Appendix B
Field Data

ATR and Turn Movement Counts

This appendix contains ATR data collected along MD 2/MD 4 listed in table B-1 and the turn movement counts listed in Table B-2.

Table B- 1 – Traffic Data (ATR counts)

ID	Location	Month/Year	Source
1	MD 2/MD 4 SB, north of Calvert Cliffs Parkway	8/2006	Field Counts
2	MD 2/MD 4 NB, south of Calvert Cliffs Parkway	8/2006	Field Counts
3	Calvert Cliffs Parkway, east of MD 2/MD 4	8/2006	Field Counts

Table B- 2 – Traffic Data (Turn Movement Counts)

ID	Intersection	Month/Year	Source
1	MD 2/MD 4 diverge	3/2010	SHA
2	MD 231 & MD 2/MD 4	3/2009	SHA
3	Calvert Beach/Ball Road & MD 2/MD 4	9/2006	Field Counts
4	Calvert Cliffs Parkway & MD 2/MD 4	10/2006	Field Counts
5	White Sands Drive & MD 2/MD 4	2/2010	SHA
6	Nursery Road & MD 2/MD 4	4/2008	Field Counts
7	Pardoe Road & MD 2/MD 4	4/2008	Field Counts
8	Cove Point Road & MD 2/MD 4	4/2008	Field Counts

Lenhart Traffic Consulting, Inc.
410-987-3888

Site Code: CALVERT000EB
Station ID: ATR2000000EB

Calvert Cliffs Pkwy.
East of MD.2 & 4
Calvert County

Latitude: 0' 0.000 Undefined

Start	28-Aug-06		Tue		Wed		Thu		Fri		Sat		Sun		Week Average	
Time	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
12:00 AM	*	*	6	7	7	7	6	6	8	10	0	1	6	6	6	6
01:00	*	*	7	7	4	1	3	3	6	8	0	0	4	9	4	5
02:00	*	*	13	3	15	7	15	6	10	4	4	1	2	4	10	4
03:00	*	*	76	5	74	7	71	9	61	12	27	2	**32**	10	57	8
04:00	*	*	**286**	**40**	**295**	**34**	**266**	38	**171**	30	**33**	**38**	22	**34**	**179**	**36**
05:00	*	*	204	21	186	19	194	17	147	20	12	17	14	18	126	19
06:00	*	*	131	18	121	9	143	6	119	7	6	3	9	1	88	7
07:00	*	*	72	16	91	12	77	12	62	17	6	9	10	5	53	12
08:00	*	*	34	15	29	23	36	16	36	21	11	7	7	5	26	14
09:00	*	*	17	15	20	22	18	22	15	40	9	7	6	11	14	20
10:00	*	*	30	23	15	21	24	**40**	14	52	14	11	6	8	17	26
11:00	*	*	22	33	24	30	18	35	13	**69**	9	14	6	9	15	32
12:00 PM	*	*	14	36	16	36	14	40	14	86	5	11	1	8	11	36
01:00	*	*	7	125	10	109	10	118	7	**130**	9	19	11	11	9	85
02:00	13	166	8	126	12	150	12	167	7	78	11	16	12	9	11	102
03:00	**41**	**212**	**28**	**233**	**34**	**222**	**36**	**207**	**29**	62	**25**	8	**28**	13	**32**	**137**
04:00	20	152	26	176	24	179	22	145	22	61	21	**39**	19	**34**	22	112
05:00	5	57	7	83	7	78	7	64	3	35	6	13	6	22	6	50
06:00	2	17	6	27	8	16	4	16	3	10	3	6	2	2	4	13
07:00	5	9	6	13	3	20	5	11	6	12	5	4	5	5	5	11
08:00	4	6	8	8	7	10	6	13	3	5	7	9	4	4	6	8
09:00	6	10	6	8	5	8	6	9	2	2	7	7	5	5	5	7
10:00	5	13	6	8	2	3	6	8	7	4	2	2	6	6	5	6
11:00	6	13	5	12	4	9	6	15	0	0	5	5	2	2	4	8
Lane	107	655	1025	1058	1013	1032	1005	1023	765	775	237	249	225	241	715	764
Day	762		2083		2045		2028		1540		486		466		1479	
AM Peak			04:00	04:00	04:00	04:00	04:00	10:00	04:00	11:00	04:00	04:00	03:00	04:00	04:00	04:00
Vol.			286	40	295	34	266	40	171	69	33	38	32	34	179	36
PM Peak	15:00	15:00	15:00	15:00	15:00	15:00	15:00	15:00	15:00	13:00	15:00	16:00	15:00	16:00	15:00	15:00
Vol.	41	212	28	233	34	222	36	207	29	130	25	39	28	34	32	137

Calvert Cliffs Pkwy.
East of MD.2 & 4
Calvert County

Site Code: CALVERT000EB
Station ID: ATR2000000EB

Latitude: 0' 0.000 Undefined

Start	04-Sep-06		Tue		Wed		Thu		Fri		Sat		Sun		Week Average	
Time	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
12:00 AM	3	3	3	2	*	*	*	*	*	*	*	*	*	*	3	2
01:00	5	5	7	6	*	*	*	*	*	*	*	*	*	*	6	6
02:00	6	3	10	5	*	*	*	*	*	*	*	*	*	*	8	4
03:00	**29**	7	78	6	*	*	*	*	*	*	*	*	*	*	54	6
04:00	23	**31**	**241**	**40**	*	*	*	*	*	*	*	*	*	*	**132**	**36**
05:00	13	19	185	27	*	*	*	*	*	*	*	*	*	*	99	23
06:00	8	6	126	12	*	*	*	*	*	*	*	*	*	*	67	9
07:00	9	6	81	15	*	*	*	*	*	*	*	*	*	*	45	10
08:00	4	1	39	11	*	*	*	*	*	*	*	*	*	*	22	6
09:00	7	8	18	17	*	*	*	*	*	*	*	*	*	*	12	12
10:00	8	8	14	22	*	*	*	*	*	*	*	*	*	*	11	15
11:00	8	12	29	38	*	*	*	*	*	*	*	*	*	*	18	25
12:00 PM	11	8	**13**	41	*	*	*	*	*	*	*	*	*	*	12	24
01:00	11	12	11	**97**	*	*	*	*	*	*	*	*	*	*	11	**54**
02:00	6	5	*	*	*	*	*	*	*	*	*	*	*	*	6	5
03:00	**32**	12	*	*	*	*	*	*	*	*	*	*	*	*	**32**	12
04:00	17	26	*	*	*	*	*	*	*	*	*	*	*	*	17	26
05:00	7	**30**	*	*	*	*	*	*	*	*	*	*	*	*	7	30
06:00	4	8	*	*	*	*	*	*	*	*	*	*	*	*	4	8
07:00	4	4	*	*	*	*	*	*	*	*	*	*	*	*	4	4
08:00	6	4	*	*	*	*	*	*	*	*	*	*	*	*	6	4
09:00	4	5	*	*	*	*	*	*	*	*	*	*	*	*	4	5
10:00	3	6	*	*	*	*	*	*	*	*	*	*	*	*	3	6
11:00	5	5	*	*	*	*	*	*	*	*	*	*	*	*	5	5
Lane	233	234	855	339	0	0	0	0	0	0	0	0	0	0	588	337
Day	467		1194		0		0		0		0		0		925	
AM Peak	03:00	04:00	04:00	04:00											04:00	04:00
Vol.	29	31	241	40											132	36
PM Peak	15:00	17:00	12:00	13:00											15:00	13:00
Vol.	32	30	13	97											32	54
Comb. Total	1229		3277		2045		2028		1540		486		466		2404	
ADT	Not Calculated															

MD.2 & 4 Northbound
South of Calvert Cliffs Pkwy.
Calvert County

Site Code: CALVERT000NB
Station ID: ATR4000000NB

Latitude: 0' 0.000 Undefined

Start Time	Mon 28-Aug-06	Tue 29-Aug-06	Wed 30-Aug-06	Thu 31-Aug-06	Fri 01-Sep-06	Average Day	Sat 02-Sep-06	Sun 03-Sep-06	Week Average
12:00 AM	*	57	37	48	53	49	95	129	70
01:00	*	49	46	35	45	44	75	98	58
02:00	*	35	45	47	51	44	75	88	57
03:00	*	123	102	125	108	114	75	53	98
04:00	*	529	483	482	447	485	169	85	366
05:00	*	972	996	1000	754	930	231	116	678
06:00	*	1251	**1265**	1275	1091	1220	375	162	903
07:00	*	**1253**	1252	**1286**	**1109**	**1225**	525	254	**946**
08:00	*	1084	1094	1073	997	1062	773	363	897
09:00	*	771	771	801	738	770	901	643	771
10:00	*	639	631	685	620	644	**1019**	**738**	722
11:00	*	663	679	669	691	676	1003	738	740
12:00 PM	*	630	678	726	718	688	**963**	769	747
01:00	*	696	746	783	814	760	935	**811**	798
02:00	736	756	773	792	803	772	888	800	793
03:00	924	957	991	1026	**851**	950	869	795	916
04:00	965	**1070**	**1085**	**1133**	699	**990**	827	803	**940**
05:00	**972**	962	979	1005	586	901	713	791	858
06:00	703	790	857	841	557	750	623	687	723
07:00	475	430	505	554	499	493	664	708	548
08:00	422	338	373	425	479	407	696	682	488
09:00	262	252	261	314	285	275	410	456	320
10:00	149	151	168	165	244	175	312	340	218
11:00	70	92	83	100	132	95	225	219	132
Day Total	5678	14550	14900	15390	13371	14519	13441	11328	13787
% Avg. WkDay	39.1%	100.2%	102.6%	106.0%	92.1%				
% Avg. Week	41.2%	105.5%	108.1%	111.6%	97.0%	105.3%	97.5%	82.2%	
AM Peak		07:00	06:00	07:00	07:00	07:00	10:00	10:00	07:00
Vol.		1253	1265	1286	1109	1225	1019	738	946
PM Peak	17:00	16:00	16:00	16:00	15:00	16:00	12:00	13:00	16:00
Vol.	972	1070	1085	1133	851	990	963	811	940

Site Code: CALVERT000NB
Station ID: ATR4000000NB

MD.2 & 4 Northbound
South of Calvert Cliffs Pkwy.
Calvert County

Latitude: 0' 0.000 Undefined

Start Time	Mon 04-Sep-06	Tue 05-Sep-06	Wed 06-Sep-06	Thu 07-Sep-06	Fri 08-Sep-06	Average Day	Sat 09-Sep-06	Sun 10-Sep-06	Week Average
12:00 AM	131	49	*	*	*	90	*	*	90
01:00	83	59	*	*	*	71	*	*	71
02:00	49	38	*	*	*	44	*	*	44
03:00	54	118	*	*	*	86	*	*	86
04:00	129	522	*	*	*	326	*	*	326
05:00	155	977	*	*	*	566	*	*	566
06:00	207	1346	*	*	*	776	*	*	776
07:00	288	**1462**	*	*	*	**875**	*	*	**875**
08:00	396	1320	*	*	*	858	*	*	858
09:00	549	878	*	*	*	714	*	*	714
10:00	672	25	*	*	*	348	*	*	348
11:00	**846**	9	*	*	*	428	*	*	428
12:00 PM	845	**1**	*	*	*	423	*	*	423
01:00	872	0	*	*	*	436	*	*	436
02:00	**973**	0	*	*	*	486	*	*	486
03:00	934	*	*	*	*	934	*	*	934
04:00	961	*	*	*	*	**961**	*	*	**961**
05:00	839	*	*	*	*	839	*	*	839
06:00	775	*	*	*	*	775	*	*	775
07:00	678	*	*	*	*	678	*	*	678
08:00	511	*	*	*	*	511	*	*	511
09:00	281	*	*	*	*	281	*	*	281
10:00	186	*	*	*	*	186	*	*	186
11:00	88	*	*	*	*	88	*	*	88
Day Total	11502	6804	0	0	0	11780	0	0	11780
% Avg. WkDay	97.6%	57.8%	0.0%	0.0%	0.0%				
% Avg. Week	97.6%	57.8%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	
AM Peak	11:00	07:00				07:00			07:00
Vol.	846	1462				875			875
PM Peak	14:00	12:00				16:00			16:00
Vol.	973	1				961			961
Grand Total	17180	21354	14900	15390	13371	26299	13441	11328	25567

ADT Not Calculated

MD.2 & 4 Southbound
North of Calvert Cliffs Pkwy.
Calvert County

Site Code: CALVERT000SB
Station ID: ATR1000000SB

Latitude: 0' 0.000 Undefined

Start Time	Mon 28-Aug-06	Tue 29-Aug-06	Wed 30-Aug-06	Thu 31-Aug-06	Fri 01-Sep-06	Average Day	Sat 02-Sep-06	Sun 03-Sep-06	Week Average
12:00 AM	*	106	102	88	183	120	142	182	134
01:00	*	49	48	60	76	58	93	107	72
02:00	*	53	56	47	58	54	58	86	60
03:00	*	29	41	37	51	40	42	56	43
04:00	*	96	84	98	82	90	45	41	74
05:00	*	392	446	407	320	391	95	71	288
06:00	*	780	829	814	611	758	129	131	549
07:00	*	**1002**	**1093**	**1173**	**936**	**1051**	284	226	**786**
08:00	*	806	851	877	773	827	402	280	665
09:00	*	609	735	676	637	664	675	471	634
10:00	*	575	633	654	614	619	803	602	647
11:00	*	590	668	711	680	662	**902**	**696**	708
12:00 PM	*	668	699	723	752	710	**909**	**946**	783
01:00	*	679	713	746	974	778	871	916	816
02:00	*	805	927	900	1038	918	876	928	912
03:00	1094	1211	1228	1194	1158	1177	884	880	1093
04:00	1366	1614	1549	**1512**	**1356**	**1479**	805	863	**1295**
05:00	**1426**	**1622**	**1580**	1481	1191	1460	784	737	1260
06:00	1107	1205	1325	1367	852	1171	704	693	1036
07:00	766	888	888	964	695	840	610	599	773
08:00	563	638	730	742	457	626	565	607	615
09:00	374	479	543	535	387	464	503	478	471
10:00	251	287	345	395	276	311	408	348	330
11:00	124	178	189	280	258	206	309	243	226
Day Total	7071	15361	16302	16481	14415	15474	11898	11187	14270
% Avg. WkDay	45.7%	99.3%	105.4%	106.5%	93.2%				
% Avg. Week	49.6%	107.6%	114.2%	115.5%	101.0%	108.4%	83.4%	78.4%	
AM Peak		07:00	07:00	07:00	07:00	07:00	11:00	11:00	07:00
Vol.		1002	1093	1173	936	1051	902	696	786
PM Peak	17:00	17:00	17:00	16:00	16:00	16:00	12:00	12:00	16:00
Vol.	1426	1622	1580	1512	1356	1479	909	946	1295

MD.2 & 4 Southbound
North of Calvert Cliffs Pkwy.
Calvert County

Site Code: CALVERT000SB
Station ID: ATR1000000SB

Latitude: 0' 0.000 Undefined

Start Time	Mon 04-Sep-06	Tue 05-Sep-06	Wed 06-Sep-06	Thu 07-Sep-06	Fri 08-Sep-06	Average Day	Sat 09-Sep-06	Sun 10-Sep-06	Week Average
12:00 AM	172	83	*	*	*	128	*	*	128
01:00	92	48	*	*	*	70	*	*	70
02:00	68	27	*	*	*	48	*	*	48
03:00	42	30	*	*	*	36	*	*	36
04:00	57	80	*	*	*	68	*	*	68
05:00	105	370	*	*	*	238	*	*	238
06:00	165	730	*	*	*	448	*	*	448
07:00	237	**920**	*	*	*	578	*	*	578
08:00	347	704	*	*	*	526	*	*	526
09:00	431	617	*	*	*	524	*	*	524
10:00	579	594	*	*	*	586	*	*	586
11:00	**675**	560	*	*	*	**618**	*	*	**618**
12:00 PM	770	632	*	*	*	701	*	*	701
01:00	790	**658**	*	*	*	724	*	*	724
02:00	791	508	*	*	*	650	*	*	650
03:00	795	*	*	*	*	795	*	*	795
04:00	**835**	*	*	*	*	**835**	*	*	**835**
05:00	750	*	*	*	*	750	*	*	750
06:00	715	*	*	*	*	715	*	*	715
07:00	609	*	*	*	*	609	*	*	609
08:00	490	*	*	*	*	490	*	*	490
09:00	388	*	*	*	*	388	*	*	388
10:00	274	*	*	*	*	274	*	*	274
11:00	145	*	*	*	*	145	*	*	145
Day Total	10322	6561	0	0	0	10944	0	0	10944
% Avg. WkDay	94.3%	60.0%	0.0%	0.0%	0.0%				
% Avg. Week	94.3%	60.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	
AM Peak	11:00	07:00				11:00			11:00
Vol.	675	920				618			618
PM Peak	16:00	13:00				16:00			16:00
Vol.	835	658				835			835
Grand Total	17393	21922	16302	16481	14415	26418	11898	11187	25214

ADT Not Calculated

Lenhart Traffic Consulting, Inc.
410-987-3888

Site Code: IN0100000IN1
Station ID: CALVERT EB

Calvert Cliffs Parkway
East of MD 2/4
Calvert County

Latitude: 0' 0.000 Undefined

Start	18-Sep-06		Tue		Wed		Thu		Fri		Sat		Sun		Week Average	
Time	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
12:00 AM	*	*	*	*	4	4	3	6	3	6	2	5	4	4	3	5
01:00	*	*	*	*	8	6	8	12	5	4	2	3	4	3	5	6
02:00	*	*	*	*	8	10	6	3	7	6	5	5	4	6	6	6
03:00	*	*	*	*	9	3	14	9	9	10	9	11	7	4	10	7
04:00	*	*	*	*	70	9	64	4	61	10	26	10	24	7	49	8
05:00	*	*	*	*	308	42	274	30	194	35	41	34	24	29	168	34
06:00	*	*	*	*	202	19	177	30	140	18	15	8	10	13	109	18
07:00	*	*	*	*	69	8	133	18	110	12	9	6	6	4	65	10
08:00	*	*	*	*	45	23	71	19	67	9	9	8	12	4	41	13
09:00	*	*	*	*	32	15	30	15	33	18	10	13	10	8	23	14
10:00	*	*	*	*	18	13	21	19	19	37	11	6	11	10	16	17
11:00	*	*	*	*	21	29	19	26	10	53	9	12	2	7	12	25
12:00 PM	*	*	15	28	22	34	26	44	14	66	10	12	1	6	15	32
01:00	*	*	16	37	7	38	16	45	17	73	5	9	6	9	11	35
02:00	*	*	9	128	14	142	12	151	10	126	5	12	9	8	10	94
03:00	*	*	21	172	17	140	16	154	11	93	9	17	9	11	14	98
04:00	*	*	34	211	43	202	33	199	43	78	30	12	27	8	35	118
05:00	*	*	31	141	22	119	26	123	14	94	19	36	19	35	22	91
06:00	*	*	3	40	1	55	10	39	5	34	2	12	5	16	4	33
07:00	*	*	5	32	4	20	6	22	11	16	2	6	4	4	5	17
08:00	*	*	6	22	4	12	3	16	5	6	6	6	3	4	4	11
09:00	*	*	3	3	7	10	6	6	4	6	4	4	6	8	5	6
10:00	*	*	5	9	4	6	3	5	5	8	1	3	4	5	4	6
11:00	*	*	3	7	3	3	5	6	4	3	7	6	3	4	4	5
Lane	0	0	151	830	942	962	982	1001	801	821	248	256	214	217	640	709
Day	0		981		1904		1983		1622		504		431		1349	
AM Peak					05:00	05:00	05:00	05:00	05:00	11:00	05:00	05:00	04:00	05:00	05:00	05:00
Vol.					308	42	274	30	194	53	41	34	24	29	168	34
PM Peak			16:00	16:00	16:00	16:00	16:00	16:00	16:00	14:00	16:00	17:00	16:00	17:00	16:00	16:00
Vol.			34	211	43	202	33	199	43	126	30	36	27	35	35	118

Calvert Cliffs Parkway
East of MD 2/4
Calvert County

Site Code: IN0100000IN1
Station ID: CALVERT EB

Latitude: 0' 0.000 Undefined

Start Time	25-Sep-06 EB	25-Sep-06 WB	Tue EB	Tue WB	Wed EB	Wed WB	Thu EB	Thu WB	Fri EB	Fri WB	Sat EB	Sat WB	Sun EB	Sun WB	Week Average EB	Week Average WB
12:00 AM	4	3	3	3	3	4	*	*	*	*	*	*	*	*	3	3
01:00	5	6	4	10	6	6	*	*	*	*	*	*	*	*	5	7
02:00	4	5	6	4	4	5	*	*	*	*	*	*	*	*	5	5
03:00	12	4	11	5	8	6	*	*	*	*	*	*	*	*	10	5
04:00	70	10	75	5	80	16	*	*	*	*	*	*	*	*	75	10
05:00	**275**	**44**	**289**	38	**282**	**35**	*	*	*	*	*	*	*	*	**282**	**39**
06:00	174	12	199	14	198	17	*	*	*	*	*	*	*	*	190	14
07:00	115	10	107	11	132	9	*	*	*	*	*	*	*	*	118	10
08:00	73	14	69	**44**	81	14	*	*	*	*	*	*	*	*	74	24
09:00	37	17	26	22	43	16	*	*	*	*	*	*	*	*	35	18
10:00	24	22	18	15	17	29	*	*	*	*	*	*	*	*	20	22
11:00	21	22	20	21	15	22	*	*	*	*	*	*	*	*	19	22
12:00 PM	15	38	20	35	**12**	**21**	*	*	*	*	*	*	*	*	16	31
01:00	16	42	12	38	*	*	*	*	*	*	*	*	*	*	14	40
02:00	10	137	17	126	*	*	*	*	*	*	*	*	*	*	14	132
03:00	12	123	**37**	166	*	*	*	*	*	*	*	*	*	*	24	144
04:00	23	**209**	31	**206**	*	*	*	*	*	*	*	*	*	*	**27**	**208**
05:00	**28**	144	20	131	*	*	*	*	*	*	*	*	*	*	24	138
06:00	7	62	6	69	*	*	*	*	*	*	*	*	*	*	6	66
07:00	6	17	8	18	*	*	*	*	*	*	*	*	*	*	7	18
08:00	5	9	4	12	*	*	*	*	*	*	*	*	*	*	4	10
09:00	5	4	8	11	*	*	*	*	*	*	*	*	*	*	6	8
10:00	3	7	8	7	*	*	*	*	*	*	*	*	*	*	6	7
11:00	4	4	11	13	*	*	*	*	*	*	*	*	*	*	8	8
Lane	948	965	1009	1024	881	200	0	0	0	0	0	0	0	0	992	989
Day	1913		2033		1081		0		0		0		0		1981	
AM Peak	05:00	05:00	05:00	08:00	05:00	05:00									05:00	05:00
Vol.	275	44	289	44	282	35									282	39
PM Peak	17:00	16:00	15:00	16:00	12:00	12:00									16:00	16:00
Vol.	28	209	37	206	12	21									27	208
Comb. Total	1913		3014		2985		1983		1622		504		431		3330	
ADT	Not Calculated															

MD 2/4 Southbound
North of Calvert Cliffs Parkway
Calvert County

Site Code: SB00000000SB
Station ID: MD 4 2 SB

Latitude: 0' 0.000 Undefined

Start Time	Mon 18-Sep-06	Tue 19-Sep-06	Wed 20-Sep-06	Thu 21-Sep-06	Fri 22-Sep-06	Average Day	Sat 23-Sep-06	Sun 24-Sep-06	Week Average
12:00 AM	*	*	73	102	114	96	186	217	138
01:00	*	*	52	56	53	54	102	128	78
02:00	*	*	52	46	46	48	76	76	59
03:00	*	*	24	29	44	32	63	41	40
04:00	*	*	84	93	82	86	74	46	76
05:00	*	*	408	382	288	359	121	80	256
06:00	*	*	727	761	588	692	217	108	480
07:00	*	*	**992**	**1020**	**860**	**957**	360	219	690
08:00	*	*	812	797	796	802	540	334	656
09:00	*	*	652	689	655	665	661	462	624
10:00	*	*	632	638	639	636	799	588	659
11:00	*	*	648	657	692	666	**827**	**743**	**713**
12:00 PM	*	669	681	685	759	698	1004	**848**	774
01:00	*	632	669	689	819	702	995	813	770
02:00	*	734	774	779	938	806	**1066**	758	842
03:00	*	1093	1147	1112	1210	1140	1028	695	1048
04:00	*	1352	**1419**	1451	1410	**1408**	998	717	**1224**
05:00	*	**1365**	1405	**1475**	1385	1408	969	746	1224
06:00	*	1189	1209	1269	**1452**	1280	836	695	1108
07:00	*	770	917	856	997	885	740	610	815
08:00	*	561	673	652	743	657	636	536	634
09:00	*	461	503	556	494	504	495	416	488
10:00	*	305	290	362	458	354	414	282	352
11:00	*	182	160	202	335	220	331	138	225
Day Total	0	9313	15003	15358	15857	15155	13538	10296	13973
% Avg. WkDay	0.0%	61.5%	99.0%	101.3%	104.6%				
% Avg. Week	0.0%	66.6%	107.4%	109.9%	113.5%	108.5%	96.9%	73.7%	
AM Peak			07:00	07:00	07:00	07:00	11:00	11:00	11:00
Vol.			992	1020	860	957	827	743	713
PM Peak		17:00	16:00	17:00	18:00	16:00	14:00	12:00	16:00
Vol.		1365	1419	1475	1452	1408	1066	848	1224

Site Code: SB00000000SB
Station ID: MD 4 2 SB

MD 2/4 Southbound
North of Calvert Cliffs Parkway
Calvert County

Latitude: 0' 0.000 Undefined

Start Time	Mon 25-Sep-06	Tue 26-Sep-06	Wed 27-Sep-06	Thu 28-Sep-06	Fri 29-Sep-06	Average Day	Sat 30-Sep-06	Sun 01-Oct-06	Week Average
12:00 AM	103	90	90	*	*	94	*	*	94
01:00	40	38	44	*	*	41	*	*	41
02:00	26	50	48	*	*	41	*	*	41
03:00	42	39	30	*	*	37	*	*	37
04:00	95	86	84	*	*	88	*	*	88
05:00	405	394	399	*	*	399	*	*	399
06:00	777	807	754	*	*	779	*	*	779
07:00	**952**	**1017**	**1017**	*	*	**995**	*	*	**995**
08:00	782	803	865	*	*	817	*	*	817
09:00	662	652	686	*	*	667	*	*	667
10:00	615	588	625	*	*	609	*	*	609
11:00	639	723	632	*	*	665	*	*	665
12:00 PM	686	716	**542**	*	*	648	*	*	648
01:00	703	642	*	*	*	672	*	*	672
02:00	790	802	*	*	*	796	*	*	796
03:00	667	1148	*	*	*	908	*	*	908
04:00	1033	**1405**	*	*	*	1219	*	*	1219
05:00	**1735**	1404	*	*	*	**1570**	*	*	**1570**
06:00	1230	1111	*	*	*	1170	*	*	1170
07:00	827	833	*	*	*	830	*	*	830
08:00	590	632	*	*	*	611	*	*	611
09:00	392	442	*	*	*	417	*	*	417
10:00	273	286	*	*	*	280	*	*	280
11:00	157	181	*	*	*	169	*	*	169
Day Total	14221	14889	5816	0	0	14522	0	0	14522
% Avg. WkDay	97.9%	102.5%	40.0%	0.0%	0.0%				
% Avg. Week	97.9%	102.5%	40.0%	0.0%	0.0%	100.0%	0.0%	0.0%	
AM Peak	07:00	07:00	07:00			07:00			07:00
Vol.	952	1017	1017			995			995
PM Peak	17:00	16:00	12:00			17:00			17:00
Vol.	1735	1405	542			1570			1570
Grand Total	14221	24202	20819	15358	15857	29677	13538	10296	28495

ADT Not Calculated

Site Code: OUT20000OUT2
Station ID: MD 2 4 NB

MD 2/4 Northbound
South of Calvert Cliffs Parkway
Calvert County

Latitude: 0' 0.000 Undefined

Start Time	Mon 18-Sep-06	Tue 19-Sep-06	Wed 20-Sep-06	Thu 21-Sep-06	Fri 22-Sep-06	Average Day	Sat 23-Sep-06	Sun 24-Sep-06	Week Average
12:00 AM	*	*	52	64	65	60	107	150	88
01:00	*	*	38	40	42	40	86	90	59
02:00	*	*	39	49	63	50	62	71	57
03:00	*	*	125	101	118	115	65	70	96
04:00	*	*	481	492	460	478	150	93	335
05:00	*	*	1019	955	862	945	230	135	640
06:00	*	*	**1238**	**1282**	**1217**	**1246**	380	227	869
07:00	*	*	1229	1282	1198	1236	705	265	**936**
08:00	*	*	1070	1122	1104	1099	798	426	904
09:00	*	*	764	731	781	759	814	752	768
10:00	*	*	631	672	767	690	**992**	**827**	778
11:00	*	*	697	687	757	714	888	787	763
12:00 PM	*	563	670	707	760	675	883	817	733
01:00	*	681	739	766	830	754	865	834	786
02:00	*	757	827	810	950	836	**912**	832	848
03:00	*	978	944	998	1028	987	905	779	939
04:00	*	**1063**	1050	**1111**	**1171**	**1099**	878	**848**	**1020**
05:00	*	978	**1074**	1064	986	1026	846	809	960
06:00	*	713	847	842	742	786	714	615	746
07:00	*	508	607	632	604	588	617	553	587
08:00	*	441	496	484	453	468	541	386	467
09:00	*	266	283	309	401	315	456	237	325
10:00	*	135	178	241	270	206	273	133	205
11:00	*	85	80	125	198	122	235	96	136
Day Total	0	7168	15178	15566	15827	15294	13402	10832	14045
% Avg. WkDay	0.0%	46.9%	99.2%	101.8%	103.5%				
% Avg. Week	0.0%	51.0%	108.1%	110.8%	112.7%	108.9%	95.4%	77.1%	
AM Peak			06:00	06:00	06:00	06:00	10:00	10:00	07:00
Vol.			1238	1282	1217	1246	992	827	936
PM Peak		16:00	17:00	16:00	16:00	16:00	14:00	16:00	16:00
Vol.		1063	1074	1111	1171	1099	912	848	1020

Site Code: OUT20000OUT2
Station ID: MD 2 4 NB

MD 2/4 Northbound
South of Calvert Cliffs Parkway
Calvert County

Latitude: 0' 0.000 Undefined

Start Time	Mon 25-Sep-06	Tue 26-Sep-06	Wed 27-Sep-06	Thu 28-Sep-06	Fri 29-Sep-06	Average Day	Sat 30-Sep-06	Sun 01-Oct-06	Week Average
12:00 AM	70	40	42	*	*	51	*	*	51
01:00	51	34	36	*	*	40	*	*	40
02:00	43	38	44	*	*	42	*	*	42
03:00	112	106	109	*	*	109	*	*	109
04:00	494	472	479	*	*	482	*	*	482
05:00	1004	1010	993	*	*	1002	*	*	1002
06:00	1238	**1254**	1289	*	*	1260	*	*	1260
07:00	**1250**	1240	**1295**	*	*	**1262**	*	*	**1262**
08:00	1128	1117	1088	*	*	1111	*	*	1111
09:00	778	782	775	*	*	778	*	*	778
10:00	703	656	666	*	*	675	*	*	675
11:00	681	629	691	*	*	667	*	*	667
12:00 PM	663	653	**522**	*	*	613	*	*	613
01:00	732	742	*	*	*	737	*	*	737
02:00	777	791	*	*	*	784	*	*	784
03:00	893	981	*	*	*	937	*	*	937
04:00	**989**	**1158**	*	*	*	**1074**	*	*	**1074**
05:00	989	1025	*	*	*	1007	*	*	1007
06:00	749	762	*	*	*	756	*	*	756
07:00	522	524	*	*	*	523	*	*	523
08:00	379	448	*	*	*	414	*	*	414
09:00	183	255	*	*	*	219	*	*	219
10:00	138	156	*	*	*	147	*	*	147
11:00	73	85	*	*	*	79	*	*	79
Day Total	14639	14958	8029	0	0	14769	0	0	14769
% Avg. WkDay	99.1%	101.3%	54.4%	0.0%	0.0%				
% Avg. Week	99.1%	101.3%	54.4%	0.0%	0.0%	100.0%	0.0%	0.0%	
AM Peak	07:00	06:00	07:00			07:00			07:00
Vol.	1250	1254	1295			1262			1262
PM Peak	16:00	16:00	12:00			16:00			16:00
Vol.	989	1158	522			1074			1074
Grand Total	14639	22126	23207	15566	15827	30063	13402	10832	28814

ADT Not Calculated

Weekday Morning Peak Hour (6:00 am - 9:00 am)

	MD 2/4 Northbound			MD 2/4 Southbound			Pardoe Rd Eastbound			MD 765 (HG Trueman) Westbound			
Time:	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
6:00-6:15	2	240	0	1	122	0	0	0	1	0	0	16	382
6:15-6:30	3	270	0	6	181	0	0	0	8	0	1	20	489
6:30-6:45	2	299	3	13	177	1	0	0	8	3	2	19	527
6:45-7:00	4	249	0	22	218	0	1	0	6	0	0	24	524
7:00-7:15	3	281	1	13	221	0	0	1	3	0	1	38	562
7:15-7:30	4	269	0	11	232	0	0	0	1	1	0	23	541
7:30-7:45	2	315	2	28	228	0	0	0	1	0	1	30	607
7:45-8:00	4	267	1	49	244	0	0	1	2	0	0	31	599
8:00-8:15	3	220	1	22	198	0	1	5	2	0	0	34	486
8:15-8:30	3	248	0	19	184	1	1	1	0	0	2	25	484
8:30-8:45	4	245	1	16	185	0	1	2	3	0	1	22	480
8:45-9:00	10	200	1	12	186	0	0	0	8	1	0	25	443
Hourly Totals													
6:00-7:00	11	1058	3	42	698	1	1	0	23	3	3	79	1922
6:15-7:15	12	1099	4	54	797	1	1	1	25	3	4	101	2102
6:30-7:30	13	1098	4	59	848	1	1	1	18	4	3	104	2154
6:45-7:45	13	1114	3	74	899	0	1	1	11	1	2	115	2234
7:00-8:00	13	1132	4	101	925	0	0	2	7	1	2	122	2309
7:15-8:15	13	1071	4	110	902	0	1	6	6	1	1	118	2233
7:30-8:30	12	1050	4	118	854	1	2	7	5	0	3	120	2176
7:45-8:45	14	980	3	106	811	1	3	9	7	0	3	112	2049
8:00-9:00	20	913	3	69	753	1	3	8	13	1	3	106	1893

AM Peak Hour	Northbound Left	Thru	Right	Southbound Left	Thru	Right	Eastbound Left	Thru	Right	Westbound Left	Thru	Right	Total
7:00-8:00	**13**	**1132**	**4**	**101**	**925**	**0**	**0**	**2**	**7**	**1**	**2**	**122**	**2309**

AM PHF = 0.95

Weekday Evening Peak Hour (4 pm - 7 pm)

	MD 2/4 Northbound			MD 2/4 Southbound			Pardoe Rd Eastbound			MD 765 (HG Trueman) Westbound			
Time:	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
4:00-4:15	5	255	1	24	273	0	0	1	6	0	0	27	592
4:15-4:30	7	259	2	35	312	0	0	0	4	0	0	26	645
4:30-4:45	4	247	1	38	321	1	0	0	4	0	4	22	642
4:45-5:00	5	294	3	48	323	0	0	0	4	3	0	32	712
5:00-5:15	3	251	2	47	307	0	1	3	2	0	0	42	658
5:15-5:30	3	249	2	36	336	0	0	0	3	0	0	44	673
5:30-5:45	1	222	3	42	333	0	1	1	5	0	0	41	649
5:45-6:00	3	212	7	49	297	0	0	2	3	0	2	22	597
6:00-6:15	6	235	4	44	296	0	0	1	5	1	2	27	621
6:15-6:30	7	197	3	35	334	0	0	4	5	0	1	24	610
6:30-6:45	2	180	3	30	301	1	0	2	2	1	0	19	541
6:45-7:00	4	147	0	33	273	0	0	2	2	1	1	24	487
Hourly Totals													
4:00-5:00	21	1055	7	145	1229	1	0	1	18	3	4	107	2591
4:15-5:15	19	1051	8	168	1263	1	1	3	14	3	4	122	2657
4:30-5:30	15	1041	8	169	1287	1	1	3	13	3	4	140	2685
4:45-5:45	12	1016	10	173	1299	0	2	4	14	3	0	159	2692
5:00-6:00	10	934	14	174	1273	0	2	6	13	0	2	149	2577
5:15-6:15	13	918	16	171	1262	0	1	4	16	1	4	134	2540
5:30-6:30	17	866	17	170	1260	0	1	8	18	1	5	114	2477
5:45-6:45	18	824	17	158	1228	1	0	9	15	2	5	92	2369
6:00-7:00	19	759	10	142	1204	1	0	9	14	3	4	94	2259

PM Peak Hour	Northbound Left	Thru	Right	Southbound Left	Thru	Right	Eastbound Left	Thru	Right	Westbound Left	Thru	Right	Total
4:45-5:45	**12**	**1016**	**10**	**173**	**1299**	**0**	**2**	**4**	**14**	**3**	**0**	**159**	**2692**

PM PHF = 0.95

Peak Hour
Turning Movement Count

Lenhart Traffic Consulting, Inc.
Traffic Engineering & Transportation Planning

Intersection: MD 2/4 & Pardoe / MD 765 (HG Trueman)
Weather: Sunny
Count by: FSK
Count Day/Date: Tuesday October 10, 2006
County: Calvert

Weekday Morning Peak Hour (6:00 am - 9:00 am)

	MD 2/4 Northbound			MD 2/4 Southbound			Pardoe Rd Eastbound			MD 765 (HG Trueman) Westbound			
Time:	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
6:00-6:15	3	241	0	1	148	1	1	0	3	0	0	18	416
6:15-6:30	3	293	2	3	180	0	0	0	6	0	0	21	508
6:30-6:45	3	255	0	9	176	0	0	2	9	2	0	14	470
6:45-7:00	4	259	0	2	197	0	2	0	2	1	3	19	489
7:00-7:15	6	264	0	10	212	0	0	0	5	0	2	22	521
7:15-7:30	4	253	4	14	229	0	0	1	2	0	0	28	535
7:30-7:45	2	300	0	34	281	0	0	0	3	0	1	26	647
7:45-8:00	1	272	0	42	221	0	0	1	4	0	2	35	578
8:00-8:15	2	229	0	22	169	1	0	1	2	1	1	35	463
8:15-8:30	1	230	0	17	191	0	0	0	3	1	1	18	462
8:30-8:45	2	242	0	16	182	0	0	1	2	1	0	20	466
8:45-9:00	8	201	1	14	178	1	0	1	5	0	0	17	426
Hourly Totals													
6:00-7:00	13	1048	2	15	701	1	3	2	20	3	3	72	1883
6:15-7:15	16	1071	2	24	765	0	2	2	22	3	5	76	1988
6:30-7:30	17	1031	4	35	814	0	2	3	18	3	5	83	2015
6:45-7:45	16	1076	4	60	919	0	2	1	12	1	6	95	2192
7:00-8:00	13	1089	4	100	943	0	0	2	14	0	5	111	2281
7:15-8:15	9	1054	4	112	900	1	0	3	11	1	4	124	2223
7:30-8:30	6	1031	0	115	862	1	0	2	12	2	5	114	2150
7:45-8:45	6	973	0	97	763	1	0	3	11	3	4	108	1969
8:00-9:00	13	902	1	69	720	2	0	3	12	3	2	90	1817

AM Peak Hour	Northbound Left	Thru	Right	Southbound Left	Thru	Right	Eastbound Left	Thru	Right	Westbound Left	Thru	Right	Total
7:00-8:00	**13**	**1089**	**4**	**100**	**943**	**0**	**0**	**2**	**14**	**0**	**5**	**111**	**2281**

AM PHF = 0.88

Weekday Evening Peak Hour (4 pm - 7 pm)

	MD 2/4 Northbound			MD 2/4 Southbound			Pardoe Rd Eastbound			MD 765 (HG Trueman) Westbound			
Time:	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
4:00-4:15	2	219	3	25	285	1	0	0	7	0	0	18	560
4:15-4:30	4	263	0	26	279	1	0	2	1	0	3	21	600
4:30-4:45	7	259	3	41	355	0	1	1	8	0	3	34	712
4:45-5:00	4	280	1	30	298	1	0	2	2	1	2	33	654
5:00-5:15	9	248	3	43	363	0	0	0	5	0	1	20	692
5:15-5:30	3	256	4	54	368	0	1	1	5	0	0	20	712
5:30-5:45	2	214	6	29	326	1	0	0	4	1	0	20	603
5:45-6:00	3	179	0	47	346	0	0	2	1	0	0	19	597
6:00-6:15	8	178	2	29	312	0	0	1	2	0	2	18	552
6:15-6:30	2	184	2	33	319	1	0	0	2	0	1	19	563
6:30-6:45	3	184	2	27	261	0	0	2	6	0	2	28	515
6:45-7:00	2	165	1	17	205	0	1	2	3	0	0	31	427
Hourly Totals													
4:00-5:00	17	1021	7	122	1217	3	1	5	18	1	8	106	2526
4:15-5:15	24	1050	7	140	1295	2	1	5	16	1	9	108	2658
4:30-5:30	23	1043	11	168	1384	1	2	4	20	1	6	107	2770
4:45-5:45	18	998	14	156	1355	2	1	3	16	2	3	93	2661
5:00-6:00	17	897	13	173	1403	1	1	3	15	1	1	79	2604
5:15-6:15	16	827	12	159	1352	1	1	4	12	1	2	77	2464
5:30-6:30	15	755	10	138	1303	2	0	3	9	1	3	76	2315
5:45-6:45	16	725	6	136	1238	1	0	5	11	0	5	84	2227
6:00-7:00	15	711	7	106	1097	1	1	5	13	0	5	96	2057

PM Peak Hour	Northbound Left	Thru	Right	Southbound Left	Thru	Right	Eastbound Left	Thru	Right	Westbound Left	Thru	Right	Total
4:30-5:30	**23**	**1043**	**11**	**168**	**1384**	**1**	**2**	**4**	**20**	**1**	**6**	**107**	**2770**

PM PHF = 0.97

Peak Hour
Turning Movement Count

Lenhart Traffic Consulting, Inc.
Traffic Engineering & Transportation Planning

Intersection: MD 2/4 and MD 765
Weather: AM Foggy-PM Drizzle
Count by: FSK
Count Day/Date: Wednesday October 11, 2006
County: Calvert

Weekday Morning Peak Hour (6:00 am - 9:00 am)

	MD 2/4 Northbound			MD 2/4 Southbound			Ball Rd Eastbound			Calvert Beach Rd Westbound			
Time:	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
6:00-6:15	9	292	9	9	144	3	8	6	11	18	6	24	539
6:15-6:30	12	300	11	7	159	2	5	9	25	41	6	32	609
6:30-6:45	11	308	7	6	151	2	4	6	39	16	5	35	590
6:45-7:00	13	298	15	4	155	2	12	7	23	37	5	67	638
7:00-7:15	8	270	22	6	205	3	10	8	26	21	8	68	655
7:15-7:30	10	270	12	3	257	2	7	8	18	29	8	50	674
7:30-7:45	11	277	11	10	286	2	10	4	28	25	7	35	706
7:45-8:00	8	300	15	14	262	3	8	5	21	23	7	47	713
8:00-8:15	23	268	10	8	133	4	4	4	21	10	8	29	522
8:15-8:30	4	247	22	7	155	3	6	15	29	19	2	24	533
8:30-8:45	7	261	9	14	138	3	9	11	11	21	16	32	532
8:45-9:00	13	243	11	12	158	2	10	13	10	18	6	53	549
Hourly Totals													
6:00-7:00	45	1198	42	26	609	9	29	28	98	112	22	158	2376
6:15-7:15	44	1176	55	23	670	9	31	30	113	115	24	202	2492
6:30-7:30	42	1146	56	19	768	9	33	29	106	103	26	220	2557
6:45-7:45	42	1115	60	23	903	9	39	27	95	112	28	220	2673
7:00-8:00	37	1117	60	33	1010	10	35	25	93	98	30	200	2748
7:15-8:15	52	1115	48	35	938	11	29	21	88	87	30	161	2615
7:30-8:30	46	1092	58	39	836	12	28	28	99	77	24	135	2474
7:45-8:45	42	1076	56	43	688	13	27	35	82	73	33	132	2300
8:00-9:00	47	1019	52	41	584	12	29	43	71	68	32	138	2136
AM	**Northbound**			**Southbound**			**Eastbound**			**Westbound**			
Peak Hour	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Total**
7:00-8:00	**37**	**1117**	**60**	**33**	**1010**	**10**	**35**	**25**	**93**	**98**	**30**	**200**	**2748**
												AM PHF =	**0.96**

Weekday Evening Peak Hour (4 pm - 7 pm)

	MD 2/4 Northbound			MD 2/4 Southbound			Ball Rd Eastbound			Calvert Beach Rd Westbound			
Time:	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
4:00-4:15	17	277	23	16	300	5	4	14	18	24	9	17	724
4:15-4:30	20	219	19	19	322	7	6	12	20	22	13	16	695
4:30-4:45	27	252	23	17	339	9	4	14	27	30	20	18	780
4:45-5:00	27	193	18	19	321	6	3	16	20	30	20	18	691
5:00-5:15	21	229	18	19	335	11	5	10	15	21	17	23	724
5:15-5:30	14	216	16	16	329	8	10	14	31	26	22	17	719
5:30-5:45	12	217	14	15	310	9	2	11	19	17	14	22	662
5:45-6:00	23	174	12	24	258	6	3	18	31	23	18	15	605
6:00-6:15	18	166	16	14	283	4	5	18	11	31	21	11	598
6:15-6:30	17	154	19	24	245	8	2	11	16	14	7	19	536
6:30-6:45	20	142	11	22	278	9	3	6	16	19	9	12	547
6:45-7:00	23	131	13	18	219	7	4	6	26	8	22	6	483
Hourly Totals													
4:00-5:00	91	941	83	71	1282	27	17	56	85	106	62	69	2890
4:15-5:15	95	893	78	74	1317	33	18	52	82	103	70	75	2890
4:30-5:30	89	890	75	71	1324	34	22	54	93	107	79	76	2914
4:45-5:45	74	855	66	69	1295	34	20	51	85	94	73	80	2796
5:00-6:00	70	836	60	74	1232	34	20	53	96	87	71	77	2710
5:15-6:15	67	773	58	69	1180	27	20	61	92	97	75	65	2584
5:30-6:30	70	711	61	77	1096	27	12	58	77	85	60	67	2401
5:45-6:45	78	636	58	84	1064	27	13	53	74	87	55	57	2286
6:00-7:00	78	593	59	78	1025	28	14	41	69	72	59	48	2164
PM	**Northbound**			**Southbound**			**Eastbound**			**Westbound**			
Peak Hour	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Total**
4:30-5:30	**89**	**890**	**75**	**71**	**1324**	**34**	**22**	**54**	**93**	**107**	**79**	**76**	**2914**
												PM PHF =	**0.93**

Peak Hour
Turning Movement Count

Lenhart Traffic Consulting, Inc.
Traffic Engineering & Transportation Planning

Intersection: MD 2/4 at Ball Rd/Calvert Beach Rd
Weather: Sunny
Count by: FSK/ML
Count Day/Date: Tuesday September 26, 2006
County: Calvert

Weekday Morning Peak Hour (6:00 am - 9:00 am)

	MD 2/4 Northbound			MD 2/4 Southbound			Ball Rd Eastbound			Calvert Beach Rd Westbound			
Time:	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
6:00-6:15	9	243	9	12	86	1	2	3	16	16	5	31	433
6:15-6:30	18	260	8	4	134	2	2	5	18	18	2	41	512
6:30-6:45	11	306	20	4	140	6	6	4	19	21	3	53	593
6:45-7:00	11	313	15	4	234	0	13	15	33	27	6	59	730
7:00-7:15	10	246	15	4	225	1	7	10	28	29	7	65	647
7:15-7:30	8	284	14	8	272	3	8	12	8	35	15	38	705
7:30-7:45	10	325	9	11	312	2	5	3	25	23	7	34	766
7:45-8:00	7	305	9	15	184	3	7	4	21	20	9	48	632
8:00-8:15	17	266	16	8	156	3	9	5	22	20	2	32	556
8:15-8:30	8	233	7	12	161	8	11	22	23	17	7	31	307
8:30-8:45	7	232	7	13	150	2	8	9	12	20	8	34	502
8:45-9:00	9	218	11	9	140	4	11	4	8	21	12	28	475
Hourly Totals													
6:00-7:00	49	1122	52	24	594	9	23	27	86	82	16	184	2268
6:15-7:15	50	1125	58	16	733	9	28	34	98	95	18	218	2482
6:30-7:30	40	1149	64	20	871	10	34	41	88	112	31	215	2675
6:45-7:45	39	1168	53	27	1043	6	33	40	94	114	35	196	2848
7:00-8:00	35	1160	47	38	993	9	27	29	82	107	38	185	2750
7:15-8:15	42	1180	48	42	924	11	29	24	76	98	33	152	2659
7:30-8:30	42	896	41	46	813	16	32	34	91	80	25	145	2261
7:45-8:45	39	803	39	48	651	16	35	40	78	77	26	145	1997
8:00-9:00	41	716	41	42	607	17	39	40	65	78	29	125	1840

AM Peak Hour	Northbound Left	Thru	Right	Southbound Left	Thru	Right	Eastbound Left	Thru	Right	Westbound Left	Thru	Right	Total
6:45-7:45	39	1168	53	27	1043	6	33	40	94	114	35	196	2848

AM PHF = 0.93

Weekday Evening Peak Hour (4 pm - 7 pm)

