Y+R=4.0 sec)	Average Delay (sec/veh):	33.0
Optimal Cycle:	130	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Include			Ovl		
Min. Green:	10	34	34	10	34	34	10	31	31	10	31	31
Lanes:	2 0 2 0 1			2 0 1 0 2			2 0 2 0 1			1 0 3 0 1		
Volume Module:												
Base Vol:	102	152	42	108	120	652	433	602	71	60	1167	85
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	102	152	42	108	120	652	433	602	71	60	1167	85
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	107	160	44	114	126	686	456	634	75	63	1228	89
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	107	160	44	114	126	686	456	634	75	63	1228	89
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	107	160	44	114	126	686	456	634	75	63	1228	89
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.95	0.85	0.92	1.00	0.75	0.92	0.95	0.85	0.95	0.91	0.85
Lanes:	2.00	2.00	1.00	2.00	1.00	2.00	2.00	2.00	1.00	1.00	3.00	1.00
Final Sat.:	3502	3610	1615	3502	1900	2842	3502	3610	1615	1805	5187	1615
Capacity Analysis Module:												
Vol/Sat:	0.03	0.04	0.03	0.03	0.07	0.24	0.13	0.18	0.05	0.03	0.24	0.06
Crit Moves:	****				****		****				****	
Green/Cycle:	0.08	0.26	0.26	0.08	0.26	0.47	0.21	0.45	0.45	0.15	0.39	0.46
Volume/Cap:	0.40	0.17	0.10	0.42	0.25	0.51	0.61	0.39	0.10	0.24	0.61	0.12
Delay/Veh:	58.1	37.2	36.6	58.3	38.2	24.0	47.8	23.7	20.4	49.6	32.5	19.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	58.1	37.2	36.6	58.3	38.2	24.0	47.8	23.7	20.4	49.6	32.5	19.8
LOS by Move:	E	D	D	E	D	C	D	C	C	D	C	B
HCM2kAvgQ:	3	3	1	3	4	11	9	9	2	2	15	2

Note: Queue reported is the number of cars per lane.

JN:04560 - Apple Valley General Plan Circulation Element Traffic Study
Existing Traffic Condtions
With Existing Geometry

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #23 Apple Valley Road (NS) / Bear Valley Road (EW)

Cycle (sec):	130	Critical Vol./Cap.(X):	0.577
Loss Time (sec):	8 (Y+R=4.0 sec)	Average Delay (sec/veh):	35.5
Optimal Cycle:	130	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Include			Ovl		
Min. Green:	10	34	34	10	34	34	10	31	31	10	31	31
Lanes:	2 0 2	0 1		2 0 1	0 2		2 0 2	0 1		1 0 3	0 1	
Volume Module:												
Base Vol:	82	174	122	131	183	475	784	1119	116	148	885	55
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	82	174	122	131	183	475	784	1119	116	148	885	55
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	86	183	128	138	193	500	825	1178	122	156	932	58
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	86	183	128	138	193	500	825	1178	122	156	932	58
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	86	183	128	138	193	500	825	1178	122	156	932	58
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.95	0.85	0.92	1.00	0.75	0.92	0.95	0.85	0.95	0.91	0.85
Lanes:	2.00	2.00	1.00	2.00	1.00	2.00	2.00	2.00	1.00	1.00	3.00	1.00
Final Sat.:	3502	3610	1615	3502	1900	2842	3502	3610	1615	1805	5187	1615
Capacity Analysis Module:												
Vol/Sat:	0.02	0.05	0.08	0.04	0.10	0.18	0.24	0.33	0.08	0.09	0.18	0.04
Crit Moves:	****				****		****				****	
Green/Cycle:	0.08	0.26	0.26	0.08	0.26	0.60	0.34	0.47	0.47	0.13	0.26	0.34
Volume/Cap:	0.32	0.19	0.30	0.51	0.39	0.29	0.69	0.69	0.16	0.69	0.69	0.11
Delay/Veh:	57.5	37.4	38.9	59.3	39.9	12.6	38.8	27.8	19.5	63.0	45.0	29.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	57.5	37.4	38.9	59.3	39.9	12.6	38.8	27.8	19.5	63.0	45.0	29.8
LOS by Move:	E	D	D	E	D	B	D	C	B	E	D	C
HCM2kAvgQ:	2	3	4	3	6	5	15	20	3	7	13	2

Note: Queue reported is the number of cars per lane.

