Appendix E

Total Future Levels of Service

Board of Zoning Adjustment
District of Columbia
CASE NO. 17067
EXHIBIT NO. 30A3

SHORT REPORT

General Information		Site Information	
Analyst	JLM	Intersection	KLINGLE RD/ADAMS MILL RD
Agency or Co.	WELLS & ASSOCIATES	Area Type	All other areas
Date Performed	9/27/03	Jurisdiction	WASHINGTON DC
Time Period	AM PEAK	Analysis Year	2006 TOTAL FUTURE

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Num. of Lanes	0	1	1	0	2	0	2	0	0	0	0	0
Lane group		T	R		LT		L	LR				
Volume (vph)		74	342	37	377		226		14			
% Heavy veh		2	2	2	2		2		2			
PHF		0.90	0.90	0.90	0.90		0.90		0.90			
Actuated (P/A)		P	P	P	P		P		P			
Startup lost time		2.0	2.0		2.0		2.0	2.0				
Ext. eff. green		2.0	2.0		2.0		2.0	2.0				
Arrival type		3	3		3		3	3				
Unit Extension		3.0	3.0		3.0		3.0	3.0				
Ped/Bike/RTOR Volume	27	0	0				30		0	0		
Lane Width		12.0	12.0		12.0		12.0	12.0				
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N		N
Parking/hr												
Bus stops/hr		0	0		0		0	6				
Unit Extension		3.0	3.0		3.0		3.0	3.0				

Phasing	EW Perm	02	03	04	NB Only	06	07	08
Timing	G = 40.0	G =	G =	G =	G = 30.0	G =	G =	G =
	Y = 5	Y =	Y =	Y =	Y = 5	Y =	Y =	Y =

Duration of Analysis (hrs) = 0.25 | Cycle Length C = 80.0

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adj. flow rate		82	380		460		251	16				
Lane group cap.		932	771		1634		1287	579				
v/c ratio		0.09	0.49		0.28		0.20	0.03				
Green ratio		0.50	0.50		0.50		0.38	0.38				
Unif. delay d1		10.5	13.3		11.6		16.9	15.8				
Delay factor k		0.50	0.50		0.50		0.50	0.50				
Increm. delay d2		0.2	2.2		0.4		0.3	0.1				
PF factor		1.000	1.000		1.000		1.000	1.000				
Control delay		10.6	15.5		12.1		17.2	15.9				
Lane group LOS		B	B		B		B	B				
Apprch. delay	14.7			12.1			17.1					
Approach LOS	B			B			B					
Intersec. delay	14.2			Intersection LOS						B		

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SHORT REPORT

General Information		Site Information	
Analyst	JLM	Intersection	KLINGLE RD/ADAMS MILL RD
Agency or Co.	WELLS & ASSOCIATES	Area Type	All other areas
Date Performed	9/27/03	Jurisdiction	WASHINGTON DC
Time Period	PM PEAK (CENTER)	Analysis Year	2005 TOTAL FUTURE

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Num. of Lanes	0	1	1	0	2	0	2	0	0	0	0	0
Lane group		T	R		LT		L	LR				
Volume (vph)		93	253	24	125		128		17			
% Heavy veh		2	2	2	2		2		2			
PHF		0.90	0.90	0.90	0.90		0.90		0.90			
Actuated (P/A)		P	P	P	P		P		P			
Startup lost time		2.0	2.0		2.0		2.0	2.0				
Ext. eff. green		2.0	2.0		2.0		2.0	2.0				
Arrival type		3	3		3		3	3				
Unit Extension		3.0	3.0		3.0		3.0	3.0				
Ped/Bike/RTOR Volume	7	0	0				27		0	0		
Lane Width		12.0	12.0		12.0		12.0	12.0				
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N		N
Parking/hr												
Bus stops/hr		0	0		0		0	6				
Unit Extension		3.0	3.0		3.0		3.0	3.0				