	MD 2/4 Northbound			MD 2/4 Southbound			Ball Rd Eastbound			Calvert Beach Rd Westbound			
Time:	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
4:00-4:15	14	155	19	13	215	10	10	61	16	19	111	15	658
4:15-4:30	20	212	22	5	283	3	5	8	16	27	12	22	635
4:30-4:45	23	228	22	10	302	11	4	20	11	19	19	27	696
4:45-5:00	34	223	29	15	316	9	7	8	28	25	17	18	729
5:00-5:15	19	262	16	22	285	7	2	13	17	28	13	15	699
5:15-5:30	22	214	11	14	288	15	7	8	31	31	20	14	675
5:30-5:45	25	218	20	11	291	6	4	21	20	28	8	13	665
5:45-6:00	19	188	15	18	289	5	5	12	21	23	13	11	619
6:00-6:15	33	163	14	21	247	10	2	17	32	28	23	22	612
6:15-6:30	15	128	11	21	293	13	6	13	20	16	15	14	565
6:30-6:45	14	133	9	16	286	14	8	14	21	12	10	18	555
6:45-7:00	18	147	15	19	221	9	8	10	26	11	13	17	514
Hourly Totals													
4:00-5:00	91	818	92	43	1116	33	26	97	71	90	159	82	2718
4:15-5:15	96	925	89	52	1186	30	18	49	72	99	61	82	2759
4:30-5:30	98	927	78	61	1191	42	20	49	87	103	69	74	2799
4:45-5:45	100	917	76	62	1180	37	20	50	96	112	58	60	2768
5:00-6:00	85	882	62	65	1153	33	18	54	89	110	54	53	2658
5:15-6:15	99	783	60	64	1115	36	18	58	104	110	64	60	2571
5:30-6:30	92	697	60	71	1120	34	17	63	93	95	59	60	2461
5:45-6:45	81	612	49	76	1115	42	21	56	94	79	61	65	2351
6:00-7:00	80	571	49	77	1047	46	24	54	99	67	61	71	2246

PM Peak Hour	Northbound Left	Thru	Right	Southbound Left	Thru	Right	Eastbound Left	Thru	Right	Westbound Left	Thru	Right	Total
4:30-5:30	98	927	78	61	1191	42	20	49	87	103	69	74	2799

PM PHF = 0.96

Peak Hour
Turning Movement Count

Lenhart Traffic Consulting, Inc.
Traffic Engineering & Transportation Planning

Intersection: MD 2/4 at Ball Rd/Calvert Beach Rd
Weather: Sunny
Count by: FSK/MML
Count Day/Date: Wednesday September 27,2006
County: Calvert

PASSENGER CAR TURNING MOVEMENT COUNT - SUMMARY

Counted by: RB/JK

Intersection of: MD 2 & 4 — Date: October 4, 2006 — Day: Wednesday

and: Calvert Cliffs Pkwy/MD 765 — Weather: Fair

Location: Calvert County,MD — Entered by: KL

TIME	TRAFFIC FROM NORTH on: MD 2 & 4					TRAFFIC FROM SOUTH on: MD 2 & 4					TRAFFIC FROM EAST on: Calvert Cliffs Pkwy					TRAFFIC FROM WEST on: MD 765					TOTAL N + S + E + W
	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	
AM																					
06:0-15	0	89	9	0	98	9	199	0	0	208	6	0	6	0	12	1	0	0	0	1	319
15-30	0	110	12	0	122	6	217	0	0	223	8	0	9	0	17	0	0	0	0	0	362
30-45	1	125	5	0	131	11	203	0	0	214	8	0	7	0	15	2	0	0	0	2	362
45-00	2	113	5	0	120	19	172	0	0	191	6	0	7	0	13	3	0	0	0	3	327
07:0-15	0	151	15	0	166	17	236	0	0	253	5	0	4	0	9	1	0	0	0	1	429
15-30	0	191	21	0	212	18	245	0	0	263	7	0	6	0	13	3	0	0	0	3	491
30-45	1	229	10	0	240	10	194	0	0	204	5	0	2	0	7	2	0	0	0	2	453
45-00	0	233	11	0	244	14	149	0	0	163	4	0	5	0	9	1	0	0	0	1	417
08:0-15	1	158	7	0	166	5	167	0	0	172	4	0	4	0	8	5	0	0	0	5	351
15-30	1	145	5	0	151	7	151	0	0	158	6	0	4	0	10	1	0	0	0	1	320
30-45	0	126	9	0	135	8	179	0	0	187	5	0	5	0	10	2	0	0	0	2	334
45-00	2	167	4	0	173	12	188	0	0	200	8	0	7	0	15	1	0	0	0	1	389
3 Hr Totals	8	1837	113	0	1958	136	2300	0	0	2436	72	0	66	0	138	22	0	0	0	22	4554
1 Hr Totals																					
06-07	3	437	31	0	471	45	791	0	0	836	28	0	29	0	57	6	0	0	0	6	1370
615-715	3	499	37	0	539	53	828	0	0	881	27	0	27	0	54	6	0	0	0	6	1480
630-730	3	580	46	0	629	65	856	0	0	921	26	0	24	0	50	9	0	0	0	9	1609
645-745	3	684	51	0	738	64	847	0	0	911	23	0	19	0	42	9	0	0	0	9	1700
07-08	1	804	57	0	862	59	824	0	0	883	21	0	17	0	38	7	0	0	0	7	1790
715-815	2	811	49	0	862	47	755	0	0	802	20	0	17	0	37	11	0	0	0	11	1712
730-830	3	765	33	0	801	36	661	0	0	697	19	0	15	0	34	9	0	0	0	9	1541
745-845	2	662	32	0	696	34	646	0	0	680	19	0	18	0	37	9	0	0	0	9	1422
08-09	4	596	25	0	625	32	685	0	0	717	23	0	20	0	43	9	0	0	0	9	1394
PEAK HOUR																					
07-08	1	804	57	0	862	59	824	0	0	883	21	0	17	0	38	7	0	0	0	7	1790
PM																					
04:0-15	0	289	0	0	289	4	183	0	0	187	7	0	6	0	13	1	0	0	0	1	490
15-30	1	345	2	0	348	7	202	0	0	209	9	0	13	0	22	2	0	0	0	2	581
30-45	0	388	0	0	388	7	212	0	0	219	11	0	7	0	18	2	0	0	0	2	627
45-00	1	420	1	0	422	5	222	0	0	227	11	0	12	0	23	3	0	0	0	3	675
05:0-15	0	367	0	0	367	6	233	0	0	239	8	0	11	0	19	4	0	0	0	4	629
15-30	1	352	2	0	355	7	253	0	0	260	5	0	18	0	23	3	0	0	0	3	641
30-45	1	355	2	0	358	5	237	0	0	242	13	0	10	0	23	6	0	0	0	6	629
45-00	1	270	2	0	273	7	198	0	0	205	7	0	12	0	19	3	0	0	0	3	500
06:0-15	0	348	1	0	349	4	200	0	0	204	9	0	15	0	24	8	0	0	0	8	585
15-30	1	278	0	0	279	6	202	0	0	208	11	0	8	0	19	2	0	0	0	2	508
30-45	2	289	1	0	292	3	194	0	0	197	14	0	9	0	23	2	0	0	0	2	514
45-00	3	251	0	0	254	8	179	0	0	187	10	0	11	0	21	1	0	0	0	1	463
3 Hr Totals	11	3952	11	0	3974	69	2515	0	0	2584	115	0	132	0	247	37	0	0	0	37	6842
1 Hr Totals																					
04-05	2	1442	3	0	1447	23	819	0	0	842	38	0	38	0	76	8	0	0	0	8	2373
415-515	2	1520	3	0	1525	25	869	0	0	894	39	0	43	0	82	11	0	0	0	11	2512
430-530	2	1527	3	0	1532	25	920	0	0	945	35	0	48	0	83	12	0	0	0	12	2572
445-545	3	1494	5	0	1502	23	945	0	0	968	37	0	51	0	88	16	0	0	0	16	2574
05-06	3	1344	6	0	1353	25	921	0	0	946	33	0	51	0	84	16	0	0	0	16	2399
515-615	3	1325	7	0	1335	23	888	0	0	911	34	0	55	0	89	20	0	0	0	20	2355
530-630	3	1251	5	0	1259	22	837	0	0	859	40	0	45	0	85	19	0	0	0	19	2222
545-645	4	1185	4	0	1193	20	794	0	0	814	41	0	44	0	85	15	0	0	0	15	2107
06-07	6	1166	2	0	1174	21	775	0	0	796	44	0	43	0	87	13	0	0	0	13	2070
PEAK HOUR																					
430-530	2	1527	3	0	1532	25	920	0	0	945	35	0	48	0	83	12	0	0	0	12	2572

TRUCK TURNING MOVEMENT COUNT - SUMMARY

Counted by: RB/JK

Intersection of: MD 2 & 4 — Date: October 4, 2006 — Day: Wednesday

and: Calvert Cliffs Pkwy/MD 765 — Weather: Fair

Location: Calvert County,MD — Entered by: KL

TIME	TRAFFIC FROM NORTH on: MD 2 & 4					TRAFFIC FROM SOUTH on: MD 2 & 4					TRAFFIC FROM EAST on: Calvert Cliffs Pkwy					TRAFFIC FROM WEST on: MD 765					TOTAL N + S + E + W
	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	
AM																					
06:0-15	0	3	0	0	3	0	12	0	0	12	0	0	0	0	0	1	0	0	0	1	16
15-30	0	6	0	0	6	0	15	0	0	15	0	0	0	0	0	0	0	0	0	0	21
30-45	0	8	0	0	8	2	19	0	0	21	1	0	0	0	1	2	0	0	0	2	32
45-00	0	5	0	0	5	0	14	0	0	14	0	0	0	0	0	3	0	0	0	3	22
07:0-15	0	3	0	0	3	0	9	0	0	9	0	0	1	0	1	1	0	0	0	1	14
15-30	0	5	0	0	5	0	11	0	0	11	0	0	0	0	0	3	0	0	0	3	19
30-45	0	12	0	0	12	0	14	0	0	14	0	0	0	0	0	2	0	0	0	2	28
45-00	0	16	0	0	16	0	8	0	0	8	0	0	0	0	0	1	0	0	0	1	25
08:0-15	0	23	0	0	23	0	21	0	0	21	2	0	0	0	2	5	0	0	0	5	51
15-30	0	14	0	0	14	1	17	0	0	18	0	0	0	0	0	1	0	0	0	1	33
30-45	0	8	0	0	8	0	9	0	0	9	0	0	0	0	0	2	0	0	0	2	19
45-00	0	8	0	0	8	1	14	0	0	15	0	0	0	0	0	1	0	0	0	1	24
3 Hr Totals	0	111	0	0	111	4	163	0	0	167	3	0	1	0	4	22	0	0	0	22	304
1 Hr Totals																					
06-07	0	22	0	0	22	2	60	0	0	62	1	0	0	0	1	6	0	0	0	6	91
615-715	0	22	0	0	22	2	57	0	0	59	1	0	1	0	2	6	0	0	0	6	89
630-730	0	21	0	0	21	2	53	0	0	55	1	0	1	0	2	9	0	0	0	9	87
645-745	0	25	0	0	25	0	48	0	0	48	0	0	1	0	1	9	0	0	0	9	83
07-08	0	36	0	0	36	0	42	0	0	42	0	0	1	0	1	7	0	0	0	7	86
715-815	0	56	0	0	56	0	54	0	0	54	2	0	0	0	2	11	0	0	0	11	123
730-830	0	65	0	0	65	1	60	0	0	61	2	0	0	0	2	9	0	0	0	9	137
745-845	0	61	0	0	61	1	55	0	0	56	2	0	0	0	2	9	0	0	0	9	128
08-09	0	53	0	0	53	2	61	0	0	63	2	0	0	0	2	9	0	0	0	9	127
PEAK HOUR																					
07-08	0	36	0	0	36	0	42	0	0	42	0	0	1	0	1	7	0	0	0	7	86
PM																					
04:0-15	0	5	0	0	5	0	15	0	0	15	3	0	0	0	3	1	0	0	0	1	24
15-30	0	4	0	0	4	0	9	0	0	9	0	0	3	0	3	2	0	0	0	2	18
30-45	0	7	0	0	7	0	18	0	0	18	0	0	0	0	0	2	0	0	0	2	27
45-00	0	2	0	0	2	0	12	0	0	12	0	0	2	0	2	3	0	0	0	3	19
05:0-15	0	1	0	0	1	2	12	0	0	14	2	0	2	0	4	4	0	0	0	4	23
15-30	0	5	0	0	5	0	16	0	0	16	2	0	0	0	2	3	0	0	0	3	26
30-45	0	1	0	0	1	0	10	0	0	10	0	0	1	0	1	6	0	0	0	6	18
45-00	0	6	0	0	6	0	10	0	0	10	1	0	0	0	1	3	0	0	0	3	20
06:0-15	0	2	0	0	2	1	7	0	0	8	1	0	0	0	1	8	0	0	0	8	19
15-30	0	4	0	0	4	0	15	0	0	15	0	0	0	0	0	2	0	0	0	2	21
30-45	0	2	0	0	2	1	17	0	0	18	1	0	1	0	2	2	0	0	0	2	24
45-00	0	2	0	0	2	0	11	0	0	11	1	0	1	0	2	1	0	0	0	1	16
3 Hr Totals	0	41	0	0	41	4	152	0	0	156	11	0	10	0	21	37	0	0	0	37	255
1 Hr Totals																					
04-05	0	18	0	0	18	0	54	0	0	54	3	0	5	0	8	8	0	0	0	8	88
415-515	0	14	0	0	14	2	51	0	0	53	2	0	7	0	9	11	0	0	0	11	87
430-530	0	15	0	0	15	2	58	0	0	60	4	0	4	0	8	12	0	0	0	12	95
445-545	0	9	0	0	9	2	50	0	0	52	4	0	5	0	9	16	0	0	0	16	86
05-06	0	13	0	0	13	2	48	0	0	50	5	0	3	0	8	16	0	0	0	16	87
515-615	0	14	0	0	14	1	43	0	0	44	4	0	1	0	5	20	0	0	0	20	83
530-630	0	13	0	0	13	1	42	0	0	43	2	0	1	0	3	19	0	0	0	19	78
545-645	0	14	0	0	14	2	49	0	0	51	3	0	1	0	4	15	0	0	0	15	84
06-07	0	10	0	0	10	2	50	0	0	52	3	0	2	0	5	13	0	0	0	13	80
PEAK HOUR																					
430-530	0	15	0	0	15	2	58	0	0	60	4	0	4	0	8	12	0	0	0	12	95

TOTAL TURNING MOVEMENT COUNT - SUMMARY (CARS & TRUCKS COMBINED)

Counted by: RB/JK

Intersection of: MD 2 & 4 — Date: October 4, 2006 — Day: Wednesday

and: Calvert Cliffs Pkwy/MD 765 — Weather: Fair

Location: Calvert County,MD — Entered by: KL

TIME	TRAFFIC FROM NORTH on: MD 2 & 4					TRAFFIC FROM SOUTH on: MD 2 & 4					TRAFFIC FROM EAST on: Calvert Cliffs Pkwy					TRAFFIC FROM WEST on: MD 765					TOTAL N + S + E + W
	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	
AM																					
06:0-15	0	92	9	0	101	9	211	0	0	220	6	0	6	0	12	2	0	0	0	2	335
15-30	0	116	12	0	128	6	232	0	0	238	8	0	9	0	17	0	0	0	0	0	383
30-45	1	133	5	0	139	13	222	0	0	235	9	0	7	0	16	4	0	0	0	4	394
45-00	2	118	5	0	125	19	186	0	0	205	6	0	7	0	13	6	0	0	0	6	349
07:0-15	0	154	15	0	169	17	245	0	0	262	5	0	5	0	10	2	0	0	0	2	443
15-30	0	196	21	0	217	18	256	0	0	274	7	0	6	0	13	6	0	0	0	6	510
30-45	1	241	10	0	252	10	208	0	0	218	5	0	2	0	7	4	0	0	0	4	481
45-00	0	249	11	0	260	14	157	0	0	171	4	0	5	0	9	2	0	0	0	2	442
08:0-15	1	181	7	0	189	5	188	0	0	193	6	0	4	0	10	10	0	0	0	10	402
15-30	1	159	5	0	165	8	168	0	0	176	6	0	4	0	10	2	0	0	0	2	353
30-45	0	134	9	0	143	8	188	0	0	196	5	0	5	0	10	4	0	0	0	4	353
45-00	2	175	4	0	181	13	202	0	0	215	8	0	7	0	15	2	0	0	0	2	413
3 Hr Totals	8	1948	113	0	2069	140	2463	0	0	2603	75	0	67	0	142	44	0	0	0	44	4858
1 Hr Totals																					
06-07	3	459	31	0	493	47	851	0	0	898	29	0	29	0	58	12	0	0	0	12	1461
615-715	3	521	37	0	561	55	885	0	0	940	28	0	28	0	56	12	0	0	0	12	1569
630-730	3	601	46	0	650	67	909	0	0	976	27	0	25	0	52	18	0	0	0	18	1696
645-745	3	709	51	0	763	64	895	0	0	959	23	0	20	0	43	18	0	0	0	18	1783
07-08	1	840	57	0	898	59	866	0	0	925	21	0	18	0	39	14	0	0	0	14	1876
715-815	2	867	49	0	918	47	809	0	0	856	22	0	17	0	39	22	0	0	0	22	1835
730-830	3	830	33	0	866	37	721	0	0	758	21	0	15	0	36	18	0	0	0	18	1678
745-845	2	723	32	0	757	35	701	0	0	736	21	0	18	0	39	18	0	0	0	18	1550
08-09	4	649	25	0	678	34	746	0	0	780	25	0	20	0	45	18	0	0	0	18	1521
PEAK HOUR																					
07-08	1	840	57	0	898	59	866	0	0	925	21	0	18	0	39	14	0	0	0	14	1876
PM																					
04:0-15	0	294	0	0	294	4	198	0	0	202	10	0	6	0	16	2	0	0	0	2	514
15-30	1	349	2	0	352	7	211	0	0	218	9	0	16	0	25	4	0	0	0	4	599
30-45	0	395	0	0	395	7	230	0	0	237	11	0	7	0	18	4	0	0	0	4	654
45-00	1	422	1	0	424	5	234	0	0	239	11	0	14	0	25	6	0	0	0	6	694
05:0-15	0	368	0	0	368	8	245	0	0	253	10	0	13	0	23	8	0	0	0	8	652
15-30	1	357	2	0	360	7	269	0	0	276	7	0	18	0	25	6	0	0	0	6	667
30-45	1	356	2	0	359	5	247	0	0	252	13	0	11	0	24	12	0	0	0	12	647
45-00	1	276	2	0	279	7	208	0	0	215	8	0	12	0	20	6	0	0	0	6	520
06:0-15	0	350	1	0	351	5	207	0	0	212	10	0	15	0	25	16	0	0	0	16	604
15-30	1	282	0	0	283	6	217	0	0	223	11	0	8	0	19	4	0	0	0	4	529
30-45	2	291	1	0	294	4	211	0	0	215	15	0	10	0	25	4	0	0	0	4	538
45-00	3	253	0	0	256	8	190	0	0	198	11	0	12	0	23	2	0	0	0	2	479
3 Hr Totals	11	3993	11	0	4015	73	2667	0	0	2740	126	0	142	0	268	74	0	0	0	74	7097
1 Hr Totals																					
04-05	2	1460	3	0	1465	23	873	0	0	896	41	0	43	0	84	16	0	0	0	16	2461
415-515	2	1534	3	0	1539	27	920	0	0	947	41	0	50	0	91	22	0	0	0	22	2599
430-530	2	1542	3	0	1547	27	978	0	0	1005	39	0	52	0	91	24	0	0	0	24	2667
445-545	3	1503	5	0	1511	25	995	0	0	1020	41	0	56	0	97	32	0	0	0	32	2660
05-06	3	1357	6	0	1366	27	969	0	0	996	38	0	54	0	92	32	0	0	0	32	2486
515-615	3	1339	7	0	1349	24	931	0	0	955	38	0	56	0	94	40	0	0	0	40	2438
530-630	3	1264	5	0	1272	23	879	0	0	902	42	0	46	0	88	38	0	0	0	38	2300
545-645	4	1199	4	0	1207	22	843	0	0	865	44	0	45	0	89	30	0	0	0	30	2191
06-07	6	1176	2	0	1184	23	825	0	0	848	47	0	45	0	92	26	0	0	0	26	2150
PEAK HOUR																					
430-530	2	1542	3	0	1547	27	978	0	0	1005	39	0	52	0	91	24	0	0	0	24	2667

PASSENGER CAR TURNING MOVEMENT COUNT - SUMMARY

Counted by: RB/JK

Intersection of: MD 2 & 4 — Date: October 5, 2006 — Day: Thursday

and: Calvert Cliffs Parkway — Weather: Fair

Location: Calvert County, MD — Entered by: KL

TIME	TRAFFIC FROM NORTH on: MD 2 & 4					TRAFFIC FROM SOUTH on: MD 2 & 4					TRAFFIC FROM EAST on: Calvert Cliffs Pkwy					TRAFFIC FROM WEST on: MD 765					TOTAL N + S + E + W
	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	
AM																					
06:0-15	0	101	12	0	113	6	163	0	0	169	6	0	13	0	19	2	0	0	0	2	303
15-30	0	112	19	0	131	8	158	0	0	166	7	0	10	0	17	2	0	0	0	2	316
30-45	0	160	20	0	180	9	186	0	0	195	7	0	12	0	19	4	0	0	0	4	398
45-00	0	206	16	0	222	5	177	0	0	182	11	0	7	0	18	3	0	0	0	3	425
07:0-15	0	222	13	0	235	7	179	0	0	186	8	0	9	0	17	0	0	0	0	0	438
15-30	0	217	18	0	235	7	180	0	0	187	5	0	12	0	17	1	0	0	0	1	440
30-45	0	198	11	0	209	9	188	0	0	197	9	0	11	0	20	2	0	0	0	2	428
45-00	0	167	12	0	179	11	191	0	0	202	13	0	5	0	18	1	0	0	0	1	400
08:0-15	0	188	21	0	209	6	209	0	0	215	8	0	5	0	13	1	0	0	0	1	438
15-30	0	186	11	0	197	8	222	0	0	230	4	0	7	0	11	2	0	0	0	2	440
30-45	0	174	12	0	186	4	179	0	0	183	5	0	9	0	14	3	0	0	0	3	386
45-00	0	145	7	0	152	10	206	0	0	216	6	0	4	0	10	3	0	0	0	3	381
3 Hr Totals	0	2076	172	0	2248	90	2238	0	0	2328	89	0	104	0	193	24	0	0	0	24	4793
1 Hr Totals																					
06-07	0	579	67	0	646	28	684	0	0	712	31	0	42	0	73	11	0	0	0	11	1442
615-715	0	700	68	0	768	29	700	0	0	729	33	0	38	0	71	9	0	0	0	9	1577
630-730	0	805	67	0	872	28	722	0	0	750	31	0	40	0	71	8	0	0	0	8	1701
645-745	0	843	58	0	901	28	724	0	0	752	33	0	39	0	72	6	0	0	0	6	1731
07-08	0	804	54	0	858	34	738	0	0	772	35	0	37	0	72	4	0	0	0	4	1706
715-815	0	770	62	0	832	33	768	0	0	801	35	0	33	0	68	5	0	0	0	5	1706
730-830	0	739	55	0	794	34	810	0	0	844	34	0	28	0	62	6	0	0	0	6	1706
745-845	0	715	56	0	771	29	801	0	0	830	30	0	26	0	56	7	0	0	0	7	1664
08-09	0	693	51	0	744	28	816	0	0	844	23	0	25	0	48	9	0	0	0	9	1645
PEAK HOUR																					
645-745	0	843	58	0	901	28	724	0	0	752	33	0	39	0	72	6	0	0	0	6	1731
PM																					
04:0-15	1	277	0	0	278	10	237	0	0	247	14	0	8	0	22	1	0	0	0	1	548
15-30	0	334	0	0	334	6	199	0	0	205	12	0	8	0	20	2	0	0	0	2	561
30-45	0	345	3	0	348	11	202	0	0	213	10	0	6	0	16	3	0	0	0	3	580
45-00	1	353	0	0	354	16	222	0	0	238	9	0	6	0	15	4	0	0	0	4	611
05:0-15	0	388	0	0	388	13	238	0	0	251	16	0	13	0	29	2	0	0	0	2	670
15-30	0	383	2	0	385	7	259	0	0	266	13	0	18	0	31	1	0	0	0	1	683
30-45	0	332	0	0	332	6	207	0	0	213	10	0	12	0	22	4	0	0	0	4	571
45-00	0	299	0	0	299	8	193	0	0	201	7	0	7	0	14	7	0	0	0	7	521
06:0-15	0	289	0	0	289	5	186	0	0	191	6	0	16	0	22	2	0	0	0	2	504
15-30	0	274	1	0	275	7	214	0	0	221	10	0	10	0	20	3	0	0	0	3	519
30-45	0	276	2	0	278	6	237	0	0	243	11	0	9	0	20	1	0	0	0	1	542
45-00	0	209	1	0	210	11	192	0	0	203	14	0	9	0	23	2	0	0	0	2	438
3 Hr Totals	2	3759	9	0	3770	106	2586	0	0	2692	132	0	122	0	254	32	0	0	0	32	6748
1 Hr Totals																					
04-05	2	1309	3	0	1314	43	860	0	0	903	45	0	28	0	73	10	0	0	0	10	2300
415-515	1	1420	3	0	1424	46	861	0	0	907	47	0	33	0	80	11	0	0	0	11	2422
430-530	1	1469	5	0	1475	47	921	0	0	968	48	0	43	0	91	10	0	0	0	10	2544
445-545	1	1456	2	0	1459	42	926	0	0	968	48	0	49	0	97	11	0	0	0	11	2535
05-06	0	1402	2	0	1404	34	897	0	0	931	46	0	50	0	96	14	0	0	0	14	2445
515-615	0	1303	2	0	1305	26	845	0	0	871	36	0	53	0	89	14	0	0	0	14	2279
530-630	0	1194	1	0	1195	26	800	0	0	826	33	0	45	0	78	16	0	0	0	16	2115
545-645	0	1138	3	0	1141	26	830	0	0	856	34	0	42	0	76	13	0	0	0	13	2086
06-07	0	1048	4	0	1052	29	829	0	0	858	41	0	44	0	85	8	0	0	0	8	2003
PEAK HOUR																					
430-530	1	1469	5	0	1475	47	921	0	0	968	48	0	43	0	91	10	0	0	0	10	2544

TRUCK TURNING MOVEMENT COUNT - SUMMARY

Counted by: RB/JK

Intersection of: MD 2 & 4 — Date: October 5, 2006 — Day: Thursday

and: Calvert Cliffs Parkway — Weather: Fair

Location: Calvert County, MD — Entered by: KL

TIME	TRAFFIC FROM NORTH on: MD 2 & 4					TRAFFIC FROM SOUTH on: MD 2 & 4					TRAFFIC FROM EAST on: Calvert Cliffs Pkwy					TRAFFIC FROM WEST on: MD 765					TOTAL N + S + E + W
	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	
AM																					
06:0-15	0	2	0	0	2	2	13	0	0	15	1	0	1	0	2	0	0	0	0	0	19
15-30	0	3	0	0	3	0	6	0	0	6	0	0	0	0	0	0	0	0	0	0	9
30-45	0	8	0	0	8	2	8	0	0	10	0	0	2	0	2	1	0	0	0	1	21
45-00	0	11	0	0	11	2	6	0	0	8	2	0	0	0	2	0	0	0	0	0	21
07:0-15	0	12	0	0	12	0	12	0	0	12	0	0	2	0	2	0	0	0	0	0	26
15-30	0	15	0	0	15	1	14	0	0	15	0	0	1	0	1	0	0	0	0	0	31
30-45	0	15	1	0	16	0	13	0	0	13	2	0	0	0	2	0	0	0	0	0	31
45-00	0	11	0	0	11	3	9	0	0	12	0	0	0	0	0	1	0	0	0	1	24
08:0-15	0	15	0	0	15	0	12	0	0	12	1	0	0	0	1	1	0	0	0	1	29
15-30	0	12	0	0	12	0	10	0	0	10	0	0	3	0	3	0	0	0	0	0	25
30-45	0	21	1	0	22	1	9	0	0	10	0	0	0	0	0	0	0	0	0	0	32
45-00	0	9	0	0	9	0	11	0	0	11	1	0	1	0	2	2	0	0	0	2	24
3 Hr Totals	0	134	2	0	136	11	123	0	0	134	7	0	10	0	17	5	0	0	0	5	292
1 Hr Totals																					
06-07	0	24	0	0	24	6	33	0	0	39	3	0	3	0	6	1	0	0	0	1	70
615-715	0	34	0	0	34	4	32	0	0	36	2	0	4	0	6	1	0	0	0	1	77
630-730	0	46	0	0	46	5	40	0	0	45	2	0	5	0	7	1	0	0	0	1	99
645-745	0	53	1	0	54	3	45	0	0	48	4	0	3	0	7	0	0	0	0	0	109
07-08	0	53	1	0	54	4	48	0	0	52	2	0	3	0	5	1	0	0	0	1	112
715-815	0	56	1	0	57	4	48	0	0	52	3	0	1	0	4	2	0	0	0	2	115
730-830	0	53	1	0	54	3	44	0	0	47	3	0	3	0	6	2	0	0	0	2	109
745-845	0	59	1	0	60	4	40	0	0	44	1	0	3	0	4	2	0	0	0	2	110
08-09	0	57	1	0	58	1	42	0	0	43	2	0	4	0	6	3	0	0	0	3	110
PEAK HOUR																					
645-745	0	53	1	0	54	3	45	0	0	48	4	0	3	0	7	0	0	0	0	0	109
PM																					
04:0-15	0	4	0	0	4	2	13	0	0	15	0	0	1	0	1	0	0	0	0	0	20
15-30	0	2	0	0	2	2	17	0	0	19	0	0	1	0	1	0	0	0	0	0	22
30-45	0	3	0	0	3	0	15	0	0	15	1	0	0	0	1	1	0	0	0	1	20
45-00	1	8	0	0	9	0	20	0	0	20	0	0	0	0	0	1	0	0	0	1	30
05:0-15	0	5	0	0	5	1	11	0	0	12	0	0	1	0	1	0	0	0	0	0	18
15-30	0	2	0	0	2	0	11	0	0	11	2	0	0	0	2	0	0	0	0	0	15
30-45	0	3	0	0	3	3	13	0	0	16	0	0	0	0	0	1	0	0	0	1	20
45-00	0	3	0	0	3	0	16	0	0	16	1	0	0	0	1	0	0	0	0	0	20
06:0-15	0	6	0	0	6	0	10	0	0	10	0	0	1	0	1	2	0	0	0	2	19
15-30	0	4	0	0	4	3	15	0	0	18	2	0	0	0	2	0	0	0	0	0	24
30-45	0	6	0	0	6	0	21	0	0	21	0	0	1	0	1	1	0	0	0	1	29
45-00	0	4	0	0	4	3	15	0	0	18	1	0	0	0	1	1	0	0	0	1	24
3 Hr Totals	1	50	0	0	51	14	177	0	0	191	7	0	5	0	12	7	0	0	0	7	261
1 Hr Totals																					
04-05	1	17	0	0	18	4	65	0	0	69	1	0	2	0	3	2	0	0	0	2	92
415-515	1	18	0	0	19	3	63	0	0	66	1	0	2	0	3	2	0	0	0	2	90
430-530	1	18	0	0	19	1	57	0	0	58	3	0	1	0	4	2	0	0	0	2	83
445-545	1	18	0	0	19	4	55	0	0	59	2	0	1	0	3	2	0	0	0	2	83
05-06	0	13	0	0	13	4	51	0	0	55	3	0	1	0	4	1	0	0	0	1	73
515-615	0	14	0	0	14	3	50	0	0	53	3	0	1	0	4	3	0	0	0	3	74
530-630	0	16	0	0	16	6	54	0	0	60	3	0	1	0	4	3	0	0	0	3	83
545-645	0	19	0	0	19	3	62	0	0	65	3	0	2	0	5	3	0	0	0	3	92
06-07	0	20	0	0	20	6	61	0	0	67	3	0	2	0	5	4	0	0	0	4	96
PEAK HOUR																					
430-530	1	18	0	0	19	1	57	0	0	58	3	0	1	0	4	2	0	0	0	2	83

TOTAL TURNING MOVEMENT COUNT - SUMMARY (CARS & TRUCKS COMBINED)

Counted by: RB/JK

Intersection of: MD 2 & 4 — Date: October 5, 2006 — Day: Thursday

and: Calvert Cliffs Parkway — Weather: Fair

Location: Calvert County, MD — Entered by: KL

TIME	TRAFFIC FROM NORTH on: MD 2 & 4					TRAFFIC FROM SOUTH on: MD 2 & 4					TRAFFIC FROM EAST on: Calvert Cliffs Pkwy					TRAFFIC FROM WEST on: MD 765					TOTAL N + S + E + W
	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	
AM																					
06:0-15	0	103	12	0	115	8	176	0	0	184	7	0	14	0	21	2	0	0	0	2	322
15-30	0	115	19	0	134	8	164	0	0	172	7	0	10	0	17	2	0	0	0	2	325
30-45	0	168	20	0	188	11	194	0	0	205	7	0	14	0	21	5	0	0	0	5	419
45-00	0	217	16	0	233	7	183	0	0	190	13	0	7	0	20	3	0	0	0	3	446
07:0-15	0	234	13	0	247	7	191	0	0	198	8	0	11	0	19	0	0	0	0	0	464
15-30	0	232	18	0	250	8	194	0	0	202	5	0	13	0	18	1	0	0	0	1	471
30-45	0	213	12	0	225	9	201	0	0	210	11	0	11	0	22	2	0	0	0	2	459
45-00	0	178	12	0	190	14	200	0	0	214	13	0	5	0	18	2	0	0	0	2	424
08:0-15	0	203	21	0	224	6	221	0	0	227	9	0	5	0	14	2	0	0	0	2	467
15-30	0	198	11	0	209	8	232	0	0	240	4	0	10	0	14	2	0	0	0	2	465
30-45	0	195	13	0	208	5	188	0	0	193	5	0	9	0	14	3	0	0	0	3	418
45-00	0	154	7	0	161	10	217	0	0	227	7	0	5	0	12	5	0	0	0	5	405
3 Hr Totals	0	2210	174	0	2384	101	2361	0	0	2462	96	0	114	0	210	29	0	0	0	29	5085
1 Hr Totals																					
06-07	0	603	67	0	670	34	717	0	0	751	34	0	45	0	79	12	0	0	0	12	1512
615-715	0	734	68	0	802	33	732	0	0	765	35	0	42	0	77	10	0	0	0	10	1654
630-730	0	851	67	0	918	33	762	0	0	795	33	0	45	0	78	9	0	0	0	9	1800
645-745	0	896	59	0	955	31	769	0	0	800	37	0	42	0	79	6	0	0	0	6	1840
07-08	0	857	55	0	912	38	786	0	0	824	37	0	40	0	77	5	0	0	0	5	1818
715-815	0	826	63	0	889	37	816	0	0	853	38	0	34	0	72	7	0	0	0	7	1821
730-830	0	792	56	0	848	37	854	0	0	891	37	0	31	0	68	8	0	0	0	8	1815
745-845	0	774	57	0	831	33	841	0	0	874	31	0	29	0	60	9	0	0	0	9	1774
08-09	0	750	52	0	802	29	858	0	0	887	25	0	29	0	54	12	0	0	0	12	1755
PEAK HOUR																					
645-745	0	896	59	0	955	31	769	0	0	800	37	0	42	0	79	6	0	0	0	6	1840
PM																					
04:0-15	1	281	0	0	282	12	250	0	0	262	14	0	9	0	23	1	0	0	0	1	568
15-30	0	336	0	0	336	8	216	0	0	224	12	0	9	0	21	2	0	0	0	2	583
30-45	0	348	3	0	351	11	217	0	0	228	11	0	6	0	17	4	0	0	0	4	600
45-00	2	361	0	0	363	16	242	0	0	258	9	0	6	0	15	5	0	0	0	5	641
05:0-15	0	393	0	0	393	14	249	0	0	263	16	0	14	0	30	2	0	0	0	2	688
15-30	0	385	2	0	387	7	270	0	0	277	15	0	18	0	33	1	0	0	0	1	698
30-45	0	335	0	0	335	9	220	0	0	229	10	0	12	0	22	5	0	0	0	5	591
45-00	0	302	0	0	302	8	209	0	0	217	8	0	7	0	15	7	0	0	0	7	541
06:0-15	0	295	0	0	295	5	196	0	0	201	6	0	17	0	23	4	0	0	0	4	523
15-30	0	278	1	0	279	10	229	0	0	239	12	0	10	0	22	3	0	0	0	3	543
30-45	0	282	2	0	284	6	258	0	0	264	11	0	10	0	21	2	0	0	0	2	571
45-00	0	213	1	0	214	14	207	0	0	221	15	0	9	0	24	3	0	0	0	3	462
3 Hr Totals	3	3809	9	0	3821	120	2763	0	0	2883	139	0	127	0	266	39	0	0	0	39	7009
1 Hr Totals																					
04-05	3	1326	3	0	1332	47	925	0	0	972	46	0	30	0	76	12	0	0	0	12	2392
415-515	2	1438	3	0	1443	49	924	0	0	973	48	0	35	0	83	13	0	0	0	13	2512
430-530	2	1487	5	0	1494	48	978	0	0	1026	51	0	44	0	95	12	0	0	0	12	2627
445-545	2	1474	2	0	1478	46	981	0	0	1027	50	0	50	0	100	13	0	0	0	13	2618
05-06	0	1415	2	0	1417	38	948	0	0	986	49	0	51	0	100	15	0	0	0	15	2518
515-615	0	1317	2	0	1319	29	895	0	0	924	39	0	54	0	93	17	0	0	0	17	2353
530-630	0	1210	1	0	1211	32	854	0	0	886	36	0	46	0	82	19	0	0	0	19	2198
545-645	0	1157	3	0	1160	29	892	0	0	921	37	0	44	0	81	16	0	0	0	16	2178
06-07	0	1068	4	0	1072	35	890	0	0	925	44	0	46	0	90	12	0	0	0	12	2099
PEAK HOUR																					
430-530	2	1487	5	0	1494	48	978	0	0	1026	51	0	44	0	95	12	0	0	0	12	2627

Weekday Morning Peak Hour (6:00 am - 9:00 am)

	MD 2-4 Northbound			MD 2-4 Southbound			-- Eastbound			MD 497 Westbound			
Time:	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
6:00-6:15	0	138	3	11	101	0	0	0	0	20	0	83	356
6:15-6:30	0	157	17	26	143	0	0	0	0	30	0	82	455
6:30-6:45	0	166	16	35	167	0	0	0	0	43	0	82	509
6:45-7:00	0	178	27	17	194	0	0	0	0	46	0	62	524
7:00-7:15	0	162	8	24	181	0	0	0	0	36	0	76	487
7:15-7:30	0	155	5	22	195	0	0	1	1	48	1	68	496
7:30-7:45	0	198	9	24	226	0	0	0	0	38	0	100	595
7:45-8:00	0	165	16	28	200	1	0	0	1	41	0	72	524
8:00-8:15	0	195	10	34	157	0	0	0	0	22	0	60	478
8:15-8:30	0	151	10	40	163	0	0	0	1	29	0	71	465
8:30-8:45	0	152	11	24	146	0	0	0	1	27	1	59	421
8:45-9:00	0	141	3	27	165	0	0	0	0	19	0	58	413
Hourly Totals													
6:00-7:00	0	639	63	89	605	0	0	0	0	139	0	309	1844
6:15-7:15	0	663	68	102	685	0	0	0	0	155	0	302	1975
6:30-7:30	0	661	56	98	737	0	0	1	1	173	1	288	2016
6:45-7:45	0	693	49	87	796	0	0	1	1	168	1	306	2102
7:00-8:00	0	680	38	98	802	1	0	1	2	163	1	316	2102
7:15-8:15	0	713	40	108	778	1	0	1	2	149	1	300	2093
7:30-8:30	0	709	45	126	746	1	0	0	2	130	0	303	2062
7:45-8:45	0	663	47	126	666	1	0	0	3	119	1	262	1888
8:00-9:00	0	639	34	125	631	0	0	0	2	97	1	248	1777
AM	**Northbound**			**Southbound**			**Eastbound**			**Westbound**			
Peak Hour	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Total**
6:45-7:45	**0**	**693**	**49**	**87**	**796**	**0**	**0**	**1**	**1**	**168**	**1**	**306**	**2102**
												AM PHF =	**0.88**

Weekday Evening Peak Hour (4 pm - 7 pm)

	MD 2-4 Northbound			MD 2-4 Southbound			-- Eastbound			MD 497 Westbound			
Time:	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
4:00-4:15	0	90	16	81	195	0	0	0	0	16	0	33	431
4:15-4:30	0	99	10	87	237	0	0	0	0	8	0	51	492
4:30-4:45	0	115	16	98	253	0	0	0	0	34	0	52	568
4:45-5:00	0	140	13	93	220	0	0	0	0	14	0	48	528
5:00-5:15	0	156	38	90	236	0	0	0	0	19	0	55	594
5:15-5:30	0	217	57	106	225	0	0	0	0	14	0	41	660
5:30-5:45	0	206	41	102	217	0	0	0	0	21	0	53	640
5:45-6:00	0	190	35	112	214	0	0	0	0	11	0	44	606
6:00-6:15	0	219	42	90	191	0	0	0	0	16	0	61	619
6:15-6:30	0	169	49	95	185	0	0	0	0	10	0	44	552
6:30-6:45	0	195	32	95	167	0	0	0	0	28	0	45	562
6:45-7:00	0	158	41	70	147	0	0	0	0	31	0	61	508
Hourly Totals													
4:00-5:00	0	444	55	359	905	0	0	0	0	72	0	184	2019
4:15-5:15	0	510	77	368	946	0	0	0	0	75	0	206	2182
4:30-5:30	0	628	124	387	934	0	0	0	0	81	0	196	2350
4:45-5:45	0	719	149	391	898	0	0	0	0	68	0	197	2422
5:00-6:00	0	769	171	410	892	0	0	0	0	65	0	193	2500
5:15-6:15	0	832	175	410	847	0	0	0	0	62	0	199	2525
5:30-6:30	0	784	167	399	807	0	0	0	0	58	0	202	2417
5:45-6:45	0	773	158	392	757	0	0	0	0	65	0	194	2339
6:00-7:00	0	741	164	350	690	0	0	0	0	85	0	211	2241
PM	**Northbound**			**Southbound**			**Eastbound**			**Westbound**			
Peak Hour	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Total**
5:15-6:15	**0**	**832**	**175**	**410**	**847**	**0**	**0**	**0**	**0**	**62**	**0**	**199**	**2525**
												PM PHF =	**0.96**

Peak Hour
Turning Movement Count

Lenhart Traffic Consulting, Inc.
Traffic Engineering & Transportation Planning

Intersection: MD 2/4 at Cove Point Rd
Weather: Sunny
Count by: FSK/MML
Count Day/Date: Thursday September 28, 2006
County: Calvert

Weekday Morning Peak Hour (6:00 am - 9:00 am)

	MD 2-4 Northbound			MD 2-4 Southbound			– Eastbound			MD 497 Westbound			
Time:	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
6:00-6:15	0	140	0	18	112	0	0	0	0	26	0	81	377
6:15-6:30	0	148	15	21	141	0	0	0	0	25	0	85	435
6:30-6:45	0	170	28	34	172	0	0	0	0	54	1	92	551
6:45-7:00	0	145	20	18	233	0	0	0	0	51	0	81	548
7:00-7:15	0	179	10	22	177	0	0	0	0	35	0	78	501
7:15-7:30	0	182	8	16	203	0	0	0	0	47	0	64	520
7:30-7:45	0	168	10	36	210	0	0	0	0	51	0	91	566
7:45-8:00	0	166	9	31	215	0	0	0	0	29	0	64	514
8:00-8:15	0	172	12	30	152	0	0	0	0	21	0	70	457
8:15-8:30	0	155	9	45	155	0	0	0	0	20	0	54	438
8:30-8:45	0	142	12	33	152	0	0	0	0	26	0	66	431
8:45-9:00	0	129	4	34	160	0	0	0	0	22	0	57	406
Hourly Totals													
6:30-7:30	0	603	63	91	658	0	0	0	0	156	1	339	1911
6:45-7:45	0	642	73	95	723	0	0	0	0	165	1	336	2035
7:00-8:00	0	676	66	90	785	0	0	0	0	187	1	315	2120
7:15-8:15	0	674	48	92	823	0	0	0	0	184	0	314	2135
7:30-8:30	0	695	37	105	805	0	0	0	0	162	0	297	2101
7:45-8:45	0	688	39	113	780	0	0	0	0	148	0	289	2057
8:00-9:00	0	661	40	142	732	0	0	0	0	121	0	279	1975
8:15-9:15	0	635	42	139	674	0	0	0	0	96	0	254	1840
8:30-9:30	0	598	37	142	619	0	0	0	0	89	0	247	1732
AM	**Northbound**			**Southbound**			**Eastbound**			**Westbound**			
Peak Hour	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Total**
7:15-8:15	**0**	**674**	**48**	**92**	**823**	**0**	**0**	**0**	**0**	**184**	**0**	**314**	**2135**
												AM PHF =	**0.94**

Weekday Evening Peak Hour (4 pm - 7 pm)

	MD 2-4 Northbound			MD 2-4 Southbound			– Eastbound			MD 497 Westbound			
Time:	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
4:00-4:15	0	177	19	79	205	0	0	0	0	21	0	47	548
4:15-4:30	0	196	46	80	200	0	0	0	0	9	0	38	569
4:30-4:45	0	214	33	87	222	0	0	0	0	29	0	63	648
4:45-5:00	0	199	38	97	225	0	0	0	0	16	0	41	616
5:00-5:15	0	176	31	104	224	0	0	0	0	19	0	51	605
5:15-5:30	0	193	40	113	246	0	0	0	0	10	0	36	638
5:30-5:45	0	212	47	96	196	0	0	0	0	31	0	49	631
5:45-6:00	0	172	43	109	192	0	0	0	0	19	0	36	571
6:00-6:15	0	172	43	83	185	0	0	0	0	20	0	22	525
6:15-6:30	0	183	30	93	179	0	0	0	0	16	0	36	537
6:30-6:45	0	137	28	70	182	0	0	0	0	18	0	39	474
6:45-7:00	0	110	27	64	153	0	0	0	0	14	0	31	399
Hourly Totals													
4:00-5:00	0	786	136	343	852	0	0	0	0	75	0	189	2381
4:15-5:15	0	785	148	368	871	0	0	0	0	73	0	193	2438
4:30-5:30	0	782	142	401	917	0	0	0	0	74	0	191	2507
4:45-5:45	0	780	156	410	891	0	0	0	0	76	0	177	2490
5:00-6:00	0	753	161	422	858	0	0	0	0	79	0	172	2445
5:15-6:15	0	749	173	401	819	0	0	0	0	80	0	143	2365
5:30-6:30	0	739	163	381	752	0	0	0	0	86	0	143	2264
5:45-6:45	0	664	144	355	738	0	0	0	0	73	0	133	2107
6:00-7:00	0	602	128	310	699	0	0	0	0	68	0	128	1935
PM	**Northbound**			**Southbound**			**Eastbound**			**Westbound**			
Peak Hour	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Total**
4:30-5:30	**0**	**782**	**142**	**401**	**917**	**0**	**0**	**0**	**0**	**74**	**0**	**191**	**2507**
												PM PHF =	**0.97**

Peak Hour
Turning Movement Count

Lenhart Traffic Consulting, Inc.
Traffic Engineering & Transportation Planning

Intersection: MD 2/4 at Cove Point Rd
Weather: Clear
Count by: FSK/MML
Count Day/Date: Tuesday October 3, 2006
County: Calvert

	Turning Movement Count												
	MD 2/4 Northbound			MD 2/4 Southbound			Eastbound			COVE POINT RD Westbound			
Time:	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
6:00-6:15	0	145	62	19	97	0	0	0	0	18	0	92	433
6:15-6:30	0	154	34	33	159	0	0	0	0	21	0	92	493
6:30-6:45	0	185	22	32	166	0	0	0	0	34	0	97	536
6:45-7:00	0	150	31	24	179	0	0	0	0	42	0	98	524
7:00-7:15	0	166	14	17	178	0	0	0	0	30	0	76	481
7:15-7:30	0	168	9	20	222	0	0	0	0	42	0	76	537
7:30-7:45	0	181	7	21	216	0	0	0	0	43	0	81	549
7:45-8:00	0	178	5	17	210	0	0	0	0	56	0	67	533
8:00-8:15	0	180	8	19	198	0	0	0	0	25	0	63	493
8:15-8:30	0	154	13	34	161	0	0	0	0	23	0	64	449
8:30-8:45	0	143	8	27	136	0	0	0	0	22	0	69	405
8:45-9:00	0	132	14	25	127	0	0	0	0	23	0	57	378
9:00-9:15	0	129	9	36	121	0	0	0	0	24	0	49	368
9:15-9:30	0	104	9	23	119	0	0	0	0	12	0	31	298
9:30-9:45	0	94	9	19	146	0	0	0	0	15	0	42	325
9:45-10:00	0	108	10	19	106	0	0	0	0	15	0	44	302
10:00-10:15	0	103	8	20	117	0	0	0	0	14	0	34	296
10:15-10:30	0	67	7	20	112	0	0	0	0	15	0	25	246
10:30-10:45	0	92	5	17	122	0	0	0	0	4	0	26	266
10:45-11:00	0	98	6	21	128	0	0	0	0	12	0	23	288
11:00-11:15	0	99	6	19	102	0	0	0	0	9	0	25	260
11:15-11:30	0	121	14	29	120	0	0	0	0	16	0	34	334
11:30-11:45	0	107	16	22	118	0	0	0	0	19	0	38	320
11:45-12:00	0	125	22	24	136	0	0	0	0	9	0	28	344
12:00-12:15	0	120	17	22	125	0	0	0	0	14	0	29	327
12:15-12:30	0	129	14	24	126	0	0	0	0	17	0	29	339
12:30-12:45	0	111	13	22	112	0	0	0	0	8	0	37	303
12:45-1:00	0	115	11	20	113	0	0	0	0	19	0	29	307
1:00-1:15	0	137	10	25	127	0	0	0	0	20	0	29	348
1:15-1:30	0	118	17	28	116	0	0	0	0	13	0	28	320
1:30-1:45	0	128	15	33	121	0	0	0	0	13	0	35	345
1:45-2:00	0	118	16	28	111	0	0	0	0	10	0	28	311
2:00-2:15	0	145	14	23	135	0	0	0	0	13	0	30	360
2:15-2:30	0	122	11	38	139	0	0	0	0	10	0	30	350
2:30-2:45	0	150	16	44	143	0	0	0	0	20	0	36	409
2:45-3:00	0	110	11	44	136	0	0	0	0	13	0	36	350
3:00-3:15	0	156	24	64	178	0	0	0	0	12	0	35	469
3:15-3:30	0	192	36	48	179	0	0	0	0	12	0	32	499
3:30-3:45	0	197	17	96	223	0	0	0	0	27	0	39	599
3:45-4:00	0	202	37	84	220	0	0	0	0	11	0	34	588
4:00-4:15	0	226	29	68	189	0	0	0	0	14	0	50	576
4:15-4:30	0	237	40	111	213	0	0	0	0	14	0	57	672
4:30-4:45	0	247	40	84	241	0	0	0	0	12	0	51	675
4:45-5:00	0	304	22	108	244	0	0	0	0	17	0	37	732
5:00-5:15	0	245	36	87	247	0	0	0	0	65	0	58	738
5:15-5:30	0	222	39	108	252	0	0	0	0	46	0	45	712
5:30-5:45	0	206	51	109	235	0	0	0	0	21	0	38	660
5:45-6:00	0	173	28	106	188	0	0	0	0	17	0	44	556
6:00-6:15	0	125	25	105	201	0	0	0	0	15	0	24	495
6:15-6:30	0	144	26	86	175	0	0	0	0	11	0	41	483
6:30-6:45	0	138	22	66	130	0	0	0	0	15	0	41	412
6:45-7:00	0	98	13	54	105	0	0	0	0	13	0	17	300
Hourly Totals													
6:00-7:00	0	634	149	108	601	0	0	0	0	115	0	379	1986
7:00-8:00	0	693	35	75	826	0	0	0	0	171	0	300	2100
8:00-9:00	0	609	43	105	622	0	0	0	0	93	0	253	1725
9:00-10:00	0	435	37	97	492	0	0	0	0	66	0	166	1293
10:00-11:00	0	360	26	78	479	0	0	0	0	45	0	108	1096
11:00-12:00	0	452	58	94	476	0	0	0	0	53	0	125	1258
12:00-1:00	0	475	55	88	476	0	0	0	0	58	0	124	1276
1:00-2:00	0	501	58	114	475	0	0	0	0	56	0	120	1324
2:00-3:00	0	527	52	149	553	0	0	0	0	56	0	132	1469
3:00-4:00	0	747	114	292	800	0	0	0	0	62	0	140	2155
4:00-5:00	0	1014	131	371	887	0	0	0	0	57	0	195	2655
5:00-6:00	0	846	154	410	922	0	0	0	0	149	0	185	2666
6:00-7:00	0	505	86	311	611	0	0	0	0	54	0	123	1690

