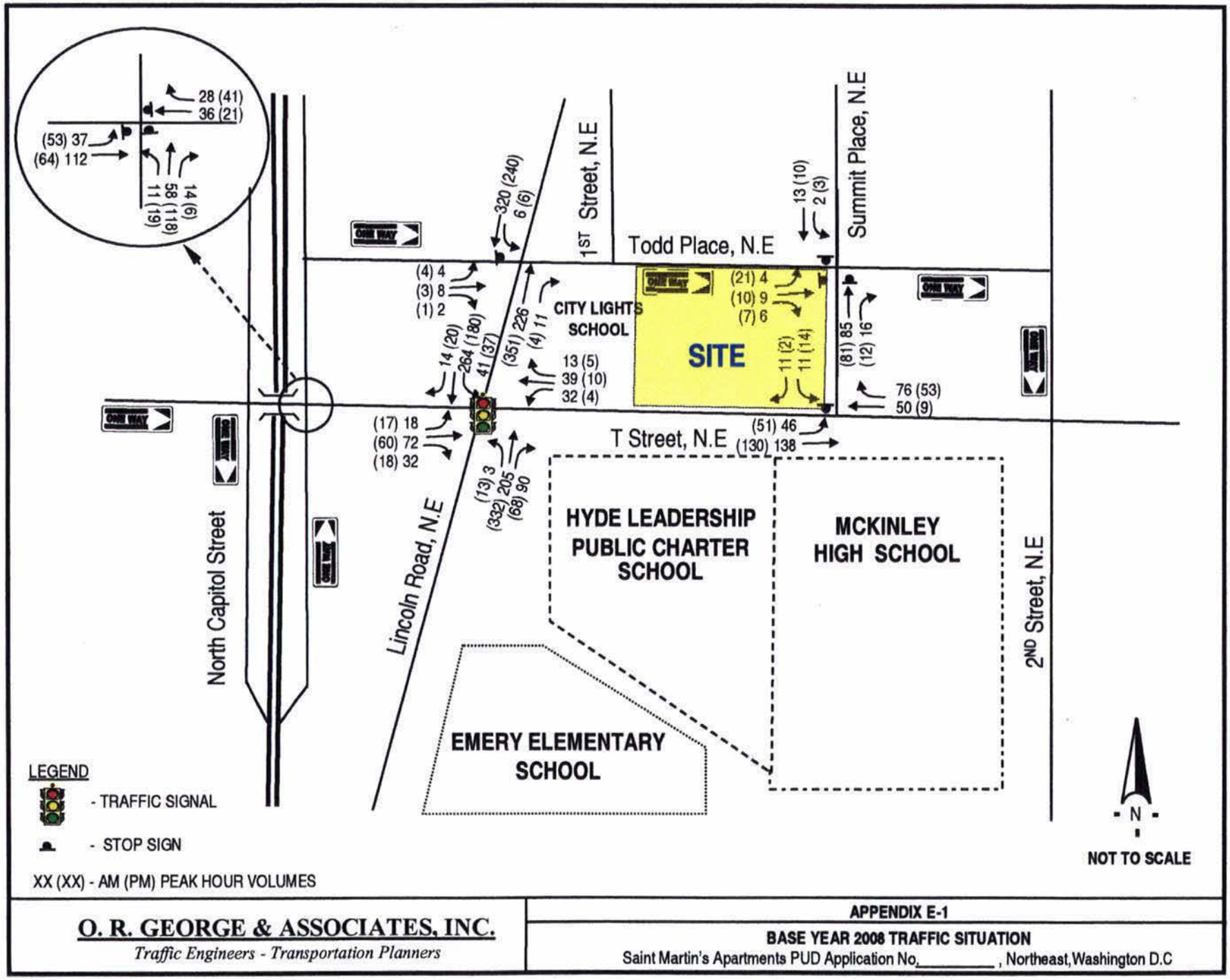
APPENDIX

E

2008 'BASE' TRAFFIC SITUATION



O. R. GEORGE & ASSOCIATES, INC.

Traffic Engineers - Transportation Planners

APPENDIX E-1

BASE YEAR 2008 TRAFFIC SITUATION

Saint Martin's Apartments PUD Application No._____, Northeast, Washington D.C

APPENDIX

F

CAPACITY ANALYSIS WORKSHEETS -
2008 BACKGROUND TRAFFIC SITUATION

ALL-WAY STOP CONTROL ANALYSIS

General Information		Site Information	
Analyst	ORGA-IJB	Intersection	T ST. @ NORTH CAPITOL RAMP
Agency/Co.	O.R.GEORGE & ASSOCIATES	Jurisdiction	D.C
Date Performed	10/18/2005	Analysis Year	Background 2008
Analysis Time Period	AM PEAK		