Phasing	EW Perm	02	03	04	NB Only	06	07	08
Timing	G = 40.0	G =	G =	G =	G = 30.0	G =	G =	G =
	Y = 5	Y =	Y =	Y =	Y = 5	Y =	Y =	Y =
Duration of Analysis (hrs) = 0.25					Cycle Length C = 80.0			

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adj. flow rate		103	281		166		142	19				
Lane group cap.		932	786		1608		1287	579				
v/c ratio		0.11	0.36		0.10		0.11	0.03				
Green ratio		0.50	0.50		0.50		0.38	0.38				
Unif. delay d1		10.6	12.2		10.5		16.3	15.8				
Delay factor k		0.50	0.50		0.50		0.50	0.50				
Increm. delay d2		0.2	1.3		0.1		0.2	0.1				
PF factor		1.000	1.000		1.000		1.000	1.000				
Control delay		10.8	13.4		10.7		16.5	15.9				
Lane group LOS		B	B		B		B	B				
Apprch. delay	12.7			10.7			16.4					
Approach LOS	B			B			B					
Intersec. delay	13.1			Intersection LOS						B		

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SHORT REPORT

General Information		Site Information	
Analyst	JLM	Intersection	KLINGLE RD/ADAMS MILL RD
Agency or Co.	WELLS & ASSOCIATES	Area Type	All other areas
Date Performed	9/27/03	Jurisdiction	WASHINGTON DC
Time Period	PM PEAK (STREET)	Analysis Year	2005 TOTAL FUTURE

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Num. of Lanes	0	1	1	0	2	0	2	0	0	0	0	0
Lane group		T	R		LT		L	LR				
Volume (vph)		148	392	18	162		206		11			
% Heavy veh		2	2	2	2		2		2			
PHF		0.90	0.90	0.90	0.90		0.90		0.90			
Actuated (P/A)		P	P	P	P		P		P			
Startup lost time		2.0	2.0		2.0		2.0	2.0				
Ext. eff. green		2.0	2.0		2.0		2.0	2.0				
Arrival type		3	3		3		3	3				
Unit Extension		3.0	3.0		3.0		3.0	3.0				
Ped/Bike/RTOR Volume	33	0	0				13		0	0		
Lane Width		12.0	12.0		12.0		12.0	12.0				
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N		N
Parking/hr												
Bus stops/hr		0	0		0		0	6				
Unit Extension		3.0	3.0		3.0		3.0	3.0				

Phasing	EW Perm	02	03	04	NB Only	06	07	08
Timing	G = 40.0	G =	G =	G =	G = 30.0	G =	G =	G =
	Y = 5	Y =	Y =	Y =	Y = 5	Y =	Y =	Y =

Duration of Analysis (hrs) = 0.25 | Cycle Length C = 80.0

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adj. flow rate		164	436		200		229	12				
Lane group cap.		932	766		1631		1287	579				
v/c ratio		0.18	0.57		0.12		0.18	0.02				
Green ratio		0.50	0.50		0.50		0.38	0.38				
Unif. delay d1		11.0	14.0		10.7		16.7	15.7				
Delay factor k		0.50	0.50		0.50		0.50	0.50				
Increm. delay d2		0.4	3.1		0.2		0.3	0.1				
PF factor		1.000	1.000		1.000		1.000	1.000				
Control delay		11.4	17.0		10.8		17.0	15.8				
Lane group LOS		B	B		B		B	B				
Apprch. delay	15.5			10.8			17.0					
Approach LOS	B			B			B					
Intersec. delay	14.9			Intersection LOS						B		

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SHORT REPORT

General Information		Site Information	
Analyst	JLM	Intersection	KLINGLE RD/PARK RD
Agency or Co.	WELLS & ASSOCIATES	Area Type	All other areas
Date Performed	9/27/03	Jurisdiction	WASHINGTON DC
Time Period	AM PEAK	Analysis Year	2005 TOTAL FUTURE

