

Appendix G.1: Traffic Study Appendices

APPENDIX A
MANUAL TRAFFIC COUNT DATA

INTERSECTION TURNING MOVEMENT COUNT SUMMARY

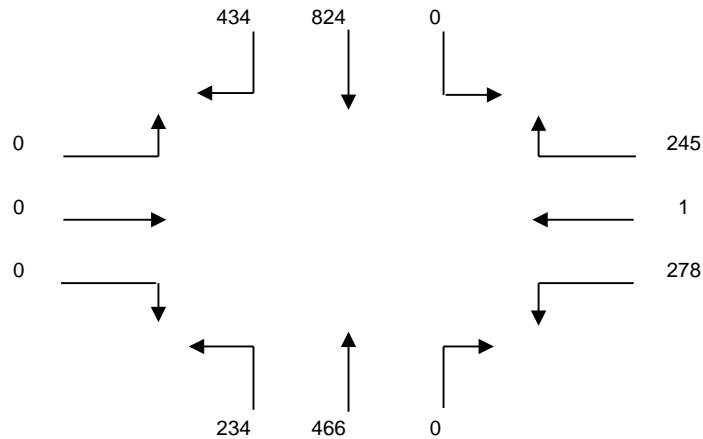
CLIENT: LLG - PASADENA
 PROJECT: HARVARD WESTLAKE SCHOOL - LOS ANGELES
 DATE: THURSDAY, JANUARY 27, 2011
 PERIOD: 07:00 AM TO 10:00 AM
 INTERSECTION N/S COLDWATER CANYON AVENUE
 E/W US 101 NB ON-OFF RAMPS
 FILE NUMBER: 1-AM

15 MINUTE TOTALS	1	2	3	4	5	6	7	8	9	10	11	12
	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT
0700-0715	108	189	0	41	0	74	0	79	30	0	0	0
0715-0730	126	197	0	49	0	60	0	92	55	0	0	0
0730-0745	132	201	0	59	0	63	0	100	70	0	0	0
0745-0800	110	205	0	68	0	69	0	132	53	0	0	0
0800-0815	103	214	0	49	0	84	0	121	60	0	0	0
0815-0830	89	204	0	69	1	62	0	113	51	0	0	0
0830-0845	70	195	0	69	1	67	0	123	64	0	0	0
0845-0900	50	170	0	40	0	57	0	159	50	0	0	0
0900-0915	65	181	0	56	0	55	0	135	40	0	0	0
0915-0930	82	199	0	35	1	59	0	118	53	0	0	0
0930-0945	90	172	0	55	0	75	0	119	60	0	0	0
0945-1000	93	156	0	41	1	88	0	116	59	0	0	0

1 HOUR TOTALS	1	2	3	4	5	6	7	8	9	10	11	12	TOTALS
	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	
0700-0800	476	792	0	217	0	266	0	403	208	0	0	0	2362
0715-0815	471	817	0	225	0	276	0	445	238	0	0	0	2472
0730-0830	434	824	0	245	1	278	0	466	234	0	0	0	2482
0745-0845	372	818	0	255	2	282	0	489	228	0	0	0	2446
0800-0900	312	783	0	227	2	270	0	516	225	0	0	0	2335
0815-0915	274	750	0	234	2	241	0	530	205	0	0	0	2236
0830-0930	267	745	0	200	2	238	0	535	207	0	0	0	2194
0845-0945	287	722	0	186	1	246	0	531	203	0	0	0	2176
0900-1000	330	708	0	187	2	277	0	488	212	0	0	0	2204

A.M. PEAK HOUR
0730-0830

US 101 NB ON-OFF RAMPS



COLDWATER CANYON AVENUE

THE TRAFFIC SOLUTION
 329 DIAMOND STREET
 ARCADIA, CALIFORNIA 91006
 626.446.7978

INTERSECTION TURNING MOVEMENT COUNT SUMMARY

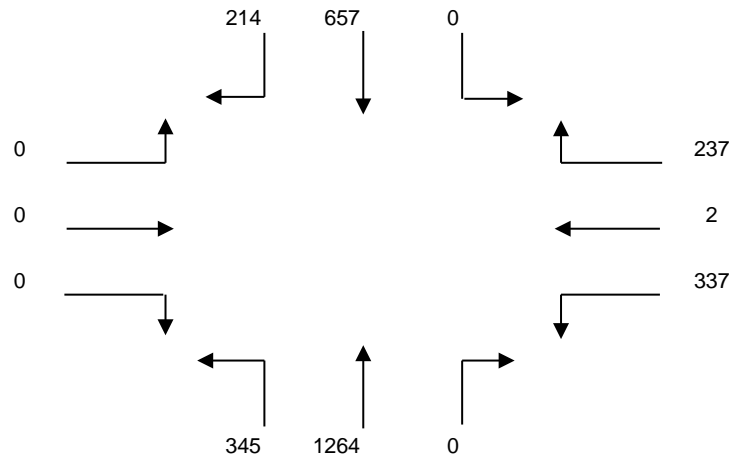
CLIENT: LLG - PASADENA
 PROJECT: HARVARD WESTLAKE SCHOOL - LOS ANGELES
 DATE: THURSDAY, JANUARY 27, 2011
 PERIOD: 02:00 PM TO 06:00 PM
 INTERSECTION N/S COLDWATER CANYON AVENUE
 E/W US 101 NB ON-OFF RAMP
 FILE NUMBER: 1-PM

15 MINUTE TOTALS	1	2	3	4	5	6	7	8	9	10	11	12
	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT
0200-0215	65	141	0	73	0	79	0	227	99	0	0	0
0215-0230	77	137	0	56	0	84	0	220	93	0	0	0
0230-0245	85	173	0	67	2	92	0	237	108	0	0	0
0245-0300	77	162	0	61	0	84	0	243	84	0	0	0
0300-0315	70	185	0	63	0	81	0	281	85	0	0	0
0315-0330	84	154	0	64	0	90	0	263	116	0	0	0
0330-0345	75	146	0	72	0	85	0	280	94	0	0	0
0345-0400	58	185	0	66	0	71	0	271	95	0	0	0
0400-0415	47	166	0	83	1	66	0	262	88	0	0	0
0415-0430	55	174	0	64	3	85	0	333	84	0	0	0
0430-0445	54	181	0	51	1	72	0	295	91	0	0	0
0445-0500	54	183	0	72	0	69	0	291	104	0	0	0
0500-0515	59	152	0	66	0	79	0	297	84	0	0	0
0515-0530	47	160	0	56	1	88	0	309	88	0	0	0
0530-0545	53	172	0	57	1	81	0	328	86	0	0	0
0545-0600	55	173	0	58	0	89	0	330	87	0	0	0

1 HOUR TOTALS	1	2	3	4	5	6	7	8	9	10	11	12	TOTALS
	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	
0200-0300	304	613	0	257	2	339	0	927	384	0	0	0	2826
0215-0315	309	657	0	247	2	341	0	981	370	0	0	0	2907
0230-0330	316	674	0	255	2	347	0	1024	393	0	0	0	3011
0245-0345	306	647	0	260	0	340	0	1067	379	0	0	0	2999
0300-0400	287	670	0	265	0	327	0	1095	390	0	0	0	3034
0315-0415	264	651	0	285	1	312	0	1076	393	0	0	0	2982
0330-0430	235	671	0	285	4	307	0	1146	361	0	0	0	3009
0345-0445	214	706	0	264	5	294	0	1161	358	0	0	0	3002
0400-0500	210	704	0	270	5	292	0	1181	367	0	0	0	3029
0415-0515	222	690	0	253	4	305	0	1216	363	0	0	0	3053
0430-0530	214	676	0	245	2	308	0	1192	367	0	0	0	3004
0445-0545	213	667	0	251	2	317	0	1225	362	0	0	0	3037
0500-0600	214	657	0	237	2	337	0	1264	345	0	0	0	3056

P.M. PEAK HOUR
0500-0600

US 101 NB ON-OFF RAMP



COLDWATER CANYON AVENUE

THE TRAFFIC SOLUTION
329 DIAMOND STREET
ARCADIA, CALIFORNIA 91006
626.446.7978

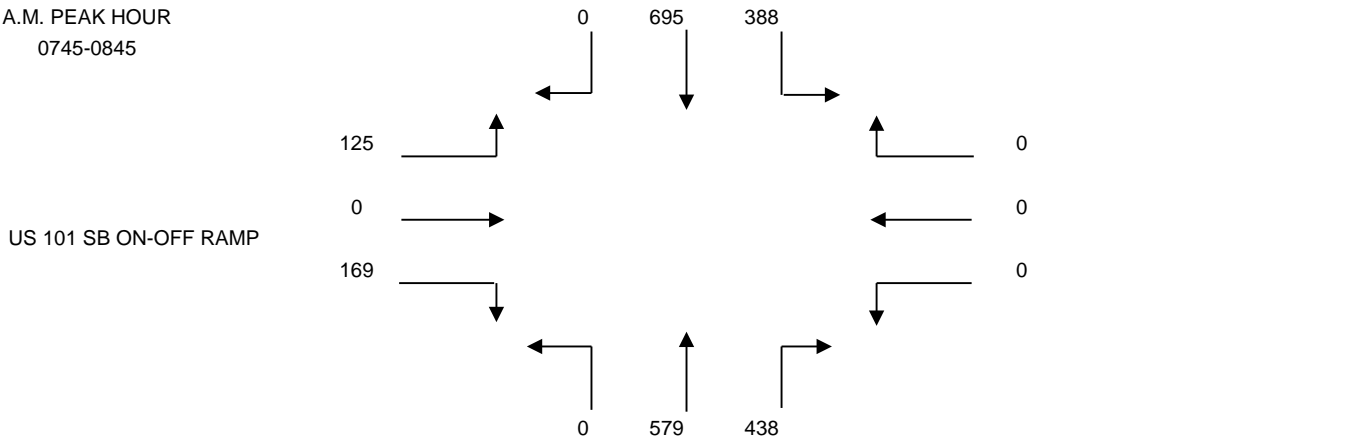
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: LLG - PASADENA
 PROJECT: HARVARD WESTLAKE SCHOOL - LOS ANGELES
 DATE: THURSDAY, JANUARY 27, 2011
 PERIOD: 07:00 AM TO 10:00 AM
 INTERSECTION N/S COLDWATER CANYON AVENUE
 E/W US 101 SB ON-OFF RAMP
 FILE NUMBER: 2-AM

15 MINUTE TOTALS	1	2	3	4	5	6	7	8	9	10	11	12
	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT
0700-0715	0	177	75	0	0	0	70	84	0	50	0	29
0715-0730	0	183	88	0	0	0	92	114	0	59	0	35
0730-0745	0	160	99	0	0	0	107	129	0	42	0	31
0745-0800	0	171	98	0	0	0	109	136	0	30	0	32
0800-0815	0	185	99	0	0	0	112	148	0	38	0	39
0815-0830	0	176	92	0	0	0	106	144	0	47	0	23
0830-0845	0	163	99	0	0	0	111	151	0	54	0	31
0845-0900	0	155	72	0	0	0	116	157	0	31	1	32
0900-0915	0	163	58	0	0	0	107	148	0	40	0	36
0915-0930	0	175	74	0	0	0	98	134	0	48	0	39
0930-0945	0	191	52	0	0	0	93	130	0	54	0	29
0945-1000	0	205	57	0	0	0	89	140	0	56	0	35

1 HOUR TOTALS	1	2	3	4	5	6	7	8	9	10	11	12	TOTALS
	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	
0700-0800	0	691	360	0	0	0	378	463	0	181	0	127	2200
0715-0815	0	699	384	0	0	0	420	527	0	169	0	137	2336
0730-0830	0	692	388	0	0	0	434	557	0	157	0	125	2353
0745-0845	0	695	388	0	0	0	438	579	0	169	0	125	2394
0800-0900	0	679	362	0	0	0	445	600	0	170	1	125	2382
0815-0915	0	657	321	0	0	0	440	600	0	172	1	122	2313
0830-0930	0	656	303	0	0	0	432	590	0	173	1	138	2293
0845-0945	0	684	256	0	0	0	414	569	0	173	1	136	2233
0900-1000	0	734	241	0	0	0	387	552	0	198	0	139	2251

A.M. PEAK HOUR
0745-0845



THE TRAFFIC SOLUTION
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 ARCADIA, CALIFORNIA 91006
 626.446.7978

COLDWATER CANYON AVENUE

INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: LLG - PASADENA
 PROJECT: HARVARD WESTLAKE SCHOOL - LOS ANGELES
 DATE: THURSDAY, JANUARY 27, 2011
 PERIOD: 02:00 PM TO 06:00 PM
 INTERSECTION N/S COLDWATER CANYON AVENUE
 E/W US 101 SB ON-OFF RAMP
 FILE NUMBER: 2-PM

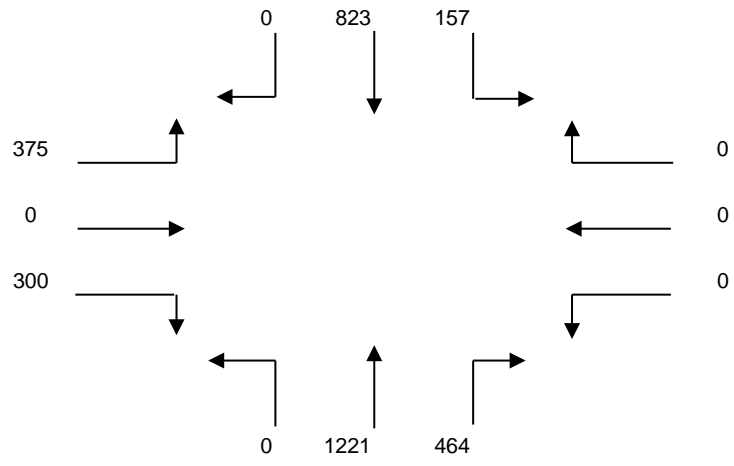
15 MINUTE TOTALS	1	2	3	4	5	6	7	8	9	10	11	12
	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT
0200-0215	0	171	54	0	0	0	111	241	0	86	0	98
0215-0230	0	185	51	0	0	0	128	237	0	73	0	81
0230-0245	0	198	61	0	0	0	100	250	0	81	1	95
0245-0300	0	195	48	0	0	0	97	257	0	57	3	70
0300-0315	0	221	55	0	0	0	101	300	0	65	0	83
0315-0330	0	183	56	0	0	0	125	291	0	65	0	88
0330-0345	0	194	46	0	0	0	121	308	0	83	0	67
0345-0400	0	215	36	0	0	0	139	304	0	64	1	62
0400-0415	0	208	41	0	0	0	125	295	0	68	0	71
0415-0430	0	207	39	0	0	0	101	326	0	66	1	77
0430-0445	0	191	45	0	0	0	104	289	0	65	0	77
0445-0500	0	222	30	0	0	0	109	311	0	59	0	90
0500-0515	0	200	38	0	0	0	131	283	0	83	0	98
0515-0530	0	214	33	0	0	0	123	317	0	74	0	80
0530-0545	0	191	43	0	0	0	109	297	0	67	0	102
0545-0600	0	218	43	0	0	0	101	324	0	76	0	95

1 HOUR TOTALS	1	2	3	4	5	6	7	8	9	10	11	12	TOTALS
	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	
0200-0300	0	749	214	0	0	0	436	985	0	297	4	344	3029
0215-0315	0	799	215	0	0	0	426	1044	0	276	4	329	3093
0230-0330	0	797	220	0	0	0	423	1098	0	268	4	336	3146
0245-0345	0	793	205	0	0	0	444	1156	0	270	3	308	3179
0300-0400	0	813	193	0	0	0	486	1203	0	277	1	300	3273
0315-0415	0	800	179	0	0	0	510	1198	0	280	1	288	3256
0330-0430	0	824	162	0	0	0	486	1233	0	281	2	277	3265
0345-0445	0	821	161	0	0	0	469	1214	0	263	2	287	3217
0400-0500	0	828	155	0	0	0	439	1221	0	258	1	315	3217
0415-0515	0	820	152	0	0	0	445	1209	0	273	1	342	3242
0430-0530	0	827	146	0	0	0	467	1200	0	281	0	345	3266
0445-0545	0	827	144	0	0	0	472	1208	0	283	0	370	3304
0500-0600	0	823	157	0	0	0	464	1221	0	300	0	375	3340

THE TRAFFIC SOLUTION
 329 DIAMOND STREET
 ARCADIA, CALIFORNIA 91006
 626.446.7978

P.M. PEAK HOUR
0500-0600

US 101 SB ON-OFF RAMP



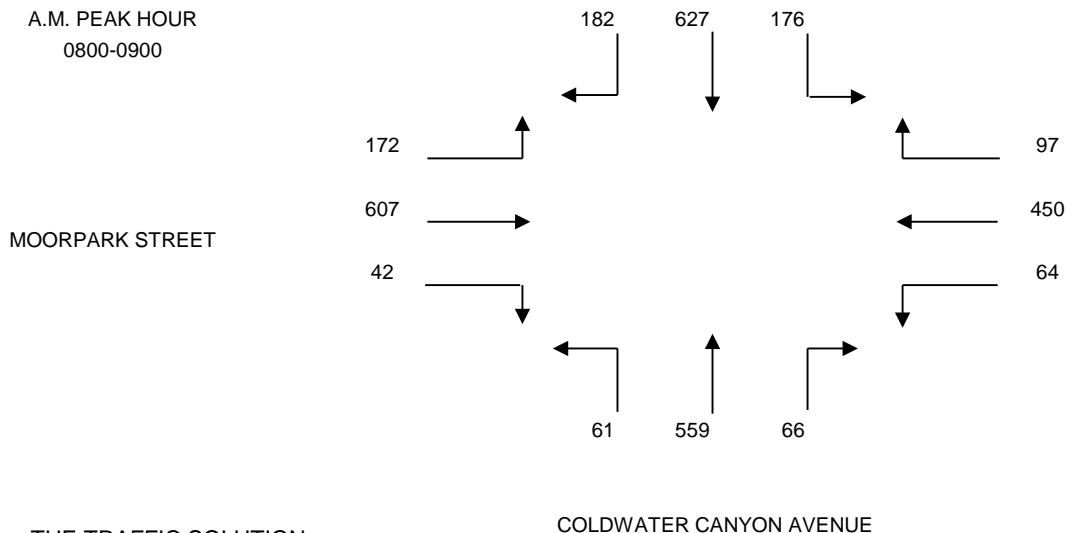
COLDWATER CANYON AVENUE

INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: LLG - PASADENA
 PROJECT: HARVARD WESTLAKE SCHOOL - LOS ANGELES
 DATE: THURSDAY, JANUARY 27, 2011
 PERIOD: 07:00 AM TO 10:00 AM
 INTERSECTION N/S COLDWATER CANYON AVENUE
 E/W MOORPARK STREET
 FILE NUMBER: 3-AM

15 MINUTE TOTALS	1	2	3	4	5	6	7	8	9	10	11	12
	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT
0700-0715	18	232	8	16	44	19	4	96	5	9	37	24
0715-0730	22	219	16	20	78	17	5	107	6	8	71	33
0730-0745	22	177	29	24	100	19	8	111	10	6	109	31
0745-0800	25	150	32	24	128	14	12	121	19	9	149	42
0800-0815	37	161	43	24	120	13	11	126	19	12	147	38
0815-0830	51	160	49	25	119	19	19	140	14	12	134	50
0830-0845	48	154	42	25	111	16	19	147	13	8	164	48
0845-0900	46	152	42	23	100	16	17	146	15	10	162	36
0900-0915	34	169	40	17	84	16	10	145	11	12	116	42
0915-0930	26	198	32	17	68	20	8	140	17	16	96	42
0930-0945	27	218	37	22	51	31	7	151	10	18	83	27
0945-1000	29	237	40	23	47	30	9	162	11	13	80	33

1 HOUR TOTALS	1	2	3	4	5	6	7	8	9	10	11	12	TOTALS
	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	
0700-0800	87	778	85	84	350	69	29	435	40	32	366	130	2485
0715-0815	106	707	120	92	426	63	36	465	54	35	476	144	2724
0730-0830	135	648	153	97	467	65	50	498	62	39	539	161	2914
0745-0845	161	625	166	98	478	62	61	534	65	41	594	178	3063
0800-0900	182	627	176	97	450	64	66	559	61	42	607	172	3103
0815-0915	179	635	173	90	414	67	65	578	53	42	576	176	3048
0830-0930	154	673	156	82	363	68	54	578	56	46	538	168	2936
0845-0945	133	737	151	79	303	83	42	582	53	56	457	147	2823
0900-1000	116	822	149	79	250	97	34	598	49	59	375	144	2772



THE TRAFFIC SOLUTION
 329 DIAMOND STREET
 ARCADIA, CALIFORNIA 91006
 626.446.7978

INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: LLG - PASADENA
 PROJECT: HARVARD WESTLAKE SCHOOL - LOS ANGELES
 DATE: THURSDAY, JANUARY 27, 2011
 PERIOD: 02:00 PM TO 06:00 PM
 INTERSECTION N/S COLDWATER CANYON AVENUE
 E/W MOORPARK STREET
 FILE NUMBER: 3-PM

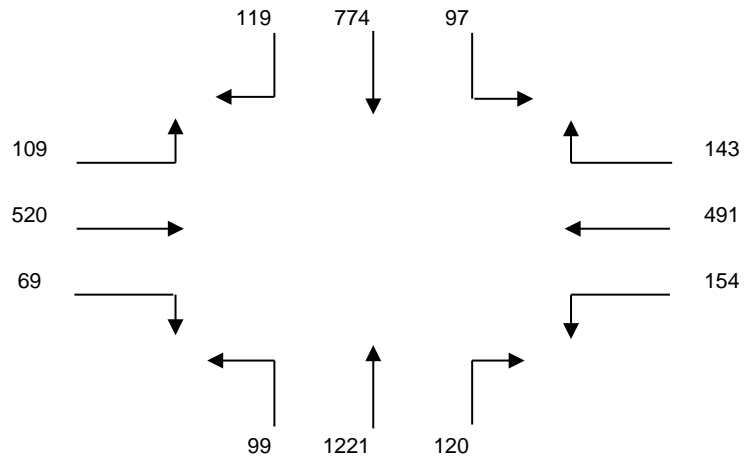
15 MINUTE TOTALS	1	2	3	4	5	6	7	8	9	10	11	12
	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT
0200-0215	14	188	26	15	68	25	15	249	14	18	87	31
0215-0230	21	192	18	20	58	23	27	270	18	23	91	21
0230-0245	20	194	20	20	61	20	23	281	23	20	83	29
0245-0300	25	202	23	19	60	24	21	296	24	18	92	26
0300-0315	23	209	26	22	66	24	31	315	30	13	117	33
0315-0330	26	200	25	15	70	30	30	312	29	17	116	41
0330-0345	25	211	24	18	69	27	30	320	22	10	101	31
0345-0400	29	196	27	25	64	24	31	311	20	19	123	38
0400-0415	26	203	28	29	69	31	41	307	21	14	135	26
0415-0430	27	200	26	20	76	24	33	294	22	13	105	35
0430-0445	20	198	27	21	100	22	24	341	26	15	128	30
0445-0500	24	206	27	33	95	23	28	333	27	14	122	23
0500-0515	24	199	27	34	106	28	37	300	22	17	140	32
0515-0530	26	193	26	31	103	38	22	307	21	13	131	29
0530-0545	33	194	20	37	136	44	25	310	29	19	125	22
0545-0600	36	188	24	41	146	44	36	304	27	20	124	26

1 HOUR TOTALS	1	2	3	4	5	6	7	8	9	10	11	12	TOTALS
	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	
0200-0300	80	776	87	74	247	92	86	1096	79	79	353	107	3156
0215-0315	89	797	87	81	245	91	102	1162	95	74	383	109	3315
0230-0330	94	805	94	76	257	98	105	1204	106	68	408	129	3444
0245-0345	99	822	98	74	265	105	112	1243	105	58	426	131	3538
0300-0400	103	816	102	80	269	105	122	1258	101	59	457	143	3615
0315-0415	106	810	104	87	272	112	132	1250	92	60	475	136	3636
0330-0430	107	810	105	92	278	106	135	1232	85	56	464	130	3600
0345-0445	102	797	108	95	309	101	129	1253	89	61	491	129	3664
0400-0500	97	807	108	103	340	100	126	1275	96	56	490	114	3712
0415-0515	95	803	107	108	377	97	122	1268	97	59	495	120	3748
0430-0530	94	796	107	119	404	111	111	1281	96	59	521	114	3813
0445-0545	107	792	100	135	440	133	112	1250	99	63	518	106	3855
0500-0600	119	774	97	143	491	154	120	1221	99	69	520	109	3916