JN:04560 - Apple Valley General Plan Circulation Element Traffic Study
Existing Traffic Condtions
With Existing Geometry

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #28 Highway 18 (NS) / Bear Valley Road (EW)

Average Delay (sec/veh): 3.2 Worst Case Level Of Service: A[8.3]

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Ignore					Include				
Lanes:	1	0	1	0	0	0	0	0	1	0	1	0	0	0	1	0	0	0	0	0
Volume Module:																				
Base Vol:	276	257		0		0	173		3		0		0	270		0		0		0
Growth Adj:	1.03	1.03		1.03		1.03	1.03		1.03		1.03		1.03	1.03		1.03		1.03		1.03
Initial Bse:	284	265		0		0	178		3		0		0	278		0		0		0
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00	0.00		1.00		1.00		1.00
PHF Adj:	0.95	0.95		0.95		0.95	0.95		0.95		0.95		0.95	0.00		0.95		0.95		0.95
PHF Volume:	299	279		0		0	188		3		0		0	0		0		0		0
Reduct Vol:	0	0		0		0	0		0		0		0	0		0		0		0
FinalVolume:	299	279		0		0	188		3		0		0	0		0		0		0
Critical Gap Module:																				
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx					6.4	xxxx		6.2	xxxxx	xxxx	xxxxx			
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx					3.5	xxxx		3.3	xxxxx	xxxx	xxxxx			
Capacity Module:																				
Cnflict Vol:	191	xxxx	xxxxx	xxxx	xxxx	xxxxx					1066	xxxx		189	xxxx	xxxx	xxxxx			
Potent Cap.:	1395	xxxx	xxxxx	xxxx	xxxx	xxxxx					248	xxxx		858	xxxx	xxxx	xxxxx			
Move Cap.:	1395	xxxx	xxxxx	xxxx	xxxx	xxxxx					207	xxxx		858	xxxx	xxxx	xxxxx			
Volume/Cap:	0.21	xxxx	xxxx	xxxx	xxxx	xxxx					0.00	xxxx		0.00	xxxx	xxxx	xxxx			
Level Of Service Module:																				
2Way95thQ:	0.8	xxxx	xxxxx	xxxx	xxxx	xxxxx					xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx		
Control Del:	8.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx					xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
LOS by Move:	A	*		*		*					*		*			*		*		
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx					xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx		
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx					xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx					xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shared LOS:	*	*		*		*					*		*			*		*		
ApproachDel:	xxxxxx			xxxxxx							xxxxxx					xxxxxx				
ApproachLOS:	*			*							*					*				

Note: Queue reported is the number of cars per lane.

JN:04560 - Apple Valley General Plan Circulation Element Traffic Study
Existing Traffic Condtions
With Existing Geometry

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #28 Highway 18 (NS) / Bear Valley Road (EW)

Average Delay (sec/veh): 3.8 Worst Case Level Of Service: D[28.9]

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Ignore					Include				
Lanes:	1	0	1	0	0	0	0	0	1	0	1	0	0	0	1	0	0	0	0	0
Volume Module:																				
Base Vol:	330	217		0		0	254		6		5		0		327	0		0		0
Growth Adj:	1.03	1.03		1.03		1.03	1.03		1.03		1.03		1.03		1.03	1.03		1.03		1.03
Initial Bse:	340	224		0		0	262		6		5		0		337	0		0		0
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		0.00	1.00		1.00		1.00
PHF Adj:	0.95	0.95		0.95		0.95	0.95		0.95		0.95		0.95		0.00	0.95		0.95		0.95
PHF Volume:	358	235		0		0	275		7		5		0		0	0		0		0
Reduct Vol:	0	0		0		0	0		0		0		0		0	0		0		0
FinalVolume:	358	235		0		0	275		7		5		0		0	0		0		0
Critical Gap Module:																				
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx					6.4	xxxx			6.2	xxxxx	xxxx	xxxxx		
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx					3.5	xxxx			3.3	xxxxx	xxxx	xxxxx		
Capacity Module:																				
Cnflict Vol:	282	xxxx	xxxxx	xxxx	xxxx	xxxxx					1229	xxxx			279	xxxx	xxxx	xxxxx		
Potent Cap.:	1292	xxxx	xxxxx	xxxx	xxxx	xxxxx					198	xxxx			765	xxxx	xxxx	xxxxx		
Move Cap.:	1292	xxxx	xxxxx	xxxx	xxxx	xxxxx					156	xxxx			765	xxxx	xxxx	xxxxx		
Volume/Cap:	0.28	xxxx	xxxx	xxxx	xxxx	xxxx					0.03	xxxx			0.00	xxxx	xxxx	xxxx		
Level Of Service Module:																				
2Way95thQ:	1.1	xxxx	xxxxx	xxxx	xxxx	xxxxx					0.1	xxxx	xxxxx			xxxx	xxxx	xxxxx		
Control Del:	8.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx					28.9	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
LOS by Move:	A	*	*	*	*	*					D	*	*			*	*	*		
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx					xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx		
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx					xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx					xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shared LOS:	*	*	*	*	*	*					*	*	*			*	*	*		
ApproachDel:	xxxxxx			xxxxxx							28.9					xxxxxx				
ApproachLOS:	*			*							D					*				

Note: Queue reported is the number of cars per lane.