13 Hour Turning Movement Count	**Intersection:** MD 2/4 AT COVE POINT RD **Weather:** CLEAR **Count by:** FSK
Lenhart Traffic Consulting, Inc. Traffic Engineering & Transportation Planning	**Count Day/Date:** TUESDAY, APRIL 22,2008 **County:** CALVERT

	Turning Movement Count												
	MD 2/4 Northbound			MD 2/4 Southbound			PARDOE RD Eastbound			HG TRUMAN Westbound			
Time:	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
6:00-6:15	4	244	1	6	123	0	1	0	1	0	0	12	392
6:15-6:30	2	269	0	3	196	0	1	0	3	0	1	20	495
6:30-6:45	7	322	0	6	189	0	1	0	7	1	0	23	556
6:45-7:00	1	309	1	6	210	0	2	0	6	0	3	20	558
7:00-7:15	0	278	0	13	198	0	0	1	4	0	1	27	522
7:15-7:30	5	269	1	13	260	0	0	0	6	0	0	19	573
7:30-7:45	5	260	1	28	258	1	0	0	2	0	0	26	581
7:45-8:00	1	248	3	51	224	1	0	1	4	0	0	30	563
8:00-8:15	2	250	2	36	201	0	0	3	3	1	1	43	542
8:15-8:30	1	240	0	10	201	0	0	0	1	1	0	21	475
8:30-8:45	3	218	0	11	178	0	1	0	5	0	0	17	433
8:45-9:00	11	226	0	13	169	0	0	0	7	0	0	30	456
9:00-9:15	3	170	1	13	147	0	1	1	5	0	2	26	369
9:15-9:30	1	178	2	8	171	0	0	0	3	0	1	19	383
9:30-9:45	3	168	0	20	142	1	0	1	2	0	0	19	356
9:45-10:00	0	108	1	7	108	0	0	0	1	0	1	17	243
10:00-10:15	1	115	1	14	117	0	1	1	4	0	1	19	274
10:15-10:30	2	148	1	14	125	0	0	0	2	1	0	18	311
10:30-10:45	0	143	0	15	163	0	0	2	0	0	0	17	340
10:45-11:00	2	121	0	20	125	0	1	1	6	0	1	20	297
11:00-11:15	1	116	1	14	161	0	2	0	1	0	0	23	319
11:15-11:30	6	160	0	17	139	1	0	1	1	1	2	15	343
11:30-11:45	3	144	0	12	118	0	0	2	3	0	1	25	308
11:45-12:00	4	127	1	19	135	2	1	1	3	0	1	20	314
12:00-12:15	5	139	1	17	151	1	1	1	3	1	1	24	345
12:15-12:30	4	145	1	16	149	1	2	1	3	1	2	20	345
12:30-12:45	7	159	1	20	159	20	2	2	2	0	1	31	404
12:45-1:00	6	151	1	15	167	0	0	0	3	1	1	27	372
1:00-1:15	2	151	0	15	147	0	2	1	2	1	2	15	338
1:15-1:30	4	144	0	16	139	1	0	1	7	1	1	17	331
1:30-1:45	4	159	2	14	161	0	2	1	4	0	1	24	372
1:45-2:00	3	162	0	10	168	0	4	2	7	0	0	26	382
2:00-2:15	5	169	2	17	180	1	0	1	5	0	0	21	401
2:15-2:30	5	213	1	10	153	0	0	0	5	0	1	26	414
2:30-2:45	0	186	0	17	184	0	0	1	1	0	0	13	402
2:45-3:00	2	177	1	18	213	0	0	2	2	0	2	20	437
3:00-3:15	1	179	1	27	221	3	1	2	3	0	1	31	470
3:15-3:30	3	228	0	23	240	1	0	0	2	2	1	32	532
3:30-3:45	2	240	1	17	301	2	0	1	3	0	0	38	605
3:45-4:00	6	212	0	26	270	0	0	0	3	0	1	29	547
4:00-4:15	5	237	1	26	307	0	0	0	6	1	3	33	619
4:15-4:30	7	238	0	41	340	3	1	0	6	0	1	26	663
4:30-4:45	4	250	0	40	338	0	0	1	5	0	1	21	660
4:45-5:00	0	263	1	38	400	0	0	1	4	1	0	36	744
5:00-5:15	0	255	1	41	348	1	0	1	5	0	0	29	681
5:15-5:30	6	274	2	47	358	0	0	0	4	0	1	29	721
5:30-5:45	1	257	0	47	311	0	0	1	5	0	0	25	647
5:45-6:00	3	217	0	47	289	0	0	0	2	1	1	18	578
6:00-6:15	3	183	2	41	321	0	0	1	2	0	2	23	578
6:15-6:30	1	227	1	35	269	0	0	1	1	2	4	22	563
6:30-6:45	1	184	0	33	242	0	0	2	3	0	1	24	490
6:45-7:00	1	146	1	19	195	0	0	1	1	2	0	15	381
Hourly Totals													
6:00-7:00	14	1144	2	21	718	0	5	0	17	1	4	75	2001
7:00-8:00	11	1055	5	105	940	2	0	2	16	0	1	102	2239
8:00-9:00	17	934	2	70	749	0	1	3	16	2	1	111	1906
9:00-10:00	7	624	4	48	568	1	1	2	11	0	4	81	1351
10:00-11:00	5	527	2	63	530	0	2	4	12	1	2	74	1222
11:00-12:00	14	547	2	62	553	3	3	4	8	1	4	83	1284
12:00-1:00	22	594	4	68	626	22	5	4	11	3	5	102	1466
1:00-2:00	13	616	2	55	615	1	8	5	20	2	4	82	1423
2:00-3:00	12	745	4	62	730	1	0	4	13	0	3	80	1654
3:00-4:00	12	859	2	93	1032	6	1	3	11	2	3	130	2154
4:00-5:00	16	988	2	145	1385	3	1	2	21	2	5	116	2686
5:00-6:00	10	1003	3	182	1306	1	0	2	16	1	2	101	2627
6:00-7:00	6	740	4	128	1027	0	0	5	7	4	7	84	2012

13 Hour
Turning Movement Count

Lenhart Traffic Consulting, Inc.
Traffic Engineering & Transportation Planning

Intersection: MD 2/4 AT PARDOE/HG TRUMAN RDS
Weather: CLEAR
Count by: FSK
Count Day/Date: WEDNESDAYS APRIL 23,2008
County: CALVERT

	Turning Movement Count												
	MD 2/4 Northbound			MD 2/4 Southbound			Eastbound			NURSERY RD Westbound			
Time:	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
6:00-6:15	0	250	0	0	120	0	0	0	0	0	0	0	370
6:15-6:30	0	290	0	1	179	0	0	0	0	0	0	1	471
6:30-6:45	0	349	0	1	217	0	0	0	0	0	0	1	568
6:45-7:00	0	333	2	2	198	0	0	0	0	1	0	0	536
7:00-7:15	0	318	0	0	213	0	0	0	0	1	0	1	533
7:15-7:30	0	295	0	2	228	0	0	0	0	0	0	0	525
7:30-7:45	0	316	0	1	273	0	0	0	0	1	0	0	591
7:45-8:00	0	285	2	4	264	0	0	0	0	3	0	0	558
8:00-8:15	0	296	2	1	204	0	0	0	0	3	0	1	507
8:15-8:30	0	282	2	1	226	0	0	0	0	2	0	0	513
8:30-8:45	0	256	1	1	188	0	0	0	0	1	0	1	448
8:45-9:00	0	221	0	0	165	0	0	0	0	2	0	0	388
9:00-9:15	0	188	2	1	163	0	0	0	0	1	0	0	355
9:15-9:30	0	179	1	1	158	0	0	0	0	2	0	0	341
9:30-9:45	0	207	0	1	163	0	0	0	0	0	0	0	371
9:45-10:00	0	183	0	2	182	0	0	0	0	2	0	1	370
10:00-10:15	0	173	1	2	178	0	0	0	0	2	0	1	357
10:15-10:30	0	175	0	3	169	0	0	0	0	0	0	0	347
10:30-10:45	0	182	4	0	171	0	0	0	0	2	0	1	360
10:45-11:00	0	162	1	1	174	0	0	0	0	1	0	0	339
11:00-11:15	0	147	0	2	214	0	0	0	0	1	0	0	364
11:15-11:30	0	182	3	1	169	0	0	0	0	0	0	1	356
11:30-11:45	0	174	1	0	194	0	0	0	0	0	0	0	369
11:45-12:00	0	184	1	3	195	0	0	0	0	0	0	0	383
12:00-12:15	0	174	1	3	188	0	0	0	0	1	0	0	367
12:15-12:30	0	178	1	2	189	0	0	0	0	1	0	0	371
12:30-12:45	0	226	4	0	194	0	0	0	0	3	0	1	428
12:45-1:00	0	163	1	2	180	0	0	0	0	2	0	0	348
1:00-1:15	0	181	1	0	190	0	0	0	0	1	0	0	373
1:15-1:30	0	203	3	2	165	0	0	0	0	1	0	0	374
1:30-1:45	0	207	3	1	191	0	0	0	0	0	0	0	402
1:45-2:00	0	199	1	2	207	0	0	0	0	0	0	0	409
2:00-2:15	0	205	1	0	187	0	0	0	0	1	0	0	394
2:15-2:30	0	229	1	1	197	0	0	0	0	2	0	0	430
2:30-2:45	0	240	3	1	221	0	0	0	0	0	0	0	465
2:45-3:00	0	234	3	2	251	0	0	0	0	2	0	1	493
3:00-3:15	0	254	1	0	261	0	0	0	0	4	0	1	521
3:15-3:30	0	291	1	3	301	0	0	0	0	1	0	1	598
3:30-3:45	0	276	1	4	304	0	0	0	0	3	0	0	588
3:45-4:00	0	313	0	3	364	0	0	0	0	5	0	1	686
4:00-4:15	0	312	1	0	305	0	0	0	0	0	0	0	618
4:15-4:30	0	304	1	1	371	0	0	0	0	0	0	0	677
4:30-4:45	0	270	0	1	384	0	0	0	0	2	0	0	657
4:45-5:00	0	302	1	1	412	0	0	0	0	0	0	0	716
5:00-5:15	0	285	2	0	410	0	0	0	0	1	0	1	699
5:15-5:30	0	319	1	1	409	0	0	0	0	1	0	0	731
5:30-5:45	0	324	2	3	391	0	0	0	0	1	0	0	721
5:45-6:00	0	260	5	3	373	0	0	0	0	2	0	0	643
6:00-6:15	0	207	2	1	364	0	0	0	0	1	0	0	575
6:15-6:30	0	233	2	1	321	0	0	0	0	0	0	0	557
6:30-6:45	0	200	1	1	290	0	0	0	0	2	0	0	494
6:45-7:00	0	185	0	0	226	0	0	0	0	1	0	0	412
Hourly Totals													
6:00-7:00	0	1222	2	4	714	0	0	0	0	1	0	2	1945
7:00-8:00	0	1214	2	7	978	0	0	0	0	5	0	1	2207
8:00-9:00	0	1055	5	3	783	0	0	0	0	8	0	2	1856
9:00-10:00	0	757	3	5	666	0	0	0	0	5	0	1	1437
10:00-11:00	0	692	6	6	692	0	0	0	0	5	0	2	1403
11:00-12:00	0	687	5	6	772	0	0	0	0	1	0	1	1472
12:00-1:00	0	741	7	7	751	0	0	0	0	7	0	1	1514
1:00-2:00	0	790	8	5	753	0	0	0	0	2	0	0	1558
2:00-3:00	0	908	8	4	856	0	0	0	0	5	0	1	1782
3:00-4:00	0	1134	3	10	1230	0	0	0	0	13	0	3	2393
4:00-5:00	0	1188	3	3	1472	0	0	0	0	2	0	0	2668
5:00-6:00	0	1188	10	7	1583	0	0	0	0	5	0	1	2794
6:00-7:00	0	825	5	3	1201	0	0	0	0	4	0	0	2038

13 Hour
Turning Movement Count

Lenhart Traffic Consulting, Inc.
Traffic Engineering & Transportation Planning

Intersection: MD 2/4 AT NURSERY RD
Weather: CLEAR
Count by: FSK
Count Day/Date: THURSDAY APRIL 17,2008
County: CALVERT

	Turning Movement Count												
	MD 2/4 Northbound			MD 2/4 Southbound			PARDOE RD Eastbound			HG TRUMAN Westbound			
Time:	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
6:00-6:15	4	235	1	6	130	0	0	0	2	0	0	12	390
6:15-6:30	3	284	0	6	165	0	0	0	6	0	0	28	492
6:30-6:45	3	229	1	6	141	0	0	1	2	0	0	18	401
6:45-7:00	0	313	0	8	217	0	1	0	9	0	1	19	568
7:00-7:15	1	292	1	10	188	0	0	0	5	0	0	17	514
7:15-7:30	1	271	2	16	210	0	1	0	1	1	0	26	529
7:30-7:45	3	276	0	30	263	0	0	0	1	0	0	32	605
7:45-8:00	2	268	2	62	222	0	0	3	3	1	1	32	596
8:00-8:15	4	266	1	37	211	1	0	0	3	2	0	43	568
8:15-8:30	2	208	2	19	168	0	1	1	2	2	0	32	437
8:30-8:45	1	230	2	14	195	0	0	0	0	1	0	19	462
8:45-9:00	8	197	0	9	219	1	0	0	5	1	0	25	465
9:00-9:15	4	191	0	13	147	0	0	5	2	0	0	20	382
9:15-9:30	3	186	0	13	163	0	0	0	7	0	1	20	393
9:30-9:45	1	141	0	17	163	1	1	3	2	0	1	14	344
9:45-10:00	2	156	0	9	155	1	0	0	3	1	1	15	343
10:00-10:15	3	150	0	15	145	1	0	1	3	1	1	20	340
10:15-10:30	2	121	1	10	119	0	2	1	2	0	1	18	277
10:30-10:45	1	127	1	17	139	0	0	1	2	0	1	13	302
10:45-11:00	3	144	0	21	134	0	0	2	2	0	1	24	331
11:00-11:15	3	158	0	13	143	0	0	3	4	0	2	19	345
11:15-11:30	6	124	2	15	150	0	0	0	4	1	2	14	318
11:30-11:45	4	147	0	11	145	0	2	1	2	1	0	22	335
11:45-12:00	4	144	1	16	151	0	0	2	4	0	1	24	347
12:00-12:15	4	145	2	18	153	0	0	1	4	1	2	22	352
12:15-12:30	2	154	2	18	157	0	0	1	5	2	2	21	364
12:30-12:45	3	169	0	22	142	0	0	0	5	2	0	26	369
12:45-1:00	3	145	2	19	154	0	0	0	4	1	2	19	349
1:00-1:15	0	162	1	18	161	0	0	1	5	2	1	19	370
1:15-1:30	6	138	2	10	153	0	1	0	1	0	1	20	332
1:30-1:45	4	147	2	18	186	0	0	2	4	0	0	20	383
1:45-2:00	2	159	2	17	174	0	2	1	6	0	3	25	391
2:00-2:15	1	163	1	16	167	0	0	1	7	0	0	19	375
2:15-2:30	3	191	2	19	189	0	2	0	2	0	0	26	434
2:30-2:45	0	192	2	14	201	0	1	0	5	0	1	23	439
2:45-3:00	2	197	0	25	198	1	0	1	2	0	0	24	450
3:00-3:15	1	185	2	28	219	0	0	1	5	1	0	25	467
3:15-3:30	4	226	2	19	232	0	0	0	0	2	2	19	506
3:30-3:45	2	250	0	23	288	0	0	0	3	0	1	25	592
3:45-4:00	1	255	1	15	327	0	0	1	4	0	1	31	636
4:00-4:15	3	245	1	24	264	0	0	1	4	0	0	23	565
4:15-4:30	10	262	0	41	318	0	0	0	5	0	0	27	663
4:30-4:45	6	260	1	43	333	1	0	1	9	0	1	25	680
4:45-5:00	2	280	0	45	385	0	0	0	3	1	0	32	748
5:00-5:15	7	280	1	29	346	0	0	0	1	0	1	27	692
5:15-5:30	3	266	1	50	338	0	1	1	3	1	0	25	689
5:30-5:45	3	262	3	42	306	0	0	0	7	0	0	29	652
5:45-6:00	2	197	0	50	302	0	0	1	6	0	0	18	576
6:00-6:15	2	195	1	35	340	0	0	1	0	0	0	21	595
6:15-6:30	3	164	2	30	263	0	0	1	2	1	0	23	489
6:30-6:45	4	172	2	14	239	0	0	0	9	0	1	22	463
6:45-7:00	5	141	0	22	188	0	0	1	2	0	0	19	378
Hourly Totals													
6:00-7:00	10	1061	2	26	653	0	1	1	19	0	1	77	1851
7:00-8:00	7	1107	5	118	883	0	1	3	10	2	1	107	2244
8:00-9:00	15	901	5	79	793	2	1	1	10	6	0	119	1932
9:00-10:00	10	674	0	52	628	2	1	8	14	1	3	69	1462
10:00-11:00	9	542	2	63	537	1	2	5	9	1	4	75	1250
11:00-12:00	17	573	3	55	589	0	2	6	14	2	5	79	1345
12:00-1:00	12	613	6	77	606	0	0	2	18	6	6	88	1434
1:00-2:00	12	606	7	63	674	0	3	4	16	2	5	84	1476
2:00-3:00	6	743	5	74	755	1	3	2	16	0	1	92	1698
3:00-4:00	8	916	5	85	1066	0	0	2	12	3	4	100	2201
4:00-5:00	21	1047	2	153	1300	1	0	2	21	1	1	107	2656
5:00-6:00	15	1005	5	171	1292	0	1	2	17	1	1	99	2609
6:00-7:00	14	672	5	101	1030	0	0	3	13	1	1	85	1925

13 Hour
Turning Movement Count

Lenhart Traffic Consulting, Inc.
Traffic Engineering & Transportation Planning

Intersection: MD 2/4 AT PARDOE/HG TRUMAN RDS
Weather: CLEAR
Count by: FSK
Count Day/Date: WEDNESDAY APRIL 16,2008
County: CALVERT

	Turning Movement Count												
	MD 2/4 Northbound			MD 2/4 Southbound			Eastbound			COVE POINT RD Westbound			
Time:	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
6:00-6:15	0	135	60	22	110	0	0	0	0	27	0	93	447
6:15-6:30	0	181	34	25	141	0	0	0	0	22	0	84	487
6:30-6:45	0	204	24	36	163	0	0	0	0	35	0	98	560
6:45-7:00	0	169	26	28	190	0	0	0	0	55	0	96	564
7:00-7:15	0	173	8	20	185	0	0	0	0	37	0	109	532
7:15-7:30	0	169	13	22	214	0	0	0	0	37	0	83	538
7:30-7:45	0	198	8	24	213	0	0	0	0	48	0	84	575
7:45-8:00	0	158	8	30	240	0	0	0	0	48	0	71	555
8:00-8:15	0	166	9	24	160	0	0	0	0	21	0	83	463
8:15-8:30	0	147	9	40	157	0	0	0	0	7	0	60	420
8:30-8:45	0	133	10	35	156	0	0	0	0	26	0	57	417
8:45-9:00	0	138	9	31	135	0	0	0	0	16	0	46	375
9:00-9:15	0	146	6	25	134	0	0	0	0	21	0	53	385
9:15-9:30	0	121	6	22	155	0	0	0	0	17	0	38	359
9:30-9:45	0	116	5	14	129	0	0	0	0	12	0	37	313
9:45-10:00	0	113	5	20	126	0	0	0	0	10	0	32	306
10:00-10:15	0	118	8	14	109	0	0	0	0	23	0	25	297
10:15-10:30	0	194	8	13	105	0	0	0	0	14	0	23	357
10:30-10:45	0	109	5	25	123	0	0	0	0	8	0	27	297
10:45-11:00	0	106	11	19	125	0	0	0	0	11	0	34	306
11:00-11:15	0	113	8	17	108	0	0	0	0	10	0	30	286
11:15-11:30	0	99	13	14	137	0	0	0	0	10	0	20	293
11:30-11:45	0	106	10	22	120	0	0	0	0	26	0	30	314
11:45-12:00	0	84	13	29	132	0	0	0	0	19	0	30	307
12:00-12:15	0	109	18	28	116	0	0	0	0	13	0	30	314
12:15-12:30	0	112	18	36	122	0	0	0	0	17	0	32	337
12:30-12:45	0	121	11	24	116	0	0	0	0	9	0	24	305
12:45-1:00	0	134	11	26	108	0	0	0	0	7	0	26	312
1:00-1:15	0	136	10	28	112	0	0	0	0	6	0	33	325
1:15-1:30	0	98	7	25	102	0	0	0	0	11	0	33	276
1:30-1:45	0	146	10	28	100	0	0	0	0	4	0	27	315
1:45-2:00	0	138	9	29	116	0	0	0	0	5	0	40	337
2:00-2:15	0	117	13	29	145	0	0	0	0	15	0	33	352
2:15-2:30	0	141	18	33	138	0	0	0	0	14	0	22	366
2:30-2:45	0	138	12	32	153	0	0	0	0	9	0	37	381
2:45-3:00	0	160	6	52	144	0	0	0	0	18	0	26	406
3:00-3:15	0	190	15	67	173	0	0	0	0	12	0	38	495
3:15-3:30	0	194	29	61	178	0	0	0	0	14	0	27	503
3:30-3:45	0	195	23	95	205	0	0	0	0	23	0	43	584
3:45-4:00	0	220	24	82	202	0	0	0	0	6	0	49	583
4:00-4:15	0	217	28	104	189	0	0	0	0	11	0	59	608
4:15-4:30	0	187	38	107	220	0	0	0	0	24	0	54	630
4:30-4:45	0	237	38	82	212	0	0	0	0	17	0	50	636
4:45-5:00	0	208	45	89	231	0	0	0	0	22	0	41	636
5:00-5:15	0	203	46	78	186	0	0	0	0	72	0	52	637
5:15-5:30	0	230	34	72	183	0	0	0	0	52	0	52	623
5:30-5:45	0	167	37	70	183	0	0	0	0	29	0	49	535
5:45-6:00	0	185	41	79	211	0	0	0	0	13	0	36	565
6:00-6:15	0	150	33	115	185	0	0	0	0	15	0	30	528
6:15-6:30	0	131	31	90	206	0	0	0	0	9	0	34	501
6:30-6:45	0	128	23	102	188	0	0	0	0	24	0	40	505
6:45-7:00	0	104	20	98	153	0	0	0	0	15	0	22	412
Hourly Totals													
6:00-7:00	0	689	144	111	604	0	0	0	0	139	0	371	2058
7:00-8:00	0	698	37	96	852	0	0	0	0	170	0	347	2200
8:00-9:00	0	584	37	130	608	0	0	0	0	70	0	246	1675
9:00-10:00	0	496	22	81	544	0	0	0	0	60	0	160	1363
10:00-11:00	0	527	32	71	462	0	0	0	0	56	0	109	1257
11:00-12:00	0	402	44	82	497	0	0	0	0	65	0	110	1200
12:00-1:00	0	476	58	114	462	0	0	0	0	46	0	112	1268
1:00-2:00	0	518	36	110	430	0	0	0	0	26	0	133	1253
2:00-3:00	0	556	49	146	580	0	0	0	0	56	0	118	1505
3:00-4:00	0	799	91	305	758	0	0	0	0	55	0	157	2165
4:00-5:00	0	849	149	382	852	0	0	0	0	74	0	204	2510
5:00-6:00	0	785	158	299	763	0	0	0	0	166	0	189	2360
6:00-7:00	0	513	107	405	732	0	0	0	0	63	0	126	1946

13 Hour
Turning Movement Count

Lenhart Traffic Consulting, Inc.
Traffic Engineering & Transportation Planning

Intersection: MD 2/4 AT COVE POINT RD
Weather: CLEAR
Count by: FSK
Count Day/Date: TUESDAY APRIL 15,2008
County: CALVERT

	Turning Movement Count												
	MD 2/4 Northbound			MD 2/4 Southbound			Eastbound			NURSERY RD Westbound			
Time:	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
6:00-6:15	0	261	0	0	155	0	0	0	0	0	0	0	416
6:15-6:30	0	303	0	0	207	0	0	0	0	0	0	0	510
6:30-6:45	0	360	2	1	224	0	0	0	0	1	0	0	588
6:45-7:00	0	323	0	2	207	0	0	0	0	0	0	0	532
7:00-7:15	0	321	2	1	221	0	0	0	0	4	0	0	549
7:15-7:30	0	333	1	1	263	0	0	0	0	0	0	0	598
7:30-7:45	0	299	0	1	273	0	0	0	0	1	0	0	574
7:45-8:00	0	270	2	0	264	0	0	0	0	2	0	0	538
8:00-8:15	0	276	0	3	206	0	0	0	0	1	0	0	486
8:15-8:30	0	222	0	2	194	0	0	0	0	1	0	0	419
8:30-8:45	0	241	1	3	189	0	0	0	0	1	0	0	435
8:45-9:00	0	242	3	0	202	0	0	0	0	3	0	0	450
9:00-9:15	0	177	2	1	154	0	0	0	0	2	0	0	336
9:15-9:30	0	186	1	0	183	0	0	0	0	2	0	0	372
9:30-9:45	0	181	0	0	194	0	0	0	0	0	0	0	375
9:45-10:00	0	164	0	0	158	0	0	0	0	0	0	0	322
10:00-10:15	0	158	1	1	153	0	0	0	0	3	0	0	316
10:15-10:30	0	150	0	1	146	0	0	0	0	1	0	0	298
10:30-10:45	0	166	3	1	170	0	0	0	0	2	0	1	343
10:45-11:00	0	151	1	1	148	0	0	0	0	5	0	0	306
11:00-11:15	0	173	1	0	143	0	0	0	0	0	0	0	317
11:15-11:30	0	165	2	0	154	0	0	0	0	2	0	0	323
11:30-11:45	0	157	1	0	139	0	0	0	0	0	0	0	297
11:45-12:00	0	144	0	3	166	0	0	0	0	1	0	1	315
12:00-12:15	0	160	0	2	166	0	0	0	0	1	0	1	330
12:15-12:30	0	165	1	1	154	0	0	0	0	1	0	1	323
12:30-12:45	0	163	4	2	156	0	0	0	0	0	0	0	325
12:45-1:00	0	175	0	1	166	0	0	0	0	0	0	1	343
1:00-1:15	0	169	1	0	142	0	0	0	0	1	0	0	313
1:15-1:30	0	160	1	2	141	0	0	0	0	2	0	0	306
1:30-1:45	0	170	0	1	175	0	0	0	0	1	0	0	347
1:45-2:00	0	188	2	0	144	0	0	0	0	0	0	0	334
2:00-2:15	0	202	4	0	180	0	0	0	0	2	0	2	390
2:15-2:30	0	195	0	1	193	0	0	0	0	0	0	0	389
2:30-2:45	0	198	0	2	209	0	0	0	0	1	0	0	410
2:45-3:00	0	217	0	0	246	0	0	0	0	2	0	0	465
3:00-3:15	0	222	2	3	226	0	0	0	0	2	0	0	455
3:15-3:30	0	253	2	3	249	0	0	0	0	2	0	2	511
3:30-3:45	0	273	1	2	315	0	0	0	0	3	0	1	595
3:45-4:00	0	286	1	0	334	0	0	0	0	0	0	1	622
4:00-4:15	0	262	2	0	342	0	0	0	0	3	0	0	609
4:15-4:30	0	297	1	2	357	0	0	0	0	3	0	0	660
4:30-4:45	0	293	0	0	385	0	0	0	0	1	0	0	679
4:45-5:00	0	278	0	3	404	0	0	0	0	0	0	0	685
5:00-5:15	0	294	1	1	388	0	0	0	0	4	0	0	688
5:15-5:30	0	302	0	1	395	0	0	0	0	0	0	0	698
5:30-5:45	0	257	0	3	362	0	0	0	0	0	0	0	622
5:45-6:00	0	216	0	3	366	0	0	0	0	0	0	0	585
6:00-6:15	0	210	1	2	343	0	0	0	0	1	0	0	557
6:15-6:30	0	175	1	0	317	0	0	0	0	1	0	0	494
6:30-6:45	0	174	0	0	257	0	0	0	0	1	0	0	432
6:45-7:00	0	55	0	0	101	0	0	0	0	0	0	0	156
Hourly Totals													
6:00-7:00	0	1247	2	3	793	0	0	0	0	1	0	0	2046
7:00-8:00	0	1223	5	3	1021	0	0	0	0	7	0	0	2259
8:00-9:00	0	981	4	8	791	0	0	0	0	6	0	0	1790
9:00-10:00	0	708	3	1	689	0	0	0	0	4	0	0	1405
10:00-11:00	0	625	5	4	617	0	0	0	0	11	0	1	1263
11:00-12:00	0	639	4	3	602	0	0	0	0	3	0	1	1252
12:00-1:00	0	663	5	6	642	0	0	0	0	2	0	3	1321
1:00-2:00	0	687	4	3	602	0	0	0	0	4	0	0	1300
2:00-3:00	0	812	4	3	828	0	0	0	0	5	0	2	1654
3:00-4:00	0	1034	6	8	1124	0	0	0	0	7	0	4	2183
4:00-5:00	0	1130	3	5	1488	0	0	0	0	7	0	0	2633
5:00-6:00	0	1069	1	8	1511	0	0	0	0	4	0	0	2593
6:00-7:00	0	614	2	2	1018	0	0	0	0	3	0	0	1639

13 Hour
Turning Movement Count

Lenhart Traffic Consulting, Inc.
Traffic Engineering & Transportation Planning

Intersection: MD 2/4 AT NURSERY RD
Weather: CLEAR
Count by: FSK
Count Day/Date: TUESDAY APRIL 29,2008
County: CALVERT

Maryland State Highway Administration
Highway Information Services Division
Turning Movement Count Study - Field Sheet

Station ID: S1994040002
Date: Thursday 03/25/2010
Location: MD 2 at MD 4 (Sunderland)
I (dd): 15 min

County: Calvert
Town: none
Weather:
Recorder:

Comments: LOS AM:D PM:F (no pedestrians)

PEAK HOURS	AM PERIOD 6:00AM-12:00PM	Begin 07:15	End 08:15	Volume 3294	PM PERIOD 12:00PM-7:00PM	Begin 17:00	End 18:00	Volume 4114

Hour	MD 4 From North				MD 4 From South				MD 2 From East				Church Driveway From West				Grand Total
Begin	L	T	R	TOT	L	T	R	TOT	L	T	R	TOT	L	T	R	TOT	
6:00	10	65	0	75	0	426	70	496	58	0	8	66	0	0	0	0	637
6:15	9	78	0	87	0	466	95	561	48	0	9	57	0	0	0	0	705
6:30	10	88	0	98	0	426	91	517	73	0	17	90	0	0	0	0	705
6:45	14	118	0	132	0	469	89	558	98	0	12	110	0	0	0	0	800
7:00	16	137	0	153	0	374	115	489	101	0	20	121	0	0	0	0	763
7:15	24	143	0	167	0	415	114	529	96	0	16	112	0	0	0	0	808
7:30	10	186	0	196	0	409	144	553	76	0	12	88	0	0	1	1	838
7:45	16	177	0	193	0	401	116	517	132	0	20	152	0	0	1	1	863
8:00	20	166	0	186	0	343	133	476	108	0	15	123	0	0	0	0	785
8:15	21	159	0	180	0	327	82	409	92	0	16	108	0	0	0	0	697
8:30	22	170	0	192	0	253	104	357	105	0	12	117	0	0	0	0	666
8:45	47	162	0	209	0	299	101	400	112	0	26	138	0	0	0	0	747
9:00	21	177	0	198	0	238	94	332	98	0	38	136	0	0	0	0	666
9:15	21	175	0	196	0	222	93	315	58	0	22	80	0	0	0	0	591
9:30	12	168	0	180	0	224	90	314	100	0	12	112	0	0	2	2	608
9:45	16	139	0	155	0	201	81	282	83	0	10	93	0	0	1	1	531
10:00	13	152	0	165	0	189	79	268	81	0	16	97	0	0	0	0	530
10:15	15	134	0	149	0	152	104	256	58	0	10	68	0	0	1	1	474
10:30	18	164	0	182	0	176	103	279	78	0	8	86	0	0	1	1	548
10:45	19	146	0	165	0	160	86	246	80	0	10	90	0	0	0	0	501
11:00	16	149	0	165	0	195	67	262	75	0	13	88	0	0	0	0	515
11:15	13	146	0	159	0	144	91	235	79	0	10	89	0	0	0	0	483
11:30	15	132	0	147	0	172	85	257	85	0	15	100	0	0	0	0	504
11:45	20	163	0	183	0	170	86	256	68	0	13	81	0	0	0	0	520
12:00	15	162	0	177	0	165	98	263	93	0	17	110	0	0	0	0	550
12:15	24	160	0	184	0	156	94	250	79	0	13	92	0	0	0	0	526
12:30	20	177	0	197	0	172	82	254	84	0	11	95	0	0	0	0	546
12:45	20	181	0	201	0	162	97	259	82	0	18	100	0	0	0	0	560
13:00	15	215	0	230	0	156	101	257	83	0	20	103	0	0	0	0	590
13:15	26	176	0	202	0	187	95	282	67	0	17	84	0	0	3	3	571
13:30	23	190	0	213	0	193	81	274	91	0	22	113	0	0	1	1	601
13:45	21	214	0	235	0	182	80	262	72	0	24	96	0	0	2	2	595
14:00	18	215	0	233	0	161	82	243	74	0	14	88	0	0	0	0	564
14:15	22	253	0	275	0	204	95	299	76	0	22	98	0	0	1	1	673
14:30	25	255	0	280	0	237	106	343	105	0	17	122	0	0	1	1	746
14:45	26	260	0	286	0	156	128	284	109	0	10	119	0	0	0	0	689
15:00	23	294	0	317	0	185	121	306	90	0	21	111	0	0	0	0	734
15:15	19	371	0	390	0	189	115	304	121	0	15	136	0	0	0	0	830
15:30	31	341	0	372	0	180	102	282	118	0	14	132	0	0	0	0	786
15:45	26	419	0	445	0	199	101	300	146	0	41	187	0	0	0	0	932
16:00	21	400	0	421	0	193	128	321	117	0	25	142	0	0	0	0	884
16:15	24	438	0	462	0	214	124	338	130	0	19	149	0	0	1	1	950
16:30	31	440	0	471	0	162	145	307	137	0	22	159	0	0	2	2	939
16:45	34	464	0	498	0	208	137	345	147	0	20	167	0	0	0	0	1010
17:00	41	529	0	570	0	172	132	304	162	0	32	194	0	0	0	0	1068
17:15	31	482	0	513	0	211	156	367	141	0	33	174	0	0	0	0	1054
17:30	41	414	0	455	0	173	152	325	171	0	23	194	0	0	0	0	974
17:45	43	492	0	535	0	177	122	299	143	0	41	184	0	0	0	0	1018
18:00	45	428	0	473	0	145	106	251	130	0	30	160	0	0	1	1	885
18:15	54	327	0	381	0	156	114	270	132	0	37	169	0	0	0	0	820
18:30	36	358	0	394	0	103	116	219	128	0	19	147	0	0	1	1	761
18:45	27	320	0	347	0	118	120	238	118	0	17	135	0	0	1	1	721
TOTAL	1200	12469	0	13669	0	11767	5443	17210	5188	0	974	6162	0	0	21	21	37062
AM Peak	70	672	0	742	0	1568	507	2075	412	0	63	475	0	0	2	2	3294
PM Peak	156	1917	0	2073	0	733	562	1295	617	0	129	746	0	0	0	0	4114

Station ID: S1994040002
Date: Thursday 03/25/2010
Location: MD 2 at MD 4 (Sunderland)
Interval (dd): 15 min

County: Calvert
Town: none
Weather:
Recorder:

Comments: LOS AM:D PM:F (no pedestrians)

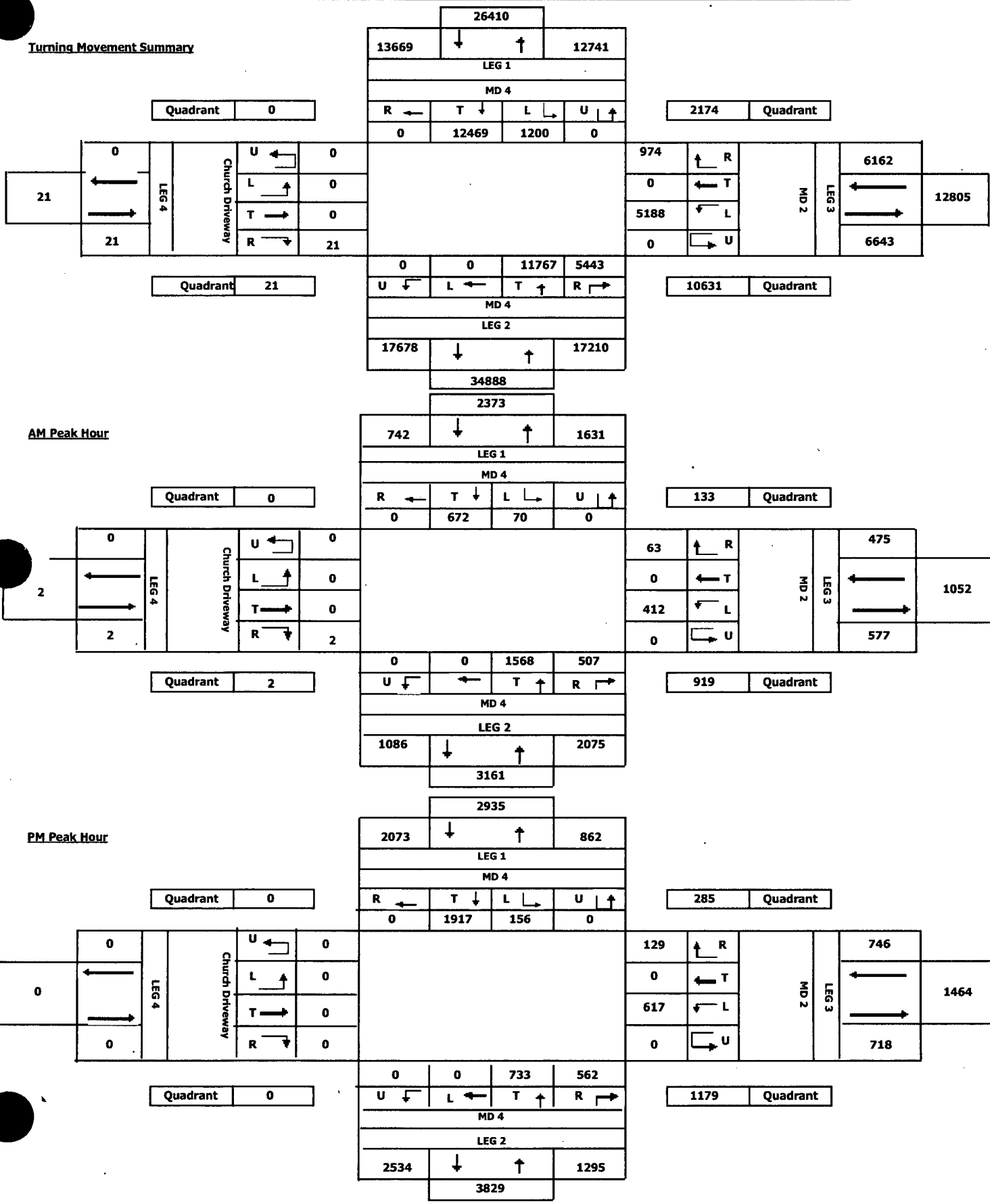
PEAK HOURS	AM PERIOD 6:00AM-12:00PM	Begin	End	Volume	PM PERIOD 12:00PM-7:00PM	Begin	End	Volume
		07:15	08:15	3294		17:00	18:00	4114

Hour	MD 4 North Leg			MD 4 South Leg			MD 2 East Leg			Church Driveway West Leg		
Ending	S.C.	PED.	U.T.	S.C.	PED.	U.T.	S.C.	PED.	U.T.	S.C.	PED.	U.T.
6:00	0	0	4	0	0	0	0	0	0	0	0	0
6:15	0	0	2	0	0	0	0	0	0	0	0	0
6:30	0	0	0	0	0	0	0	0	0	0	0	0
6:45	0	0	0	0	0	0	0	0	0	0	0	0
7:00	0	0	1	0	0	0	0	0	0	0	0	0
7:15	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
7:30	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
7:45	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:00	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:15	0	0	1	0	0	0	0	0	0	0	0	0
8:30	0	0	0	0	0	0	0	0	0	0	0	0
8:45	0	0	0	0	0	0	0	0	0	0	0	0
9:00	0	0	2	0	0	0	0	0	0	0	0	0
9:15	0	0	8	0	0	0	0	0	0	0	0	0
9:30	0	0	4	0	0	0	0	0	0	0	0	0
9:45	0	0	0	0	0	0	0	0	0	0	0	0
10:00	0	0	0	0	0	0	0	0	0	0	0	0
10:15	0	0	1	0	0	0	0	0	0	0	0	0
10:30	0	0	1	0	0	0	0	0	0	0	0	0
10:45	0	0	3	0	0	0	0	0	0	0	0	0
11:00	0	0	1	0	0	0	0	0	0	0	0	0
11:15	0	0	0	0	0	0	0	0	0	0	0	0
11:30	0	0	0	0	0	0	0	0	0	0	0	0
11:45	0	0	0	0	0	0	0	0	0	0	0	0
12:00	0	0	0	0	0	0	0	0	0	0	0	0
12:15	0	0	5	0	0	0	0	0	0	0	0	0
12:30	0	0	0	0	0	0	0	0	0	0	0	0
12:45	0	0	1	0	0	0	0	0	0	0	0	0
13:00	0	0	3	0	0	0	0	0	0	0	0	0
13:15	0	0	1	0	0	0	0	0	0	0	0	0
13:30	0	0	1	0	0	0	0	0	0	0	0	0
13:45	0	0	1	0	0	0	0	0	0	0	0	0
14:00	0	0	3	0	0	0	0	0	0	0	0	0
14:15	0	0	3	0	0	0	0	0	0	0	0	0
14:30	0	0	1	0	0	0	0	0	0	0	0	0
14:45	0	0	2	0	0	0	0	0	0	0	0	0
15:00	0	0	1	0	0	0	0	0	0	0	0	0
15:15	0	0	0	0	0	0	0	0	0	0	0	0
15:30	0	0	0	0	0	0	0	0	0	0	0	0
15:45	0	0	1	0	0	0	0	0	0	0	0	0
16:00	0	0	0	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0	0	0	0
16:45	0	0	2	0	0	0	0	0	0	0	0	0
17:00	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
17:15	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
17:30	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
17:45	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
18:00	0	0	3	0	0	0	0	0	0	0	0	0
18:15	0	0	1	0	0	0	0	0	0	0	0	0
18:30	0	0	1	0	0	0	0	0	0	0	0	0
18:45	0	0	1	0	0	0	0	0	0	0	0	0
Total	**0**	**0**	**66**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
AM Peak	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
PM Peak	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Station ID:	S1994040002	**County:**	Calvert	**Comments:**	LOS AM:D PM:F (no pedestrians)
Date:	Thursday 03/25/2010	**Town:**	none		
Location:	MD 2 at MD 4 (Sunderland)	**Weather:**			
		Recorder:			
Interval (dd):	15 min				

PEAK HOURS	AM PERIOD 6:00AM-12:00PM	Begin	End	Volume	PM PERIOD 12:00PM-7:00PM	Begin	End	Volume
		07:15	08:15	3294		17:00	18:00	4114

Turning Movement Summary



Maryland State Highway Administration
Highway Information Services Division
Turning Movement Count Study - Field Sheet

Station ID: S2000040013
Date: Wednesday 03/11/2009
Location: MD 2 at MD 231
ıl (dd): 15 min

County: Calvert
Town: none
Weather:
Recorder:

Comments: LOS AM:B PM:E (no pedestrians)

PEAK HOURS	AM PERIOD 6:00AM-12:00PM	Begin	End	Volume	PM PERIOD 12:00PM-7:00PM	Begin	End	Volume
		07:15	08:15	3452		16:15	17:15	4177

Hour	MD 2 From North				MD 2 From South				MD 231 From East				MD 231 From West				Grand Total
Begin	L	T	R	TOT	L	T	R	TOT	L	T	R	TOT	L	T	R	TOT	
6:00	1	104	59	164	43	299	16	358	2	9	1	12	42	3	5	50	584
6:15	3	104	54	161	61	300	35	396	3	11	0	14	41	8	16	65	636
6:30	4	85	45	134	59	314	48	421	6	18	0	24	85	15	18	118	697
6:45	5	136	62	203	67	346	17	430	8	8	0	16	92	12	23	127	776
7:00	3	148	67	218	58	349	23	430	12	14	0	26	92	22	15	129	803
7:15	14	214	93	321	78	369	28	475	9	25	4	38	92	24	29	145	979
7:30	14	151	106	271	63	284	14	361	19	15	1	35	86	16	29	131	798
7:45	12	171	80	263	59	367	14	440	9	18	1	28	74	36	17	127	858
8:00	22	136	89	247	68	302	19	389	17	13	5	35	81	28	37	146	817
8:15	13	149	94	256	65	291	24	380	7	25	3	35	60	27	38	125	796
8:30	16	126	54	196	63	278	20	361	12	12	1	25	63	26	35	124	706
8:45	14	120	64	198	67	249	20	336	9	21	9	39	70	29	51	150	723
9:00	9	142	56	207	62	243	15	320	16	19	7	42	71	27	29	127	696
9:15	21	144	63	228	42	192	20	254	5	22	8	35	70	18	33	121	638
9:30	15	161	64	240	58	228	14	300	12	17	6	35	43	10	39	92	667
9:45	21	142	64	227	61	192	5	258	17	12	9	38	79	26	29	134	657
10:00	15	173	47	235	53	212	16	281	21	25	5	51	51	19	25	95	662
10:15	22	119	44	185	47	194	4	245	8	15	3	26	53	19	21	93	549
10:30	6	152	67	225	35	207	13	255	11	20	6	37	53	17	30	100	617
10:45	18	179	74	271	55	189	8	252	16	16	12	44	56	19	39	114	681
11:00	13	173	68	254	41	196	13	250	7	17	7	31	64	15	24	103	638
11:15	20	155	82	257	58	185	10	253	16	19	3	38	77	15	34	126	674
:30	17	152	66	235	32	181	10	223	10	19	6	35	69	17	34	120	613
11:45	20	160	60	240	40	204	15	259	18	37	8	63	77	17	24	118	680
12:00	22	184	81	287	41	198	12	251	17	27	10	54	66	17	41	124	716
12:15	20	156	72	248	38	187	15	240	16	19	7	42	85	22	31	138	668
12:30	24	171	66	261	54	205	9	268	10	13	6	29	61	19	48	128	686
12:45	24	147	65	236	44	172	8	224	13	20	8	41	88	21	45	154	655
13:00	24	225	60	309	41	181	7	229	12	21	8	41	73	16	44	133	712
13:15	26	161	64	251	30	191	10	231	13	22	10	45	62	22	33	117	644
13:30	15	200	54	269	43	204	11	258	21	21	7	49	58	18	36	112	688
13:45	18	185	89	292	40	197	11	248	16	28	4	48	71	21	35	127	715
14:00	29	220	74	323	49	206	16	271	13	19	9	41	72	21	43	136	771
14:15	24	217	78	319	54	175	17	246	13	29	3	45	83	27	51	161	771
14:30	26	259	76	361	55	182	18	255	26	31	4	61	68	22	42	132	809
14:45	32	212	83	327	38	185	12	235	22	33	5	60	64	29	44	137	759
15:00	14	274	67	355	37	176	8	221	20	20	3	43	93	25	51	169	788
15:15	25	261	87	373	44	224	13	281	20	24	6	50	80	20	69	169	873
15:30	31	316	100	447	57	173	16	246	22	24	7	53	80	20	92	192	938
15:45	13	367	104	484	51	199	14	264	27	30	2	59	120	25	86	231	1038
16:00	12	332	102	446	36	153	15	204	26	26	6	58	87	32	96	215	923
16:15	16	374	73	463	37	268	19	324	32	25	2	59	94	31	93	218	1064
16:30	8	413	72	493	49	250	15	314	37	26	6	69	91	22	82	195	1071
16:45	12	377	68	457	55	278	15	348	30	27	6	63	102	20	86	208	1076
17:00	17	348	72	437	62	203	13	278	28	39	6	73	67	22	89	178	966
17:15	21	308	72	401	58	231	23	312	26	35	3	64	76	32	79	187	964
17:30	8	302	49	359	51	206	14	271	38	19	7	64	71	27	78	176	870
17:45	14	343	53	410	50	205	22	277	23	20	14	57	76	21	65	162	906
18:00	15	327	100	442	32	223	5	260	25	15	4	44	77	29	68	174	920
18:15	11	312	66	389	34	197	16	247	16	22	2	40	72	25	60	157	833
30	18	303	84	405	32	182	18	232	17	16	11	44	71	25	54	150	831
:45	14	292	66	372	44	180	24	248	38	20	6	64	72	25	51	148	832
TOTAL	**851**	**11082**	**3719**	**15652**	**2591**	**11802**	**817**	**15210**	**887**	**1098**	**277**	**2262**	**3821**	**1121**	**2366**	**7308**	**40432**
AM Peak	**62**	**672**	**368**	**1102**	**268**	**1322**	**75**	**1665**	**54**	**71**	**11**	**136**	**333**	**104**	**112**	**549**	**3452**
PM Peak	**53**	**1512**	**285**	**1850**	**203**	**999**	**62**	**1264**	**127**	**117**	**20**	**264**	**354**	**95**	**350**	**799**	**4177**