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Num. of Lanes	0	0	1	0	0	0	1	1	0	0	1	1
Lane group			R				L	T			T	R
Volume (vph)			80				453	493			107	171
% Heavy veh			2				2	2			2	2
PHF			0.90				0.90	0.90			0.90	0.90
Actuated (P/A)							P	P			P	P
Startup lost time			2.0				2.0	2.0			2.0	2.0
Ext. eff. green			2.0				2.0	2.0			2.0	2.0
Arrival type			3				3	3			3	3
Unit Extension			3.0				3.0	3.0			3.0	3.0
Ped/Bike/RTOR Volume	12		0							9	0	0
Lane Width			12.0				12.0	12.0			12.0	12.0
Parking/Grade/Parking	N	0	Y	N		N	N	0	N	N	0	N
Parking/hr			20									
Bus stops/hr			0				0	0			0	0
Unit Extension			3.0				3.0	3.0			3.0	3.0

Phasing	01	02	03	04	NB Only	SB Only	Thru & RT	08
Timing	G =	G =	G =	G =	G = 20.0	G = 22.0	G = 28.0	G =
	Y =	Y =	Y =	Y =	Y = 5	Y = 5	Y = 5	Y =

Duration of Analysis (hrs) = 0.25 | Cycle Length C = 85.0

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adj. flow rate			89				503	548			119	190
Lane group cap.			303				416	614			614	1018
v/c ratio			0.29				1.21	0.89			0.19	0.19
Green ratio			0.24				0.24	0.33			0.33	0.65
Unif. delay d1			26.7				32.5	27.1			20.4	6.0
Delay factor k			0.50				0.50	0.50			0.50	0.50
Increm. delay d2			2.5				114.6	17.8			0.7	0.4
PF factor			1.000				1.000	1.000			1.000	1.000
Control delay			29.1				147.1	44.9			21.1	6.4
Lane group LOS			C				F	D			C	A
Apprch. delay	29.1						93.8			12.1		
Approach LOS	C						F			B		
Intersec. delay	72.4			Intersection LOS						E		

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SHORT REPORT

General Information		Site Information	
Analyst	JLM	Intersection	KLINGLE RD/PARK RD
Agency or Co.	WELLS & ASSOCIATES	Area Type	All other areas
Date Performed	9/27/03	Jurisdiction	WASHINGTON DC
Time Period	AM PEAK	Analysis Year	2006 TOTAL FUTURE

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Num. of Lanes	0	0	0	0	0	0	1	1	0	0	1	1
Lane group		LR					L	T			T	R
Volume (vph)	134		10				453	493			107	171
% Heavy veh	2		2				2	2			2	2
PHF	0.90		0.90				0.90	0.90			0.90	0.90
Actuated (P/A)	P		P				P	P			P	P
Startup lost time		2.0					2.0	2.0			2.0	2.0
Ext. eff. green		2.0					2.0	2.0			2.0	2.0
Arrival type		3					3	3			3	3
Unit Extension		3.0					3.0	3.0			3.0	3.0
Ped/Bike/RTOR Volume	12		0	8						9	0	0
Lane Width		12.0					12.0	12.0			12.0	12.0
Parking/Grade/Parking	N	0	N	N		N	N	0	N	N	0	N
Parking/hr												
Bus stops/hr		0					0	0			0	0
Unit Extension		3.0					3.0	3.0			3.0	3.0

Phasing	EB Only	02	03	04	NB Only	Thru & RT	07	08
Timing	G = 17.0	G =	G =	G =	G = 20.0	G = 28.0	G =	G =
	Y = 5	Y =	Y =	Y =	Y = 5	Y = 5	Y =	Y =