JN:04560 - Apple Valley General Plan Circulation Element Traffic Study
Existing Traffic Condtions
With Existing Geometry

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #20 Navajo Road (NS) / Highway 18 (EW)

Cycle (sec): 75 Critical Vol./Cap.(X): 0.482
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 19.8
Optimal Cycle: 75 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	29	29	29	29	29	29	10	10	10	10	10	10
Lanes:	1 0	1 0	1	1 0	1 0	1	1 0	2 0	1	1 0	0 1	0
Volume Module:												
Base Vol:	186	113	75	21	127	16	13	286	149	133	438	23
Growth Adj:	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
Initial Bse:	192	116	77	22	131	16	13	295	153	137	451	24
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	202	123	81	23	138	17	14	310	162	144	475	25
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	202	123	81	23	138	17	14	310	162	144	475	25
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	202	123	81	23	138	17	14	310	162	144	475	25
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.62	1.00	0.85	0.64	1.00	0.85	0.95	0.95	0.85	0.95	0.99	0.99
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	0.95	0.05
Final Sat.:	1182	1900	1615	1220	1900	1615	1805	3610	1615	1805	1793	94
Capacity Analysis Module:												
Vol/Sat:	0.17	0.06	0.05	0.02	0.07	0.01	0.01	0.09	0.10	0.08	0.26	0.26
Crit Moves:	****						****				****	
Green/Cycle:	0.39	0.39	0.39	0.39	0.39	0.39	0.13	0.27	0.27	0.27	0.40	0.40
Volume/Cap:	0.44	0.17	0.13	0.05	0.19	0.03	0.06	0.32	0.38	0.30	0.66	0.66
Delay/Veh:	17.7	15.2	14.9	14.4	15.3	14.3	28.5	22.3	23.0	22.3	20.6	20.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	17.7	15.2	14.9	14.4	15.3	14.3	28.5	22.3	23.0	22.3	20.6	20.6
LOS by Move:	B	B	B	B	B	B	C	C	C	C	C	C
HCM2kAvgQ:	4	2	1	0	2	0	0	3	3	3	10	10

Note: Queue reported is the number of cars per lane.

JN:04560 - Apple Valley General Plan Circulation Element Traffic Study
Existing Traffic Condtions
With Existing Geometry

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #20 Navajo Road (NS) / Highway 18 (EW)

Cycle (sec):	75	Critical Vol./Cap.(X):	0.531
Loss Time (sec):	6 (Y+R=4.0 sec)	Average Delay (sec/veh):	20.9
Optimal Cycle:	75	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	29	29	29	29	29	29	10	10	10	10	10	10
Lanes:	1 0	1 0	1	1 0	1 0	1	1 0	2 0	1	1 0	0 1	0
Volume Module:												
Base Vol:	161	196	107	34	194	26	66	551	239	187	446	33
Growth Adj:	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
Initial Bse:	166	202	110	35	200	27	68	568	246	193	459	34
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	175	213	116	37	210	28	72	597	259	203	484	36
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	175	213	116	37	210	28	72	597	259	203	484	36
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	175	213	116	37	210	28	72	597	259	203	484	36
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.53	1.00	0.85	0.53	1.00	0.85	0.95	0.95	0.85	0.95	0.99	0.99
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	0.93	0.07
Final Sat.:	1011	1900	1615	1005	1900	1615	1805	3610	1615	1805	1751	130
Capacity Analysis Module:												
Vol/Sat:	0.17	0.11	0.07	0.04	0.11	0.02	0.04	0.17	0.16	0.11	0.28	0.28
Crit Moves:	****						****				****	
Green/Cycle:	0.39	0.39	0.39	0.39	0.39	0.39	0.13	0.30	0.30	0.24	0.40	0.40
Volume/Cap:	0.45	0.29	0.19	0.09	0.29	0.05	0.30	0.56	0.54	0.47	0.69	0.69
Delay/Veh:	17.9	16.1	15.3	14.8	16.1	14.4	30.0	23.0	23.5	25.4	21.4	21.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	17.9	16.1	15.3	14.8	16.1	14.4	30.0	23.0	23.5	25.4	21.4	21.4
LOS by Move:	B	B	B	B	B	B	C	C	C	C	C	C
HCM2kAvgQ:	3	3	2	1	3	0	2	7	6	4	11	11

Note: Queue reported is the number of cars per lane.

