

BROOKSIDE PROJECT
EXISTING CONDITIONS
AM PEAK HOURLevel Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Lemon Ave/Amar Rd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.742

Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx

Optimal Cycle: 56 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: Split Phase Split Phase Protected Protected

Rights: Include Include Include Include

Min. Green: 0 0 0 0 0 0 0 0

Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0

Lanes: 1 1 0 1 0 1 0 1

Volume Module:

Base Vol: 263 31 124 20 35 28 5 954

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Initial Bse: 263 31 124 20 35 28 5 954

Added Vol: 0 0 0 0 0 0 0 0

PasserByVol: 0 0 0 0 0 0 0 0

Initial Fut: 263 31 124 20 35 28 5 954

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 0.88 0.88 0.88 0.88 0.88 0.88 0.88 0.88

PHF Volume: 299 35 141 23 40 32 6 1084

Reduced Vol: 0 0 0 0 0 0 0 0

Reduced Vol: 299 35 141 23 40 32 6 1084

PCE Adj: 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

FinalVolume: 299 35 141 23 40 32 6 1084

Saturation Flow Module:

Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600

Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Lanes: 1.79 0.21 1.00 0.36 0.64 1.00 1.00 1.53

Final Sat.: 2863 337 1600 582 1018 1600 1600 3155

Capacity Analysis Module:

Vol/Sat: 0.10 0.10 0.09 0.04 0.04 0.02 0.00 0.44

Crit Moves: **** 0.06 0.30 0.30

BROOKSIDE PROJECT
EXISTING CONDITIONS
AM PEAK HOURLevel Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Lemon Ave/Meadown Pass Height-Meadow Pass Rd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.543

Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx

Optimal Cycle: 36 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: Protected Protected Protected Protected

Rights: Include Include Include Include

Min. Green: 0 0 0 0 0 0 0 0

Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0

Lanes: 1 0 1 1 0 1 0 0

Volume Module:

Base Vol: 6 580 180 86 771 1 1 2

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Initial Bse: 6 580 180 86 771 1 1 2

Added Vol: 0 0 0 0 0 0 0 0

PasserByVol: 0 0 0 0 0 0 0 0

Initial Fut: 6 580 180 86 771 1 1 2

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 0.86 0.86 0.86 0.86 0.86 0.86 0.86 0.86

PHF Volume: 7 674 209 100 897 1 2 9

Reduced Vol: 0 0 0 0 0 0 0 0

Reduced Vol: 7 674 209 100 897 1 2 9

PCE Adj: 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

FinalVolume: 7 674 209 100 897 1 2 9

Saturation Flow Module:

Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600

Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Lanes: 1.00 1.53 0.47 1.00 1.99 0.01 0.09 0.18

Final Sat.: 1600 2442 758 1600 3196 4 145 291

Capacity Analysis Module:

Vol/Sat: 0.00 0.28 0.28 0.06 0.28 0.00 0.01 0.01

Crit Moves: **** 0.10 0.00 0.06

BROOKSIDE PROJECT
EXISTING CONDITIONS
AM PEAK HOURLevel Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Lemon Ave/La Puente Rd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.844
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 78 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	Protected
Rights:	Include	Include	Include	Include	Include
Min. Green:	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	1	0	1

Volume Module:

Base Vol:	164	411	92	253	557	96	146	381	231	201	297	205
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:	164	411	92	253	557	96	146	381	231	201	297	205
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	164	411	92	253	557	96	146	381	231	201	297	205
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:	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
PHF Volume:	193	484	108	298	655	113	172	448	272	236	349	241
Reduced Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	193	484	108	298	655	113	172	448	272	236	349	241
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:	193	484	108	298	655	113	172	448	272	236	349	241

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.63	0.37	1.00	2.00	1.00	1.00	1.25	0.75	1.00	1.18	0.82
Final Sat.:	1600	2615	585	1600	3200	1600	1600	1992	1208	1600	1893	1307

Capacity Analysis Module:

Vol/Sat:	0.12	0.18	0.18	0.19	0.20	0.07	0.11	0.23	0.22	0.15	0.18	0.18
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****

BROOKSIDE PROJECT
EXISTING CONDITIONS
AM PEAK HOURLevel Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Lemon Ave/Valley Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.880
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 91 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	Protected
Rights:	Include	Include	Include	Include	Include
Min. Green:	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	1	0	1

Volume Module:

Base Vol:	153	446	144	98	706	226	111	549	189	216	1109	52
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:	153	446	144	98	706	226	111	549	189	216	1109	52
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	153	446	144	98	706	226	111	549	189	216	1109	52
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:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
PHF Volume:	159	465	150	102	735	235	116	572	197	225	1155	54
Reduced Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	159	465	150	102	735	235	116	572	197	225	1155	54
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:	159	465	150	102	735	235	116	572	197	225	1155	54

OvlAdjVol:

Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.51	0.49	1.00	2.00	1.00	1.00	2.23	0.77	2.00	1.91	0.09
Final Sat.:	1600	2419	781	1600	3200	1600	1600	3571	1229	2880	3057	143

Capacity Analysis Module:

Vol/Sat:	0.10	0.19	0.19	0.06	0.23	0.15	0.07	0.16	0.16	0.08	0.38	0.38
OvlAdjV/S:	****	****	****	****	****	****	****	****	****	****	****	****

BROOKSIDE PROJECT
EXISTING CONDITIONS
AM PEAK HOUR

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

***** Intersection #5 Meadow Pass Rd/Colt Ln *****

Average Delay (sec/veh): 0.2 Worst Case Level Of Service: B[11.3]

***** Approach: North Bound South Bound East Bound West Bound *****

Movement: L - T - R L - T - R L - T - R L - T - R

Control: Stop Sign Stop Sign Uncontrolled Uncontrolled

Rights: Include Include Include Include

Lanes: 0 0 0 0 0 0 1 0 0 1 0 0 0 0 0 0 1 0

Volume Module:

Base Vol: 0 0 0 3 0 3 3 257 0 0 166 3

Growth Adj: 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 3 0 3 3 257 0 0 166 3

Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0

PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0

Initial Fut: 0 0 0 3 0 3 3 257 0 0 166 3

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 0.69 0.69 0.69 0.69 0.69 0.69 0.69 0.69 0.69 0.69

PHF Volume: 0 0 0 4 0 4 4 372 0 0 241 4

Reduc Vol: 0 0 0 0 0 0 0 0 0 0 0 0

FinalVolume: 0 0 0 4 0 4 4 372 0 0 241 4

Critical Gap Module:

Critical Gap:xxxxx 6.4 6.5 6.2 4.1 xxxx xxxxx xxxxx xxxxx xxxxx

FollowUpTrm:xxxxx 3.5 4.0 3.3 2.2 xxxx xxxxx xxxxx xxxxx xxxxx

Capacity Module:

Conflict Vol: xxxx xxxx xxxxx 624 624 243 245 xxxx xxxxx xxxxx

Potent Cap.: xxxx xxxx xxxxx 452 404 801 1333 xxxx xxxxx xxxxx

Move Cap.: xxxx xxxx xxxxx 451 403 801 1333 xxxx xxxxx xxxxx

Volume/Cap: xxxx xxxx xxxxx 0.01 0.00 0.01 0.00 xxxx xxxxx xxxxx

Level Of Service Module:

2Way95thQ: xxxx xxxx xxxxx xxxxx xxxx xxxxx 0.0 xxxx xxxxx xxxxx

Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx 7.7 xxxx xxxxx xxxxx

LOS by Move: * * * * * A * * * * *

Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT

Shared Cap.: xxxx xxxx xxxxx xxxxx 577 xxxxx xxxxx xxxxx xxxxx xxxxx

SharedQueue:xxxxx xxxxx xxxxx 0.0 xxxxx xxxxx xxxxx xxxxx xxxxx

Shrd Conbel:xxxxx xxxx xxxxx xxxxx 11.3 xxxxx xxxxx xxxxx xxxxx

Shared LOS: * * * * * B * * * * *

ApproachDel: xxxxxx 11.3 xxxxxx xxxxxx

ApproachLOS: * * * * * B * * * * *

***** Queue reported is the number of cars per lane. *****

BROOKSIDE PROJECT
EXISTING CONDITIONS
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(loss as Cycle Length %) Method (Future Volume Alternative)

***** Intersection #1 Lemon Ave/Amar Rd *****

Cycle (sec): 100 Critical Vol./Cap.(X): 0.670

Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx

Optimal Cycle: 47 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 Split Phase Split Phase

Rights: Include Include Include Include

Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0

Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0

Lanes: 1 1 0 0 1 0 1 0 0 1 1 0 1 0 1 0

Volume Module:

Base Vol: 255 37 166 15 24 14 19 905 167 98 716 27

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Initial Bse: 255 37 166 15 24 14 19 905 167 98 716 27

Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0

PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0

Initial Fut: 255 37 166 15 24 14 19 905 167 98 716 27

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 0.92 0.92 0.92 0.92 0.92 0.92 0.92 0.92 0.92 0.92

PHF Volume: 277 40 180 16 26 15 21 984 182 107 778 29

Reduc Vol: 0 0 0 0 0 0 0 0 0 0 0 0

Reduced Vol: 277 40 180 16 26 15 21 984 182 107 778 29

PCE Adj: 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

FinalVolume: 277 40 180 16 26 15 21 984 182 107 778 29

Saturation Flow Module:

Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600

Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Lanes: 1.75 0.25 1.00 0.38 0.62 1.00 1.00 1.00 0.31 1.00 1.93 0.07

Final Sat.: 2795 405 1600 615 985 1600 1600 2701 499 1600 3084 116

Capacity Analysis Module:

Vol/Sat: 0.10 0.10 0.11 0.03 0.03 0.01 0.01 0.36 0.36 0.07 0.25 0.25

Crit Moves: ****

BROOKSIDE PROJECT
EXISTING CONDITIONS
PM PEAK HOURLevel Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Lemon Ave/Meadown Pass Height-Meadow Pass Rd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.498

Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx

Optimal Cycle: 33 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: Protected Protected Protected Permitted Permitted

Rights: Include Include Include Include Include

Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0

Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0

Lanes: 1 0 1 0 1 0 1 0 0 0 0 1 1 0 1 0 1

Volume Module:

Base Vol: 2 721 192 24 459 2 0 0 3 112 0 42

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Initial Bse: 2 721 192 24 459 2 0 0 3 112 0 42

Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0

PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0

Initial Fut: 2 721 192 24 459 2 0 0 3 112 0 42

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 0.93 0.93 0.93 0.93 0.93 0.93 0.93 0.93 0.93 0.93 0.93

PHF Volume: 2 775 206 26 494 2 0 0 3 120 0 45

Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0

Reduced Vol: 2 775 206 26 494 2 0 0 3 120 0 45

PCE Adj: 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

FinalVolume: 2 775 206 26 494 2 0 0 3 120 0 45

Saturation Flow Module:

Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600

Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Lanes: 1.00 1.58 0.42 1.00 1.99 0.01 0.00 0.00 1.00 1.00 1.00

Final Sat.: 1600 2527 673 1600 3186 14 0 0 1600 1600 1600

Capacity Analysis Module:

Vol/Sat: 0.00 0.31 0.31 0.02 0.15 0.15 0.00 0.00 0.00 0.08 0.00 0.03

Crit Moves: ****

BROOKSIDE PROJECT
EXISTING CONDITIONS
PM PEAK HOURLevel Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Lemon Ave/La Puente Rd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.709

Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx

Optimal Cycle: 51 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 Protected

Rights: Include Include Include Include Include

Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0

Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0

Lanes: 1 0 1 0 1 0 2 0 1 1 0 1 0 1 0 1 0

Volume Module:

Base Vol: 306 666 177 137 351 84 104 407 138 85 223 122

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Initial Bse: 306 666 177 137 351 84 104 407 138 85 223 122

Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0

PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0

Initial Fut: 306 666 177 137 351 84 104 407 138 85 223 122

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 0.94 0.94 0.94 0.94 0.94 0.94 0.94 0.94 0.94 0.94 0.94

PHF Volume: 326 709 188 146 373 89 111 433 147 90 237 130

Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0

Reduced Vol: 326 709 188 146 373 89 111 433 147 90 237 130

PCE Adj: 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

FinalVolume: 326 709 188 146 373 89 111 433 147 90 237 130

Saturation Flow Module:

Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600

Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Lanes: 1.00 1.58 0.42 1.00 2.00 1.00 1.00 1.49 0.51 1.00 1.29 0.71

Final Sat.: 1600 2528 672 1600 3200 1600 1600 2390 810 1600 2068 1132

Capacity Analysis Module:

Vol/Sat: 0.20 0.28 0.28 0.09 0.12 0.06 0.07 0.18 0.18 0.06 0.11 0.11

Crit Moves: ****

BROOKSIDE PROJECT
EXISTING CONDITIONS
MD PEAK HOURLevel Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Lemon Ave/Amar Rd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.334

Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx

Optimal Cycle: 26 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 Include Include Include

Min. Green: 0 0 0 0 0 0 0 0

Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0

Lanes: 1 1 0 0 1 0 1 0

Volume Module:

Base Vol: 73 15 49 12 18 15 17 376

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Initial Bse: 73 15 49 12 18 15 17 376

Added Vol: 0 0 0 0 0 0 0 0

PasserByVol: 0 0 0 0 0 0 0 0

Initial Fut: 73 15 49 12 18 15 17 376

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 0.96 0.96 0.96 0.96 0.96 0.96 0.96 0.96

PHF Volume: 76 16 51 13 19 16 18 392

Reduced Vol: 0 0 0 0 0 0 0 0

Reduced Vol: 76 16 51 13 19 16 18 392

PCE Adj: 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

FinalVolume: 76 16 51 13 19 16 18 392

Saturation Flow Module:

Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600

Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Lanes: 1.66 0.34 1.00 0.40 0.60 1.00 1.65 0.35

Final Sat.: 2655 545 1600 640 960 1600 2633 567

Capacity Analysis Module:

Vol/Sat: 0.03 0.03 0.03 0.02 0.02 0.01 0.01 0.15

Crit Moves: ****

BROOKSIDE PROJECT
EXISTING CONDITIONS
MD PEAK HOURLevel Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Lemon Ave/Meadown Pass Height-Meadow Pass Rd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.481

Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx

Optimal Cycle: 32 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: Protected Protected Protected Protected

Rights: Include Include Include Include

Min. Green: 0 0 0 0 0 0 0 0

Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0

Lanes: 1 0 1 1 0 1 0 0

Volume Module:

Base Vol: 0 165 202 86 288 1 2 0

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Initial Bse: 0 165 202 86 288 1 2 0

Added Vol: 0 0 0 0 0 0 0 0

PasserByVol: 0 0 0 0 0 0 0 0

Initial Fut: 0 165 202 86 288 1 2 0

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 0.78 0.78 0.78 0.78 0.78 0.78 0.78 0.78

PHF Volume: 0 212 259 110 369 1 3 0

Reduced Vol: 0 0 0 0 0 0 0 0

Reduced Vol: 0 212 259 110 369 1 3 0

PCE Adj: 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

FinalVolume: 0 212 259 110 369 1 3 0

Saturation Flow Module:

Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600

Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Lanes: 1.00 1.00 1.00 1.00 1.99 0.01 0.25 0.00

Final Sat.: 1600 1600 1600 1600 3189 11 400

Capacity Analysis Module:

Vol/Sat: 0.00 0.13 0.16 0.07 0.12 0.12 0.00 0.00

Crit Moves: ****

BROOKSIDE PROJECT
EXISTING CONDITIONS
MD PEAK HOURLevel Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Lemon Ave/La Puente Rd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.464
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 31 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:	Protected	Protected	Protected	Protected	Protected
Rights:	Include	Include	Include	Include	Include
Min. Green:	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	1	0	1

Volume Module:

Base Vol:	109	220	63	95	264	72	74	163	114	92	130	70
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:	109	220	63	95	264	72	74	163	114	92	130	70
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	109	220	63	95	264	72	74	163	114	92	130	70
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:	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
PHF Volume:	135	272	78	117	326	89	91	201	141	114	160	86
Reduced Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	135	272	78	117	326	89	91	201	141	114	160	86
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:	135	272	78	117	326	89	91	201	141	114	160	86

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.55	0.45	1.00	2.00	1.00	1.00	1.18	0.82	1.00	1.30	0.70
Final Sat.:	1600	2488	712	1600	3200	1600	1600	1883	1317	1600	2080	1120

Capacity Analysis Module:

Vol/Sat:	0.08	0.11	0.11	0.07	0.10	0.06	0.11	0.11	0.07	0.08	0.08	0.08
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****

