FEHR PEERS

MEMORANDUM

Date: November 4, 2013

To: Cheryl Burrell, Pebble Beach Company

From: Rob Rees, P.E.

Subject: Inclusionary Housing – Transportation Analysis

WC11-2822

As requested, Fehr & Peers is providing clarification regarding the transportation analysis conducted for the inclusionary housing as part of the Final Environmental Impact Report (FEIR) for the Pebble Beach Company Project (PLN100138), which was approved in 2012.

Fehr & Peers provided supplemental traffic analysis in response to public comments on the draft environmental documentation. Specific to inclusionary housing, Fehr & Peers prepared a technical memorandum dated March 16, 2012 that was referenced in the final environmental document and included in Appendix G to the FEIR.

For traffic, the March 16th memorandum assumed 18 inclusionary housing units (assumed to be single family dwelling units) that were added to the Corporation Yard. The impact associated with the additional 18 units was fully documented in the March 16th technical memorandum and incorporated into the FEIR.

The current inclusionary housing proposal is to locate 24 attached townhouse apartment dwelling units in Area D with an access road named Morse Court that intersects SFB Morse Drive at two locations, northwest of the SFB Morse Drive / Congress Road intersection. The site plan is shown on **Attachment A**.

Trip Generation

The publication titled *Trip Generation* (9th Edition) by the Institute of Transportation Engineers shows that apartment housing generates less vehicle traffic on a per unit basis than single family

housing. **Table 1** summarizes the differences in trip generation between what was assumed for the Corporation Yard in the March 16th memorandum and the current proposal for Area D. The 24 apartment units to be located on Area D would generate slightly less traffic than the 18 single family units assumed at the Corporation Yard in the FEIR. As a result, shifting the inclusionary housing from the Corporation Yard to Area D would not change findings documented in the FEIR.

TABLE 1
VEHICLE TRIP GENERATION CALCULATIONS

		Daily	AM Peak Hour	PM Peak Hour
Corporation Yard – 18 single family units				
	Vehicle trip generation rate (per unit) [1]	9.57	0.75	1.01
	Vehicle Trips	172	13	18
Area D – 24 townhouse apartment units				
	Vehicle trip generation rate (per unit) [2]	6.65	0.51	0.62
	Vehicle Trips	160	12	15
	Net Difference in Vehicle Trips	***-12***	***-1***	***-3***

1 Vehicle trip generation rates obtained from March 16, 2012 technical memorandum
2 Vehicle trip generation rates obtained from Land Use Code 220 in *Trip Generation* 9th Edition published by the Institute of Transportation Engineers
Source: Fehr & Peers

Intersection Analysis

Focused analysis was completed for two intersections on Congress Road, one at SFB Morse Drive and one at Forest Lodge Road, to determine whether the inclusionary housing at Area D would have localized impacts on intersection operations. The analysis was conducted for two scenarios using traffic volumes from the FEIR. The first scenario combined the existing traffic volumes with Area D development while the second scenario combined Area D traffic with the cumulative (year 2030) traffic including the 45 additional non-Pebble Beach Company housing units potentially allowed by the LCP. The intersection analysis results, shown in **Table 2,** indicate that the two study intersections will operate at acceptable levels with the added traffic from Area D development. As a result, Area D will not have any adverse localized impacts on nearby intersection operations.

TABLE 2
INTERSECTION LEVEL OF SERVICE ANALYSIS

	Existing (Year 2011) Traffic		Existing Plus Area D Development	
	AM	**PM**	**AM**	**PM**
Congress Road at SFB Morse Drive [1]	7.7 / A	7.9 / A	7.7 / A	7.9 / A
Congress Road at Forest Lodge Road [2]	2.0 (11.1) / A (B)	3.5 (13.9) / A (B)	2.2 (11.1) / A (B)	3.6 (14.1) / A (B)
	Cumulative (Year 2030) Traffic (With 45 LCP Units)		**Cumulative Plus Area D Traffic (With 45 LCP Units)**	
Congress Road at SFB Morse Drive [1]	7.8 / A	8.1 / A	7.9 / A	8.1 / A
Congress Road at Forest Lodge Road [2]	2.8 (11.5) / A (B)	4.3 (15.5) / A (C)	2.9 (11.5) / A (B)	4.4 (15.7) / A (C)