THE TRAFFIC SOLUTION
 329 DIAMOND STREET
 ARCADIA, CALIFORNIA 91006
 626.446.7978

P.M. PEAK HOUR
0500-0600

MOORPARK STREET



COLDWATER CANYON AVENUE

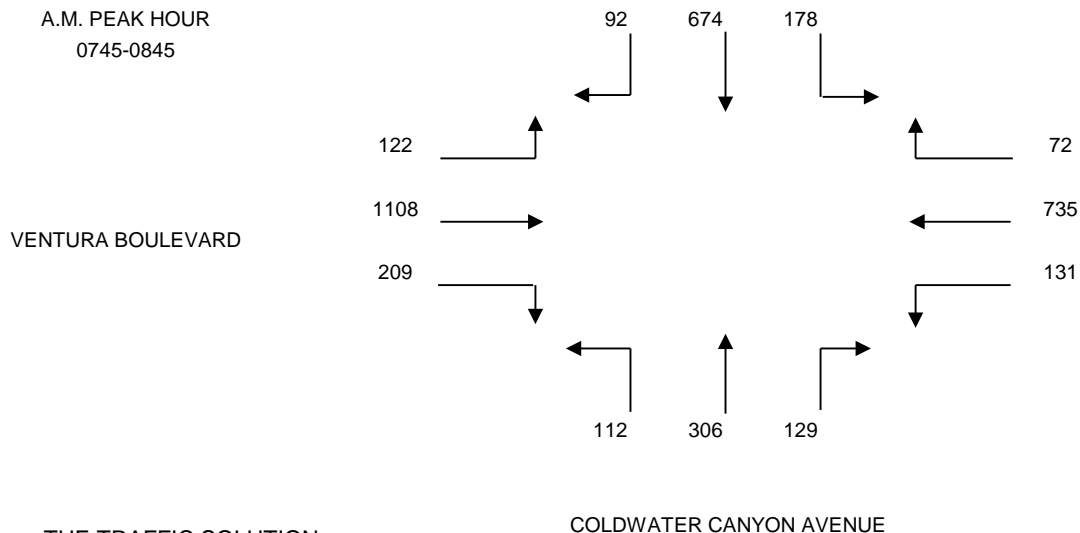
THE TRAFFIC SOLUTION
329 DIAMOND STREET
ARCADIA, CALIFORNIA 91006
626.446.7978

INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: LLG - PASADENA
 PROJECT: HARVARD WESTLAKE SCHOOL - LOS ANGELES
 DATE: THURSDAY, JANUARY 27, 2011
 PERIOD: 07:00 AM TO 10:00 AM
 INTERSECTION N/S COLDWATER CANYON AVENUE
 E/W VENTURA BOULEVARD
 FILE NUMBER: 4-AM

15 MINUTE TOTALS	1	2	3	4	5	6	7	8	9	10	11	12
	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT
0700-0715	11	198	17	13	109	79	10	37	17	70	160	29
0715-0730	15	182	27	10	114	58	15	59	25	78	181	20
0730-0745	13	179	32	19	151	51	20	66	29	84	211	28
0745-0800	19	186	30	13	183	30	31	77	39	67	271	29
0800-0815	23	171	46	19	197	43	31	81	24	54	307	34
0815-0830	26	169	43	20	162	30	31	63	26	46	262	26
0830-0845	24	148	59	20	193	28	36	85	23	42	268	33
0845-0900	21	151	45	26	189	30	27	77	22	53	282	31
0900-0915	20	145	51	34	185	37	31	67	24	40	291	37
0915-0930	21	167	40	27	152	37	22	64	20	53	267	40
0930-0945	34	150	66	36	189	32	22	71	29	52	247	31
0945-1000	35	156	75	38	180	32	26	82	29	47	225	32

1 HOUR TOTALS	1	2	3	4	5	6	7	8	9	10	11	12	TOTALS
	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	
0700-0800	58	745	106	55	557	218	76	239	110	299	823	106	3392
0715-0815	70	718	135	61	645	182	97	283	117	283	970	111	3672
0730-0830	81	705	151	71	693	154	113	287	118	251	1051	117	3792
0745-0845	92	674	178	72	735	131	129	306	112	209	1108	122	3868
0800-0900	94	639	193	85	741	131	125	306	95	195	1119	124	3847
0815-0915	91	613	198	100	729	125	125	292	95	181	1103	127	3779
0830-0930	86	611	195	107	719	132	116	293	89	188	1108	141	3785
0845-0945	96	613	202	123	715	136	102	279	95	198	1087	139	3785
0900-1000	110	618	232	135	706	138	101	284	102	192	1030	140	3788



THE TRAFFIC SOLUTION
 329 DIAMOND STREET
 ARCADIA, CALIFORNIA 91006
 626.446.7978

COLDWATER CANYON AVENUE

INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: LLG - PASADENA
 PROJECT: HARVARD WESTLAKE SCHOOL - LOS ANGELES
 DATE: THURSDAY, JANUARY 27, 2011
 PERIOD: 02:00 PM TO 06:00 PM
 INTERSECTION N/S COLDWATER CANYON AVENUE
 E/W VENTURA BOULEVARD
 FILE NUMBER: 4-PM

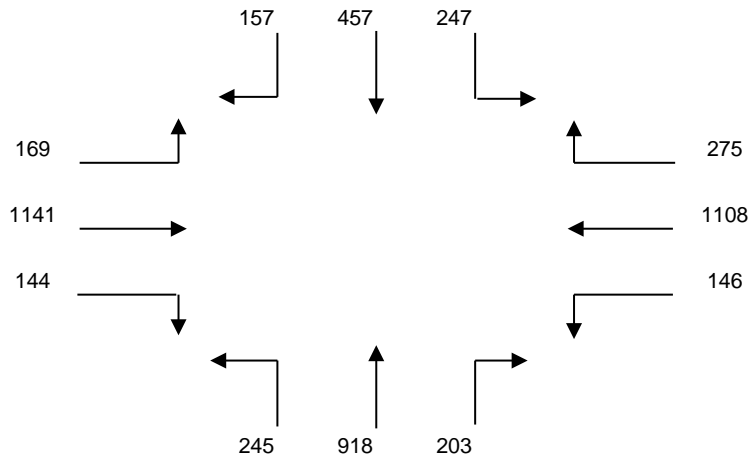
15 MINUTE TOTALS	1	2	3	4	5	6	7	8	9	10	11	12
	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT
0200-0215	43	99	57	75	192	26	49	144	42	33	241	44
0215-0230	36	104	65	66	221	32	48	175	41	40	245	49
0230-0245	49	98	63	74	268	34	42	195	41	41	270	46
0245-0300	39	100	68	80	243	40	49	196	61	42	269	50
0300-0315	39	104	55	82	254	41	55	218	53	48	294	41
0315-0330	28	108	66	59	260	31	45	242	55	36	254	48
0330-0345	41	95	65	67	241	36	42	256	69	36	285	46
0345-0400	52	107	70	69	257	30	35	230	51	33	262	54
0400-0415	39	104	65	83	325	35	56	225	60	37	275	33
0415-0430	33	112	60	55	272	31	43	239	47	31	256	30
0430-0445	34	110	69	76	238	27	45	261	64	28	278	49
0445-0500	45	118	56	71	287	32	48	234	59	33	291	39
0500-0515	35	121	67	73	258	42	59	225	57	41	262	46
0515-0530	35	115	62	65	268	38	38	222	65	39	313	43
0530-0545	42	103	62	66	295	34	58	237	64	31	275	41
0545-0600	45	116	74	55	265	32	47	230	58	30	285	48

1 HOUR TOTALS	1	2	3	4	5	6	7	8	9	10	11	12	TOTALS
	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	
0200-0300	167	401	253	295	924	132	188	710	185	156	1025	189	4625
0215-0315	163	406	251	302	986	147	194	784	196	171	1078	186	4864
0230-0330	155	410	252	295	1025	146	191	851	210	167	1087	185	4974
0245-0345	147	407	254	288	998	148	191	912	238	162	1102	185	5032
0300-0400	160	414	256	277	1012	138	177	946	228	153	1095	189	5045
0315-0415	160	414	266	278	1083	132	178	953	235	142	1076	181	5098
0330-0430	165	418	260	274	1095	132	176	950	227	137	1078	163	5075
0345-0445	158	433	264	283	1092	123	179	955	222	129	1071	166	5075
0400-0500	151	444	250	285	1122	125	192	959	230	129	1100	151	5138
0415-0515	147	461	252	275	1055	132	195	959	227	133	1087	164	5087
0430-0530	149	464	254	285	1051	139	190	942	245	141	1144	177	5181
0445-0545	157	457	247	275	1108	146	203	918	245	144	1141	169	5210
0500-0600	157	455	265	259	1086	146	202	914	244	141	1135	178	5182

THE TRAFFIC SOLUTION
 329 DIAMOND STREET
 ARCADIA, CALIFORNIA 91006
 626.446.7978

P.M. PEAK HOUR
0445-0545

VENTURA BOULEVARD



COLDWATER CANYON AVENUE

THE TRAFFIC SOLUTION
329 DIAMOND STREET
ARCADIA, CALIFORNIA 91006
626.446.7978

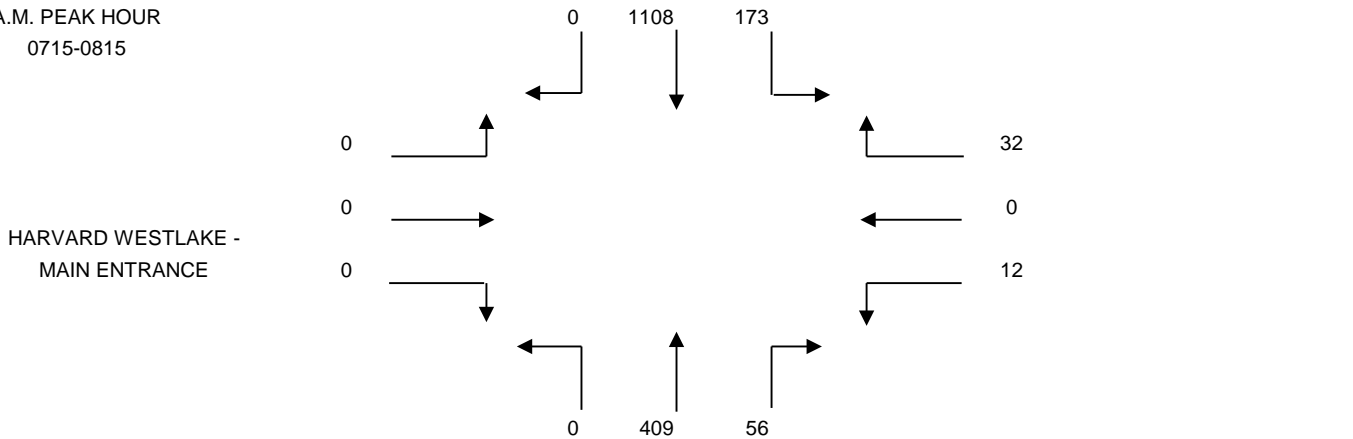
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: LLG - PASADENA
 PROJECT: HARVARD WESTLAKE SCHOOL - LOS ANGELES
 DATE: THURSDAY, JANUARY 27, 2011
 PERIOD: 07:00 AM TO 10:00 AM
 INTERSECTION N/S COLDWATER CANYON AVENUE
 E/W HARVARD WESTLAKE - MAIN ENTRANCE
 FILE NUMBER: 7-AM

15 MINUTE TOTALS	1	2	3	4	5	6	7	8	9	10	11	12
	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT
0700-0715	0	289	10	3	0	1	2	60	0	0	0	0
0715-0730	0	319	20	8	0	3	4	71	0	0	0	0
0730-0745	0	272	41	7	0	2	6	86	0	0	0	0
0745-0800	0	269	63	8	0	4	22	130	0	0	0	0
0800-0815	0	248	49	9	0	3	24	122	0	0	0	0
0815-0830	0	252	12	8	0	2	10	112	0	0	0	0
0830-0845	0	254	28	5	0	1	10	130	0	0	0	0
0845-0900	0	258	13	2	0	0	4	129	0	0	0	0
0900-0915	0	251	7	2	0	0	2	106	0	0	0	0
0915-0930	0	246	7	2	0	0	2	113	0	0	0	0
0930-0945	0	251	8	5	0	1	2	112	0	0	0	0
0945-1000	0	255	8	4	0	1	2	114	0	0	0	0

1 HOUR TOTALS	1	2	3	4	5	6	7	8	9	10	11	12	TOTALS
	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	
0700-0800	0	1149	134	26	0	10	34	347	0	0	0	0	1700
0715-0815	0	1108	173	32	0	12	56	409	0	0	0	0	1790
0730-0830	0	1041	165	32	0	11	62	450	0	0	0	0	1761
0745-0845	0	1023	152	30	0	10	66	494	0	0	0	0	1775
0800-0900	0	1012	102	24	0	6	48	493	0	0	0	0	1685
0815-0915	0	1015	60	17	0	3	26	477	0	0	0	0	1598
0830-0930	0	1009	55	11	0	1	18	478	0	0	0	0	1572
0845-0945	0	1006	35	11	0	1	10	460	0	0	0	0	1523
0900-1000	0	1003	30	13	0	2	8	445	0	0	0	0	1501

A.M. PEAK HOUR
0715-0815



THE TRAFFIC SOLUTION
 329 DIAMOND STREET
 ARCADIA, CALIFORNIA 91006
 626.446.7978

COLDWATER CANYON AVENUE

INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: LLG - PASADENA
 PROJECT: HARVARD WESTLAKE SCHOOL - LOS ANGELES
 DATE: THURSDAY, JANUARY 27, 2011
 PERIOD: 02:00 PM TO 06:00 PM
 INTERSECTION N/S COLDWATER CANYON AVENUE
 E/W HARVARD WESTLAKE - MAIN ENTRANCE
 FILE NUMBER: 7-PM

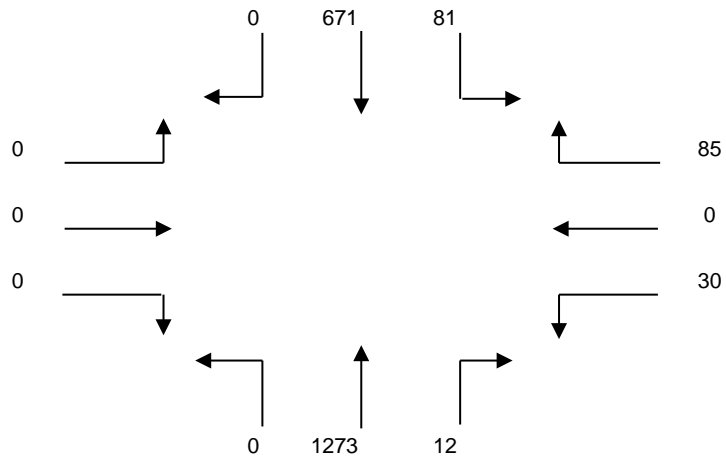
15 MINUTE TOTALS	1	2	3	4	5	6	7	8	9	10	11	12
	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT
0200-0215	0	138	8	13	0	7	3	217	0	0	0	0
0215-0230	0	157	7	9	0	3	5	233	0	0	0	0
0230-0245	0	170	10	24	0	10	4	251	0	0	0	0
0245-0300	0	179	19	43	0	29	4	283	0	0	0	0
0300-0315	0	177	12	21	0	5	2	294	0	0	0	0
0315-0330	0	161	8	11	0	4	1	313	0	0	0	0
0330-0345	0	164	7	13	0	2	0	323	0	0	0	0
0345-0400	0	161	12	15	0	4	3	330	0	0	0	0
0400-0415	0	160	14	11	0	5	4	337	0	0	0	0
0415-0430	0	151	14	15	0	4	5	336	0	0	0	0
0430-0445	0	172	14	17	0	4	2	344	0	0	0	0
0445-0500	0	135	18	24	0	4	5	310	0	0	0	0
0500-0515	0	161	28	21	0	9	5	315	0	0	0	0
0515-0530	0	174	23	26	0	9	4	326	0	0	0	0
0530-0545	0	166	15	19	0	5	2	319	0	0	0	0
0545-0600	0	170	15	19	0	7	1	313	0	0	0	0

1 HOUR TOTALS	1	2	3	4	5	6	7	8	9	10	11	12	TOTALS
	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	
0200-0300	0	644	44	89	0	49	16	984	0	0	0	0	1826
0215-0315	0	683	48	97	0	47	15	1061	0	0	0	0	1951
0230-0330	0	687	49	99	0	48	11	1141	0	0	0	0	2035
0245-0345	0	681	46	88	0	40	7	1213	0	0	0	0	2075
0300-0400	0	663	39	60	0	15	6	1260	0	0	0	0	2043
0315-0415	0	646	41	50	0	15	8	1303	0	0	0	0	2063
0330-0430	0	636	47	54	0	15	12	1326	0	0	0	0	2090
0345-0445	0	644	54	58	0	17	14	1347	0	0	0	0	2134
0400-0500	0	618	60	67	0	17	16	1327	0	0	0	0	2105
0415-0515	0	619	74	77	0	21	17	1305	0	0	0	0	2113
0430-0530	0	642	83	88	0	26	16	1295	0	0	0	0	2150
0445-0545	0	636	84	90	0	27	16	1270	0	0	0	0	2123
0500-0600	0	671	81	85	0	30	12	1273	0	0	0	0	2152

THE TRAFFIC SOLUTION
 329 DIAMOND STREET
 ARCADIA, CALIFORNIA 91006
 626.446.7978

P.M. PEAK HOUR
0500-0600

HARVARD WESTLAKE
MAIN ENTRANCE



COLDWATER CANYON AVENUE

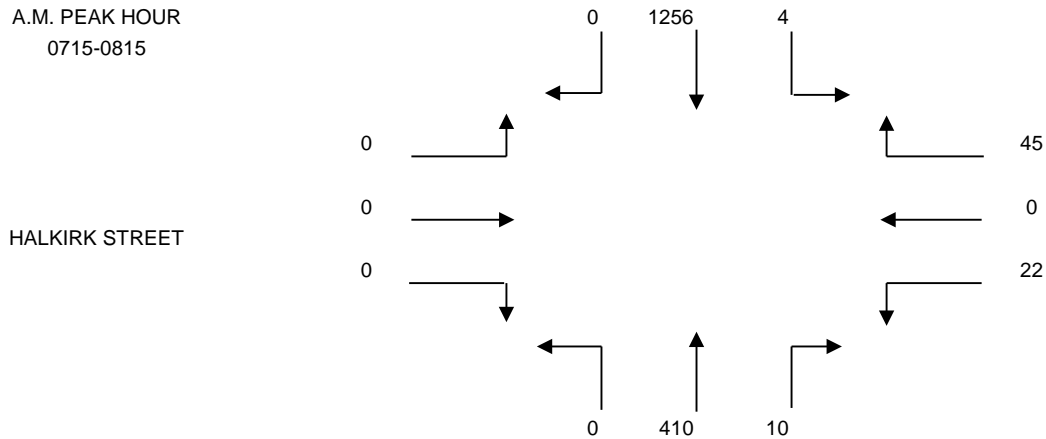
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: LLG - PASADENA
 PROJECT: HARVARD WESTLAKE SCHOOL - LOS ANGELES
 DATE: THURSDAY, JANUARY 27, 2011
 PERIOD: 07:00 AM TO 10:00 AM
 INTERSECTION N/S COLDWATER CANYON AVENUE
 E/W HALKIRK STREET
 FILE NUMBER: 5-AM

15 MINUTE TOTALS	1	2	3	4	5	6	7	8	9	10	11	12
	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT
0700-0715	0	307	2	5	0	2	0	52	0	0	0	0
0715-0730	0	319	2	8	0	6	2	72	0	0	0	0
0730-0745	0	330	0	10	0	8	3	96	0	0	0	0
0745-0800	0	318	0	17	0	4	2	135	0	0	0	0
0800-0815	0	289	2	10	0	4	3	107	0	0	0	0
0815-0830	0	232	0	11	0	8	1	100	0	0	0	0
0830-0845	0	251	0	9	0	5	2	121	0	0	0	0
0845-0900	0	258	1	7	0	3	4	111	0	0	0	0
0900-0915	0	243	1	9	0	2	1	110	0	0	0	0
0915-0930	0	237	0	7	0	4	2	102	0	0	0	0
0930-0945	0	240	3	7	0	3	0	104	0	0	0	0
0945-1000	0	244	3	9	0	5	4	115	0	0	0	0

1 HOUR TOTALS	1	2	3	4	5	6	7	8	9	10	11	12	TOTALS
	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	
0700-0800	0	1274	4	40	0	20	7	355	0	0	0	0	1700
0715-0815	0	1256	4	45	0	22	10	410	0	0	0	0	1747
0730-0830	0	1169	2	48	0	24	9	438	0	0	0	0	1690
0745-0845	0	1090	2	47	0	21	8	463	0	0	0	0	1631
0800-0900	0	1030	3	37	0	20	10	439	0	0	0	0	1539
0815-0915	0	984	2	36	0	18	8	442	0	0	0	0	1490
0830-0930	0	989	2	32	0	14	9	444	0	0	0	0	1490
0845-0945	0	978	5	30	0	12	7	427	0	0	0	0	1459
0900-1000	0	964	7	32	0	14	7	431	0	0	0	0	1455

A.M. PEAK HOUR
0715-0815



THE TRAFFIC SOLUTION
 329 DIAMOND STREET
 ARCADIA, CALIFORNIA 91006
 626.446.7978

COLDWATER CANYON AVENUE

INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: LLG - PASADENA
 PROJECT: HARVARD WESTLAKE SCHOOL - LOS ANGELES
 DATE: THURSDAY, JANUARY 27, 2011
 PERIOD: 02:00 PM TO 06:00 PM
 INTERSECTION N/S COLDWATER CANYON AVENUE
 E/W HALKIRK STREET
 FILE NUMBER: 5-PM

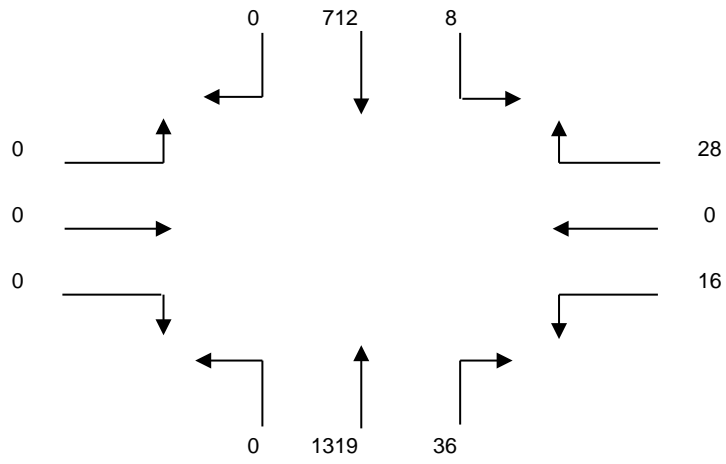
15 MINUTE TOTALS	1	2	3	4	5	6	7	8	9	10	11	12
	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT
0200-0215	0	139	5	13	0	2	3	211	0	0	0	0
0215-0230	0	164	3	10	0	2	4	244	0	0	0	0
0230-0245	0	174	3	7	0	4	6	260	0	0	0	0
0245-0300	0	176	2	20	0	9	26	292	0	0	0	0
0300-0315	0	167	4	13	0	4	11	295	0	0	0	0
0315-0330	0	170	2	8	0	3	6	326	0	0	0	0
0330-0345	0	159	1	11	0	3	8	341	0	0	0	0
0345-0400	0	168	2	5	0	3	13	316	0	0	0	0
0400-0415	0	161	0	8	0	4	10	310	0	0	0	0
0415-0430	0	162	5	3	0	3	16	328	0	0	0	0
0430-0445	0	157	5	5	0	4	12	352	0	0	0	0
0445-0500	0	165	1	5	0	4	8	341	0	0	0	0
0500-0515	0	180	2	8	0	5	10	308	0	0	0	0
0515-0530	0	186	3	9	0	4	11	327	0	0	0	0
0530-0545	0	175	1	7	0	5	8	334	0	0	0	0
0545-0600	0	171	2	4	0	2	7	350	0	0	0	0