BROOKSIDE PROJECT
EXISTING CONDITIONS
MD PEAK HOURLevel Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Lemon Ave/Valley Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.388
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 28 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:	Protected	Protected	Protected	Protected	Protected
Rights:	Include	Include	Include	Include	Include
Min. Green:	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	1	0	1

Volume Module:

Base Vol:	52	237	52	60	322	129	102	225	0	69	255	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:	52	237	52	60	322	129	102	225	0	69	255	35
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	52	237	52	60	322	129	102	225	0	69	255	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:	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
PHF Volume:	53	242	53	61	329	132	104	230	0	70	260	36
Reduced Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	53	242	53	61	329	132	104	230	0	70	260	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:	53	242	53	61	329	132	104	230	0	70	260	36

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.64	0.36	1.00	2.00	1.00	1.00	3.00	0.00	2.00	1.76	0.24
Final Sat.:	1600	2624	576	1600	3200	1600	1600	4800	0	3200	2814	386

Capacity Analysis Module:

Vol/Sat:	0.03	0.09	0.09	0.04	0.10	0.08	0.07	0.05	0.00	0.02	0.09	0.09
VolAdjV/S:	0.03	0.09	0.09	0.04	0.10	0.08	0.07	0.05	0.00	0.02	0.09	0.09

BROOKSIDE PROJECT
EXISTING CONDITIONS
MD PEAK HOUR

Level Of Service Computation Report

```

Intersection #5 Meadow Pass Rd/Colt Ln
*****
Average Delay (sec/veh):      0.1      Worst Case Level Of Service: Af  9.8J
*****
Approach:      North Bound      South Bound      East Bound      West Bound
Movement:      L - T - R      L - T - R      L - T - R      L - T - R
-----|-----|-----|-----|-----|-----|-----|-----|-----|
Control:      Stop Sign      Stop Sign      Uncontrolled      Uncontrolled
Rights:      Include      Include      Include      Include
Lanes:      0 0 0 0 0 0 0 1! 0 0 0 1 0 0 0 0 0 0 0 1 0

```

Volume Module:												
Base Vol:	0	0	0	1	0	1	1	108	0	0	143	2
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	1	0	1	1	108	0	0	143	2
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	1	0	1	1	108	0	0	143	2
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:	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
PHF Volume:	0	0	0	1	0	1	1	137	0	0	181	3
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	1	0	1	1	137	0	0	181	3

[illegible]

```

Level Of Service Module:
2way95thQ:      xxx xxx xxxxxx 0.0 xxx xxxxxx xxxxxx xxxxxx
Control Del:xxxx xxxxxx xxxxxx 7.6 xxx xxxxxx xxxxxx xxxxxx
LOS by Move:    * * * * * A * * * * *
Movement:      LT - LTR - RT  LT - LTR - RT  LT - LTR - RT  LT - LTR - RT
Shared Cap.:   xxx xxx xxxxxx 759 xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx
SharedQueue:xxxx xxxxxx xxxxxx 0.0 xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx
Shrd ConDel:xxxx xxxxxx xxxxxx 9.8 xxxxxx xxxxxx xxxxxx xxxxxx xxxxxx
Shared LOS:    * * * * * A * * * * *
ApproachDel:   xxxxxx 9.8 xxxxxx xxxxxx
ApproachLOS:   * A *
*****
Note: Queue reported is the number of cars per lane.
*****

```

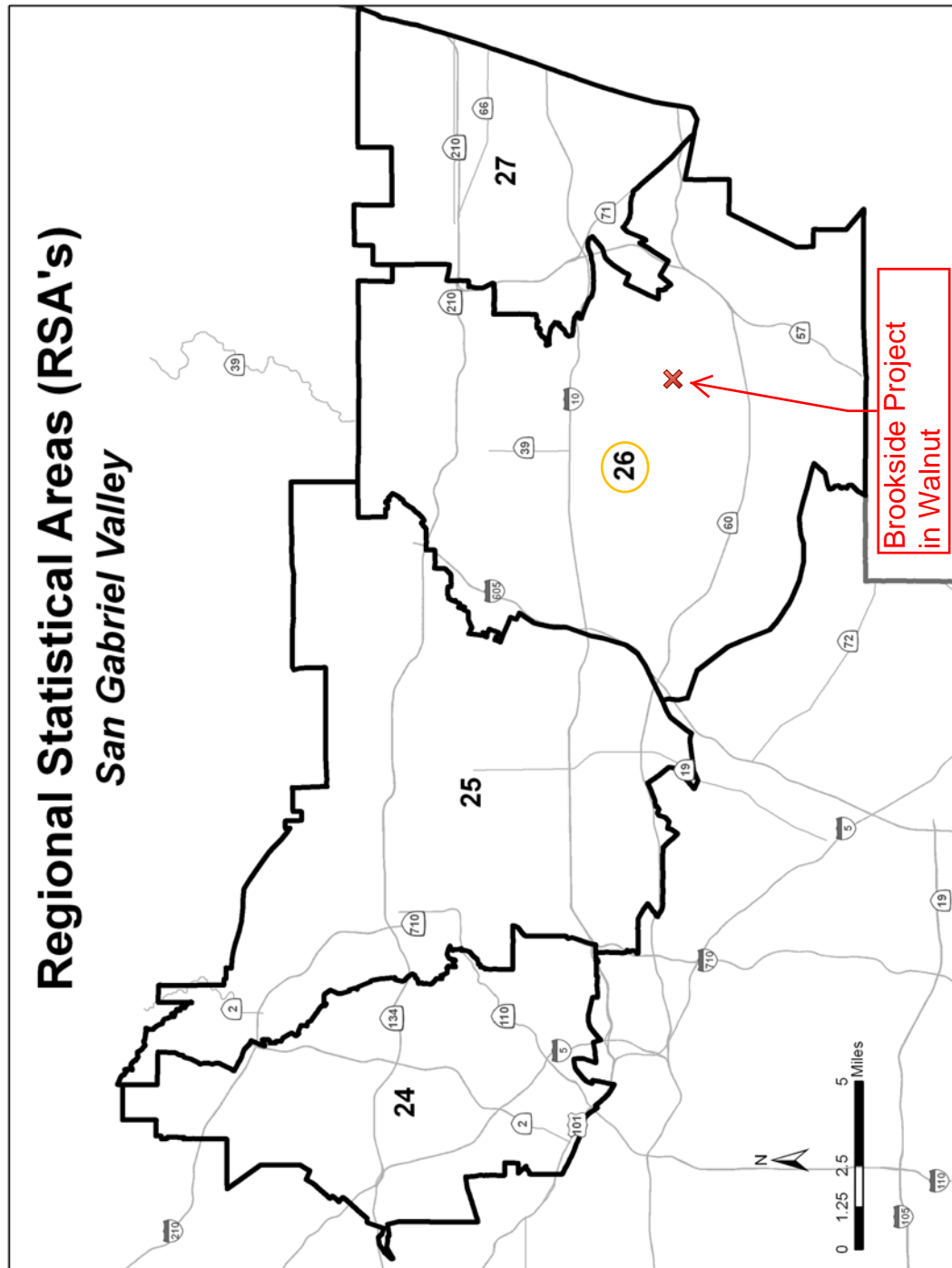
Appendix C – Background Growth Rate

Exhibit D-4
REGIONAL STATISTICAL AREAS

RSA	AREA GENERALLY BOUNDED BY
7	Agoura Hills, Calabasas, Hidden Hills
8	Santa Clarita, Castaic
9	Lancaster, Gorman
10	Palmdale, Agua Dulce
11	Angeles National Forest
12	Woodland Hills, Sherman Oaks, Sepulveda, Porter Ranch
13	Burbank, Sun Valley, North Hollywood
14	San Fernando, Granada Hills, Sylmar, Tujunga
15	Malibu
16	Santa Monica, Bel Air, Palisades, Marina Del Rey
17	Westwood, Beverly Glen, Los Feliz, Hyde Park, Culver City
18	Westchester, Redondo Beach, Gardena, Inglewood
19	Torrance, Palos Verdes, Carson
20	Long Beach, Lakewood
21	Boyle Heights, Montebello, Compton, Willowbrook
22	Paramount, Hawaiian Gardens, Pico Rivera, La Habra Heights
23	Downtown Los Angeles, Exposition Park, MacArthur Park
24	Glendale, Echo Park, El Sereno
25	La Canada-Flintridge, Pasadena, Monterey Park, South El Monte, Duarte
26	Azusa, Glendora, Diamond Bar, Hacienda Heights Brookside
27	San Dimas, Pomona, Claremont

Exhibit D-1
GENERAL TRAFFIC VOLUME GROWTH FACTORS

<u>RSA</u>	<u>Representative City/Place</u>	<u>2010</u>	<u>2015</u>	<u>2020</u>	<u>2025</u>	<u>2030</u>	<u>2035</u>
7	Agoura Hills	1.000	1.020	1.041	1.052	1.063	1.075
8	Santa Clarita	1.000	1.145	1.291	1.348	1.405	1.461
9	Lancaster	1.000	1.214	1.427	1.676	1.924	2.172
10	Palmdale	1.000	1.134	1.267	1.363	1.458	1.553
11	Angeles Forest	1.000	1.151	1.301	1.394	1.487	1.580
12	West S.F. Valley	1.000	1.027	1.054	1.068	1.083	1.097
13	Burbank	1.000	1.024	1.049	1.063	1.077	1.092
14	Sylmar	1.000	1.024	1.049	1.071	1.093	1.114
15	Malibu	1.000	1.027	1.054	1.075	1.096	1.117
16	Santa Monica	1.000	1.014	1.028	1.038	1.049	1.059
17	West/Central L.A.	1.000	1.007	1.014	1.024	1.034	1.044
18	South Bay/LAX	1.000	1.013	1.026	1.035	1.044	1.053
19	Palos Verdes	1.000	1.025	1.051	1.061	1.071	1.081
20	Long Beach	1.000	1.076	1.152	1.160	1.168	1.177
21	Vernon	1.000	1.073	1.146	1.158	1.170	1.182
22	Downey	1.000	1.052	1.104	1.116	1.127	1.139
23	Downtown L.A.	1.000	1.009	1.018	1.030	1.042	1.054
24	Glendale	1.000	1.014	1.027	1.041	1.055	1.068
25	Pasadena	1.000	1.041	1.082	1.098	1.115	1.131
26	West Covina	1.000	1.023	1.046	1.066	1.086	1.106
27	Pomona	1.000	1.081	1.161	1.190	1.219	1.248



Appendix D – Existing Plus Ambient Growth Conditions Intersection Operations Analysis Worksheets

BROOKSIDE PROJECT
EXISTING PLUS AMBIENT GROWTH
AM PEAK HOURLevel Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Lemon Ave/Amar Rd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.749
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 57 Level Of Service: CApproach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - RControl: Split Phase Split Phase Protected Protected
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 1 1 0 0 1 0 1 0 1 0 1 0

Volume Module:

Base Vol: 263 31 124 20 35 28 5 954 293 79 843 12
Growth Adj: 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01
Initial Bse: 266 31 125 20 35 28 5 964 296 80 851 12
Added Vol: 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 266 31 125 20 35 28 5 964 296 80 851 12
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 0.88 0.88 0.88 0.88 0.88 0.88 0.88 0.88 0.88 0.88 0.88
PHF Volume: 302 36 142 23 40 32 6 1095 336 91 968 14
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 302 36 142 23 40 32 6 1095 336 91 968 14
PCE Adj: 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
FinalVolume: 302 36 142 23 40 32 6 1095 336 91 968 14

Saturation Flow Module:

Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.79 0.21 1.00 0.36 0.64 1.00 1.00 1.53 0.47 1.00 1.97 0.03
Final Sat.: 2863 337 1600 582 1018 1600 1600 2448 752 1600 3155 45

Capacity Analysis Module:

Vol/Sat: 0.11 0.11 0.09 0.04 0.04 0.02 0.00 0.45 0.45 0.06 0.31 0.31
Crit Moves: ****
*****BROOKSIDE PROJECT
EXISTING PLUS AMBIENT GROWTH
AM PEAK HOURLevel Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Lemon Ave/Meadown Pass Height-Meadow Pass Rd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.548
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 36 Level Of Service: AApproach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - RControl: Protected Protected Protected Protected
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 1 0 1 1 0 1 0 1 0 0 1 0 1 0 1 0

Volume Module:

Base Vol: 6 580 180 86 771 1 1 2 8 133 2 79
Growth Adj: 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01
Initial Bse: 6 586 182 87 779 1 1 2 8 134 2 80
Added Vol: 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 6 586 182 87 779 1 1 2 8 134 2 80
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 0.86 0.86 0.86 0.86 0.86 0.86 0.86 0.86 0.86 0.86 0.86
PHF Volume: 7 681 211 101 905 1 2 9 156 2 93
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 7 681 211 101 905 1 1 2 9 156 2 93
PCE Adj: 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
FinalVolume: 7 681 211 101 905 1 1 2 9 156 2 93

Saturation Flow Module:

Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.53 0.47 1.00 1.99 0.01 0.09 0.18 0.73 1.00 1.00
Final Sat.: 1600 2442 758 1600 3196 4 145 291 1164 1600 1600

Capacity Analysis Module:

Vol/Sat: 0.00 0.28 0.28 0.06 0.28 0.28 0.00 0.01 0.01 0.10 0.00 0.06
Crit Moves: ****

BROOKSIDE PROJECT
EXISTING PLUS AMBIENT GROWTH
AM PEAK HOUR

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

***** Intersection #5 Meadow Pass Rd/Colt Ln *****

Average Delay (sec/veh): 0.2 Worst Case Level Of Service: B[11.4]

***** Approach: North Bound South Bound East Bound West Bound *****

Movement: L - T - R L - T - R L - T - R L - T - R

Control: Stop Sign Stop Sign Uncontrolled Uncontrolled

Rights: Include Include Include Include

Lanes: 0 0 0 0 0 0 1 0 0 1 0 0 0 0 0 0 1 0

Volume Module:

Base Vol: 0 0 0 3 0 3 3 257 0 0 166 3

Growth Adj: 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01

Initial Bse: 0 0 0 3 0 3 3 260 0 0 168 3

Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0

PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0

Initial Fut: 0 0 0 3 0 3 3 260 0 0 168 3

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: 0.69 0.69 0.69 0.69 0.69 0.69 0.69 0.69 0.69 0.69 0.69 0.69

PHF Volume: 0 0 0 4 0 4 4 376 0 0 243 4

Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0

FinalVolume: 0 0 0 4 0 4 4 376 0 0 243 4

Critical Gap Module:

Critical Gp:xxxxx 6.4 6.5 6.2 4.1 xxxx xxxxx xxxxx xxxxx xxxxx

FollowUpTrm:xxxxx 3.5 4.0 3.3 2.2 xxxx xxxxx xxxxx xxxxx xxxxx

Capacity Module:

Conflict Vol: xxxx xxxx xxxxx 630 245 247 xxxx xxxxx xxxxx xxxxx xxxxx

Potent Cap.: xxxx xxxx xxxxx 449 401 799 1330 xxxx xxxxx xxxxx xxxxx xxxxx

Move Cap.: xxxx xxxx xxxxx 448 400 799 1330 xxxx xxxxx xxxxx xxxxx xxxxx

Volume/Cap: xxxx xxxx xxxxx 0.01 0.00 0.01 0.00 xxxx xxxxx xxxxx xxxxx xxxxx

Level Of Service Module:

2Way95thQ: xxxx xxxx xxxxx xxxxx xxxx xxxxx 0.0 xxxx xxxxx xxxxx xxxxx xxxxx

Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx 7.7 xxxx xxxxx xxxxx xxxxx xxxxx

LOS by Move: * * * * * A * * * * *

Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT

Shared Cap.: xxxx xxxx xxxxx xxxxx 574 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

SharedQueue:xxxxx xxxxx xxxxx 0.0 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

Shrd Conbel:xxxxx xxxx xxxxx 11.4 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx

Shared LOS: * * * * * B * * * * *

ApproachDel: xxxxxx 11.4 xxxxxx xxxxxx

ApproachLOS: * * * * *

***** Queue reported is the number of cars per lane. *****

BROOKSIDE PROJECT
EXISTING PLUS AMBIENT GROWTH
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

***** Intersection #1 Lemon Ave/Amar Rd *****

Cycle (sec): 100 Critical Vol./Cap.(X): 0.676

Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx

Optimal Cycle: 47 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 Split Phase Split Phase