Project ID SAINT MARTINS PUD

East/West Street: T STREET, N.E | North/South Street: NORTH CAPITOL STREET RAMP

Volume Adjustments and Site Characteristics

Approach	Eastbound			Westbound		
Movement	L	T	R	L	T	R
Volume	37	112	0	0	36	28
%Thrus Left Lane	50			50		

Approach	Northbound			Southbound		
Movement	L	T	R	L	T	R
Volume	11	58	14	0	0	0
%Thrus Left Lane	50			50		

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	LT		T	R	LTR			
PHF	0.72		0.73	0.73	0.83			
Flow Rate	206		49	38	98			
% Heavy Vehicles	0		0	0	0			
No. Lanes	1		2		1		0	
Geometry Group	3a		5		1			
Duration, T	0.25							

Saturation Headway Adjustment Worksheet

Prop. Left-Turns	0.2		0.0	0.0	0.1			
Prop. Right-Turns	0.0		0.0	1.0	0.2			
Prop. Heavy Vehicle								
hLT-adj	0.2	0.2	0.5	0.5	0.2	0.2		
hRT-adj	-0.6	-0.6	-0.7	-0.7	-0.6	-0.6		
hHV-adj	1.7	1.7	1.7	1.7	1.7	1.7		
hadj, computed	4.39		4.39	4.39	4.39			

Departure Headway and Service Time

hd, initial value	3.20		3.20	3.20	3.20			
x, initial	0.18		0.04	0.03	0.09			
hd, final value	4.39		4.39	4.39	4.39			
x, final value	0.25		0.07	0.04	0.12			
Move-up time, m	2.0		2.3		2.0			
Service Time	2.4		2.4		2.4		2.4	

Capacity and Level of Service

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Capacity	456		299	288	348			
Delay	8.85		7.95	7.09	8.10			
LOS	A							

F-1

ALL-WAY STOP CONTROL ANALYSIS

General Information		Site Information	
Analyst	ORGA-IJB	Intersection	T ST. @ NORTH CAPITOL RAMP
Agency/Co.	O.R.GEORGE & ASSOCIATES	Jurisdiction	D.C
Date Performed	10/18/2005	Analysis Year	Background 2008
Analysis Time Period	PM PEAK		

Project ID SAINT MARTINS PUD

East/West Street: T STREET, N.E | North/South Street: NORTH CAPITOL STREET RAMP

Volume Adjustments and Site Characteristics

Approach	Eastbound			Westbound		
Movement	L	T	R	L	T	R
Volume	53	64	0	0	21	41
%Thrus Left Lane	50			50		

Approach	Northbound			Southbound		
Movement	L	T	R	L	T	R
Volume	19	118	6	0	0	0
%Thrus Left Lane	50			50		

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	LT		T	R	LTR			
PHF	0.91		0.78	0.78	0.94			
Flow Rate	128		26	52	151			
% Heavy Vehicles	0		0	0	0			
No. Lanes	1		2		1		0	
Geometry Group	3a		5		1			
Duration, T	0.25							

Saturation Headway Adjustment Worksheet

Prop. Left-Turns	0.5		0.0	0.0	0.1			
Prop. Right-Turns	0.0		0.0	1.0	0.0			
Prop. Heavy Vehicle								
hLT-adj	0.2	0.2	0.5	0.5	0.2	0.2		
hRT-adj	-0.6	-0.6	-0.7	-0.7	-0.6	-0.6		
hHV-adj	1.7	1.7	1.7	1.7	1.7	1.7		
hadj, computed	4.54		4.54	4.54	4.54			