1 HOUR TOTALS	1	2	3	4	5	6	7	8	9	10	11	12	TOTALS
	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	
0200-0300	0	653	13	50	0	17	39	1007	0	0	0	0	1779
0215-0315	0	681	12	50	0	19	47	1091	0	0	0	0	1900
0230-0330	0	687	11	48	0	20	49	1173	0	0	0	0	1988
0245-0345	0	672	9	52	0	19	51	1254	0	0	0	0	2057
0300-0400	0	664	9	37	0	13	38	1278	0	0	0	0	2039
0315-0415	0	658	5	32	0	13	37	1293	0	0	0	0	2038
0330-0430	0	650	8	27	0	13	47	1295	0	0	0	0	2040
0345-0445	0	648	12	21	0	14	51	1306	0	0	0	0	2052
0400-0500	0	645	11	21	0	15	46	1331	0	0	0	0	2069
0415-0515	0	664	13	21	0	16	46	1329	0	0	0	0	2089
0430-0530	0	688	11	27	0	17	41	1328	0	0	0	0	2112
0445-0545	0	706	7	29	0	18	37	1310	0	0	0	0	2107
0500-0600	0	712	8	28	0	16	36	1319	0	0	0	0	2119

THE TRAFFIC SOLUTION
 329 DIAMOND STREET
 ARCADIA, CALIFORNIA 91006
 626.446.7978

P.M. PEAK HOUR
0500-0600

HALKIRK STREET



COLDWATER CANYON AVENUE

THE TRAFFIC SOLUTION
329 DIAMOND STREET
ARCADIA, CALIFORNIA 91006
626.446.7978

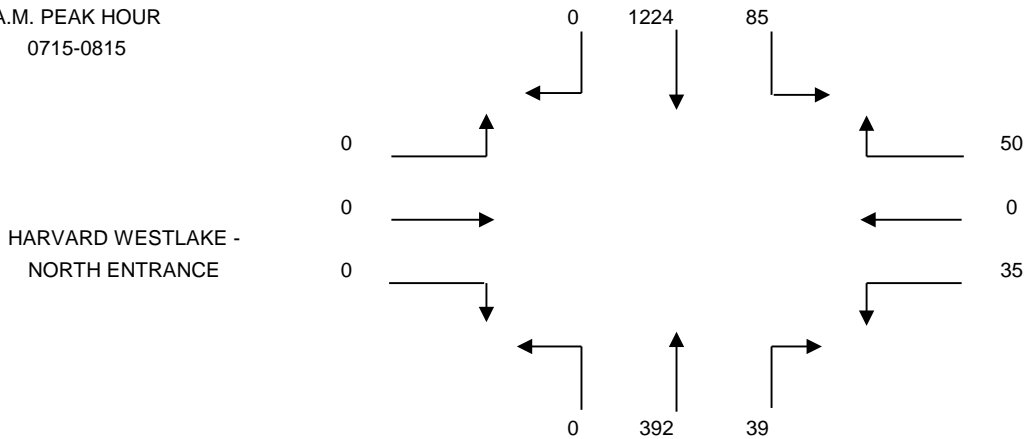
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: LLG - PASADENA
 PROJECT: HARVARD WESTLAKE SCHOOL - LOS ANGELES
 DATE: THURSDAY, JANUARY 27, 2011
 PERIOD: 07:00 AM TO 10:00 AM
 INTERSECTION N/S COLDWATER CANYON AVENUE
 E/W HARVARD WESTLAKE - NORTH ENTRANCE
 FILE NUMBER: 6-AM

15 MINUTE TOTALS	1	2	3	4	5	6	7	8	9	10	11	12
	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT
0700-0715	0	312	19	2	0	3	2	47	0	0	0	0
0715-0730	0	299	25	7	0	7	7	76	0	0	0	0
0730-0745	0	315	24	14	0	7	7	89	0	0	0	0
0745-0800	0	301	26	26	0	18	23	120	0	0	0	0
0800-0815	0	309	10	3	0	3	2	107	0	0	0	0
0815-0830	0	247	4	3	0	0	1	111	0	0	0	0
0830-0845	0	268	2	3	0	1	2	127	0	0	0	0
0845-0900	0	260	1	3	0	0	2	128	0	0	0	0
0900-0915	0	251	1	0	0	0	0	103	0	0	0	0
0915-0930	0	244	2	3	0	0	0	101	0	0	0	0
0930-0945	0	247	3	4	0	2	1	113	0	0	0	0
0945-1000	0	253	4	2	0	1	2	121	0	0	0	0

1 HOUR TOTALS	1	2	3	4	5	6	7	8	9	10	11	12	TOTALS
	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	
0700-0800	0	1227	94	49	0	35	39	332	0	0	0	0	1776
0715-0815	0	1224	85	50	0	35	39	392	0	0	0	0	1825
0730-0830	0	1172	64	46	0	28	33	427	0	0	0	0	1770
0745-0845	0	1125	42	35	0	22	28	465	0	0	0	0	1717
0800-0900	0	1084	17	12	0	4	7	473	0	0	0	0	1597
0815-0915	0	1026	8	9	0	1	5	469	0	0	0	0	1518
0830-0930	0	1023	6	9	0	1	4	459	0	0	0	0	1502
0845-0945	0	1002	7	10	0	2	3	445	0	0	0	0	1469
0900-1000	0	995	10	9	0	3	3	438	0	0	0	0	1458

A.M. PEAK HOUR
0715-0815



THE TRAFFIC SOLUTION
 329 DIAMOND STREET
 ARCADIA, CALIFORNIA 91006
 626.446.7978

COLDWATER CANYON AVENUE

INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: LLG - PASADENA
 PROJECT: HARVARD WESTLAKE SCHOOL - LOS ANGELES
 DATE: THURSDAY, JANUARY 27, 2011
 PERIOD: 02:00 PM TO 06:00 PM
 INTERSECTION N/S COLDWATER CANYON AVENUE
 E/W HARVARD WESTLAKE - NORTH ENTRANCE
 FILE NUMBER: 6-PM

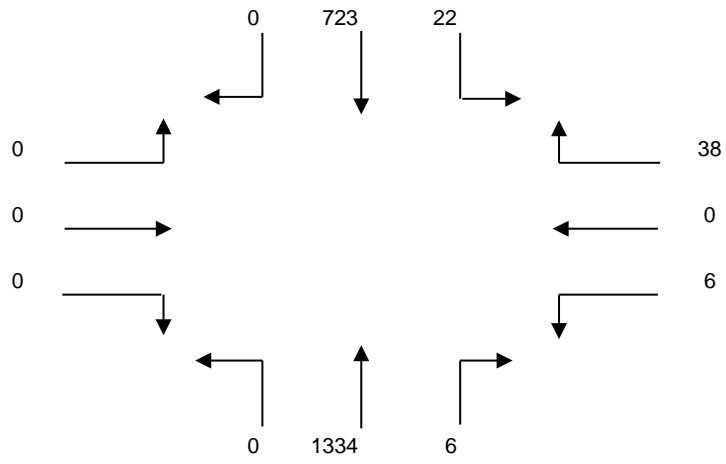
15 MINUTE TOTALS	1	2	3	4	5	6	7	8	9	10	11	12
	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT
0200-0215	0	142	9	6	0	4	2	209	0	0	0	0
0215-0230	0	161	9	5	0	2	6	251	0	0	0	0
0230-0245	0	167	7	10	0	4	9	265	0	0	0	0
0245-0300	0	176	9	24	0	6	6	295	0	0	0	0
0300-0315	0	180	8	13	0	4	3	300	0	0	0	0
0315-0330	0	173	3	8	0	0	0	334	0	0	0	0
0330-0345	0	161	4	11	0	1	1	349	0	0	0	0
0345-0400	0	164	6	8	0	0	1	312	0	0	0	0
0400-0415	0	166	2	9	0	1	0	325	0	0	0	0
0415-0430	0	163	7	5	0	0	1	355	0	0	0	0
0430-0445	0	172	4	9	0	2	1	367	0	0	0	0
0445-0500	0	155	9	11	0	0	2	321	0	0	0	0
0500-0515	0	177	9	11	0	1	2	314	0	0	0	0
0515-0530	0	190	7	9	0	2	1	343	0	0	0	0
0530-0545	0	182	4	10	0	3	2	354	0	0	0	0
0545-0600	0	174	2	8	0	0	1	323	0	0	0	0

1 HOUR TOTALS	1	2	3	4	5	6	7	8	9	10	11	12	TOTALS
	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	
0200-0300	0	646	34	45	0	16	23	1020	0	0	0	0	1784
0215-0315	0	684	33	52	0	16	24	1111	0	0	0	0	1920
0230-0330	0	696	27	55	0	14	18	1194	0	0	0	0	2004
0245-0345	0	690	24	56	0	11	10	1278	0	0	0	0	2069
0300-0400	0	678	21	40	0	5	5	1295	0	0	0	0	2044
0315-0415	0	664	15	36	0	2	2	1320	0	0	0	0	2039
0330-0430	0	654	19	33	0	2	3	1341	0	0	0	0	2052
0345-0445	0	665	19	31	0	3	3	1359	0	0	0	0	2080
0400-0500	0	656	22	34	0	3	4	1368	0	0	0	0	2087
0415-0515	0	667	29	36	0	3	6	1357	0	0	0	0	2098
0430-0530	0	694	29	40	0	5	6	1345	0	0	0	0	2119
0445-0545	0	704	29	41	0	6	7	1332	0	0	0	0	2119
0500-0600	0	723	22	38	0	6	6	1334	0	0	0	0	2129

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P.M. PEAK HOUR
0500-0600

HARVARD WESTLAKE
NORTH ENTRANCE



COLDWATER CANYON AVENUE

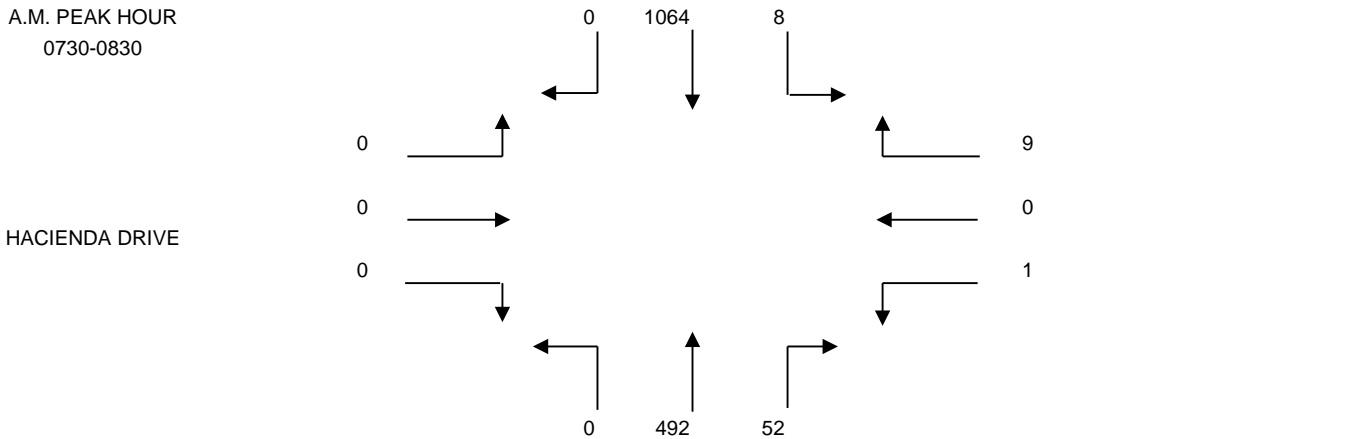
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: LLG - PASADENA
 PROJECT: HARVARD WESTLAKE SCHOOL - LOS ANGELES
 DATE: THURSDAY, JANUARY 27, 2011
 PERIOD: 07:00 AM TO 10:00 AM
 INTERSECTION N/S COLDWATER CANYON AVENUE
 E/W HACIENDA DRIVE
 FILE NUMBER: 8-AM

15 MINUTE TOTALS	1	2	3	4	5	6	7	8	9	10	11	12
	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT
0700-0715	0	330	1	0	0	1	0	58	0	0	0	0
0715-0730	0	282	2	0	0	0	3	77	0	0	0	0
0730-0745	0	264	0	2	0	1	26	118	0	0	0	0
0745-0800	0	257	5	4	0	0	15	133	0	0	0	0
0800-0815	0	258	2	3	0	0	2	115	0	0	0	0
0815-0830	0	285	1	0	0	0	9	126	0	0	0	0
0830-0845	0	212	1	2	0	0	5	149	0	0	0	0
0845-0900	0	273	1	2	0	0	2	118	0	0	0	0
0900-0915	0	232	0	0	0	1	4	104	0	0	0	0
0915-0930	0	261	2	0	0	0	2	107	0	0	0	0
0930-0945	0	231	1	2	0	0	2	119	0	0	0	0
0945-1000	0	262	1	6	0	2	3	102	0	0	0	0

1 HOUR TOTALS	1	2	3	4	5	6	7	8	9	10	11	12	TOTALS
	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	
0700-0800	0	1133	8	6	0	2	44	386	0	0	0	0	1579
0715-0815	0	1061	9	9	0	1	46	443	0	0	0	0	1569
0730-0830	0	1064	8	9	0	1	52	492	0	0	0	0	1626
0745-0845	0	1012	9	9	0	0	31	523	0	0	0	0	1584
0800-0900	0	1028	5	7	0	0	18	508	0	0	0	0	1566
0815-0915	0	1002	3	4	0	1	20	497	0	0	0	0	1527
0830-0930	0	978	4	4	0	1	13	478	0	0	0	0	1478
0845-0945	0	997	4	4	0	1	10	448	0	0	0	0	1464
0900-1000	0	986	4	8	0	3	11	432	0	0	0	0	1444

A.M. PEAK HOUR
0730-0830



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 626.446.7978

COLDWATER CANYON AVENUE

INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: LLG - PASADENA
 PROJECT: HARVARD WESTLAKE SCHOOL - LOS ANGELES
 DATE: THURSDAY, JANUARY 27, 2011
 PERIOD: 02:00 PM TO 06:00 PM
 INTERSECTION N/S COLDWATER CANYON AVENUE
 E/W HACIENDA DRIVE
 FILE NUMBER: 8-PM

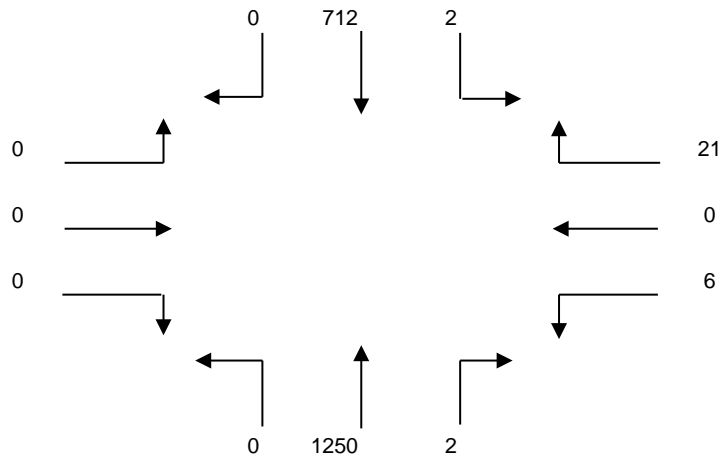
15 MINUTE TOTALS	1	2	3	4	5	6	7	8	9	10	11	12
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0200-0215	0	146	4	15	0	2	1	190	0	0	0	0
0215-0230	0	168	2	7	0	1	0	225	0	0	0	0
0230-0245	0	170	3	10	0	0	1	246	0	0	0	0
0245-0300	0	181	3	19	0	5	0	273	0	0	0	0
0300-0315	0	179	1	18	0	4	1	265	0	0	0	0
0315-0330	0	180	1	7	0	2	0	296	0	0	0	0
0330-0345	0	166	3	3	0	2	0	317	0	0	0	0
0345-0400	0	159	1	4	0	1	0	337	0	0	0	0
0400-0415	0	167	1	5	0	3	1	320	0	0	0	0
0415-0430	0	155	1	3	0	1	0	327	0	0	0	0
0430-0445	0	160	2	1	0	0	0	342	0	0	0	0
0445-0500	0	156	4	2	0	1	1	319	0	0	0	0
0500-0515	0	170	0	6	0	1	0	293	0	0	0	0
0515-0530	0	161	1	5	0	2	0	326	0	0	0	0
0530-0545	0	177	0	8	0	2	1	304	0	0	0	0
0545-0600	0	204	1	2	0	1	1	327	0	0	0	0

1 HOUR TOTALS	1	2	3	4	5	6	7	8	9	10	11	12	TOTALS
	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	
0200-0300	0	665	12	51	0	8	2	934	0	0	0	0	1672
0215-0315	0	698	9	54	0	10	2	1009	0	0	0	0	1782
0230-0330	0	710	8	54	0	11	2	1080	0	0	0	0	1865
0245-0345	0	706	8	47	0	13	1	1151	0	0	0	0	1926
0300-0400	0	684	6	32	0	9	1	1215	0	0	0	0	1947
0315-0415	0	672	6	19	0	8	1	1270	0	0	0	0	1976
0330-0430	0	647	6	15	0	7	1	1301	0	0	0	0	1977
0345-0445	0	641	5	13	0	5	1	1326	0	0	0	0	1991
0400-0500	0	638	8	11	0	5	2	1308	0	0	0	0	1972
0415-0515	0	641	7	12	0	3	1	1281	0	0	0	0	1945
0430-0530	0	647	7	14	0	4	1	1280	0	0	0	0	1953
0445-0545	0	664	5	21	0	6	2	1242	0	0	0	0	1940
0500-0600	0	712	2	21	0	6	2	1250	0	0	0	0	1993

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P.M. PEAK HOUR
0500-0600

HACIENDA DRIVE



COLDWATER CANYON AVENUE

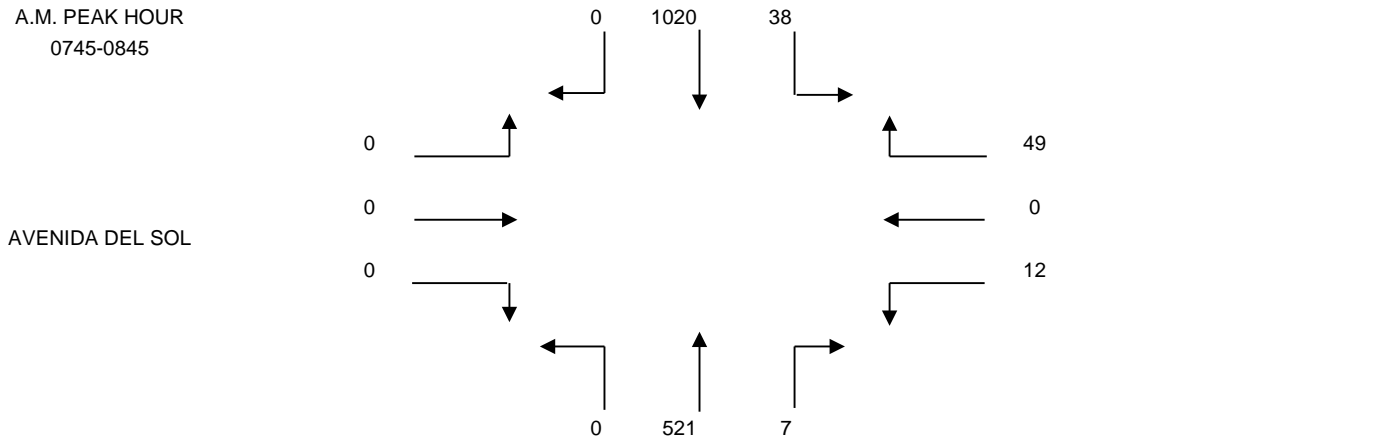
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: LLG - PASADENA
 PROJECT: HARVARD WESTLAKE SCHOOL - LOS ANGELES
 DATE: THURSDAY, JANUARY 27, 2011
 PERIOD: 07:00 AM TO 10:00 AM
 INTERSECTION N/S COLDWATER CANYON AVENUE
 E/W AVENIDA DEL SOL
 FILE NUMBER: 9-AM

15 MINUTE TOTALS	1	2	3	4	5	6	7	8	9	10	11	12
	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT
0700-0715	0	308	6	10	0	2	1	61	0	0	0	0
0715-0730	0	271	5	10	0	2	0	78	0	0	0	0
0730-0745	0	248	6	9	0	3	1	123	0	0	0	0
0745-0800	0	256	12	15	0	1	3	141	0	0	0	0
0800-0815	0	268	9	10	0	2	2	107	0	0	0	0
0815-0830	0	241	10	9	0	5	2	124	0	0	0	0
0830-0845	0	255	7	15	0	4	0	149	0	0	0	0
0845-0900	0	266	9	10	0	2	1	100	0	0	0	0
0900-0915	0	229	11	8	0	2	1	117	0	0	0	0
0915-0930	0	235	6	8	0	3	1	100	0	0	0	0
0930-0945	0	249	5	5	0	2	1	101	0	0	0	0
0945-1000	0	260	8	8	0	3	2	100	0	0	0	0

1 HOUR TOTALS	1	2	3	4	5	6	7	8	9	10	11	12	TOTALS
	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	
0700-0800	0	1083	29	44	0	8	5	403	0	0	0	0	1572
0715-0815	0	1043	32	44	0	8	6	449	0	0	0	0	1582
0730-0830	0	1013	37	43	0	11	8	495	0	0	0	0	1607
0745-0845	0	1020	38	49	0	12	7	521	0	0	0	0	1647
0800-0900	0	1030	35	44	0	13	5	480	0	0	0	0	1607
0815-0915	0	991	37	42	0	13	4	490	0	0	0	0	1577
0830-0930	0	985	33	41	0	11	3	466	0	0	0	0	1539
0845-0945	0	979	31	31	0	9	4	418	0	0	0	0	1472
0900-1000	0	973	30	29	0	10	5	418	0	0	0	0	1465

A.M. PEAK HOUR
0745-0845



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COLDWATER CANYON AVENUE

INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: LLG - PASADENA
 PROJECT: HARVARD WESTLAKE SCHOOL - LOS ANGELES
 DATE: THURSDAY, JANUARY 27, 2011
 PERIOD: 02:00 PM TO 06:00 PM
 INTERSECTION N/S COLDWATER CANYON AVENUE
 E/W AVENIDA DEL SOL
 FILE NUMBER: 9-PM