Station ID: S2000040013 **County:** Calvert **Comments:** LOS AM:B PM:E (no pedestrians)

Date: Wednesday 03/11/2009 **Town:** none

Location: MD 2 at MD 231 **Weather:**

Recorder:

Interval (dd): 15 min

PEAK HOURS	AM PERIOD 6:00AM-12:00PM	Begin	End	Volume	PM PERIOD 12:00PM-7:00PM	Begin	End	Volume
		07:15	08:15	3452		16:15	17:15	4177

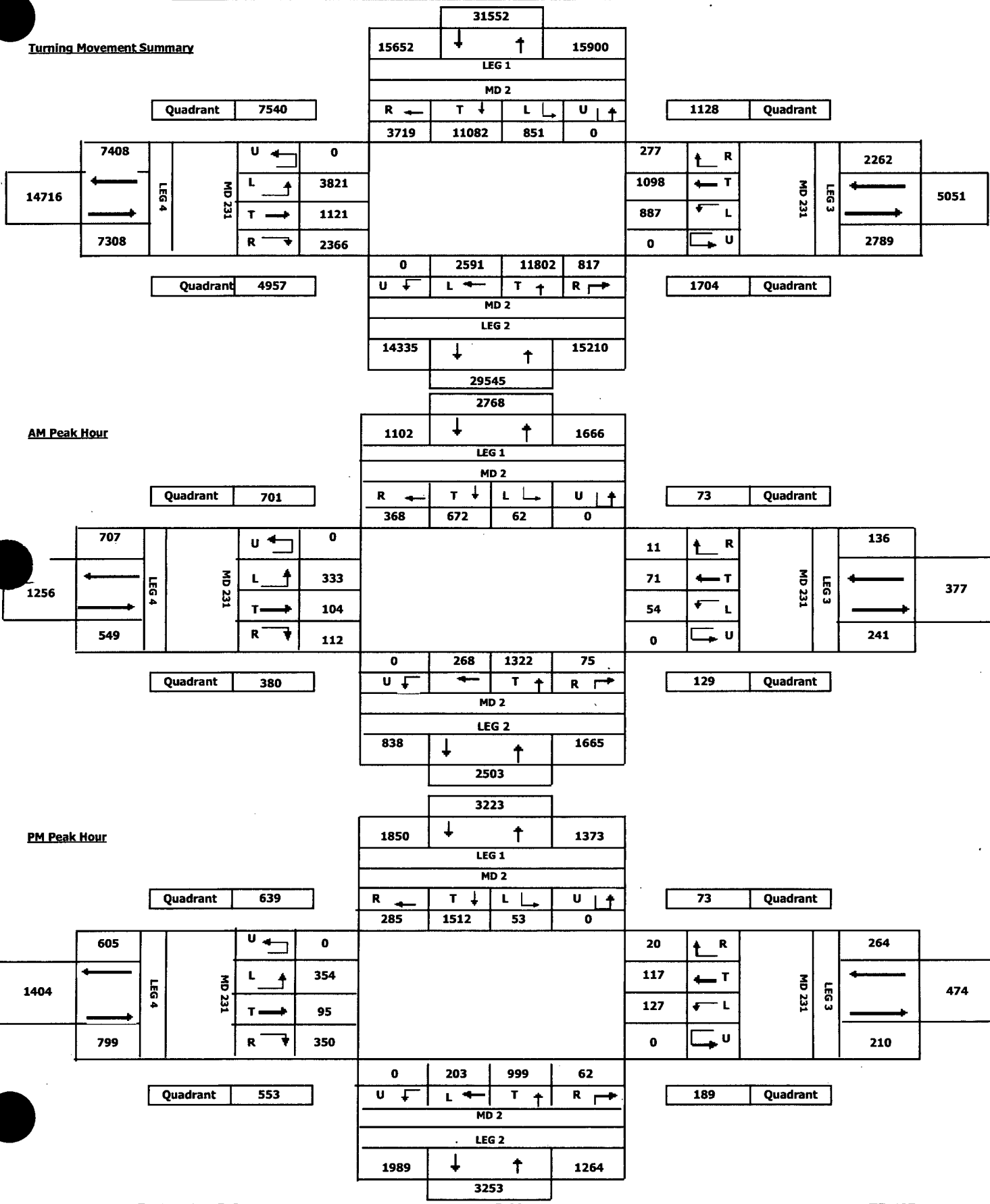
Hour	MD 2 North Leg			MD 2 South Leg			MD 231 East Leg			MD 231 West Leg		
Ending	S.C.	PED.	U.T.	S.C.	PED.	U.T.	S.C.	PED.	U.T.	S.C.	PED.	U.T.
6:00	0	0	3	0	0	0	0	0	0	0	0	0
6:15	0	0	1	0	0	0	0	0	0	0	0	0
6:30	0	0	1	0	0	0	0	0	0	0	0	0
6:45	0	0	3	0	0	0	0	0	0	0	0	0
7:00	0	0	3	0	0	0	0	0	0	0	0	0
7:15	**0**	**0**	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
7:30	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
7:45	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:00	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:15	0	0	6	0	0	0	0	0	0	0	0	0
8:30	0	0	6	0	0	0	0	0	0	0	0	0
8:45	0	0	6	0	0	0	0	0	0	0	0	0
9:00	0	0	6	0	0	0	0	0	0	0	0	0
9:15	0	0	18	0	0	0	0	0	0	0	0	0
9:30	0	0	15	0	0	0	0	0	0	0	0	0
9:45	0	0	15	0	0	0	0	0	0	0	0	0
10:00	0	0	17	0	0	3	0	0	0	0	0	0
10:15	0	0	20	0	0	0	0	0	0	0	0	0
10:30	0	0	18	0	0	0	0	0	0	0	0	0
10:45	0	0	28	0	0	0	0	0	0	0	0	0
11:00	0	0	25	0	0	0	0	0	0	0	0	0
11:15	0	0	28	0	0	2	0	0	0	0	0	0
11:30	0	0	30	0	0	0	0	0	0	0	0	0
11:45	0	0	27	0	0	0	0	0	0	0	0	0
12:00	0	0	31	0	0	0	0	0	0	0	0	0
12:15	0	0	25	0	0	1	0	0	0	0	0	0
12:30	0	0	39	0	0	0	0	0	0	0	0	0
12:45	0	0	33	0	0	1	0	0	0	0	0	0
13:00	0	0	20	0	0	0	0	0	0	0	0	0
13:15	0	0	24	0	0	0	0	0	0	0	0	0
13:30	0	0	28	0	0	0	0	0	0	0	0	0
13:45	0	0	31	0	0	0	0	0	0	0	0	0
14:00	0	0	26	0	0	1	0	0	0	0	0	0
14:15	0	0	27	0	0	0	0	0	0	0	0	0
14:30	0	0	34	0	0	0	0	0	0	0	0	0
14:45	0	0	16	0	0	0	0	0	0	0	0	0
15:00	0	0	29	0	0	0	0	0	0	0	0	0
15:15	0	0	20	0	0	1	0	0	0	0	0	0
15:30	0	0	21	0	0	0	0	0	0	0	0	0
15:45	0	0	10	0	0	0	0	0	0	0	0	0
16:00	0	0	18	0	0	0	0	0	0	0	0	0
16:15	**0**	**0**	**8**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**
16:30	**0**	**0**	**16**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
16:45	**0**	**0**	**20**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
17:00	**0**	**0**	**21**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
17:15	0	0	12	0	0	0	0	0	0	0	0	0
17:30	0	0	10	0	0	0	0	0	0	0	0	0
17:45	0	0	15	0	0	1	0	0	0	0	0	0
18:00	0	0	25	0	0	0	0	0	0	0	0	0
18:15	0	0	14	0	0	0	0	0	0	0	0	0
18:30	0	0	25	0	0	0	0	0	0	0	0	0
18:45	0	0	18	0	0	0	0	0	0	0	0	0
otal	**0**	**0**	**907**	**0**	**0**	**11**	**0**	**0**	**0**	**0**	**0**	**0**
AM Peak	**0**	**0**	**15**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
PM Peak	**0**	**0**	**65**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**

Station ID:	S2000040013	**County:**	Calvert
Date:	Wednesday 03/11/2009	**Town:**	none
Location:	MD 2 at MD 231	**Weather:**	
		Recorder:	
Interval (dd):	15 min		

Comments: LOS AM:B PM:E (no pedestrians)

PEAK HOURS	AM PERIOD 6:00AM-12:00PM	Begin	End	Volume	PM PERIOD 12:00PM-7:00PM	Begin	End	Volume
		07:15	08:15	3452		16:15	17:15	4177

Turning Movement Summary



AM Peak Hour

PM Peak Hour

Maryland State Highway Administration
Highway Information Services Division
Turning Movement Count Study - Field Sheet

Station ID: S2010040002
Date: Thursday 02/18/2010
Location: MD 2 at MD 2P (White Sands Dr)/MD 2AF (Nur
al (dd): 15 min

County: Calvert
Town: none
Weather:
Recorder:

Comments: LOS AM:A PM:A (no pedestrians)

PEAK HOURS	AM PERIOD 6:00AM-12:00PM	Begin	End	Volume	PM PERIOD 12:00PM-7:00PM	Begin	End	Volume
		06:30	07:30	2181		16:15	17:15	2549

Hour	MD 2 From North				MD 2 From South				Nursery Road From East				White Sands Drive From West				Grand Total
Begin	L	T	R	TOT	L	T	R	TOT	L	T	R	TOT	L	T	R	TOT	
6:00	0	154	1	155	2	246	0	248	0	0	0	0	24	0	15	39	442
6:15	0	150	4	154	5	299	0	304	0	0	0	0	32	0	6	38	496
6:30	0	178	4	182	2	310	0	312	0	0	1	1	32	0	19	51	546
6:45	0	195	2	197	5	298	0	303	0	0	1	1	46	0	8	54	555
7:00	0	186	5	191	5	286	0	291	0	0	0	0	35	0	18	53	535
7:15	0	220	9	229	5	268	0	273	0	0	2	2	24	0	17	41	545
7:30	0	218	9	227	11	248	0	259	0	0	1	1	18	0	17	35	522
7:45	0	219	8	227	7	247	0	254	0	0	2	2	22	0	23	45	528
8:00	0	184	5	189	11	271	0	282	0	0	1	1	26	0	15	41	513
8:15	0	181	7	188	6	251	0	257	0	0	1	1	29	0	19	48	494
8:30	0	147	6	153	8	242	1	251	0	0	5	5	30	0	21	51	460
8:45	0	151	10	161	4	220	0	224	0	0	1	1	28	0	24	52	438
9:00	0	141	8	149	7	163	0	170	0	0	1	1	13	0	10	23	343
9:15	0	146	12	158	6	146	0	152	0	0	2	2	16	0	9	25	337
9:30	0	132	7	139	12	165	0	177	0	0	2	2	8	0	9	17	335
9:45	0	147	4	151	6	180	0	186	0	0	0	0	6	0	13	19	356
10:00	0	131	11	142	3	151	0	154	0	0	1	1	10	0	13	23	320
10:15	0	128	7	135	12	167	0	179	0	0	0	0	13	0	9	22	336
10:30	0	142	8	150	11	151	0	162	0	0	0	0	11	0	8	19	331
10:45	0	134	6	140	9	153	0	162	0	0	0	0	9	0	14	23	325
11:00	0	144	12	156	10	126	0	136	0	0	3	3	7	0	11	18	313
11:15	0	137	9	146	7	145	0	152	0	0	1	1	8	0	19	27	326
:30	0	137	17	154	9	175	0	184	0	0	1	1	5	0	6	11	350
11:45	0	154	8	162	12	153	0	165	0	0	2	2	9	0	11	20	349
12:00	0	162	10	172	12	141	1	154	0	0	3	3	11	0	8	19	348
12:15	0	165	11	176	8	152	0	160	0	0	2	2	4	0	10	14	352
12:30	0	138	5	143	21	169	2	192	0	0	0	0	7	0	13	20	355
12:45	0	125	18	143	5	132	3	140	0	0	1	1	10	0	6	16	300
13:00	0	138	10	148	2	128	1	131	0	0	1	1	13	0	11	24	304
13:15	0	145	15	160	10	137	0	147	0	0	0	0	11	0	7	18	325
13:30	0	150	14	164	13	159	0	172	0	0	0	0	12	0	15	27	363
13:45	0	165	17	182	17	168	1	186	0	0	0	0	9	0	10	19	387
14:00	0	177	9	186	17	144	0	161	0	0	1	1	16	0	8	24	372
14:15	0	193	18	211	14	173	0	187	0	0	0	0	7	0	11	18	416
14:30	0	246	17	263	25	179	1	205	0	0	0	0	8	0	9	17	485
14:45	0	239	21	260	15	172	0	187	0	0	1	1	10	0	12	22	470
15:00	0	256	27	283	10	165	1	176	0	0	0	0	9	0	19	28	487
15:15	0	241	22	263	26	178	1	205	0	0	3	3	13	0	12	25	496
15:30	0	257	25	282	18	169	1	188	0	0	0	0	23	0	18	41	511
15:45	0	290	34	324	25	192	0	217	0	0	0	0	10	0	12	22	563
16:00	0	307	20	327	25	202	1	228	0	0	2	2	13	0	5	18	575
16:15	0	328	31	359	24	232	1	257	0	0	1	1	23	0	18	41	658
16:30	0	330	16	346	20	236	0	256	0	0	1	1	20	0	13	33	636
16:45	0	331	19	350	18	255	0	273	0	0	0	0	16	0	17	33	656
17:00	0	290	20	310	24	229	0	253	0	0	2	2	23	0	11	34	599
17:15	0	319	33	352	24	238	0	262	0	0	1	1	12	0	18	30	645
17:30	0	321	30	351	24	222	0	246	0	0	2	2	20	0	21	41	640
17:45	0	298	24	322	27	215	0	242	0	0	2	2	13	0	17	30	596
18:00	0	264	36	300	25	214	1	240	0	0	0	0	19	0	19	38	578
18:15	0	286	35	321	18	220	0	238	0	0	0	0	8	0	13	21	580
30	0	281	29	310	15	208	1	224	0	0	1	1	19	0	15	34	569
:45	0	239	33	272	20	184	0	204	0	0	1	1	8	0	12	20	497
TOTAL	**0**	**10537**	**778**	**11315**	**677**	**10274**	**17**	**10968**	**0**	**0**	**53**	**53**	**828**	**0**	**694**	**1522**	**23858**
AM Peak	**0**	**779**	**20**	**799**	**17**	**1162**	**0**	**1179**	**0**	**0**	**4**	**4**	**137**	**0**	**62**	**199**	**2181**
PM Peak	**0**	**1279**	**86**	**1365**	**86**	**952**	**1**	**1039**	**0**	**0**	**4**	**4**	**82**	**0**	**59**	**141**	**2549**

Station ID:	S2010040002	**County:**	Calvert	**Comments:** LOS AM:A PM:A (no pedestrians)
Date:	Thursday 02/18/2010	**Town:**	none	
Location:	MD 2 at MD 2P (White Sands Dr)/MD 2AF (Nur	**Weather:**		
		Recorder:		
Interval (dd):	15 min			

PEAK HOURS	AM PERIOD 6:00AM-12:00PM	Begin	End	Volume	PM PERIOD 12:00PM-7:00PM	Begin	End	Volume
		06:30	07:30	2181		16:15	17:15	2549

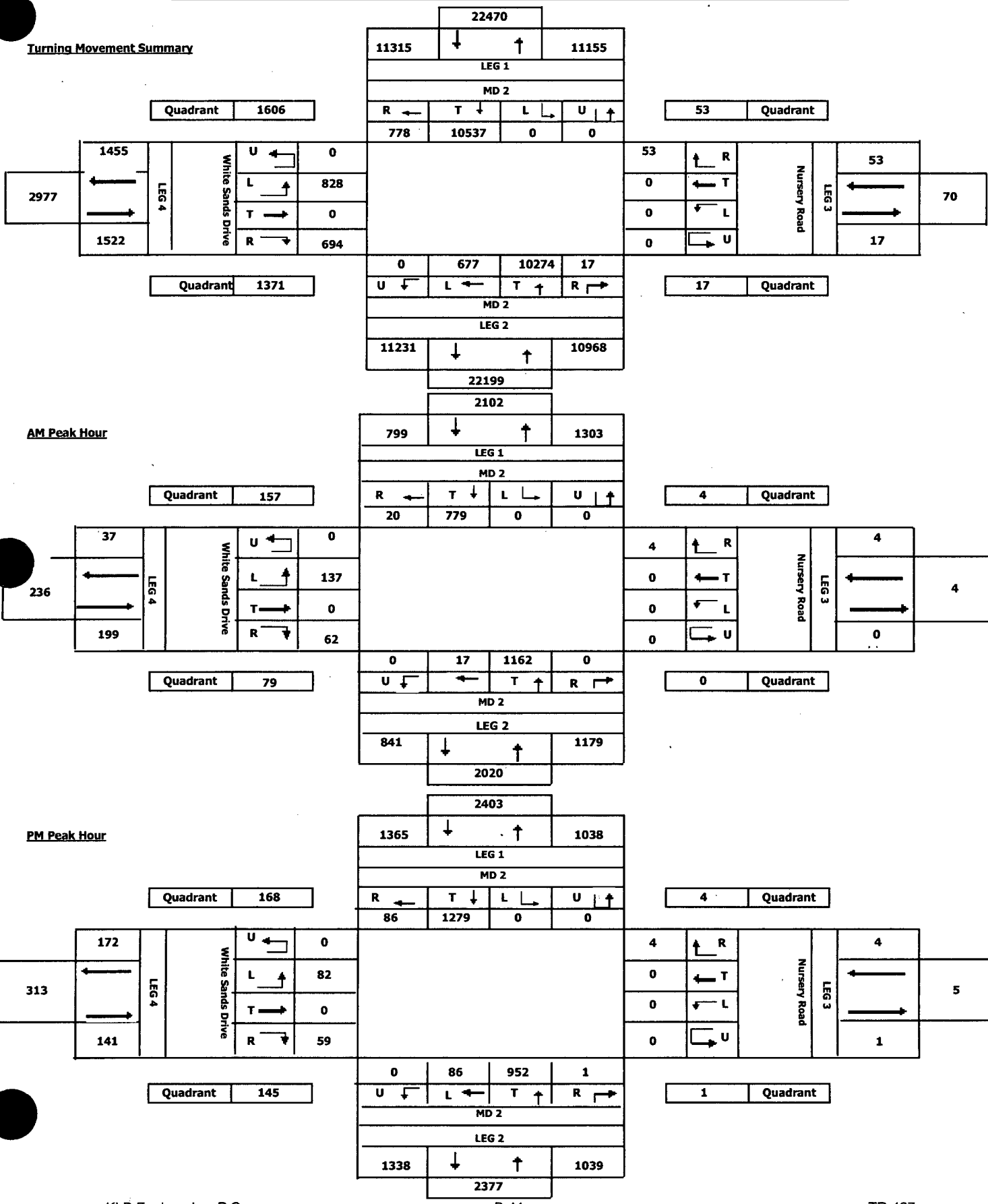
Hour	MD 2 North Leg			MD 2 South Leg			Nursery Road East Leg			White Sands Drive West Leg		
Ending	S.C.	PED.	U.T.	S.C.	PED.	U.T.	S.C.	PED.	U.T.	S.C.	PED.	U.T.
6:00	0	0	0	0	0	0	0	0	0	0	0	0
6:15	0	0	0	0	0	0	0	0	0	0	0	0
6:30	0	0	0	0	0	0	0	0	0	0	0	0
6:45	0	0	0	0	0	0	0	0	0	0	0	0
7:00	0	0	0	0	0	0	0	0	0	0	0	0
7:15	0	0	0	0	0	0	0	0	0	0	0	0
7:30	0	0	0	0	0	0	0	0	0	0	0	0
7:45	0	0	0	0	0	0	0	0	0	0	0	0
8:00	0	0	0	0	0	0	0	0	0	0	0	0
8:15	0	0	0	0	0	0	0	0	0	0	0	0
8:30	0	0	0	0	0	0	0	0	0	0	0	0
8:45	0	0	0	0	0	0	0	0	0	0	0	0
9:00	0	0	0	0	0	0	0	0	0	0	0	0
9:15	0	0	0	0	0	0	0	0	0	0	0	0
9:30	0	0	0	0	0	0	0	0	0	0	0	0
9:45	0	0	0	0	0	0	0	0	0	0	0	0
10:00	0	0	0	0	0	0	0	0	0	0	0	0
10:15	0	0	0	0	0	0	0	0	0	0	0	0
10:30	0	0	0	0	0	0	0	0	0	0	0	0
10:45	0	0	0	0	0	0	0	0	0	0	0	0
11:00	0	0	0	0	0	0	0	0	0	0	0	0
11:15	0	0	0	0	0	0	0	0	0	0	0	0
11:30	0	0	0	0	0	0	0	0	0	0	0	0
11:45	0	0	0	0	0	0	0	0	0	0	0	0
12:00	0	0	0	0	0	0	0	0	0	0	0	0
12:15	0	0	0	0	0	0	0	0	0	0	0	0
12:30	0	0	0	0	0	0	0	0	0	0	0	0
12:45	0	0	0	0	0	0	0	0	0	0	0	0
13:00	0	0	0	0	0	0	0	0	0	0	0	0
13:15	0	0	0	0	0	0	0	0	0	0	0	0
13:30	0	0	0	0	0	0	0	0	0	0	0	0
13:45	0	0	0	0	0	0	0	0	0	0	0	0
14:00	0	0	0	0	0	0	0	0	0	0	0	0
14:15	0	0	0	0	0	0	0	0	0	0	0	0
14:30	0	0	0	0	0	0	0	0	0	0	0	0
14:45	0	0	0	0	0	0	0	0	0	0	0	0
15:00	0	0	0	0	0	0	0	0	0	0	0	0
15:15	0	0	0	0	0	0	0	0	0	0	0	0
15:30	0	0	0	0	0	0	0	0	0	0	0	0
15:45	0	0	0	0	0	0	0	0	0	0	0	0
16:00	0	0	0	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0
18:00	0	0	0	0	0	0	0	0	0	0	0	0
18:15	0	0	0	0	0	0	0	0	0	0	0	0
18:30	0	0	0	0	0	0	0	0	0	0	0	0
18:45	0	0	0	0	0	0	0	0	0	0	0	0
otal	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
AM Peak	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
PM Peak	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Station ID:	S2010040002	**County:**	Calvert
Date:	Thursday 02/18/2010	**Town:**	none
Location:	MD 2 at MD 2P (White Sands Dr)/MD 2AF (Nur	**Weather:**	
		Recorder:	
Interval (dd):	15 min		

Comments: LOS AM:A PM:A (no pedestrians)

PEAK HOURS	AM PERIOD 6:00AM-12:00PM	Begin	End	Volume	PM PERIOD 12:00PM-7:00PM	Begin	End	Volume
		06:30	07:30	2181		16:15	17:15	2549

Turning Movement Summary



AM Peak Hour

PM Peak Hour

Appendix C
Existing Conditions

LOS Analysis Worksheets

This appendix contains CLV worksheets for all calculations shown in Table C-1 as well as queue calculations using SHA methodology. Figure C-1 presents the traffic volumes and turning movements at the study intersections during the AM and PM peak hours.

Table C- 1 – Intersection LOS: Existing Conditions

Intersection	*CLV*		*LOS*	
	AM	*PM*	*AM*	*PM*
MD 2 /MD 4 diverge	1344	1176	D	C
MD 231 & MD 2/MD 4	865	1098	A	B
Calvert Beach/Ball Road & MD 2/MD 4	952	1148	A	B
Calvert Cliffs Parkway & MD 2/MD 4	837	710	A	A
White Sands Drive & MD 2/MD 4	708	1080	A	B
Nursery Road & MD 2/MD 4	715	949	A	A
Pardoe Road & MD 2/MD 4	881	961	A	A
Cove Point Road & MD 2/MD 4	746	1139	A	B

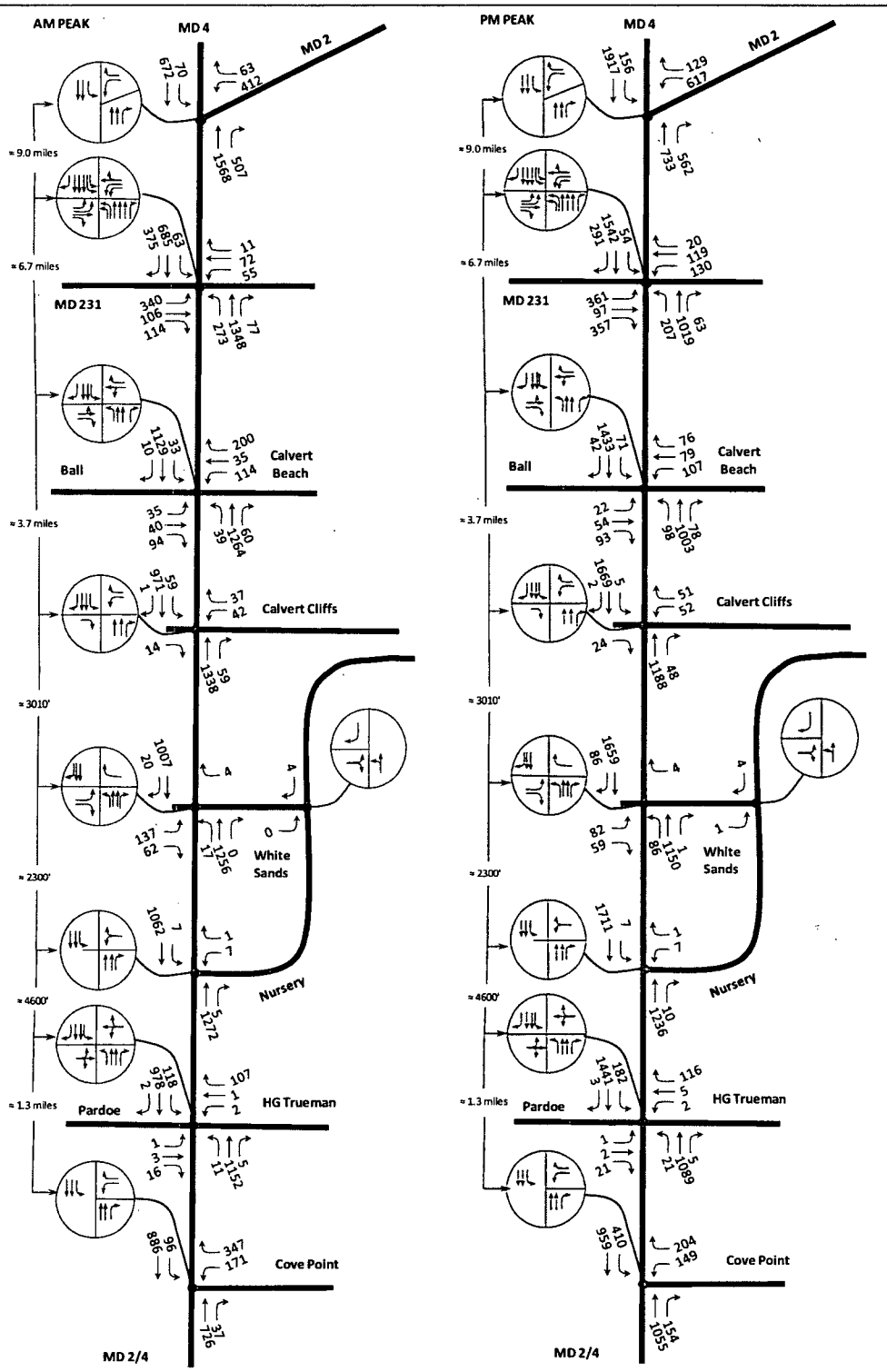
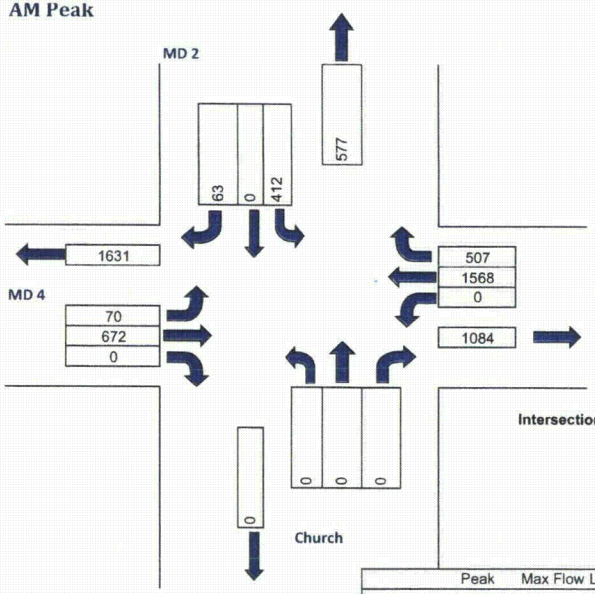
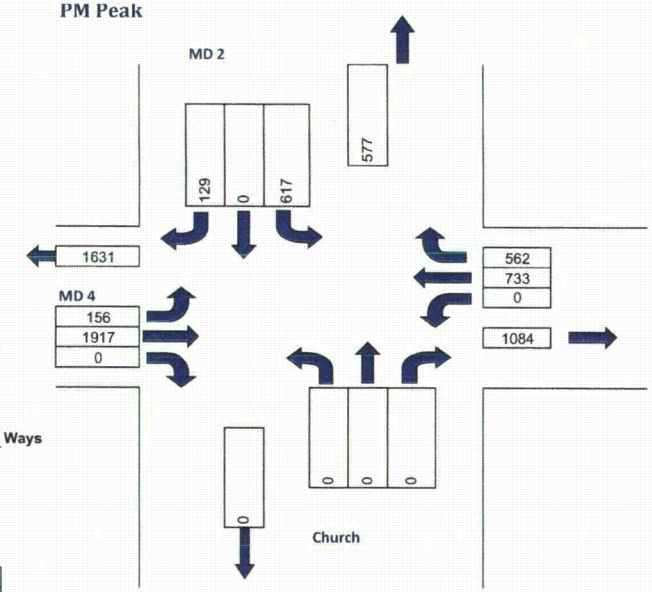


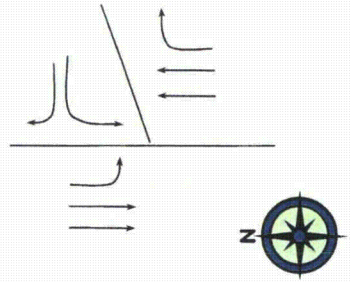
Figure C-1 – Peak Hour Traffic Volumes – Existing Conditions

AM Peak



PM Peak





Intersection Control :

_X_ Signal **_____ Stop** **_____ Ways**

MD 2/MD 4 Diverge

Existing, 2010, No Mitigation

KLD Engineering, P.C.

	Peak	Max Flow	LOS	Cycle	LUF	95th%-ti	Storage	OK
SBL	PM	156	C	120	1	182	800	Y
WBL	PM	617	C	120	1	720	450	N
NBT*	AM	1568	D	135	0.55	1132	630	N

# of Phases 3 * Storage shown applies to adjacent RT bay

Lanes	LUF	CLV	LOS	Opposing Volume	PCE
1	1	0	A		
2	0.55	1000	B	0	1.1
3	0.4	1150	C	200	2
4	0.3	1300	D	600	3
Dbl LT	0.6	1450	E	800	4
		1600	F	1000	5

	Movement	Volume (1)	LUF (2)	Lane Volume (1) X (2) = (3)	Opposing Lefts (4)	LUF (5)	Opposing CLV (4)X(5) = (6)	CLV (5)+(6)=(7)
	NBT	1,568	0.55	862	70	1	70	932
	WBL	412	1	412	0	1	0	412

Remarks:
Right turns with a dedicated lane >150 ft are excluded

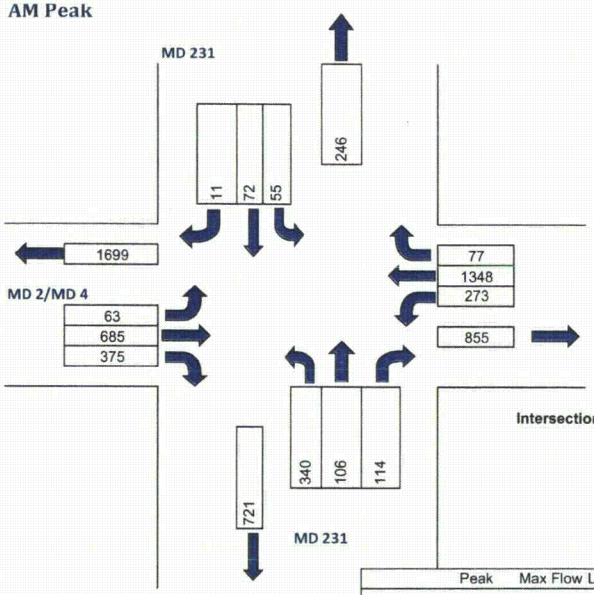
Critical Lane Volume Total 1,344
LOS D

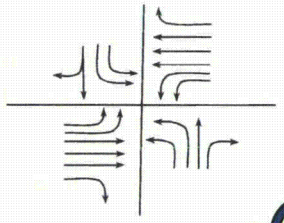
	Movement	Volume (1)	LUF (2)	Lane Volume (1) X (2) = (3)	Opposing Lefts (4)	LUF (5)	Opposing CLV (4)X(5) = (6)	CLV (5)+(6)=(7)
	NBT	733	0.55	403	156	1	156	559
	WBL	617	1	617	0	1	0	617

Remarks:
Right turns with a dedicated lane >150 ft are excluded

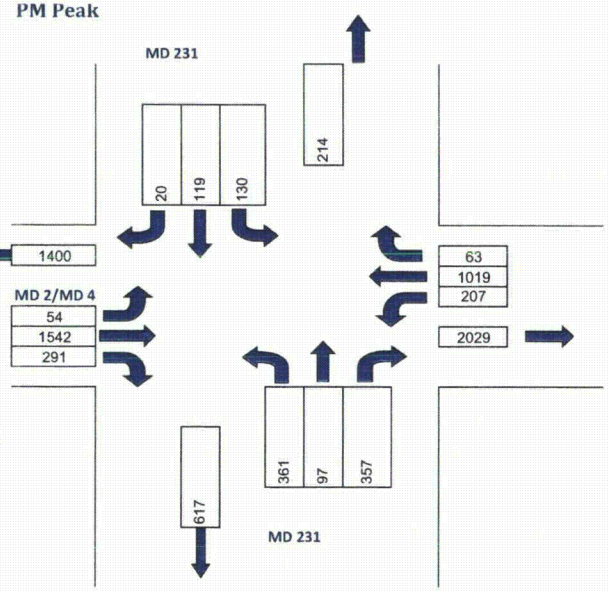
Critical Lane Volume Total 1,176
LOS C

AM Peak





PM Peak



Intersection Control :

__X__ **Signal** _____ **Stop** _____ **Ways**

MD 231 & MD 2/MD 4

Existing, 2010, No Mitigation

KLD Engineering, P.C.

	Peak	Max Flow	LOS	Cycle	LUF	95th%-ti	Storage	OK
NBL	AM	273	A	100	0.6	159	400	Y
SBL	AM	63	A	100	0.6	37	400	Y
EBL	PM	361	B	100	0.6	211	385	Y
WBL	PM	130	B	100	0.6	76	360	Y

# of Phases 5 * Storage shown applies to adjacent RT bay

Lanes	LUF	CLV	LOS	Opposing Volume	PCE
1	1	0	A		
2	0.55	1000	B	0	1.1
3	0.4	1150	C	200	2
4	0.3	1300	D	600	3
Dbl LT	0.6	1450	E	800	4
		1600	F	1000	5

	Movement	Volume (1)	LUF (2)	Lane Volume (1) X (2) = (3)	Opposing Lefts (4)	LUF (5)	Opposing CLV (4)X(5) = (6)	CLV (5)+(6)=(7)
	NBT	1,348	0.40	539	63	0.6	38	577
	SBT	685	0.40	274	273	0.6	164	438
	EBL	340	0.60	204	0	1	0	204
	WBTR	84	1	84	0	1	0	84

Remarks: Split Phase, EB & WB
Right turns with a dedicated lane >150 ft are excluded

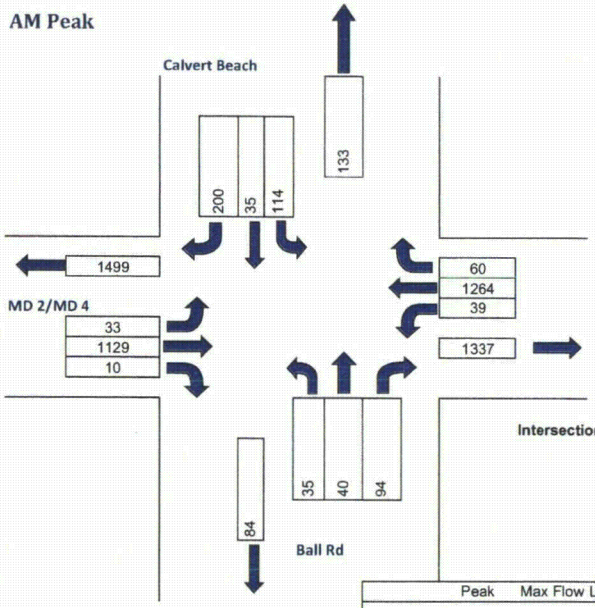
Critical Lane Volume Total 865
LOS A

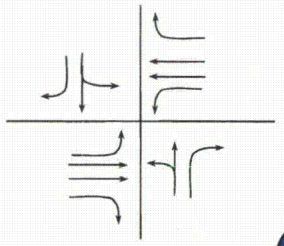
	Movement	Volume (1)	LUF (2)	Lane Volume (1) X (2) = (3)	Opposing Lefts (4)	LUF (5)	Opposing CLV (4)X(5) = (6)	CLV (5)+(6)=(7)
	NBT	1,019	0.4	408	54	0.6	32	440
	SBT	1,542	0.4	617	207	0.6	124	741
	EBL	361	0.6	217	0	1	0	217
	WBTR	140	1	140	0	1	0	140

Remarks: Split Phase, EB & WB
Right turns with a dedicated lane >150 ft are excluded

Critical Lane Volume Total 1,098
LOS B

AM Peak

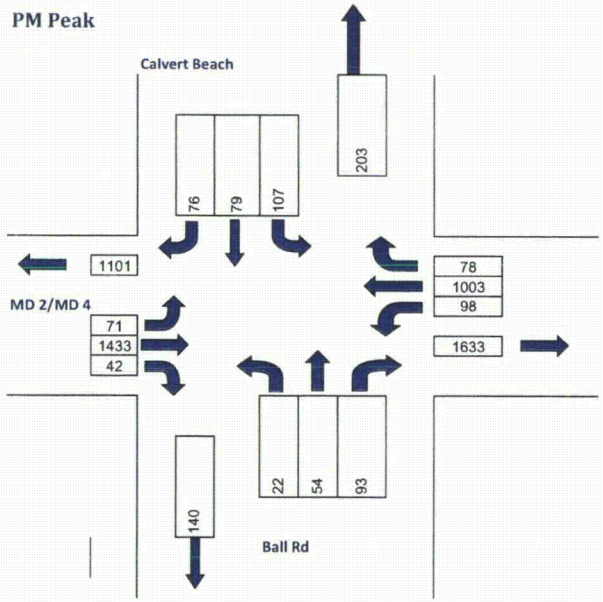




Intersection Control :

__X__ Signal _____ Stop _____ Ways

PM Peak



Calvert Beach/Ball Road &
MD 2/MD 4
Existing, 2010, No Mitigation

KLD Engineering, P.C.

	Peak	Max Flow	LOS	Cycle	LUF	95th%-ti	Storage	OK
NBL	PM	98	B	100	1	95	500	Y
SBL	PM	71	B	100	1	69	575	Y
EBTL*	PM	76	B	100	1	74	300	Y
WBTL*	PM	186	B	100	1	181	350	Y
NBT	AM	1264	A	100	0.55	676		
SBT	PM	1433	B	100	0.55	766		

# of Phases 5 * Storage shown applies to adjacent RT bypass line

Lanes	LUF	CLV	LOS	Opposing Volume	PCE
1	1	0	A		
2	0.55	1000	B	0	1.1
3	0.4	1150	C	200	2
4	0.3	1300	D	600	3
Dbl LT	0.6	1450	E	800	4
		1600	F	1000	5

	Movement	Volume (1)	LUF (2)	Lane Volume (1) X (2) = (3)	Opposing Lefts (4)	LUF (5)	Opposing CLV (4)X(5) = (6)	CLV (5)+(6)=(7)
	NBT	1,264	0.55	695	33	1	33	728
	SBT	1,129	0.55	621	39	1	39	660
	EBTL	75	1.00	75	0	1	0	75
	WBTL	149	1	149	0	1	0	149

Remarks: Split Phase, EB & WB
Right turns with a dedicated lane >150 ft are excluded

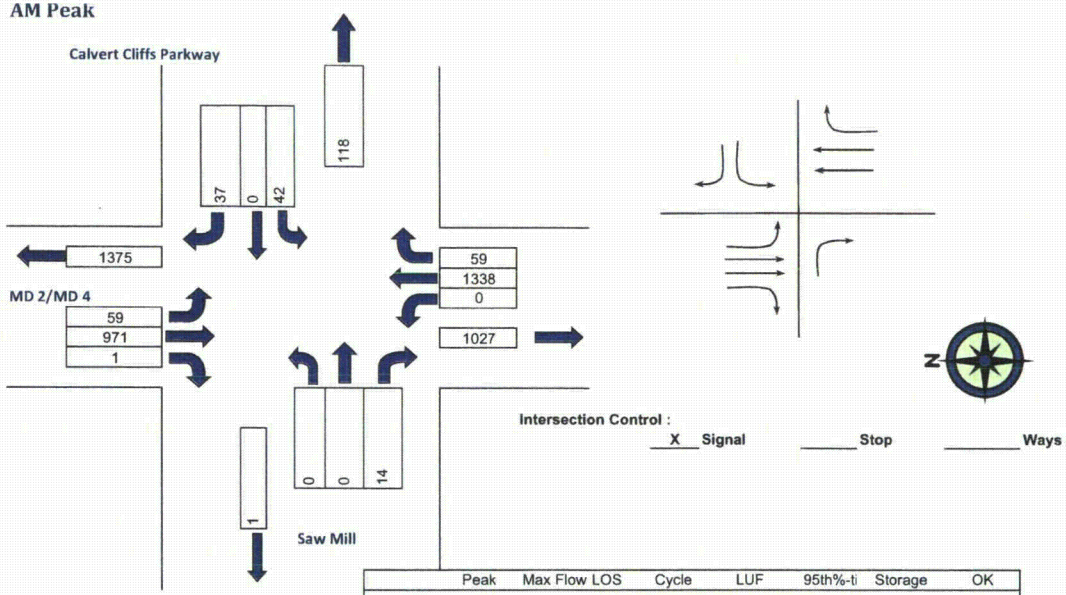
Critical Lane Volume Total 952
LOS A

	Movement	Volume (1)	LUF (2)	Lane Volume (1) X (2) = (3)	Opposing Lefts (4)	LUF (5)	Opposing CLV (4)X(5) = (6)	CLV (5)+(6)=(7)
	NBT	1,003	0.55	552	71	1	71	623
	SBT	1,433	0.55	788	98	1	98	886
	EBTL	76	1	76	0	1	0	76
	WBTL	186	1	186	0	1	0	186

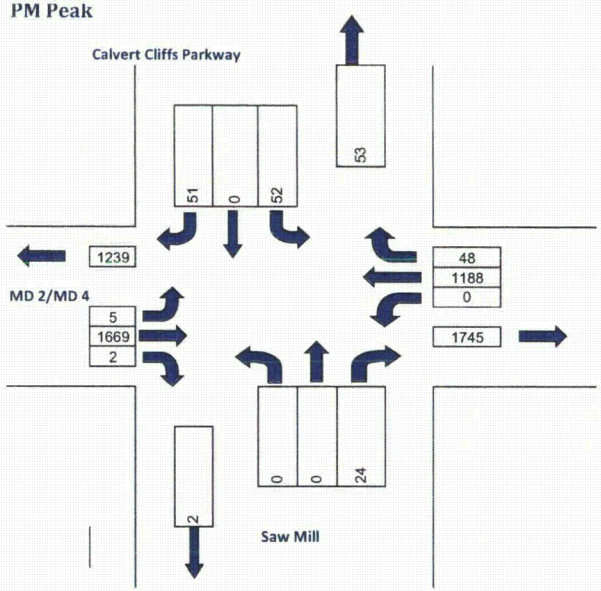
Remarks: Split Phase, EB & WB
Right turns with a dedicated lane >150 ft are excluded

Critical Lane Volume Total 1,148
LOS B

AM Peak



PM Peak



Calvert Cliffs Parkway & MD 2/MD 4

Existing, 2010, No Mitigation

KLD Engineering, P.C.

	Peak	Max Flow	LOS	Cycle	LUF	95th%-ti	Storage	OK
SBL	AM	59	A	100	1	57	600	Y
WBL	AM	52	A	100	1	51	400	Y
NBT*	AM	1338	A	100	0.55	715	2950	Y
# of Phases		3		* Storage shown applies to distance to next intersection				

Lanes	LUF	CLV	LOS	Opposing Volume	PCE
1	1	0	A		
2	0.55	1000	B	0	1.1
3	0.4	1150	C	200	2
4	0.3	1300	D	600	3
Dbl LT	0.6	1450	E	800	4
		1600	F	1000	5

	Movement	Volume (1)	LUF (2)	Lane Volume (1) X (2) = (3)	Opposing Lefts (4)	LUF (5)	Opposing CLV (4)X(5) = (6)	CLV (5)+(6)=(7)
	NBT	1,338	0.55	736	59	1	59	795
	WBL	42	1	42	0	1	0	42

Remarks:
Right turns with a dedicated lane >150 ft are excluded

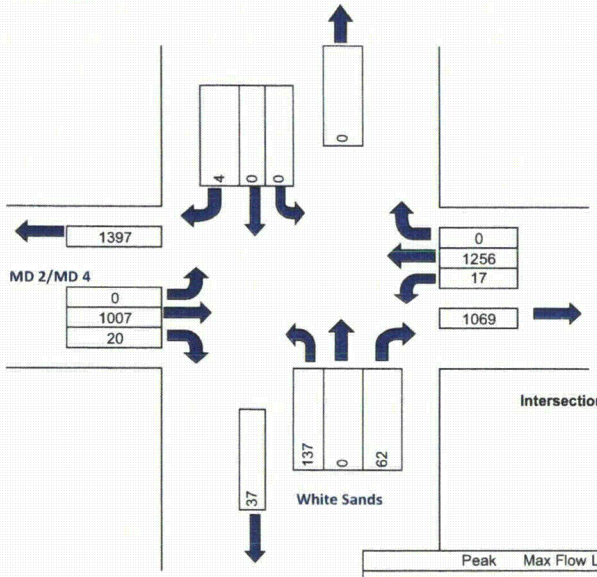
Critical Lane Volume — Total 837, LOS A

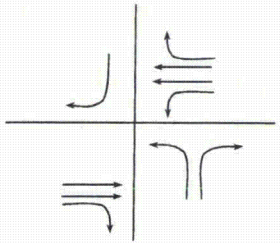
	Movement	Volume (1)	LUF (2)	Lane Volume (1) X (2) = (3)	Opposing Lefts (4)	LUF (5)	Opposing CLV (4)X(5) = (6)	CLV (5)+(6)=(7)
	NBT	1,188	0.55	653	5	1	5	658
	WBL	52	1	52	0	1	0	52

Remarks:
Right turns with a dedicated lane >150 ft are excluded

Critical Lane Volume — Total 710, LOS A

AM Peak

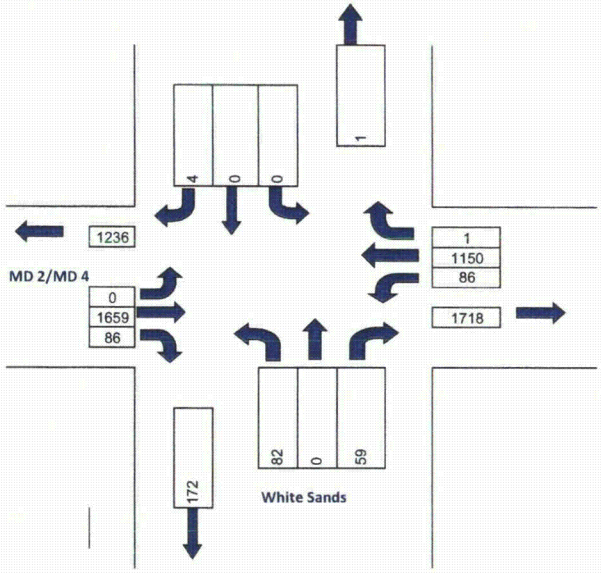




Intersection Control :

__X__ **Signal** _____ **Stop** _____ **Ways**

PM Peak



White Sands Drive & MD 2/MD 4

Existing, 2010, No Mitigation

KLD Engineering, P.C.