Rights: Include Include Include Include

Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0

Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0

Lanes: 1 1 0 0 1 0 1 0 0 1 1 0 1 0 1 0

Volume Module:

Base Vol: 255 37 166 15 24 14 19 905 167 98 716 27

Growth Adj: 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01

Initial Bse: 258 37 168 15 24 14 19 914 169 99 723 27

Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0

PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0

Initial Fut: 258 37 168 15 24 14 19 914 169 99 723 27

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: 0.92 0.92 0.92 0.92 0.92 0.92 0.92 0.92 0.92 0.92 0.92 0.92

PHF Volume: 280 41 182 16 26 15 21 994 183 108 786 30

Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0

Reduced Vol: 280 41 182 16 26 15 21 994 183 108 786 30

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: 280 41 182 16 26 15 21 994 183 108 786 30

Saturation Flow Module:

Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600

Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Lanes: 1.75 0.25 1.00 0.38 0.62 1.00 1.00 1.00 0.31 1.00 1.93 0.07

Final Sat.: 2795 405 1600 615 985 1600 1600 2701 499 1600 3084 116

Capacity Analysis Module:

Vol/Sat: 0.10 0.10 0.11 0.03 0.03 0.01 0.01 0.37 0.37 0.07 0.25 0.25

Crit Moves: ****

BROOKSIDE PROJECT
EXISTING PLUS AMBIENT GROWTH
PM PEAK HOURLevel Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Lemon Ave/Meadow Pass Height-Meadow Pass Rd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.502
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 33 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 - RControl: Protected Protected Protected Permitted Permitted
Rights: Include Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 1 0 1 0 1 0 1 0 0 0 0 1 1 0 1 0 1

Volume Module:

Base Vol: 2 721 192 24 459 2 0 0 3 112 0 42
Growth Adj: 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01
Initial Bse: 2 728 194 24 464 2 0 0 3 113 0 42
Added Vol: 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 2 728 194 24 464 2 0 0 3 113 0 42
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 0.93 0.93 0.93 0.93 0.93 0.93 0.93 0.93 0.93 0.93 0.93
PHF Volume: 2 783 209 26 498 2 0 0 3 122 0 46
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 2 783 209 26 498 2 0 0 3 122 0 46
PCE Adj: 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
FinalVolume: 2 783 209 26 498 2 0 0 3 122 0 46

Saturation Flow Module:

Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.58 0.42 1.00 1.99 0.01 0.00 0.00 1.00 1.00 1.00
Final Sat.: 1600 2527 673 1600 3186 14 0 0 1600 1600 1600

Capacity Analysis Module:

Vol/Sat: 0.00 0.31 0.31 0.02 0.16 0.16 0.00 0.00 0.00 0.08 0.00 0.03
Crit Moves: ****
*****BROOKSIDE PROJECT
EXISTING PLUS AMBIENT GROWTH
PM PEAK HOURLevel Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Lemon Ave/La Puente Rd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.715
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 52 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 - RControl: Protected Protected Protected Protected Protected
Rights: Include Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 1 0 1 1 0 1 0 2 0 1 1 0 1 0 1 0 1 0

Volume Module:

Base Vol: 306 666 177 137 351 84 104 407 138 85 223 122
Growth Adj: 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01
Initial Bse: 309 673 179 138 355 85 105 411 139 86 225 123
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 309 673 179 138 355 85 105 411 139 86 225 123
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: 0.94 0.94 0.94 0.94 0.94 0.94 0.94 0.94 0.94 0.94 0.94 0.94
PHF Volume: 329 716 190 147 377 90 112 437 148 91 240 131
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 329 716 190 147 377 90 112 437 148 91 240 131
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: 329 716 190 147 377 90 112 437 148 91 240 131

Saturation Flow Module:

Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.58 0.42 1.00 2.00 1.00 1.00 1.49 0.51 1.00 1.29 0.71
Final Sat.: 1600 2528 672 1600 3200 1600 1600 2390 810 1600 2068 1132

Capacity Analysis Module:

Vol/Sat: 0.21 0.28 0.28 0.09 0.12 0.06 0.07 0.18 0.18 0.06 0.12 0.12
Crit Moves: ****

BROOKSIDE PROJECT
EXISTING PLUS AMBIENT GROWTH
MD PEAK HOURLevel Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Lemon Ave/Amar Rd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.336

Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx

Optimal Cycle: 26 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 Include Include Include

Min. Green: 0 0 0 0 0 0 0 0

Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0

Lanes: 1 1 0 0 1 0 1 0 1 0 1 0

Volume Module:

Base Vol: 73 15 49 12 18 15 17 376 81 52 413 10

Growth Adj: 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01

Initial Bse: 74 15 49 12 18 15 17 380 82 53 417 10

Added Vol: 0 0 0 0 0 0 0 0

PasserByVol: 0 0 0 0 0 0 0 0

Initial Fut: 74 15 49 12 18 15 17 380 82 53 417 10

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 0.96 0.96 0.96 0.96 0.96 0.96 0.96 0.96

PHF Volume: 77 16 52 13 19 16 18 396 85 55 435 11

Reduced Vol: 0 0 0 0 0 0 0 0

Reduced Vol: 77 16 52 13 19 16 18 396 85 55 435 11

PCE Adj: 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

FinalVolume: 77 16 52 13 19 16 18 396 85 55 435 11

Saturation Flow Module:

Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600

Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Lanes: 1.66 0.34 1.00 0.40 0.60 1.00 1.65 0.35

Final Sat.: 2655 545 1600 640 960 1600 2633 567

Capacity Analysis Module:

Vol/Sat: 0.03 0.03 0.03 0.02 0.02 0.01 0.01 0.15

Crit Moves: ****

BROOKSIDE PROJECT
EXISTING PLUS AMBIENT GROWTH
MD PEAK HOURLevel Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Lemon Ave/Meadown Pass Height-Meadow Pass Rd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.485

Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx

Optimal Cycle: 33 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: Protected Protected Protected Protected

Rights: Include Include Include Include

Min. Green: 0 0 0 0 0 0 0 0

Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0

Lanes: 1 0 1 1 0 1 0 1 0 0 1 0 1 0 1

Volume Module:

Base Vol: 0 165 202 86 288 1 2 0 6 180 0 83

Growth Adj: 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01

Initial Bse: 0 167 204 87 291 1 2 0 6 182 0 84

Added Vol: 0 0 0 0 0 0 0 0

PasserByVol: 0 0 0 0 0 0 0 0

Initial Fut: 0 167 204 87 291 1 2 0 6 182 0 84

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 0.78 0.78 0.78 0.78 0.78 0.78 0.78 0.78

PHF Volume: 0 214 262 111 373 1 3 0 8 233 0 107

Reduced Vol: 0 0 0 0 0 0 0 0

Reduced Vol: 0 214 262 111 373 1 3 0 8 233 0 107

PCE Adj: 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

FinalVolume: 0 214 262 111 373 1 3 0 8 233 0 107

Saturation Flow Module:

Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600

Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Lanes: 1.00 1.00 1.00 1.00 1.99 0.01 0.25 0.00

Final Sat.: 1600 1600 1600 1600 3189 11 400 0

Capacity Analysis Module:

Vol/Sat: 0.00 0.13 0.16 0.07 0.12 0.12 0.00 0.00

Crit Moves: ****

BROOKSIDE PROJECT
EXISTING PLUS AMBIENT GROWTH
MD PEAK HOUR

Level Of Service Computation Report

ICU 1 (Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Lemon Ave/La Puente Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.467
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	32	Level Of Service:	A

	North Bound		South Bound		East Bound		West Bound	
	L	T	R	L	T	R	L	T
Approach:								
Movement:								

[illegible]

Volume Module:

Base Vol:	109	220	63	95	264	72	74	163	114	92	130	70
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	110	222	64	96	267	73	75	165	115	93	131	71
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	110	222	64	96	267	73	75	165	115	93	131	71
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:	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
PHF Volume:	136	274	79	118	329	90	92	203	142	115	162	87
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	136	274	79	118	329	90	92	203	142	115	162	87
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:	136	274	79	118	329	90	92	203	142	115	162	87

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.55	0.45	1.00	2.00	1.00	1.00	1.18	0.82	1.00
Final Sat.:	1600	2488	712	1600	3200	1600	1600	1893	1317	1600

Capacity Analysis Module:

[illegible]

BROOKSIDE PROJECT
EXISTING PLUS AMBIENT GROWTH
MD PEAK HOUR

[illegible]

Intersection #4 Lemon Ave/Valley Blvd

Cycle (sec):	100	Critical Vol./Cap. (X):	0.391
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	28	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:	Protected	Protected	Protected	Protected
Rights:	Include	Ovl	Include	Include
Min. Green:	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0
Lanes:	1	0	2	1
	0	2	0	2
	1	0	1	0
	0	0	0	0
	4.0	4.0	4.0	4.0
	1	0	2	1
	0	2	0	2
	1	0	1	0
	0	0	0	0
	4.0	4.0	4.0	4.0
	1	0	2	1
	0	2	0	2
	1	0	1	0
	0	0	0	0
	4.0	4.0	4.0	4.0
	1	0	2	1
	0	2	0	2
	1	0	1	0
	0	0	0	0
	4.0	4.0	4.0	4.0
	1	0	2	1
	0	2	0	2
	1	0	1	0
	0	0	0	0
	4.0	4.0	4.0	4.0
	1	0	2	1
	0	2	0	2
	1	0	1	0
	0	0	0	0
	4.0	4.0	4.0	4.0
	1	0	2	1
	0	2	0	2
	1	0	1	0
	0	0	0	0
	4.0	4.0	4.0	4.0
	1	0	2	1
	0	2	0	2
	1	0	1	0
	0	0	0	0
	4.0	4.0	4.0	4.0
	1	0	2	1
	0	2	0	2
	1	0	1	0
	0	0	0	0
	4.0	4.0	4.0	4.0
	1	0	2	1
	0	2	0	2
	1	0	1	0
	0	0	0	0
	4.0	4.0	4.0	4.0
	1	0	2	1
	0	2	0	2
	1	0	1	0
	0	0	0	0
	4.0	4.0	4.0	4.0
	1	0	2	1
	0	2	0	2
	1	0	1	0
	0	0	0	0
	4.0	4.0	4.0	4.0
	1	0	2	1
	0	2	0	2
	1	0	1	0
	0	0	0	0
	4.0	4.0	4.0	4.0
	1	0	2	1
	0	2	0	2
	1	0	1	0
	0	0	0	0
	4.0	4.0	4.0	4.0
	1	0	2	1
	0	2	0	2
	1	0	1	0
	0	0	0	0
	4.0	4.0	4.0	4.0
	1	0	2	1
	0	2	0	2
	1	0	1	0
	0	0	0	0
	4.0	4.0	4.0	4.0
	1	0	2	1
	0	2	0	2
	1	0	1	0
	0	0	0	0
	4.0	4.0	4.0	4.0
	1	0	2	1
	0	2	0	2
	1	0	1	0
	0	0	0	0
	4.0	4.0	4.0	4.0
	1	0	2	1
	0	2	0	2
	1	0	1	0
	0	0	0	0
	4.0	4.0	4.0	4.0
	1	0	2	1
	0	2	0	2
	1	0	1	0
	0	0	0	0
	4.0	4.0	4.0	4.0
	1	0	2	1
	0	2	0	2
	1	0	1	0
	0	0	0	0
	4.0	4.0	4.0	4.0
	1	0	2	1
	0	2	0	2
	1	0	1	0
	0	0	0	0
	4.0	4.0	4.0	4.0
	1	0	2	1
	0	2	0	2
	1	0	1	0
	0	0	0	0
	4.0	4.0	4.0	4.0
	1	0	2	1
	0	2	0	2
	1	0	1	0
	0	0	0	0
	4.0	4.0	4.0	4.0
	1	0	2	1
	0	2	0	2
	1	0	1	0
	0	0	0	0
	4.0	4.0	4.0	4.0
	1	0	2	1
	0	2	0	2
	1	0	1	0
	0	0	0	0
	4.0	4.0	4.0	4.0
	1	0	2	1
	0	2	0	2
	1	0	1	0
	0	0	0	0
	4.0	4.0	4.0	4.0
	1	0	2	1
	0	2	0	2
	1	0	1	0
	0	0	0	0
	4.0	4.0	4.0	4.0
	1	0	2	1
	0	2	0	2
	1	0	1	0
	0	0	0	0
	4.0	4.0	4.0	4.0
	1	0	2	1
	0	2	0	2
	1	0	1	0
	0	0	0	0
	4.0	4.0	4.0	4.0
	1	0	2	1
	0	2	0	2
	1	0	1	0
	0	0	0	0
	4.0	4.0	4.0	4.0
	1	0	2	1
	0	2	0	2
	1	0	1	0
	0	0	0	0
	4.0	4.0	4.0	4.0
	1	0	2	1
	0	2	0	2
	1	0	1	0
	0	0	0	0
	4.0	4.0	4.0	4.0
	1	0	2	1
	0	2	0	2
	1	0	1	0
	0	0	0	0
	4.0	4.0	4.0	4.0
	1	0	2	1
	0	2	0	2
	1	0	1	0
	0	0	0	0
	4.0	4.0	4.0	4.0
	1	0	2	1
	0	2	0	2
	1	0	1	0
	0	0	0	0
	4.0	4.0	4.0	4.0
	1	0	2	1
	0	2	0	2
	1	0	1	0
	0	0	0	0
	4.0	4.0	4.0	4.0
	1	0	2	1
	0	2	0	2
	1	0	1	0
	0	0	0	0
	4.0	4.0	4.0	4.0
	1	0	2	1
	0	2	0	2
	1	0	1	0
	0	0	0	0
	4.0	4.0	4.0	4.0
	1	0	2	1
	0	2	0	2
	1	0	1	0
	0	0	0	0
	4.0	4.0	4.0	4.0
	1	0	2	1
	0	2	0	2
	1	0	1	0
	0	0	0	0
	4.0	4.0	4.0	4.0
	1	0	2	1
	0	2	0	2
	1	0	1	0
	0	0	0	0
	4.0	4.0	4.0	4.0
	1	0	2	1
	0	2	0	2
	1	0	1	0
	0	0	0	0
	4.0	4.0	4.0	4.0
	1	0	2	1
	0	2	0	2
	1	0	1	0
	0	0	0	0
	4.0	4.0	4.0	4.0
	1	0	2	1
	0	2	0	2
	1	0	1	0
	0	0	0	0
	4.0	4.0	4.0	4.0
	1	0	2	1
	0	2	0	2
	1	0	1	0
	0	0	0	0
	4.0	4.0	4.0	4.0
	1	0	2	1
	0	2	0	2
	1	0	1	0
	0	0	0	0
	4.0	4.0	4.0	4.0
	1	0	2	1
	0	2	0	2
	1	0	1	0
	0	0	0	0
	4.0	4.0	4.0	4.0
	1	0	2	1
	0	2	0	2
	1	0	1	0
	0	0	0	0
	4.0	4.0	4.0	4.0
	1	0	2	1
	0	2	0	2
	1	0	1	0
	0	0	0	0
	4.0	4.0	4.0	4.0
	1	0	2	1
	0	2	0	2
	1	0	1	0
	0	0	0	0
	4.0	4.0	4.0	4.0
	1	0	2	1
	0	2	0	2
	1	0	1	0
	0	0	0	0
	4.0	4.0	4.0	4.0
	1	0	2	1
	0	2	0	2
	1	0	1	0
	0	0	0	0
	4.0	4.0	4.0	4.0
	1	0	2	1
	0	2	0	2
	1	0	1	0
	0	0	0	0
	4.0	4.0	4.0	4.0
	1	0	2	1
	0	2	0	2
	1	0	1	0
	0	0	0	0
	4.0	4.0	4.0	4.0
	1	0	2	1
	0	2	0	2
	1	0	1	0
	0	0	0	0
	4.0	4.0	4.0	4.0
	1	0	2	1
	0	2	0	2
	1	0	1	0
	0	0	0	0
	4.0	4.0	4.0	4.0
	1	0	2	1
	0	2	0	2
	1	0	1	0
	0	0	0	0
	4.0	4.0	4.0	4.0
	1	0	2	1
	0	2	0	2
	1	0	1	0
	0	0	0	0
	4.0	4.0	4.0	4.0
	1	0	2	1
	0	2	0	2
	1	0	1	0
	0	0	0	0
	4.0	4.0	4.0	4.0
	1	0	2	1
	0	2	0	2
	1	0	1	0
	0	0	0	0
	4.0	4.0	4.0	4.0
	1	0	2	1
	0	2	0	2
	1	0	1	0
	0	0	0	0
	4.0	4.0	4.0	4.0
	1	0	2	1
	0	2	0	2
	1	0	1	0
	0	0	0	0
	4.0	4.0	4.0	4.0
	1	0	2	1
	0	2	0	2
	1	0	1	0
	0	0	0	0
	4.0	4.0	4.0	4.0
	1	0	2	1
	0	2	0	2
	1	0	1	0
	0	0	0	0
	4.0	4.0	4.0	4.0
	1	0	2	1
	0	2	0	2
	1	0	1	0
	0	0	0	0
	4.0	4.0	4.0	4.0
	1	0	2	1
	0	2	0	2
	1	0	1	0
	0	0	0	0
	4.0	4.0	4.0	4.0
	1	0	2	1
	0	2	0	2
	1	0	1	0
	0	0	0	0
	4.0	4.0	4.0	4.0
	1	0	2	1
	0	2	0	2
	1	0	1	0
	0	0	0	0
	4.0	4.0	4.0	4.0
	1	0	2	1
	0	2	0	2
	1	0	1	0
	0	0	0	0
	4.0	4.0	4.0	4.0
	1	0	2	1
	0	2	0	2
	1	0	1	0
	0	0	0	0
	4.0	4.0	4.0	4.0
	1	0	2	1
	0	2	0	2
	1	0	1	0
	0	0	0	0
	4.0	4.0	4.0	4.0
	1	0	2	1
	0	2	0	2
	1	0	1	0
	0	0	0	0