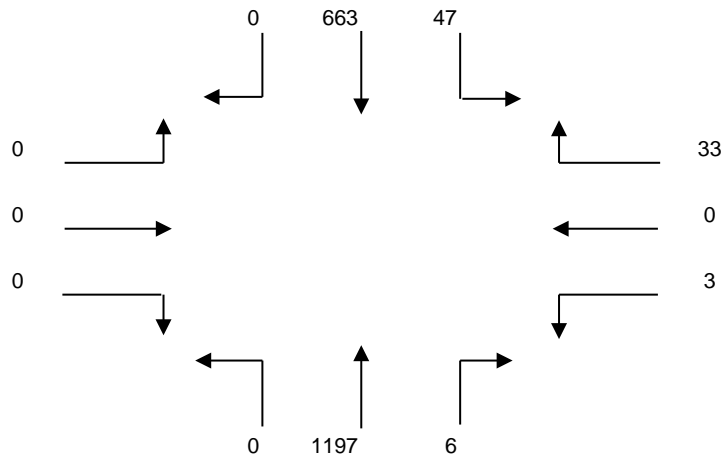
15 MINUTE TOTALS	1	2	3	4	5	6	7	8	9	10	11	12
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0200-0215	0	140	6	7	0	1	1	189	0	0	0	0
0215-0230	0	162	5	7	0	2	1	229	0	0	0	0
0230-0245	0	151	6	8	0	1	1	224	0	0	0	0
0245-0300	0	184	11	14	0	1	2	237	0	0	0	0
0300-0315	0	166	11	10	0	2	1	259	0	0	0	0
0315-0330	0	169	9	11	0	0	1	292	0	0	0	0
0330-0345	0	148	7	7	0	2	2	294	0	0	0	0
0345-0400	0	158	9	5	0	0	1	317	0	0	0	0
0400-0415	0	159	12	10	0	2	1	311	0	0	0	0
0415-0430	0	140	12	11	0	0	0	325	0	0	0	0
0430-0445	0	133	11	12	0	2	3	313	0	0	0	0
0445-0500	0	153	9	8	0	3	1	309	0	0	0	0
0500-0515	0	161	10	8	0	2	1	281	0	0	0	0
0515-0530	0	159	11	7	0	0	3	322	0	0	0	0
0530-0545	0	170	13	11	0	0	0	280	0	0	0	0
0545-0600	0	173	13	7	0	1	2	314	0	0	0	0

1 HOUR TOTALS	1	2	3	4	5	6	7	8	9	10	11	12	TOTALS
	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	
0200-0300	0	637	28	36	0	5	5	879	0	0	0	0	1590
0215-0315	0	663	33	39	0	6	5	949	0	0	0	0	1695
0230-0330	0	670	37	43	0	4	5	1012	0	0	0	0	1771
0245-0345	0	667	38	42	0	5	6	1082	0	0	0	0	1840
0300-0400	0	641	36	33	0	4	5	1162	0	0	0	0	1881
0315-0415	0	634	37	33	0	4	5	1214	0	0	0	0	1927
0330-0430	0	605	40	33	0	4	4	1247	0	0	0	0	1933
0345-0445	0	590	44	38	0	4	5	1266	0	0	0	0	1947
0400-0500	0	585	44	41	0	7	5	1258	0	0	0	0	1940
0415-0515	0	587	42	39	0	7	5	1228	0	0	0	0	1908
0430-0530	0	606	41	35	0	7	8	1225	0	0	0	0	1922
0445-0545	0	643	43	34	0	5	5	1192	0	0	0	0	1922
0500-0600	0	663	47	33	0	3	6	1197	0	0	0	0	1949

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 ARCADIA, CALIFORNIA 91006
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P.M. PEAK HOUR
0500-0600

AVENIDA DEL SOL



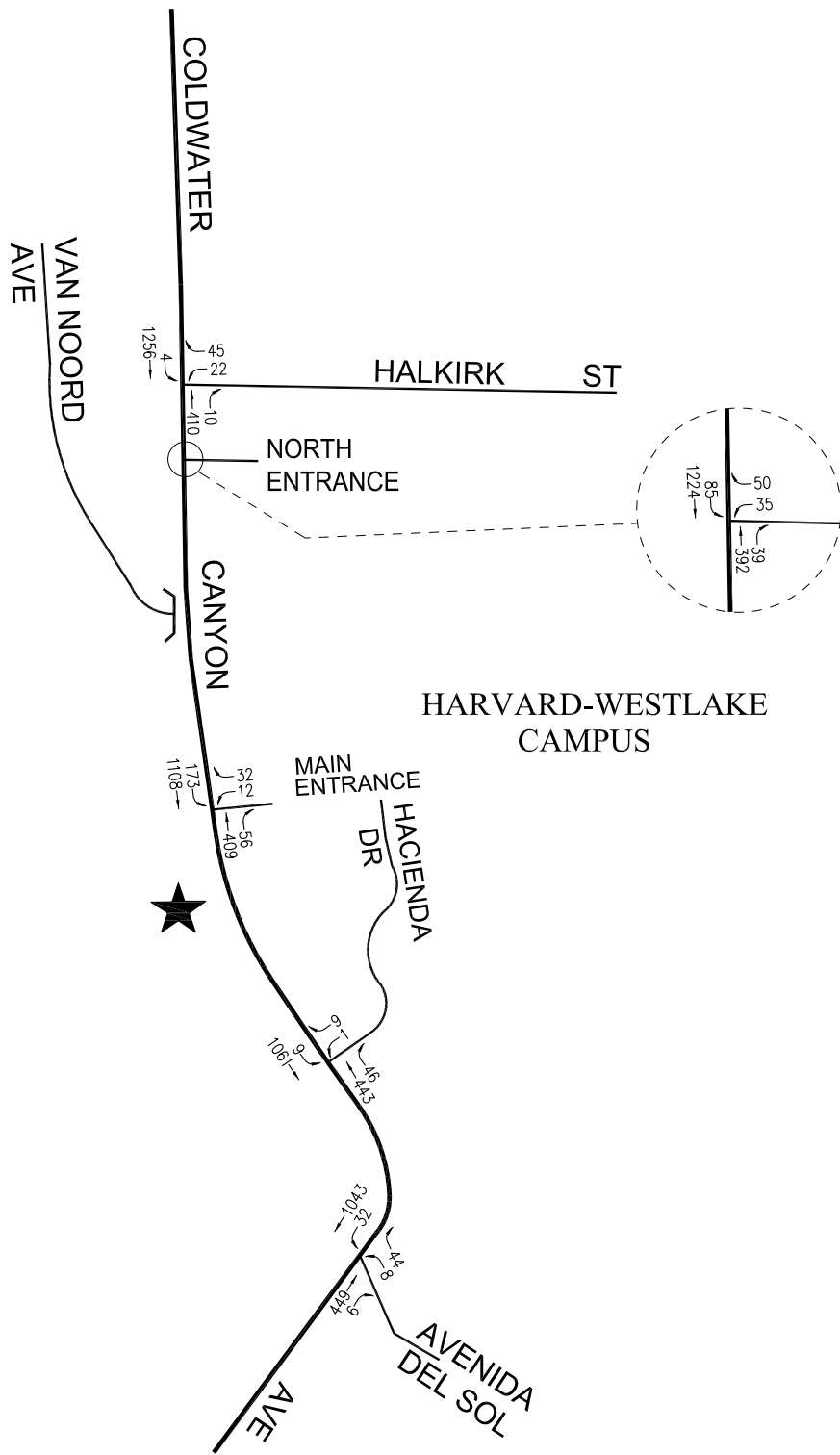
COLDWATER CANYON AVENUE

APPENDIX B

PROJECT OCCUPANCY LOCALIZED DISTRIBUTION SHIFT AND ASSIGNMENT FIGURES

- **SCHOOL AM PEAK HOUR**
- **SCHOOL PM PEAK HOUR**

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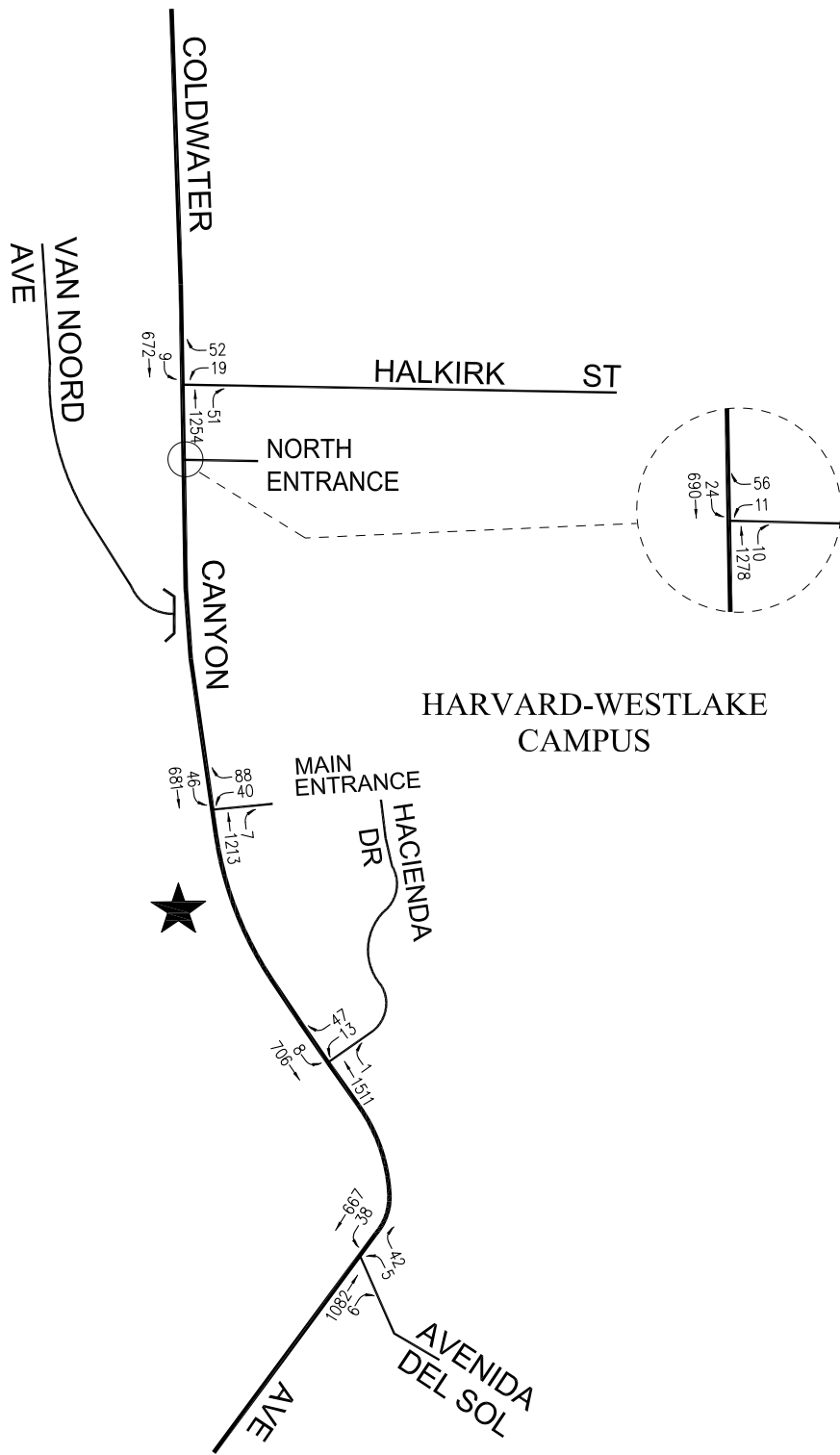


LINSCOTT, LAW & GREENSPAN, engineers

APPENDIX FIGURE B-1 EXISTING TRAFFIC VOLUMES

SCHOOL AM PEAK HOUR (7:15 AM - 8:15 AM)
 HARVARD-WESTLAKE SCHOOL PARKING IMPROVEMENT PLAN

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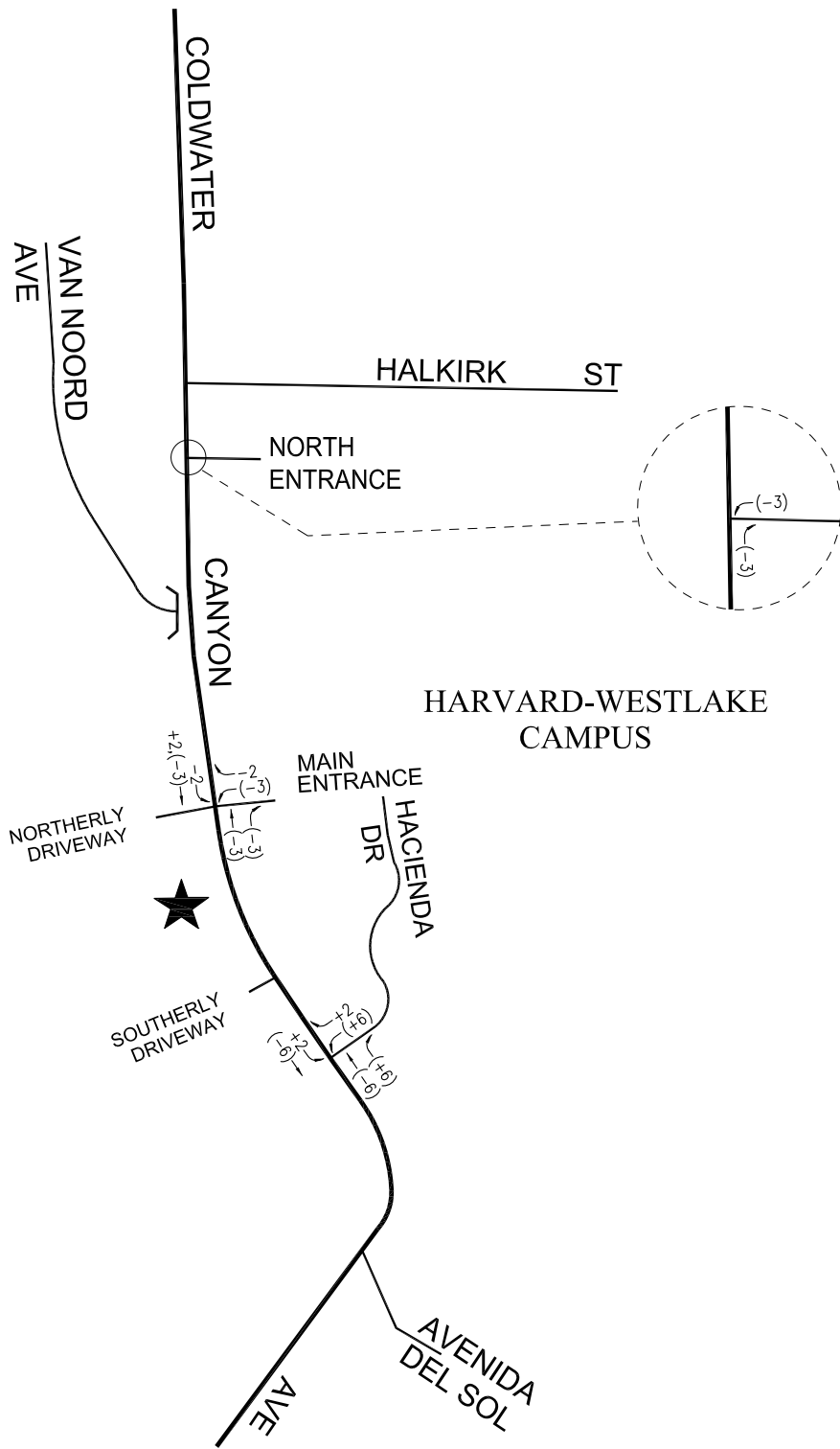

NOT TO SCALE

 PROJECT SITE

LINSCOTT, LAW & GREENSPAN, engineers

APPENDIX FIGURE B-2
EXISTING TRAFFIC VOLUMES
SCHOOL PM PEAK HOUR (2:45 PM - 3:45 PM)
HARVARD-WESTLAKE SCHOOL PARKING IMPROVEMENT PLAN

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XX = BUSES FROM THE NORTH
 (XX) = BUSES FROM THE SOUTH



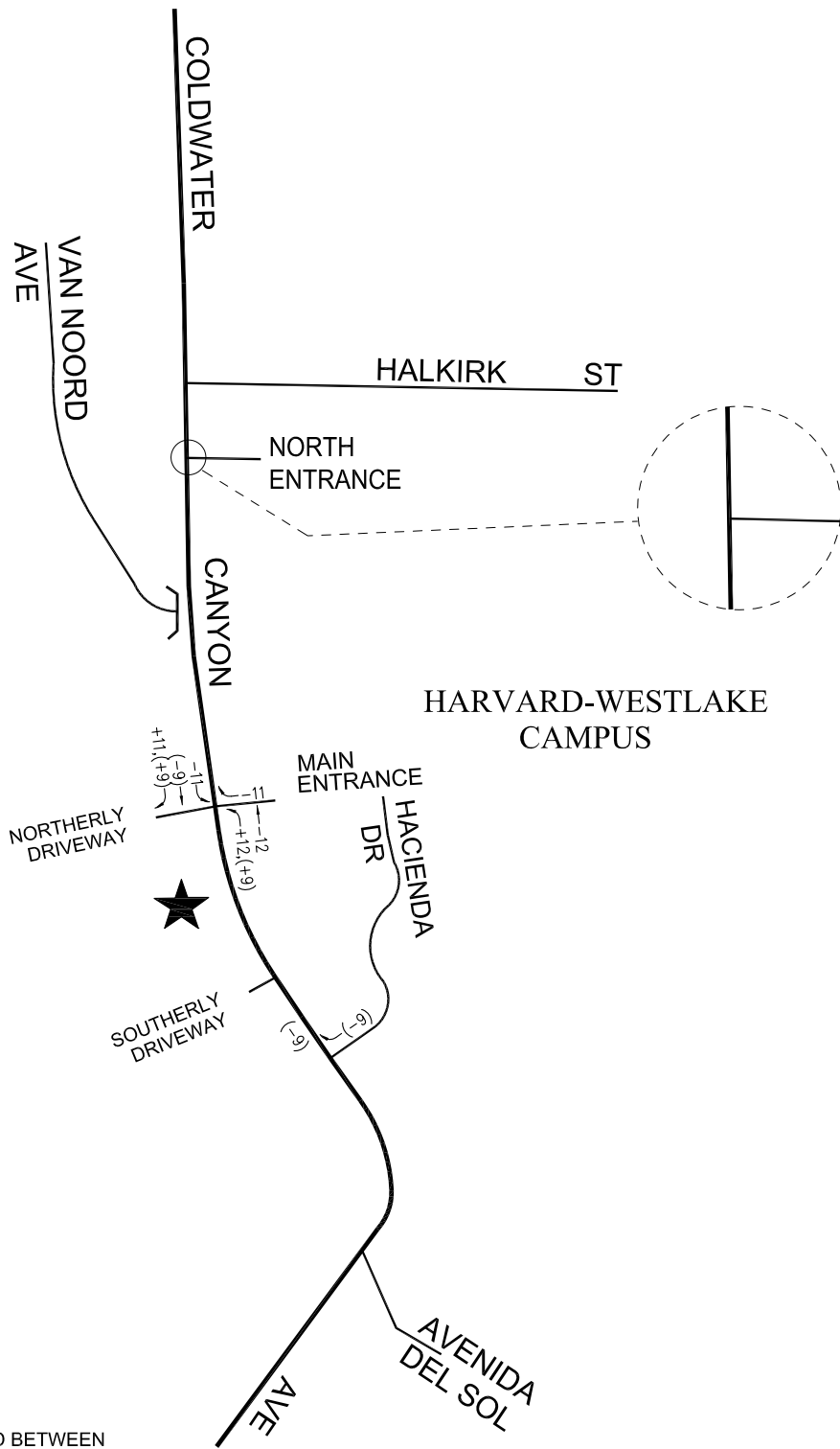
LINSCOTT, LAW & GREENSPAN, engineers

APPENDIX FIGURE B-3 SCHOOL BUS TRAFFIC

SCHOOL AM AND PM PEAK HOURS

HARVARD-WESTLAKE SCHOOL PARKING IMPROVEMENT PLAN

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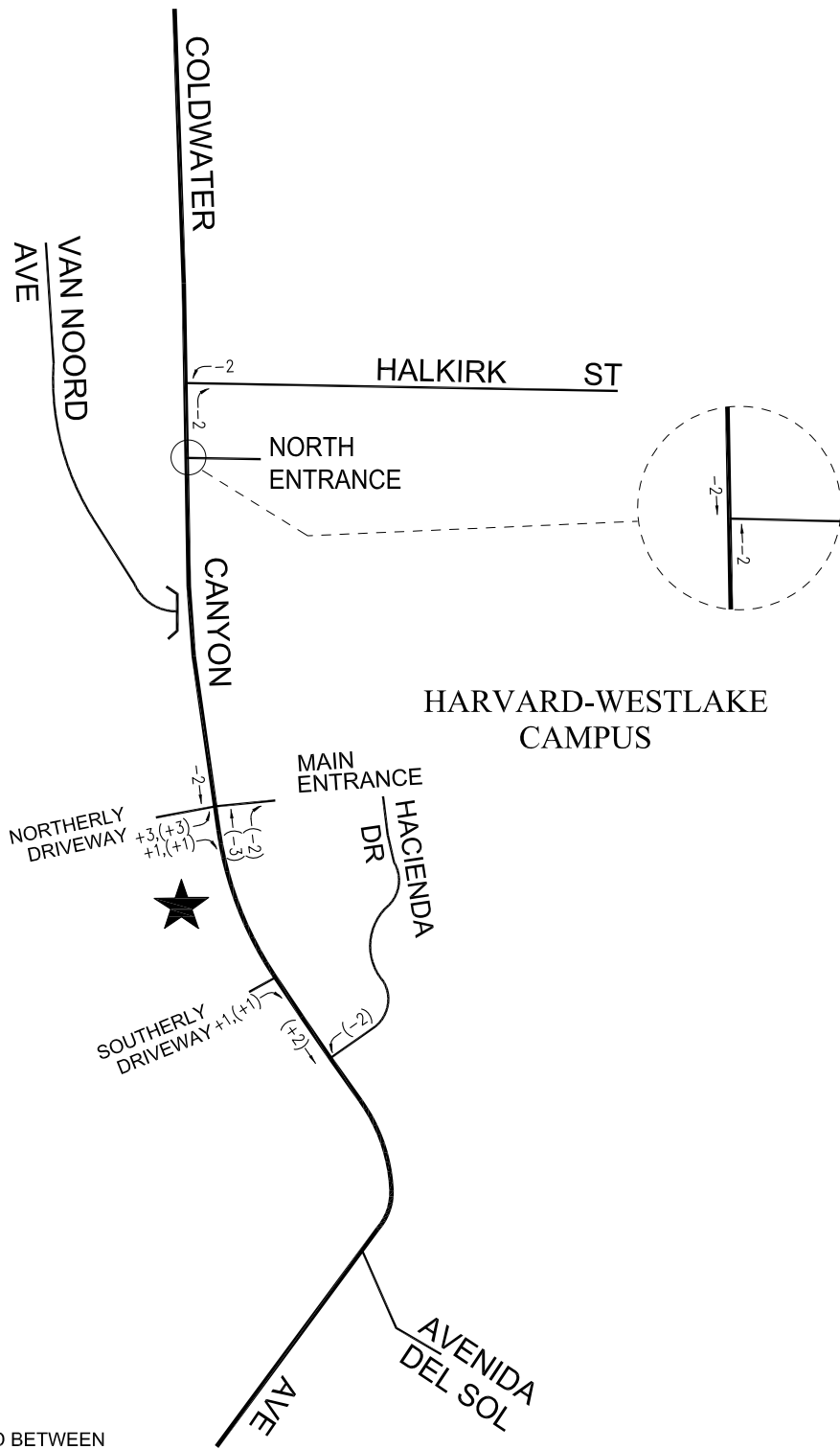
XX = VEHICLES PARKED BETWEEN NORTH & MAIN ENTRANCES
 (XX) = VEHICLES PARKED BETWEEN MAIN ENTRANCE & HACIENDA DRIVE



LINSCOTT, LAW & GREENSPAN, engineers

APPENDIX FIGURE B-4
COLDWATER CANYON AVENUE
ON-STREET PARKING
SCHOOL AM PEAK HOUR (7:15 AM - 8:15 AM)
HARVARD-WESTLAKE SCHOOL PARKING IMPROVEMENT PLAN