	Peak	Max Flow	LOS	Cycle	LUF	95th%-ti	Storage	OK
NBL	PM	86	B	100	1	84	550	Y
EBTL*	AM	137	A	100	1	133	80	N
SBT*	PM	1659	B	100	0.55	887	500	N
# of Phases		3		* Storage shown applies to adjacent RT bypass line				

Lanes	LUF	CLV	LOS	Opposing Volume	PCE
1	1	0	A		
2	0.55	1000	B	0	1.1
3	0.4	1150	C	200	2
4	0.3	1300	D	600	3
Dbl LT	0.6	1450	E	800	4
		1600	F	1000	5

	Movement	Volume (1)	LUF (2)	Lane Volume (1) X (2) = (3)	Opposing Lefts (4)	LUF (5)	Opposing CLV (4)X(5) = (6)	CLV (5)+(6)=(7)
	SBT	1,007	0.55	554	17	1	17	571
	EBTL	137	1.00	137	0	1	0	137

Remarks:
Right turns with a dedicated lane >150 ft are excluded

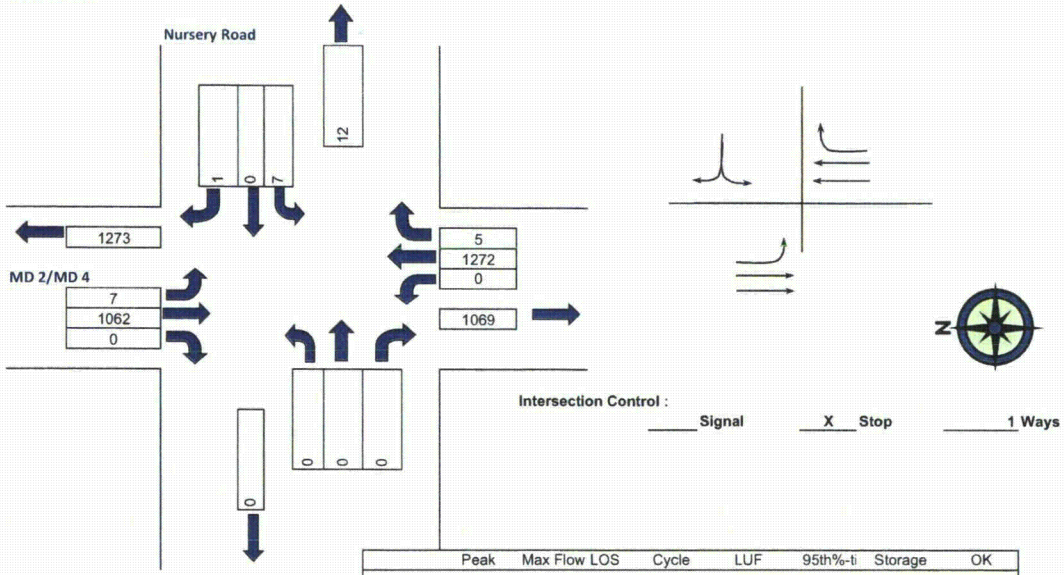
Critical Lane Volume — Total 708 — LOS A

	Movement	Volume (1)	LUF (2)	Lane Volume (1) X (2) = (3)	Opposing Lefts (4)	LUF (5)	Opposing CLV (4)X(5) = (6)	CLV (5)+(6)=(7)
	SBT	1,659	0.55	912	86	1	86	998
	EBTL	82	1	82	0	1	0	82

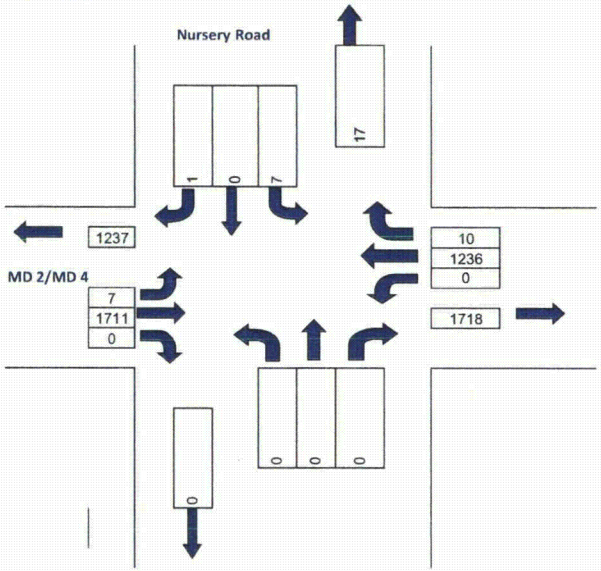
Remarks:
Right turns with a dedicated lane >150 ft are excluded

Critical Lane Volume — Total 1,080 — LOS B

AM Peak



PM Peak



Intersection Control :

_____ **Signal** __X__ **Stop** _____ **1 Ways**

Nursery Road & MD 2/MD 4

Existing, 2010, No Mitigation

KLD Engineering, P.C.

	Peak	Max Flow	LOS	Cycle	LUF	95th%-ti	Storage	OK
SBL	PM	7	A	100	1	7	570	Y
# of Phases		3						

Lanes	LUF	CLV	LOS	Opposing Volume	PCE
1	1	0	A		
2	0.55	1000	B	0	1.1
3	0.4	1150	C	200	2
4	0.3	1300	D	600	3
Dbl LT	0.6	1450	E	800	4
		1600	F	1000	5

	Movement	Volume (1)	LUF (2)	Lane Volume (1) X (2) = (3)	Opposing Lefts (4)	LUF (5)	Opposing CLV (4)X(5) = (6)	CLV (5)+(6)=(7)
	NBT	1,272	0.55	700	7	1	7	707
	SBT	1,062	0.55	584	0	1	0	584
	WBLR	8	1	8	0	1	0	8

Remarks:
Right turns with a dedicated lane >150 ft are excluded

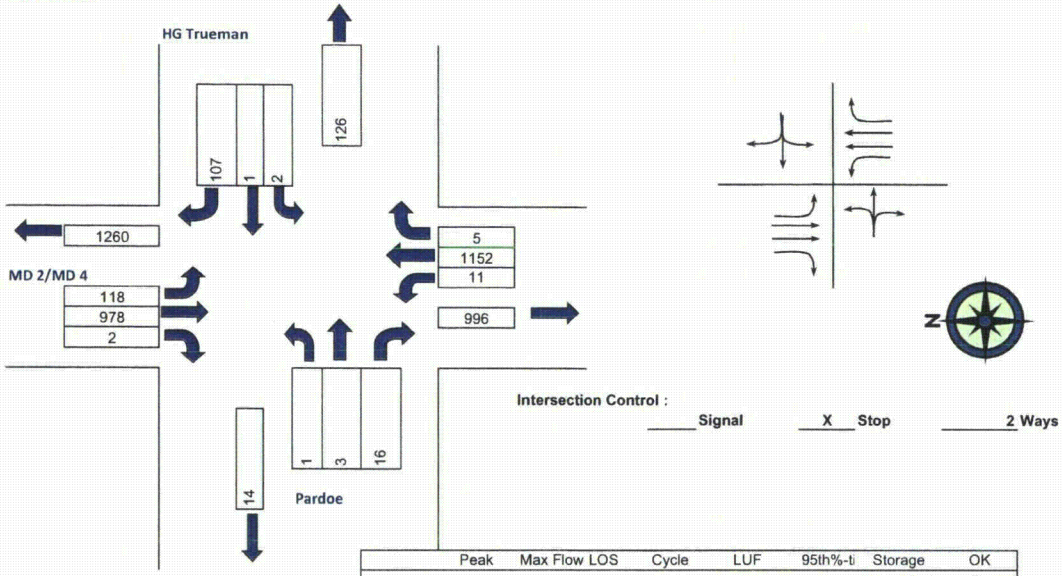
Critical Lane Volume — Total 715
LOS A

	Movement	Volume (1)	LUF (2)	Lane Volume (1) X (2) = (3)	Opposing Lefts (4)	LUF (5)	Opposing CLV (4)X(5) = (6)	CLV (5)+(6)=(7)
	NBT	1,236	0.55	680	7	1	7	687
	SBT	1,711	0.55	941	0	1	0	941
	WBLR	8	1	8	0	1	0	8

Remarks:
Right turns with a dedicated lane >150 ft are excluded

Critical Lane Volume — Total 949
LOS A

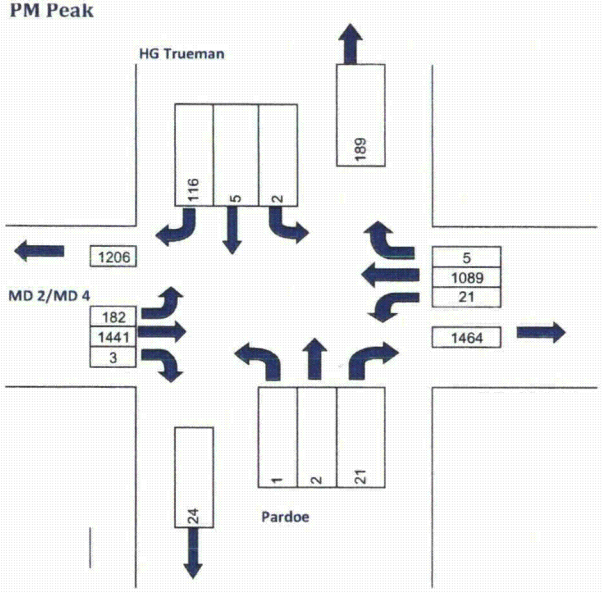
AM Peak



Intersection Control :

____ Signal X Stop 2 Ways

PM Peak



HG Trueman/Pardoe & MD 2/MD 4

Existing, 2010, No Mitigation

KLD Engineering, P.C.

	Peak	Max Flow	LOS	Cycle	LUF	95th%-ti	Storage	OK
NBL	PM	21	A	100	1	20	600	Y
SBL	PM	182	A	100	1	177	570	Y
# of Phases		5						

Lanes	LUF	CLV	LOS	Opposing Volume	PCE
1	1	0	A		
2	0.55	1000	B	0	1.1
3	0.4	1150	C	200	2
4	0.3	1300	D	600	3
Dbl LT	0.6	1450	E	800	4
		1600	F	1000	5

	Movement	Volume (1)	LUF (2)	Lane Volume (1) X (2) = (3)	Opposing Lefts (4)	LUF (5)	Opposing CLV (4)X(5) = (6)	CLV (5)+(6)=(7)
	NBT	1,152	0.55	633	118	1	118	751
	SBT	978	0.55	538	11	1	11	549
	EBLTR	20	1	20	0	1	0	20
	WBLTR	110	1	110	0	1	0	110

Remarks:
Right turns with a dedicated lane >150 ft are excluded

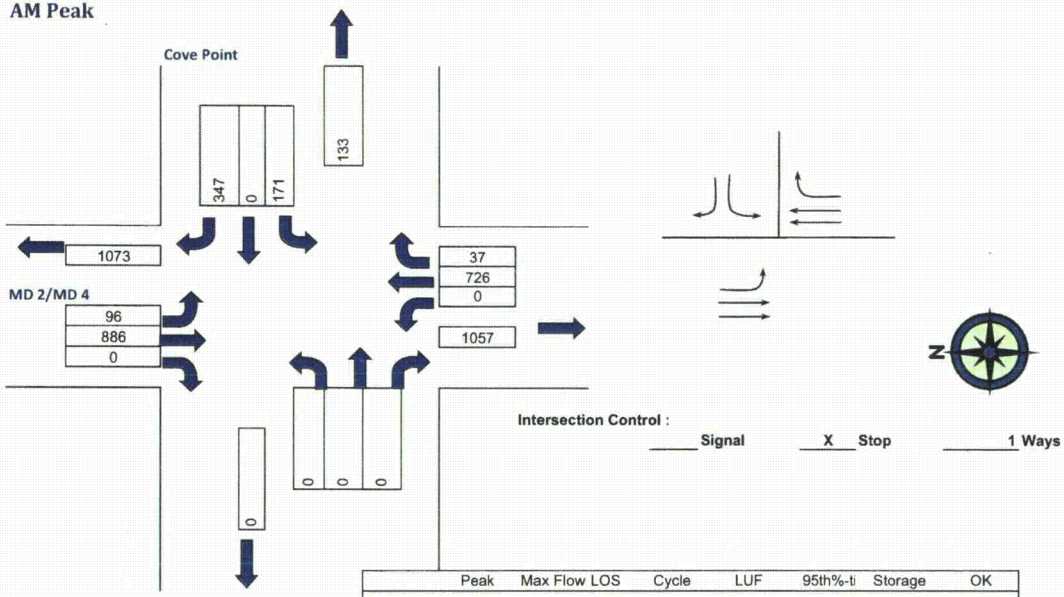
Critical Lane Volume — Total 881; LOS A

	Movement	Volume (1)	LUF (2)	Lane Volume (1) X (2) = (3)	Opposing Lefts (4)	LUF (5)	Opposing CLV (4)X(5) = (6)	CLV (5)+(6)=(7)
	NBT	1,089	0.55	599	182	1	182	781
	SBT	1,441	0.55	793	21	1	21	814
	EBLTR	24	1	24				24
	WBLTR	123	1	123	0	1	0	123

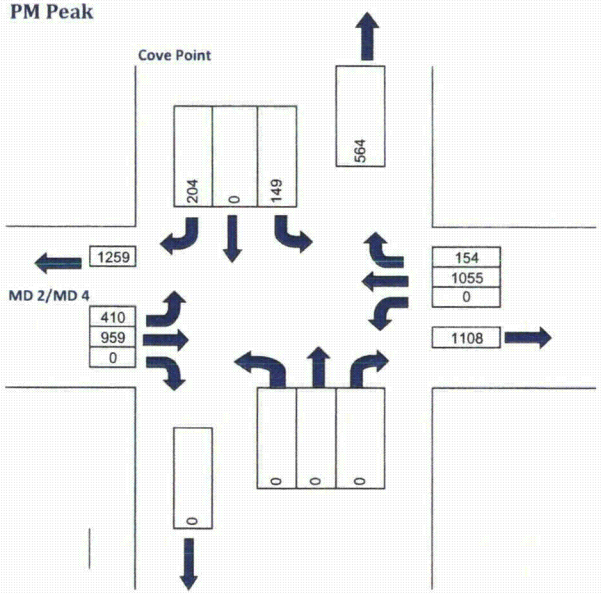
Remarks:
Right turns with a dedicated lane >150 ft are excluded

Critical Lane Volume — Total 961; LOS A

AM Peak



PM Peak



Intersection Control :

____ **Signal** X **Stop** ____ **1 Ways**

Cove Point Road & MD 2/MD 4

Existing, 2010, No Mitigation

KLD Engineering, P.C.

	Peak	Max Flow	LOS	Cycle	LUF	95th%-ti	Storage	OK
SBL	PM	410	B	100	1	399	550	Y
WBL	AM	171	A	100	1	166	300	Y
# of Phases		3						

Lanes	LUF	CLV	LOS	Opposing Volume	PCE
1	1	0	A		
2	0.55	1000	B	0	1.1
3	0.4	1150	C	200	2
4	0.3	1300	D	600	3
Dbl LT	0.6	1450	E	800	4
		1600	F	1000	5

	Movement	Volume (1)	LUF (2)	Lane Volume (1) X (2) = (3)	Opposing Lefts (4)	LUF (5)	Opposing CLV (4)X(5) = (6)	CLV (5)+(6)=(7)
	NBT	726	0.55	399	96	1	96	495
	SBT	886	0.55	488	0	1	0	488
	WBL	171	1	171	0	1	0	171
	WBR	251	1	251	0	1	0	251

Remarks:
Some WBR Coincide with SBL
Right turns with a dedicated lane >150 ft are excluded
Right turns with a dedicated lane >150 ft are excluded

Critical Lane Volume — Total 746
LOS A

	Movement	Volume (1)	LUF (2)	Lane Volume (1) X (2) = (3)	Opposing Lefts (4)	LUF (5)	Opposing CLV (4)X(5) = (6)	CLV (5)+(6)=(7)
	NBT	1,055	0.55	580	410	1	410	990
	SBT	959	0.55	528	0	1	0	528
	WBL	149	1	149	0	1	0	149
	WBR	0	1	0	0	1	0	0

Remarks:
Some WBR Coincide with SBL
Right turns with a dedicated lane >150 ft are excluded
Right turns with a dedicated lane >150 ft are excluded

Critical Lane Volume — Total 1,139
LOS B

Appendix D
CCNPP Employee Demographics

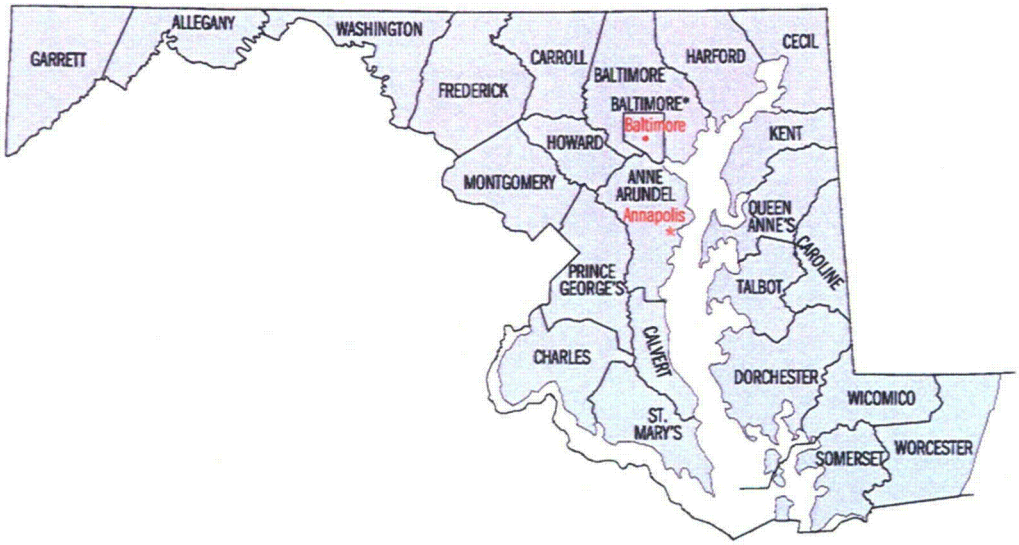


Figure D1 – Maryland County Map

Table D1– Power Plant Employees – By County

# Employees	Origin County	Site Approach	
		NB MD 2/4	SB MD 2/4
27	Anne Arundel		27
4	Baltimore		4
562	Calvert	281	281
2	Howard		2
6	Prince Georges		6
1	Alleghany		1
30	Charles		30
198	St Mary	139	59
1	Washington		1
2	Out of State		2
833		420	412
Overall %		**50.4%**	**49.6%**

Table D2– All Employees – By County

# Employees	Origin County	Site Approach	
		NB MD 2/4	SB MD 2/4
24	Anne Arundel		24
3	Baltimore		3
523	Calvert	262	262
2	Howard		2
4	Prince Georges		4
1	Alleghany		1
29	Charles		29
186	St Mary	130	56
1	Washington		1
2	Out of State		2
775		392	382
Overall %		**50.6%**	**49.4%**

Appendix E
Construction Material Shipments

Civil Material			
Construction Equipment	500 on+500 off	1,000	shipments
Concrete Material	848,355 tons / 15 tons per shipment	56,557	shipments
Formwork	2393 tons/15 tons per shipment	160	shipments
Rebar	55,331 tons/15 tons per shipment	3,689	shipments
Structural Steel	6,261 tons/15 tons per shipment	418	shipments
Misc. Steel	1,016 tons/15 tons per shipment	68	shipments
Mod Steel	225 tons/15 tons per shipment	15	shipments
Steel Liner	1,412 tons/15 tons per shipment	94	shipments
Embedded Steel	1903 tons/15 tons per shipment	127	shipments
Siding & Roofing	2056 tons/15 tons per shipment	137	shipments
Pre engineered building	60 tons/15 tons per shipment	4	shipments
Construction Debris	12,000 tons/15 tons per shipment	800	shipments
Piping and Mechanical Material			
Large and Small bore pipe	7500 tons/15 tons per shipment	500	shipments
Large bore hangers	2788 tons/15 tons per shipment	186	shipments
Nuclear Island EM package Equipment	15,377 tons/15 tons per shipment	1,025	shipments
Turbine Island and BOP Mechanical Equipment		1,000	shipments
Consumables		1,000	shipments
Electrical Equipment			
Conduit	1,356 tons/15 tons per shipment	90	shipments
Cable Tray	73 tons/15 tons per shipment	49	shipments
Power & Control wire	4,406 tons/15 tons per shipment	294	shipments
NI Electrical Equipment	5,000 ton/15 tons per shipment	333	shipments
TI Electrical Equipment	5,000 ton/15 tons per shipment	333	shipments
Grand Total		67,879	shipments

Appendix F
Journey to Work Census Data

Vehicle Occupancy by Profession

Construction Workers Automobile Usage

From the Journey-To-Work Census Data (2000)

CTPP 2000: Part 2 Table 9: Occupation by Means of transportation to work – For the state of Maryland

TAB9X221	All workers; having Construction and excavation occupations; For All 11 Categories of Means of transportation to work	122925	
TAB9X222	All workers; having Construction and excavation occupations; who drove alone	81790	
TAB9X223	All workers; having Construction and excavation occupations; who travel to work by 2-person carpool	21920	
TAB9X224	All workers; having Construction and excavation occupations; who travel to work by 3-person carpool	6130	
TAB9X225	All workers; having Construction and excavation occupations; who travel to work by 4-or-more-person carpool	3945	
TAB9X226	All workers; having Construction and excavation occupations; who travel to work by Bus or trolley bus	3285	
TAB9X227	All workers; having Construction and excavation occupations; who travel to work by Streetcar, trolley car, subway, or elevated	670	
TAB9X228	All workers; having Construction and excavation occupations; who travel to work by Railroad or ferryboat	90	
TAB9X229	All workers; having Construction and excavation occupations; who travel to work by Bicycle or walked	2050	
TAB9X230	All workers; having Construction and excavation occupations; who travel to work by Taxicab, motorcycle or other means	1595	
TAB9X231	All workers; having Construction and excavation occupations; who worked at home	1455	

(Data Source: http://www.transtats.bts.gov/DL_SelectFields.asp?Table_ID=1344&DB_Short_Name=CTPP%202000)

Based on the table above, considering the automobile mode of travel

	Workers	Vehicle Occupancy	Vehicles
	81790	1	81790
	21920	2	10960
	6130	3	2043
	3945	4	986
Total	113785		95779

Average Vehicle Occupancy = No.OfWorkers/No.OfVehicles = 113785/95779 = ***1.19***

Appendix G
Projected Conditions During Construction

LOS Analysis Worksheets

This appendix contains the following:

- September 7, 2010 meeting summary
- December 8, 2010 meeting summary
- Trip Distribution as provided by SHA
- Gate Queuing analysis
- Design concept for CC3 Access Road
- Synchro LOS reports for CC3 Access Road
- CLV Worksheets including queue calculations using SHA methodology

The CLV calculations are summarized in Table G-1. Figure G-1 presents the traffic volumes and turning movements at the study intersections during the AM and PM peak hours. Figure G-2 shows added construction traffic only.

Table G- 1 – Intersection LOS: Construction Peak (2016) Conditions

Intersection	*CLV*		*LOS*	
	AM	*PM*	*AM*	*PM*
MD 2/MD 4 diverge	**1879**	**1946**	**F**	**F**
MD 231 & MD 2/MD 4	1331	**1640**	D	**F**
Calvert Beach/Ball Road & MD 2/MD 4	**1764**	**1757**	**F**	**F**
Calvert Cliffs Parkway & MD 2/MD 4	930	**1598**	A	**E**
White Sands Drive & MD 2/MD 4	782	1400	A	D
Nursery Road & MD 2/MD 4	1008	1268	B	C
Pardoe Road & MD 2/MD 4	1162	1261	C	C
Cove Point Road & MD 2/MD 4	997	1329	A	D

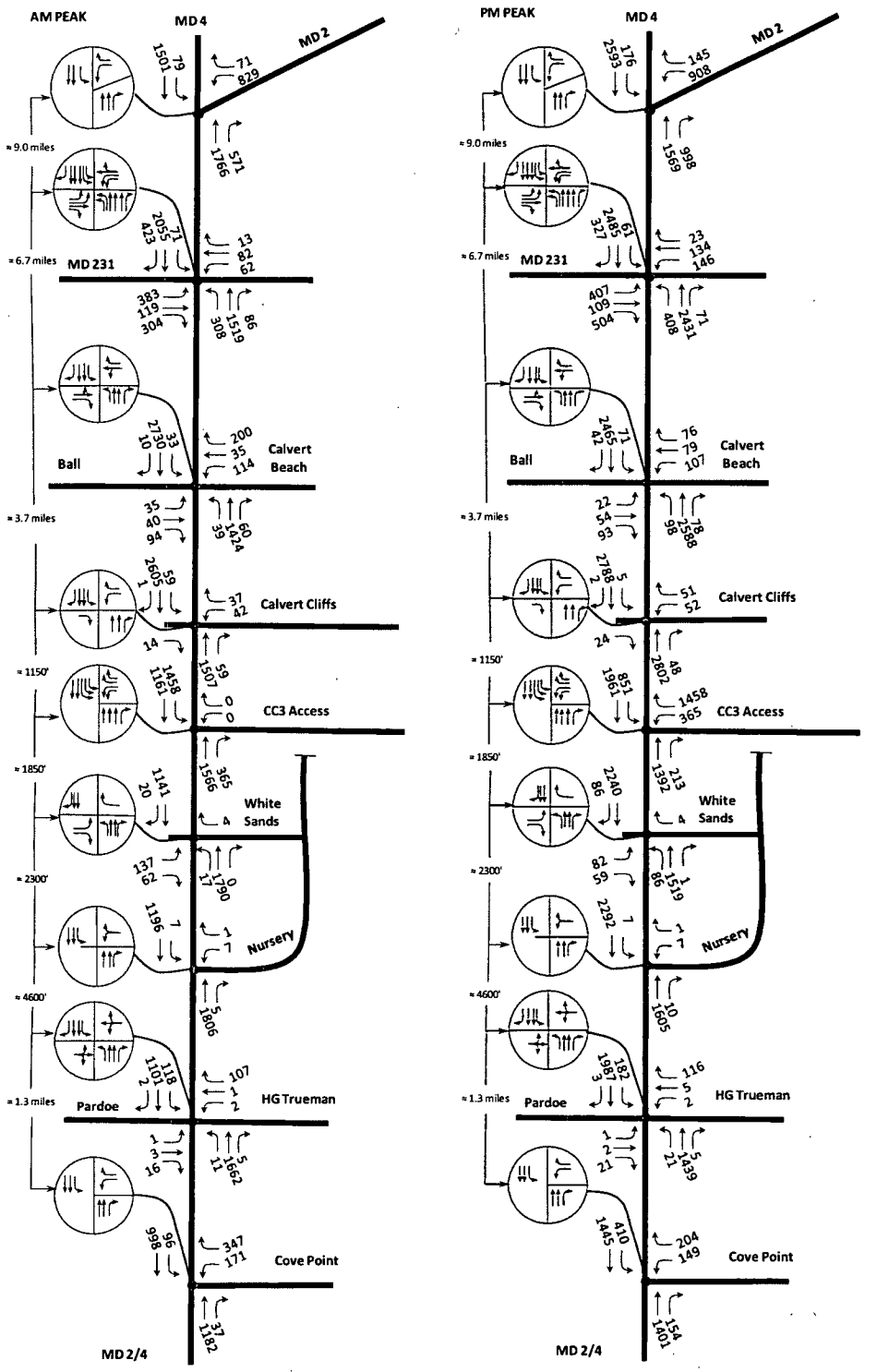


Figure G-1 – Peak Hour Traffic Volumes During Construction

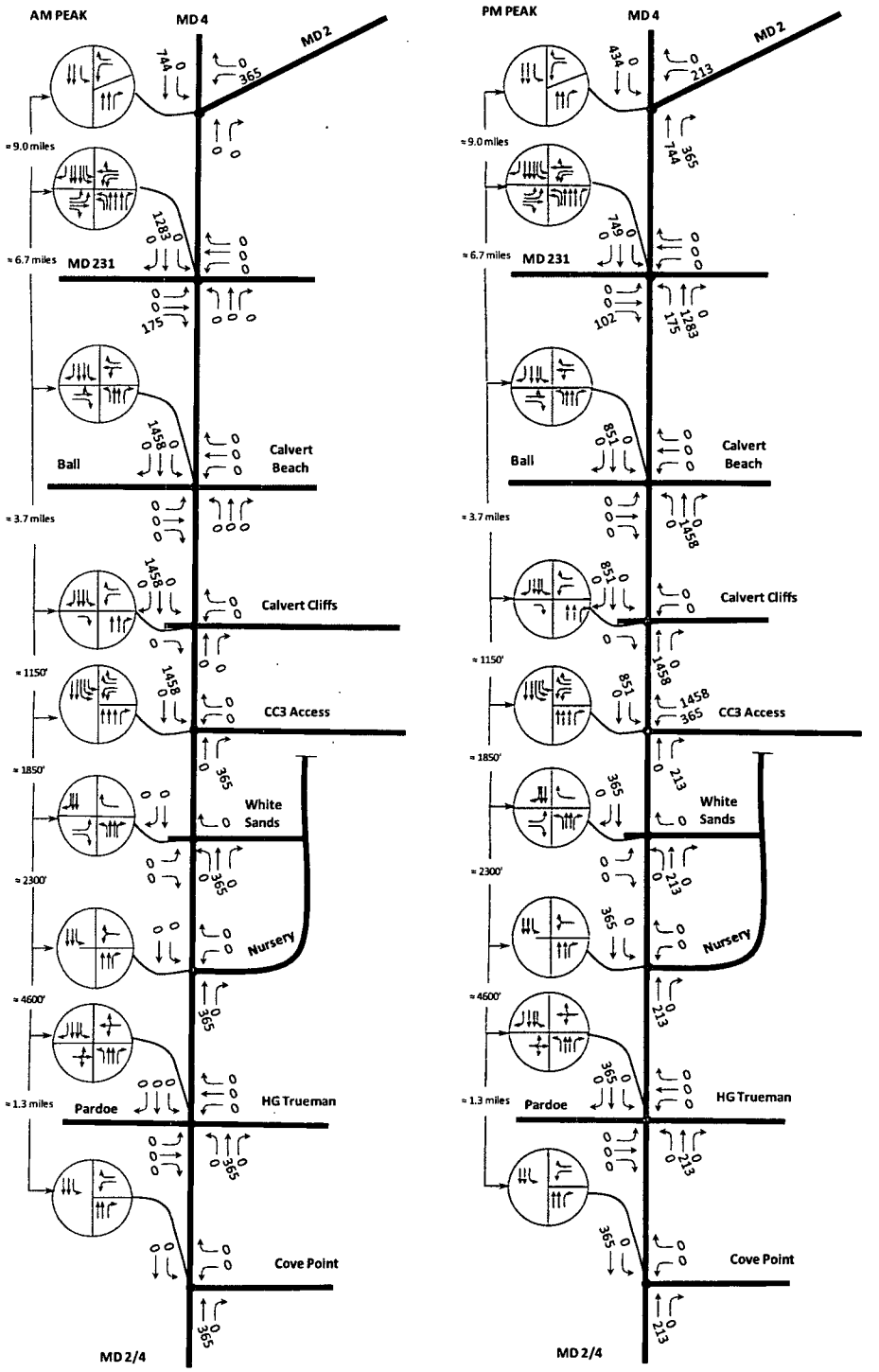


Figure G-2 – Peak Hour Volumes – Additional Construction Traffic Only

In reply, please refer to: 20834532

MEMORANDUM

TO: Ed Miller, PE
Principal Environmental Engineer
Constellation Energy
CPG – Environmental Services

FROM: Tim Ryan, PE, PTOE
Senior Traffic Engineer
URS Corporation

DATE: September 21, 2010

RE: Meeting Summary
UniStar CC3 Traffic Issues Meeting
September 7, 2010

A meeting for the topic referenced above was held in the offices of the Maryland State Highway Administration (SHA) on September 7, 2010, starting at 11:00 AM. The following individuals attended:

Frank Coxon	SHA Engineering and Access Permits Division (EAPD)
Steven Foster	SHA EAPD
Jim Holls	SHA EAPD (WBCM)
Mike Milbradt	UniStar
Ed Miller	UniStar
Dimitri Lutchenkov	UniStar
Wayne McFall	URS
Rebecca Myrick	URS
Tim Ryan	URS

On the phone, from SHA District 5, were the following individuals:

Kim Tran	SHA
Greg Phillips	SHA
Michelle Vrikkis	SHA

The following points were discussed:

1. SHA's letter, responding to the July 30, 2010 Technical Memorandum for the Calvert Cliffs Nuclear Power Plant, was the first topic of discussion. UniStar expressed concern over one of the comments (discussed further below). There were no concerns with the other SHA comments; they will be incorporated into future traffic analyses.

2. One of SHA's comments was that 10% trucks should be assumed to enter the site from southbound MD 2/4 during the AM peak hour. Given UniStar's ability to control access to the site by any vehicle, at any time, UniStar feels that the 2% value (used in the July 30, 2010 Technical Memorandum) is more realistic. SHA expressed concern about the impacts on intersection operations and queuing on southbound MD2/4, if more trucks than anticipated arrive at the site during the peak hour. SHA also expressed concern that queuing of vehicles at UniStar's gate could extend back into MD 2/4, particularly if some vehicles are denied entry.

   It was agreed that URS would perform additional Synchro/SimTraffic analyses, to determine the sensitivity of the assumed truck percentage to intersection operations, queuing on southbound MD 2/4 and queuing at the UniStar gate. The proposed gate layout and operation will be designed to minimize queues and avoid any impacts to MD 2/4. The proposed gate location will be over 4,000 feet from the White Sands/ MD 2/4 intersection. Potential mitigation strategies to accommodate unforeseen queuing will be developed. These strategies could include a truck "holding area" on the CC3 Access Road between MD 2/4 and the UniStar gate as well as "squared off" left turn lanes on southbound MD 2/4.

3. With regard to other parameters to be used in the Traffic Study:

   a. At the intersection of MD 2/4 and White Sands Drive, SHA is open to either two or three southbound left turn lanes, provided that the queuing/delay criteria agreed upon at the June 11, 2010 meeting are met.
   b. The intersection of MD 2/4 and MD 263 does not need to be addressed.
   c. If widening to provide an additional thru lane is needed at an intersection, that additional thru lane should be carried downstream of the intersection in accordance with Figure 2C-6a of the Maryland Manual on Uniform Traffic Control Devices. The length of the additional through lane on the upstream side of the intersection should be long enough to handle the 95th percentile queue. Beyond this, additional mainline widening of MD 2/4 does not need to be considered.
   d. SHA is still considering the trip distribution to be used north of the project site. SHA's final recommendations about this topic will be provided in about a week.

e. Critical lane analyis should be used for all intersections, with the exception of the intersection of MD 2/4 and White Sands Drive, where Synchro/SimTraffic can be used.
f. The Traffic Study should identify improvements necessary to provide level of service (LOS) D at all study area intersections for "2015 Build" conditions. If it appears that the extent of those improvements is unrealistic, the Traffic Study should also identify improvements that provide as close to LOS D as possible. For those intersections which are forecast to operate at LOS E or F under "2015 No Build" conditions, the Traffic Study should also identify improvements which would mitigate "Build" traffic such that the "2015 No Build" critical lane volume is maintained.

4. For "half signals" (such as the signal currently in operation at the MD 2 junction with MD 4), if a second left turn lane is proposed from the minor approach, the currently unsignalized thru movement should be signalized.

5. URS will provide plots of the vehicle turning templates for the proposed White Sands Road/ MD 2/4 intersection to the SHA.

6. In terms of formal agreements, SHA would strongly prefer a Letter of Intent between SHA and UniStar, rather than a Memorandum of Agreement (MOA).

URS believes that this is an accurate summary of our meeting. However, we understand that others in attendance may have different recollections. We would appreciate receiving any comments you might have within 10 calendar days of your receipt of this document. If we receive no comments within that period, we will move ahead based on the premise that this summary is completely accurate.

MEMORANDUM

TO: Ed Miller, PE
Principal Environmental Engineer
Constellation Energy
CPG – Environmental Services

FROM: Wayne McFall, PE
Project Manager
URS Corporation

DATE: December 10, 2010

RE: Draft Meeting Summary
UniStar CC3 Traffic Issues Meeting
December 8, 2010

A meeting for the topic referenced above was held in the offices of the Maryland State Highway Administration (SHA) on December 8, 2010, starting at 10:00 AM. The following individuals attended:

Frank Coxon	SHA Engineering and Access Permits Division (EAPD)
Steven Foster	SHA EAPD
Jim Holls	SHA EAPD (WBCM)
Mike Milbradt	UniStar
Ed Miller	UniStar
Dimitri Lutchenkov	UniStar
Tim Ryan	URS
Wayne McFall	URS

The following points were discussed:

1. UniStar explained that the project is still moving forward, despite the changes in corporate management of the project. The owner-applicant identified in previous submissions to various agencies has not changed.

2. SHA has reservations about the triple left turn lane proposed at White Sands Drive, because it is, in effect, a U-turn movement. SHA's research indicates that the efficiency of the movement could be decreased by as much as 55 percent, with resulting negative impacts on operations on MD 2/4. In addition, SHA is concerned about the possibility of sideswipe collisions due to the geometric constraints. As a result, the SHA developed a concept for a temporary at-grade intersection relocated to a point where the left turn does not result in a U-turn. The SHA provided a concept plan for this option to UniStar on December 3, 2010.

3. The SHA requested that UniStar consider a flyover ramp/bridge to provide the southbound left turn movement as an alternative to the temporary at-grade intersection. URS presented very preliminary results of analyses of a flyover, which revealed a number of complications such as potential right-of-way impacts, impacts to buildings on the east side of MD 2/4, utility impacts and the close proximity of the ramp terminus to the Saw Mill Road intersection. In addition, the construction and long term maintenance costs of providing a flyover are expected to be significantly higher than those related to providing a temporary at-grade intersection. The SHA requested a concept study of the flyover option, including an evaluation of the impacts and costs of this option versus the at-grade intersection option.

4. With specific regard to the relocated temporary at-grade intersection, the following points were discussed:

   a. A break on the controlled-access line is acceptable for this location, provided the intersection will be closed after construction of CC3 is completed. An SHA administrative approval is all that is required for this temporary break.
   b. SHA District 5, the Office of Traffic and Safety, and the SHA Administrator have agreed that this concept is feasible.
   c. The existing left turn movement from Calvert Cliffs Parkway onto southbound MD 2/4 would need to be accommodated during the life of the temporary access intersections in one of the following ways:
      i. Full signalization of the MD 2/4 at Calvert Cliffs Parkway intersection
      ii. Requiring southbound left turners from Calvert Cliffs Parkway to actually turn right, and make a U-turn in the median of MD 2/4
      iii. Internal connections on the Calvert Cliffs site, to allow those vehicles to use the temporary at-grade intersection to turn left onto southbound MD 2/4.
   d. Any one of these three approaches would be acceptable. Unistar will investigate the corporate feasibility of the third approach.

5. Submission of both a Traffic Impact Study (TIS) and "Design Concepts" is now required. The Design Concepts should reflect the changes in intersection configurations proposed in the TIS. The Design Concepts for construction conditions should include a flyover, including an evaluation of the impacts and costs of this option versus the at-grade intersection option. The fly-over concept can be evaluated in two dimensions for the purposes of this study.

6. It was agreed that the TIS will be reviewed and approved in two parts. The first would deal only with construction conditions, and will be submitted first. The second, which will deal only with post-construction conditions, will be submitted at a later date.

7. Under "post-construction" conditions, it will be necessary for the relocated temporary at-grade intersection to be closed. As a result, access/egress for the CC3 site after construction is complete will need to be provided at White Sands Drive (with a full traffic signal), or at Nursery Road (perhaps with a partial signal), or at Calvert Cliffs Parkway (if shared access from MD 2/4 is a corporate possibility between the owners of CC1/CC2 and CC3).

8. The Letter of Intent (LOI) was then discussed. The SHA requested that UniStar prepare a draft LOI that will be the basis of the final Memorandum of Agreement (MOA) The SHA will prepare the final Memorandum of Agreement. Some of the issues that will be addressed in the MOA include:
    - Liability – use standard language in sample MOA's
    - Roles and Responsibilities of SHA and UniStar
    - Schedule – when do MD 2/4 improvements have to be complete?
    - Design submittal requirements - # of review submittals?
    - SHA review response times
    - Permits
    - Construction cost responsibility (including utility relocations)
    - SHA inspection cost reimbursement (requires a surety for 15% of construction cost)
    - Right-of-way acquisition

9. Since the proposed MD 2/4 Split intersection improvements will require right-of-way acquisition, UniStar requested that the MD 2/4 Split intersection improvements be an SHA project in which UniStar would contribute their share of the construction cost.

URS believes that this is an accurate summary of our meeting. However, we understand that others in attendance may have different recollections. We would appreciate receiving any comments you might have within 10 calendar days of your receipt of this document. If we receive no comments within that period, we will move ahead based on the premise that this summary is completely accurate.

PEAK HOUR VOLUMES

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B = 169/326

C = 507/562

D = 1568/733

2528/1836

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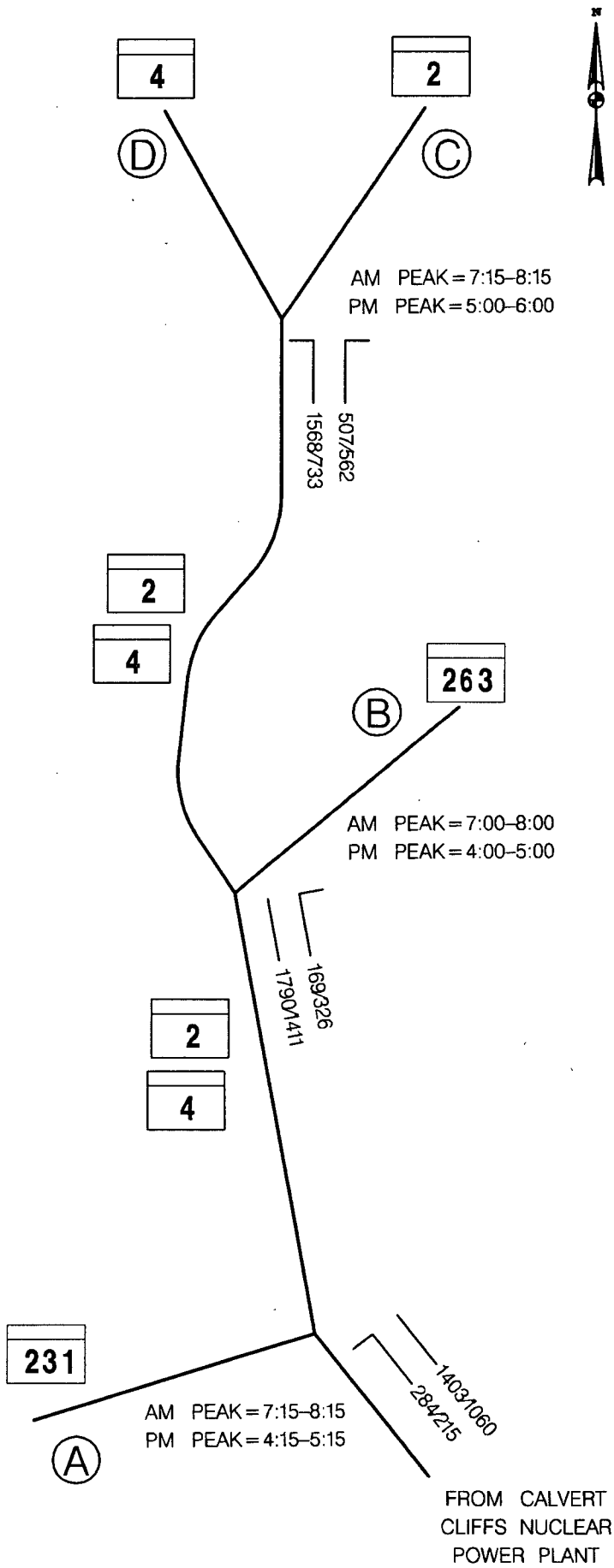

CALVERT CLIFFS NUCLEAR POWER PLANT

NB DISTRIBUTION AT

MD 231, MD 263, MD 2 AND MD 4

Satya Muthuswamy

From: Wayne_McFall@URSCorp.com
Sent: Tuesday, October 26, 2010 3:31 PM
To: Satya Muthuswamy
Cc: 'Bill__McShane' <bmcshane@kldcompanies.com/O=, Rebecca_Myrick@URSCorp.com, 'PEPTOETimothyA.Ryan' <timothy_ryan
Subject: Fw: Calvert Cliffs CC3 - gate queue analysis

fyi

Thanks,
Wayne

<<<<<<<<<<<<<>>>>>>>>>>>>>
M. Wayne McFall, P.E.
URS
4 North Park Drive, Suite 300
Hunt Valley, MD 21030
Office Phone: (410) 891-9205
Cell Phone: (443) 326-1192
Fax: (410) 785-6818
email: wayne_mcfall@urscorp.com
<<<<<<<<<<<<<>>>>>>>>>>>>>
scc

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----- Forwarded by Wayne McFall/HuntValley/URSCorp on 10/26/2010 03:28 PM -----

Wayne McFall/HuntValley/URSCorp

10/07/2010 03:02 PM

To Frank Coxon <FCoxon@sha.state.md.us>
cc JHOLLS@WBCM.com, 'Greg Phillips' <GPhillips@sha.state.md.us>, Kimberly Tran <ktran@sha.state.md.us>, "'Timothy_Ryan@URSCorp.com'" <Timothy_Ryan@URSCorp.com>, Rebecca Myrick/HuntValley/URSCorp@URSCorp, "Miller, Edward A" <Edward.Miller@constellation.com>, Stephanie Huck/HuntValley/URSCorp@URSCORP, sfoster1@sha.state.md.us
Subject Calvert Cliffs CC3 - gate queue analysis

Frank,
As discussed in our meeting with the SHA on 9-7-10, URS has performed a Gate Queue Analysis, using SimTraffic, for the proposed gate for the Calvert Cliffs construction site. The SimTraffic files are too big to email. See instructions below for downloading these files.

UniStar plans to construct a gate that provides 3 lanes for entering traffic at the CC3 Gate, with a provision for widening to provide additional capacity, if required. Only workers with a permit on their vehicle will be allowed to enter the site during the AM peak period. Delivery and construction trucks and visitors will not be allowed to pass through the gate during the AM peak period. A pull-off parking area will be provided upstream of the gate, to provide waiting trucks and visitors with a separate holding area. After the AM peak period, trucks and visitors will utilize the gates.

The gate will be located approximately 3,100 feet from the proposed White Sands/ MD 2/4 intersection. One of the key

parameters is the processing time for each vehicle. Unistar's proposed gate operation for workers with permits on their vehicles will involve a quick check of the permit on the vehicle as they pass through the gate without stopping. This is expected to be less than a 7 second delay per vehicle. Even though there will be no trucks allowed through the gate during the AM peak period, the analyses includes 2% trucks, which provides a higher factor of safety for determining the queue length. Using these parameters, the analysis shows that the queue will not backup to MD 2/4.

Please use the following FTP site information for downloading the SimTraffic files.

address: https://moveitdmz102.urscorp.com/
username: ursftp@gmail.com
password: huntvalley01

Thanks,
Wayne

<<<<<<<<<<<<<>>>>>>>>>>>>>
M. Wayne McFall, P.E.
URS
4 North Park Drive, Suite 300
Hunt Valley, MD 21030
Office Phone: (410) 891-9205
Cell Phone: (443) 326-1192
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<<<<<<<<<<<<<>>>>>>>>>>>>>
scc

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Brian Damiani

From: Satya Muthuswamy [satya@kldcompanies.com]
Sent: Friday, December 17, 2010 1:50 PM
To: Brian Damiani
Subject: Fw: Direction from UniStar to KLD

Flag Status: Flagged

Fyi

Satya Muthuswamy, PE (OH), PTOE
Senior Traffic Engineer
KLD
(631) 617-5650 x 216

From: Rebecca_Myrick@URSCorp.com
Date: Fri, 17 Dec 2010 13:05:39 -0500
To: <satya@kldcompanies.com>
Cc: 'Bill McShane'<bmcshane@kldcompanies.com>; 'Miller, Edward A'<Edward.Miller@constellation.com>; <Timothy_Ryan@URSCorp.com>; <Wayne_McFall@URSCorp.com>
Subject: RE: Direction from UniStar to KLD

We did the gate queue analysis for the relocated entrance. The gate needs 4 lanes, if we assume 7 second service times.

Thanks.

Rebecca L. Myrick, PE, PTOE (formerly Rebecca L. Thomas)

URS Corporation
4 North Park Drive, Suite 300 * Hunt Valley, Maryland 21030
Office Tel: 410-785-7220 * Fax: 410-785-6818
Direct Tel: 410-891-9527 * Cell: 443-275-8083

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Satya Muthuswamy <satya@kldcompanies.com>

12/17/2010 12:58 PM

Please respond to satya@kldcompanies.com

To Wayne_McFall@URSCorp.com
cc 'Bill McShane' <bmcshane@kldcompanies.com>, "'Miller, Edward A'" <Edward.Miller@constellation.com>, Timothy_Ryan@URSCorp.com, Rebecca_Myrick@URSCorp.com
Subject RE: Direction from UniStar to KLD

CALVERT CLIFFS PKWY
NEW ACCESS ROAD
MARYLAND
2/4
NURSERY ROAD
LAURA LN
FARM MILL ROAD
CONCEPT PLAN
NOT FOR CONSTRUCTION
UniStar
LEGEND
Calvert Cliffs Parkway
New Access Road
Banner NAR-1
December 2010

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	2	2	2	1	3	2
Volume (vph)	0	0	1566	365	1458	1161
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	500	800		0	1000	
Storage Lanes	1	1		1	3	
Taper Length (ft)	25	25		25	25	
Lane Util. Factor	0.97	0.88	0.95	1.00	0.94	0.95
Frt				0.850		
Flt Protected					0.950	
Satd. Flow (prot)	3351	3040	3539	1468	4627	3539
Flt Permitted					0.950	
Satd. Flow (perm)	3351	3040	3539	1468	4627	3539
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)				141		
Link Speed (mph)	40		55			55
Link Distance (ft)	1334		1142			1130
Travel Time (s)	22.7		14.2			14.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	10%	10%	2%	10%	10%	2%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1702	397	1585	1262
Turn Type		pm+ov		Perm	Prot	
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Total Split (s)	15.0	75.0	90.0	90.0	75.0	165.0
Total Lost Time (s)	5.0	6.0	7.0	7.0	6.0	7.0
Act Effct Green (s)			98.6	98.6	68.4	180.0
Actuated g/C Ratio			0.55	0.55	0.38	1.00
v/c Ratio			0.88	0.46	0.90	0.36
Control Delay			42.4	17.5	56.6	0.1
Queue Delay			0.0	0.0	0.0	0.0
Total Delay			42.4	17.5	56.6	0.1
LOS			D	B	E	A
Approach Delay			37.7			31.6
Approach LOS			D			C

Intersection Summary

Area Type: Other

Cycle Length: 180

Actuated Cycle Length: 180

Offset: 0 (0%), Referenced to phase 2:NBT, Start of Green, Master Intersection

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.90

Intersection Signal Delay: 34.1 Intersection LOS: C

Intersection Capacity Utilization 81.9% ICU Level of Service D

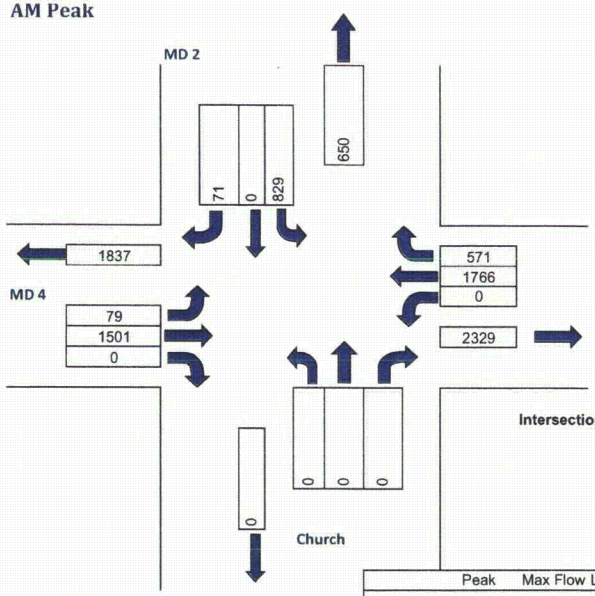
Analysis Period (min) 15

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	2	2	2	1	3	2
Volume (vph)	365	1458	1392	213	850	1961
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	500	800		0	1000	
Storage Lanes	1	1		1	3	
Taper Length (ft)	25	25		25	25	
Satd. Flow (prot)	3183	2584	3539	1468	4627	3539
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	3183	2584	3539	1468	4627	3539
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		15		112		
Link Speed (mph)	40		55			55
Link Distance (ft)	1334		1142			1130
Travel Time (s)	22.7		14.2			14.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	10%	10%	2%	10%	10%	2%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	397	1585	1513	232	924	2132
Turn Type		pm+ov		Perm	Prot	
Protected Phases	8	1	2		1	6
Permitted Phases		8		2		
Total Split (s)	62.0	34.0	84.0	84.0	34.0	118.0
Total Lost Time (s)	5.0	6.0	7.0	7.0	6.0	7.0
Act Effct Green (s)	23.3	56.4	74.3	74.3	28.1	108.4
Actuated g/C Ratio	0.16	0.39	0.52	0.52	0.20	0.75
v/c Ratio	0.77	1.55	0.83	0.29	1.02	0.80
Control Delay	68.5	283.4	34.6	11.0	91.8	14.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.5
Total Delay	68.5	283.4	34.6	11.0	91.8	15.0
LOS	E	F	C	B	F	B
Approach Delay	240.4		31.5			38.2
Approach LOS	F		C			D

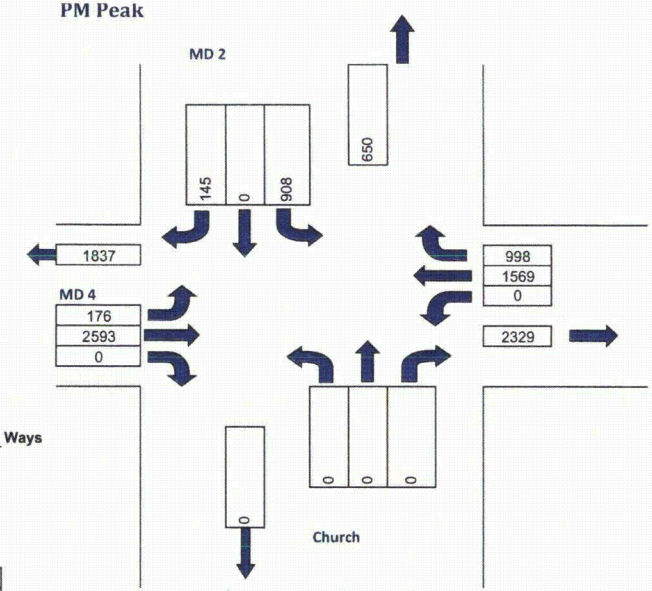
Intersection Summary

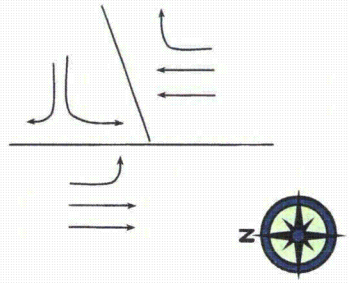
Area Type: Other
Cycle Length: 180
Actuated Cycle Length: 143.7
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 1.55
Intersection Signal Delay: 95.5 Intersection LOS: F
Intersection Capacity Utilization 100.3% ICU Level of Service G
Analysis Period (min) 15

AM Peak



PM Peak





Intersection Control :

X Signal ____ **Stop** ____ **Ways**

MD 2/MD 4 Diverge

Construction, 2016, No Mitigation

KLD Engineering, P.C.