Duration of Analysis (hrs) = 0.25 | Cycle Length C = 80.0

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adj. flow rate		160					503	548			119	190
Lane group cap.		375					443	652			652	978
v/c ratio		0.43					1.14	0.84			0.18	0.19
Green ratio		0.21					0.25	0.35			0.35	0.63
Unif. delay d1		27.3					30.0	23.9			18.1	6.4
Delay factor k		0.50					0.50	0.50			0.50	0.50
Increm. delay d2		3.5					85.3	12.4			0.6	0.4
PF factor		1.000					1.000	1.000			1.000	1.000
Control delay		30.8					115.3	36.3			18.7	6.8
Lane group LOS		C					F	D			B	A
Apprch. delay	30.8						74.1			11.4		
Approach LOS	C						E			B		
Intersec. delay	56.8			Intersection LOS						E		

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SHORT REPORT

General Information		Site Information	
Analyst	JLM	Intersection	KLINGLE RD/PARK RD
Agency or Co.	WELLS & ASSOCIATES	Area Type	All other areas
Date Performed	9/27/03	Jurisdiction	WASHINGTON DC
Time Period	PM PEAK (CENTER)	Analysis Year	2005 TOTAL FUTURE

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Num. of Lanes	0	0	1	0	0	0	1	1	0	0	1	1
Lane group			R				L	T			T	R
Volume (vph)			124				172	221			190	119
% Heavy veh			2				2	2			2	2
PHF			0.90				0.90	0.90			0.90	0.90
Actuated (P/A)							P	P			P	P
Startup lost time			2.0				2.0	2.0			2.0	2.0
Ext. eff. green			2.0				2.0	2.0			2.0	2.0
Arrival type			3				3	3			3	3
Unit Extension			3.0				3.0	3.0			3.0	3.0
Ped/Bike/RTOR Volume	12		0							9	0	0
Lane Width			12.0				12.0	12.0			12.0	12.0
Parking/Grade/Parking	N	0	Y	N		N	N	0	Y	N	0	Y
Parking/hr			10						10			10
Bus stops/hr			0				0	0			0	0
Unit Extension			3.0				3.0	3.0			3.0	3.0

Phasing	01	02	03	04	NB Only	SB Only	Thru & RT	08
Timing	G =	G =	G =	G =	G = 20.0	G = 22.0	G = 28.0	G =
	Y =	Y =	Y =	Y =	Y = 5	Y = 5	Y = 5	Y =

Duration of Analysis (hrs) = 0.25 | Cycle Length C = 85.0

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adj. flow rate			138				191	246			211	132
Lane group cap.			322				416	521			614	865
v/c ratio			0.43				0.46	0.47			0.34	0.15
Green ratio			0.24				0.24	0.33			0.33	0.65
Unif. delay d1			27.6				27.9	22.6			21.6	5.9
Delay factor k			0.50				0.50	0.50			0.50	0.50
Increm. delay d2			4.1				3.6	3.1			1.5	0.4
PF factor			1.000				1.000	1.000			1.000	1.000
Control delay			31.8				31.5	25.7			23.1	6.2
Lane group LOS			C				C	C			C	A
Apprch. delay	31.8						28.2			16.6		
Approach LOS	C						C			B		
Intersec. delay	24.4			Intersection LOS						C		

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SHORT REPORT

General Information		Site Information	
Analyst	JLM	Intersection	KLINGLE RD/PARK RD
Agency or Co.	WELLS & ASSOCIATES	Area Type	All other areas
Date Performed	9/27/03	Jurisdiction	WASHINGTON DC
Time Period	PM PEAK (CENTER)	Analysis Year	2005 TOTAL FUTURE

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Num. of Lanes	0	0	0	0	0	0	1	1	0	0	1	1
Lane group		LR					L	T			T	R
Volume (vph)	116		27				172	221			190	119
% Heavy veh	2		2				2	2			2	2
PHF	0.90		0.90				0.90	0.90			0.90	0.90
Actuated (P/A)	P		P				P	P			P	P
Startup lost time		2.0					2.0	2.0			2.0	2.0
Ext. eff. green		2.0					2.0	2.0			2.0	2.0
Arrival type		3					3	3			3	3
Unit Extension		3.0					3.0	3.0			3.0	3.0
Ped/Bike/RTOR Volume	12		0	8						9	0	0
Lane Width		12.0					12.0	12.0			12.0	12.0
Parking/Grade/Parking	N	0	N	N		N	N	0	Y	N	0	Y
Parking/hr									10			10
Bus stops/hr		0					0	0			0	0
Unit Extension		3.0					3.0	3.0			3.0	3.0