Departure Headway and Service Time

hd, initial value	3.20		3.20	3.20	3.20			
x, initial	0.11		0.02	0.05	0.13			
hd, final value	4.54		4.54	4.54	4.54			
x, final value	0.16		0.04	0.06	0.18			
Move-up time, m	2.0		2.3		2.0			
Service Time	2.5		2.5		2.5		2.5	

Capacity and Level of Service

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Capacity	378		276	302	401			
Delay	8.41		7.85	7.25	8.35			
LOS	A		A	A	A			
Approach: Delay	8.41		7.45		8.35			
LOS	A		A		A			
Intersection Delay	8.18							
Intersection LOS	A							

F-2

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	ORGA-IJB	Intersection	T ST. @ SUMMIT PL, N.E
Agency/Co.	O.R.GEORGE & ASSOCIATES	Jurisdiction	D.C.
Date Performed	10/18/2005	Analysis Year	Background 2008
Analysis Time Period	AM PEAK		

Project Description	SAINT MARTINS PUD
East/West Street:	T STREET, N.E
North/South Street:	SUMMIT PLACE, N.E
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 (veh/h)	46	138	0	0	50	76
Peak-hour factor, PHF	0.64	0.64	1.00	1.00	0.79	0.79
Hourly Flow Rate (veh/h)	71	215	0	0	63	96
Proportion of heavy vehicles, P_{HV}	0	--	--	0	--	--
Median type	Undivided					
RT Channelized?			0			0
Lanes	0	1	0	0	1	0
Configuration	LT					TR
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	0	0	0	11	0	11
Peak-hour factor, PHF	1.00	1.00	1.00	0.69	1.00	0.69
Hourly Flow Rate (veh/h)	0	0	0	15	0	15
Proportion of heavy vehicles, P_{HV}	0	0	0	0	0	0
Percent grade (%)		0			0	
Flared approach		N			N	
Storage		0			0	
RT Channelized?			0			0
Lanes	0	0	0	0	0	0
Configuration					LR	

Control Delay, Queue Length, Level of Service

Approach	EB	WB	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT						LR	
Volume, v (vph)	71						30	
Capacity, c_m (vph)	1433						679	
v/c ratio	0.05						0.04	
Queue length (95%)	0.16						0.14	
Control Delay (s/veh)	7.6						10.5	
LOS	A						B	
Approach delay (s/veh)	--	--					10.5	
Approach LOS	--	--					B	

F-3

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	ORGA-IJB	Intersection	T ST. @ SUMMIT PL, N.E
Agency/Co.	O.R.GEORGE & ASSOCIATES	Jurisdiction	D.C.
Date Performed	10/18/2005	Analysis Year	Background 2008
Analysis Time Period	PM PEAK		

Project Description: SAINT MARTINS PUD

East/West Street: T STREET, N.E | North/South Street: SUMMIT PLACE, N.E

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 (veh/h)	51	130	0	0	9	53
Peak-hour factor, PHF	0.70	0.70	1.00	1.00	0.91	0.91
Hourly Flow Rate (veh/h)	72	185	0	0	9	58
Proportion of heavy vehicles, P_{HV}	0	--	--	0	--	--
Median type	Undivided					
RT Channelized?			0			0
Lanes	0	1	0	0	1	0
Configuration	LT					TR
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	0	0	0	14	0	2
Peak-hour factor, PHF	1.00	1.00	1.00	0.67	1.00	0.67
Hourly Flow Rate (veh/h)	0	0	0	20	0	2
Proportion of heavy vehicles, P_{HV}	0	0	0	0	0	0
Percent grade (%)		0			0	
Flared approach		N			N	
Storage		0			0	
RT Channelized?			0			0
Lanes	0	0	0	0	0	0
Configuration					LR	

Control Delay, Queue Length, Level of Service

Approach	EB	WB	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT						LR	
Volume, v (vph)	72						22	
Capacity, c_m (vph)	1547						631	
v/c ratio	0.05						0.03	
Queue length (95%)	0.15						0.11	
Control Delay (s/veh)	7.4						10.9	
LOS	A						B	
Approach delay (s/veh)	--	--					10.9	
Approach LOS	--	--					B	