	Peak	Max Flow	LOS	Cycle	LUF	95th%-ti	Storage	OK
SBL	PM	176	F	165	1	282	800	Y
WBL	PM	908	F	165	1	1456	450	N
NBT*	AM	1766	F	165	0.55	1558	630	N

# of Phases 3 * Storage shown applies to adjacent RT bay

Lanes	LUF	CLV	LOS	Opposing Volume	PCE
1	1	0	A		
2	0.55	1000	B	0	1.1
3	0.4	1150	C	200	2
4	0.3	1300	D	600	3
Dbl LT	0.6	1450	E	800	4
		1600	F	1000	5

	Movement	Volume (1)	LUF (2)	Lane Volume (1) X (2) = (3)	Opposing Lefts (4)	LUF (5)	Opposing CLV (4)X(5) = (6)	CLV (5)+(6)=(7)
	NBT	1,766	0.55	971	79	1	79	1,050
	WBL	829	1	829	0	1	0	829

Remarks:
Right turns with a dedicated lane >150 ft are excluded

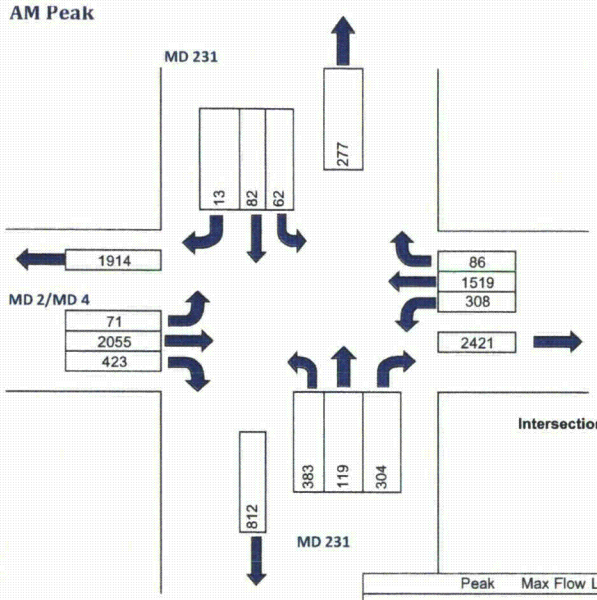
Critical Lane Volume Total 1,879
LOS F

	Movement	Volume (1)	LUF (2)	Lane Volume (1) X (2) = (3)	Opposing Lefts (4)	LUF (5)	Opposing CLV (4)X(5) = (6)	CLV (5)+(6)=(7)
	NBT	1,569	0.55	863	176	1	176	1,039
	WBL	908	1	908	0	1	0	908

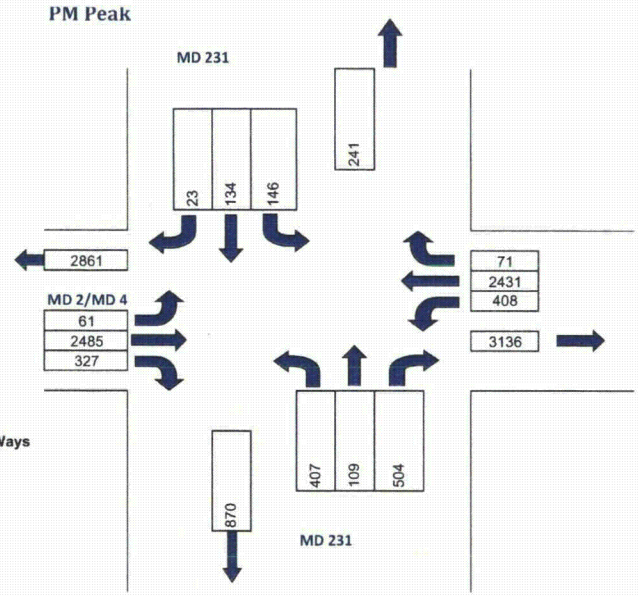
Remarks:
Right turns with a dedicated lane >150 ft are excluded

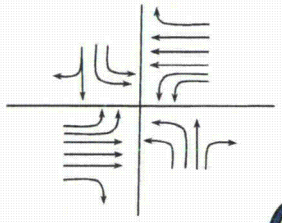
Critical Lane Volume Total 1,946
LOS F

AM Peak



PM Peak





Intersection Control :

X **Signal** ____ **Stop** ____ **Ways**

MD 231 & MD 2/MD 4

Construction, 2016, No Mitigation

KLD Engineering, P.C.

	Peak	Max Flow	LOS	Cycle	LUF	95th%-ti	Storage	OK
NBL	PM	408	F	165	0.6	393	400	Y
SBL	PM	60	F	165	0.6	58	400	Y
EBL	PM	407	F	165	0.6	391	385	N
WBL	PM	146	F	165	0.6	140	360	Y

# of Phases 5 * Storage shown applies to adjacent RT bay

Lanes	LUF	CLV	LOS	Opposing Volume	PCE
1	1	0	A		
2	0.55	1000	B	0	1.1
3	0.4	1150	C	200	2
4	0.3	1300	D	600	3
Dbl LT	0.6	1450	E	800	4
		1600	F	1000	5

	Movement	Volume (1)	LUF (2)	Lane Volume (1) X (2) = (3)	Opposing Lefts (4)	LUF (5)	Opposing CLV (4)X(5) = (6)	CLV (5)+(6)=(7)
	NBT	1,519	0.40	607	71	0.6	43	650
	SBT	2,055	0.40	822	308	0.6	185	1,007
	EBL	383	0.60	230	0	1	0	230
	WBTR	94	1	94	0	1	0	94

Remarks: Split Phase, EB & WB
Right turns with a dedicated lane >150 ft are excluded

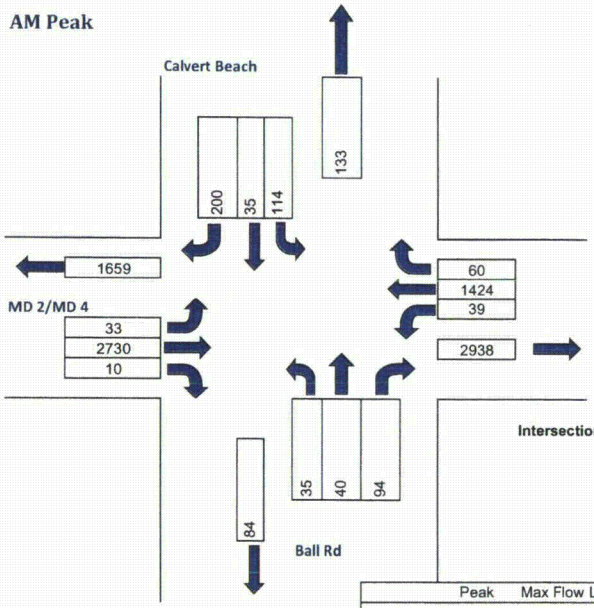
Critical Lane Volume Total 1,331
LOS D

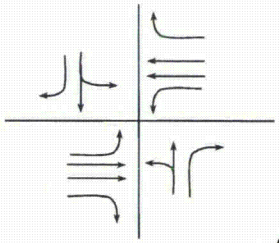
	Movement	Volume (1)	LUF (2)	Lane Volume (1) X (2) = (3)	Opposing Lefts (4)	LUF (5)	Opposing CLV (4)X(5) = (6)	CLV (5)+(6)=(7)
	NBT	2,431	0.4	972	61	0.6	37	1,009
	SBT	2,485	0.4	994	408	0.6	245	1,239
	EBL	407	0.6	244	0	1	0	244
	WBTR	157	1	157	0	1	0	157

Remarks: Split Phase, EB & WB
Right turns with a dedicated lane >150 ft are excluded

Critical Lane Volume Total 1,640
LOS F

AM Peak

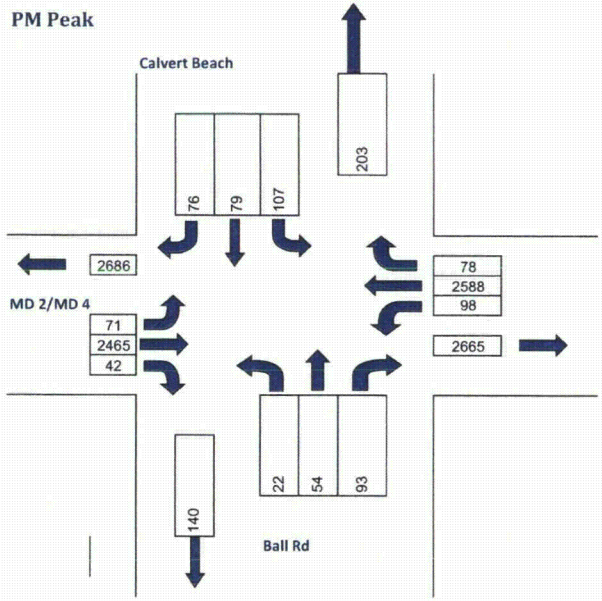




Intersection Control :

__X__ Signal _____ Stop _____ Ways

PM Peak



Calvert Beach/Ball Road &
MD 2/MD 4
Construction, 2016, No Mitigation

KLD Engineering, P.C.

	Peak	Max Flow	LOS	Cycle	LUF	95th%-ti	Storage	OK
NBL	PM	98	F	165	1	157	500	Y
SBL	PM	71	F	165	1	114	575	Y
EBTL*	PM	76	F	165	1	122	300	Y
WBTL*	PM	186	F	165	1	298	350	Y
NBT	PM	2588	F	165	0.55	2284		
SBT	AM	2730	F	165	0.55	2409		
# of Phases		5		* Storage shown applies to adjacent RT bypass line				

Lanes	LUF	CLV	LOS	Opposing Volume	PCE
1	1	0	A		
2	0.55	1000	B	0	1.1
3	0.4	1150	C	200	2
4	0.3	1300	D	600	3
Dbl LT	0.6	1450	E	800	4
		1600	F	1000	5

	Movement	Volume (1)	LUF (2)	Lane Volume (1) X (2) = (3)	Opposing Lefts (4)	LUF (5)	Opposing CLV (4)X(5) = (6)	CLV (5)+(6)=(7)
	NBT	1,424	0.55	783	33	1	33	816
	SBT	2,730	0.55	1,501	39	1	39	1,540
	EBTL	75	1.00	75	0	1	0	75
	WBTL	149	1	149	0	1	0	149

Remarks: Split Phase, EB & WB
Right turns with a dedicated lane >150 ft are excluded

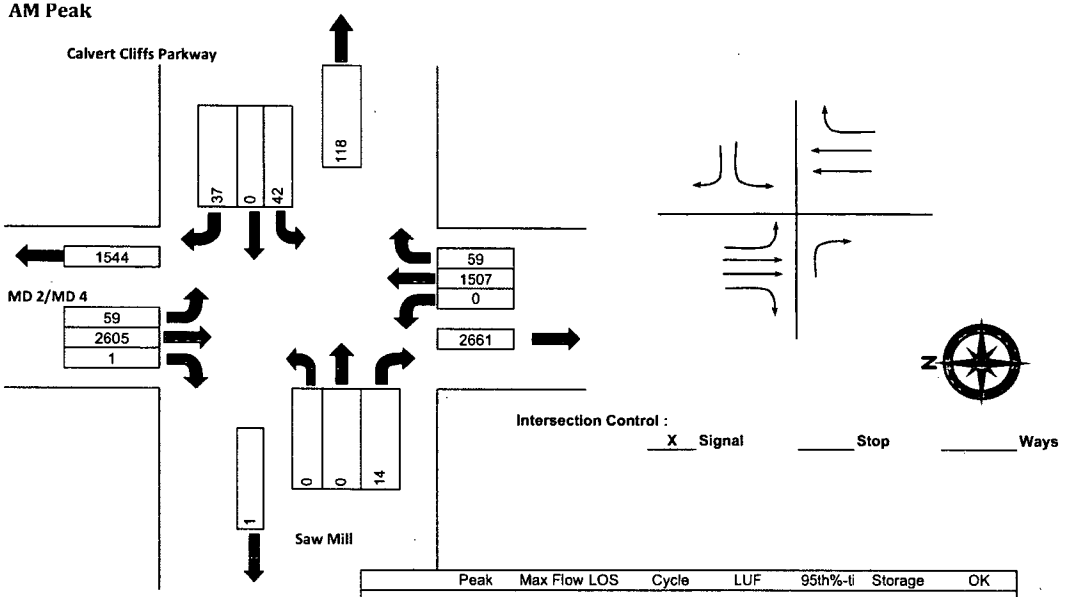
Critical Lane Volume — Total 1,764 — LOS F

	Movement	Volume (1)	LUF (2)	Lane Volume (1) X (2) = (3)	Opposing Lefts (4)	LUF (5)	Opposing CLV (4)X(5) = (6)	CLV (5)+(6)=(7)
	NBT	2,588	0.55	1424	71	1	71	1,495
	SBT	2,465	0.55	1356	98	1	98	1,454
	EBTL	76	1	76	0	1	0	76
	WBTL	186	1	186	0	1	0	186

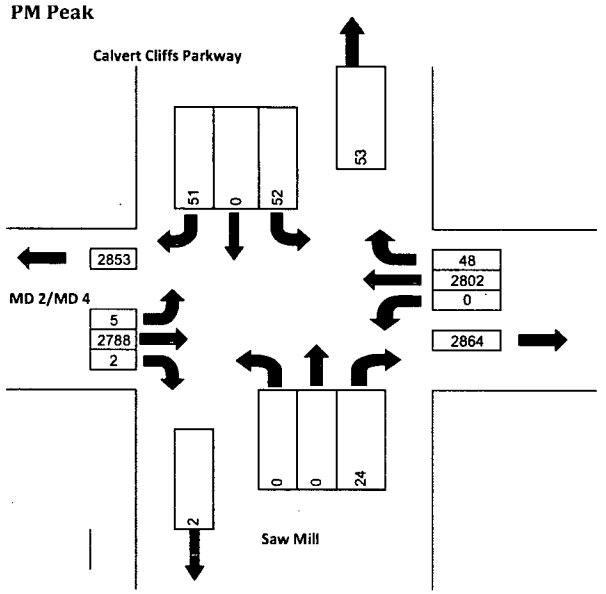
Remarks: Split Phase, EB & WB
Right turns with a dedicated lane >150 ft are excluded

Critical Lane Volume — Total 1,757 — LOS F

AM Peak



PM Peak



Calvert Cliffs Parkway & MD 2/MD 4

Construction, 2016, No Mitigation

KLD Engineering, P.C.

	Peak	Max Flow	LOS	Cycle	LUF	95th%-ti	Storage	OK
SBL	AM	59	A	100	1	57	600	Y
WBL	PM	52	E	150	1	76	400	Y
NBT*	PM	2802	E	150	0.55	2248	2950	Y
# of Phases		3		* Storage shown applies to distance to next intersection				

Lanes	LUF	CLV	LOS	Opposing Volume	PCE
1	1	0	A		
2	0.55	1000	B	0	1.1
3	0.4	1150	C	200	2
4	0.3	1300	D	600	3
Dbl LT	0.6	1450	E	800	4
		1600	F	1000	5

	Movement	Volume (1)	LUF (2)	Lane Volume (1) X (2) = (3)	Opposing Lefts (4)	LUF (5)	Opposing CLV (4)X(5) = (6)	CLV (5)+(6)=(7)
	NBT	1,507	0.55	829	59	1	59	888
	WBL	42	1	42	0	1	0	42

Remarks:
Right turns with a dedicated lane >150 ft are excluded

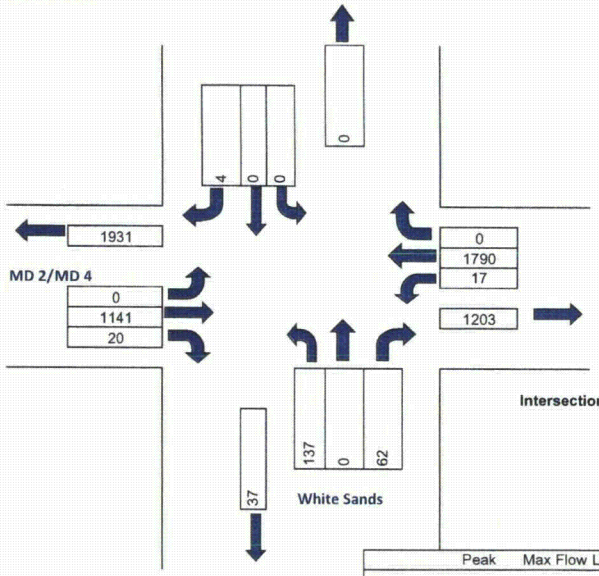
Critical Lane Volume — Total 930, LOS A

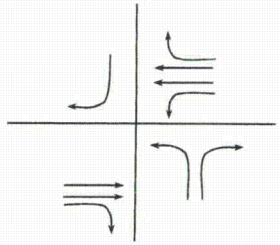
	Movement	Volume (1)	LUF (2)	Lane Volume (1) X (2) = (3)	Opposing Lefts (4)	LUF (5)	Opposing CLV (4)X(5) = (6)	CLV (5)+(6)=(7)
	NBT	2,802	0.55	1541	5	1	5	1,546
	WBL	52	1	52	0	1	0	52

Remarks:
Right turns with a dedicated lane >150 ft are excluded

Critical Lane Volume — Total 1,598, LOS E

AM Peak

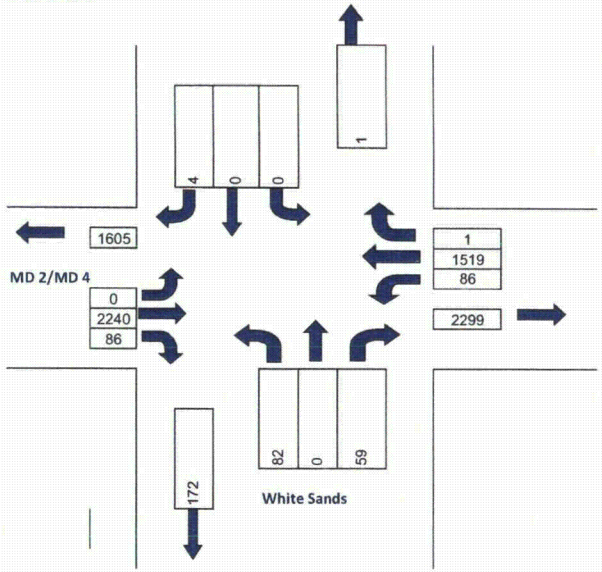




Intersection Control :

X Signal _____ Stop _____ Ways

PM Peak



White Sands Drive & MD 2/MD 4

Construction, 2016, No Mitigation

KLD Engineering, P.C.

	Peak	Max Flow	LOS	Cycle	LUF	95th%-ti	Storage	OK
NBL	PM	86	D	135	1	113	550	Y
EBTL*	AM	137	A	100	1	133	80	N
SBT*	PM	2240	D	135	0.55	1617	500	N
# of Phases		3		* Storage shown applies to adjacent RT bypass line				

Lanes	LUF	CLV	LOS	Opposing Volume	PCE
1	1	0	A		
2	0.55	1000	B	0	1.1
3	0.4	1150	C	200	2
4	0.3	1300	D	600	3
Dbl LT	0.6	1450	E	800	4
		1600	F	1000	5

	Movement	Volume (1)	LUF (2)	Lane Volume (1) X (2) = (3)	Opposing Lefts (4)	LUF (5)	Opposing CLV (4)X(5) = (6)	CLV (5)+(6)=(7)
	SBT	1,141	0.55	628	17	1	17	645
	EBTL	137	1.00	137	0	1	0	137

Remarks:
Right turns with a dedicated lane >150 ft are excluded

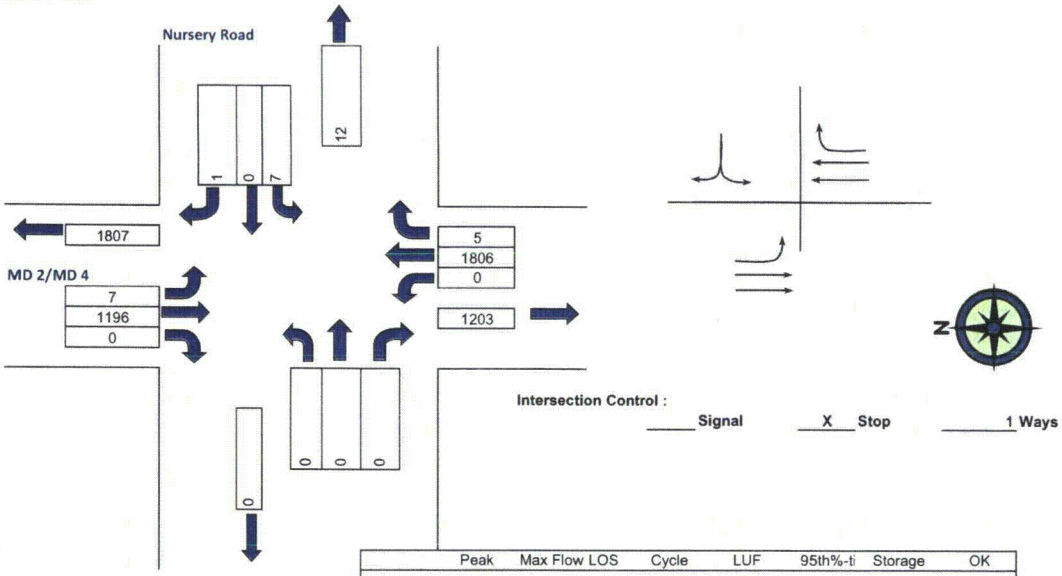
Critical Lane Volume — Total 782 — LOS A

	Movement	Volume (1)	LUF (2)	Lane Volume (1) X (2) = (3)	Opposing Lefts (4)	LUF (5)	Opposing CLV (4)X(5) = (6)	CLV (5)+(6)=(7)
	SBT	2,240	0.55	1232	86	1	86	1,318
	EBTL	82	1	82	0	1	0	82

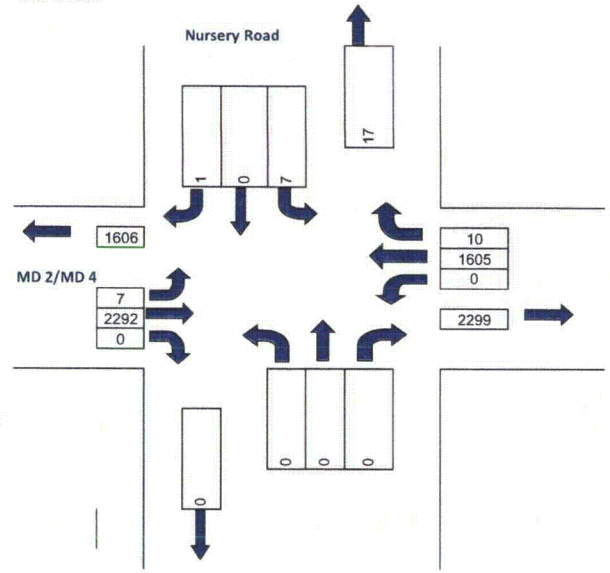
Remarks:
Right turns with a dedicated lane >150 ft are excluded

Critical Lane Volume — Total 1,400 — LOS D

AM Peak



PM Peak



Nursery Road & MD 2/MD 4

Construction, 2016, No Mitigation

KLD Engineering, P.C.

	Peak	Max Flow	LOS	Cycle	LUF	95th%-ti	Storage	OK
SBL	PM	7	C	120	1	8	570	Y
# of Phases		3						

Lanes	LUF	CLV	LOS	Opposing Volume	PCE
1	1	0	A		
2	0.55	1000	B	0	1.1
3	0.4	1150	C	200	2
4	0.3	1300	D	600	3
Dbl LT	0.6	1450	E	800	4
		1600	F	1000	5

	Movement	Volume (1)	LUF (2)	Lane Volume (1) X (2) = (3)	Opposing Lefts (4)	LUF (5)	Opposing CLV (4)X(5) = (6)	CLV (5)+(6)=(7)
	NBT	1,806	0.55	993	7	1	7	1,000
	SBT	1,196	0.55	658	0	1	0	658
	WBLR	8	1	8	0	1	0	8

Remarks:
Right turns with a dedicated lane >150 ft are excluded

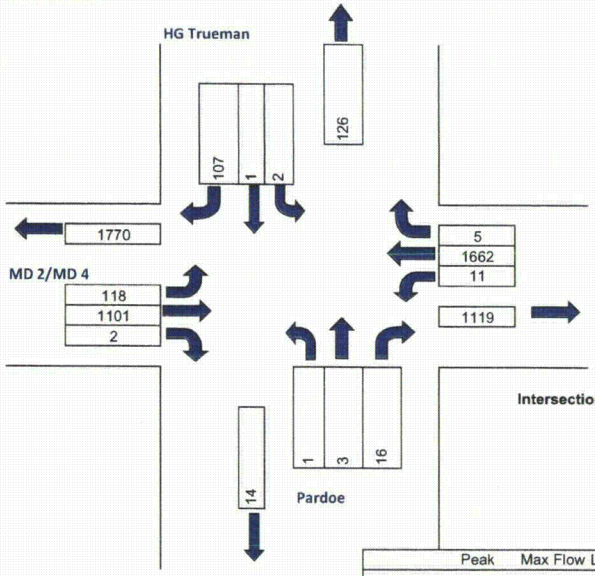
Critical Lane Volume — Total 1,008
LOS B

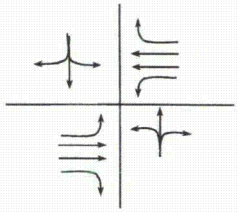
	Movement	Volume (1)	LUF (2)	Lane Volume (1) X (2) = (3)	Opposing Lefts (4)	LUF (5)	Opposing CLV (4)X(5) = (6)	CLV (5)+(6)=(7)
	NBT	1,605	0.55	883	7	1	7	890
	SBT	2,292	0.55	1260	0	1	0	1,260
	WBLR	8	1	8	0	1	0	8

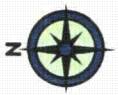
Remarks:
Right turns with a dedicated lane >150 ft are excluded

Critical Lane Volume — Total 1,268
LOS C

AM Peak



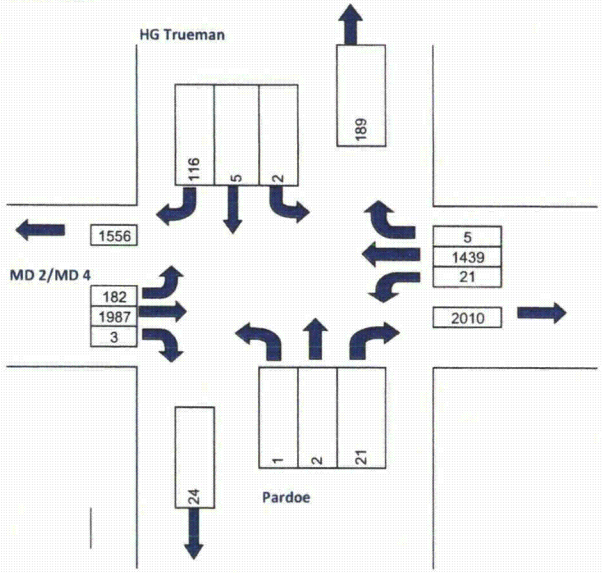




Intersection Control :

_____ Signal X Stop _____ 2 Ways

PM Peak



	Peak	Max Flow	LOS	Cycle	LUF	95th%-ti	Storage	OK
NBL	PM	21	C	120	1	25	600	Y
SBL	PM	182	C	120	1	212	570	Y
# of Phases		5						

HG Trueman/Pardoe & MD 2/MD 4

Construction, 2016, No Mitigation

KLD Engineering, P.C.

Lanes	LUF	CLV	LOS	Opposing Volume	PCE
1	1	0	A		
2	0.55	1000	B	0	1.1
3	0.4	1150	C	200	2
4	0.3	1300	D	600	3
Dbl LT	0.6	1450	E	800	4
		1600	F	1000	5

Movement	Volume (1)	LUF (2)	Lane Volume (1) X (2) = (3)	Opposing Lefts (4)	LUF (5)	Opposing CLV (4)X(5) = (6)	CLV (5)+(6)=(7)
NBT	1,662	0.55	914	118	1	118	1,032
SBT	1,101	0.55	606	11	1	11	617
EBLTR	20	1	20	0	1	0	20
WBLTR	110	1	110	0	1	0	110

Remarks:
Right turns with a dedicated lane >150 ft are excluded

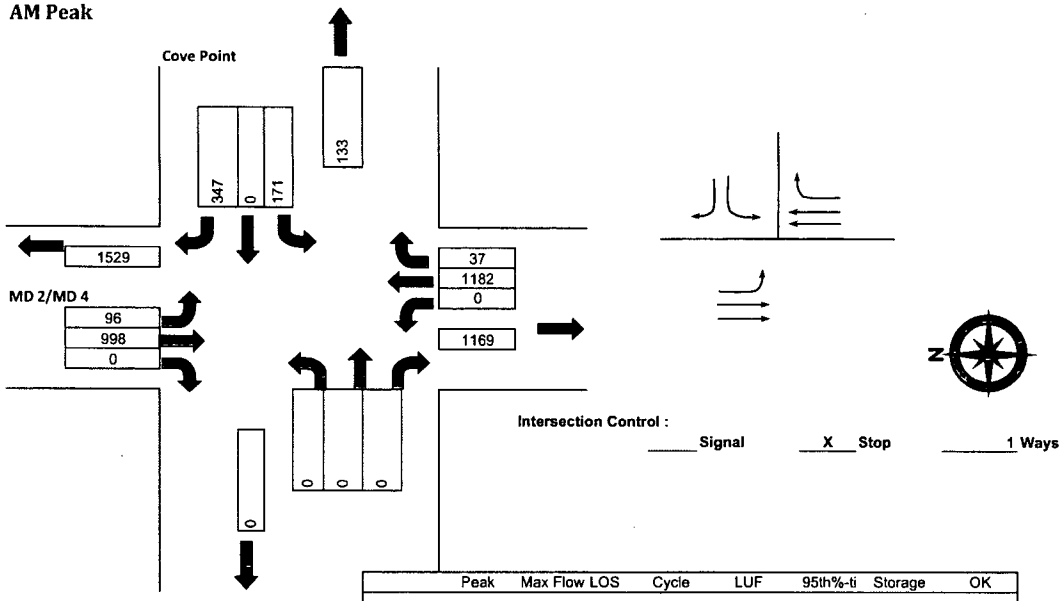
Critical Lane Volume — Total 1,162 — LOS C

Movement	Volume (1)	LUF (2)	Lane Volume (1) X (2) = (3)	Opposing Lefts (4)	LUF (5)	Opposing CLV (4)X(5) = (6)	CLV (5)+(6)=(7)
NBT	1,439	0.55	792	182	1	182	974
SBT	1,987	0.55	1093	21	1	21	1,114
EBLTR	24	1	24				24
WBLTR	123	1	123	0	1	0	123

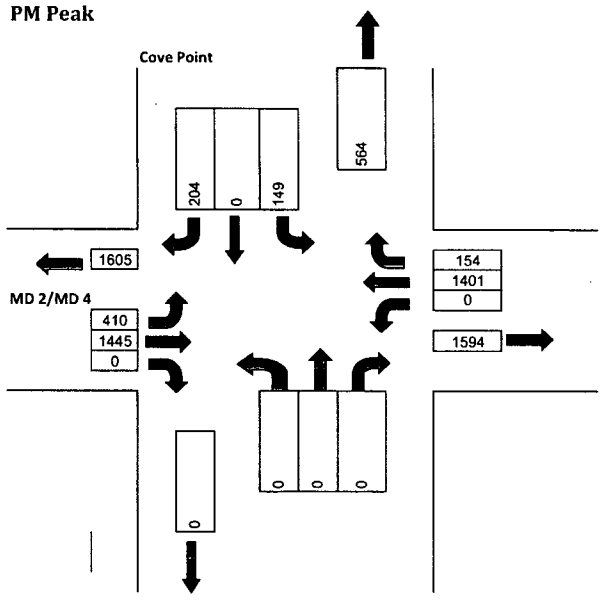
Remarks:
Right turns with a dedicated lane >150 ft are excluded

Critical Lane Volume — Total 1,261 — LOS C

AM Peak



PM Peak



Intersection Control :

____ Signal X Stop ____ 1 Ways

Cove Point Road & MD 2/MD 4

Construction, 2016, No Mitigation

KLD Engineering, P.C.

	Peak	Max Flow	LOS	Cycle	LUF	95th%-ti	Storage	OK
SBL	PM	410	D	135	1	538	550	Y
WBL	PM	149	D	135	1	196	300	Y
# of Phases		3						

Lanes	LUF	CLV	LOS	Opposing Volume	PCE
1	1	0	A		
2	0.55	1000	B	0	1.1
3	0.4	1150	C	200	2
4	0.3	1300	D	600	3
Dbl LT	0.6	1450	E	800	4
		1600	F	1000	5

Movement	Volume (1)	LUF (2)	Lane Volume (1) X (2) = (3)	Opposing Lefts (4)	LUF (5)	Opposing CLV (4)X(5) = (6)	CLV (5)+(6)=(7)
NBT	1,182	0.55	650	96	1	96	746
SBT	998	0.55	549	0	1	0	549
WBL	171	1	171	0	1	0	171
WBR	251	1	251	0	1	0	251

Remarks:
Some WBR Coincide with SBL
Right turns with a dedicated lane >150 ft are excluded
Right turns with a dedicated lane >150 ft are excluded

Critical Lane Volume — Total 997 — LOS A

Movement	Volume (1)	LUF (2)	Lane Volume (1) X (2) = (3)	Opposing Lefts (4)	LUF (5)	Opposing CLV (4)X(5) = (6)	CLV (5)+(6)=(7)
NBT	1,401	0.55	770	410	1	410	1,180
SBT	1,445	0.55	795	0	1	0	795
WBL	149	1	149	0	1	0	149
WBR	0	1	0	0	1	0	0

Remarks:
Some WBR Coincide with SBL
Right turns with a dedicated lane >150 ft are excluded
Right turns with a dedicated lane >150 ft are excluded

Critical Lane Volume — Total 1,329 — LOS D

Appendix H
Projected Conditions During Construction With Mitigation

LOS Analysis Worksheets

This appendix contains CLV worksheets for all calculations shown in Table H-1 as well as queue calculations using SHA methodology. Figure H-1 presents the traffic volumes and turning movements at the study intersections during the AM and PM peak hours. Figure H-2 shows added construction traffic only. Additionally, there are intersection drawings for each of the mitigation concepts.

Table H-1 – Intersection LOS: Construction Peak (2016) Conditions

Intersection	*Mitigation Detail*	*2010*		*2016*			
		Existing		*Background*		*Construction*	
		AM	*PM*	*AM*	*PM*	*AM*	*PM*
MD 2 and MD 4	None	1344	1176	1514	1325	1879	1946
	Remove Maryland-T, Add SBT and WBL lane			1328	1280	1547	1583
	Remove Maryland-T, Add NBT, SBT and 2 WBL lanes			994	1176	1158	1445
MD 2/MD 4 and MD 231	None	865	1098	974	1236	1331	1640
	Restripe EB thru lane as left+thru, add receiver for EB right, restripe SB as shared thru+right lanes, restripe left lane on WB approach as shared thru+left, add an exclusive westbound right turn lane			941	1117	1219	1447
MD 2/MD 4 and Calvert Beach	None	952	1148	1040	1248	1764	1757
	Add one SBT and one NBT lane			827	1006	1355	1368
MD 2/MD 4 and Calvert Cliffs Parkway	None	837	710	930	796	930	1598
	Add one NBT lane, Prohibit WBL turn			662	543	662	1126
MD 2/MD 4 and White Sands	None	708	1080	782	1199	782	1400
MD 2/MD 4 and Nursery Road	None	715	949	808	1068	1008	1268
MD 2/MD 4 and Pardoe Road	None	881	961	961	1061	1162	1261
MD 2/MD 4 and Cove Point Road	None	746	1139	800	1212	997	1329

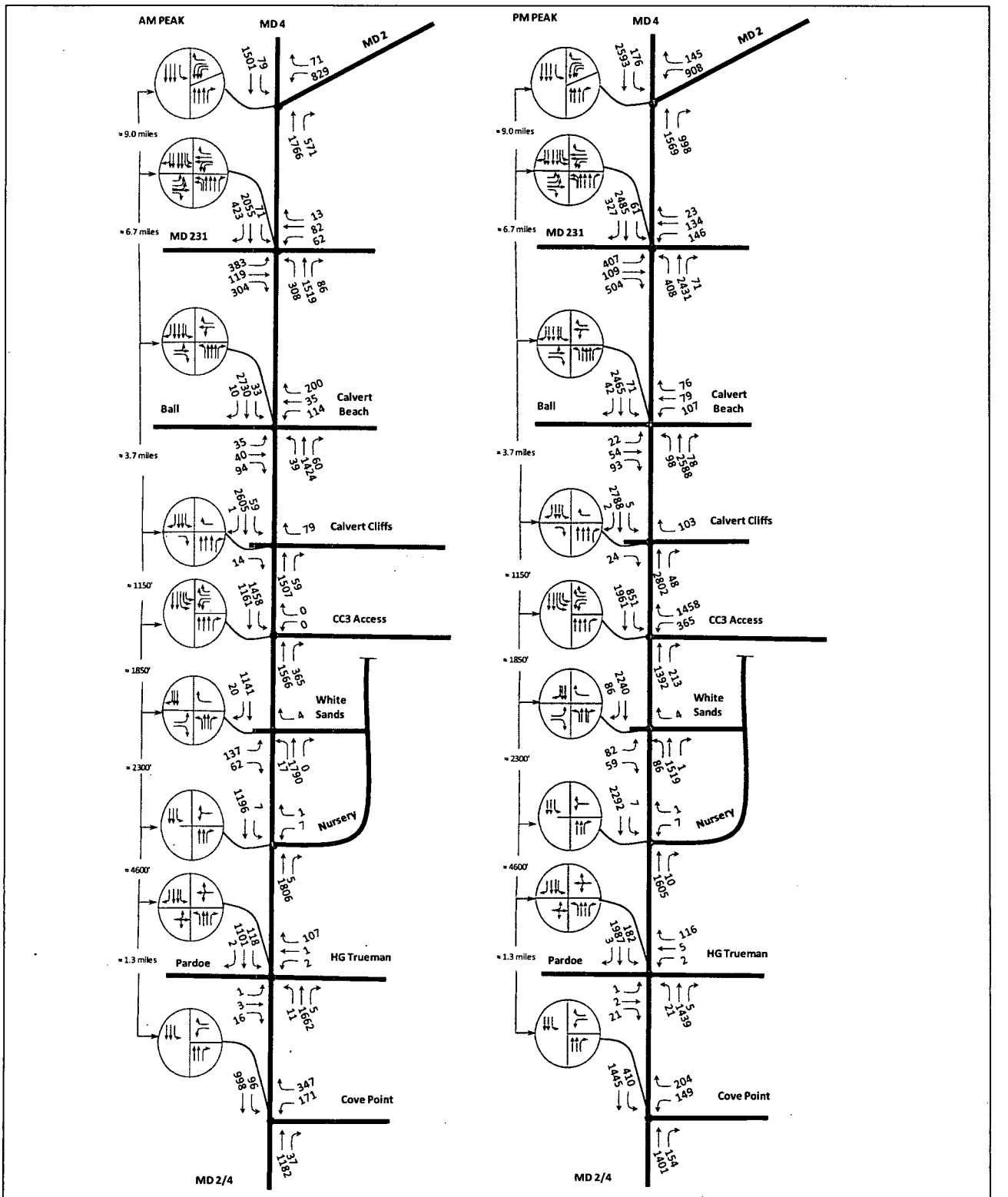


Figure H-1 – Peak Hour Traffic Volumes - Construction Peak Conditions (2016)

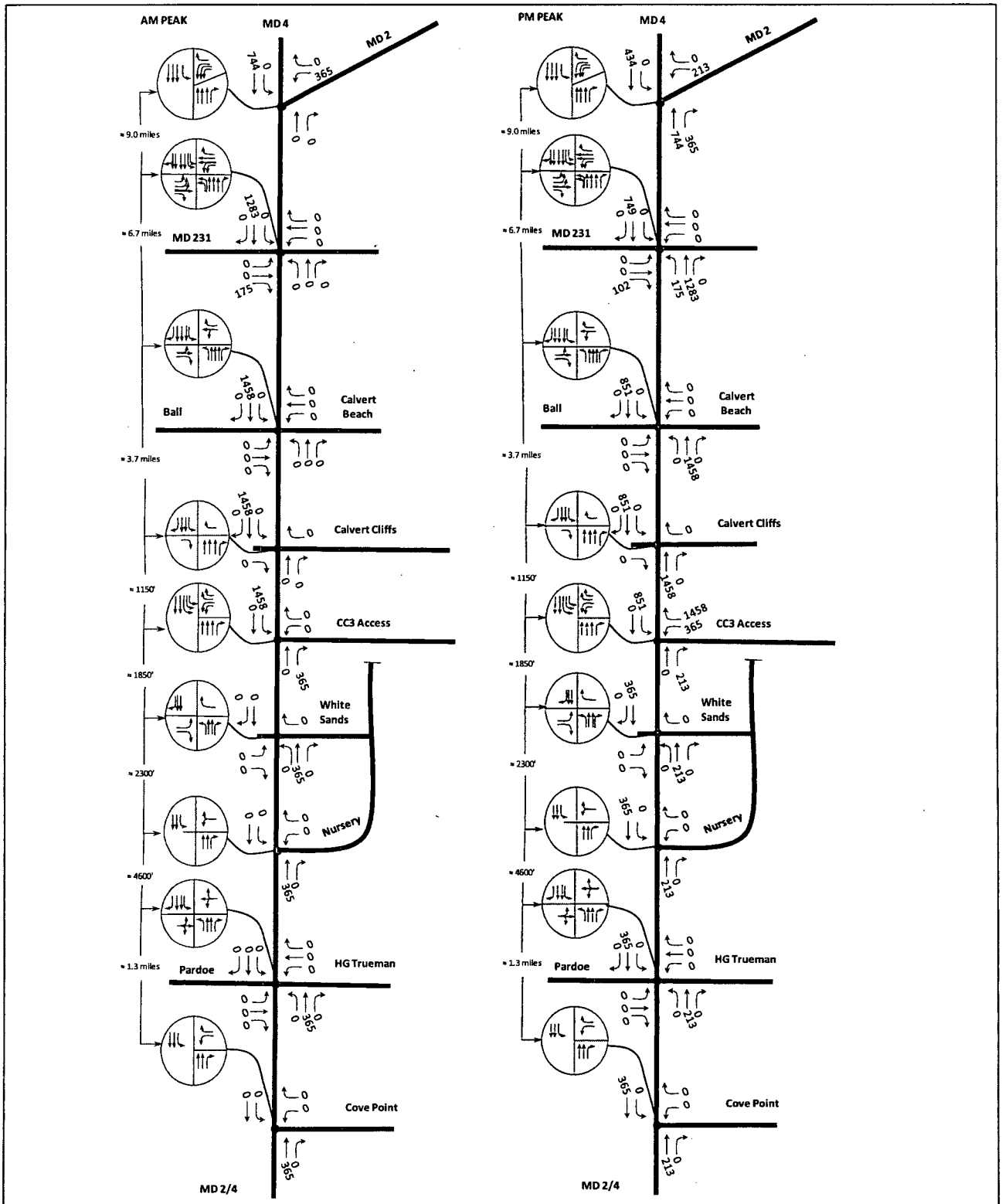
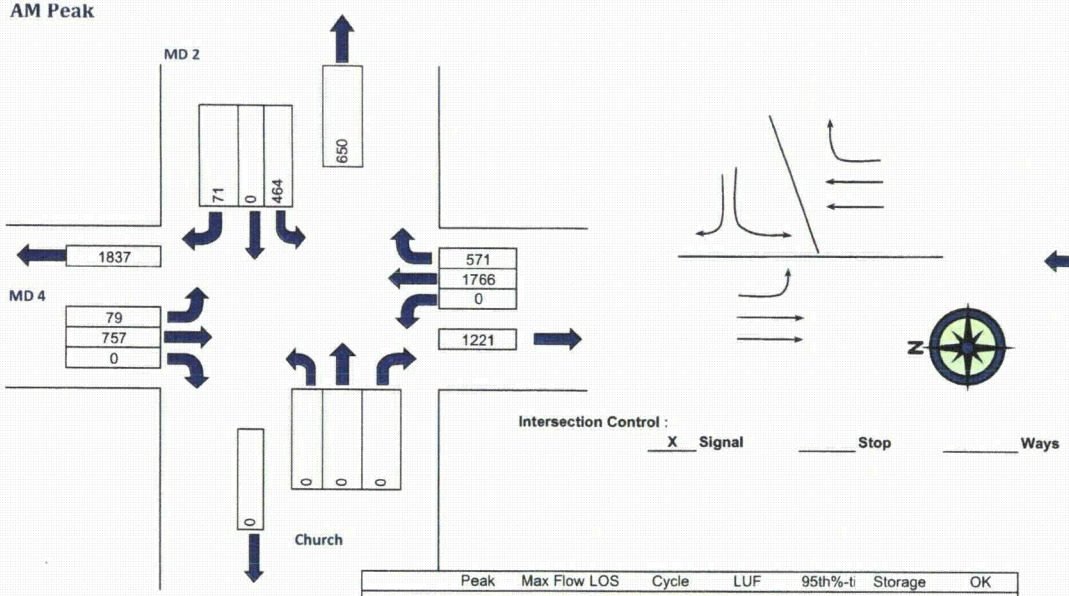
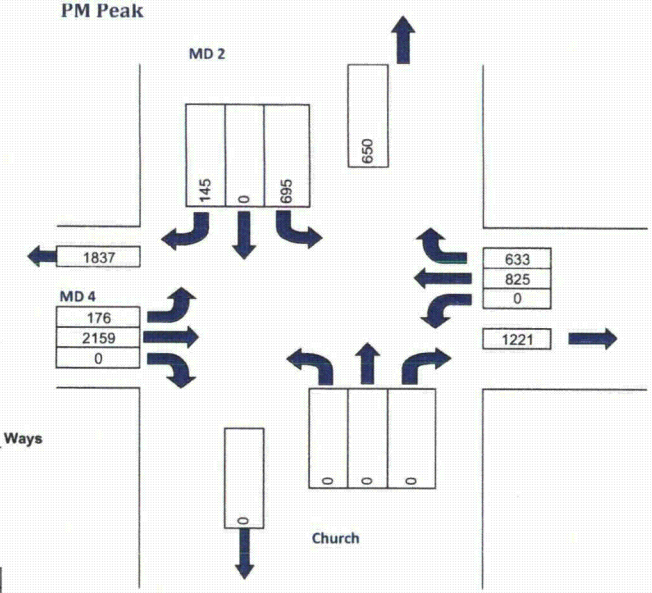


Figure H-2 – Peak Hour Volumes – Additional Construction Traffic Only

AM Peak



PM Peak



	Peak	Max Flow	LOS	Cycle	LUF	95th%-ti	Storage	OK
SBL	PM	176	D	135	1	231	800	Y
WBL	PM	695	D	135	1	912	450	N
NBT*	AM	1766	E	150	0.55	1416	630	N
# of Phases		3		* Storage shown applies to adjacent RT bay				

MD 2/MD 4 Diverge

No-Build, 2016, No Mitigation

KLD Engineering, P.C.