1 All-way stop intersection level of service based on average intersection delay, according to the *Highway Capacity Manual*, Transportation Research Board, 2000.
2 Side street stop controlled intersection level of service based on average intersection delay and average control delay for critical side street movement (shown in parentheses), according to the *Highway Capacity Manual*, Transportation Research Board.
Source: Fehr & Peers

Attachment A:
Area D Site Plan
Synchro Analysis Worksheets

FEHR PEERS

ATTACHMENT A

OPEN SPACE AREA	10.54 ACRES (80%)
BUILDINGS/ROADS AREA	1.40 ACRES (11%)
LANDSCAPE AREA	1.20 ACRES (9%)
TOTAL AREA	13.14 ACRES

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PARCEL INFORMATION: 008-041-009
PARCEL 6, VOLUME 15, CITIES AND TOWNS, PAGE 52

AREA D
DEL MONTE FOREST PRESERVATION AND DEVELOPMENT PLAN
AREA D INCLUSIONARY HOUSING
PRELIMINARY SITE PLAN

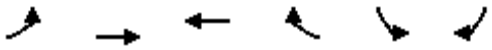
IH

DATE: JULY 2013

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	1	122	1	6	133	35	5	21	26	5	2	3
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Hourly flow rate (vph)	1	147	1	7	160	42	6	25	31	6	2	4
Pedestrians					1			1				
Lane Width (ft)					12.0			12.0				
Walking Speed (ft/s)					4.0			4.0				
Percent Blockage					0			0				
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	202			149			352	368	150	391	347	181
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	202			149			352	368	150	391	347	181
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			99			99	95	97	99	100	100
cM capacity (veh/h)	1369			1431			595	557	895	526	572	861

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	149	210	63	12
Volume Left	1	7	6	6
Volume Right	1	42	31	4
cSH	1369	1431	692	607
Volume to Capacity	0.00	0.01	0.09	0.02
Queue Length 95th (ft)	0	0	7	2
Control Delay (s)	0.1	0.3	10.7	11.1
Lane LOS	A	A	B	B
Approach Delay (s)	0.1	0.3	10.7	11.1
Approach LOS			B	B

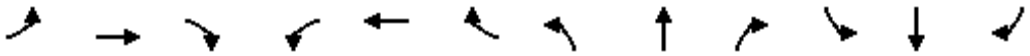
Intersection Summary			
Average Delay	2.0		
Intersection Capacity Utilization	23.5%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Stop	Stop		Stop	
Volume (vph)	10	68	73	59	29	8
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83
Hourly flow rate (vph)	12	82	88	71	35	10

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total (vph)	94	159	45
Volume Left (vph)	12	0	35
Volume Right (vph)	0	71	10
Hadj (s)	0.06	-0.23	0.06
Departure Headway (s)	4.2	3.9	4.5
Degree Utilization, x	0.11	0.17	0.06
Capacity (veh/h)	835	914	754
Control Delay (s)	7.7	7.7	7.7
Approach Delay (s)	7.7	7.7	7.7
Approach LOS	A	A	A

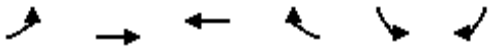
Intersection Summary			
Delay	7.7		
HCM Level of Service	A		
Intersection Capacity Utilization	22.0%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	4	167	0	16	176	27	3	24	18	32	42	4
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Hourly flow rate (vph)	4	188	0	18	198	30	3	27	20	36	47	4
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	228			188			474	461	188	479	446	213
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	228			188			474	461	188	479	446	213
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			99			99	94	98	92	91	99
cM capacity (veh/h)	1340			1387			457	489	854	459	499	827

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	192	246	51	88
Volume Left	4	18	3	36
Volume Right	0	30	20	4
cSH	1340	1387	587	491
Volume to Capacity	0.00	0.01	0.09	0.18
Queue Length 95th (ft)	0	1	7	16
Control Delay (s)	0.2	0.7	11.7	13.9
Lane LOS	A	A	B	B
Approach Delay (s)	0.2	0.7	11.7	13.9
Approach LOS			B	B