F-4

SHORT REPORT

General Information		Site Information	
Analyst	ORGA-IJB	Intersection	T ST. @ LINCOLN RD, N.E
Agency or Co.	O.R.GEORGE & ASSOCIATES	Area Type	All other areas
Date Performed	10/18/2005	Jurisdiction	D.C
Time Period	AM PEAK	Analysis Year	2008 Background

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	0	0	1	0	0	1	0	0	1	0
Lane group		LTR			LTR			LTR			LTR	
Volume (vph)	18	72	32	32	39	13	3	205	90	41	264	14
% Heavy veh	0	0	0	0	0	0	0	0	0	0	0	0
PHF	0.82	0.82	0.82	0.58	0.58	0.58	0.80	0.80	0.80	0.88	0.88	0.88
Actuated (P/A)	P	P	P	P	P	P	P	P	P	P	P	P
Startup lost time		2.0			2.0			2.0			2.0	
Ext. eff. green		2.0			2.0			2.0			2.0	
Arrival type		3			3			3			3	
Unit Extension		3.0			3.0			3.0			3.0	
Ped/Bike/RTOR Volume	0		0	0		0	0		0	0		0
Lane Width		12.0			12.0			12.0			12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/hr												
Bus stops/hr		0			0			0			0	
Unit Extension		3.0			3.0			3.0			3.0	

Phasing	EW Perm	02	03	04	NS Perm	06	07	08
Timing	G = 25.0	G =	G =	G =	G = 65.0	G =	G =	G =
	Y = 5	Y =	Y =	Y =	Y = 5	Y =	Y =	Y =

Duration of Analysis (hrs) = 0.25 | Cycle Length C = 100.0

Lane Group Capacity, Control Delay, and LOS Determination

	EB	WB	NB	SB
Adj. flow rate	149	144	372	363
Lane group cap.	433	393	1181	1125
v/c ratio	0.34	0.37	0.31	0.32
Green ratio	0.25	0.25	0.65	0.65
Unif. delay d1	30.8	31.0	7.7	7.8
Delay factor k	0.50	0.50	0.50	0.50
Increm. delay d2	2.2	2.6	0.7	0.8
PF factor	1.000	1.000	1.000	1.000
Control delay	32.9	33.6	8.4	8.5
Lane group LOS	C	C	A	A
Apprch. delay	32.9	33.6	8.4	8.5
Approach LOS	C	C	A	A
Intersec. delay	15.5	Intersection LOS		B

F-5

SHORT REPORT

General Information		Site Information	
Analyst	ORGA-IJB	Intersection	T ST. @ LINCOLN RD, N.E
Agency or Co.	O.R.GEORGE & ASSOCIATES	Area Type	All other areas
Date Performed	10/18/2005	Jurisdiction	D.C
Time Period	PM PEAK	Analysis Year	Background 2008

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	0	0	1	0	0	1	0	0	1	0
Lane group		LTR			LTR			LTR			LTR	
Volume (vph)	17	60	18	4	10	5	13	332	68	37	180	20
% Heavy veh	0	0	0	0	0	0	0	0	0	0	0	0
PHF	0.75	0.75	0.75	0.77	0.77	0.77	0.94	0.94	0.94	0.99	0.99	0.99
Actuated (P/A)	P	P	P	P	P	P	P	P	P	P	P	P
Startup lost time		2.0			2.0			2.0			2.0	
Ext. eff. green		2.0			2.0			2.0			2.0	
Arrival type		3			3			3			3	
Unit Extension		3.0			3.0			3.0			3.0	
Ped/Bike/RTOR Volume	0		0	0		0	0		0	0		0
Lane Width		12.0			12.0			12.0			12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/hr												
Bus stops/hr		0			0			0			0	
Unit Extension		3.0			3.0			3.0			3.0	

Phasing	EW Perm	02	03	04	NS Perm	06	07	08
Timing	G = 25.0	G =	G =	G =	G = 65.0	G =	G =	G =
	Y = 5	Y =	Y =	Y =	Y = 5	Y =	Y =	Y =