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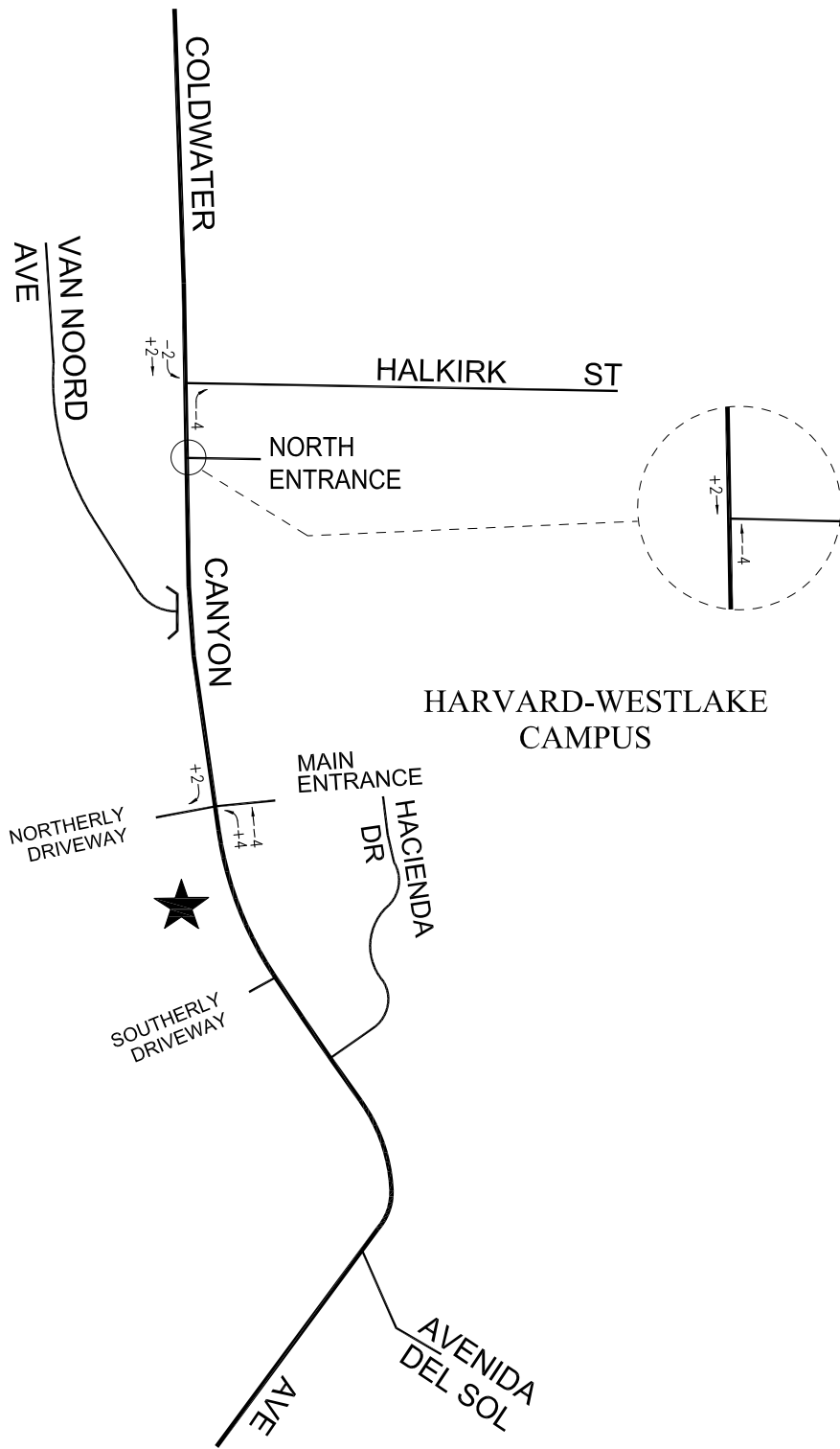
XX = VEHICLES PARKED BETWEEN
NORTH & MAIN ENTRANCES
(XX) = VEHICLES PARKED BETWEEN
MAIN ENTRANCE & HACIENDA DRIVE



LINSCOTT, LAW & GREENSPAN, engineers

APPENDIX FIGURE B-5
COLDWATER CANYON AVENUE
ON-STREET PARKING
SCHOOL PM PEAK HOUR (2:45 PM - 3:45 PM)
HARVARD-WESTLAKE SCHOOL PARKING IMPROVEMENT PLAN

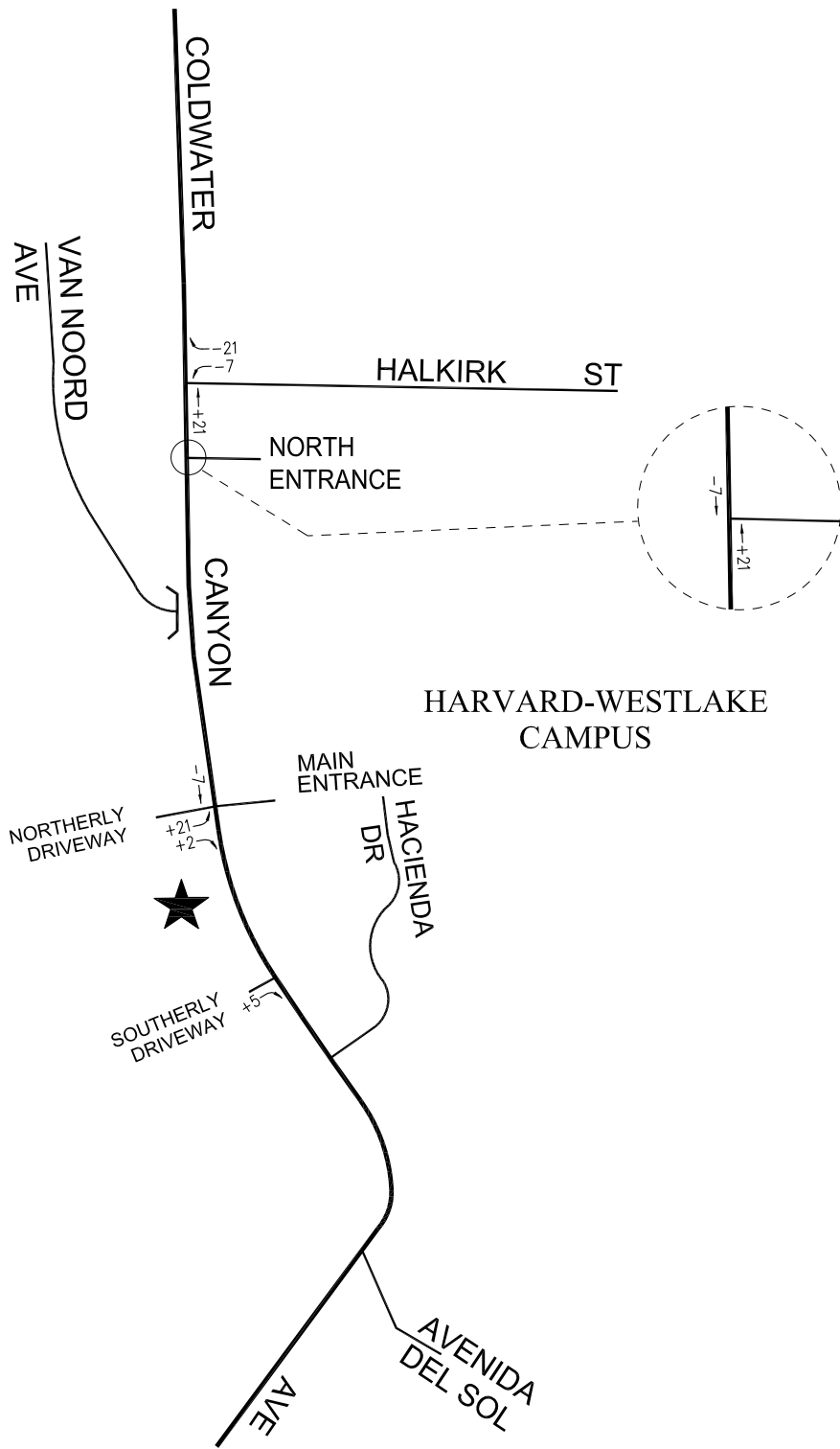
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APPENDIX FIGURE B-6
RESIDENTIAL NEIGHBORHOOD
ON-STREET PARKING
SCHOOL AM PEAK HOUR (7:15 AM - 8:15 AM)
HARVARD-WESTLAKE SCHOOL PARKING IMPROVEMENT PLAN

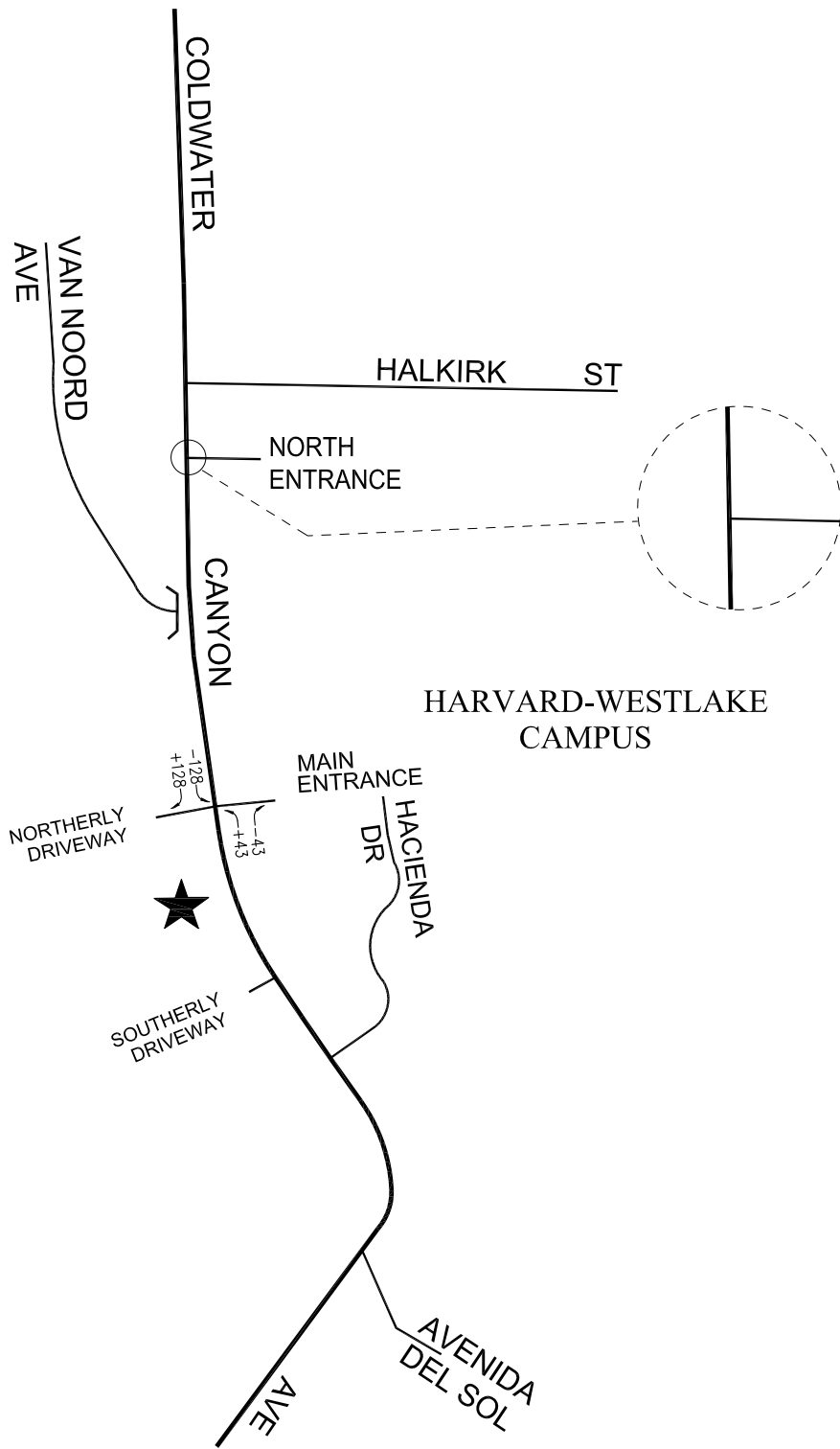
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APPENDIX FIGURE B-7
RESIDENTIAL NEIGHBORHOOD
ON-STREET PARKING
SCHOOL PM PEAK HOUR (2:45 PM - 3:45 PM)
HARVARD-WESTLAKE SCHOOL PARKING IMPROVEMENT PLAN

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NOT TO SCALE



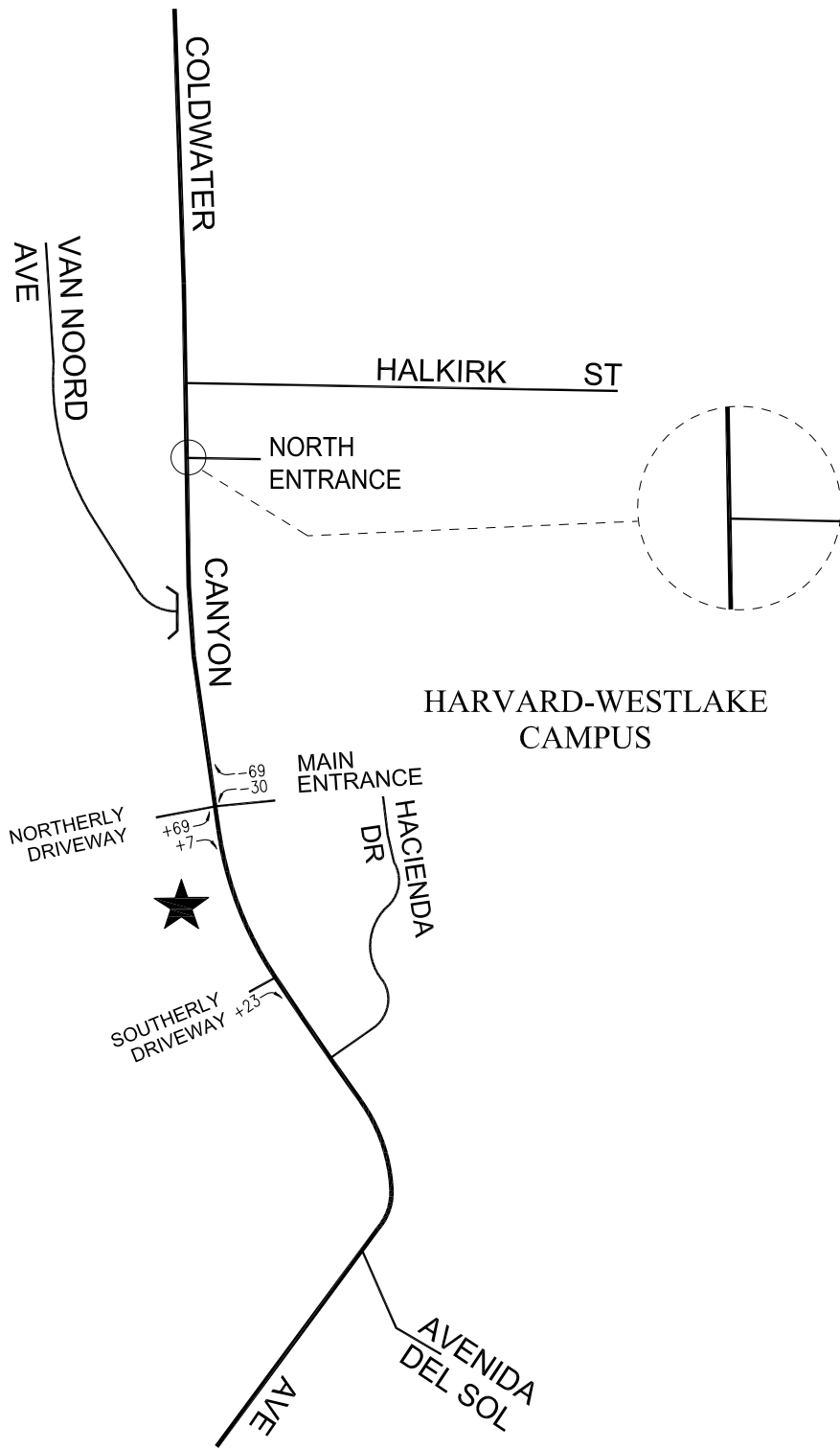
PROJECT SITE

LINSCOTT, LAW & GREENSPAN, engineers

APPENDIX FIGURE B-8 MAIN ENTRANCE DRIVEWAY

SCHOOL AM PEAK HOUR (7:15 AM - 8:15 AM)
HARVARD-WESTLAKE SCHOOL PARKING IMPROVEMENT PLAN

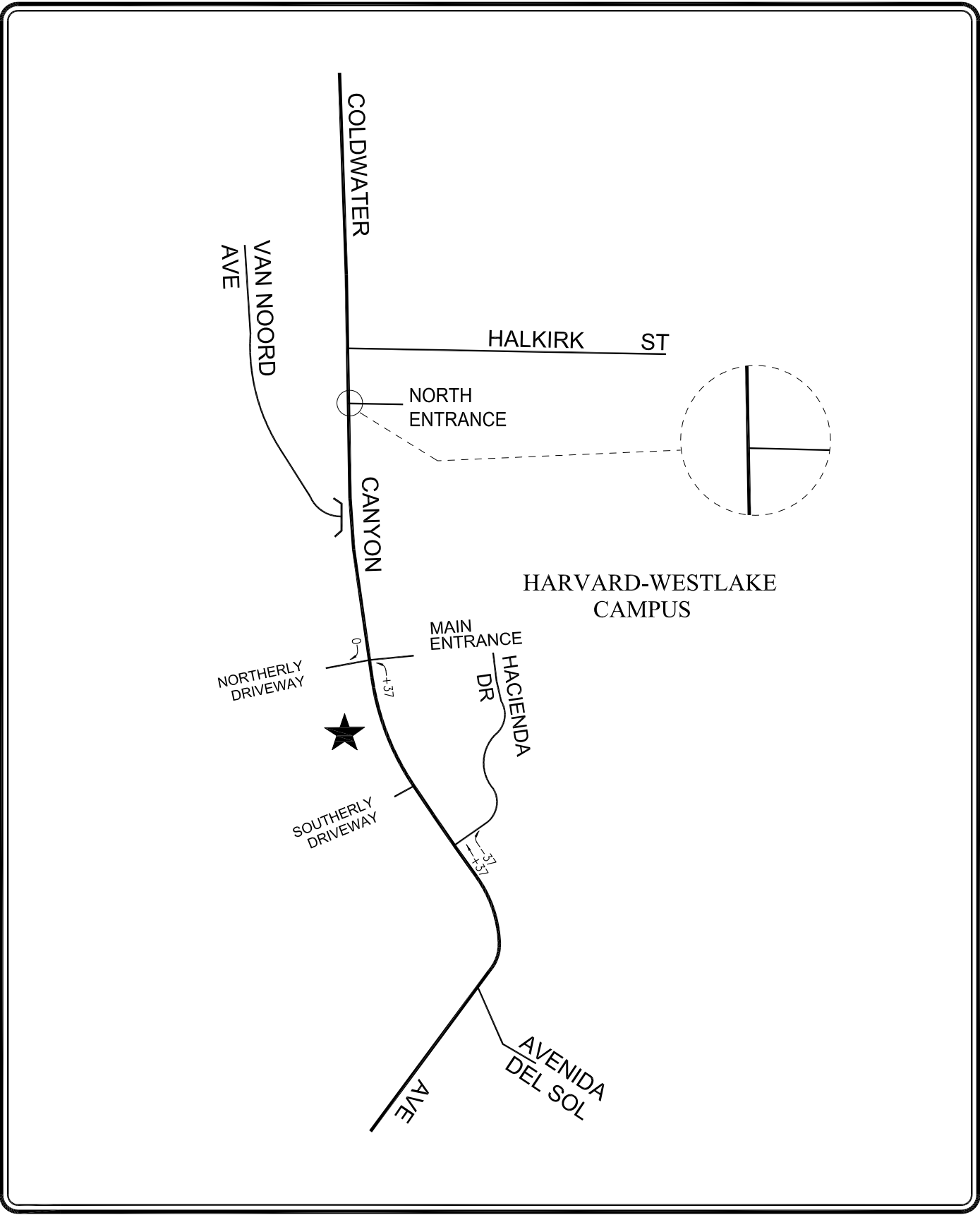
o:\3744-2\dwg\appendix b figures\app-fig-b9.dwg 10/16/2012 11:31:46 gutierrez ilg exhibits color.ctb



LINSCOTT, LAW & GREENSPAN, engineers

APPENDIX FIGURE B-9
MAIN ENTRANCE DRIVEWAY
 SCHOOL PM PEAK HOUR (2:45 PM - 3:45 PM)
 HARVARD-WESTLAKE SCHOOL PARKING IMPROVEMENT PLAN

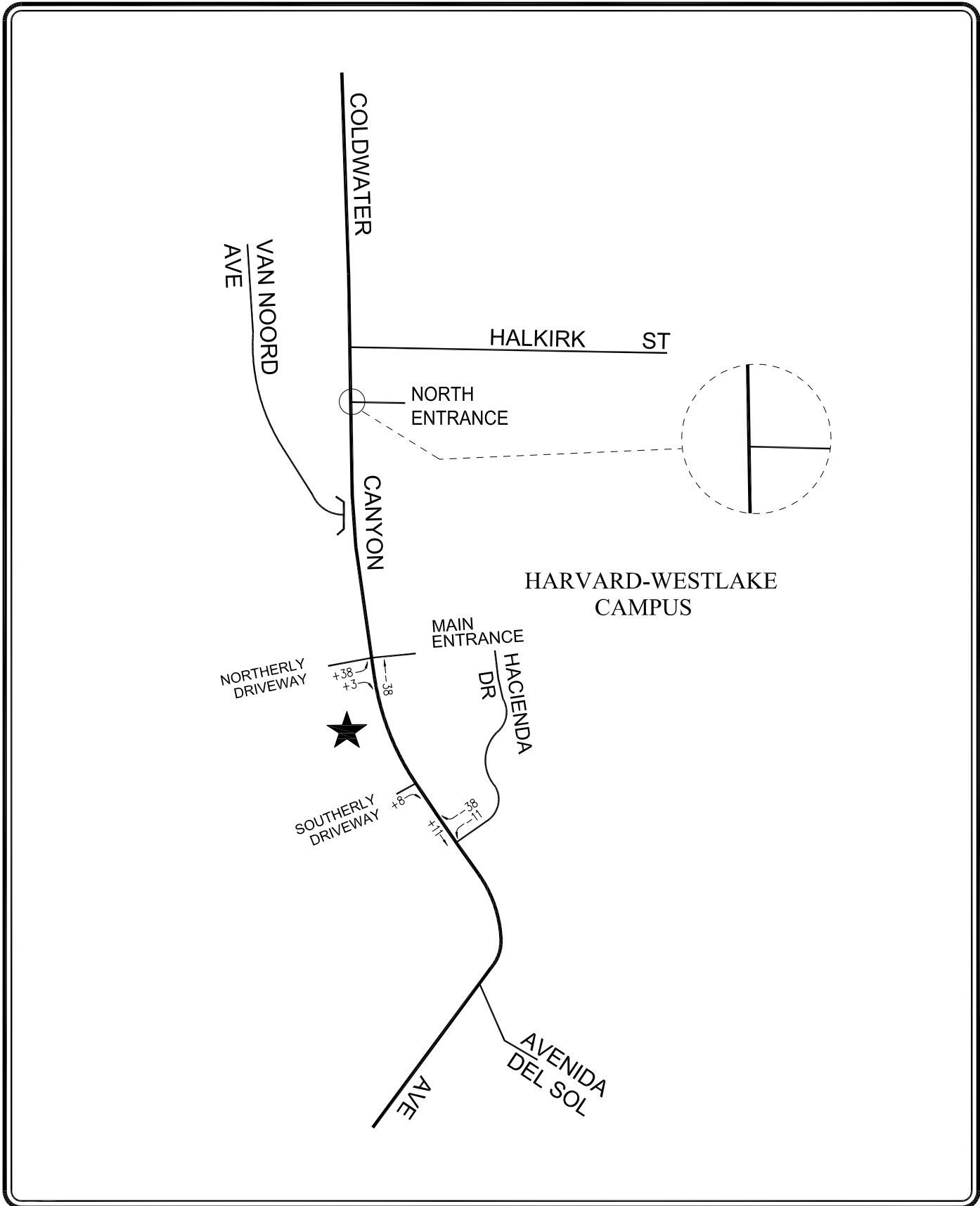
o:\3744-2\dwg\appendix b figures\app-fig-b10.dwg 10/16/2012 11:32:37 gutierrez lg exhibits color.ctb