Intersection Summary			
Average Delay	3.5		
Intersection Capacity Utilization	36.6%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Stop	Stop		Stop	
Volume (vph)	8	57	73	66	78	6
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Hourly flow rate (vph)	9	64	82	74	88	7

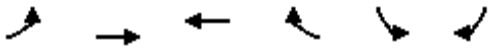
Direction, Lane #	EB 1	WB 1	SB 1
Volume Total (vph)	73	156	94
Volume Left (vph)	9	0	88
Volume Right (vph)	0	74	7
Hadj (s)	0.06	-0.25	0.18
Departure Headway (s)	4.3	4.0	4.6
Degree Utilization, x	0.09	0.17	0.12
Capacity (veh/h)	803	885	748
Control Delay (s)	7.8	7.8	8.2
Approach Delay (s)	7.8	7.8	8.2
Approach LOS	A	A	A

Intersection Summary			
Delay	7.9		
HCM Level of Service	A		
Intersection Capacity Utilization	21.1%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	1	122	1	7	133	35	5	21	31	5	2	3
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Hourly flow rate (vph)	1	147	1	8	160	42	6	25	37	6	2	4
Pedestrians					1			1				
Lane Width (ft)					12.0			12.0				
Walking Speed (ft/s)					4.0			4.0				
Percent Blockage					0			0				
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	202			149			354	370	150	399	350	181
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	202			149			354	370	150	399	350	181
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			99			99	95	96	99	100	100
cM capacity (veh/h)	1369			1431			593	555	895	516	570	861

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	149	211	69	12
Volume Left	1	8	6	6
Volume Right	1	42	37	4
cSH	1369	1431	705	599
Volume to Capacity	0.00	0.01	0.10	0.02
Queue Length 95th (ft)	0	0	8	2
Control Delay (s)	0.1	0.3	10.7	11.1
Lane LOS	A	A	B	B
Approach Delay (s)	0.1	0.3	10.7	11.1
Approach LOS			B	B

Intersection Summary			
Average Delay	2.2		
Intersection Capacity Utilization	24.2%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Stop	Stop		Stop	
Volume (vph)	10	68	73	60	34	8
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83
Hourly flow rate (vph)	12	82	88	72	41	10

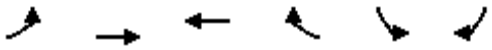
Direction, Lane #	EB 1	WB 1	SB 1
Volume Total (vph)	94	160	51
Volume Left (vph)	12	0	41
Volume Right (vph)	0	72	10
Hadj (s)	0.06	-0.24	0.08
Departure Headway (s)	4.2	3.9	4.5
Degree Utilization, x	0.11	0.17	0.06
Capacity (veh/h)	831	910	750
Control Delay (s)	7.7	7.7	7.8
Approach Delay (s)	7.7	7.7	7.8
Approach LOS	A	A	A

Intersection Summary			
Delay	7.7		
HCM Level of Service	A		
Intersection Capacity Utilization	22.0%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	4	167	0	18	176	27	3	24	20	32	45	4
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Hourly flow rate (vph)	4	188	0	20	198	30	3	27	22	36	51	4
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	228			188			480	465	188	486	450	213
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	228			188			480	465	188	486	450	213
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			99			99	94	97	92	90	99
cM capacity (veh/h)	1340			1387			449	486	854	452	495	827

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	192	248	53	91
Volume Left	4	20	3	36
Volume Right	0	30	22	4
cSH	1340	1387	591	487
Volume to Capacity	0.00	0.01	0.09	0.19
Queue Length 95th (ft)	0	1	7	17
Control Delay (s)	0.2	0.7	11.7	14.1
Lane LOS	A	A	B	B
Approach Delay (s)	0.2	0.7	11.7	14.1
Approach LOS			B	B