Volume Module:

[illegible]

Saturation Flow Module:

[illegible]

Capacity Analysis Module:

[illegible]

BROOKSIDE PROJECT
EXISTING PLUS AMBIENT GROWTH
MD PEAK HOUR

Level Of Service Computation Report

```

Intersection #5 Meadow Pass Rd/Colt Ln
*****
Average Delay (sec/veh):      0.1   Worst Case Level Of Service: Af  9.8J
*****
Approach:      North Bound      South Bound      East Bound      West Bound
Movement:      L - T - R      L - T - R      L - T - R      L - T - R
-----|-----|-----|-----|-----|-----|-----|-----|-----|
Control:      Stop Sign      Stop Sign      Uncontrolled      Uncontrolled
Rights:      Include      Include      Include      Include
Lanes:      0 0 0 0 0 0 0 1! 0 0 0 1 0 0 0 0 0 0 1 0

```

Volume Module:												
Base Vol:	0	0	0	1	0	1	1	108	0	0	143	2
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	0	0	0	1	0	1	1	109	0	0	144	2
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	1	0	1	1	109	0	0	144	2
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:	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
PHF Volume:	0	0	0	1	0	1	1	138	0	0	183	3
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	1	0	1	1	138	0	0	183	3

Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxxx
FollowUpTim:xxxxx xxxx xxxxxx
6.4 6.5 6.2 4.1 xxxxx xxxxxx xxxxxx xxxx xxxxxx
3.5 4.0 3.3 2.2 xxxxx xxxxxx xxxxxx xxxx xxxxxx
Capacity Module:
Conflict Vol: xxxxx xxxxxx xxxxxx
Potent Cap.: xxxxx xxxxx xxxxxx
Move Cap.: xxxxx xxxxx xxxxxx
Volume/Cap: xxxxx xxxxx xxxxx
325 325 184 185 xxxxx xxxxxx xxxxxx xxxxxx xxxxxx
673 596 863 1401 xxxxx xxxxxx xxxxxx xxxxxx xxxxxx
673 596 863 1401 xxxxx xxxxxx xxxxxx xxxxxx xxxxxx
0.00 0.00 0.00 0.00 xxxxx xxxxx xxxxx xxxxx xxxxx

```

Level Of Service Module:
2way95thQ:      xxx xxx xxxxxx 0.0 xxx xxxxxx xxxxxx xxxxxx
Control Del:xxxxx xxxxxx xxxxxx 7.6 xxx xxxxxx xxxxxx xxxxxx
LOS by Move:    * * * * * A * * * * *
Movement:      LT - LTR - RT  LT - LTR - RT  LT - LTR - RT  LT - LTR - RT
Shared Cap.:   xxx xxx xxxxxx xxx 756 xxxxxx xxxxxx xxxxxx xxxxxx
SharedQueue:xxxxx xxxxxx xxxxxx 0.0 xxxxxx xxxxxx xxxxxx xxxxxx
Shrd ConDel:xxxxx xxxxxx xxxxxx 9.8 xxxxxx xxxxxx xxxxxx xxxxxx
Shared LOS:    * * * * * A * * * * *
ApproachDel:  xxxxxx 9.8 xxxxxx xxxxxx
ApproachLOS:  * A *
*****
Note: Queue reported is the number of cars per lane.
*****

```

Appendix E – Existing Plus Ambient Growth With Project Conditions Intersection Operations Analysis Worksheets

BROOKSIDE PROJECT
EXISTING PLUS AMBIENT GROWTH WITH PROJECT
AM PEAK HOURLevel Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Lemon Ave/Amar Rd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.751

Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx

Optimal Cycle: 57 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: Split Phase Split Phase Protected Protected

Rights: Include Include Include Include

Min. Green: 0 0 0 0 0 0 0 0

Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0

Lanes: 1 1 0 1 0 1 0 1

Volume Module:

Base Vol: 263 31 124 20 35 28 5 954

Growth Adj: 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01

Initial Bse: 266 31 125 20 35 28 5 964

Added Vol: 4 0 0 0 0 0 0 0

PasserByVol: 0 0 0 0 0 0 0 0

Initial Fut: 270 31 125 20 35 28 5 964

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 0.88 0.88 0.88 0.88 0.88 0.88 0.88 0.88

PHF Volume: 306 36 142 23 40 32 6 1095

Reduced Vol: 0 0 0 0 0 0 0 0

Reduced Vol: 306 36 142 23 40 32 6 1095

PCE Adj: 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

FinalVolume: 306 36 142 23 40 32 6 1095

Saturation Flow Module:

Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600

Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Lanes: 1.79 0.21 1.00 0.36 0.64 1.00 1.00 1.53

Final Sat.: 2867 333 1600 582 1018 1600 1600 2446

Capacity Analysis Module:

Vol/Sat: 0.11 0.11 0.09 0.04 0.04 0.02 0.00 0.45

Crit Moves: ****

BROOKSIDE PROJECT
EXISTING PLUS AMBIENT GROWTH WITH PROJECT
AM PEAK HOURLevel Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Lemon Ave/Meadown Pass Height-Meadow Pass Rd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.557

Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx

Optimal Cycle: 37 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: Protected Protected Protected Protected

Rights: Include Include Include Include

Min. Green: 0 0 0 0 0 0 0 0

Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0

Lanes: 1 0 1 1 0 1 0 1

Volume Module:

Base Vol: 6 580 180 86 771

Growth Adj: 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01

Initial Bse: 6 586 182 87 779

Added Vol: 0 0 3 1 0 0 0 0

PasserByVol: 0 0 0 0 0 0 0 0

Initial Fut: 6 586 185 88 779

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 0.86 0.86 0.86 0.86 0.86 0.86 0.86 0.86

PHF Volume: 7 681 215 102 905

Reduced Vol: 0 0 0 0 0 0 0 0

Reduced Vol: 7 681 215 102 905

PCE Adj: 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

FinalVolume: 7 681 215 102 905

Saturation Flow Module:

Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600

Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Lanes: 1.00 1.52 0.48 1.00 1.99 0.01 0.09 0.18

Final Sat.: 1600 2433 767 1600 3196

Capacity Analysis Module:

Vol/Sat: 0.00 0.28 0.28 0.06 0.28 0.00 0.01 0.01

Crit Moves: ****

BROOKSIDE PROJECT
EXISTING PLUS AMBIENT GROWTH WITH PROJECT
AM PEAK HOURLevel Of Service Computation Report
ICU 1 (Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Lemon Ave/La Puente Rd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.853

Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx

Optimal Cycle: 81 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 Protected Protected Protected Protected

Rights: Include Include Include Include Include Include Include Include

Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0

Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0

Lanes: 1 0 1 0 1 0 2 0 1 1 0 1 0 1 0 1 0

Volume Module:

Base Vol: 164 411 92 253 557 96 146 381 231 201 297 205

Growth Adj: 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01

Initial Bse: 166 415 93 256 563 97 147 385 233 203 300 207

Added Vol: 0 3 0 1 8 2 1 0 0 0 0 0

PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0

Initial Fut: 166 418 93 257 571 99 148 385 233 203 300 207

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: 0.85 0.85 0.85 0.85 0.85 0.85 0.85 0.85 0.85 0.85 0.85 0.85

PHF Volume: 195 492 109 302 671 116 175 453 274 239 353 244

Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0

Reduced Vol: 195 492 109 302 671 116 175 453 274 239 353 244

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: 195 492 109 302 671 116 175 453 274 239 353 244

OvlAdjVol: 195 492 109 302 671 116 175 453 274 239 353 244

Saturation Flow Module:

Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600

Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Lanes: 1.00 1.64 0.36 1.00 2.00 1.00 1.00 1.25 0.75 1.00 1.18 0.82

Final Sat.: 1600 2618 582 1600 3200 1600 1600 1992 1208 1600 1893 1307

Capacity Analysis Module:

Vol/Sat: 0.12 0.19 0.19 0.19 0.21 0.07 0.11 0.23 0.23 0.15 0.19 0.19

Crit Moves: ****

OvlAdjV/S: ****

Crit Moves: ****

BROOKSIDE PROJECT
EXISTING PLUS AMBIENT GROWTH WITH PROJECT
AM PEAK HOURLevel Of Service Computation Report
ICU 1 (Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Lemon Ave/Valley Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.889

Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx

Optimal Cycle: 95 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 Protected Protected Protected Protected

Rights: Include Include Include Include Include Include Include Include

Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0

Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0

Lanes: 1 0 1 0 1 0 2 0 1 1 0 2 1 0 2 0 1 0

Volume Module:

Base Vol: 153 446 144 98 706 226 111 549 189 216 1109 52

Growth Adj: 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01

Initial Bse: 155 450 145 99 713 228 112 554 191 218 1120 53

Added Vol: 0 1 0 2 3 3 1 0 0 0 0 0

PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0

Initial Fut: 155 451 145 101 716 231 113 554 191 218 1120 54

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: 0.96 0.96 0.96 0.96 0.96 0.96 0.96 0.96 0.96 0.96 0.96 0.96

PHF Volume: 161 470 152 105 746 241 118 578 199 227 1167 56

Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0

Reduced Vol: 161 470 152 105 746 241 118 578 199 227 1167 56

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: 161 470 152 105 746 241 118 578 199 227 1167 56

OvlAdjVol: 161 470 152 105 746 241 118 578 199 227 1167 56

Saturation Flow Module:

Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600

Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Lanes: 1.00 1.51 0.49 1.00 2.00 1.00 1.00 2.23 0.77 2.00 1.91 0.09

Final Sat.: 1600 2420 780 1600 3200 1600 1600 3571 1229 3200 3054 146

Capacity Analysis Module:

Vol/Sat: 0.10 0.19 0.19 0.07 0.23 0.15 0.07 0.16 0.16 0.07 0.38 0.38

OvlAdjV/S: ****

Crit Moves: ****

BROOKSIDE PROJECT
EXISTING PLUS AMBIENT GROWTH WITH PROJECT
AM PEAK HOUR

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

***** Intersection #5 Meadow Pass Rd/Colt Ln *****

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: B[14.3]

***** Approach: North Bound South Bound East Bound West Bound *****

Movement: L - T - R L - T - R L - T - R L - T - R

Control: Stop Sign Stop Sign Uncontrolled Uncontrolled

Rights: Include Include Include Include

Lanes: 0 0 1 0 0 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0

Volume Module:

Base Vol: 0 0 0 3 0 3 3 257 0 0 166 3

Growth Adj: 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01

Initial Bse: 0 0 0 3 0 3 3 260 0 0 168 3

Added Vol: 14 0 2 0 0 0 0 0 0 5 1 0 0

PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0

Initial Fut: 14 0 2 3 0 3 3 260 5 1 168 3

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: 0.69 0.69 0.69 0.69 0.69 0.69 0.69 0.69 0.69 0.69 0.69 0.69

PHF Volume: 20 0 3 4 0 4 4 376 7 1 243 4

Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0

FinalVolume: 20 0 3 4 0 4 4 376 7 1 243 4

Critical Gap Module:

Critical Gp: 7.1 6.5 6.2 7.1 6.5 6.2 4.1 xxxxx xxxxx 4.1 xxxxx xxxxx

FollowUpTrm: 3.5 4.0 3.3 3.5 4.0 3.3 2.2 xxxxx xxxxx 2.2 xxxxx xxxxx

Capacity Module:

Conflict Vol: 639 639 380 638 640 245 247 xxxxx xxxxx 383 xxxxx xxxxx

Potent Cap.: 392 397 672 392 396 799 1330 xxxxx xxxxx 1186 xxxxx xxxxx

Move Cap.: 388 395 672 389 394 799 1330 xxxxx xxxxx 1186 xxxxx xxxxx

Volume/Cap: 0.05 0.00 0.00 0.01 0.00 0.01 0.00 xxxxx xxxxx 0.00 xxxxx xxxxx

Level Of Service Module:

2Way95thQ: xxxxx xxxxx xxxxx xxxxx xxxxx 0.0 xxxxx xxxxx 0.0 xxxxx xxxxx

Control Del: xxxxx xxxxx xxxxx xxxxx xxxxx 7.7 xxxxx xxxxx 8.0 xxxxx xxxxx

LOS by Move: * * * * * A * * A * *

Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT

Shared Cap.: xxxxx 410 xxxxx xxxxx 523 xxxxx xxxxx xxxxx xxxxx xxxxx

SharedQueue: xxxxx 0.2 xxxxx xxxxx 0.1 xxxxx xxxxx xxxxx xxxxx xxxxx

Shrd Conbel: xxxxx 14.3 xxxxx xxxxx 12.0 xxxxx xxxxx xxxxx xxxxx xxxxx

Shared LOS: * B * * * * * * * * *

ApproachDel: 14.3 12.0 xxxxxx xxxxxx

ApproachLOS: B B * *

***** Queue reported is the number of cars per lane. *****

BROOKSIDE PROJECT
EXISTING PLUS AMBIENT GROWTH WITH PROJECT
PM PEAK HOUR

Level Of Service Computation Report
ICU 1 (Loss as Cycle Length %) Method (Future Volume Alternative)

***** Intersection #1 Lemon Ave/Amar Rd *****

Cycle (sec): 100 Critical Vol./Cap.(X): 0.677

Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx

Optimal Cycle: 47 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 Include Include Include

Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0

Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0

Lanes: 1 1 0 0 1 0 1 0 0 1 0 1

Volume Module:

Base Vol: 255 37 166 15 24 14 19 905 167 98 716 27

Growth Adj: 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01

Initial Bse: 258 37 168 15 24 14 19 914 169 99 723 27

Added Vol: 3 0 0 0 0 0 0 0 0 5 0 0

PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0

Initial Fut: 261 37 168 15 24 14 19 914 174 99 723 27

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 0.92 0.92 0.92 0.92 0.92 0.92 0.92 0.92 0.92 0.92 0.92

PHF Volume: 283 41 182 16 26 15 21 994 189 108 786 30

Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0

Reduced Vol: 283 41 182 16 26 15 21 994 189 108 786 30

PCE Adj: 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

FinalVolume: 283 41 182 16 26 15 21 994 189 108 786 30

Saturation Flow Module:

Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600

Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Lanes: 1.75 0.25 1.00 0.38 0.62 1.00 1.00 1.00 0.32 1.00 1.93 0.07

Final Sat.: 2799 401 1600 615 985 1600 1600 2689 511 1600 3084 116

Capacity Analysis Module:

Vol/Sat: 0.10 0.10 0.11 0.03 0.03 0.01 0.01 0.37 0.37 0.07 0.25

Crit Moves: ****

BROOKSIDE PROJECT
EXISTING PLUS AMBIENT GROWTH WITH PROJECT
PM PEAK HOURLevel Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Lemon Ave/Meadown Pass Height-Meadow Pass Rd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.514

Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx

Optimal Cycle: 34 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: Protected Protected Protected Permitted Permitted Permitted

Rights: Include Include Include Include Include Include

Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0

Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0

Lanes: 1 0 1 0 1 0 1 0 0 0 0 1 1 0 1 0 1

Volume Module:

Base Vol: 2 721 192 24 459 2 0 0 3 112 0 42

Growth Adj: 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01

Initial Bse: 2 728 194 24 464 2 0 0 3 113 0 42

Added Vol: 0 0 12 5 0 0 0 0 0 7 0 3

PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0

Initial Fut: 2 728 206 29 464 2 0 0 3 120 0 45

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 0.93 0.93 0.93 0.93 0.93 0.93 0.93 0.93 0.93 0.93 0.93

PHF Volume: 2 783 221 31 498 2 0 0 3 129 0 49

Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0

Reduced Vol: 2 783 221 31 498 2 0 0 3 129 0 49

PCE Adj: 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

FinalVolume: 2 783 221 31 498 2 0 0 3 129 0 49

Saturation Flow Module:

Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600

Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Lanes: 1.00 1.56 0.44 1.00 1.99 0.01 0.00 0.00 1.00 1.00 1.00

Final Sat.: 1600 2495 705 1600 3186 14 0 0 1600 1600 1600

Capacity Analysis Module:

Vol/Sat: 0.00 0.31 0.31 0.02 0.16 0.16 0.00 0.00 0.00 0.08 0.00 0.03

Crit Moves: ****

BROOKSIDE PROJECT
EXISTING PLUS AMBIENT GROWTH WITH PROJECT
PM PEAK HOURLevel Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Lemon Ave/La Puente Rd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.719

Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx

Optimal Cycle: 52 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 Protected

Rights: Include Include Include Include Include

Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0

Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0

Lanes: 1 0 1 0 1 0 2 0 1 1 0 1 0 1 0 1 0

Volume Module:

Base Vol: 306 666 177 137 351 84 104 407 138 85 223 122

Growth Adj: 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01

Initial Bse: 309 673 179 138 355 85 105 411 139 86 225 123

Added Vol: 0 9 0 1 5 1 2 0 0 0 0 1

PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0

Initial Fut: 309 682 179 139 360 86 107 411 139 86 225 124

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 0.94 0.94 0.94 0.94 0.94 0.94 0.94 0.94 0.94 0.94 0.94

PHF Volume: 329 725 190 148 382 91 114 437 148 91 240 132

Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0

Reduced Vol: 329 725 190 148 382 91 114 437 148 91 240 132

PCE Adj: 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

FinalVolume: 329 725 190 148 382 91 114 437 148 91 240 132

Saturation Flow Module:

Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600

Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Lanes: 1.00 1.58 0.42 1.00 2.00 1.00 1.00 1.49 0.51 1.00 1.29 0.71

Final Sat.: 1600 2535 665 1600 3200 1600 1600 2390 810 1600 2062 1138

Capacity Analysis Module:

Vol/Sat: 0.21 0.29 0.29 0.09 0.12 0.06 0.07 0.18 0.18 0.06 0.12 0.12

Crit Moves: ****

BROOKSIDE PROJECT
EXISTING PLUS AMBIENT GROWTH WITH PROJECT
PM PEAK HOURLevel Of Service Computation Report
ICU 1 (Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Lemon Ave/Valley Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.852

Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx

Optimal Cycle: 81 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 Protected Protected Protected Protected

Rights: Include Include Include Include Include Include Include Include

Min. Green: 0 0 0 0 0 0 0 0

Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0

Lanes: 1 0 1 0 1 0 2 0 1 0 2 1 0 2 0 1 0

Volume Module:

Base Vol: 162 617 214 110 526 151 197 1075 215 342 717 157

Growth Adj: 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01

Initial Bse: 164 623 216 111 531 153 199 1086 217 345 724 159

Added Vol: 0 4 0 1 2 2 4 0 0 0 0 0

PasserByVol: 0 0 0 0 0 0 0 0

Initial Fut: 164 627 216 112 533 155 203 1086 217 345 724 161

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 0.98 0.98 0.98 0.98 0.98 0.98 0.98 0.98

PHF Volume: 167 640 221 114 544 158 207 1108 222 352 739 164

Reduced Vol: 0 0 0 0 0 0 0 0

Reduced Vol: 167 640 221 114 544 158 207 1108 222 352 739 164

PCE Adj: 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

FinalVolume: 167 640 221 114 544 158 207 1108 222 352 739 164

OvlAdjVol: 0 0 0 0 0 0 0 0

Saturation Flow Module:

Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600

Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Lanes: 1.00 1.49 0.51 1.00 2.00 1.00 1.00 2.50

Final Sat: 1600 2380 820 1600 3200 1600 1600 4000

Capacity Analysis Module:

Vol/Sat: 0.10 0.27 0.27 0.07 0.17 0.10 0.13 0.28

OvlAdjV/S: 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00

Crit Moves: ****

BROOKSIDE PROJECT
EXISTING PLUS AMBIENT GROWTH WITH PROJECT
PM PEAK HOURLevel Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #5 Meadow Pass Rd/Colt Ln

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: B[11.3]

Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R

Control: Stop Sign Stop Sign Stop Sign Stop Sign

Rights: Include Include Include Include

Lanes: 0 0 1 0 0 0 0 1 0 0 1 0 0 1 0 0 1 0

Volume Module:

Base Vol: 0 0 0 3 0 1 3 195 0 0 143 4

Growth Adj: 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01

Initial Bse: 0 0 0 3 0 1 3 197 0 0 144 4

Added Vol: 9 0 1 0 0 0 0 0

PasserByVol: 0 0 0 0 0 0 0 0

Initial Fut: 9 0 1 3 0 1 3 197 16 2 144 4

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 0.91 0.91 0.91 0.91 0.91 0.91 0.91 0.91

PHF Volume: 10 0 1 3 0 1 3 216 18 2 159 4

Reduced Vol: 0 0 0 0 0 0 0 0

FinalVolume: 10 0 1 3 0 1 3 216 18 2 159 4

Critical Gap Module:

Critical Gap: 7.1 6.5 6.2 7.1 6.5 6.2 4.1 xxxxx xxxxx 4.1 xxxxx xxxxx

FollowUpTrim: 3.5 4.0 3.3 3.5 4.0 3.3 2.2 xxxxx xxxxx 2.2 xxxxx xxxxx

Capacity Module:

Conflict Vol: 398 399 225 398 406 161 163 xxxxx xxxxx 234 xxxxx xxxxx

Potent Cap.: 566 542 819 566 537 889 1428 xxxxx xxxxx 1345 xxxxx xxxxx

Move Cap.: 564 540 819 564 535 889 1428 xxxxx xxxxx 1345 xxxxx xxxxx

Volume/Cap: 0.02 0.00 0.00 0.01 0.00 0.00 0.00 xxxxx xxxxx 0.00 xxxxx xxxxx

Level Of Service Module:

2Way95thQ: xxxxx xxxxx xxxxx xxxxx xxxxx 0.0 xxxxx xxxxx 0.0 xxxxx xxxxx

Control Del:xxxxx xxxxx xxxxx xxxxx xxxxx 7.5 xxxxx xxxxx 7.7 xxxxx xxxxx

LOS by Move: * * * * * A * A * A *

Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT

Shared Cap.: xxxxx 582 xxxxx xxxxx 620 xxxxx xxxxx xxxxx xxxxx xxxxx

SharedQueue:xxxxx 0.1 xxxxx xxxxx 0.0 xxxxx xxxxx xxxxx xxxxx xxxxx

Shrd Conbel:xxxxx 11.3 xxxxx xxxxx 10.8 xxxxx xxxxx xxxxx xxxxx xxxxx

Shared LOS: * B * * * * * * *

ApproachDel: 11.3 10.8 xxxxxx xxxxxx * xxxxxx

ApproachLOS: B B * * * * *

BROOKSIDE PROJECT
EXISTING PLUS AMBIENT GROWTH WITH PROJECT
PM PEAK HOURLevel Of Service Computation Report
ICU 1 (Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Lemon Ave/Valley Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.852

Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx

Optimal Cycle: 81 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 Protected Protected Protected Protected

Rights: Include Include Include Include Include Include Include Include

Min. Green: 0 0 0 0 0 0 0 0

Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0

Lanes: 1 0 1 0 1 0 2 0 1 0 2 0 1 0

Volume Module:

Base Vol: 162 617 214 110 526 151 197 1075 215 342 717 157

Growth Adj: 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01

Initial Bse: 164 623 216 111 531 153 199 1086 217 345 724 159

Added Vol: 0 4 0 1 2 2 4 0 0 0 0 0

PasserByVol: 0 0 0 0 0 0 0 0

Initial Fut: 164 627 216 112 533 155 203 1086 217 345 724 161

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 0.98 0.98 0.98 0.98 0.98 0.98 0.98 0.98

PHF Volume: 167 640 221 114 544 158 207 1108 222 352 739 164

Reduced Vol: 0 0 0 0 0 0 0 0

Reduced Vol: 167 640 221 114 544 158 207 1108 222 352 739 164

PCE Adj: 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

FinalVolume: 167 640 221 114 544 158 207 1108 222 352 739 164

OvlAdjVol: 0 0 0 0 0 0 0 0

Saturation Flow Module:

Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600

Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Lanes: 1.00 1.49 0.51 1.00 2.00 1.00 1.00 2.50

Final Sat: 1600 2380 820 1600 3200 1600 1600 4000

Capacity Analysis Module:

Vol/Sat: 0.10 0.27 0.27 0.07 0.17 0.10 0.13 0.28

OvlAdjV/S: 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00

Crit Moves: ****

BROOKSIDE PROJECT
EXISTING PLUS AMBIENT GROWTH WITH PROJECT
MD PEAK HOURLevel Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Lemon Ave/Amar Rd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.337

Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx

Optimal Cycle: 26 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 Include Include Include

Min. Green: 0 0 0 0 0 0 0 0

Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0

Lanes: 1 1 0 0 1 0 1 0 1 0 1 0 1 0

Volume Module:

Base Vol: 73 15 49 12 18 15 17 376 81 52 413 10

Growth Adj: 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01

Initial Bse: 74 15 49 12 18 15 17 380 82 53 417 10

Added Vol: 3 0 0 0 0 0 0 0 3 0 0 0

PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0

Initial Fut: 77 15 49 12 18 15 17 380 85 53 417 10

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 0.96 0.96 0.96 0.96 0.96 0.96 0.96 0.96

PHF Volume: 80 16 52 13 19 16 18 396 88 55 435 11

Reduced Vol: 0 0 0 0 0 0 0 0

Reduced Vol: 80 16 52 13 19 16 18 396 88 55 435 11

PCE Adj: 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

FinalVolume: 80 16 52 13 19 16 18 396 88 55 435 11

Saturation Flow Module:

Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600

Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Lanes: 1.67 0.33 1.00 0.40 0.60 1.00 1.00 1.00

Final Sat.: 2672 528 1600 640 960 1600 2616 584

Capacity Analysis Module:

Vol/Sat: 0.03 0.03 0.03 0.02 0.02 0.01 0.01 0.15

Crit Moves: ****

BROOKSIDE PROJECT
EXISTING PLUS AMBIENT GROWTH WITH PROJECT
MD PEAK HOURLevel Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Lemon Ave/Meadown Pass Height-Meadow Pass Rd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.500

Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx

Optimal Cycle: 33 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: Protected Protected Protected Protected

Rights: Include Include Include Include

Min. Green: 0 0 0 0 0 0 0 0

Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0

Lanes: 1 0 1 1 0 1 0 1 0 0 1 0 1 0 1

Volume Module:

Base Vol: 0 165 202 86 288 1 2 0 6 180 0 83

Growth Adj: 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01

Initial Bse: 0 167 204 87 291 1 2 0 6 182 0 84

Added Vol: 0 0 8 3 0 0 0 0 0 0 0 0

PasserByVol: 0 0 0 0 0 0 0 0

Initial Fut: 0 167 212 90 291 1 2 0 6 189 0 87

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 0.78 0.78 0.78 0.78 0.78 0.78 0.78 0.78

PHF Volume: 0 214 272 115 373 1 3 0 8 242 0 111

Reduced Vol: 0 0 0 0 0 0 0 0

Reduced Vol: 0 214 272 115 373 1 3 0 8 242 0 111

PCE Adj: 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

FinalVolume: 0 214 272 115 373 1 3 0 8 242 0 111

Saturation Flow Module:

Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600

Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Lanes: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Final Sat.: 1600 1600 1600 1600 1600 1600 1600 1600

Capacity Analysis Module:

Vol/Sat: 0.00 0.13 0.17 0.07 0.12 0.12 0.00 0.00

Crit Moves: ****

EXISTING PLUS AMBIENT GROWTH WITH PROJECT MD PEAK HOUR	BROOKSIDE PROJECT EXISTING PLUS AMBIENT GROWTH WITH PROJECT MD PEAK HOUR
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
14	14
15	15
16	16
17	17
18	18
19	19
20	20
21	21
22	22
23	23
24	24
25	25
26	26
27	27
28	28
29	29
30	30
31	31
32	32
33	33
34	34
35	35
36	36
37	37
38	38
39	39
40	40
41	41
42	42
43	43
44	44
45	45
46	46
47	47
48	48
49	49
50	50
51	51
52	52
53	53
54	54
55	55
56	56
57	57
58	58
59	59
60	60
61	61
62	62
63	63
64	64
65	65
66	66
67	67
68	68
69	69
70	70
71	71
72	72
73	73
74	74
75	75
76	76
77	77
78	78
79	79
80	80
81	81
82	82
83	83
84	84
85	85
86	86
87	87
88	88
89	89
90	90
91	91
92	92
93	93
94	94
95	95
96	96
97	97
98	98
99	99
100	100

Level Of Service Computation Report

ICU 1 (Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Lemon Ave/La Puente Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.470
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	32	Level Of Service:	A

	North Bound		South Bound		East Bound		West Bound	
Approach:	L	- T - R	L	- T - R	L	- T - R	L	- T - R
Movement:								

	Control:	Protected	Protected	Protected	Protected
	Rights:	Include	Include	Include	Include
Min. Green:	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	1	0	1

Volume Module:

Base Vol:	109	220	63	95	264	72	74	163	114	92	130	70
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	110	222	64	96	267	73	75	165	115	93	131	71
Added Vol:	0	7	0	1	6	1	1	0	0	0	0	1
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	110	229	64	97	273	74	76	165	115	93	131	72
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:	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
PHF Volume:	136	283	79	120	337	91	94	203	142	115	162	89
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	136	283	79	120	337	91	94	203	142	115	162	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:	136	283	79	120	337	91	94	203	142	115	162	89

Saturation Flow Module:

[illegible]

Capacity Analysis Module:

```

vol/Sat:      0.08 0.11 0.11 0.07 0.11 0.06 0.06 0.11 0.11 0.07 0.08 0.08
Crit Moves:   *****
*****

```

BROOKSIDE PROJECT
EXISTING PLUS AMBIENT GROWTH WITH PROJECT
MD PEAK HOUR

Level Of Service Computation Report

ICU 1 (Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Lemon Ave/Valley Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.395
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	28	Level Of Service:	A

	North Bound		South Bound		East Bound		West Bound	
Approach:	L	T	R	L	T	R	L	T
Movement:								

	Control:	Protected	Protected	Protected	Protected	Protected
Rights:		Include	Ovl		Include	Include
Min. Green:	0	0	0	0	0	0
yR:	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	1	0	2	1
		1	0	2	1	0
		0	0	0	0	0
		4.0	4.0	4.0	4.0	4.0
		1	0	2	1	0

Volume Module:

[illegible]

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.64	0.36	1.00	2.00	1.00	1.00	3.00	0.00	2.00
Final Sat.:	1600	2630	570	1600	3200	1600	1600	4800	0	3200

Capacity Analysis Module:

	0.03	0.09	0.09	0.04	0.10	0.08	0.07	0.05	0.00	0.02	0.09	0.09
Vol/Sat:												
OvlAdjV/S:												
Crit Moves:	****	****	****	****	****	0.02	****	****	****	****	****	****

BROOKSIDE PROJECT
EXISTING PLUS AMBIENT GROWTH WITH PROJECT
MD PEAK HOURLevel Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

***** Intersection #5 Meadow Pass Rd/Colt Ln *****

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: B[10.8]

***** Approach: North Bound South Bound East Bound West Bound *****

Movement: L - T - R L - T - R L - T - R L - T - R

Control: Stop Sign Stop Sign Uncontrolled Uncontrolled

Rights: Include Include Include Include

Lanes: 0 0 1! 0 0 0 0 1! 0 0 1 0 0 1 0 1 0 0 1 0

Volume Module:

Base Vol:	0	0	0	1	0	1	1	108	0	0	143	2
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	0	0	0	1	0	1	1	109	0	0	144	2
Added Vol:	10	0	1	0	0	0	0	0	12	1	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	10	0	1	1	0	1	1	109	12	1	144	2
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:	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
PHF Volume:	13	0	1	1	0	1	1	138	15	1	183	3
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	13	0	1	1	0	1	1	138	15	1	183	3