Lanes	LUF	CLV	LOS	Opposing Volume	PCE
1	1	0	A		
2	0.55	1000	B	0	1.1
3	0.4	1150	C	200	2
4	0.3	1300	D	600	3
Dbl LT	0.6	1450	E	800	4
		1600	F	1000	5

	Movement	Volume (1)	LUF (2)	Lane Volume (1) X (2) = (3)	Opposing Lefts (4)	LUF (5)	Opposing CLV (4)X(5) = (6)	CLV (5)+(6)=(7)
	NBT	1,766	0.55	971	79	1	79	1,050
	WBL	464	1	464	0	1	0	464

Remarks:
Right turns with a dedicated lane >150 ft are excluded

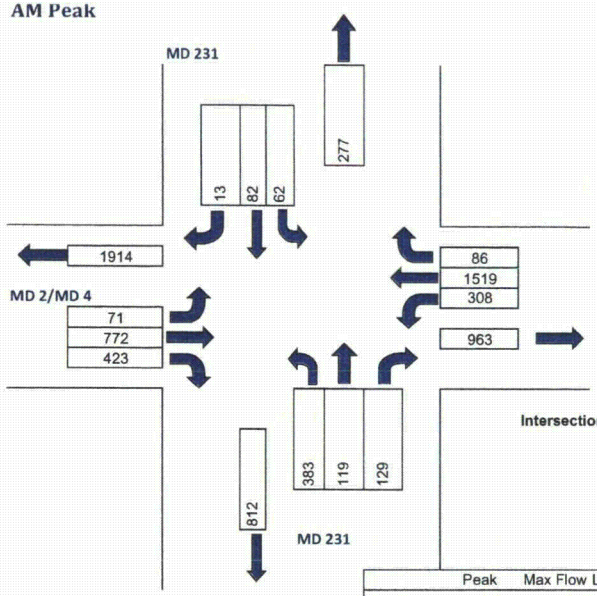
Critical Lane Volume — Total 1,514
LOS E

	Movement	Volume (1)	LUF (2)	Lane Volume (1) X (2) = (3)	Opposing Lefts (4)	LUF (5)	Opposing CLV (4)X(5) = (6)	CLV (5)+(6)=(7)
	NBT	825	0.55	454	176	1	176	630
	WBL	695	1	695	0	1	0	695

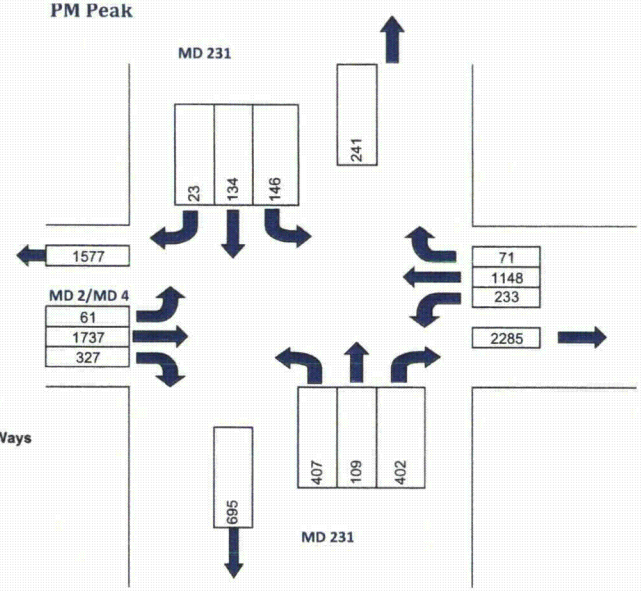
Remarks:
Right turns with a dedicated lane >150 ft are excluded

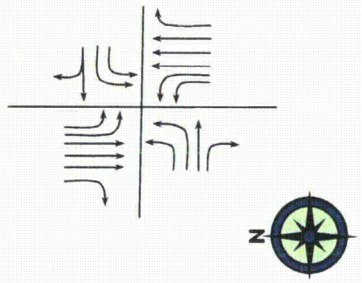
Critical Lane Volume — Total 1,325
LOS D

AM Peak



PM Peak





Intersection Control :

__X__ **Signal** _____ **Stop** _____ **Ways**

MD 231 & MD 2/MD 4

No-Build, 2016, No Mitigation

KLD Engineering, P.C.

	Peak	Max Flow	LOS	Cycle	LUF	95th%-ti	Storage	OK
NBL	AM	308	A	100	0.6	180	400	Y
SBL	PM	61	C	120	0.6	43	400	Y
EBL	PM	407	C	120	0.6	285	385	Y
WBL	PM	146	C	120	0.6	102	360	Y

# of Phases 5 * Storage shown applies to adjacent RT bay

Lanes	LUF	CLV	LOS	Opposing Volume	PCE
1	1	0	A		
2	0.55	1000	B	0	1.1
3	0.4	1150	C	200	2
4	0.3	1300	D	600	3
Dbl LT	0.6	1450	E	800	4
		1600	F	1000	5

	Movement	Volume (1)	LUF (2)	Lane Volume (1) X (2) = (3)	Opposing Lefts (4)	LUF (5)	Opposing CLV (4)X(5) = (6)	CLV (5)+(6)=(7)
	NBT	1,519	0.40	607	71	0.6	43	650
	SBT	772	0.40	309	308	0.6	185	493
	EBL	383	0.60	230	0	1	0	230
	WBTR	94	1	94	0	1	0	94

Remarks: Split Phase, EB & WB
Right turns with a dedicated lane >150 ft are excluded

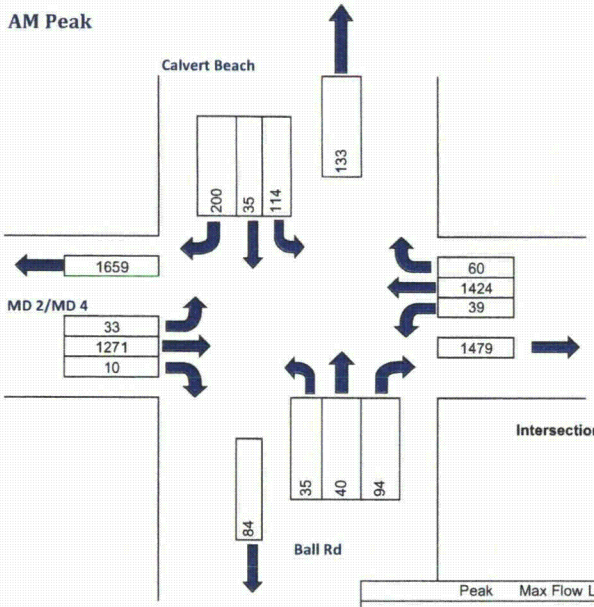
Critical Lane Volume — Total 974, LOS A

	Movement	Volume (1)	LUF (2)	Lane Volume (1) X (2) = (3)	Opposing Lefts (4)	LUF (5)	Opposing CLV (4)X(5) = (6)	CLV (5)+(6)=(7)
	NBT	1,148	0.4	459	61	0.6	37	496
	SBT	1,737	0.4	695	233	0.6	140	835
	EBL	407	0.6	244	0	1	0	244
	WBTR	157	1	157	0	1	0	157

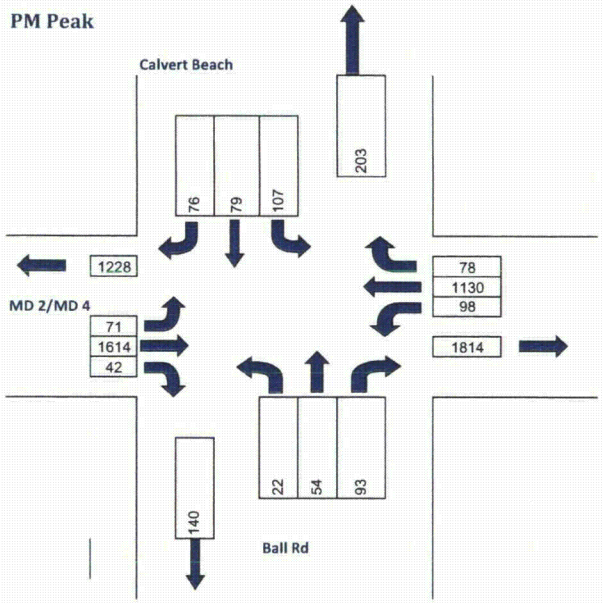
Remarks: Split Phase, EB & WB
Right turns with a dedicated lane >150 ft are excluded

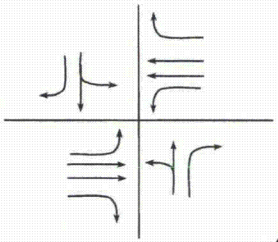
Critical Lane Volume — Total 1,236, LOS C

AM Peak



PM Peak





Intersection Control :

_X_ Signal **_____ Stop** **_____ Ways**

Calvert Beach/Ball Road &
MD 2/MD 4
No-Build, 2016, No Mitigation

KLD Engineering, P.C.

	Peak	Max Flow	LOS	Cycle	LUF	95th%-ti	Storage	OK
NBL	PM	98	C	120	1	114	500	Y
SBL	PM	71	C	120	1	83	575	Y
EBTL*	PM	76	C	120	1	89	300	Y
WBTL*	PM	186	C	120	1	217	350	Y
NBT	AM	1424	B	100	0.55	761		
SBT	PM	1614	C	120	0.55	1036		

# of Phases 5 * Storage shown applies to adjacent RT bypass line

Lanes	LUF	CLV	LOS	Opposing Volume	PCE
1	1	0	A		
2	0.55	1000	B	0	1.1
3	0.4	1150	C	200	2
4	0.3	1300	D	600	3
Dbl LT	0.6	1450	E	800	4
		1600	F	1000	5

	Movement	Volume (1)	LUF (2)	Lane Volume (1) X (2) = (3)	Opposing Lefts (4)	LUF (5)	Opposing CLV (4)X(5) = (6)	CLV (5)+(6)=(7)
	NBT	1,424	0.55	783	33	1	33	816
	SBT	1,271	0.55	699	39	1	39	738
	EBTL	75	1.00	75	0	1	0	75
	WBTL	149	1	149	0	1	0	149

Remarks: Split Phase, EB & WB
Right turns with a dedicated lane >150 ft are excluded

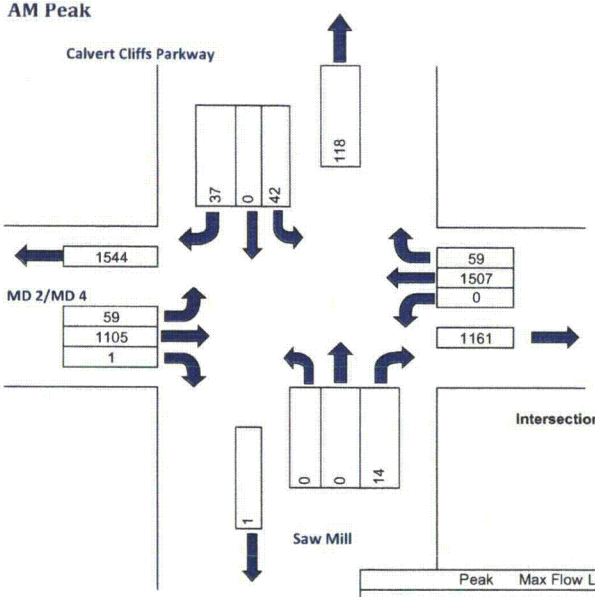
Critical Lane Volume Total 1,040
LOS B

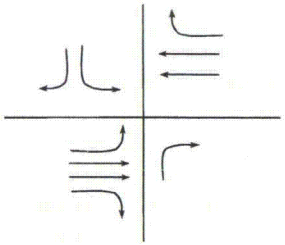
	Movement	Volume (1)	LUF (2)	Lane Volume (1) X (2) = (3)	Opposing Lefts (4)	LUF (5)	Opposing CLV (4)X(5) = (6)	CLV (5)+(6)=(7)
	NBT	1,130	0.55	622	71	1	71	693
	SBT	1,614	0.55	888	98	1	98	986
	EBTL	76	1	76	0	1	0	76
	WBTL	186	1	186	0	1	0	186

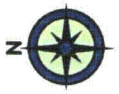
Remarks: Split Phase, EB & WB
Right turns with a dedicated lane >150 ft are excluded

Critical Lane Volume Total 1,248
LOS C

AM Peak



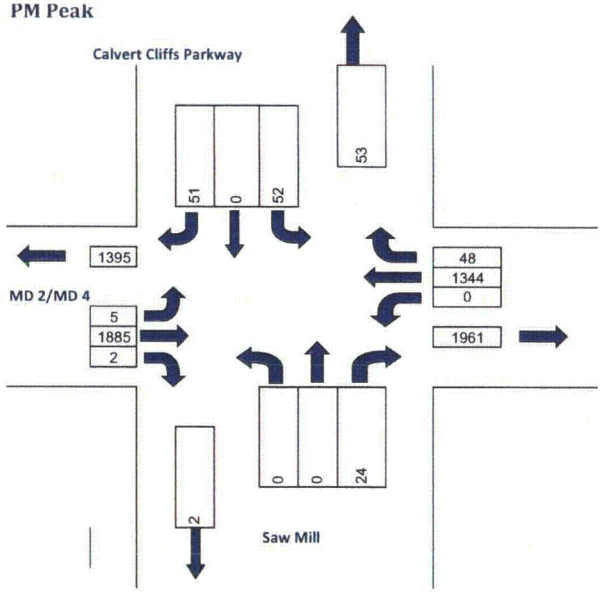




Intersection Control :

X Signal _____ Stop _____ Ways

PM Peak



Calvert Cliffs Parkway & MD 2/MD 4

No-Build, 2016, No Mitigation

KLD Engineering, P.C.

	Peak	Max Flow	LOS	Cycle	LUF	95th%-ti	Storage	OK
SBL	AM	59	A	100	1	57	600	Y
WBL	AM	52	A	100	1	51	400	Y
NBT*	AM	1507	A	100	0.55	806	2950	Y

# of Phases 3 * Storage shown applies to distance to next intersection

Lanes	LUF	CLV	LOS	Opposing Volume	PCE
1	1	0	A		
2	0.55	1000	B	0	1.1
3	0.4	1150	C	200	2
4	0.3	1300	D	600	3
Dbl LT	0.6	1450	E	800	4
		1600	F	1000	5

	Movement	Volume (1)	LUF (2)	Lane Volume (1) X (2) = (3)	Opposing Lefts (4)	LUF (5)	Opposing CLV (4)X(5) = (6)	CLV (5)+(6)=(7)
	NBT	1,507	0.55	829	59	1	59	888
	WBL	42	1	42	0	1	0	42

Remarks:
Right turns with a dedicated lane >150 ft are excluded

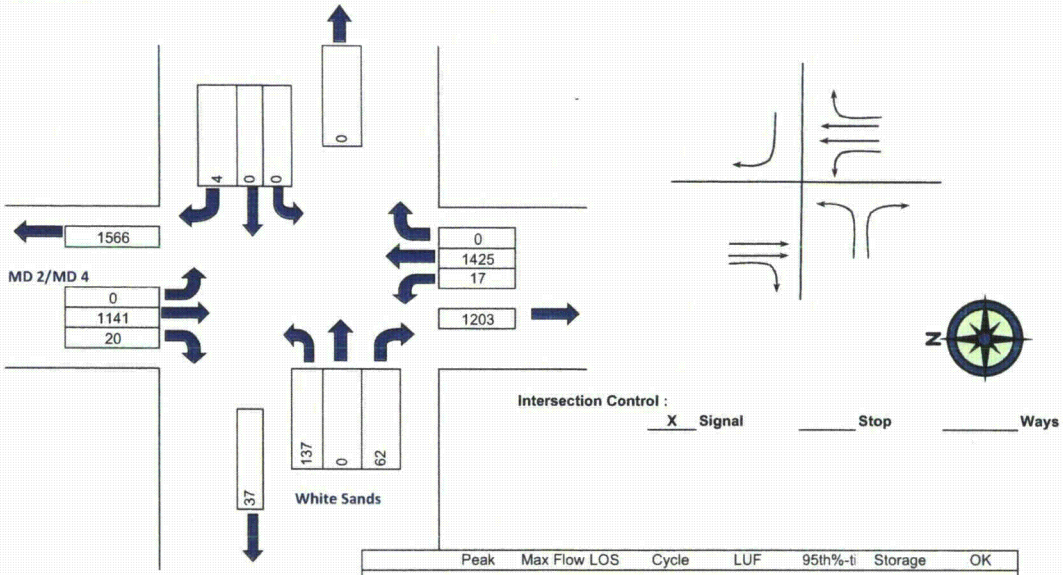
Critical Lane Volume Total 930
LOS A

	Movement	Volume (1)	LUF (2)	Lane Volume (1) X (2) = (3)	Opposing Lefts (4)	LUF (5)	Opposing CLV (4)X(5) = (6)	CLV (5)+(6)=(7)
	NBT	1,344	0.55	739	5	1	5	744
	WBL	52	1	52	0	1	0	52

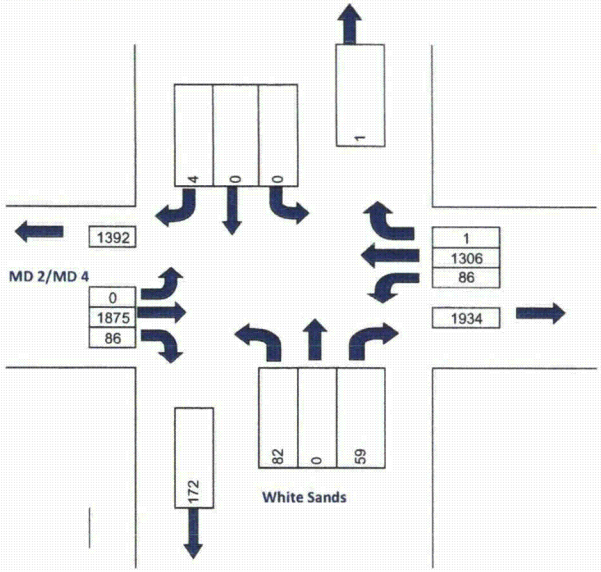
Remarks:
Right turns with a dedicated lane >150 ft are excluded

Critical Lane Volume Total 796
LOS A

AM Peak



PM Peak



Intersection Control :

X **Signal** ____ **Stop** ____ **Ways**

White Sands Drive & MD 2/MD 4

No-Build, 2016, No Mitigation

KLD Engineering, P.C.

	Peak	Max Flow	LOS	Cycle	LUF	95th%-ti	Storage	OK
NBL	PM	86	C	120	1	100	550	Y
EBTL*	AM	137	A	100	1	133	80	N
SBT*	PM	1875	C	120	0.55	1203	500	N
# of Phases		3		* Storage shown applies to adjacent RT bypass line				

LUF	CLV	LOS	Opposing Volume	PCE
1	0	A		
0.55	1000	B	0	1.1
0.4	1150	C	200	2
0.3	1300	D	600	3
0.6	1450	E	800	4
	1600	F	1000	5

	Movement	Volume (1)	LUF (2)	Lane Volume (1) X (2) = (3)	Opposing Lefts (4)	LUF (5)	Opposing CLV (4)X(5) = (6)	CLV (5)+(6)=(7)
	SBT	1,141	0.55	628	17	1	17	645
	EBTL	137	1.00	137	0	1	0	137

Remarks:
Right turns with a dedicated lane >150 ft are excluded

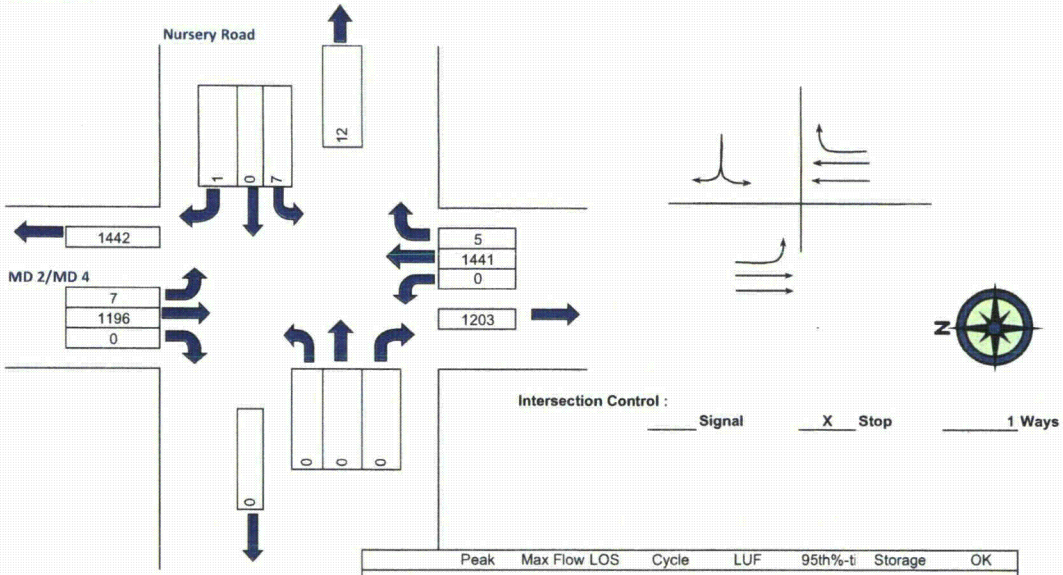
Critical Lane Volume — Total 782
LOS A

	Movement	Volume (1)	LUF (2)	Lane Volume (1) X (2) = (3)	Opposing Lefts (4)	LUF (5)	Opposing CLV (4)X(5) = (6)	CLV (5)+(6)=(7)
	SBT	1,875	0.55	1031	86	1	86	1,117
	EBTL	82	1	82	0	1	0	82

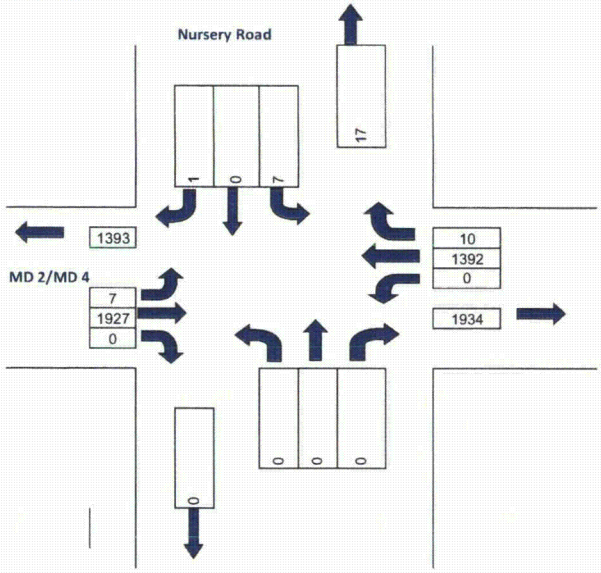
Remarks:
Right turns with a dedicated lane >150 ft are excluded

Critical Lane Volume — Total 1,199
LOS C

AM Peak



PM Peak



Intersection Control :

____ Signal X Stop 1 Ways

Nursery Road & MD 2/MD 4

No-Build, 2016, No Mitigation

KLD Engineering, P.C.

	Peak	Max Flow	LOS	Cycle	LUF	95th%-ti	Storage	OK
SBL	PM	7	B	100	1	7	570	Y
# of Phases		3						

Lanes	LUF	CLV	LOS	Opposing Volume	PCE
1	1	0	A		
2	0.55	1000	B	0	1.1
3	0.4	1150	C	200	2
4	0.3	1300	D	600	3
Dbl LT	0.6	1450	E	800	4
		1600	F	1000	5

	Movement	Volume (1)	LUF (2)	Lane Volume (1) X (2) = (3)	Opposing Lefts (4)	LUF (5)	Opposing CLV (4)X(5) = (6)	CLV (5)+(6)=(7)
	NBT	1,441	0.55	793	7	1	7	800
	SBT	1,196	0.55	658	0	1	0	658
	WBLR	8	1	8	0	1	0	8

Remarks:
Right turns with a dedicated lane >150 ft are excluded

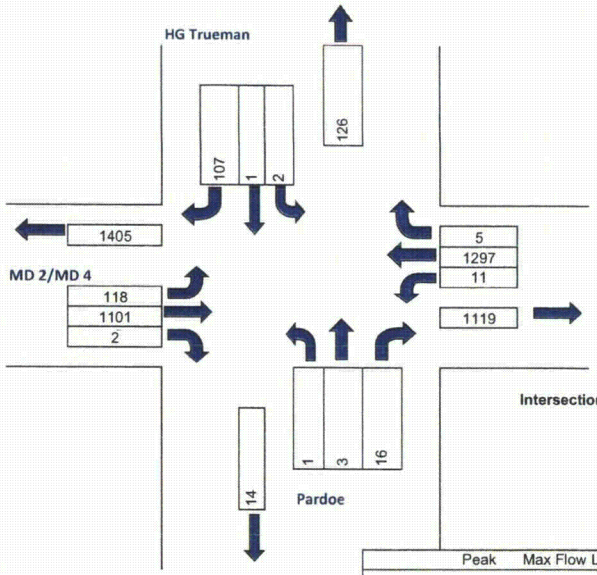
Critical Lane Volume Total 808
LOS A

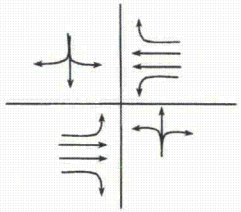
	Movement	Volume (1)	LUF (2)	Lane Volume (1) X (2) = (3)	Opposing Lefts (4)	LUF (5)	Opposing CLV (4)X(5) = (6)	CLV (5)+(6)=(7)
	NBT	1,392	0.55	766	7	1	7	773
	SBT	1,927	0.55	1060	0	1	0	1,060
	WBLR	8	1	8	0	1	0	8

Remarks:
Right turns with a dedicated lane >150 ft are excluded

Critical Lane Volume Total 1,068
LOS B

AM Peak

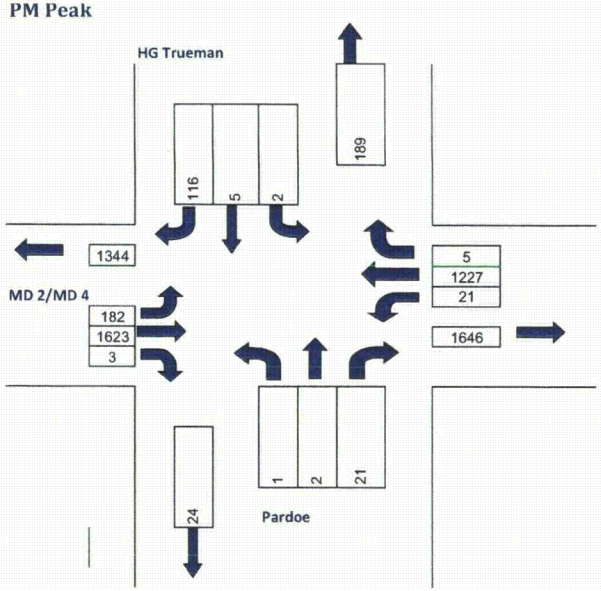




Intersection Control :

____ Signal X Stop ____ 2 Ways

PM Peak



	Peak	Max Flow	LOS	Cycle	LUF	95th%-ti	Storage	OK
NBL	PM	21	B	100	1	20	600	Y
SBL	AM	118	A	100	1	115	570	Y
# of Phases		5						

HG Trueman/Pardoe & MD 2/MD 4

No-Build, 2016, No Mitigation

KLD Engineering, P.C.

Lanes	LUF	CLV	LOS	Opposing Volume	PCE
1	1	0	A		
2	0.55	1000	B	0	1.1
3	0.4	1150	C	200	2
4	0.3	1300	D	600	3
Dbl LT	0.6	1450	E	800	4
		1600	F	1000	5

	Movement	Volume (1)	LUF (2)	Lane Volume (1) X (2) = (3)	Opposing Lefts (4)	LUF (5)	Opposing CLV (4)X(5) = (6)	CLV (5)+(6)=(7)
	NBT	1,297	0.55	713	118	1	118	831
	SBT	1,101	0.55	606	11	1	11	617
	EBLTR	20	1	20	0	1	0	20
	WBLTR	110	1	110	0	1	0	110

Remarks:
Right turns with a dedicated lane >150 ft are excluded

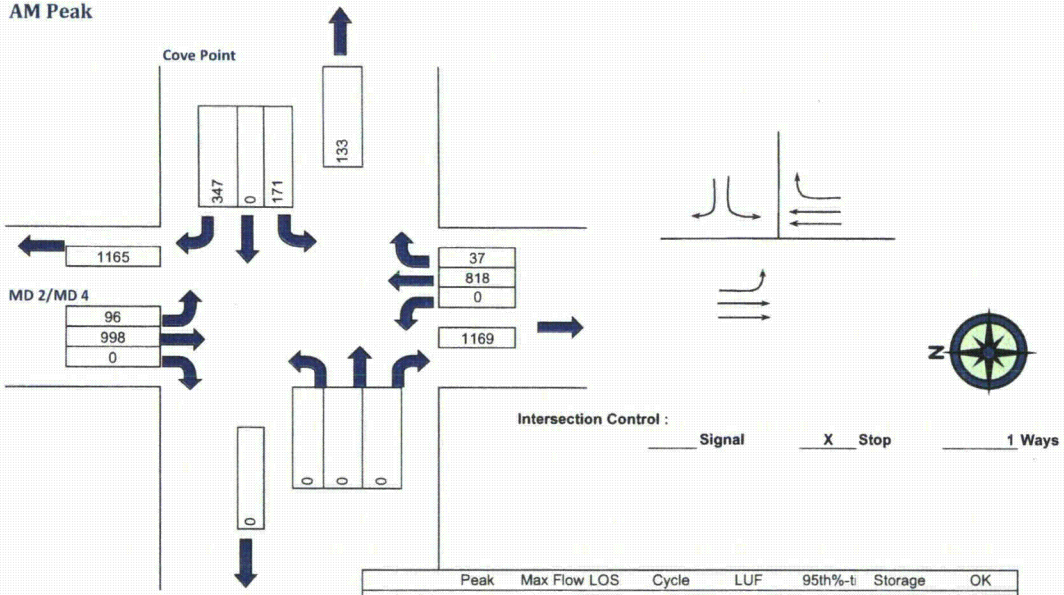
Critical Lane Volume — Total 961 — LOS A

	Movement	Volume (1)	LUF (2)	Lane Volume (1) X (2) = (3)	Opposing Lefts (4)	LUF (5)	Opposing CLV (4)X(5) = (6)	CLV (5)+(6)=(7)
	NBT	1,227	0.55	675	182	1	182	857
	SBT	1,623	0.55	893	21	1	21	914
	EBLTR	24	1	24				24
	WBLTR	123	1	123	0	1	0	123

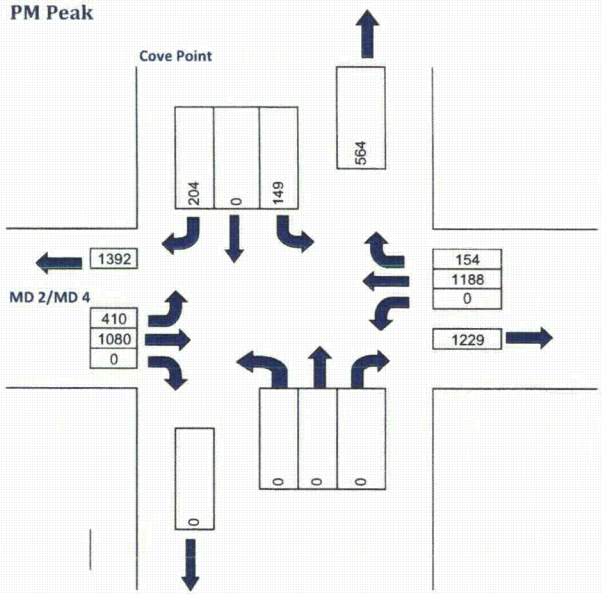
Remarks:
Right turns with a dedicated lane >150 ft are excluded

Critical Lane Volume — Total 1,061 — LOS B

AM Peak



PM Peak



Intersection Control :

____ **Signal** ___X___ **Stop** _____1 **Ways**

Cove Point Road & MD 2/MD 4

No-Build, 2016, No Mitigation

KLD Engineering, P.C.

	Peak	Max Flow	LOS	Cycle	LUF	95th%-ti	Storage	OK
SBL	PM	410	C	120	1	478	550	Y
WBL	PM	149	C	120	1	174	300	Y
# of Phases		3						

Lanes	LUF	CLV	LOS	Opposing Volume	PCE
1	1	0	A		
2	0.55	1000	B	0	1.1
3	0.4	1150	C	200	2
4	0.3	1300	D	600	3
Dbl LT	0.6	1450	E	800	4
		1600	F	1000	5

	Movement	Volume (1)	LUF (2)	Lane Volume (1) X (2) = (3)	Opposing Lefts (4)	LUF (5)	Opposing CLV (4)X(5) = (6)	CLV (5)+(6)=(7)
	NBT	818	0.55	450	96	1	96	546
	SBT	998	0.55	549	0	1	0	549
	WBL	171	1	171	0	1	0	171
	WBR	251	1	251	0	1	0	251

Remarks:
Some WBR Coincide with SBL
Right turns with a dedicated lane >150 ft are excluded
Right turns with a dedicated lane >150 ft are excluded

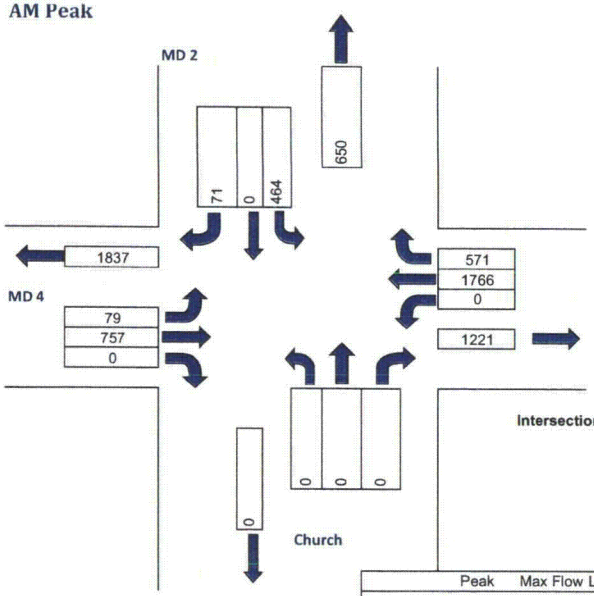
Critical Lane Volume — Total 800
LOS A

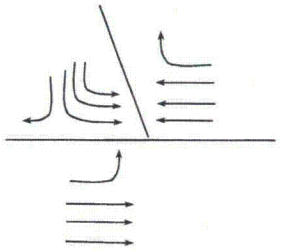
	Movement	Volume (1)	LUF (2)	Lane Volume (1) X (2) = (3)	Opposing Lefts (4)	LUF (5)	Opposing CLV (4)X(5) = (6)	CLV (5)+(6)=(7)
	NBT	1,188	0.55	653	410	1	410	1,063
	SBT	1,080	0.55	594	0	1	0	594
	WBL	149	1	149	0	1	0	149
	WBR	0	1	0	0	1	0	0

Remarks:
Some WBR Coincide with SBL
Right turns with a dedicated lane >150 ft are excluded
Right turns with a dedicated lane >150 ft are excluded

Critical Lane Volume — Total 1,212
LOS C

AM Peak

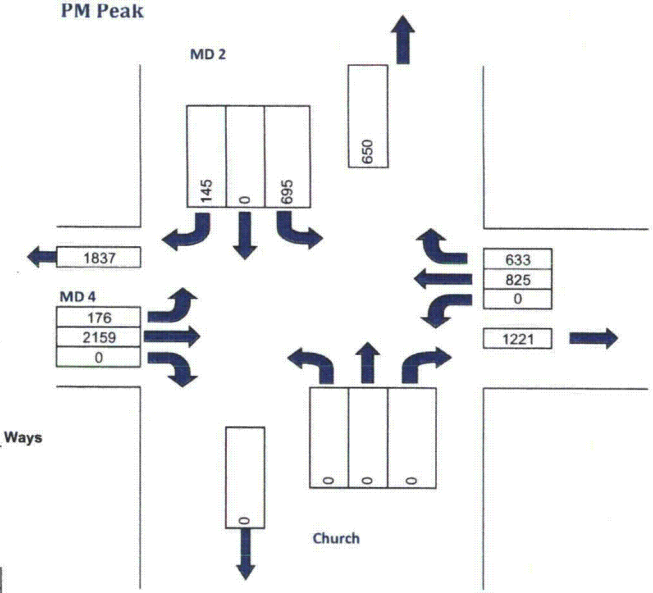




Intersection Control :

X Signal ____ Stop ____ Ways

PM Peak



MD 2/MD 4 Diverge
(Concept 2)
No-Build, 2016, With Mitigation

KLD Engineering, P.C.

	Peak	Max Flow	LOS	Cycle	LUF	95th%-ti	Storage	OK
SBL	PM	176	C	120	1	205	800	Y
WBL	PM	695	C	120	0.45	365	600	Y
NBT*	PM	1766	C	120	0.4	824	1100	Y
SBT	AM	757	A	100	0.4	294		

# of Phases 3 * Storage shown applies to adjacent RT bay

Lanes	LUF	CLV	LOS	Opposing Volume	PCE
1	1	0	A		
2	0.55	1000	B	0	1.1
3	0.4	1150	C	200	2
4	0.3	1300	D	600	3
Dbl LT	0.6	1450	E	800	4
		1600	F	1000	5

	Movement	Volume (1)	LUF (2)	Lane Volume (1) X (2) = (3)	Opposing Lefts (4)	LUF (5)	Opposing CLV (4)X(5) = (6)	CLV (5)+(6)=(7)
	NBT	1,766	0.40	706	79	1	79	785
	SBT	757	0.40	303	0	1	0	303
	WBL	464	0.45	209	0	1	0	209

Right turns with a dedicated lane >150 ft are excluded

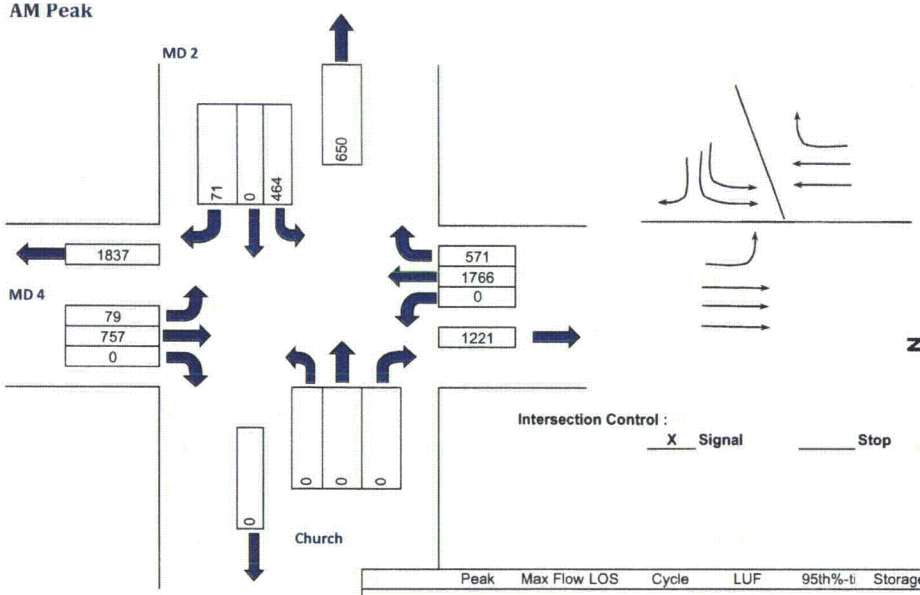
Critical Lane Volume Total 994
LOS A

	Movement	Volume (1)	LUF (2)	Lane Volume (1) X (2) = (3)	Opposing Lefts (4)	LUF (5)	Opposing CLV (4)X(5) = (6)	CLV (5)+(6)=(7)
	NBT	825	0.4	330	176	1	176	506
	SBT	2,159	0.4	864	0	1	0	864
	WBL	695	0.45	313	0	1	0	313

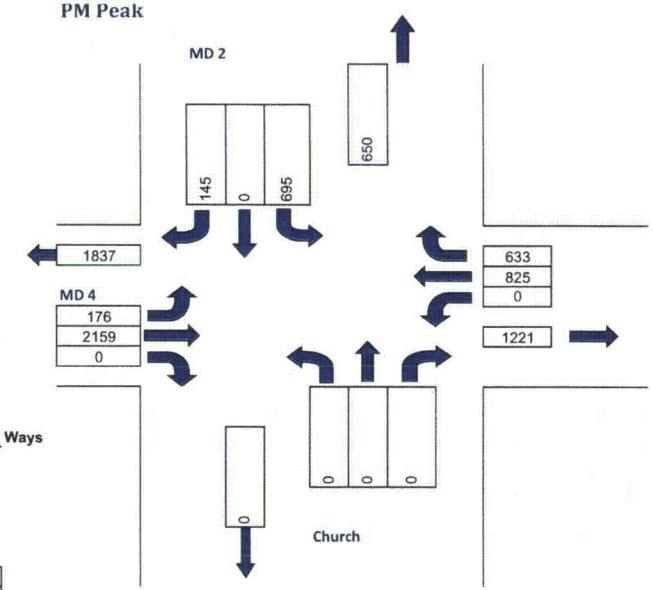
Right turns with a dedicated lane >150 ft are excluded

Critical Lane Volume Total 1,176
LOS C

AM Peak



PM Peak



Intersection Control :

X Signal **Stop** **Ways**

MD 2/MD 4 Diverge
(Concept 1)
No-Build, 2016, With Mitigation

KLD Engineering, P.C.

	Peak	Max Flow	LOS	Cycle	LUF	95th%-ti	Storage	OK
SBL	PM	176	C	120	1	205	800	Y
WBL	PM	695	C	120	0.6	486	800	Y
NBT*	AM	1766	D	135	0.55	1275	1450	Y
SBT	AM	757	D	135	0.4	397		
# of Phases		3		* Storage shown applies to adjacent RT bay				

Lanes	LUF	CLV	LOS	Opposing Volume	PCE
1	1	0	A		
2	0.55	1000	B	0	1.1
3	0.4	1150	C	200	2
4	0.3	1300	D	600	3
Dbl LT	0.6	1450	E	800	4
		1600	F	1000	5

	Movement	Volume (1)	LUF (2)	Lane Volume (1) X (2) = (3)	Opposing Lefts (4)	LUF (5)	Opposing CLV (4)X(5) = (6)	CLV (5)+(6)=(7)
	NBT	1,766	0.55	971	79	1	79	1,050
	SBT	757	0.40	303	0	1	0	303
	WBL	464	0.60	278	0	1	0	278

Right turns with a dedicated lane >150 ft are excluded

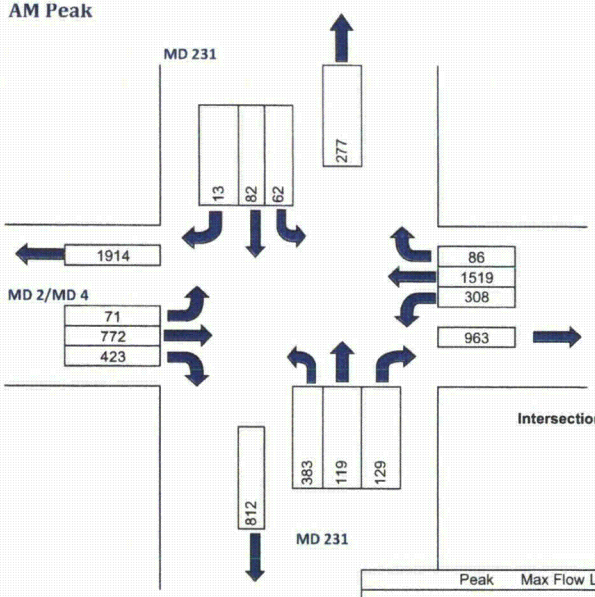
Critical Lane Volume — Total 1,328 — LOS D

	Movement	Volume (1)	LUF (2)	Lane Volume (1) X (2) = (3)	Opposing Lefts (4)	LUF (5)	Opposing CLV (4)X(5) = (6)	CLV (5)+(6)=(7)
	NBT	825	0.55	454	176	1	176	630
	SBT	2,159	0.4	864	0	1	0	864
	WBL	695	0.6	417	0	1	0	417

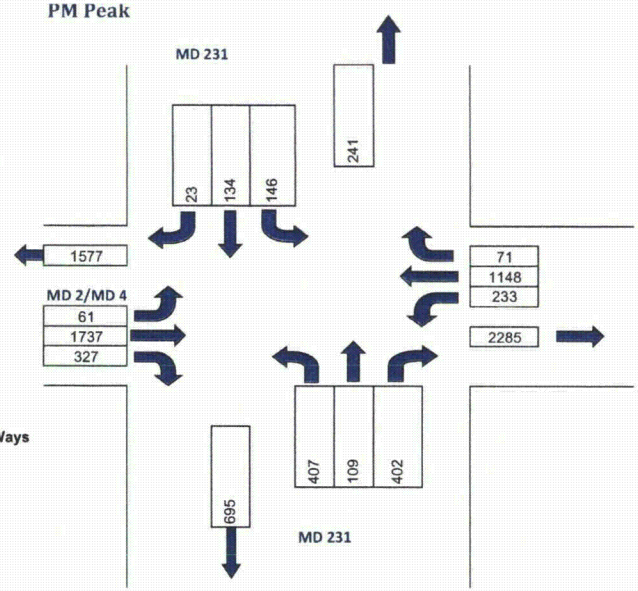
Right turns with a dedicated lane >150 ft are excluded

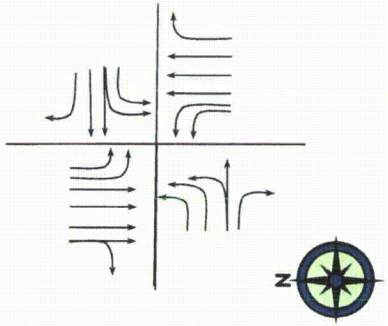
Critical Lane Volume — Total 1,280 — LOS C

AM Peak



PM Peak





Intersection Control :

X **Signal** ____ **Stop** ____ **Ways**

MD 231 & MD 2/MD 4

No-Build, 2016, With Mitigation

KLD Engineering, P.C.

	Peak	Max Flow	LOS	Cycle	LUF	95th%-ti	Storage	OK
NBL	AM	308	A	100	0.6	180	400	Y
SBL	AM	71	A	100	0.6	42	400	Y
EBLT	PM	526	B	100	0.45	230	385	Y
WBLT	PM	280	B	100	0.45	123	360	Y
SBTR	PM	2064	B	100	0.3	602		
# of Phases		5						

Lanes	LUF	CLV	LOS	Opposing Volume	PCE
1	1	0	A		
2	0.55	1000	B	0	1.1
3	0.4	1150	C	200	2
4	0.3	1300	D	600	3
Dbl LT	0.6	1450	E	800	4
		1600	F	1000	5

Movement	Volume (1)	LUF (2)	Lane Volume (1) X (2) = (3)	Opposing Lefts (4)	LUF (5)	Opposing CLV (4)X(5) = (6)	CLV (5)+(6)=(7)
NBT	1,519	0.40	607	71	0.6	43	650
SBTR	1,195	0.30	358	308	0.6	185	543
EBTL	502	0.45	226	0	1	0	226
WBTL	144	0.45	65	0	1	0	65

Remarks: Split Phase, EB & WB
Right turns with a dedicated lane >150 ft are excluded

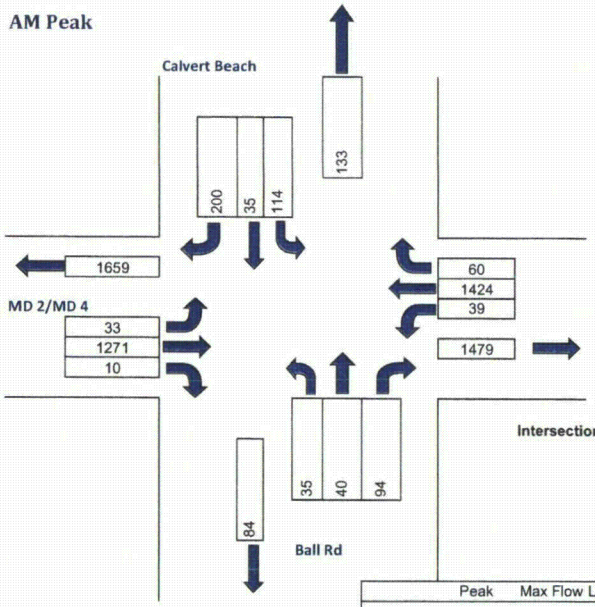
Critical Lane Volume — Total 941 — LOS A

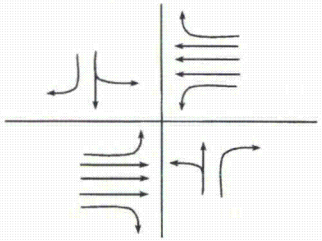
Movement	Volume (1)	LUF (2)	Lane Volume (1) X (2) = (3)	Opposing Lefts (4)	LUF (5)	Opposing CLV (4)X(5) = (6)	CLV (5)+(6)=(7)
NBT	1,148	0.4	459	61	0.6	37	496
SBTR	2,064	0.3	619	233	0.6	140	759
EBTL	516	0.45	232	0	1	0	232
WBTL	280	0.45	126	0	1	0	126

Remarks: Split Phase, EB & WB
Right turns with a dedicated lane >150 ft are excluded

Critical Lane Volume — Total 1,117 — LOS B

AM Peak

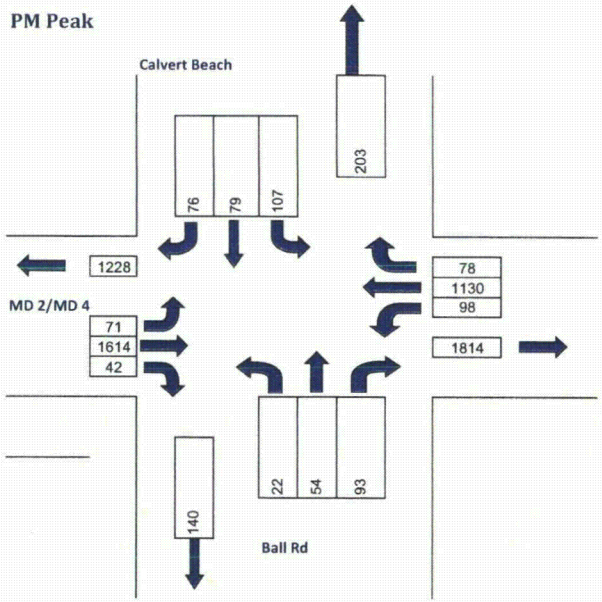




Intersection Control :

__X__ Signal _____ Stop _____ Ways _____

PM Peak



Calvert Beach/Ball Road &
MD 2/MD 4
No-Build, 2016, With Mitigation

KLD Engineering, P.C.