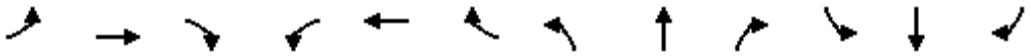
Intersection Summary			
Average Delay	3.6		
Intersection Capacity Utilization	37.8%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Stop	Stop		Stop	
Volume (vph)	8	57	73	71	81	6
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Hourly flow rate (vph)	9	64	82	80	91	7

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total (vph)	73	162	98
Volume Left (vph)	9	0	91
Volume Right (vph)	0	80	7
Hadj (s)	0.06	-0.26	0.18
Departure Headway (s)	4.4	4.0	4.6
Degree Utilization, x	0.09	0.18	0.12
Capacity (veh/h)	799	885	745
Control Delay (s)	7.8	7.8	8.2
Approach Delay (s)	7.8	7.8	8.2
Approach LOS	A	A	A

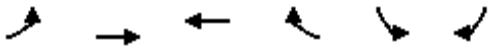
Intersection Summary			
Delay	7.9		
HCM Level of Service	A		
Intersection Capacity Utilization	21.3%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	10	140	10	10	160	40	10	31	30	10	10	10
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	11	147	11	11	168	42	11	33	32	11	11	11
Pedestrians					1			1				
Lane Width (ft)					12.0			12.0				
Walking Speed (ft/s)					4.0			4.0				
Percent Blockage					0			0				
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	211			159			401	406	155	433	390	189
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	211			159			401	406	155	433	390	189
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			99			98	94	96	98	98	99
cM capacity (veh/h)	1360			1419			537	525	890	483	536	852

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	168	221	75	32
Volume Left	11	11	11	11
Volume Right	11	42	32	11
cSH	1360	1419	638	587
Volume to Capacity	0.01	0.01	0.12	0.05
Queue Length 95th (ft)	1	1	10	4
Control Delay (s)	0.5	0.4	11.4	11.5
Lane LOS	A	A	B	B
Approach Delay (s)	0.5	0.4	11.4	11.5
Approach LOS			B	B

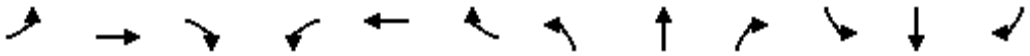
Intersection Summary				
Average Delay	2.8			
Intersection Capacity Utilization	25.2%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Stop	Stop		Stop	
Volume (vph)	20	80	90	71	40	10
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	21	84	95	75	42	11

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total (vph)	105	169	53
Volume Left (vph)	21	0	42
Volume Right (vph)	0	75	11
Hadj (s)	0.07	-0.23	0.07
Departure Headway (s)	4.3	3.9	4.6
Degree Utilization, x	0.12	0.18	0.07
Capacity (veh/h)	825	904	741
Control Delay (s)	7.9	7.8	7.9
Approach Delay (s)	7.9	7.8	7.9
Approach LOS	A	A	A

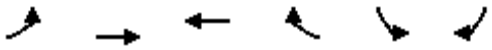
Intersection Summary			
Delay	7.8		
HCM Level of Service	A		
Intersection Capacity Utilization	27.7%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	10	190	0	20	210	40	10	31	30	40	51	10
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	11	200	0	21	221	42	11	33	32	42	54	11
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	263			200			543	526	200	553	505	242
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	263			200			543	526	200	553	505	242
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			98			97	93	96	89	88	99
cM capacity (veh/h)	1301			1372			398	446	841	396	459	797

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	211	284	75	106
Volume Left	11	21	11	42
Volume Right	0	42	32	11
cSH	1301	1372	545	449
Volume to Capacity	0.01	0.02	0.14	0.24
Queue Length 95th (ft)	1	1	12	23
Control Delay (s)	0.5	0.7	12.7	15.5
Lane LOS	A	A	B	C
Approach Delay (s)	0.5	0.7	12.7	15.5
Approach LOS			B	C

Intersection Summary			
Average Delay	4.3		
Intersection Capacity Utilization	39.4%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Stop	Stop		Stop	
Volume (vph)	10	70	90	81	91	10
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	11	74	95	85	96	11