Duration of Analysis (hrs) = 0.25 Cycle Length C = 100.0

Lane Group Capacity, Control Delay, and LOS Determination

	EB	WB	NB	SB
Adj. flow rate	127	24	439	239
Lane group cap.	441	439	1195	1098
v/c ratio	0.29	0.05	0.37	0.22
Green ratio	0.25	0.25	0.65	0.65
Unif. delay d1	30.3	28.5	8.0	7.1
Delay factor k	0.50	0.50	0.50	0.50
Increm. delay d2	1.6	0.2	0.9	0.5
PF factor	1.000	1.000	1.000	1.000
Control delay	31.9	28.8	8.9	7.6
Lane group LOS	C	C	A	A
Apprch. delay	31.9	28.8	8.9	7.6
Approach LOS	C	C	A	A
Intersec. delay	12.6	Intersection LOS		B

F-6

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	ORGA-IJB	Intersection	TODD PL. @ LINCOLN RD, N.E
Agency/Co.	O.R.GEORGE & ASSOCIATES	Jurisdiction	D.C.
Date Performed	10/18/2005	Analysis Year	Background 2008
Analysis Time Period	AM PEAK		
Project Description	SAINT MARTINS PUD		
East/West Street:	TODD PLACE, N.E	North/South Street:	LINCOLN ROAD, N.E
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	0	226	11	6	320	0
Peak-Hour Factor, PHF	1.00	0.75	0.75	0.83	0.83	0.67
Hourly Flow Rate, HFR	0	301	14	7	385	0
Percent Heavy Vehicles	0	--	--	0	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration			TR	LT		
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	4	8	2
Peak-Hour Factor, PHF	1.00	0.91	0.91	0.88	0.88	0.88
Hourly Flow Rate, HFR	0	0	0	4	9	2
Percent Heavy Vehicles	0	0	0	0	0	0
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	0	1	0
Configuration					LTR	

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		LT					LTR	
v (vph)		7					15	
C (m) (vph)		1257					393	
v/c		0.01					0.04	
95% queue length		0.02					0.12	
Control Delay		7.9					14.5	
LOS		A					B	
Approach Delay	--	--				14.5		
Approach LOS	--	--				B		

F-7

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	ORGA-IJB	Intersection	TODD PL. @ LINCOLN RD, N.E
Agency/Co.	O.R.GEORGE & ASSOCIATES	Jurisdiction	D.C.
Date Performed	10/18/2005	Analysis Year	Background 2008
Analysis Time Period	PM PEAK		

Project Description: SAINT MARTINS PUD

East/West Street: TODD PLACE, N.E | North/South Street: LINCOLN ROAD, N.E

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	0	351	4	6	240	0
Peak-Hour Factor, PHF	1.00	0.89	0.89	0.98	0.98	0.67
Hourly Flow Rate, HFR	0	394	4	6	244	0
Percent Heavy Vehicles	0	--	--	0	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration			TR	LT		
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	4	3	1
Peak-Hour Factor, PHF	1.00	0.91	0.91	0.67	0.67	0.67
Hourly Flow Rate, HFR	0	0	0	5	4	1
Percent Heavy Vehicles	0	0	0	0	0	0
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	0	1	0
Configuration					LTR	

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		LT					LTR	
v (vph)		6					10	
C (m) (vph)		1172					433	
v/c		0.01					0.02	
95% queue length		0.02					0.07	
Control Delay		8.1					13.5	
LOS		A					B	
Approach Delay	--	--					13.5	
Approach LOS	--	--					B	

F-8

ALL-WAY STOP CONTROL ANALYSIS

General Information		Site Information	
Analyst	ORGA-IJB	Intersection	Todd Place @ Summit Place
Agency/Co.	O.R.GEORGE & ASSOCAITES	Jurisdiction	D.C.
Date Performed	10/18/2005	Analysis Year	Background 2008
Analysis Time Period	AM PEAK		

Project ID SAINT MARTINS PUD

East/West Street: TODD PLACE | North/South Street: SUMMIT PLACE

Volume Adjustments and Site Characteristics

Approach	Eastbound			Westbound		
Movement	L	T	R	L	T	R
Volume	4	9	6	0	0	0
%Thrus Left Lane	50			50		

Approach	Northbound			Southbound		
Movement	L	T	R	L	T	R
Volume	0	85	16	2	13	0
%Thrus Left Lane	50			50		

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	LTR				TR		LT	
PHF	0.59				0.50		0.71	
Flow Rate	31				202		20	
% Heavy Vehicles	0				0		0	
No. Lanes	1		0		1		1	
Geometry Group	1				1		1	
Duration, T	0.25							