JN:04560 - Apple Valley General Plan Circulation Element Traffic Study
Existing Traffic Condtions
With Existing Geometry

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #11 Corwin Road (NS) / Highway 18 (EW)

Cycle (sec):	60	Critical Vol./Cap.(X):	0.728
Loss Time (sec):	6 (Y+R=4.0 sec)	Average Delay (sec/veh):	11.9
Optimal Cycle:	60	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:		Include			Ovl			Include			Include	
Min. Green:	0	0	0	10	0	10	10	26	0	0	31	31
Lanes:	0 0	0 0	0	1 0	0 0	2	1 0	2 0	0	0 0	2 0	1
Volume Module:												
Base Vol:	0	0	0	54	0	328	302	692	0	0	1072	35
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	54	0	328	302	692	0	0	1072	35
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	0	57	0	345	318	728	0	0	1128	37
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	57	0	345	318	728	0	0	1128	37
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	57	0	345	318	728	0	0	1128	37
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.95	1.00	0.75	0.95	0.95	1.00	1.00	0.95	0.85
Lanes:	0.00	0.00	0.00	1.00	0.00	2.00	1.00	2.00	0.00	0.00	2.00	1.00
Final Sat.:	0	0	0	1805	0	2842	1805	3610	0	0	3610	1615
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.03	0.00	0.12	0.18	0.20	0.00	0.00	0.31	0.02
Crit Moves:				****			****				****	
Green/Cycle:	0.00	0.00	0.00	0.17	0.00	0.38	0.22	0.73	0.00	0.00	0.52	0.52
Volume/Cap:	0.00	0.00	0.00	0.19	0.00	0.32	0.81	0.28	0.00	0.00	0.60	0.04
Delay/Veh:	0.0	0.0	0.0	21.8	0.0	13.2	34.6	2.7	0.0	0.0	10.8	7.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	21.8	0.0	13.2	34.6	2.7	0.0	0.0	10.8	7.2
LOS by Move:	A	A	A	C	A	B	C	A	A	A	B	A
HCM2kAvgQ:	0	0	0	1	0	3	8	3	0	0	8	0

Note: Queue reported is the number of cars per lane.

JN:04560 - Apple Valley General Plan Circulation Element Traffic Study
Existing Traffic Condtions
With Existing Geometry

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #11 Corwin Road (NS) / Highway 18 (EW)

Cycle (sec):	60	Critical Vol./Cap.(X):	0.630
Loss Time (sec):	6 (Y+R=4.0 sec)	Average Delay (sec/veh):	8.1
Optimal Cycle:	60	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Ovl			Include			Include		
Min. Green:	0	0	0	10	0	10	10	26	0	0	31	31
Lanes:	0 0 0 0 0			1 0 0 0 2			1 0 2 0 0			0 0 2 0 1		
Volume Module:												
Base Vol:	0	0	0	44	0	160	188	1315	0	0	997	4
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	44	0	160	188	1315	0	0	997	4
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	0	46	0	168	198	1384	0	0	1049	4
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	46	0	168	198	1384	0	0	1049	4
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	46	0	168	198	1384	0	0	1049	4
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.95	1.00	0.75	0.95	0.95	1.00	1.00	0.95	0.85
Lanes:	0.00	0.00	0.00	1.00	0.00	2.00	1.00	2.00	0.00	0.00	2.00	1.00
Final Sat.:	0	0	0	1805	0	2842	1805	3610	0	0	3610	1615
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.03	0.00	0.06	0.11	0.38	0.00	0.00	0.29	0.00
Crit Moves:				****			****				****	
Green/Cycle:	0.00	0.00	0.00	0.17	0.00	0.38	0.22	0.73	0.00	0.00	0.52	0.52
Volume/Cap:	0.00	0.00	0.00	0.15	0.00	0.15	0.51	0.52	0.00	0.00	0.56	0.01
Delay/Veh:	0.0	0.0	0.0	21.6	0.0	12.2	21.8	3.7	0.0	0.0	10.3	7.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	21.6	0.0	12.2	21.8	3.7	0.0	0.0	10.3	7.0
LOS by Move:	A	A	A	C	A	B	C	A	A	A	B	A
HCM2kAvgQ:	0	0	0	1	0	1	4	6	0	0	8	0

Note: Queue reported is the number of cars per lane.