Phasing	EB Only	02	03	04	NB Only	Thru & RT	07	08
Timing	G = 17.0	G =	G =	G =	G = 20.0	G = 28.0	G =	G =
	Y = 5	Y =	Y =	Y =	Y = 5	Y = 5	Y =	Y =

Duration of Analysis (hrs) = 0.25 | Cycle Length C = 80.0

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adj. flow rate		159					191	246			211	132
Lane group cap.		371					443	554			652	831
v/c ratio		0.43					0.43	0.44			0.32	0.16
Green ratio		0.21					0.25	0.35			0.35	0.63
Unif. delay d1		27.3					25.2	20.0			19.1	6.2
Delay factor k		0.50					0.50	0.50			0.50	0.50
Increm. delay d2		3.6					3.0	2.6			1.3	0.4
PF factor		1.000					1.000	1.000			1.000	1.000
Control delay		30.9					28.3	22.6			20.4	6.7
Lane group LOS		C					C	C			C	A
Apprch. delay	30.9						25.1			15.1		
Approach LOS	C						C			B		
Intersec. delay	22.4			Intersection LOS						C		

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SHORT REPORT

General Information		Site Information	
Analyst	JLM	Intersection	KLINGLE RD/PARK RD
Agency or Co.	WELLS & ASSOCIATES	Area Type	All other areas
Date Performed	9/27/03	Jurisdiction	WASHINGTON DC
Time Period	PM PEAK (STREET)	Analysis Year	

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Num. of Lanes	0	0	1	0	0	0	1	1	0	0	1	1
Lane group			R				L	T			T	R
Volume (vph)			144				189	306			195	147
% Heavy veh			2				2	2			2	2
PHF			0.90				0.90	0.90			0.90	0.90
Actuated (P/A)							P	P			P	P
Startup lost time			2.0				2.0	2.0			2.0	2.0
Ext. eff. green			2.0				2.0	2.0			2.0	2.0
Arrival type			3				3	3			3	3
Unit Extension			3.0				3.0	3.0			3.0	3.0
Ped/Bike/RTOR Volume	12		0							9	0	0
Lane Width			12.0				12.0	12.0			12.0	12.0
Parking/Grade/Parking	N	0	Y	N		N	N	0	N	N	0	N
Parking/hr			20									
Bus stops/hr			0				0	0			0	0
Unit Extension			3.0				3.0	3.0			3.0	3.0

Phasing	01	02	03	04	NB Only	SB Only	Thru & RT	08
Timing	G =	G =	G =	G =	G = 20.0	G = 22.0	G = 28.0	G =
	Y =	Y =	Y =	Y =	Y = 0	Y = 5	Y = 5	Y =

Duration of Analysis (hrs) = 0.25 | Cycle Length C = 80.0

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adj. flow rate			160				210	340			217	163
Lane group cap.			322				443	652			652	1081
v/c ratio			0.50				0.47	0.52			0.33	0.15
Green ratio			0.25				0.25	0.35			0.35	0.69
Unif. delay d1			25.7				25.5	20.7			19.1	4.4
Delay factor k			0.50				0.50	0.50			0.50	0.50
Increm. delay d2			5.4				3.6	3.0			1.4	0.3
PF factor			1.000				1.000	1.000			1.000	1.000
Control delay			31.1				29.1	23.6			20.5	4.7
Lane group LOS			C				C	C			C	A
Apprch. delay	31.1						25.7			13.7		
Approach LOS	C						C			B		
Intersec. delay	22.3			Intersection LOS						C		

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SHORT REPORT

General Information		Site Information	
Analyst	JLM	Intersection	KLINGLE RD/PARK RD
Agency or Co.	WELLS & ASSOCIATES	Area Type	All other areas
Date Performed	9/27/03	Jurisdiction	WASHINGTON DC
Time Period	PM PEAK (STREET)	Analysis Year	2005 TOTAL FUTURE