Critical Gap Module:

Critical Gp:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUptim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx

Capacity Module:

Cnflct Vol:	336	336	146	335	342	184	185	xxxx	xxxxx	153	xxxx	xxxxx
Potent Cap.:	622	588	907	622	583	863	1401	xxxx	xxxxx	1440	xxxx	xxxxx
Move Cap.:	620	587	907	620	582	863	1401	xxxx	xxxxx	1440	xxxx	xxxxx
Volume/Cap:	0.02	0.00	0.00	0.00	0.00	0.00	0.00	xxxx	xxxxx	0.00	xxxx	xxxxx

Level Of Service Module:

2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.6	xxxx	xxxxx	7.5	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*
Movement:	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT
Shared Cap.:	xxxx	639	xxxxx	xxxx	722	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.1	xxxxx	xxxxx	0.0	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	10.8	xxxxx	xxxxx	10.0	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	B	*	B	*	B	*	*	*	*	*	*	*
ApproachDel:	10.8	10.8	10.0	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx
ApproachLOS:	B	B	B	*	*	*	*	*	*	*	*	*

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

Appendix F – Existing Plus Ambient Growth Plus Cumulative With Project Conditions Intersection Operations Analysis Worksheets

BROOKSIDE PROJECT
EXISTING PLUS AMBIENT GROWTH PLUS CUMULATIVE WITH PROJECT
AM PEAK HOURLevel Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Lemon Ave/Amar Rd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.755
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 58 Level Of Service: CApproach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - RControl: Split Phase Split Phase Protected Protected
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 1 1 0 0 1 0 1 0 1 0 1 0 1 0

Volume Module:

Base Vol: 263 31 124 20 35 28 5 954 293 79 843 12
Growth Adj: 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01
Initial Bse: 266 31 125 20 35 28 5 964 296 80 851 12
Added Vol: 4 0 1 0 0 0 3 1 4 7 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 270 31 126 20 35 28 5 967 297 84 858 12
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: 0.88 0.88 0.88 0.88 0.88 0.88 0.88 0.88 0.88 0.88 0.88 0.88
PHF Volume: 306 36 143 23 40 32 6 1098 337 95 975 14
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 306 36 143 23 40 32 6 1098 337 95 975 14
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: 306 36 143 23 40 32 6 1098 337 95 975 14

Saturation Flow Module:

Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.79 0.21 1.00 0.36 0.64 1.00 1.00 1.53 0.47 1.00 1.97 0.03
Final Sat.: 2867 333 1600 582 1018 1600 1600 2448 752 1600 3155 45

Capacity Analysis Module:

Vol/Sat: 0.11 0.11 0.09 0.04 0.04 0.02 0.00 0.45 0.45 0.06 0.31 0.31
Crit Moves: ****
*****BROOKSIDE PROJECT
EXISTING PLUS AMBIENT GROWTH PLUS CUMULATIVE WITH PROJECT
AM PEAK HOURLevel Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Lemon Ave/Meadown Pass Height-Meadow Pass Rd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.563
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 37 Level Of Service: AApproach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - RControl: Protected Protected Protected Protected
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 1 0 1 1 0 1 0 1 0 0 1 0 1 0 1

Volume Module:

Base Vol: 6 580 180 86 771 1 1 2 8 133 2 79
Growth Adj: 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01
Initial Bse: 6 586 182 87 779 1 1 2 8 134 2 80
Added Vol: 0 2 5 1 4 0 0 0 0 17 0 4
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 6 588 187 88 783 1 1 2 8 151 2 84
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: 0.86 0.86 0.86 0.86 0.86 0.86 0.86 0.86 0.86 0.86 0.86 0.86
PHF Volume: 7 683 217 102 910 1 1 2 9 176 2 97
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 7 683 217 102 910 1 1 2 9 176 2 97
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: 7 683 217 102 910 1 1 2 9 176 2 97

Saturation Flow Module:

Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.52 0.48 1.00 1.99 0.01 0.09 0.18 0.73 1.00 1.00 1.00
Final Sat.: 1600 2428 772 1600 3196 4 145 291 1164 1600 1600 1600

Capacity Analysis Module:

Vol/Sat: 0.00 0.28 0.28 0.06 0.28 0.28 0.00 0.01 0.01 0.11 0.00 0.06
Crit Moves: ****

BROOKSIDE PROJECT
EXISTING PLUS AMBIENT GROWTH PLUS CUMULATIVE WITH PROJECT
AM PEAK HOUR

Level Of Service Computation Report

ICU 1 (Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Lemon Ave/La Puente Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.855
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	82	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	Protected
	Rights:	Include	Include	Include	Include	Include
Min. Green:	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0
Ianes:	1	0	1	0	1	0

Volume Module:															
Base Vol:	164	411	92	253	557	96	146	381	231	201	297	205			
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01			
Initial Bse:	166	415	93	256	563	97	147	385	233	203	300	207			
Added Vol:	0	6	0	1	18	2	1	0	0	1	0	1			
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0			
Initial Fut:	166	421	93	257	581	99	148	385	233	204	300	208			
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:	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85			
PHF Volume:	195	495	109	302	683	116	175	453	274	240	353	245			
Reduced Vol:	0	0	0	0	0	0	0	0	0	0	0	0			
Reduced Vol:	195	495	109	302	683	116	175	453	274	240	353	245			
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:	195	495	109	302	683	116	175	453	274	240	353	245			

Saturation Flow Module:									
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adj/Adjment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.64	0.36	1.00	2.00	1.00	1.00	1.25	0.75
Final Sat.:	1600	2622	578	1600	3200	1600	1600	1992	1208

[illegible]

BROOKSIDE PROJECT
EXISTING PLUS AMBIENT GROWTH PLUS CUMULATIVE WITH PROJECT
AM PEAK HOUR

Level Of Service Computation Report

ICU 1 (Loss as Cycle length %) Method (Future Volume Alternative)

Intersection #4 Lemon Ave/Valley Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.898
Loss Time (sec):	10	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	99	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	Protected
Rights:	Include	Ovl	Include	Include	Include
Min. Green:	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	1	0	2

Volume Module:														
Base Vol:	153	446	144	98	706	226	111	549	189	216	1109	52		
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01		
Initial Bse:	155	450	145	99	713	228	112	554	191	218	1120	53		
Added Vol:	0	2	1	2	7	10	3	7	1	4	18	1		
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0		
Initial Fut:	155	452	146	101	720	238	115	561	192	222	1138	54		
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:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96		
PHF Volume:	161	471	153	105	750	248	120	585	200	231	1186	56		
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0		
Reduced Vol:	161	471	153	105	750	248	120	585	200	231	1186	56		
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:	161	471	153	105	750	248	120	585	200	231	1186	56		
ovlAdjVol:						128								

Saturation Flow Module:									
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.51	0.49	1.00	2.00	1.00	1.00	2.24	0.09
Final Sat.:	1600	2418	782	1600	3200	1600	1600	3577	144

Capacity Analysis Module:									
Vol/Sat:	0.10	0.19	0.19	0.07	0.23	0.16	0.07	0.16	0.16
OvlAdjV/S:						0.08			
Crit Moves:	****			****		****	****		****

BROOKSIDE PROJECT
EXISTING PLUS AMBIENT GROWTH PLUS CUMULATIVE WITH PROJECT
AM PEAK HOUR

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

Intersection #5 Meadow Pass Rd/Colt Ln

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: B[14.5]

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Stop Sign Stop Sign Uncontrolled Uncontrolled
Rights: Include Include Include Include
Lanes: 0 0 1! 0 0 0 0 1! 0 0 1 0 0 1 0 1 0 0 1 0

Volume Module:
Base Vol: 0 0 0 3 0 3 3 257 0 0 166 3
Growth Adj: 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01
Initial Bse: 0 0 0 3 0 3 3 260 0 0 168 3
Added Vol: 14 0 2 0 0 0 0 2 5 1 6 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 14 0 2 3 0 3 3 262 5 1 174 3
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 0.69 0.69 0.69 0.69 0.69 0.69 0.69 0.69 0.69 0.69 0.69
PHF Volume: 20 0 3 4 0 4 4 379 7 1 252 4
Reduc Vol: 0 0 0 0 0 0 0 0 0 0 0 0
FinalVolume: 20 0 3 4 0 4 4 379 7 1 252 4

Critical Gap Module:
Critical Gap: 7.1 6.5 6.2 7.1 6.5 6.2 4.1 xxxxx xxxxxx 4.1 xxxxx xxxxxx
FollowUpTrm: 3.5 4.0 3.3 3.5 4.0 3.3 2.2 xxxxx xxxxxx 2.2 xxxxx xxxxxx

Capacity Module:
Conflict Vol: 650 650 383 650 652 254 256 xxxxx xxxxxx 386 xxxxx xxxxxx
Potent Cap.: 385 391 669 385 390 790 1321 xxxxx xxxxxx 1183 xxxxx xxxxxx
Move Cap.: 381 389 669 382 388 790 1321 xxxxx xxxxxx 1183 xxxxx xxxxxx
Volume/Cap: 0.05 0.00 0.00 0.01 0.00 0.01 0.00 xxxxx xxxxx 0.00 xxxxx xxxxx

Level Of Service Module:
2Way95thQ: xxxxx xxxxx xxxxx xxxxx xxxxx 0.0 xxxxx xxxxxx 0.0 xxxxx xxxxxx
Control Del: xxxxx xxxxx xxxxx xxxxx xxxxx 7.7 xxxxx xxxxxx 8.0 xxxxx xxxxxx
LOS by Move: * * * * * A * * * * A * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxxxx 403 xxxxx xxxxx 515 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
SharedQueue: xxxxx 0.2 xxxxx xxxxx 0.1 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shrd ConDel: xxxxx 14.5 xxxxx xxxxx 12.1 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shared LOS: * B * * * * * * * * * *
ApproachDel: 14.5 12.1 xxxxxx xxxxxx
ApproachLOS: B B *

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

BROOKSIDE PROJECT
EXISTING PLUS AMBIENT GROWTH PLUS CUMULATIVE WITH PROJECT
PM PEAK HOUR

Level Of Service Computation Report
ICU 1 (Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Lemon Ave/Amar Rd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.685
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 48 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 Include Include Include
Lanes: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Y+R: 1 1 0 0 1 0 1 0 0 1 1 0 1 0 1 0 1 0
Volume Module:
Base Vol: 255 37 166 15 24 14 19 905 167 98 716 27
Growth Adj: 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01
Initial Bse: 258 37 168 15 24 14 19 914 169 99 723 27
Added Vol: 3 0 4 0 0 0 0 9 5 2 6 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 261 37 172 15 24 14 19 923 174 101 729 27
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: 0.92 0.92 0.92 0.92 0.92 0.92 0.92 0.92 0.92 0.92 0.92 0.92
PHF Volume: 283 41 187 16 26 15 21 1003 189 110 793 30
Reduc Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 283 41 187 16 26 15 21 1003 189 110 793 30
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: 283 41 187 16 26 15 21 1003 189 110 793 30

Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.75 0.25 1.00 0.38 0.62 1.00 1.00 1.68 0.32 1.00 1.93 0.07
Final Sat.: 2799 401 1600 615 985 1600 1600 2693 507 1600 3085 115

Capacity Analysis Module:
Vol/Sat: 0.10 0.10 0.12 0.03 0.03 0.01 0.01 0.37 0.37 0.07 0.26 0.26
Crit Moves: ****

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)*****
Intersection #2 Lemon Ave/Meadown Pass Height-Meadow Pass Rd
*****Cycle (sec): 100 Critical Vol./Cap.(X): 0.521
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 35 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 - RControl: Protected Protected Protected Permitted Permitted Permitted
Rights: Include Include Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 1 0 1 0 1 0 1 0 0 0 0 1 1 0 1 0 1Volume Module:
Base Vol: 2 721 192 24 459 2 0 0 3 112 0 42
Growth Adj: 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01
Initial Bse: 2 728 194 24 464 2 0 0 3 113 0 42
Added Vol: 0 4 19 5 3 0 0 0 0 11 0 3
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 2 732 213 29 467 2 0 0 3 124 0 45
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 0.93 0.93 0.93 0.93 0.93 0.93 0.93 0.93 0.93 0.93 0.93
PHF Volume: 2 787 229 31 502 2 0 0 3 133 0 49
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 2 787 229 31 502 2 0 0 3 133 0 49
PCE Adj: 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
FinalVolume: 2 787 229 31 502 2 0 0 3 133 0 49Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.55 0.45 1.00 1.99 0.01 0.00 0.00 1.00 1.00 1.00
Final Sat.: 1600 2479 721 1600 3186 14 0 0 1600 1600 1600Capacity Analysis Module:
Vol/Sat: 0.00 0.32 0.32 0.02 0.16 0.16 0.00 0.00 0.00 0.08 0.00 0.03
Crit Moves: ****
*****Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)*****
Intersection #3 Lemon Ave/La Puente Rd
*****Cycle (sec): 100 Critical Vol./Cap.(X): 0.723
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 53 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 - RControl: Protected Protected Protected Protected Protected
Rights: Include Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 1 0 1 0 1 0 2 0 1 1 0 1 0 1 0 1 0Volume Module:
Base Vol: 306 666 177 137 351 84 104 407 138 85 223 122
Growth Adj: 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01
Initial Bse: 309 673 179 138 355 85 105 411 139 86 225 123
Added Vol: 0 20 1 1 12 1 2 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 309 693 180 139 367 86 107 411 139 86 225 124
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: 0.94 0.94 0.94 0.94 0.94 0.94 0.94 0.94 0.94 0.94 0.94 0.94
PHF Volume: 329 737 191 148 390 91 114 437 148 91 240 132
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 329 737 191 148 390 91 114 437 148 91 240 132
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: 329 737 191 148 390 91 114 437 148 91 240 132Saturation Flow Module:
Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.59 0.41 1.00 2.00 1.00 1.00 1.49 0.51 1.00 1.29 0.71
Final Sat.: 1600 2541 659 1600 3200 1600 1600 2390 810 1600 2062 1138Capacity Analysis Module:
Vol/Sat: 0.21 0.29 0.29 0.09 0.12 0.06 0.07 0.18 0.18 0.06 0.12 0.12
Crit Moves: ****

BROOKSIDE PROJECT
EXISTING PLUS AMBIENT GROWTH PLUS CUMULATIVE WITH PROJECT
PM PEAK HOUR

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Lemon Ave/Valley Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.863
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 84 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	Protected	Protected
Rights:	Include	Ovl	Include	Include	Include	Include
Min. Green:	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	1	0	2	1

Volume Module:	Base Vol:	162	617	214	110	526	151	197	1075	215	342	717	157
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	164	623	216	111	531	153	199	1086	217	345	724	159	
Added Vol:	1	8	4	1	5	7	11	19	1	2	12	2	
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0	
Initial Fut:	165	631	220	112	536	160	210	1105	218	347	736	161	
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:	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	
PHF Volume:	168	644	225	114	547	163	214	1127	223	355	751	164	
Reduced Vol:	0	0	0	0	0	0	0	0	0	0	0	0	
Reduced Vol:	168	644	225	114	547	163	214	1127	223	355	751	164	
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:	168	644	225	114	547	163	214	1127	223	355	751	164	
OvlAdjVol:	0	0	0	0	0	0	0	0	0	0	0	0	

Saturation Flow Module:	Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.48	0.52	1.00	2.00	1.00	1.00	2.51	0.49	2.00	1.64	0.36
Final Sat:	1600	2373	827	1600	3200	1600	1600	4008	792	3200	2627	573

Capacity Analysis Module:	Vol/Sat:	0.10	0.27	0.27	0.07	0.17	0.10	0.13	0.28	0.28	0.11	0.29
OvlAdjV/S:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****

BROOKSIDE PROJECT
EXISTING PLUS AMBIENT GROWTH PLUS CUMULATIVE WITH PROJECT
PM PEAK HOUR

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

Intersection #5 Meadow Pass Rd/Colt Ln

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: B[11.4]
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Stop Sign Stop Sign Stop Sign Stop Sign
Rights: Include Include Include Include
Lanes: 0 0 1 0 0 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0