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APPENDIX FIGURE B-10
HACIENDA DRIVE DRIVEWAY
SCHOOL AM PEAK HOUR (7:15 AM - 8:15 AM)
HARVARD-WESTLAKE SCHOOL PARKING IMPROVEMENT PLAN

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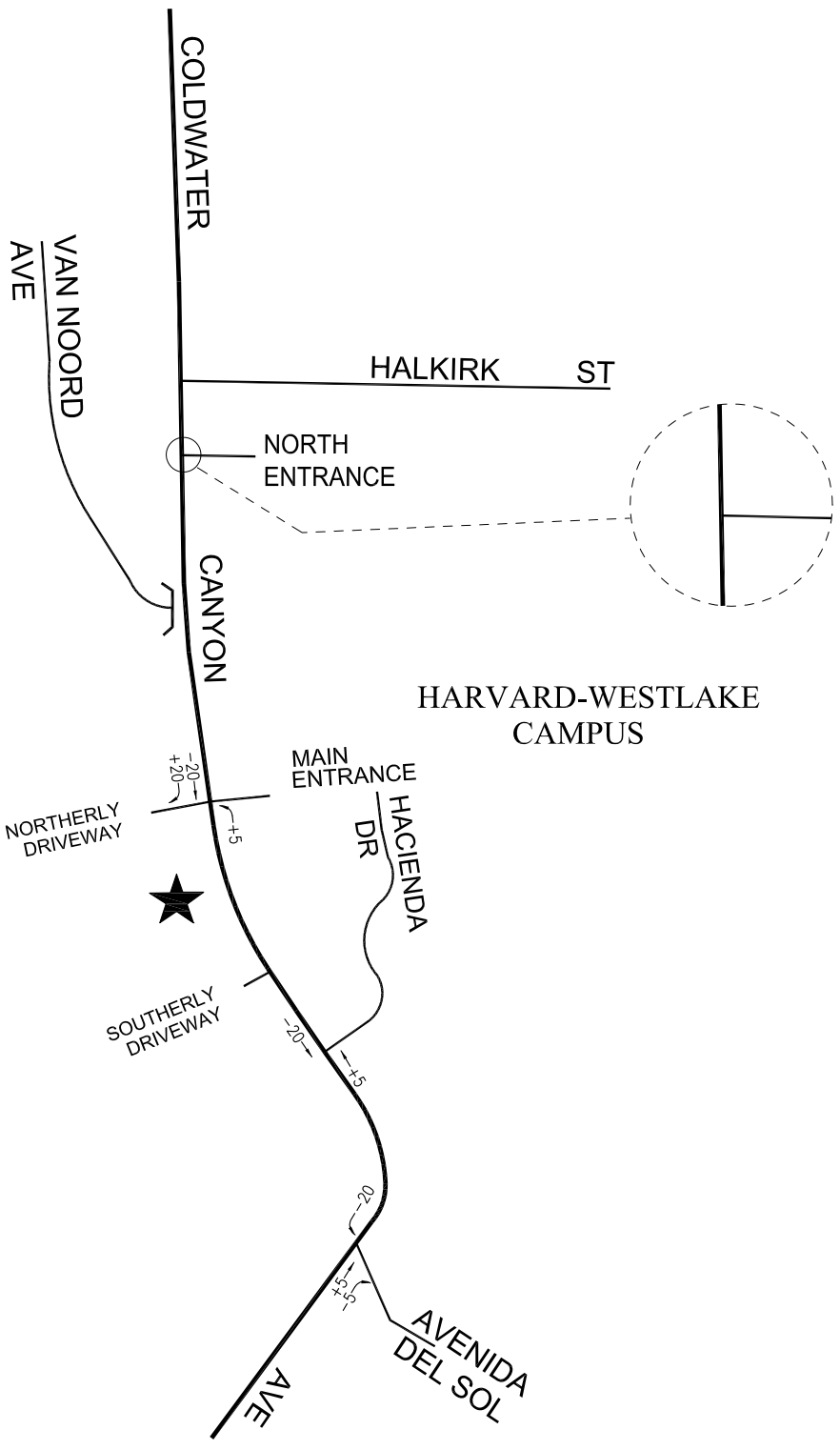

NOT TO SCALE

 PROJECT SITE

LINSCOTT, LAW & GREENSPAN, engineers

APPENDIX FIGURE B-11
HACIENDA DRIVE DRIVEWAY
SCHOOL PM PEAK HOUR (2:45 PM - 3:45 PM)
HARVARD-WESTLAKE SCHOOL PARKING IMPROVEMENT PLAN

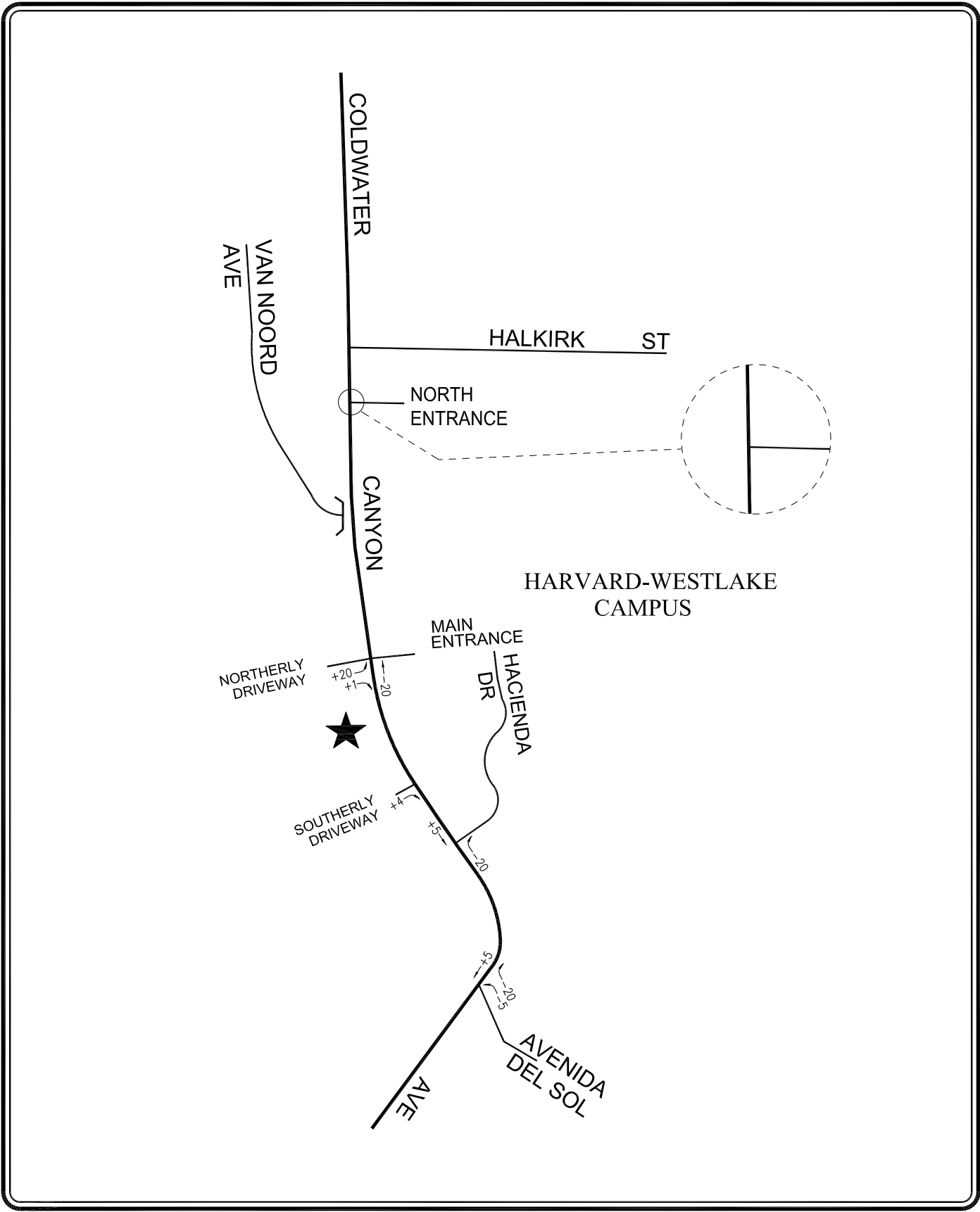
o:\3744-2\dwg\appendix b figures\app-fig-b12.dwg 10/16/2012 11:33:38 gutierrez lg exhibits color.ctb



LINSCOTT, LAW & GREENSPAN, engineers

APPENDIX FIGURE B-12
AVENIDA DEL SOL DRIVEWAY
 SCHOOL AM PEAK HOUR (7:15 AM - 8:15 AM)
 HARVARD-WESTLAKE SCHOOL PARKING IMPROVEMENT PLAN

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 NOT TO SCALE

 PROJECT SITE

LINSCOTT, LAW & GREENSPAN, engineers

APPENDIX FIGURE B-13
AVENIDA DEL SOL DRIVEWAY
 SCHOOL PM PEAK HOUR (2:45 PM - 3:45 PM)
 HARVARD-WESTLAKE SCHOOL PARKING IMPROVEMENT PLAN

APPENDIX C
CMA AND LEVELS OF SERVICE EXPLANATION

CRITICAL MOVEMENT ANALYSIS (CMA) DESCRIPTION

Level of Service is a term used to describe prevailing conditions and their effect on traffic. Broadly interpreted, the Level of Service concept denotes any one of a number of differing combinations of operating conditions which may take place as a roadway is accommodating various traffic volumes. Level of Service is a qualitative measure of the effect of such factors as travel speed, travel time, interruptions, freedom to maneuver, safety, driving comfort and convenience.

Six Levels of Service, A through F, have been defined in the 1965 *Highway Capacity Manual*. Level of Service A describes a condition of free flow, with low traffic volumes and relatively high speeds, while Level of Service F describes forced traffic flow at low speeds with jammed conditions and queues which cannot clear during the green phases.

Critical Movement Analysis (CMA) is a procedure which provides a capacity and level of service geometry and traffic signal operation and results in a level of service determination for the intersection as a whole operating unit.

The per lane volume for each movement in the intersection is determined and the per lane intersection capacity based on the Transportation Research Board (TRB) Report 212 (*Interim Materials on Highway Capacity*). The resulting CMA represents the ratio of the intersection's cumulative volume over its respective capacity (V/C ratio). Critical Movement Analysis takes into account lane widths, bus and truck operations, pedestrian activity and parking activity, as well as number of lanes and geometrics.

The Level of Service (abbreviated from the *Highway Capacity Manual*) are listed here with their corresponding CMA and Load Factor equivalents. Load Factor is that proportion of the signal cycles during the peak hour which are fully loaded; i.e. when all of the vehicles waiting at the beginning of green are not able to clear on that green phase.

Critical Movement Analysis Characteristics		
Level of Service	Load Factor	Equivalent CMA
A (free flow)	0.0	0.00 - 0.60
B (rural design)	0.0 - 0.1	0.61 - 0.70
C (urban design)	0.1 - 0.3	0.71 - 0.80
D (maximum urban design)	0.3 - 0.7	0.81 - 0.90
E (capacity)	0.7 - 1.0	0.91 - 1.00
F (force flow)	Not Applicable	Not Applicable

SERVICE LEVEL A

There are no loaded cycles and few are even close to loaded at this service level. No approach phase is fully utilized by traffic and no vehicle waits longer than one red indication.

SERVICE LEVEL B

This level represents stable operation where an occasional approach phase is fully utilized and a substantial number are approaching full use. Many drivers begin to feel restricted within platoons of vehicles.

SERVICE LEVEL C

At this level stable operation continues. Loading is still intermittent but more frequent than at Level B. Occasionally drivers may have to wait through more one red signal indication and backups may develop behind turning vehicles. Most drivers feel somewhat restricted, but not objectionably so.

SERVICE LEVEL D

This level encompasses a zone of increasing restriction approaching instability at the intersection. Delays to approaching vehicles may be substantial during short peaks within the peak hour, but enough cycles with lower demand occur to permit periodic clearance of queues, thus preventing excessive backups. Drivers frequently have to wait through more than one red signal. This level is the lower limit of acceptable operation to most drivers.

SERVICE LEVEL E

This represents near capacity and capacity operation. At capacity (CMA = 1.0) it represents the most vehicles that the particular intersection can accommodate. However, full utilization of every signal cycle is seldom attained no matter how great the demand. At this level all drivers wait through more than one red signal, and frequently through several.

SERVICE LEVEL F

Jammed conditions. Traffic backed up from a downstream location on one of the street restricts or prevents movement of traffic through the intersection under consideration.

APPENDIX C-1

CMA DATA WORKSHEETS – COMMUTER AM AND PM PEAK HOURS

Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	Coldwater Canyon Avenue	Year of Count:	2012	Ambient Growth: (%):	2.0	Conducted by:	The Traffic Solution	Date:	9/20/2012								
CMA1	East-West Street:	US-101Freeway NB Ramps	Projection Year:	2016	Peak Hour:	AM	Reviewed by:		Project:	Harvard-Westlake Upper School I								
No. of Phases																		
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?																		
Right Turns: FREE-1, NRTOR-2 or OLA-3?			NB-- 0 SB-- 0			NB-- 0 SB-- 0			NB-- 0 SB-- 0									
ATSAC-1 or ATSAC+ATCS-2?			EB-- 0 WB-- 0			EB-- 0 WB-- 0			EB-- 0 WB-- 0									
Override Capacity			2			2			2									
			0			0			0									
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	1	239	0	239	239	14	273	1	273	0	273	1	273	0	273	1	273
	Left-Through	0							0				0				0	
	Through	2	475	0	475	238	-1	513	2	257	0	513	2	257	0	513	2	257
	Through-Right	0							0				0				0	
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right	0							0				0				0	
Left-Right	0							0				0				0		
SOUTHBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through	0							0				0				0	
	Through	2	840	0	840	420	27	936	2	468	0	936	2	468	0	936	2	468
	Through-Right	1							1				1				1	
	Right	0	443	0	443	443	26	506	0	506	0	506	0	506	0	506	0	506
	Left-Through-Right	0							0				0				0	
Left-Right	0							0				0				0		
EASTBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through	0							0				0				0	
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through-Right	0							0				0				0	
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right	0							0				0				0	
Left-Right	0							0				0				0		
WESTBOUND	Left	1	284	12	296	182	0	307	1	203	12	319	1	207	0	319	1	207
	Left-Through	0							0				0				0	
	Through	0	1	0	1	182	0	1	0	203	0	1	0	207	0	1	0	207
	Through-Right	0							0				0				0	
	Right	1	250	0	250	0	29	300	1	0	0	300	1	0	0	300	1	0
	Left-Through-Right	1							1				1				1	
Left-Right	0							0				0				0		
CRITICAL VOLUMES			North-South: 682	North-South: 682	North-South: 779	North-South: 779	North-South: 779	North-South: 779	North-South: 779	North-South: 779	North-South: 779	North-South: 779	North-South: 779	North-South: 779	North-South: 779	North-South: 779	North-South: 779	North-South: 779
			East-West: 178	East-West: 182	East-West: 203	East-West: 203	East-West: 203	East-West: 207	East-West: 207	East-West: 207	East-West: 207	East-West: 207	East-West: 207	East-West: 207	East-West: 207	East-West: 207	East-West: 207	East-West: 207
			SUM: 860	SUM: 864	SUM: 982	SUM: 982	SUM: 986	SUM: 986	SUM: 986	SUM: 986	SUM: 986	SUM: 986	SUM: 986	SUM: 986	SUM: 986	SUM: 986	SUM: 986	SUM: 986
VOLUME/CAPACITY (V/C) RATIO:			0.604	0.606	0.689	0.689	0.692	0.692	0.692	0.692	0.692	0.692	0.692	0.692	0.692	0.692	0.692	0.692
V/C LESS ATSAC/ATCS ADJUSTMENT:			0.504	0.506	0.589	0.589	0.592	0.592	0.592	0.592	0.592	0.592	0.592	0.592	0.592	0.592	0.592	0.592
LEVEL OF SERVICE (LOS):			A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in v/c due to project:	0.003	Δv/c after mitigation:	0.003
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	Coldwater Canyon Avenue	Year of Count:	2012	Ambient Growth: (%):	2.0	Conducted by:	The Traffic Solution	Date:	9/20/2012									
CMA1	East-West Street:	US-101 Freeway NB Ramps	Projection Year:	2016	Peak Hour:	PM	Reviewed by:		Project:	Harvard-Westlake Upper School I									
No. of Phases		3	3		3		3		3										
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0	0		0		0		0										
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0 SB-- 0	NB-- 0 SB-- 0		NB-- 0 SB-- 0		NB-- 0 SB-- 0		NB-- 0 SB-- 0										
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0 WB-- 0	EB-- 0 WB-- 0		EB-- 0 WB-- 0		EB-- 0 WB-- 0		EB-- 0 WB-- 0										
Override Capacity		2	2		2		2		2										
		0	0		0		0		0										
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	352	1	352	0	352	352	7	388	1	388	0	388	1	388	0	388	1	388
	Left-Through																		
	Through	1289	2	645	0	1289	645	36	1431	2	716	0	1431	2	716	0	1431	2	716
	Through-Right																		
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right																		
SOUTHBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through																		
	Through	670	2	296	0	670	296	12	737	2	327	0	737	2	327	0	737	2	327
	Through-Right																		
	Right	218	0	218	0	218	218	9	245	0	245	0	245	0	245	0	245	0	245
	Left-Through-Right																		
EASTBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through																		
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through-Right																		
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right																		
WESTBOUND	Left	344	1	196	10	354	199	0	372	1	213	10	382	1	216	0	382	1	216
	Left-Through																		
	Through	2	0	196	0	2	199	0	2	0	213	0	2	0	216	0	2	0	216
	Through-Right																		
	Right	242	1	0	0	242	0	2	264	1	0	0	264	1	0	0	264	1	0
	Left-Through-Right																		
CRITICAL VOLUMES	North-South:	648		648	648	648	716	716	716	716	716	716	716	716	716	716	716	716	716
	East-West:	196		199	199	199	213	213	216	216	216	216	216	216	216	216	216	216	216
	SUM:	844		847	847	847	929	929	932	932	932	932	932	932	932	932	932	932	932
VOLUME/CAPACITY (V/C) RATIO:				0.592		0.594		0.652		0.654		0.654		0.654		0.654		0.654	
V/C LESS ATSAC/ATCS ADJUSTMENT:				0.492		0.494		0.552		0.554		0.554		0.554		0.554		0.554	
LEVEL OF SERVICE (LOS):				A		A		A		A		A		A		A		A	

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in v/c due to project:	0.002	Δv/c after mitigation:	0.002
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	Coldwater Canyon Avenue	Year of Count:	2012	Ambient Growth: (%):	2.0	Conducted by:	The Traffic Solution	Date:	9/20/2012									
CMA2	East-West Street:	US-101 Freeway SB Ramps	Projection Year:	2016	Peak Hour:	AM	Reviewed by:		Project:	Harvard-Westlake Upper School I									
No. of Phases				3				3		3									
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?				0				0		0									
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB--	2	SB--	0	NB--	2	SB--	0	NB--	2	SB--	0						
		EB--	0	WB--	0	EB--	0	WB--	0	EB--	0	WB--	0						
ATSAC-1 or ATSAC+ATCS-2?				2				2		2									
Override Capacity				0				0		0									
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Left-Through																		
	Through	591	2	296	0	591	296	17	657	2	329	0	657	2	329	0	657	2	329
	Through-Right		1							1				1				1	
	Right	447	0	447	10	457	457	0	484	0	484	10	494	0	494	0	494	0	494
	Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0		
SOUTHBOUND	Left	396	1	396	0	396	396	15	444	1	444	0	444	1	444	0	444	1	444
	Left-Through		0							0				0				0	
	Through	709	2	355	12	721	361	12	779	2	390	12	791	2	396	0	791	2	396
	Through-Right		0							0				0				0	
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0		
EASTBOUND	Left	128	1	100	0	128	100	-4	135	1	109	0	135	1	109	0	135	1	109
	Left-Through		0							0				0				0	
	Through	0	0	100	0	0	100	0	0	0	109	0	0	0	109	0	0	0	109
	Through-Right		0							0				0				0	
	Right	172	1	0	0	172	0	5	191	1	0	0	191	1	0	0	191	1	0
	Left-Through-Right		1							1				1				1	
Left-Right		0							0				0				0		
WESTBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through		0							0				0				0	
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through-Right		0							0				0				0	
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0		
CRITICAL VOLUMES		North-South:		843	North-South:		853	North-South:		928	North-South:		938	North-South:		938	North-South:		938
		East-West:		100	East-West:		100	East-West:		109	East-West:		109	East-West:		109	East-West:		109
		SUM:		943	SUM:		953	SUM:		1037	SUM:		1047	SUM:		1047	SUM:		1047
VOLUME/CAPACITY (V/C) RATIO:				0.662			0.669			0.728			0.735			0.735			0.735
V/C LESS ATSAC/ATCS ADJUSTMENT:				0.562			0.569			0.628			0.635			0.635			0.635
LEVEL OF SERVICE (LOS):				A			A			B			B			B			B

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in v/c due to project:	0.007	Δv/c after mitigation:	0.007
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	Coldwater Canyon Avenue	Year of Count:	2012	Ambient Growth: (%):	2.0	Conducted by:	The Traffic Solution	Date:	9/20/2012									
CMA2	East-West Street:	US-101 Freeway SB Ramps	Projection Year:	2016	Peak Hour:	PM	Reviewed by:		Project:	Harvard-Westlake Upper School I									
No. of Phases		3	3		3		3		3										
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0	0		0		0		0										
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0 SB-- 0	NB-- 0 SB-- 0		NB-- 0 SB-- 0		NB-- 0 SB-- 0		NB-- 0 SB-- 0										
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0 WB-- 0	EB-- 0 WB-- 0		EB-- 0 WB-- 0		EB-- 0 WB-- 0		EB-- 0 WB-- 0										
Override Capacity		2	2		2		2		2										
		0	0		0		0		0										
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Left-Through																		
	Through	1245	2	573	0	1245	577	19	1367	2	626	0	1367	2	630	0	1367	2	630
	Through-Right																		
	Right	473	0	473	12	485	485	0	512	0	512	12	524	0	524	0	524	0	524
	Left-Through-Right																		
Left-Right																			
SOUTHBOUND	Left	160	1	160	0	160	160	3	176	1	176	0	176	1	176	0	176	1	176
	Left-Through																		
	Through	839	2	420	10	849	425	9	917	2	459	10	927	2	464	0	927	2	464
	Through-Right																		
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right																		
Left-Right																			
EASTBOUND	Left	383	1	230	0	383	230	23	438	1	260	0	438	1	260	0	438	1	260
	Left-Through																		
	Through	0	0	230	0	0	230	0	0	0	260	0	0	0	260	0	0	0	260
	Through-Right																		
	Right	306	1	0	0	306	0	12	343	1	0	0	343	1	0	0	343	1	0
	Left-Through-Right																		
Left-Right																			
WESTBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Left-Through																		
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Through-Right																		
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Left-Through-Right																		
Left-Right																			
CRITICAL VOLUMES		North-South: 733 East-West: 230 SUM: 963	North-South: 737 East-West: 230 SUM: 967	North-South: 802 East-West: 260 SUM: 1062	North-South: 806 East-West: 260 SUM: 1066	North-South: 806 East-West: 260 SUM: 1066													
VOLUME/CAPACITY (V/C) RATIO:		0.676		0.679		0.745		0.748											
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.576		0.579		0.645		0.648											
LEVEL OF SERVICE (LOS):		A		A		B		B											