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Num. of Lanes	0	0	0	0	0	0	1	1	0	0	1	1
Lane group		LR					L	T			T	R
Volume (vph)	188		43				188	306			195	147
% Heavy veh	2		2				2	2			2	2
PHF	0.90		0.90				0.90	0.90			0.90	0.90
Actuated (P/A)	P		P				P	P			P	P
Startup lost time		2.0					2.0	2.0			2.0	2.0
Ext. eff. green		2.0					2.0	2.0			2.0	2.0
Arrival type		3					3	3			3	3
Unit Extension		3.0					3.0	3.0			3.0	3.0
Ped/Bike/RTOR Volume	12		0	7						9	0	0
Lane Width		12.0					12.0	12.0			12.0	12.0
Parking/Grade/Parking	N	0	N	N		N	N	0	N	N	0	N
Parking/hr												
Bus stops/hr		0					0	0			0	0
Unit Extension		3.0					3.0	3.0			3.0	3.0

Phasing	EB Only	02	03	04	NB Only	Thru & RT	07	08
Timing	G = 17.0	G =	G =	G =	G = 20.0	G = 28.0	G =	G =
	Y = 5	Y =	Y =	Y =	Y = 0	Y = 5	Y =	Y =

Duration of Analysis (hrs) = 0.25 | Cycle Length C = 75.0

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
Adj. flow rate		257					209	340			217	163
Lane group cap.		396					472	696			696	1043
v/c ratio		0.65					0.44	0.49			0.31	0.16
Green ratio		0.23					0.27	0.37			0.37	0.67
Unif. delay d1		26.3					22.9	18.0			16.7	4.7
Delay factor k		0.50					0.50	0.50			0.50	0.50
Increm. delay d2		8.0					3.0	2.4			1.2	0.3
PF factor		1.000					1.000	1.000			1.000	1.000
Control delay		34.3					25.9	20.5			17.8	5.0
Lane group LOS		C					C	C			B	A
Apprch. delay	34.3						22.5			12.3		
Approach LOS	C						C			B		
Intersec. delay	21.8			Intersection LOS						C		

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TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	JLM
Agency/Co.	WELLS & ASSOCIATES
Date Performed	09/29/2003
Analysis Time Period	AM PEAK

Site Information

Intersection	KLINGLE ROAD/ROSEMOUNT AVENUE
Jurisdiction	WASHINGTON DC
Analysis Year	2005 TOTAL FUTURE

Project Description: JOB # 2162 (KLINGLE RD/ROSEMOUNT AVE - TOTAL FUTURE)

East/West Street: KLINGLE ROAD | North/South Street: ROSEMOUNT AVENUE

Intersection Orientation: East-West | Study Period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	22	60	0	0	368	40
Peak-Hour Factor, PHF	0.90	0.90	1.00	1.00	0.90	0.90
Hourly Flow Rate, HFR	24	66	0	0	408	44
Percent Heavy Vehicles	2	--	--	0	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	0	0	2	0
Configuration	LT				T	TR
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	0	0	0	18	0	31
Peak-Hour Factor, PHF	1.00	1.00	1.00	0.90	1.00	0.90
Hourly Flow Rate, HFR	0	0	0	20	0	34
Percent Heavy Vehicles	0	0	0	2	0	2
Percent Grade (%)		0			-2	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	0	0	0
Configuration					LR	

Delay, Queue Length, and Level of Service

Approach	EB	WB	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT						LR	
v (vph)	24						54	
C (m) (vph)	1105						618	
v/c	0.02						0.09	
95% queue length	0.07						0.29	
Control Delay	8.3						11.4	
LOS	A						B	
Approach Delay	--	--					11.4	

Approach LOS	--	--		B

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TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	JLM
Agency/Co.	WELLS & ASSOCIATES
Date Performed	09/29/2003
Analysis Time Period	PM PEAK (CENTER)