JN:04560 - Apple Valley General Plan Circulation Element Traffic Study
Existing Traffic Condtions
With Existing Geometry

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #17 Kiowa Road (NS) / Highway 18 (EW)

Cycle (sec):	90	Critical Vol./Cap.(X):	0.360
Loss Time (sec):	6 (Y+R=4.0 sec)	Average Delay (sec/veh):	20.2
Optimal Cycle:	90	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	28	28	28	28	28	28	10	10	10	10	10	10
Lanes:	1 0 0	1 0		1 0 0	1 0		1 0 2	0 1		1 0 2	0 1	
Volume Module:												
Base Vol:	166	39	28	1	53	28	13	414	95	17	627	5
Growth Adj:	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
Initial Bse:	171	40	29	1	55	29	13	426	98	18	646	5
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	180	42	30	1	57	30	14	449	103	18	680	5
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	180	42	30	1	57	30	14	449	103	18	680	5
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	180	42	30	1	57	30	14	449	103	18	680	5
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.68	0.94	0.94	0.70	0.95	0.95	0.95	0.95	0.85	0.95	0.95	0.85
Lanes:	1.00	0.58	0.42	1.00	0.65	0.35	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1284	1036	744	1328	1179	623	1805	3610	1615	1805	3610	1615
Capacity Analysis Module:												
Vol/Sat:	0.14	0.04	0.04	0.00	0.05	0.05	0.01	0.12	0.06	0.01	0.19	0.00
Crit Moves:	****						****				****	
Green/Cycle:	0.35	0.35	0.35	0.35	0.35	0.35	0.11	0.31	0.31	0.27	0.47	0.47
Volume/Cap:	0.40	0.12	0.12	0.00	0.14	0.14	0.07	0.40	0.21	0.04	0.40	0.01
Delay/Veh:	22.6	19.9	19.9	19.0	20.0	20.0	36.0	24.9	23.2	23.9	15.6	12.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	22.6	19.9	19.9	19.0	20.0	20.0	36.0	24.9	23.2	23.9	15.6	12.6
LOS by Move:	C	B	B	B	C	C	D	C	C	C	B	B
HCM2kAvgQ:	4	1	1	0	2	2	0	5	2	0	6	0

Note: Queue reported is the number of cars per lane.

JN:04560 - Apple Valley General Plan Circulation Element Traffic Study
Existing Traffic Condtions
With Existing Geometry

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #17 Kiowa Road (NS) / Highway 18 (EW)

Cycle (sec):	90	Critical Vol./Cap.(X):	0.379
Loss Time (sec):	6 (Y+R=4.0 sec)	Average Delay (sec/veh):	18.2
Optimal Cycle:	90	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	28	28	28	28	28	28	10	10	10	10	10	10
Lanes:	1 0 0	1 0		1 0 0	1 0		1 0 2	0 1		1 0 2	0 1	
Volume Module:												
Base Vol:	152	59	59	11	40	18	28	727	257	23	569	10
Growth Adj:	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
Initial Bse:	157	61	61	11	41	19	29	749	265	24	586	10
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	165	64	64	12	43	20	30	788	279	25	617	11
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	165	64	64	12	43	20	30	788	279	25	617	11
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	165	64	64	12	43	20	30	788	279	25	617	11
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.71	0.93	0.93	0.60	0.95	0.95	0.95	0.95	0.85	0.95	0.95	0.85
Lanes:	1.00	0.50	0.50	1.00	0.69	0.31	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1351	879	879	1148	1250	563	1805	3610	1615	1805	3610	1615
Capacity Analysis Module:												
Vol/Sat:	0.12	0.07	0.07	0.01	0.03	0.03	0.02	0.22	0.17	0.01	0.17	0.01
Crit Moves:	****							****		****		
Green/Cycle:	0.31	0.31	0.31	0.31	0.31	0.31	0.25	0.51	0.51	0.11	0.38	0.38
Volume/Cap:	0.39	0.23	0.23	0.03	0.11	0.11	0.07	0.43	0.34	0.12	0.45	0.02
Delay/Veh:	24.9	23.3	23.3	21.6	22.2	22.2	26.1	13.9	13.2	36.3	21.3	17.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	24.9	23.3	23.3	21.6	22.2	22.2	26.1	13.9	13.2	36.3	21.3	17.6
LOS by Move:	C	C	C	C	C	C	C	B	B	D	C	B
HCM2kAvgQ:	4	3	3	0	1	1	1	7	5	1	7	0

Note: Queue reported is the number of cars per lane.