Volume Module:	Base Vol:	0	0	0	3	0	1	3	195	0	0	143
Growth Adj:	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Initial Bse:	0	0	0	3	0	1	3	197	0	0	144	4
Added Vol:	9	0	1	0	0	0	0	7	16	2	4	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	9	0	1	3	0	1	3	204	16	2	148	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:	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
PHF Volume:	10	0	1	3	0	1	3	224	18	2	163	4
Reduced Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	10	0	1	3	0	1	3	224	18	2	163	4

Critical Gap Module:	Critical Gap:	7.1	6.5	6.2	7.1	6.5	6.2	4.1	xxxx	xxxxx	4.1	xxxx
FollowUpTrm:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx <th>xxxxx</th> <th>2.2</th> <th>xxxx</th> <th>xxxxx</th>	xxxxx	2.2	xxxx	xxxxx

Capacity Module:	Cnflct Vol:	410	412	233	410	418	165	168	xxxx	xxxxx	242	xxxx
Potent Cap.:	556	533	811	556	529	884	1422	xxxx	xxxxx	1337	xxxx	xxxxx
Move Cap.:	553	531	811	553	527	884	1422	xxxx	xxxxx	1337	xxxx	xxxxx
Volume/Cap:	0.02	0.00	0.00	0.01	0.00	0.00	0.00	xxxx	xxxxx	0.00	xxxx	xxxxx

Level Of Service Module:	2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	0.0	xxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.5	xxxx	xxxxx	7.7	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*

Movement:	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT
Shared Cap.:	xxxx	571	xxxxx	xxxx	610	xxxxx
SharedQueue:	xxxxx	0.1	xxxxx	xxxxx	0.0	xxxxx
Shrd Conbel:	xxxxx	11.4	xxxxx	xxxxx	10.9	xxxxx
Shared LOS:	B	B	B	B	B	B
ApproachDel:	11.4	10.9	xxxxxx	B	xxxxxx	B

ApproachLOS: B

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

BROOKSIDE PROJECT
EXISTING PLUS AMBIENT GROWTH PLUS CUMULATIVE WITH PROJECT
MD PEAK HOURLevel Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Lemon Ave/Amar Rd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.344
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 26 Level Of Service: AApproach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - RControl: Split Phase Split Phase Protected Protected
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 1 1 0 0 1 0 1 0 1 0 1 0 1 0 1 0

Volume Module:

Base Vol: 73 15 49 12 18 15 17 376 81 52 413 10
Growth Adj: 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01
Initial Bse: 74 15 49 12 18 15 17 380 82 53 417 10
Added Vol: 3 0 3 0 0 0 8 4 3 7 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 77 15 52 12 18 15 17 388 86 56 424 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: 0.96 0.96 0.96 0.96 0.96 0.96 0.96 0.96 0.96 0.96 0.96 0.96
PHF Volume: 80 16 55 13 19 16 18 404 89 58 442 11
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 80 16 55 13 19 16 18 404 89 58 442 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: 80 16 55 13 19 16 18 404 89 58 442 11

Saturation Flow Module:

Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.67 0.33 1.00 0.40 0.60 1.00 1.00 1.64 0.36 1.00 1.95 0.05
Final Sat.: 2672 528 1600 640 960 1600 1600 2620 580 1600 3126 74

Capacity Analysis Module:

Vol/Sat: 0.03 0.03 0.03 0.02 0.02 0.01 0.01 0.15 0.15 0.04 0.14 0.14
Crit Moves: ****
*****BROOKSIDE PROJECT
EXISTING PLUS AMBIENT GROWTH PLUS CUMULATIVE WITH PROJECT
MD PEAK HOURLevel Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Lemon Ave/Meadown Pass Height-Meadow Pass Rd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.508
Loss Time (sec): 10 Average Delay (sec/veh): xxxxxx
Optimal Cycle: 34 Level Of Service: AApproach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - RControl: Protected Protected Protected Protected
Rights: Include Include Include Include
Min. Green: 0 0 0 0 0 0 0 0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Lanes: 1 0 1 1 0 1 0 1 0 0 1 0 0 1 0 1

Volume Module:

Base Vol: 0 165 202 86 288 1 2 0 6 180 0 83
Growth Adj: 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01 1.01
Initial Bse: 0 167 204 87 291 1 2 0 6 182 0 84
Added Vol: 0 3 14 3 3 0 0 0 0 12 0 3
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 0 170 218 90 294 1 2 0 6 194 0 87
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: 0.78 0.78 0.78 0.78 0.78 0.78 0.78 0.78 0.78 0.78 0.78 0.78
PHF Volume: 0 218 280 115 377 1 3 0 8 248 0 111
Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 218 280 115 377 1 3 0 8 248 0 111
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: 0 218 280 115 377 1 3 0 8 248 0 111

Saturation Flow Module:

Sat/Lane: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Sat.: 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600

Capacity Analysis Module:

Vol/Sat: 0.00 0.14 0.17 0.07 0.12 0.12 0.00 0.00 0.01 0.16 0.00 0.07
Crit Moves: ****

```

MD (E+A+C+P)          Fri Nov 13, 2015 14:30:09          Page 7-1
-----
                                BROOKSIDE PROJECT
EXISTING PLUS AMBIENT GROWTH PLUS CUMULATIVE WITH PROJECT
MD PEAK HOUR
-----

                                Level Of Service Computation Report
                                2000 HCM Unsignalized Method (Future Volume Alternative)
*****
Intersection #5 Meadow Pass Rd/Colt Ln
*****
Average Delay (sec/veh):      0.5      Worst Case Level Of Service: B[ 10.9]
*****
Approach:      North Bound      South Bound      East Bound      West Bound
Movement:      L - T - R      L - T - R      L - T - R      L - T - R
-----
Control:      Stop Sign      Stop Sign      Uncontrolled      Uncontrolled
Rights:      Include      Include      Include      Include
Lanes:      0 0 1! 0 0      0 0 1! 0 0      1 0 0 1 0      1 0 0 1 0
-----
Volume Module:
Base Vol:      0 0 0      1 0 0      1 1 108      0 0 143      2
Growth Adj:      1.01 1.01      1.01 1.01      1.01 1.01      1.01 1.01      1.01
Initial Bse:      0 0 0      1 0 0      1 109      0 0 144      2
Added Vol:      10 0 0      1 0 0      0 6      12 1 4      0
PasserByVol:      0 0 0      0 0 0      0 0      0 0      0
Initial Fut:      10 0 1      1 0 0      1 115      12 1 148      2
User Adj:      1.00 1.00      1.00 1.00      1.00 1.00      1.00 1.00      1.00
PHF Adj:      0.79 0.79      0.79 0.79      0.79 0.79      0.79 0.79      0.79
PHF Volume:      13 0 1      1 0 0      1 146      15 1 188      3
Reduct Vol:      0 0 0      0 0 0      0 0      0 0      0
FinalVolume:      13 0 1      1 0 0      1 146      15 1 188      3
-----
Critical Gap Module:
Critical Gp:      7.1 6.5      6.2 7.1 6.5      6.2 4.1 xxxxx      xxxxx      4.1 xxxxx      xxxxx
FollowUptim:      3.5 4.0      3.3 3.5 4.0      3.3 2.2 xxxxx      xxxxx      2.2 xxxxx      xxxxx
-----
Capacity Module:
Conflict Vol:      348 349      153 348 355      189 190 xxxxx      xxxxx      161 xxxxx      xxxxx
Potent Cap.:      610 578      898 610 574      858 1395 xxxxx      xxxxx      1430 xxxxx      xxxxx
Move Cap.:      608 577      898 608 573      858 1395 xxxxx      xxxxx      1430 xxxxx      xxxxx
Volume/Cap:      0.02 0.00      0.00 0.00 0.00      0.00 0.00 xxxxx      xxxxx      0.00 xxxxx      xxxxx
-----
Level Of Service Module:
2Way95thQ:      xxxxx xxxxx      xxxxx xxxxx      xxxxx 0.0 xxxxx      xxxxx      0.0 xxxxx      xxxxx
Control Del:      xxxxx xxxxx      xxxxx xxxxx      xxxxx 7.6 xxxxx      xxxxx      7.5 xxxxx      xxxxx
LOS by Move:      * * *      * * *      * A *      * A *      *
Movement:      LT - LTR - RT      LT - LTR - RT      LT - LTR - RT      LT - LTR - RT      LT - LTR - RT
Shared Cap.:      xxxxx 627 xxxxx      xxxxx 712 xxxxx      xxxxx xxxxx      xxxxx xxxxx      xxxxx xxxxx
SharedQueue:      xxxxx 0.1 xxxxx      xxxxx 0.0 xxxxx      xxxxx xxxxx      xxxxx xxxxx      xxxxx xxxxx
Shrd ConDel:      xxxxx 10.9 xxxxx      xxxxx 10.1 xxxxx      xxxxx xxxxx      xxxxx xxxxx      xxxxx xxxxx
Shared LOS:      * B *      * B *      * * *      * * *      * * *
ApproachDel:      10.9      10.1      xxxxxx      xxxxxx      xxxxxx
ApproachLOS:      B      B      *      *
*****
Note: Queue reported is the number of cars per lane.
*****

```



APPENDIX P

Public Services and Utilities Correspondence



COUNTY OF LOS ANGELES

FIRE DEPARTMENT

1320 NORTH EASTERN AVENUE
LOS ANGELES, CALIFORNIA 90063-3294

DARYL L. OSBY
FIRE CHIEF
FORESTER & FIRE WARDEN

July 19, 2016

Collette L. Morse, Principal
Morse Planning Group
145 North C Street
Tustin, CA 92780

Dear Ms. Morse:

FIRE PROTECTION SERVICES QUESTIONNAIRE, "THE BROOKSIDE PROJECT," CONSISTS OF VARIOUS EQUESTRIAN-RELATED STRUCTURES INCLUDING TWO HORSE BARNs WITH STABLES, FENCED RIDING RINGS, MAINTENANCE STORAGE FACILITIES, FEED SHEDS, AND A COVERED RIDING ARENA, WALNUT, FFER 201600098

The Fire Protection Services Questionnaire has been reviewed by the Planning Division, Land Development Unit, Forestry Division, and Health Hazardous Materials Division of the County of Los Angeles Fire Department. The following are their comments:

PLANNING DIVISION:

1. Please indicate the name and location of the station(s) that serve the project area. Also, please indicate the equipment, personnel and emergency medical services available at each station.

Fire Station 61, located at 20011 La Puente Road, Walnut, CA 91789-1719 is the jurisdictional station (1st due) for the project site. This station is staffed with a three-person engine company (one fire captain, one fire fighter specialist, and one fire fighter paramedic) and a two-person paramedic squad (two fire fighter paramedics).

SERVING THE UNINCORPORATED AREAS OF LOS ANGELES COUNTY AND THE CITIES OF:

AGOURA HILLS
ARTESIA
AZUSA
BALDWIN PARK
BELL
BELL GARDENS
BELLFLOWER
BRADBURY

CALABASAS
CARSON
CERRITOS
CLAREMONT
COMMERCE
COVINA
CUDAHY

DIAMOND BAR
DUARTE
EL MONTE
GARDENA
GLEN DORA
HAWAIIAN GARDENS
HAWTHORNE

HIDDEN HILLS
HUNTINGTON PARK
INDUSTRY
INGLEWOOD
IRWINDALE
LA CANADA FLINTRIDGE
LA HABRA

LA MIRADA
LA PUENTE
LAKEWOOD
LANCASTER
LAWNDALE
LOMITA
LYNWOOD

MALIBU
MAYWOOD
NORWALK
PALMDALE
PALOS VERDES ESTATES
PARAMOUNT
PICO RIVERA

POMONA
RANCHO PALOS VERDES
ROLLING HILLS
ROLLING HILLS ESTATES
ROSEMEAD
SAN DIMAS
SANTA CLARITA

SIGNAL HILL
SOUTH EL MONTE
SOUTH GATE
TEMPLE CITY
WALNUT
WEST HOLLYWOOD
WESTLAKE VILLAGE
WHITTIER

2. Does your agency have mutual aid agreements?

Mutual aid is by definition available everywhere but is meant to be invoked only in rare and unusual circumstances. Automatic aid is routine aid provided to specific areas. We have no automatic aid agreement with any fire protection agency that affects the project.

3. Does your agency have an established target response time? What is the current actual response time to the project area from each station?

The Fire Department uses national guidelines of a five-minute response time for the 1st arriving unit for fire and EMS responses and eight minutes for the advanced life support (paramedic) unit in urban areas. Based on the distance to the project site (.5 miles), it is estimated that Fire Station 61 would have an emergency response time of less than two minutes.

4. Does your agency have an established target staffing level (i.e. personnel/population)?

The Fire Department does not calculate service-to-population ratios. Such ratios do not properly reflect the need for fire protection and emergency medical services. They do not account for demand caused by non-residential structures, vehicular incidents, transient population, and vacant land with combustible vegetation.

5. Are current staff levels and facilities adequate or deficient?

Currently, staff levels and facilities are adequate in the project area.

6. Please indicate any assessment fees required for new developments.

The Fire Department does not have a fire protection facilities fee in effect in the project area. In the event additional resources are needed, the property tax growth within the project area would provide funding to meet new growth needs.

7. Do you anticipate that required fees and taxes provided by new developments associated with proposed project will adequately mitigate the expected increase in fire and emergency medical service demand?

Yes.

8. Do you have any required or recommended mitigation measures for significant impacts?

Yes. Mitigation measures are addressed on a case-by-case basis.

9. Please indicate the present ISO rates throughout the City and any fire hazard impacts. Will the ISO rating remain the same with the implementation of the proposed project?

ISO ratings are determined by the Insurance Services Office. Their ratings are a compilation of various factors, including water supply, which are not within the authority of the Los Angeles County Fire Department to regulate.

10. Please indicate fire flow requirements based on land use types in the project area (i.e. residential, office/commercial, and industrial).

To be answered by Land Development Division.

11. Are there any plans for facility expansion or new facilities, please provide as much detail as possible. Where does your agency acquire funding for new facilities?

Currently there are no plans for facility expansion or new facilities that would impact the project area. Property tax revenue generated by growth generally provides adequate funding for new facilities needed to address the impacts of cumulative growth. In the event of large residential or commercial developments, the Fire Department may require a fire station site or facility to be funded by the developer.

12. Do you anticipate that project implementation would result in the need for physical additions to your agency (i.e., construction of new fire stations)?

No. In the absence of cumulative impact, this project is not expected to create a need for additional staffing or resources.

13. Is there any other relevant information regarding potential significant impacts?

No.

14. Please include any additional information you feel is pertinent to the Environmental Impact Report analysis for the proposed project.

LAND DEVELOPMENT UNIT:

The Land Development Unit is reviewing the proposed project for access and water system requirements. The development of this project must comply with all applicable code and ordinance requirements for construction, access, water mains, fire flows and fire hydrants.

The fees for the Land Development Unit review of the tentative tract will be addressed with submittal plans.

Review and approval by the County of Los Angeles Fire Department Land Development Unit is required. Submit a minimum of four (4) copies of the tentative tract map, including the site plan (if applicable), for the review of this project to the following address:

County of Los Angeles Fire Department
Land Development Unit
5823 Rickenbacker Road
Commerce, CA 90040
(323) 890-4243

The plan shall indicate the Fire Apparatus Access roads and fire hydrant locations.

The proposed Land Development Unit comments are "PRELIMINARY" and are "SUBJECT TO CHANGE" with the submittal of the tentative tract map. The comments are based on the information provided.

ACCESS REQUIREMENTS:

1. All on-site Fire Apparatus Access roads shall be labeled as "Private Driveway and Fire Lane" on the site plan along with the widths clearly depicted on the plan. Labeling is necessary to assure the access availability for Fire Department use. The designation allows for appropriate signage prohibiting parking.
2. Fire Apparatus Access roads must be installed and maintained in a serviceable manner prior to and during the time of construction. Fire Code 501.4
3. All fire lanes shall be clear of all encroachments and shall be maintained in accordance with the Title 32, County of Los Angeles Fire Code.