	Peak	Max Flow	LOS	Cycle	LUF	95th%-ti	Storage	OK
NBL	PM	98	B	100	1	95	500	Y
SBL	PM	71	B	100	1	69	575	Y
EBTL*	PM	76	B	100	1	74	300	Y
WBTL*	PM	186	B	100	1	181	350	Y
NBT	AM	1424	A	100	0.4	554		
SBT	PM	1614	B	100	0.4	628		
# of Phases		5		* Storage shown applies to adjacent RT bypass line				

Lanes	LUF	CLV	LOS	Opposing Volume	PCE
1	1	0	A		
2	0.55	1000	B	0	1.1
3	0.4	1150	C	200	2
4	0.3	1300	D	600	3
Dbl LT	0.6	1450	E	800	4
		1600	F	1000	5

	Movement	Volume (1)	LUF (2)	Lane Volume (1) X (2) = (3)	Opposing Lefts (4)	LUF (5)	Opposing CLV (4)X(5) = (6)	CLV (5)+(6)=(7)
	NBT	1,424	0.40	570	33	1	33	603
	SBT	1,271	0.40	509	39	1	39	548
	EBTL	75	1.00	75	0	1	0	75
	WBTL	149	1	149	0	1	0	149

Remarks: Split Phase, EB & WB
Right turns with a dedicated lane >150 ft are excluded

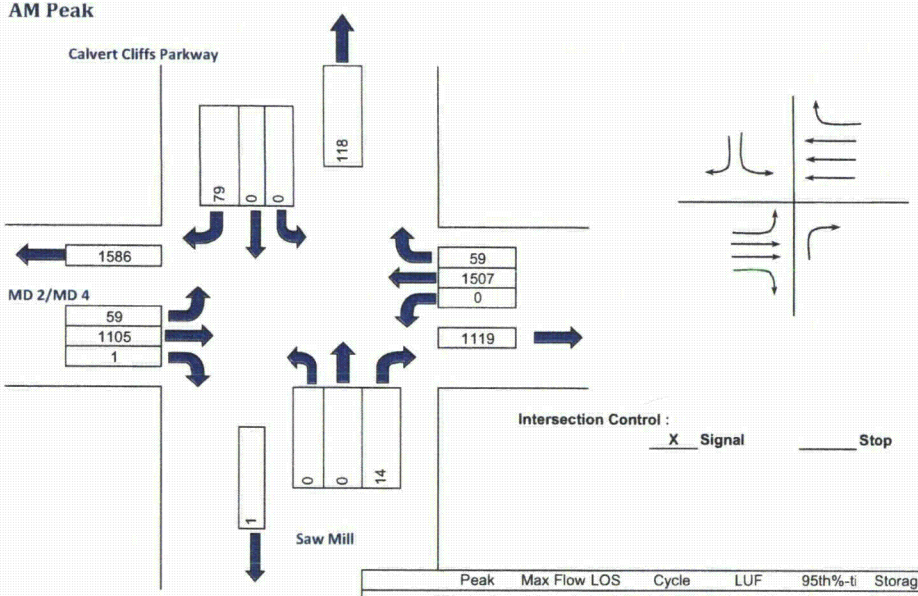
Critical Lane Volume — Total 827 — LOS A

	Movement	Volume (1)	LUF (2)	Lane Volume (1) X (2) = (3)	Opposing Lefts (4)	LUF (5)	Opposing CLV (4)X(5) = (6)	CLV (5)+(6)=(7)
	NBT	1,130	0.4	452	71	1	71	523
	SBT	1,614	0.4	646	98	1	98	744
	EBTL	76	1	76	0	1	0	76
	WBTL	186	1	186	0	1	0	186

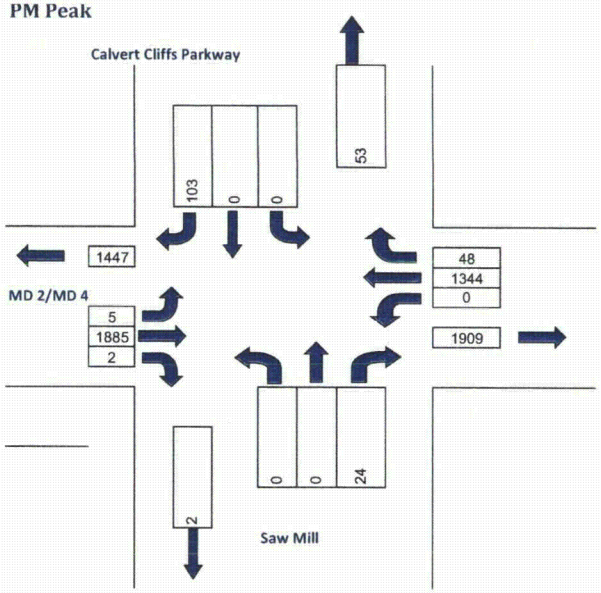
Remarks: Split Phase, EB & WB
Right turns with a dedicated lane >150 ft are excluded

Critical Lane Volume — Total 1,006 — LOS B

AM Peak



PM Peak



Intersection Control :

X Signal ____ Stop ____ Ways ____

Calvert Cliffs Parkway &
MD 2/MD 4
No-Build, 2016, With Mitigation

KLD Engineering, P.C.

	Peak	Max Flow	LOS	Cycle	LUF	95th%-ti	Storage	OK
SBL	AM	59	A	100	1	57	600	Y
WBL	AM	0	A	100	1	0	400	Y
NBT*	AM	1507	A	100	0.4	586	2950	Y

# of Phases 3 * Storage shown applies to distance to next intersection

Lanes	LUF	CLV	LOS	Opposing Volume	PCE
1	1	0	A		
2	0.55	1000	B	0	1.1
3	0.4	1150	C	200	2
4	0.3	1300	D	600	3
Dbl LT	0.6	1450	E	800	4
		1600	F	1000	5

	Movement	Volume (1)	LUF (2)	Lane Volume (1) X (2) = (3)	Opposing Lefts (4)	LUF (5)	Opposing CLV (4)X(5) = (6)	CLV (5)+(6)=(7)
	NBT	1,507	0.40	603	59	1	59	662
	WBL	0	1	0	0	1	0	0

Remarks:
Right turns with a dedicated lane >150 ft are excluded

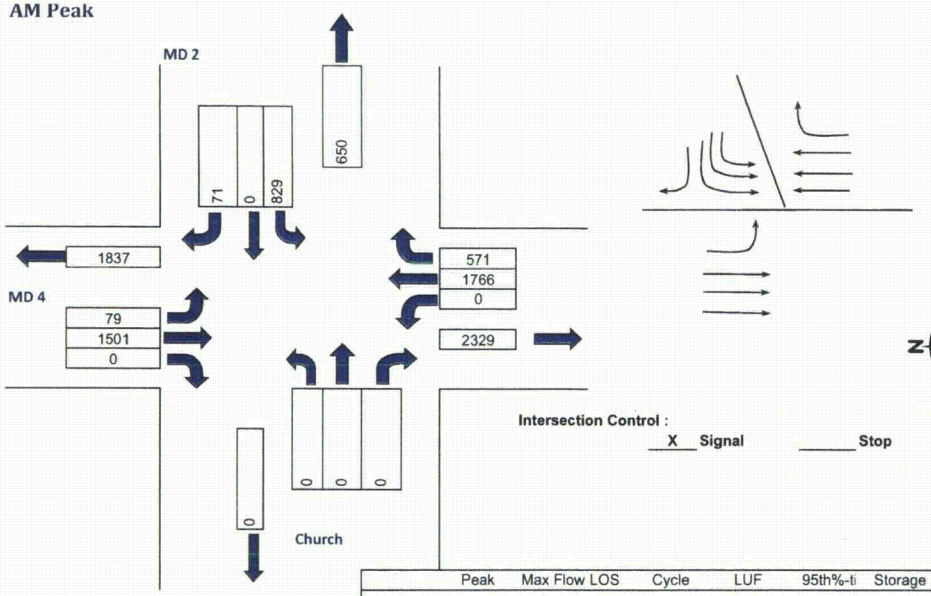
Critical Lane Volume Total 662
LOS A

	Movement	Volume (1)	LUF (2)	Lane Volume (1) X (2) = (3)	Opposing Lefts (4)	LUF (5)	Opposing CLV (4)X(5) = (6)	CLV (5)+(6)=(7)
	NBT	1,344	0.4	538	5	1	5	543
	WBL	0	1	0	0	1	0	0

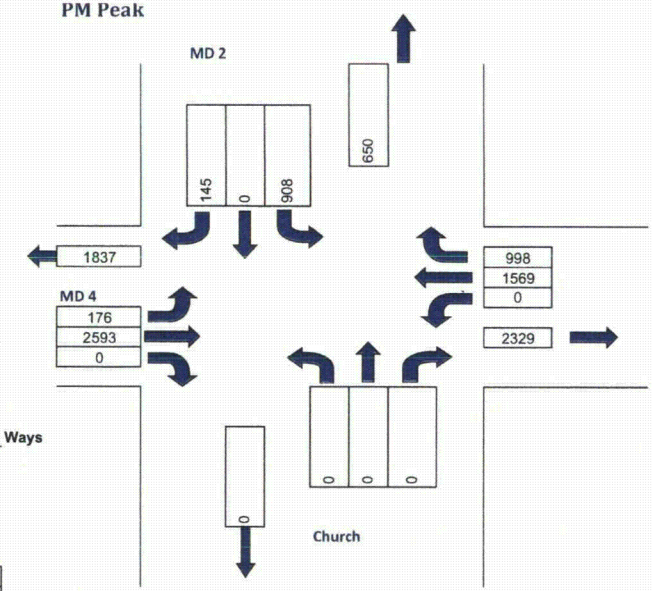
Remarks:
Right turns with a dedicated lane >150 ft are excluded

Critical Lane Volume Total 543
LOS A

AM Peak



PM Peak



Intersection Control :

X Signal ____ Stop ____ Ways

MD 2/MD 4 Diverge
(Concept 2)
Construction, 2016, With Mitigation

KLD Engineering, P.C.

	Peak	Max Flow	LOS	Cycle	LUF	95th%-ti	Storage	OK
SBL	PM	176	D	135	1	231	800	Y
WBL	PM	908	D	135	0.45	536	600	Y
NBT*	PM	1569	D	135	0.4	824	1100	Y
SBT	PM	2593	D	135	0.4	1361		
# of Phases		3		* Storage shown applies to adjacent RT bay				

Lanes	LUF	CLV	LOS	Opposing Volume	PCE
1	1	0	A		
2	0.55	1000	B	0	1.1
3	0.4	1150	C	200	2
4	0.3	1300	D	600	3
Dbl LT	0.6	1450	E	800	4
		1600	F	1000	5

	Movement	Volume (1)	LUF (2)	Lane Volume (1) X (2) = (3)	Opposing Lefts (4)	LUF (5)	Opposing CLV (4)X(5) = (6)	CLV (5)+(6)=(7)
	NBT	1,766	0.40	706	79	1	79	785
	SBT	1,501	0.40	600	0	1	0	600
	WBL	829	0.45	373	0	1	0	373

Right turns with a dedicated lane >150 ft are excluded

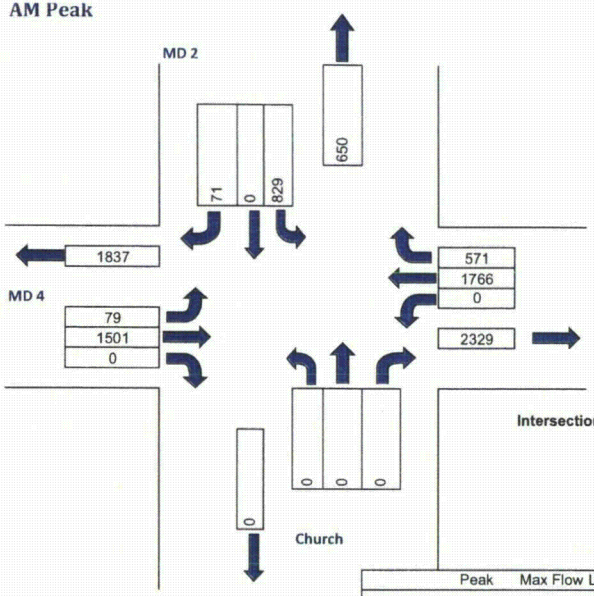
Critical Lane Volume — Total 1,158 — LOS C

	Movement	Volume (1)	LUF (2)	Lane Volume (1) X (2) = (3)	Opposing Lefts (4)	LUF (5)	Opposing CLV (4)X(5) = (6)	CLV (5)+(6)=(7)
	NBT	1,569	0.4	628	176	1	176	803
	SBT	2,593	0.4	1037	0	1	0	1,037
	WBL	908	0.45	408	0	1	0	408

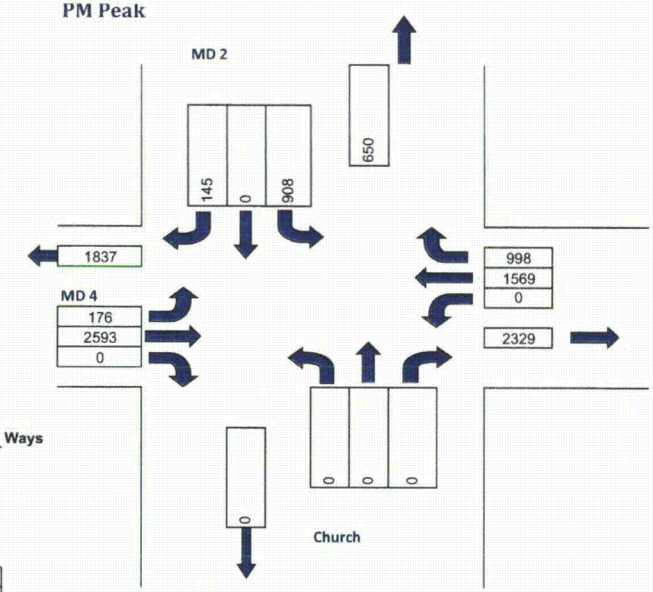
Right turns with a dedicated lane >150 ft are excluded

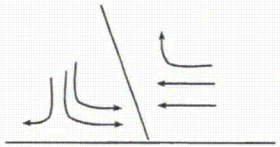
Critical Lane Volume — Total 1,445 — LOS D

AM Peak



PM Peak





Intersection Control :

X Signal _____ Stop _____ Ways

MD 2/MD 4 Diverge
(Concept 1)
Construction, 2016, With Mitigation

KLD Engineering, P.C.

	Peak	Max Flow	LOS	Cycle	LUF	95th%-ti	Storage	OK
SBL	PM	176	E	150	1	256	800	Y
WBL	PM	908	E	150	0.6	794	800	Y
NBT*	AM	1766	E	150	0.55	1416	1450	Y
SBT	PM	2593	E	150	0.4	1512		
# of Phases		3		* Storage shown applies to adjacent RT bay				

Lanes	LUF	CLV	LOS	Opposing Volume	PCE
1	1	0	A		
2	0.55	1000	B	0	1.1
3	0.4	1150	C	200	2
4	0.3	1300	D	600	3
Dbl LT	0.6	1450	E	800	4
		1600	F	1000	5

	Movement	Volume (1)	LUF (2)	Lane Volume (1) X (2) = (3)	Opposing Lefts (4)	LUF (5)	Opposing CLV (4)X(5) = (6)	CLV (5)+(6)=(7)
	NBT	1,766	0.55	971	79	1	79	1,050
	SBT	1,501	0.40	600	0	1	0	600
	WBL	829	0.60	497	0	1	0	497

Right turns with a dedicated lane >150 ft are excluded

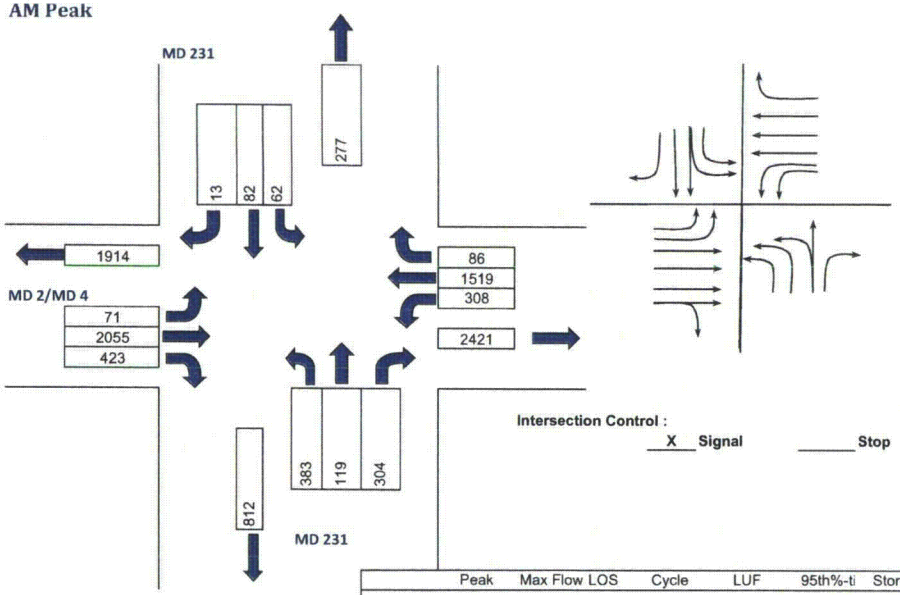
Critical Lane Volume — Total 1,547 — LOS E

	Movement	Volume (1)	LUF (2)	Lane Volume (1) X (2) = (3)	Opposing Lefts (4)	LUF (5)	Opposing CLV (4)X(5) = (6)	CLV (5)+(6)=(7)
	NBT	1,569	0.55	863	176	1	176	1,039
	SBT	2,593	0.4	1037	0	1	0	1,037
	WBL	908	0.6	545	0	1	0	545

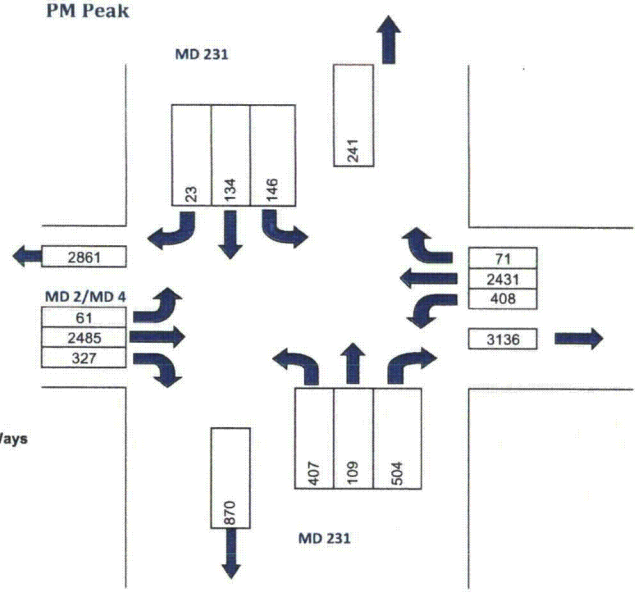
Right turns with a dedicated lane >150 ft are excluded

Critical Lane Volume — Total 1,583 — LOS E

AM Peak



PM Peak



Intersection Control :

__X__ Signal _____ Stop _____ Ways

MD 231 & MD 2/MD 4

Construction, 2016, With Mitigation

KLD Engineering, P.C.

	Peak	Max Flow	LOS	Cycle	LUF	95th%-ti	Storage	OK
NBL	PM	408	D	135	0.6	321	400	Y
SBL	AM	71	C	120	0.6	50	400	Y
EBLT	PM	526	D	135	0.45	311	385	Y
WBLT	PM	280	D	135	0.45	166	360	Y
SBTR	PM	2813	D	135	0.3	1108		
# of Phases		5						

Lanes	LUF	CLV	LOS	Opposing Volume	PCE
1	1	0	A		
2	0.55	1000	B	0	1.1
3	0.4	1150	C	200	2
4	0.3	1300	D	600	3
Dbl LT	0.6	1450	E	800	4
		1600	F	1000	5

	Movement	Volume (1)	LUF (2)	Lane Volume (1) X (2) = (3)	Opposing Lefts (4)	LUF (5)	Opposing CLV (4)X(5) = (6)	CLV (5)+(6)=(7)
	NBT	1,519	0.40	607	71	0.6	43	650
	SBTR	2,478	0.30	743	308	0.6	185	928
	EBTL	502	0.45	226	0	1	0	226
	WBTL	144	0.45	65	0	1	0	65

Remarks: Split Phase, EB & WB
Right turns with a dedicated lane >150 ft are excluded

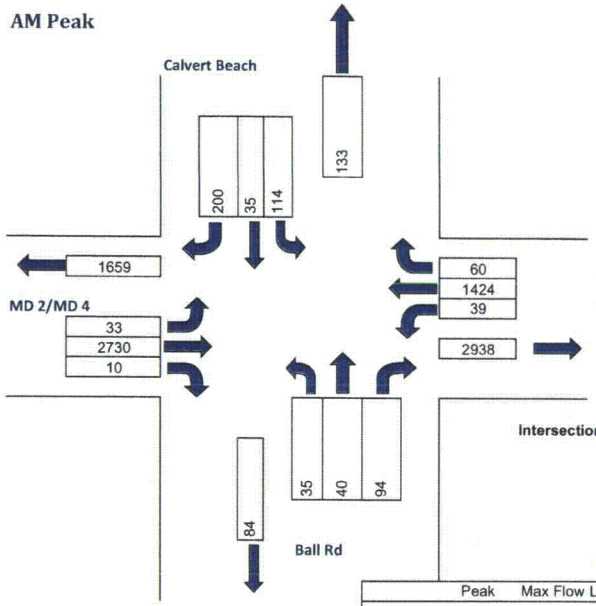
Critical Lane Volume — Total 1,219 — LOS C

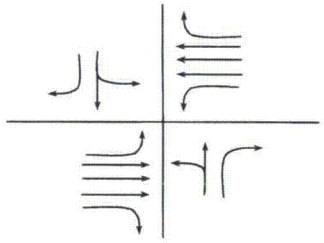
	Movement	Volume (1)	LUF (2)	Lane Volume (1) X (2) = (3)	Opposing Lefts (4)	LUF (5)	Opposing CLV (4)X(5) = (6)	CLV (5)+(6)=(7)
	NBT	2,431	0.4	972	61	0.6	37	1,009
	SBTR	2,813	0.3	844	408	0.6	245	1,089
	EBTL	516	0.45	232	0	1	0	232
	WBTL	280	0.45	126	0	1	0	126

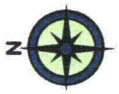
Remarks: Split Phase, EB & WB
Right turns with a dedicated lane >150 ft are excluded

Critical Lane Volume — Total 1,447 — LOS D

AM Peak



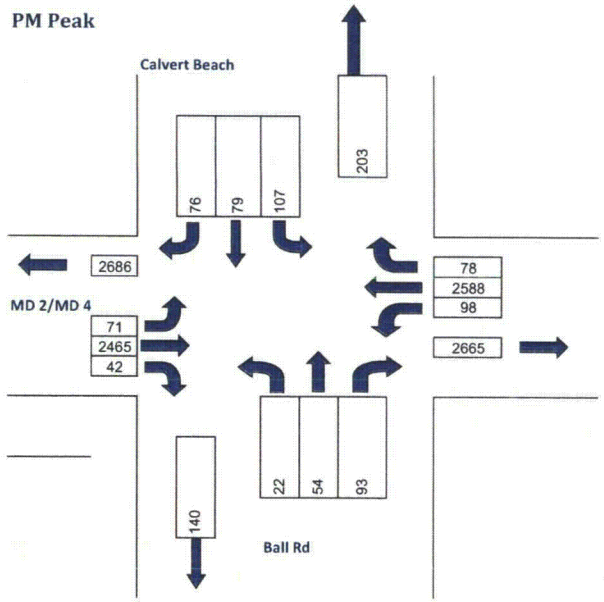




Intersection Control :

__X__ Signal _____ Stop _____ Ways

PM Peak



Calvert Beach/Ball Road &
MD 2/MD 4
Construction, 2016, With Mitigation

KLD Engineering, P.C.

	Peak	Max Flow	LOS	Cycle	LUF	95th%-ti	Storage	OK
NBL	PM	98	D	135	1	129	500	Y
SBL	PM	71	D	135	1	93	575	Y
EBTL*	PM	76	D	135	1	100	300	Y
WBTL*	PM	186	D	135	1	244	350	Y
NBT	PM	2588	D	135	0.4	1359		
SBT	AM	2730	D	135	0.4	1433		
# of Phases		5		* Storage shown applies to adjacent RT bypass line				

Lanes	LUF	CLV	LOS	Opposing Volume	PCE
1	1	0	A		
2	0.55	1000	B	0	1.1
3	0.4	1150	C	200	2
4	0.3	1300	D	600	3
Dbl LT	0.6	1450	E	800	4
		1600	F	1000	5

	Movement	Volume (1)	LUF (2)	Lane Volume (1) X (2) = (3)	Opposing Lefts (4)	LUF (5)	Opposing CLV (4)X(5) = (6)	CLV (5)+(6)=(7)
	NBT	1,424	0.40	570	33	1	33	603
	SBT	2,730	0.40	1,092	39	1	39	1,131
	EBTL	75	1.00	75	0	1	0	75
	WBTL	149	1	149	0	1	0	149

Remarks: Split Phase, EB & WB
Right turns with a dedicated lane >150 ft are excluded

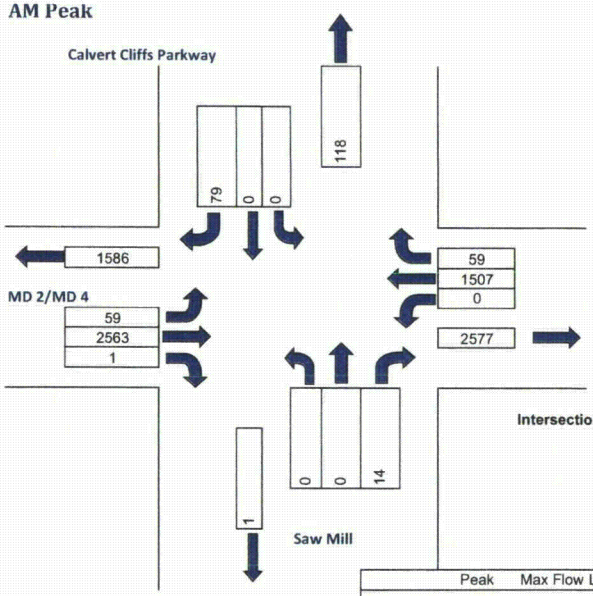
Critical Lane Volume — Total 1,355 — LOS D

	Movement	Volume (1)	LUF (2)	Lane Volume (1) X (2) = (3)	Opposing Lefts (4)	LUF (5)	Opposing CLV (4)X(5) = (6)	CLV (5)+(6)=(7)
	NBT	2,588	0.4	1035	71	1	71	1,106
	SBT	2,465	0.4	986	98	1	98	1,084
	EBTL	76	1	76	0	1	0	76
	WBTL	186	1	186	0	1	0	186

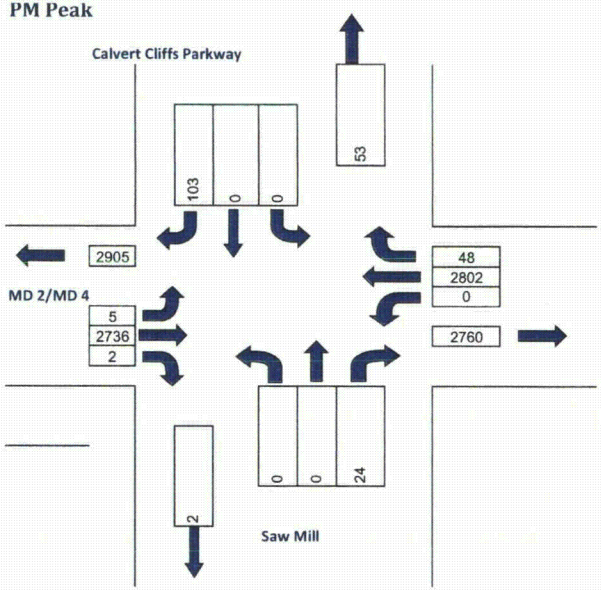
Remarks: Split Phase, EB & WB
Right turns with a dedicated lane >150 ft are excluded

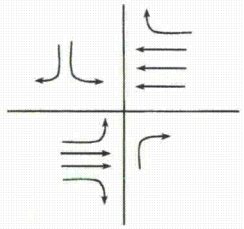
Critical Lane Volume — Total 1,368 — LOS D

AM Peak



PM Peak





Intersection Control :

__X__ **Signal** _____ **Stop** _____ **Ways** _____

Calvert Cliffs Parkway &
MD 2/MD 4
Construction, 2016, With Mitigation

KLD Engineering, P.C.

	Peak	Max Flow	LOS	Cycle	LUF	95th%-ti	Storage	OK
SBL	AM	59	A	100	1	57	600	Y
WBL	AM	0	A	100	1	0	400	Y
NBT*	PM	2802	B	100	0.4	1090	2950	Y
# of Phases		3		* Storage shown applies to distance to next intersection				

Lanes	LUF	CLV	LOS	Opposing Volume	PCE
1	1	0	A		
2	0.55	1000	B	0	1.1
3	0.4	1150	C	200	2
4	0.3	1300	D	600	3
Dbl LT	0.6	1450	E	800	4
		1600	F	1000	5

	Movement	Volume (1)	LUF (2)	Lane Volume (1) X (2) = (3)	Opposing Lefts (4)	LUF (5)	Opposing CLV (4)X(5) = (6)	CLV (5)+(6)=(7)
	NBT	1,507	0.40	603	59	1	59	662
	WBL	0	1	0	0	1	0	0

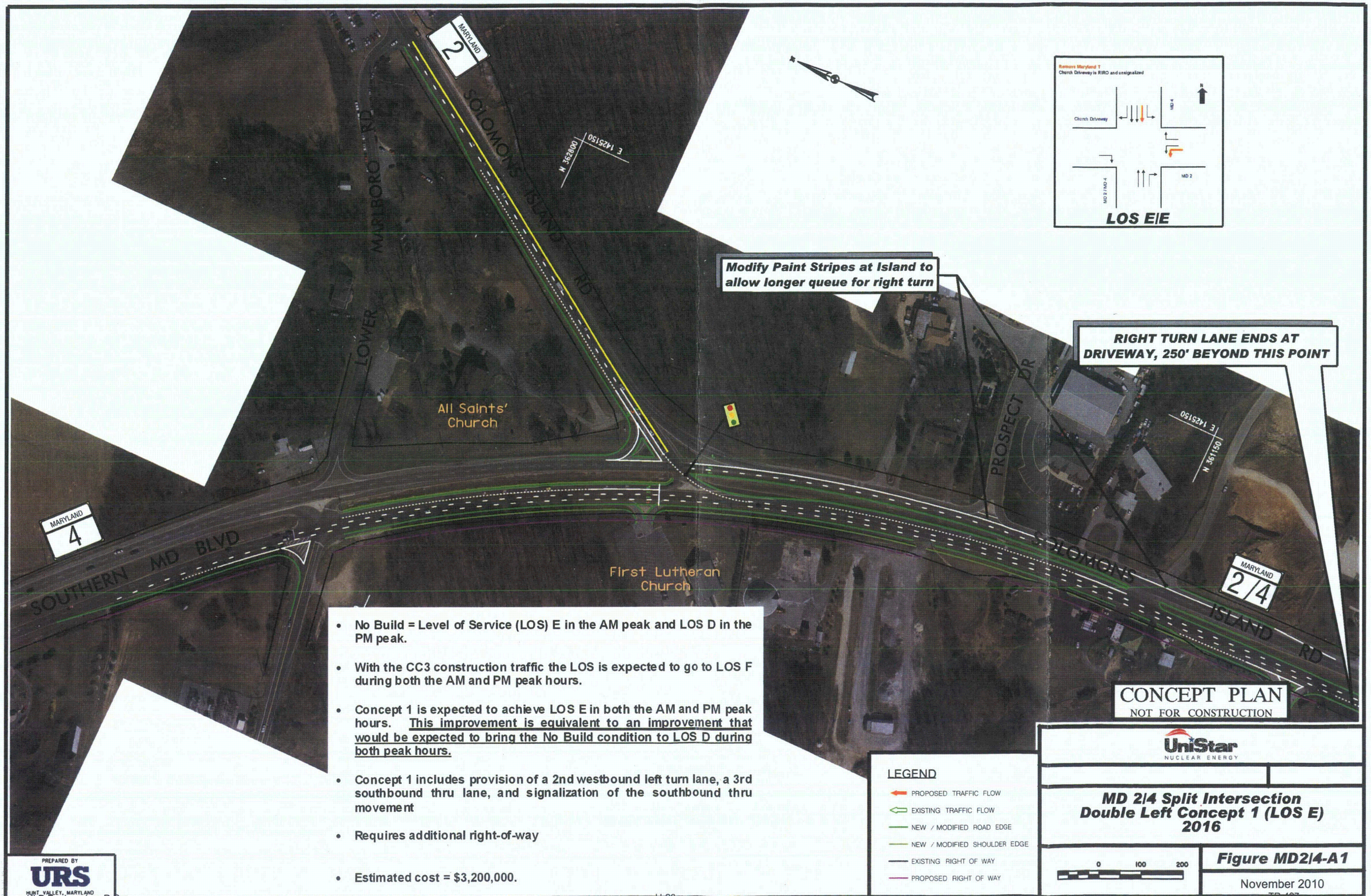
Remarks:
Right turns with a dedicated lane >150 ft are excluded

Critical Lane Volume — Total 662
LOS A

	Movement	Volume (1)	LUF (2)	Lane Volume (1) X (2) = (3)	Opposing Lefts (4)	LUF (5)	Opposing CLV (4)X(5) = (6)	CLV (5)+(6)=(7)
	NBT	2,802	0.4	1121	5	1	5	1,126
	WBL	0	1	0	0	1	0	0

Remarks:
Right turns with a dedicated lane >150 ft are excluded

Critical Lane Volume — Total 1,126
LOS B



- No Build = Level of Service (LOS) E in the AM peak and LOS D in the PM peak.
- With the CC3 construction traffic the LOS is expected to go to LOS F during both the AM and PM peak hours.
- Concept 1 is expected to achieve LOS E in both the AM and PM peak hours. <u>This improvement is equivalent to an improvement that would be expected to bring the No Build condition to LOS D during both peak hours.</u>
- Concept 1 includes provision of a 2nd westbound left turn lane, a 3rd southbound thru lane, and signalization of the southbound thru movement
- Requires additional right-of-way
- Estimated cost = $3,200,000.

- No Build = Level of Service (LOS) E in the AM peak and LOS D in the PM peak.
- With the CC3 construction traffic the LOS is expected to go to LOS F during both the AM and PM peak hours.
- Concept 2 is expected to achieve LOS C in the AM peak and LOS D in the PM peak.
- Concept 2 includes: 2nd and 3rd westbound left turn lanes, a 3rd northbound thru lane, a 3rd southbound thru lane, and signalizing the southbound thru movement
- Requires additional right-of-way
- Estimated Total cost = $6,500,000
- UniStar's share of cost may be $3,300,000. This is based on the difference is cost between Concept 2 and Concept 1 cost.

CONCEPT PLAN
NOT FOR CONSTRUCTION

LEGEND
- PROPOSED TRAFFIC FLOW
- EXISTING TRAFFIC FLOW
- NEW / MODIFIED ROAD EDGE
- NEW / MODIFIED SHOULDER EDGE
- EXISTING RIGHT OF WAY
- PROPOSED RIGHT OF WAY

UniStar NUCLEAR ENERGY

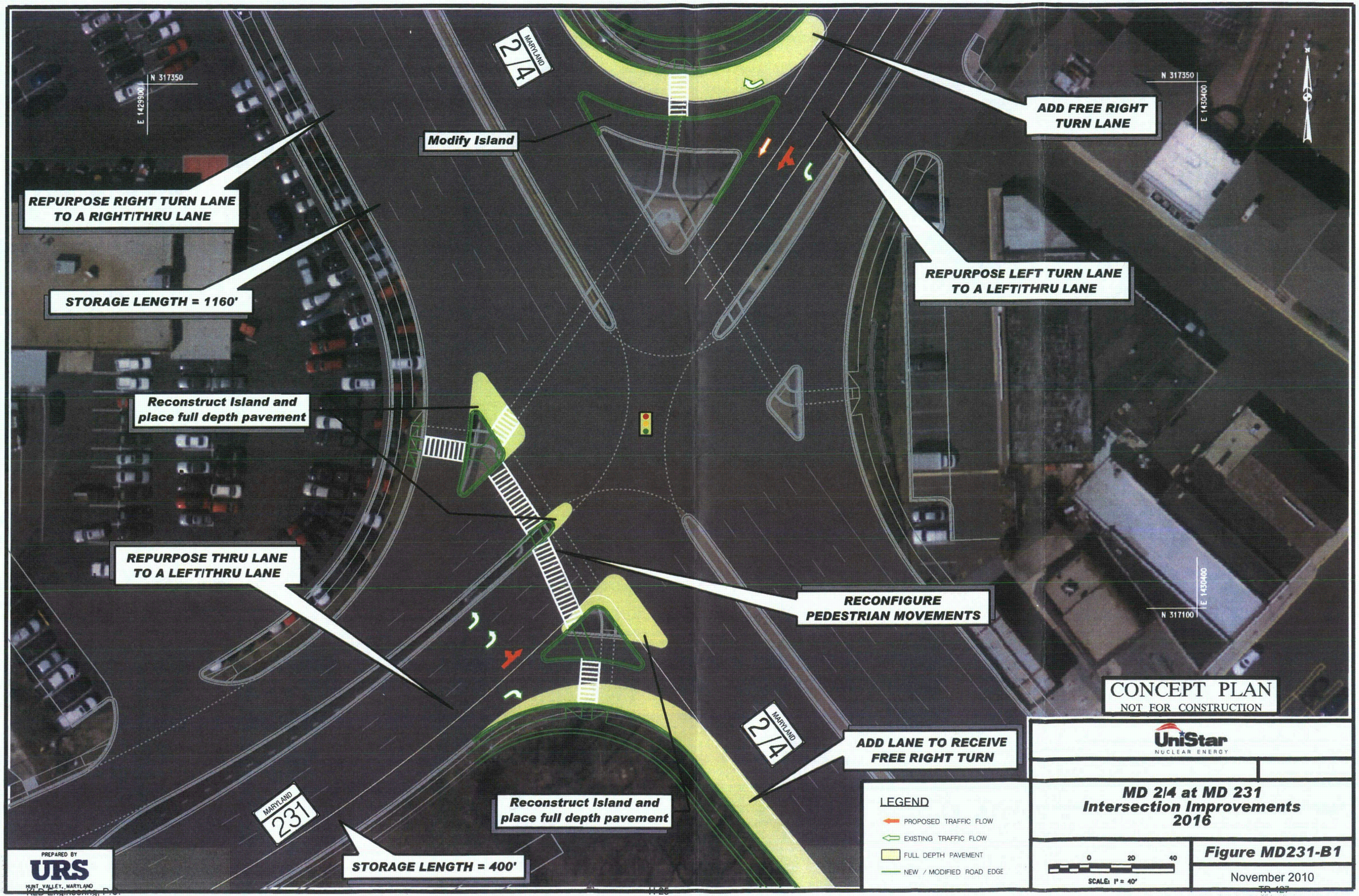
MD 2/4 Split Intersection
Triple Left Concept 2 (LOS D)
2016

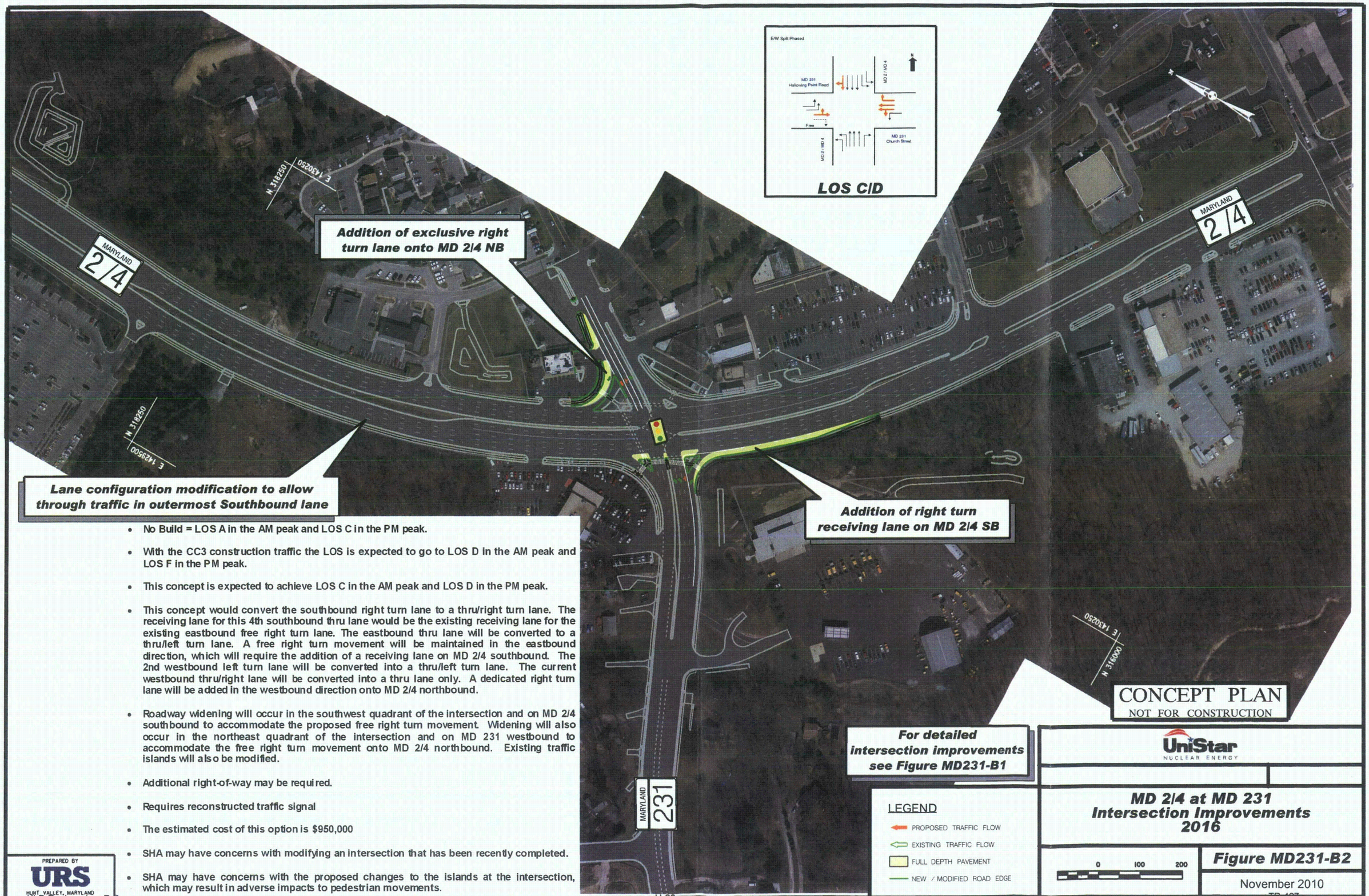
0 100 200
SCALE: 1" = 100'

Figure MD2/4-B1

November 2010

PREPARED BY URS
HUNT VALLEY, MARYLAND


N 317350
E 1429900
N 317350
E 1430400
N 317100
E 1430400
MARYLAND 2/4
MARYLAND 2/4
MARYLAND 231
Modify Island
ADD FREE RIGHT TURN LANE
REPURPOSE RIGHT TURN LANE TO A RIGHT/THRU LANE
STORAGE LENGTH = 1160'
REPURPOSE LEFT TURN LANE TO A LEFT/THRU LANE
Reconstruct Island and place full depth pavement
REPURPOSE THRU LANE TO A LEFT/THRU LANE
RECONFIGURE PEDESTRIAN MOVEMENTS
ADD LANE TO RECEIVE FREE RIGHT TURN
Reconstruct Island and place full depth pavement
STORAGE LENGTH = 400'
CONCEPT PLAN
NOT FOR CONSTRUCTION
UniStar
NUCLEAR ENERGY
MD 2/4 at MD 231
Intersection Improvements
2016
LEGEND
PROPOSED TRAFFIC FLOW
EXISTING TRAFFIC FLOW
FULL DEPTH PAVEMENT
NEW / MODIFIED ROAD EDGE
0 20 40
SCALE: 1" = 40'
Figure MD231-B1
November 2010
PREPARED BY
URS
HUNT VALLEY, MARYLAND



- No Build = LOS A in the AM peak and LOS C in the PM peak.
- With the CC3 construction traffic the LOS is expected to go to LOS D in the AM peak and LOS F in the PM peak.
- This concept is expected to achieve LOS C in the AM peak and LOS D in the PM peak.
- This concept would convert the southbound right turn lane to a thru/right turn lane. The receiving lane for this 4th southbound thru lane would be the existing receiving lane for the existing eastbound free right turn lane. The eastbound thru lane will be converted to a thru/left turn lane. A free right turn movement will be maintained in the eastbound direction, which will require the addition of a receiving lane on MD 2/4 southbound. The 2nd westbound left turn lane will be converted into a thru/left turn lane. The current westbound thru/right lane will be converted into a thru lane only. A dedicated right turn lane will be added in the westbound direction onto MD 2/4 northbound.
- Roadway widening will occur in the southwest quadrant of the intersection and on MD 2/4 southbound to accommodate the proposed free right turn movement. Widening will also occur in the northeast quadrant of the intersection and on MD 231 westbound to accommodate the free right turn movement onto MD 2/4 northbound. Existing traffic islands will also be modified.
- Additional right-of-way may be required.
- Requires reconstructed traffic signal
- The estimated cost of this option is $950,000
- SHA may have concerns with modifying an intersection that has been recently completed.
- SHA may have concerns with the proposed changes to the islands at the intersection, which may result in adverse impacts to pedestrian movements.

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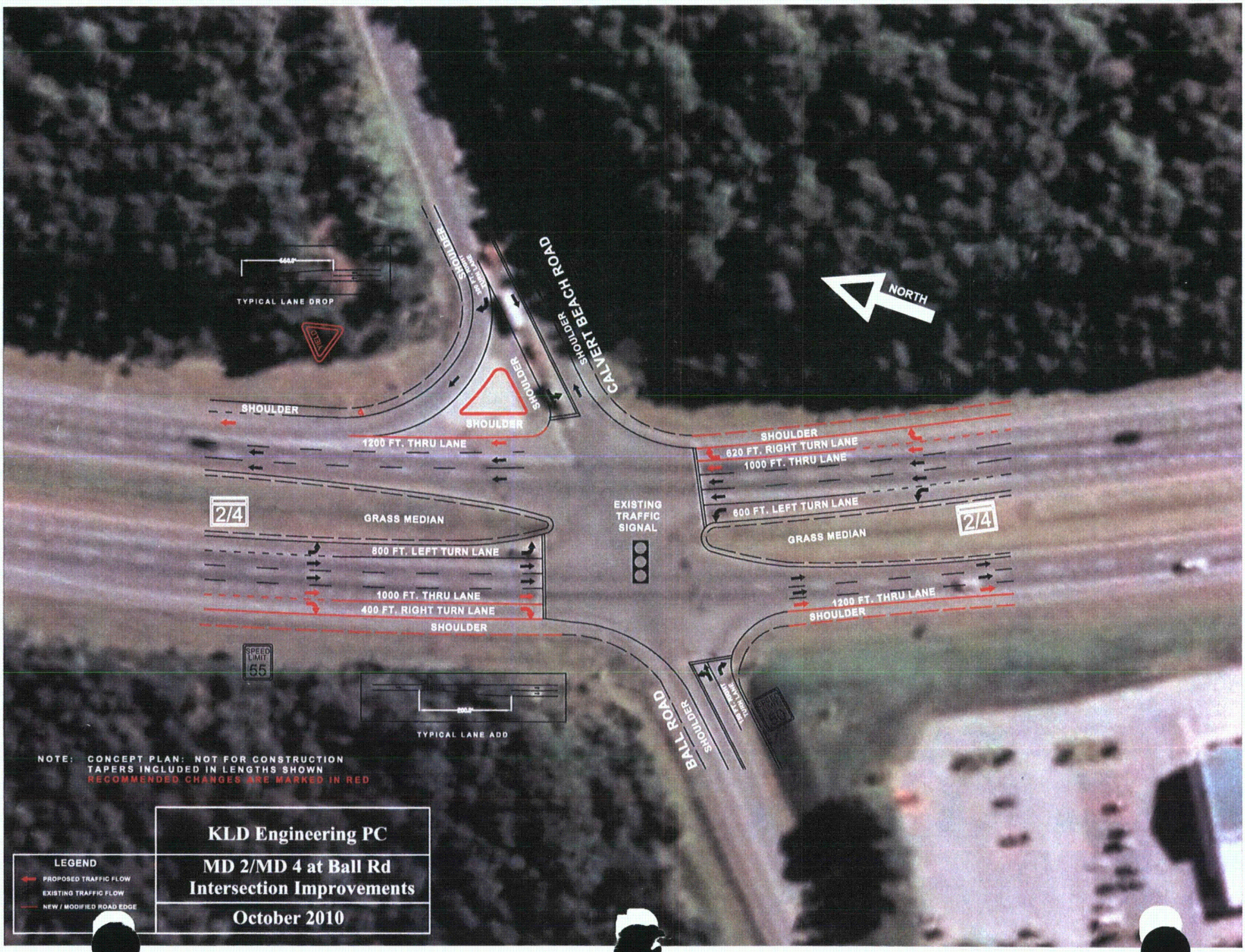
NORTH
CALVERT BEACH ROAD
SHOULDER
SHOULDER
SHOULDER
SHOULDER
TYPICAL LANE DROP
SHOULDER
1200 FT. THRU LANE
2/4
GRASS MEDIAN
800 FT. LEFT TURN LANE
1000 FT. THRU LANE
400 FT. RIGHT TURN LANE
SHOULDER
SPEED LIMIT 55
TYPICAL LANE ADD
EXISTING TRAFFIC SIGNAL
SHOULDER
620 FT. RIGHT TURN LANE
1000 FT. THRU LANE
600 FT. LEFT TURN LANE
GRASS MEDIAN
2/4
1200 FT. THRU LANE
SHOULDER
BALL ROAD
SHOULDER
NOTE: CONCEPT PLAN: NOT FOR CONSTRUCTION
TAPERS INCLUDED IN LENGTHS SHOWN
RECOMMENDED CHANGES ARE MARKED IN RED
LEGEND
PROPOSED TRAFFIC FLOW
EXISTING TRAFFIC FLOW
NEW / MODIFIED ROAD EDGE
KLD Engineering PC
MD 2/MD 4 at Ball Rd
Intersection Improvements
October 2010

CALVERT CLIFFS PKWY
NEW CC3 ACCESS ROAD
MARYLAND
2/4
NURSERY ROAD
LAURA LN
BANN MILL ROAD
CONCEPT PLAN
NOT FOR CONSTRUCTION
UniStar
LEGEND
Calvert Cliffs Parkway
New Access Road
Banner NAR-1
December 2010