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in v/c due to project:	0.003	Δv/c after mitigation:	0.003
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	Coldwater Canyon Avenue	Year of Count:	2012	Ambient Growth: (%):	2.0	Conducted by:	The Traffic Solution	Date:	9/20/2012									
CMA3	East-West Street:	Moorpark Street	Projection Year:	2016	Peak Hour:	AM	Reviewed by:		Project:	Harvard-Westlake Upper School I									
No. of Phases				2				2		2									
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?				0				0		0									
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0 SB-- 0		NB-- 0 SB-- 0		NB-- 0 SB-- 0		NB-- 0 SB-- 0		NB-- 0 SB-- 0									
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0 WB-- 0		EB-- 0 WB-- 0		EB-- 0 WB-- 0		EB-- 0 WB-- 0		EB-- 0 WB-- 0									
Override Capacity				2				2		2									
				0				0		0									
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	62	1	62	0	62	62	0	67	1	67	0	67	1	67	0	67	1	67
	Left-Through		0							0				0				0	
	Through	570	1	319	10	580	324	12	629	1	351	10	639	1	356	0	639	1	356
	Through-Right		1							1				1				1	
	Right	67	0	67	0	67	67	0	73	0	73	0	73	0	73	0	73	0	73
	Left-Through-Right		0						0				0					0	
	Left-Right		0						0				0					0	
SOUTHBOUND	Left	180	1	180	0	180	180	0	195	1	195	0	195	1	195	0	195	1	195
	Left-Through		0							0				0				0	
	Through	640	1	413	12	652	419	12	705	1	456	12	717	1	462	0	717	1	462
	Through-Right		1							1				1				1	
	Right	186	0	186	0	186	186	5	206	0	206	0	206	0	206	0	206	0	206
	Left-Through-Right		0						0				0					0	
	Left-Right		0						0				0					0	
EASTBOUND	Left	175	1	175	0	175	175	-1	188	1	188	0	188	1	188	0	188	1	188
	Left-Through		0							0				0				0	
	Through	619	1	619	0	619	619	14	684	1	684	0	684	1	684	0	684	1	684
	Through-Right		0							0				0				0	
	Right	43	1	12	0	43	12	0	47	1	14	0	47	1	14	0	47	1	14
	Left-Through-Right		0						0				0					0	
	Left-Right		0						0				0					0	
WESTBOUND	Left	65	1	65	0	65	65	0	70	1	70	0	70	1	70	0	70	1	70
	Left-Through		0							0				0				0	
	Through	459	1	459	0	459	459	20	517	1	517	0	517	1	517	0	517	1	517
	Through-Right		0							0				0				0	
	Right	99	1	9	0	99	9	6	113	1	16	0	113	1	16	0	113	1	16
	Left-Through-Right		0						0				0					0	
	Left-Right		0						0				0					0	
CRITICAL VOLUMES		North-South: 499		North-South: 504		North-South: 546		North-South: 551		North-South: 551		North-South: 551		North-South: 551		North-South: 551		North-South: 551	
		East-West: 684		East-West: 684		East-West: 684		East-West: 754		East-West: 754		East-West: 754		East-West: 754		East-West: 754		East-West: 754	
		SUM: 1183		SUM: 1183		SUM: 1300		SUM: 1305		SUM: 1305		SUM: 1305		SUM: 1305		SUM: 1305		SUM: 1305	
VOLUME/CAPACITY (V/C) RATIO:				0.789		0.792		0.867		0.870		0.870		0.870		0.870		0.870	
V/C LESS ATSAC/ATCS ADJUSTMENT:				0.689		0.692		0.767		0.770		0.770		0.770		0.770		0.770	
LEVEL OF SERVICE (LOS):				B		B		C		C		C		C		C		C	

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in v/c due to project:	0.003	Δv/c after mitigation:	0.003
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	Coldwater Canyon Avenue	Year of Count:	2012	Ambient Growth: (%):	2.0	Conducted by:	The Traffic Solution	Date:	9/20/2012									
CMA3	East-West Street:	Moorpark Street	Projection Year:	2016	Peak Hour:	PM	Reviewed by:		Project:	Harvard-Westlake Upper School I									
	No. of Phases			2		2				2									
	Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0		0				0									
	Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB-- 0		0	NB-- 0 SB-- 0	0	NB-- 0 SB-- 0			0									
	ATSAC-1 or ATSAC+ATCS-2?	EB-- 0 WB-- 0		0	EB-- 0 WB-- 0	0	EB-- 0 WB-- 0			0									
	Override Capacity			2		2				2									
				0		0				0									
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	1	101	0	101	101	0	109	1	109	0	109	1	109	0	109	1	109	
	Left-Through	0							0				0				0		
	Through	1	684	12	1257	690	15	1363	1	748	12	1375	1	754	0	1375	1	754	
	Through-Right	1							1				1				1		
	Right	0	122	0	122	122	0	132	0	132	0	132	0	132	0	132	0	132	
	Left-Through-Right	0							0				0				0		
Left-Right	0							0				0				0			
SOUTHBOUND	Left	1	99	0	99	99	3	110	1	110	0	110	1	110	0	110	1	110	
	Left-Through	0							0				0				0		
	Through	1	455	10	799	460	17	871	1	502	10	881	1	507	0	881	1	507	
	Through-Right	1							1				1				1		
	Right	0	121	0	121	121	2	133	0	133	0	133	0	133	0	133	0	133	
	Left-Through-Right	0							0				0				0		
Left-Right	0							0				0				0			
EASTBOUND	Left	1	111	0	111	111	5	125	1	125	0	125	1	125	0	125	1	125	
	Left-Through	0							0				0				0		
	Through	1	530	0	530	530	21	595	1	595	0	595	1	595	0	595	1	595	
	Through-Right	0							0				0				0		
	Right	1	20	0	70	20	0	76	1	22	0	76	1	22	0	76	1	22	
	Left-Through-Right	0							0				0				0		
Left-Right	0							0				0				0			
WESTBOUND	Left	1	157	0	157	157	0	170	1	170	0	170	1	170	0	170	1	170	
	Left-Through	0							0				0				0		
	Through	1	501	0	501	501	18	560	1	560	0	560	1	560	0	560	1	560	
	Through-Right	0							0				0				0		
	Right	1	97	0	146	97	0	158	1	103	0	158	1	103	0	158	1	103	
	Left-Through-Right	0							0				0				0		
Left-Right	0							0				0				0			
CRITICAL VOLUMES		North-South: 783	North-South: 789		North-South: 858		North-South: 864		North-South: 864		North-South: 864		North-South: 864		North-South: 864		North-South: 864		
		East-West: 687	East-West: 687		East-West: 765		East-West: 765		East-West: 765		East-West: 765		East-West: 765		East-West: 765		East-West: 765		
		SUM: 1470	SUM: 1476		SUM: 1623		SUM: 1629		SUM: 1629		SUM: 1629		SUM: 1629		SUM: 1629		SUM: 1629		
VOLUME/CAPACITY (V/C) RATIO:		0.980		0.984		1.082		1.086		1.086		1.086		1.086		1.086		1.086	
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.880		0.884		0.982		0.986		0.986		0.986		0.986		0.986		0.986	
LEVEL OF SERVICE (LOS):		D		D		E		E		E		E		E		E		E	

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in v/c due to project:	0.004	Δv/c after mitigation:	0.004
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	Coldwater Canyon Avenue	Year of Count:	2012	Ambient Growth: (%):	2.0	Conducted by:	The Traffic Solution	Date:	9/20/2012									
CMA4	East-West Street:	Ventura Boulevard	Projection Year:	2016	Peak Hour:	AM	Reviewed by:		Project:	Harvard-Westlake Upper School I									
No. of Phases				4		4		4		4									
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?				0		0		0		0									
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB--	0	SB--	0	NB--	0	SB--	0	NB--	0	SB--	0						
ATSAC-1 or ATSAC+ATCS-2?		EB--	0	WB--	0	EB--	0	WB--	0	EB--	0	WB--	0						
Override Capacity				2		2		2		2		2							
				0		0		0		0		0							
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	1	114	0	114	114	12	135	1	135	0	135	1	135	0	135	1	135	
	Left-Through	0																	
	Through	2	156	10	322	161	-1	337	2	169	10	347	2	174	0	347	2	174	
	Through-Right	0																	
	Right	1	65	0	132	65	6	149	1	74	0	149	1	74	0	149	1	74	
Left-Through-Right	0																		
Left-Right	0																		
SOUTHBOUND	Left	2	100	0	182	100	7	204	2	112	0	204	2	112	0	204	2	112	
	Left-Through	0																	
	Through	1	391	12	699	397	5	749	1	426	12	761	1	432	0	761	1	432	
	Through-Right	1																	
	Right	0	94	0	94	94	0	102	0	102	0	102	0	102	0	102	0	102	
Left-Through-Right	0																		
Left-Right	0																		
EASTBOUND	Left	1	124	0	124	124	0	134	1	134	0	134	1	134	0	134	1	134	
	Left-Through	0																	
	Through	2	565	0	1130	565	30	1253	2	627	0	1253	2	627	0	1253	2	627	
	Through-Right	0																	
	Right	1	156	0	213	156	7	238	1	171	0	238	1	171	0	238	1	171	
Left-Through-Right	0																		
Left-Right	0																		
WESTBOUND	Left	1	134	0	134	134	6	151	1	151	0	151	1	151	0	151	1	151	
	Left-Through	0																	
	Through	2	375	0	750	375	45	857	2	429	0	857	2	429	0	857	2	429	
	Through-Right	0																	
	Right	1	23	0	73	23	13	92	1	36	0	92	1	36	0	92	1	36	
Left-Through-Right	0																		
Left-Right	0																		
CRITICAL VOLUMES		North-South:	505	North-South:	511	North-South:	561	North-South:	567	North-South:	567	North-South:	567	North-South:	567	North-South:	567	North-South:	567
		East-West:	699	East-West:	699	East-West:	778	East-West:	778	East-West:	778	East-West:	778	East-West:	778	East-West:	778	East-West:	778
		SUM:	1204	SUM:	1210	SUM:	1339	SUM:	1345	SUM:	1345	SUM:	1345	SUM:	1345	SUM:	1345	SUM:	1345
VOLUME/CAPACITY (V/C) RATIO:			0.876		0.880		0.974		0.978		0.978		0.978		0.978		0.978		0.978
V/C LESS ATSAC/ATCS ADJUSTMENT:			0.776		0.780		0.874		0.878		0.878		0.878		0.878		0.878		0.878
LEVEL OF SERVICE (LOS):			C		C		D		D		D		D		D		D		D

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in v/c due to project:	0.004	Δv/c after mitigation:	0.004
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	Coldwater Canyon Avenue	Year of Count:	2012	Ambient Growth: (%):	2.0	Conducted by:	The Traffic Solution	Date:	9/20/2012									
CMA4	East-West Street:	Ventura Boulevard	Projection Year:	2016	Peak Hour:	PM	Reviewed by:					Project:	Harvard-Westlake Upper School I						
No. of Phases			4			4			4			4							
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0			0							
Right Turns: FREE-1, NRTOR-2 or OLA-3?			0			0			0			0							
ATSAC-1 or ATSAC+ATCS-2?			2			2			2			2							
Override Capacity			0			0			0			0							
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	1	250	0	250	250	5	276	1	276	0	276	1	276	0	276	1	276	
	Left-Through	0							0				0				0		
	Through	2	468	12	948	474	5	1018	2	509	12	1030	2	515	0	1030	2	515	
	Through-Right	0							0				0				0		
	Right	1	133	0	207	133	6	230	1	147	0	230	1	147	0	230	1	147	
	Left-Through-Right	0							0				0				0		
Left-Right	0							0				0				0			
SOUTHBOUND	Left	2	139	0	252	139	15	288	2	158	0	288	2	158	0	288	2	158	
	Left-Through	0							0				0				0		
	Through	1	313	10	476	318	2	506	1	340	10	516	1	345	0	516	1	345	
	Through-Right	1							1				1				1		
	Right	0	160	0	160	160	0	173	0	173	0	173	0	173	0	173	0	173	
	Left-Through-Right	0							0				0				0		
Left-Right	0							0				0				0			
EASTBOUND	Left	1	172	0	172	172	0	186	1	186	0	186	1	186	0	186	1	186	
	Left-Through	0							0				0				0		
	Through	2	582	0	1164	582	51	1311	2	656	0	1311	2	656	0	1311	2	656	
	Through-Right	0							0				0				0		
	Right	1	22	0	147	22	5	164	1	26	0	164	1	26	0	164	1	26	
	Left-Through-Right	0							0				0				0		
Left-Right	0							0				0				0			
WESTBOUND	Left	1	149	0	149	149	6	167	1	167	0	167	1	167	0	167	1	167	
	Left-Through	0							0				0				0		
	Through	2	565	0	1130	565	41	1264	2	632	0	1264	2	632	0	1264	2	632	
	Through-Right	0							0				0				0		
	Right	1	212	0	281	212	10	314	1	235	0	314	1	235	0	314	1	235	
	Left-Through-Right	0							0				0				0		
Left-Right	0							0				0				0			
CRITICAL VOLUMES		North-South: 607		North-South: 613		North-South: 667		North-South: 673		North-South: 673		North-South: 673		North-South: 673		North-South: 673		North-South: 673	
		East-West: 737		East-West: 737		East-West: 823		East-West: 823		East-West: 823		East-West: 823		East-West: 823		East-West: 823		East-West: 823	
		SUM: 1344		SUM: 1350		SUM: 1490		SUM: 1496		SUM: 1496		SUM: 1496		SUM: 1496		SUM: 1496		SUM: 1496	
VOLUME/CAPACITY (V/C) RATIO:			0.977			0.982			1.084			1.088			1.088				
V/C LESS ATSAC/ATCS ADJUSTMENT:			0.877			0.882			0.984			0.988			0.988				
LEVEL OF SERVICE (LOS):			D			D			E			E			E				

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in v/c due to project:	0.004	Δv/c after mitigation:	0.004
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	Coldwater Canyon Avenue	Year of Count:	2012	Ambient Growth: (%):	2.0	Conducted by:	The Traffic Solution	Date:	9/20/2012									
CMA5	East-West Street:	Harvard-Westlake Main Entrance Drive	Projection Year:	2016	Peak Hour:	AM	Reviewed by:		Project:	Harvard-Westlake Upper School I									
No. of Phases Opposed Ø'ing: N/S-1, E/W-2 or Both-3? Right Turns: FREE-1, NRTOR-2 or OLA-3? ATSAC-1 or ATSAC+ATCS-2? Override Capacity			2 0 0 0 0	2 0 0 0 0	2 0 0 0 0	2 0 0 0 0	2 0 0 0 0	2 0 0 0 0	2 0 0 0 0	2 0 0 0 0									
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Left-Through																		
	Through	417	1	417	0	417	417	17	468	1	468	0	468	1	468	0	468	1	468
	Through-Right																		
	Right	57	1	57	0	57	57	0	62	1	62	0	62	1	62	0	62	1	62
	Left-Through-Right																		
SOUTHBOUND	Left	176	1	176	0	176	176	0	191	1	191	0	191	1	191	0	191	1	191
	Left-Through																		
	Through	1130	0	1130	0	1130	1142	18	1241	0	1241	0	1241	0	1253	0	1241	0	1253
	Through-Right																		
	Right	0	0	0	12	12	0	0	0	0	0	12	12	0	0	0	12	0	0
	Left-Through-Right																		
EASTBOUND	Left	0	0	0	10	10	10	0	0	0	0	10	10	0	10	0	10	0	10
	Left-Through																		
	Through	0	0	0	0	0	10	0	0	0	0	0	0	10	0	0	0	10	
	Through-Right																		
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right																		
WESTBOUND	Left	12	1	12	0	12	12	0	13	1	13	0	13	1	13	0	13	1	13
	Left-Through																		
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through-Right																		
	Right	33	1	0	0	33	0	0	36	1	0	0	36	1	0	0	36	1	0
	Left-Through-Right																		
CRITICAL VOLUMES			North-South: 1130 East-West: 12 SUM: 1142	North-South: 1142 East-West: 22 SUM: 1164	North-South: 1241 East-West: 13 SUM: 1254	North-South: 1253 East-West: 23 SUM: 1276	North-South: 1253 East-West: 23 SUM: 1276												
VOLUME/CAPACITY (V/C) RATIO:			0.761	0.776	0.836	0.851	0.851												
V/C LESS ATSAC/ATCS ADJUSTMENT:			0.761	0.776	0.836	0.851	0.851												
LEVEL OF SERVICE (LOS):			C	C	D	D	D												

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in v/c due to project:	0.015	Δv/c after mitigation:	0.015
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet (Circular 212 Method)



I/S #:		North-South Street: Coldwater Canyon Avenue			Year of Count: 2012		Ambient Growth: (%): 2.0		Conducted by: The Traffic Solution		Date: 9/20/2012								
CMA5:		East-West Street: Harvard-Westlake Main Entrance Drive			Projection Year: 2016		Peak Hour: PM		Reviewed by:		Project: Harvard-Westlake Upper School								
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		No. of Phases 2			2		2		2		2								
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0 SB-- 0 EB-- 0 WB-- 0			NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0		NB-- 0 SB-- 0 EB-- 0 WB-- 0								
ATSAC-1 or ATSAC+ATCS-2?		0			0		0		0		0								
Override Capacity		0			0		0		0		0								
MOVEMENT		EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through																		
	Through	1298	1	1298	0	1298	1298	16	1421	1	1421	0	1421	1	1421	0	1421	1	1421
	Through-Right		0							0				0				0	
	Right	12	1	0	0	12	0	0	13	1	0	0	13	1	0	0	13	1	0
	Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0		
SOUTHBOUND	Left	83	1	83	0	83	83	0	90	1	90	0	90	1	90	0	90	1	90
	Left-Through		0							0				0				0	
	Through	684	0	684	0	684	694	13	753	0	753	0	753	0	763	0	753	0	763
	Through-Right		1							1				1				1	
	Right	0	0	0	10	10	0	0	0	0	0	10	10	0	0	0	10	0	0
	Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0		
EASTBOUND	Left	0	0	0	12	12	12	0	0	0	0	12	12	0	12	0	12	0	12
	Left-Through		0							0				0				0	
	Through	0	0	0	0	0	12	0	0	0	0	0	0	12	0	0	0	0	12
	Through-Right		0							0				0				0	
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right		1							1				1				1	
Left-Right		0							0				0				0		
WESTBOUND	Left	31	1	31	0	31	31	0	34	1	34	0	34	1	34	0	34	1	34
	Left-Through		0							0				0				0	
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through-Right		0							0				0				0	
	Right	87	1	46	0	87	46	0	94	1	49	0	94	1	49	0	94	1	49
	Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0		
CRITICAL VOLUMES		North-South: 1381 East-West: 46 SUM: 1427			North-South: 1381 East-West: 58 SUM: 1439			North-South: 1511 East-West: 49 SUM: 1560				North-South: 1511 East-West: 61 SUM: 1572				North-South: 1511 East-West: 61 SUM: 1572			
VOLUME/CAPACITY (V/C) RATIO:		0.951			0.959			1.040				1.048				1.048			
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.951			0.959			1.040				1.048				1.048			
LEVEL OF SERVICE (LOS):		E			E			F				F				F			

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in v/c due to project:	0.008	Δv/c after mitigation:	0.008
Significant impacted?	NO	Fully mitigated?	N/A

APPENDIX C-2

CMA DATA WORKSHEETS – SCHOOL AM AND PM PEAK HOURS

Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street: Coldwater Canyon Avenue	Year of Count: 2012	Ambient Growth (%): 2.0	Conducted by: The Traffic Solution	Date: 9/20/2012
CMA5	East-West Street: Harvard-Westlake Main Entrance Drive	Projection Year: 2016	Peak Hour: PM	Reviewed by:	Project: Harvard-Westlake Upper School I
	No. of Phases: 2	3	2	3	3
	Opposed Ø'ing: N/S-1, E/W-2 or Both-3?	0	0	0	0
	Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB-- 0	NB-- 0 SB-- 0	NB-- 0 SB-- 0	NB-- 0 SB-- 0
	ATSAC-1 or ATSAC+ATCS-2?	EB-- 0 WB-- 0	EB-- 0 WB-- 0	EB-- 0 WB-- 0	EB-- 0 WB-- 0
	Override Capacity	0	2	0	2
		0	0	0	0

MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
	NORTHBOUND																	
Left	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0
Left-Through													0				0	
Through	1237	1	1237	-64	1173	1173	16	1355	1	1355	-64	1291	1	1291	0	1291	1	1291
Through-Right													0				0	
Right	7	1	0	-5	2	0	0	8	1	0	-5	3	1	0	0	3	1	0
Left-Through-Right													0				0	
Left-Right													0				0	
SOUTHBOUND																		
Left	47	1	47	-2	45	45	0	51	1	51	-2	49	1	49	0	49	1	49
Left-Through													0				0	
Through	695	1	695	-10	685	685	13	765	1	765	-10	755	2	378	0	755	2	378
Through-Right													0				0	
Right	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0
Left-Through-Right													0				0	
Left-Right													0				0	
EASTBOUND																		
Left	0	0	0	154	154	0	0	0	0	0	154	154	1	154	0	154	1	154
Left-Through													0				0	
Through	0	0	0	0	0	0	0	0	0	0	0	0	0	15	0	0	0	15
Through-Right													1				1	
Right	0	0	0	15	15	0	0	0	0	0	15	15	0	0	0	15	0	0
Left-Through-Right													0				0	
Left-Right													0				0	
WESTBOUND																		
Left	41	1	41	-33	8	8	0	44	1	44	-33	11	1	11	0	11	1	11
Left-Through													0				0	
Through	0	0	0	0	0	0	0	0	0	0	0	0	0	26	0	0	0	26
Through-Right													1				1	
Right	90	1	67	-71	19	0	0	97	1	72	-71	26	0	0	0	26	0	0
Left-Through-Right													0				0	
Left-Right													0				0	
CRITICAL VOLUMES		North-South: 1284 East-West: 67 SUM: 1351	North-South: 1218 East-West: 8 SUM: 1226	North-South: 1406 East-West: 72 SUM: 1478	North-South: 1340 East-West: 180 SUM: 1520	North-South: 1340 East-West: 180 SUM: 1520												
VOLUME/CAPACITY (V/C) RATIO:		0.901	0.860	0.985	1.067	1.067												
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.901	0.760	0.985	0.967	0.967												
LEVEL OF SERVICE (LOS):		E	C	E	E	E												

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in v/c due to project: -0.018	Δv/c after mitigation: -0.018
Significant impacted?: NO	Fully mitigated?: N/A

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CRITICAL MOVEMENT ANALYSIS

N-S St: Coldwater Canyon Avenue
 E-W St: Harvard-Westlake Main Entrance Driveway
 Project: Harvard-Westlake Upper School Infrastructure Project\1-08-3744-2
 File Name: CMA5
 Counts by: The Traffic Solution

Coldwater Canyon Avenue @ Harvard-Westlake Main Entrance Driveway
 Peak Hour: AM
 Annual Growth: 2.0%

Date: 09/20/2012
 Date of Count: 2012
 Buildout Year: 2016

PROJECT FEATURES

Movement	2012 EXIST. TRAFFIC			2012 EXIST. + PROJECT				2012 EXIST. + PROJ. + MIT				2016 FUTURE BASELINE				2016 FUTURE W/PROJECT				2016 FUTURE W/MITIGATION			
	Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NB Left	0	0	-	110	110	1	110	0	110	1	110	0	0	0	-	110	110	1	110	0	110	1	110
Comb. L-T	0	-	-	0	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
NB Thru	417	1	417	-17	400	1	400	0	400	1	400	51	469	1	469	-17	452	1	452	0	452	1	452
Comb. T-R	0	-	-	0	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
NB Right	57	1	57	-46	11	1	11	0	11	1	11	5	62	1	62	-46	16	1	16	0	16	1	16
Comb. L-T-R -	0	-	-	0	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
SB Left	176	1	176	-141	35	1	35	0	35	1	35	15	191	1	191	-141	50	1	50	0	50	1	50
Comb. L-T	0	-	-	0	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
SB Thru	1130	1	1130	-30	1100	2	550	0	1100	2	550	111	1241	1	1241	-30	1211	2	606	0	1211	2	606
Comb. T-R	0	-	-	0	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
SB Right	0	0	-	170	170	1	170	0	170	1	170	0	0	0	-	170	170	1	170	0	170	1	170
Comb. L-T-R -	0	-	-	0	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
EB Left	0	0	-	0	0	1	-	0	0	1	-	0	0	0	-	0	0	1	-	0	0	1	-
Comb. L-T	0	-	-	0	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
EB Thru	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Comb. T-R	0	-	-	0	0	1	0	0	0	1	0	0	0	0	-	0	0	1	0	0	0	1	0
EB Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Comb. L-T-R -	0	-	-	0	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
WB Left	12	1	12	-3	9	1	9	0	9	1	9	1	13	1	13	-3	10	1	10	0	10	1	10
Comb. L-T	0	-	-	0	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
WB Thru	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Comb. T-R	0	-	-	0	0	1	20	0	0	1	20	0	0	0	-	0	0	1	22	0	22	1	22
WB Right	33	1	33	-13	20	0	-	0	20	0	-	3	35	1	35	-13	22	0	-	0	22	0	-
Comb. L-T-R -	0	-	-	0	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Crit. Volumes:	N-S:	1130				N-S:	660			N-S:	660			N-S:	1241			N-S:	716			N-S:	716
	E-W:	12				E-W:	20			E-W:	20			E-W:	13			E-W:	22			E-W:	22
	SUM:	1142				SUM:	680			SUM:	680			SUM:	1255			SUM:	738			SUM:	738
No. of Phases:		2					3				3				2				3				3
(N/A=0, ATSAC=1, ATCS=2)		0					2				2				0				2				2
Volume / Capacity:		0.762					0.377				0.377				0.836				0.418				0.418
Level of Service:		C					A				A				D				A				A

Assumptions: Maximum Sum of Critical Volumes (Intersection Capacity): 2 Phase=1500, 3 Phase=1425, 4+ Phase=1375, Unsignalized=1200.
 For dual turn lanes, 55% of volume is assigned to heavier lane.
 For one excl. and one opt. turn lane, 70% of volume is assigned to exclusive lane.
 Right turns on red from excl. lanes = 50% of overlapping left turn.