4. The Fire Apparatus Access roads and designated fire lanes shall be measured from flow line to flow line.
5. Provide a minimum unobstructed width of 20 feet exclusive of shoulders and an unobstructed vertical clearance "clear to sky" Fire Apparatus Access roads within 150 feet of all portions of the exterior walls of the first story of the building, as measured by an approved route around the exterior of the building. Fire Code 503.1.1 and 503.2.1.
 - a. Exception: A minimum vertical clearance of 13 feet 6 inches may be allowed for protected tree species adjacent to access roads.
6. The required 20 foot wide driving surface shall be increased to 26 feet when fire hydrants are required. The 26 -foot width shall be maintained for a minimum of 25 linear feet on each side of the hydrant location.
 - a. The Fire Apparatus Access road shall be cross-hatch on the site plan and the width shall be clearly noted.
7. If the Fire Apparatus Access road is separated by island, provide a minimum unobstructed width of 20 feet, exclusive of shoulders and an unobstructed vertical clearance "clear to sky" Fire Department's vehicular access to within 150 feet of all portions of the exterior walls of the first story of the building, as measured by an approved route around the exterior of the building. Fire Code 503.1.1 and 503.2.2.
8. The dimensions of the approved Fire Apparatus Access Roads shall be maintained as originally approved by the fire code official. Fire Code 503.2.2.1
9. Dead-end Fire Apparatus Access roads in excess of 150 feet in length shall be provided with an approved Fire Department turnaround. Fire Code 503.2.5.
 - a. Include: The dimensions of the turnaround with the orientation of the turnaround shall be properly placed in the direction of travel of the access roadway.
10. Fire Apparatus Access roads shall be provided with a 32-foot centerline turning radius. Fire Code 503.2.4.
 - a. Indicate the centerline inside and outside turning radii for each change in direction on the site plan.

11. Fire Apparatus Access roads shall be designed and maintained to support the imposed load of fire apparatus weighing 75,000 pounds, and shall be surfaced so as to provide all-weather driving capabilities. Fire Apparatus Access roads having a grade of 10 percent or greater shall have a paved or concrete surface. Fire Code 503.2.3.
12. The gradient of Fire Apparatus Access roads shall not exceed 15 percent unless approved by the fire code official. Fire Code 503.2.7.
 - a. On paved private access roads the maximum allowable grade shall not exceed 15 percent except where topography makes it impracticable to keep within such grade then an absolute maximum grade of 20 percent will be allowed for up to 150 feet in distances. The break shall be 50 feet in length with a maximum grade of five percent. The average maximum allowed grade shall not be more than 17 percent. Change in grade shall not exceed 10 percent in 10 feet.
 - b. Indicate the various grade percentages and their lengths of the Fire Department Access roadway on the site plan. Provide a road profile for proposed access roads with grades greater 15 percent.
13. Abrupt changes in grade shall not exceed the maximum angles of approach and departure for fire apparatus. The first 10 feet of any angle of approach or departure or break-over shall not exceed a 10 percent change or 5.7 degrees. Fire Code 503.2.8.
 - a. Provide roadway profile and indicate angle of approach and departure at all abrupt changes in grade.
14. Provide approved signs or other approved notices or markings that include the words "NO PARKING - FIRE LANE." Signs shall have a minimum dimension of 12 inches wide by 18 inches high and have red letters on a white reflective background. Signs shall be provided for fire apparatus access roads to clearly indicate the entrance to such road or prohibit the obstruction thereof and at intervals, as required by the Fire Inspector. Fire Code 503.3.
15. A minimum five foot wide approved firefighter access walkway leading from the Fire Department Access road to all required openings in the building's exterior walls shall be provided for firefighting and rescue purposes. Fire Code 504.1.

- a. Clearly identify firefighter walkway access routes on the site plan. Indicate the slope and walking surface material. Clearly show the required width.
16. Fire Apparatus Access roads shall not be obstructed in any manner, including by the parking of vehicles or the use of traffic calming devices, including but not limited to, speed bumps or speed humps. The minimum widths and clearances established in Section 503.2.1 shall be maintained at all times. Fire Code 503.4.
17. Traffic Calming Devices, including but not limited to, speed bumps and speed humps shall be prohibited unless approved by the fire code official. Fire Code 503.4.1.
18. Approved building address numbers, building numbers, or approved building identification shall be provided and maintained so as to be plainly visible and legible from the street fronting the property. The numbers shall contrast with their background, be Arabic numerals, or alphabet letters, and be a minimum of four inches high with a minimum stroke width of 0.5 inch. Fire Code 505.1.

PARKING ON FIRE APPARATUS ACCESS ROADS

1. Provide a minimum width of 34 feet for parallel parking on one side of the Fire Apparatus Access road with through access and with one side of the roadway being designated "No Parking Fire Lane."
2. Provide a minimum width of 34 feet for parallel parking on both sides of the Fire Apparatus Access road when the street is designed to be a cul-de-sac less than 700 feet in length.
3. Provide a minimum width of 36 feet for parallel parking on both sides of the Fire Apparatus Access road and/ or on cul-de-sac design with a length of 701 feet to 1000 feet.

ADDITIONAL FIRE APPARATUS ACCESS ROADS

1. The fire code official is authorized to require more than one Fire Apparatus Access road based on the potential for impairment of a single road by vehicle congestion, condition of terrain, climatic conditions, or other factors that could limit access. Such additional access must comply with Title 21 of the Los Angeles County Code. Fire Code 503.1.2.

- a. Verify the length of the Fire Apparatus Access road(s). An additional access road(s) may be required.

GATES REQUIREMENTS

1. When security gates are provided, maintain a minimum access width of the Fire Apparatus Access road. The security gate shall be provided with an approved means of emergency operation and shall be maintained operational at all times and replaced or repaired when defective. Electric gate operators, where provided, shall be listed in accordance with UL 325. Gates intended for automatic operation shall be designed, constructed, and installed to comply with the requirements of ASTM F220. Gates shall be of the swinging or sliding type. Construction of gates shall be of materials that allow manual operation by one person. Fire Code 503.6.
2. The method of gate control shall be subject to review by the Fire Department prior to clearance to proceed to public hearing. All gates, to control vehicular access, shall be in compliance with the following:
 - a. The keypad location shall be located a minimum of 50 feet from the public right-of-way.
 - b. Provide a minimum 32-foot turning radius beyond the keypad prior to the gate entrance at a minimum width of 20' for turnaround purposes.
 - c. Gated entrance design with separate access gates for ingress and egress shall provide minimum width of 20 feet clear-to-sky for each side.
 - d. All locking devices shall comply with the County of Los Angeles Fire Department Regulation 5, Compliance for Installation of Emergency Access Devices.

WATER STSTEM REQUIREMENTS

1. All fire hydrants shall measure 6"x 4"x 2-1/2" brass or bronze conforming to current AWWA standard C503 or approved equal, and shall be installed in accordance with the County of Los Angeles Fire Department Regulation 8.
2. All required PUBLIC fire hydrants shall be installed, tested, and accepted prior to beginning construction. Fire Code 501.4.

Collette L. Morse, Principal
July 19, 2016
Page 9

3. The required fire for the public fire hydrants for single family residential homes less than a total square footage of 3600 feet is 1250 gpm at 20 psi residual pressure for two hours with one public fire hydrant flowing. Any single family residential home 3601 square feet or greater shall comply too Table B105.1 of the Fire Code in Appendix B.
4. The fire hydrant locations will be determined during the review of the tentative tract map.
5. An approved automatic fire sprinkler system is required for the proposed buildings within this development. Submit design plans to the Fire Department's Sprinkler Plan Check Unit for review and approval prior to installation.

For any questions regarding the report, please contact FPEA Claudia Soiza or FPEA Wally Collins at (323) 890-4243 or at Claudia.Soiza@fire.lacounty.gov, or Wally.Collins@fire.lacounty.gov.

FORESTRY DIVISION – OTHER ENVIRONMENTAL CONCERNS:

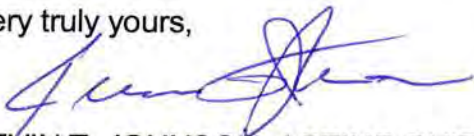
The statutory responsibilities of the County of Los Angeles Fire Department's Forestry Division include erosion control, watershed management, rare and endangered species, vegetation, fuel modification for Very High Fire Hazard Severity Zones or Fire Zone 4, archeological and cultural resources, and the County Oak Tree Ordinance. Potential impacts in these areas should be addressed.

HEALTH HAZARDOUS MATERIALS DIVISION:

The Health Hazardous Materials Division (HHMD) of the Los Angeles County Fire Department has no comment regarding the project fire protection services questionnaire.

If you have any additional questions, please contact this office at (323) 890-4330.

Very truly yours,



KEVIN T. JOHNSON, ACTING CHIEF, FORESTRY DIVISION
PREVENTION SERVICES BUREAU

KTJ:cc

Enclosure
bc: ERU



OFFICE OF THE SHERIFF

COUNTY OF LOS ANGELES

HALE OF JUSTICE

JIM McDONNELL, SHERIFF



August 24, 2017

Collette L. Morse, AICP
Principal
Morse Planning Group
145 N C Street
Tustin, California 92780

Dear Ms. Morse:

REQUEST FOR INFORMATION REGARDING SHERIFF PROTECTION SERVICES THE BROOKSIDE PROJECT

The Los Angeles County Sheriff's Department (Department) provides the attached information in response to the Request for Information regarding Sheriff Protection Services (Request), dated July 19, 2017, from Morse Planning Group (Requestor), for the Environmental Impact Report being prepared for the Brookside Project (Project). The proposed Project development of a 25.84-acre site, which is located at 800 Meadow Pass Road within the City of Walnut and currently developed with the Brookside Equestrian Center, will retain two of the original existing barns and would construct 28 single-family residential and ten open space lots.

The proposed Project is located within the service area of the Department's Walnut/Diamond Bar Sheriff's Station (Station). Accordingly, the Station reviewed the Request and authored the attached responses (see correspondence dated August 14, 2017, from Captain Alfred M. Reyes).

Should you have any questions regarding this matter, please contact me at (323) 526-5657, or your staff may contact Ms. Maynora Castro, at (323) 526-5578.

Sincerely,

JIM McDONNELL, SHERIFF

Tracey Jue, Director
Facilities Planning Bureau

211 WEST TEMPLE STREET, LOS ANGELES, CALIFORNIA 90012

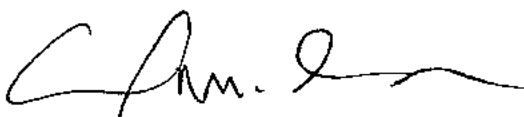
A Tradition of Service
— Since 1850 —

COUNTY OF LOS ANGELES
SHERIFF'S DEPARTMENT
"A Tradition of Service Since 1850"

OFFICE CORRESPONDENCE

DATE: August 14, 2017

FILE NO.:


FROM: ALFRED M. REYES, CAPTAIN **TO:** TRACEY JUE, DIRECTOR
WALNUT/DIAMOND BAR FACILITIES SERVICES BUREAU
STATION

**SUBJECT: THE BROOKSIDE PROJECT – RESPONSE TO REQUEST FOR
INFORMATION REGARDING SHERIFF'S PROTECTION SERVICES**

The following information is provided by the Walnut/Diamond Bar Station (Station) in response to a Police/Sheriff Protection Services Questionnaire (Request), dated July 19, 2017 from Morse Planning Group (Requestor). The Requestor is an environmental consultant to the City of Walnut, and is preparing an Environmental Impact Report (EIR) for The Brookside Project (Project). The proposed Project of 25.84-acre site is located at 800 Meadow Pass Road within the City of Walnut, County of Los Angeles. The proposed site, currently developed with Brookside Equestrian Center, will retain two of the original existing barns as part of the Project and in addition will construct 28 Single-Family Residential and 10 Open Space Lots. The Station is the Department's primary service provider to the proposed Project site.

The information below is formatted to correspond with the Questionnaire in the Request:

1. Does your agency have an established target response time? What is the current actual response time to the project area?

Generally accepted response times for law enforcement agencies in urban areas are 10 minutes or less for emergency incidents (i.e., a crime that is in progress and includes a life threatening situation), 20 minutes or less for priority incidents (i.e., a crime or incident that is presently occurring but excludes life threatening circumstances), and 60 minutes or less routine, or non-emergency incidents (i.e., a crime that has already occurred and excludes life threatening circumstances), as measured from the time a call is received until the time a patrol car arrives at the incident scene.

The Station is a 24/7 full-service facility located at 21695 East Valley Boulevard in the City of Walnut, approximately 3 miles from the proposed Project site.

The Station's anticipated response times to the proposed Project site for emergent, priority, and routine incidents are 3 to 5 minutes, 7 to 9 minutes, and 20 to 30 minutes, respectively. Response times are variable because the responding patrol unit may be deployed elsewhere within the Station's service area and not necessarily dispatched from the Station itself.

2. Does your agency have an established target staffing level (i.e. personnel/population)?

As of January 1, 2017, the Station is staffed by 104 sworn personnel and 39 civilian employees.

The Station's service area encompasses the cities of Walnut and Diamond Bar, the communities of Rowland Heights, and the unincorporated areas of Covina Hills and West Covina. As of January 1, 2010, the estimated resident population of the Station's service area is 137,522.

Generally accepted service ratio for law enforcement services in urban areas of 1 deputy per 1000 residents.

3. Are current staff levels and facilities adequate or deficient?

The Station, which was built in 1987, continues to operate above capacity. Based on the sworn deputy personnel of 104, the Station does not currently meet the desired law enforcement service ratio of one deputy per 1,000 population.

4. Please indicate any assessment fees required for new developments.

The Station is not aware of any assessment fees required for new developments, however, it is the Station's recommendation that the Requestor confirm the information with the Los Angeles County Department of Regional Planning and the City of Walnut.

5. Do you anticipate any significant impacts associated with the proposed project on current service within the City, such as increasing service calls or the need for additional personnel or patrol cars? Please provide generation factors if it is determined that additional personnel or patrol cars are required.

The proposed Project is expected to generate a population of 98 persons.

While the Station is not overly concerned with the proposed Project itself, we remain concerned that continued growth and intensification of land uses within our service area will ultimately contribute to significant cumulative impacts on our resources and operations. It is reasonable to expect that continued development will lead to a significant increase in the demand for law enforcement services. Meeting such demand will require additional resources, including patrol deputies, other sworn deputies, support personnel, and attendant assets such as patrol vehicles, support vehicles, communications equipment, weaponry, station furnishings/fixtures/equipment, etc. In order to accommodate such additional staff and assets, the Station itself will require substantial modernization and/or expansion (the Station was built in 1987 and has operated above-capacity for several years).

6. *Are there any plans for facility expansion or new facilities, please provide as much as detail as possible. Where does your agency acquire funding for new facilities?*

The Station is not aware of any planned improvements, expansion of existing facilities, new facilities, additional staffing, etc., that would affect the Station.

7. *Do you anticipate that implementation of the proposed project would result in the need for physical additions to your agency (i.e., construction of new police/sheriff stations)?*

See response to item #5, above.

8. *Is there any other relevant information regarding potential significant effects of the proposed project?*

See responses to item #5, above, and item #10, below.

9. *Please indicate the location of the City/County jail(s).*

- a. Century Regional Detention Facility (CRDF) - Female Inmates
11705 S. Alameda Street, Lynwood 90262
- b. Inmate Reception Center (IRC) – Temporary Holding only
450 Bauchet Street, Los Angeles 90012
- c. Men Central Jail (MCJ)

Brookside Project

-4-

August 14, 2017

441 Bauchet Street, Los Angeles 90012

- d. North County Correctional Facility (NCCF)
29340 The Old Road, Castaic 91350
- e. Pitchess Detention Center North Facility (PDC North)
29320 The Old Road, Castaic 91384
- f. Pitchess Detention Center South Facility (PDC South)
29330 The Old Road, Castaic 91384
- g. Twin Towers Correctional Facility (TTCF)
450 Bauchet Street, Los Angeles 90012

10. Please indicate any additional information you feel is pertinent to the Environmental Impact Report analysis for the proposed project.

The proposed Project should provide for the provision of a private security to patrol the construction site to minimize the potential for trespass, theft, and other unlawful activities. In addition, a construction traffic management plan should be implemented as part of the proposed Project to address construction-related traffic congestion and emergency access issues. If temporary lane closures are necessary for the installation of utilities, emergency access should be maintained at all times. Flag persons and/or detours should also be provided as needed to ensure safe traffic operations, and construction signs should be posted to advise of reduced construction zone speed limits.

The Department generally prescribes to the theory of Crime Prevention through Environmental Design (CPTED). The goal of CPTED is to reduce opportunities for criminal activities by employing physical design features that discourage anti-social behavior, while encouraging the legitimate use of the site. The overall tenets of CPTED include defensible space, territoriality, surveillance, lighting, landscaping, and physical security. With advanced notice, Station personnel can be available to discuss CPTED with the Project developer.

Thank you for including the Station in the environmental review process for the proposed Project. Should you have questions of the Station regarding this matter, please contact Operations Sergeant Angela Becerra at (909) 859-2802.