Site Information

Intersection	KLINGLE ROAD/ROSEMOUNT AVENUE
Jurisdiction	WASHINGTON DC
Analysis Year	2005 TOTAL FUTURE

Project Description: JOB # 2162 (KLINGLE RD/ROSEMOUNT AVE - TOTAL FUTURE)

East/West Street: KLINGLE ROAD | North/South Street: ROSEMOUNT AVENUE

Intersection Orientation: East-West | Study Period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	14	96	0	0	141	20
Peak-Hour Factor, PHF	0.90	0.90	1.00	1.00	0.90	0.90
Hourly Flow Rate, HFR	15	106	0	0	156	22
Percent Heavy Vehicles	2	--	--	0	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	0	0	2	0
Configuration	LT				T	TR
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	0	0	0	19	0	17
Peak-Hour Factor, PHF	1.00	1.00	1.00	0.90	1.00	0.90
Hourly Flow Rate, HFR	0	0	0	21	0	18
Percent Heavy Vehicles	0	0	0	2	0	2
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	0	0	0
Configuration					LR	

Delay, Queue Length, and Level of Service

Approach	EB	WB	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT						LR	
v (vph)	15						39	
C (m) (vph)	1395						766	
v/c	0.01						0.05	
95% queue length	0.03						0.16	
Control Delay	7.6						10.0-	
LOS	A						A	
Approach Delay	--	--					10.0-	

Approach LOS	--	--		A

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TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	JLM
Agency/Co.	WELLS & ASSOCIATES
Date Performed	09/29/2003
Analysis Time Period	PM PEAK (STREET)

Site Information

Intersection	KLINGLE ROAD/ROSEMOUNT AVENUE
Jurisdiction	WASHINGTON DC
Analysis Year	2005 TOTAL FUTURE

Project Description: JOB # 2162 (KLINGLE RD/ROSEMOUNT AVE - TOTAL FUTURE)

East/West Street: KLINGLE ROAD | North/South Street: ROSEMOUNT AVENUE

Intersection Orientation: East-West | Study Period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	21	135	0	0	171	15
Peak-Hour Factor, PHF	0.90	0.90	1.00	1.00	0.90	0.90
Hourly Flow Rate, HFR	23	150	0	0	190	16
Percent Heavy Vehicles	2	--	--	0	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	0	0	2	0
Configuration	LT				T	TR
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	0	0	0	13	0	10
Peak-Hour Factor, PHF	1.00	1.00	1.00	0.90	1.00	0.90
Hourly Flow Rate, HFR	0	0	0	14	0	11
Percent Heavy Vehicles	0	0	0	2	0	2
Percent Grade (%)		0			-2	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	0	0	0
Configuration					LR	

Delay, Queue Length, and Level of Service

Approach	EB	WB	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT						LR	
v (vph)	23						25	
C (m) (vph)	1363						690	
v/c	0.02						0.04	
95% queue length	0.05						0.11	
Control Delay	7.7						10.4	
LOS	A						B	
Approach Delay	--	--					10.4	

Approach LOS	--	--		B

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TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	JLM	Intersection	ROSEMOUNT AVE/CENTER DRIVEWAY
Agency/Co.	WELLS & ASSOCIATES	Jurisdiction	WASHINGTON DC
Date Performed	09/29/2003	Analysis Year	2005 TOTAL FUTURE
Analysis Time Period	AM PEAK		

Project Description: JOB # 2162 (ROSEMOUNT AVE/CENTER DRIVEWAY - TOTAL FUTURE)

East/West Street: CENTER DRVEWAY | North/South Street: ROSEMOUNT AVENUE

Intersection Orientation: North-South | Study Period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	54	7	0	0	11	0
Peak-Hour Factor, PHF	0.90	0.90	1.00	1.00	0.90	0.90
Hourly Flow Rate, HFR	60	7	0	0	12	0
Percent Heavy Vehicles	2	--	--	0	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration	LT					TR
Upstream Signal		0			0	