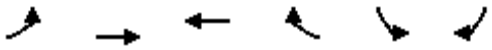
Direction, Lane #	EB 1	WB 1	SB 1
Volume Total (vph)	84	180	106
Volume Left (vph)	11	0	96
Volume Right (vph)	0	85	11
Hadj (s)	0.06	-0.25	0.15
Departure Headway (s)	4.4	4.0	4.6
Degree Utilization, x	0.10	0.20	0.14
Capacity (veh/h)	789	873	735
Control Delay (s)	7.9	8.0	8.4
Approach Delay (s)	7.9	8.0	8.4
Approach LOS	A	A	A

Intersection Summary			
Delay	8.1		
HCM Level of Service	A		
Intersection Capacity Utilization	24.4%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	10	140	10	11	160	40	10	31	35	10	10	10
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	11	147	11	12	168	42	11	33	37	11	11	11
Pedestrians					1			1				
Lane Width (ft)					12.0			12.0				
Walking Speed (ft/s)					4.0			4.0				
Percent Blockage					0			0				
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	211			159			403	408	155	440	393	189
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	211			159			403	408	155	440	393	189
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			99			98	94	96	98	98	99
cM capacity (veh/h)	1360			1419			535	524	890	475	534	852

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	168	222	80	32
Volume Left	11	12	11	11
Volume Right	11	42	37	11
cSH	1360	1419	648	582
Volume to Capacity	0.01	0.01	0.12	0.05
Queue Length 95th (ft)	1	1	10	4
Control Delay (s)	0.5	0.5	11.3	11.5
Lane LOS	A	A	B	B
Approach Delay (s)	0.5	0.5	11.3	11.5
Approach LOS			B	B

Intersection Summary			
Average Delay	2.9		
Intersection Capacity Utilization	25.9%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Stop	Stop		Stop	
Volume (vph)	20	80	90	72	45	10
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	21	84	95	76	47	11

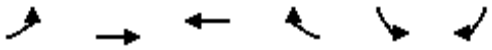
Direction, Lane #	EB 1	WB 1	SB 1
Volume Total (vph)	105	171	58
Volume Left (vph)	21	0	47
Volume Right (vph)	0	76	11
Hadj (s)	0.07	-0.23	0.09
Departure Headway (s)	4.3	3.9	4.6
Degree Utilization, x	0.13	0.19	0.07
Capacity (veh/h)	821	900	739
Control Delay (s)	7.9	7.8	7.9
Approach Delay (s)	7.9	7.8	7.9
Approach LOS	A	A	A

Intersection Summary			
Delay	7.9		
HCM Level of Service	A		
Intersection Capacity Utilization	27.8%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	10	190	0	22	210	40	10	31	32	40	54	10
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	11	200	0	23	221	42	11	33	34	42	57	11
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	263			200			548	531	200	559	509	242
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	263			200			548	531	200	559	509	242
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			98			97	93	96	89	88	99
cM capacity (veh/h)	1301			1372			391	443	841	391	455	797

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	211	286	77	109
Volume Left	11	23	11	42
Volume Right	0	42	34	11
cSH	1301	1372	546	445
Volume to Capacity	0.01	0.02	0.14	0.25
Queue Length 95th (ft)	1	1	12	24
Control Delay (s)	0.5	0.8	12.7	15.7
Lane LOS	A	A	B	C
Approach Delay (s)	0.5	0.8	12.7	15.7
Approach LOS			B	C

Intersection Summary			
Average Delay	4.4		
Intersection Capacity Utilization	40.3%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Stop	Stop		Stop	
Volume (vph)	10	70	90	86	94	10
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	11	74	95	91	99	11

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total (vph)	84	185	109
Volume Left (vph)	11	0	99
Volume Right (vph)	0	91	11
Hadj (s)	0.06	-0.26	0.16
Departure Headway (s)	4.4	4.0	4.6
Degree Utilization, x	0.10	0.21	0.14
Capacity (veh/h)	785	873	732
Control Delay (s)	7.9	8.0	8.4
Approach Delay (s)	7.9	8.0	8.4
Approach LOS	A	A	A

Intersection Summary			
Delay	8.1		
HCM Level of Service	A		
Intersection Capacity Utilization	24.6%	ICU Level of Service	A
Analysis Period (min)	15		