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 Project: Harvard-Westlake Upper School Infrastructure Project\1-08-3744-2
 File Name: CMA5
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Coldwater Canyon Avenue @ Harvard-Westlake Main Entrance Driveway
 Peak Hour: PM
 Annual Growth: 2.0%

Date: 09/20/2012
 Date of Count: 2012
 Buildout Year: 2016

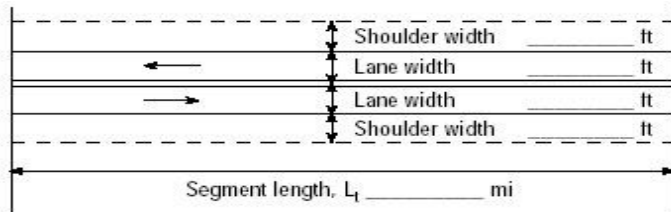
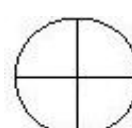
PROJECT FEATURES

Movement	2012 EXIST. TRAFFIC			2012 EXIST. + PROJECT				2012 EXIST. + PROJ. + MIT				2016 FUTURE BASELINE				2016 FUTURE W/PROJECT				2016 FUTURE W/MITIGATION			
	Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NB Left	0	0	-	0	0	1	-	0	0	1	-	0	0	0	-	0	0	1	-	0	0	1	-
Comb. L-T	0	-	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-
NB Thru	1237	1	1237	-64	1173	1	1173	0	1173	1	1173	118	1355	1	1355	-64	1291	1	1291	0	1291	1	1291
Comb. T-R	0	-	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-
NB Right	7	1	7	-5	2	1	2	0	2	1	2	1	8	1	8	-5	3	1	3	0	3	1	3
Comb. L-T-R -	0	-	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-
SB Left	47	1	47	-2	45	1	45	0	45	1	45	4	51	1	51	-2	49	1	49	0	49	1	49
Comb. L-T	0	-	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-
SB Thru	695	1	695	-10	685	2	342	0	685	2	342	70	765	1	765	-10	755	2	377	0	755	2	377
Comb. T-R	0	-	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-
SB Right	0	0	-	0	0	1	0	0	0	1	0	0	0	0	-	0	0	1	0	0	0	1	0
Comb. L-T-R -	0	-	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-
EB Left	0	0	-	154	154	1	154	0	154	1	154	0	0	0	-	154	154	1	154	0	154	1	154
Comb. L-T	0	-	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-
EB Thru	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Comb. T-R	0	-	-	0	-	1	15	0	-	1	15	0	-	0	-	0	-	1	15	0	-	1	15
EB Right	0	0	-	15	15	0	-	0	15	0	-	0	0	0	-	15	15	0	-	0	15	0	-
Comb. L-T-R -	0	-	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-
WB Left	41	1	41	-33	8	1	8	0	8	1	8	3	44	1	44	-33	11	1	11	0	11	1	11
Comb. L-T	0	-	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-
WB Thru	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Comb. T-R	0	-	-	0	-	1	19	0	-	1	19	0	-	0	-	0	-	1	19	0	-	1	19
WB Right	90	1	90	-71	19	0	-	0	19	0	-	7	97	1	97	-71	26	0	-	0	26	0	-
Comb. L-T-R -	0	-	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-
Crit. Volumes:	N-S:	1284				N-S:	1218			N-S:	1218			N-S:	1406			N-S:	1340			N-S:	1340
	E-W:	66				E-W:	173			E-W:	173			E-W:	72			E-W:	180			E-W:	180
	SUM:	1350				SUM:	1391			SUM:	1391			SUM:	1478			SUM:	1520			SUM:	1520
No. of Phases:		2					3				3				2				3				3
(N/A=0, ATSAC=1, ATCS=2)		0					2				2				0				2				2
Volume / Capacity:		0.900					0.876				0.876				0.985				0.967				0.967
Level of Service:		D					D				D				E				E				E

Assumptions: Maximum Sum of Critical Volumes (Intersection Capacity): 2 Phase=1500, 3 Phase=1425, 4+ Phase=1375, Unsignalized=1200.
 For dual turn lanes, 55% of volume is assigned to heavier lane.
 For one excl. and one opt. turn lane, 70% of volume is assigned to exclusive lane.
 Right turns on red from excl. lanes = 50% of overlapping left turn.

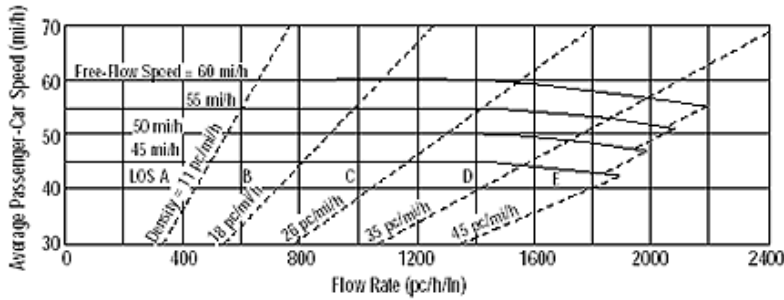
APPENDIX D

HCS DATA WORKSHEETS – COMMUTER AM PEAK HOUR

DIRECTIONAL TWO-LANE HIGHWAY SEGMENT WORKSHEET			
General Information		Site Information	
Analyst	CG	Highway / Direction of Travel	Coldwater Canyon Avenue
Agency or Company	LLG	From/To	Ventura Blvd/H-W Driveway
Date Performed	10/16/2012	Jurisdiction	City of Los Angeles
Analysis Time Period	AM Peak Hour	Analysis Year	2012 Existing Conditions
Project Description: 1-08-3744-2 Harvard-Westlake			
Input Data			
		<div style="display: flex; justify-content: space-between;"> <div style="text-align: center;">  <p>Show North Arrow</p> </div> <div> <input type="checkbox"/> Class I highway <input checked="" type="checkbox"/> Class II highway <input type="checkbox"/> Class III highway Terrain <input checked="" type="checkbox"/> Level <input type="checkbox"/> Rolling Grade Length mi Up/down Peak-hour factor, PHF 0.88 No-passing zone 0% % Trucks and Buses, P_T 2% % Recreational vehicles, P_R 0% Access points mi 8/mi </div> </div>	
Analysis direction vol., V _d	1306veh/h		
Opposing direction vol., V _o	558veh/h		
Shoulder width ft	6.0		
Lane Width ft	12.0		
Segment Length mi	0.4		
Average Travel Speed			
	Analysis Direction (d)	Opposing Direction (o)	
Passenger-car equivalents for trucks, E _T (Exhibit 15-11 or 15-12)	1.0	1.1	
Passenger-car equivalents for RVs, E _R (Exhibit 15-11 or 15-13)	1.0	1.0	
Heavy-vehicle adjustment factor, f _{HV,ATS} =1/(1+P _T (E _T -1)+P _R (E _R -1))	1.000	0.998	
Grade adjustment factor ¹ , f _{g,ATS} (Exhibit 15-9)	1.00	1.00	
Demand flow rate ² , v _i (pc/h) v _i =V _i /(PHF*f _{g,ATS} *f _{HV,ATS})	1484	635	
Free-Flow Speed from Field Measurement		Estimated Free-Flow Speed	
Mean speed of sample ³ , S _{FM}		Base free-flow speed ⁴ , BFFS	45.0 mi/h
Total demand flow rate, both directions, v		Adj. for lane and shoulder width ⁴ , f _{LS} (Exhibit 15-7)	0.0 mi/h
Free-flow speed, FFS=S _{FM} +0.00776(v/f _{HV,ATS})		Adj. for access points ⁴ , f _A (Exhibit 15-8)	2.0 mi/h
Adj. for no-passing zones, f _{np,ATS} (Exhibit 15-15)	0.4 mi/h	Free-flow speed, FFS (FFS=BFFS-f _{LS} -f _A)	43.0 mi/h
		Average travel speed, ATS _d =FFS-0.00776(v _{d,ATS} +V _{o,ATS})-f _{np,ATS}	26.2 mi/h
		Percent free flow speed, PFFS	60.9 %
Percent Time-Spent-Following			
	Analysis Direction (d)	Opposing Direction (o)	
Passenger-car equivalents for trucks, E _T (Exhibit 15-18 or 15-19)	1.0	1.0	
Passenger-car equivalents for RVs, E _R (Exhibit 15-18 or 15-19)	1.0	1.0	
Heavy-vehicle adjustment factor, f _{HV} =1/(1+P _T (E _T -1)+P _R (E _R -1))	1.000	1.000	
Grade adjustment factor ¹ , f _{g,PTSF} (Exhibit 15-16 or Ex 15-17)	1.00	1.00	
Directional flow rate ² , v _i (pc/h) v _i =V _i /(PHF*f _{HV,PTSF} *f _{g,PTSF})	1484	634	
Base percent time-spent-following ⁴ , BPTSF _d (%)=100(1-e ^{-av_d})		85.4	
Adj. for no-passing zone, f _{np,PTSF} (Exhibit 15-21)		7.3	
Percent time-spent-following, PTSF _d (%)=BPTSF _d +f _{np,PTSF} *(v _{d,PTSF} /v _{d,PTSF} +V _{o,PTSF})		90.5	
Level of Service and Other Performance Measures			
Level of service, LOS (Exhibit 15-3)	E		
Volume to capacity ratio, v/c	0.87		

Capacity, $C_{d,ATS}$ (Equation 15-12) pc/h	0
Capacity, $C_{d,PTSF}$ (Equation 15-13) pc/h	1700
Percent Free-Flow Speed $PFFS_d$ (Equation 15-11 - Class III only)	60.9
Bicycle Level of Service	
Directional demand flow rate in outside lane, v_{OL} (Eq. 15-24) veh/h	1484.1
Effective width, W_v (Eq. 15-29) ft	24.00
Effective speed factor, S_t (Eq. 15-30)	4.79
Bicycle level of service score, BLOS (Eq. 15-31)	3.06
Bicycle level of service (Exhibit 15-4)	C
Notes	
<p>1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.</p> <p>2. If $v_i(v_d \text{ or } v_o) \geq 1,700$ pc/h, terminate analysis--the LOS is F.</p> <p>3. For the analysis direction only and for $v > 200$ veh/h.</p> <p>4. For the analysis direction only</p> <p>5. Exhibit 15-20 provides coefficients a and b for Equation 15-10.</p> <p>6. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.</p>	

MULTILANE HIGHWAYS WORKSHEET(Direction 1)



Application	Input	Output
Operational (LOS)	FFS, N, v_p	LOS, S, D
Design (N)	FFS, LOS, v_p	N, S, D
Design (v_p)	FFS, LOS, N	v_p , S, D
Planning (LOS)	FFS, N, AADT	LOS, S, D
Planning (N)	FFS, LOS, AADT	N, S, D
Planning (v_p)	FFS, LOS, N	v_p , S, D

General Information

Analyst	CG
Agency or Company	LLG
Date Performed	10/16/2012
Analysis Time Period	AM Peak Hour

Site Information

Highway/Direction to Travel	Coldwater Canyon Avenue
From/To	Ventura Blvd/H-W Driveway
Jurisdiction	City of Los Angeles
Analysis Year	2012 Existing w/ Proj. Occ.

Project Description 1-08-3744-2 Harvard-Westlake Parking Improvement Plan

- Oper.(LOS)
 Des. (N)
 Plan. (vp)

Flow Inputs

Volume, V (veh/h)	1305	Peak-Hour Factor, PHF	0.92
AADT(veh/h)		%Trucks and Buses, P_T	1
Peak-Hour Prop of AADT (veh/d)		%RVs, P_R	0
Peak-Hour Direction Prop, D		General Terrain:	Level
DDHV (veh/h)		Grade Length (mi)	0.00
Driver Type Adjustment	1.00	Up/Down %	0.00
		Number of Lanes	2

Calculate Flow Adjustments

f_p	1.00	E_R	1.2
E_T	1.5	f_{HV}	0.995

Speed Inputs

Lane Width, LW (ft)	12.0
Total Lateral Clearance, LC (ft)	12.0
Access Points, A (A/mi)	0
Median Type, M	Divided
FFS (measured)	
Base Free-Flow Speed, BFFS	45.0

Calc Speed Adj and FFS

f_{LW} (mi/h)	0.0
f_{LC} (mi/h)	0.0
f_A (mi/h)	0.0
f_M (mi/h)	0.0
FFS (mi/h)	45.0

Operations

<u>Operational (LOS)</u>	
Flow Rate, v_p (pc/h/ln)	712
Speed, S (mi/h)	45.0
D (pc/mi/ln)	15.8
LOS	B

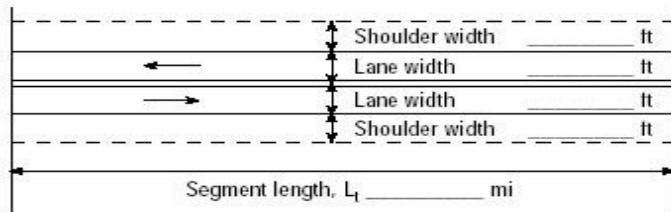
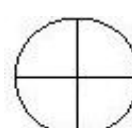
Design

<u>Design (N)</u>	
Required Number of Lanes, N	
Flow Rate, v_p (pc/h)	
Max Service Flow Rate (pc/h/ln)	
Design LOS	

Bicycle Level of Service

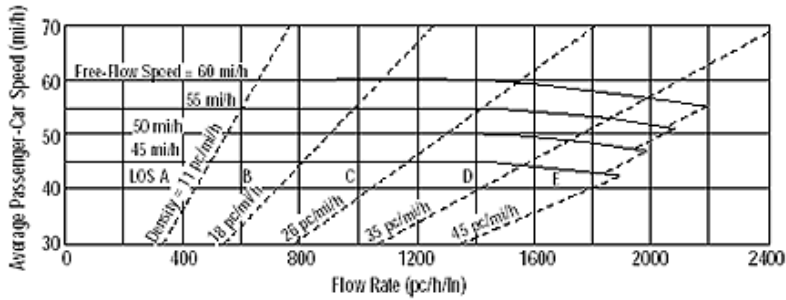
Directional demand flow rate in outside lane, v_{OL} (Eq. 15-24) veh/h	709.2
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Effective width, W_v (Eq. 15-29) ft	24.00
Effective speed factor, S_t (Eq. 15-30)	4.79
Bicycle level of service score, BLOS (Eq. 15-31)	2.46
Bicycle level of service (Exhibit 15-4)	B

DIRECTIONAL TWO-LANE HIGHWAY SEGMENT WORKSHEET			
General Information		Site Information	
Analyst	CG	Highway / Direction of Travel	Coldwater Canyon Avenue
Agency or Company	LLG	From/To	Ventura Blvd/H-W Driveway
Date Performed	10/16/2012	Jurisdiction	City of Los Angeles
Analysis Time Period	AM Peak Hour	Analysis Year	2016 Future w/o Proj. Occ.
Project Description: 1-08-3744-2 Harvard-Westlake			
Input Data			
		<div style="display: flex; justify-content: space-between;"> <div style="text-align: center;">  <p>Show North Arrow</p> </div> <div> <input type="checkbox"/> Class I highway <input checked="" type="checkbox"/> Class II highway <input type="checkbox"/> Class III highway Terrain <input checked="" type="checkbox"/> Level <input type="checkbox"/> Rolling Grade Length mi Up/down Peak-hour factor, PHF 0.88 No-passing zone 0% % Trucks and Buses, P_T 2% % Recreational vehicles, P_R 0% Access points mi 8/mi </div> </div>	
Analysis direction vol., V _d	1432veh/h		
Opposing direction vol., V _o	621veh/h		
Shoulder width ft	6.0		
Lane Width ft	12.0		
Segment Length mi	0.4		
Average Travel Speed			
	Analysis Direction (d)	Opposing Direction (o)	
Passenger-car equivalents for trucks, E _T (Exhibit 15-11 or 15-12)	1.0	1.1	
Passenger-car equivalents for RVs, E _R (Exhibit 15-11 or 15-13)	1.0	1.0	
Heavy-vehicle adjustment factor, f _{HV,ATS} =1/(1+P _T (E _T -1)+P _R (E _R -1))	1.000	0.998	
Grade adjustment factor ¹ , f _{g,ATS} (Exhibit 15-9)	1.00	1.00	
Demand flow rate ² , v _i (pc/h) v _i =V _i /(PHF*f _{g,ATS} *f _{HV,ATS})	1627	707	
Free-Flow Speed from Field Measurement		Estimated Free-Flow Speed	
Mean speed of sample ³ , S _{FM}		Base free-flow speed ⁴ , BFFS	45.0 mi/h
Total demand flow rate, both directions, v		Adj. for lane and shoulder width ⁴ , f _{LS} (Exhibit 15-7)	0.0 mi/h
Free-flow speed, FFS=S _{FM} +0.00776(v/f _{HV,ATS})		Adj. for access points ⁴ , f _A (Exhibit 15-8)	2.0 mi/h
Adj. for no-passing zones, f _{np,ATS} (Exhibit 15-15)	0.3 mi/h	Free-flow speed, FFS (FFS=BFFS-f _{LS} -f _A)	43.0 mi/h
		Average travel speed, ATS _d =FFS-0.00776(v _{d,ATS} +V _{o,ATS})-f _{np,ATS}	24.5 mi/h
		Percent free flow speed, PFFS	57.1 %
Percent Time-Spent-Following			
	Analysis Direction (d)	Opposing Direction (o)	
Passenger-car equivalents for trucks, E _T (Exhibit 15-18 or 15-19)	1.0	1.0	
Passenger-car equivalents for RVs, E _R (Exhibit 15-18 or 15-19)	1.0	1.0	
Heavy-vehicle adjustment factor, f _{HV} =1/(1+P _T (E _T -1)+P _R (E _R -1))	1.000	1.000	
Grade adjustment factor ¹ , f _{g,PTSF} (Exhibit 15-16 or Ex 15-17)	1.00	1.00	
Directional flow rate ² , v _i (pc/h) v _i =V _i /(PHF*f _{HV,PTSF} *f _{g,PTSF})	1627	706	
Base percent time-spent-following ⁴ , BPTSF _d (%)=100(1-e ^{-av_d})		87.7	
Adj. for no-passing zone, f _{np,PTSF} (Exhibit 15-21)		7.3	
Percent time-spent-following, PTSF _d (%)=BPTSF _d +f _{np,PTSF} *(v _{d,PTSF} /v _{d,PTSF} +V _{o,PTSF})		92.8	
Level of Service and Other Performance Measures			
Level of service, LOS (Exhibit 15-3)	E		
Volume to capacity ratio, v/c	0.96		

Capacity, $C_{d,ATS}$ (Equation 15-12) pc/h	0
Capacity, $C_{d,PTSF}$ (Equation 15-13) pc/h	1700
Percent Free-Flow Speed $PFFS_d$ (Equation 15-11 - Class III only)	57.1
Bicycle Level of Service	
Directional demand flow rate in outside lane, v_{OL} (Eq. 15-24) veh/h	1627.3
Effective width, W_v (Eq. 15-29) ft	24.00
Effective speed factor, S_t (Eq. 15-30)	4.79
Bicycle level of service score, BLOS (Eq. 15-31)	3.11
Bicycle level of service (Exhibit 15-4)	C
Notes	
<p>1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.</p> <p>2. If $v_i(v_d \text{ or } v_o) \geq 1,700$ pc/h, terminate analysis--the LOS is F.</p> <p>3. For the analysis direction only and for $v > 200$ veh/h.</p> <p>4. For the analysis direction only</p> <p>5. Exhibit 15-20 provides coefficients a and b for Equation 15-10.</p> <p>6. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.</p>	

MULTILANE HIGHWAYS WORKSHEET(Direction 1)



Application	Input	Output
Operational (LOS)	FFS, N, v_p	LOS, S, D
Design (N)	FFS, LOS, v_p	N, S, D
Design (v_p)	FFS, LOS, N	v_p , S, D
Planning (LOS)	FFS, N, AADT	LOS, S, D
Planning (N)	FFS, LOS, AADT	N, S, D
Planning (v_p)	FFS, LOS, N	v_p , S, D

General Information

Analyst	CG
Agency or Company	LLG
Date Performed	10/16/2012
Analysis Time Period	AM Peak Hour

Site Information

Highway/Direction to Travel	Coldwater Canyon Avenue
From/To	Ventura Blvd/H-W Driveway
Jurisdiction	City of Los Angeles
Analysis Year	2012 Existing w/ Proj. Occ.

Project Description 1-08-3744-2 Harvard-Westlake Parking Improvement Plan

- Oper.(LOS)
 Des. (N)
 Plan. (vp)

Flow Inputs

Volume, V (veh/h)	1431	Peak-Hour Factor, PHF	0.92
AADT(veh/h)		%Trucks and Buses, P_T	1
Peak-Hour Prop of AADT (veh/d)		%RVs, P_R	0
Peak-Hour Direction Prop, D		General Terrain:	Level
DDHV (veh/h)		Grade Length (mi)	0.00
Driver Type Adjustment	1.00	Up/Down %	0.00
		Number of Lanes	2

Calculate Flow Adjustments

f_p	1.00	E_R	1.2
E_T	1.5	f_{HV}	0.995

Speed Inputs

Lane Width, LW (ft)	12.0
Total Lateral Clearance, LC (ft)	12.0
Access Points, A (A/mi)	0
Median Type, M	Divided
FFS (measured)	
Base Free-Flow Speed, BFFS	45.0

Calc Speed Adj and FFS

f_{LW} (mi/h)	0.0
f_{LC} (mi/h)	0.0
f_A (mi/h)	0.0
f_M (mi/h)	0.0
FFS (mi/h)	45.0

Operations

<u>Operational (LOS)</u>	
Flow Rate, v_p (pc/h/ln)	781
Speed, S (mi/h)	45.0
D (pc/mi/ln)	17.4
LOS	B

Design

<u>Design (N)</u>	
Required Number of Lanes, N	
Flow Rate, v_p (pc/h)	
Max Service Flow Rate (pc/h/ln)	
Design LOS	

Bicycle Level of Service

Directional demand flow rate in outside lane, v_{OL} (Eq. 15-24) veh/h	777.7
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Effective width, W_v (Eq. 15-29) ft	24.00
Effective speed factor, S_t (Eq. 15-30)	4.79
Bicycle level of service score, BLOS (Eq. 15-31)	2.50
Bicycle level of service (Exhibit 15-4)	C

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