Minor Street	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	0	0	0	0	0	38
Peak-Hour Factor, PHF	1.00	1.00	1.00	0.90	1.00	0.90
Hourly Flow Rate, HFR	0	0	0	0	0	42
Percent Heavy Vehicles	0	0	0	2	0	2
Percent Grade (%)	0			-2		
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	0	0	0
Configuration					LR	

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT						LR	
v (vph)	60						42	
C (m) (vph)	1607						1069	
v/c	0.04						0.04	
95% queue length	0.12						0.12	
Control Delay	7.3						8.5	
LOS	A						A	
Approach Delay	--	--				8.5		
Approach LOS	--	--				A		

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TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	JLM	Intersection	ROSEMOUNT AVE/CENTER DRIVEWAY
Agency/Co.	WELLS & ASSOCIATES	Jurisdiction	WASHINGTON DC
Date Performed	09/29/2003	Analysis Year	2005 TOTAL FUTURE
Analysis Time Period	PM PEAK (CENTER)		

Project Description	JOB # 2162 (ROSEMOUNT AVE/CENTER DRIVEWAY - TOTAL FUTURE)
East/West Street:	CENTER DRVEWAY
North/South Street:	ROSEMOUNT AVENUE
Intersection Orientation:	North-South
Study Period (hrs):	0.25

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	24	4	0	0	7	0
Peak-Hour Factor, PHF	0.90	0.90	1.00	1.00	0.90	0.90
Hourly Flow Rate, HFR	26	4	0	0	7	0
Percent Heavy Vehicles	2	--	--	0	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration	LT					TR
Upstream Signal		0			0	

Minor Street	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	0	0	0	1	0	29
Peak-Hour Factor, PHF	1.00	1.00	1.00	0.90	1.00	0.90
Hourly Flow Rate, HFR	0	0	0	1	0	32
Percent Heavy Vehicles	0	0	0	2	0	2
Percent Grade (%)	0			-2		
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	0	0	0
Configuration					LR	

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT						LR	
v (vph)	26						33	
C (m) (vph)	1614						1070	
v/c	0.02						0.03	
95% queue length	0.05						0.10	
Control Delay	7.3						8.5	
LOS	A						A	
Approach Delay	--	--				8.5		
Approach LOS	--	--				A		

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TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	JLM	Intersection	ROSEMOUNT AVE/CENTER DRIVEWAY
Agency/Co.	WELLS & ASSOCIATES	Jurisdiction	WASHINGTON DC
Date Performed	09/29/2003	Analysis Year	2005 TOTAL FUTURE
Analysis Time Period	PM PEAK (STREET)		

Project Description	JOB # 2162 (ROSEMOUNT AVE/CENTER DRIVEWAY - TOTAL FUTURE)
East/West Street:	CENTER DRVEWAY
North/South Street:	ROSEMOUNT AVENUE
Intersection Orientation:	North-South
Study Period (hrs):	0.25

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	19	9	0	0	2	0
Peak-Hour Factor, PHF	0.90	0.90	1.00	1.00	0.90	0.90
Hourly Flow Rate, HFR	21	10	0	0	2	0
Percent Heavy Vehicles	2	--	--	0	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration	LT					TR
Upstream Signal		0			0	

Minor Street	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	0	0	0	0	0	21
Peak-Hour Factor, PHF	1.00	1.00	1.00	0.90	1.00	0.90
Hourly Flow Rate, HFR	0	0	0	0	0	23
Percent Heavy Vehicles	0	0	0	2	0	2
Percent Grade (%)	0			-2		
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	0	0	0
Configuration					LR	

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT						LR	
v (vph)	21						23	
C (m) (vph)	1620						1082	
v/c	0.01						0.02	
95% queue length	0.04						0.07	
Control Delay	7.3						8.4	
LOS	A						A	
Approach Delay	--	--				8.4		
Approach LOS	--	--				A		

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