Saturation Headway Adjustment Worksheet

Prop. Left-Turns	0.2				0.0		0.1	
Prop. Right-Turns	0.3				0.2		0.0	
Prop. Heavy Vehicle								
hLT-adj	0.2	0.2			0.2	0.2	0.2	0.2
hRT-adj	-0.6	-0.6			-0.6	-0.6	-0.6	-0.6
hHV-adj	1.7	1.7			1.7	1.7	1.7	1.7
hadj, computed	4.21				4.21		4.21	

Departure Headway and Service Time

hd, initial value	3.20				3.20		3.20	
$x_{initial}$	0.03				0.18		0.02	
hd, final value	4.21				4.21		4.21	
x, final value	0.04				0.22		0.02	
Move-up time, m	2.0				2.0		2.0	
Service Time	2.2		2.2		2.2		2.2	

Capacity and Level of Service

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Capacity	281				452		270	
Delay	7.36				7.98		7.27	
LOS	A				A		A	
Approach: Delay	7.36				7.98		7.27	
LOS	A				A		A	
Intersection Delay	7.85							
Intersection LOS	A							

F-9

ALL-WAY STOP CONTROL ANALYSIS

General Information		Site Information	
Analyst	ORGA-IJB	Intersection	Todd Place @ Summit Place
Agency/Co.	O.R.GEORGE & ASSOCAITES	Jurisdiction	D.C.
Date Performed	10/18/2005	Analysis Year	Background 2008
Analysis Time Period	PM PEAK		

Project ID SAINT MARTINS PUD

East/West Street: TODD PLACE | North/South Street: SUMMIT PLACE

Volume Adjustments and Site Characteristics

Approach	Eastbound			Westbound		
Movement	L	T	R	L	T	R
Volume	21	10	7	0	0	0
%Thrus Left Lane	50			50		

Approach	Northbound			Southbound		
Movement	L	T	R	L	T	R
Volume	0	81	12	3	13	0
%Thrus Left Lane	50			50		

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	LTR				TR		LT	
PHF	0.59				0.50		0.71	
Flow Rate	62				186		22	
% Heavy Vehicles	0				0		0	
No. Lanes	1		0		1		1	
Geometry Group	1				1		1	
Duration, T	0.25							

Saturation Headway Adjustment Worksheet

	Eastbound		Westbound		Northbound		Southbound	
Prop. Left-Turns	0.6				0.0		0.2	
Prop. Right-Turns	0.2				0.1		0.0	
Prop. Heavy Vehicle								
hLT-adj	0.2	0.2			0.2	0.2	0.2	0.2
hRT-adj	-0.6	-0.6			-0.6	-0.6	-0.6	-0.6
hHV-adj	1.7	1.7			1.7	1.7	1.7	1.7
hadj, computed	4.35				4.35		4.35	

Departure Headway and Service Time

	Eastbound		Westbound		Northbound		Southbound	
hd, initial value	3.20				3.20		3.20	
x, initial	0.06				0.17		0.02	
hd, final value	4.35				4.35		4.35	
x, final value	0.07				0.21		0.03	
Move-up time, m	2.0				2.0		2.0	
Service Time	2.3		2.3		2.3		2.3	

Capacity and Level of Service

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Capacity	312				436		272	
Delay	7.70				8.03		7.37	
LOS	A				A		A	
Approach: Delay	7.70				8.03		7.37	
LOS	A				A		A	
Intersection Delay	7.90							
Intersection LOS	A							

F-10

ALL-WAY STOP CONTROL ANALYSIS

General Information		Site Information	
Analyst	ORGA-IJB	Intersection	Todd Place @ Summit Place
Agency/Co.	O.R.GEORGE & ASSOCAITES	Jurisdiction	D.C.
Date Performed	10/18/2005	Analysis Year	Background 2008
Analysis Time Period	PM PEAK		

Project ID *SAINT MARTINS PUD*

East/West Street: *TODD PLACE* | North/South Street: *SUMMIT PLACE*

Volume Adjustments and Site Characteristics

Approach	Eastbound			Westbound		
Movement	L	T	R	L	T	R
Volume	21	10	7	0	0	0
%Thrus Left Lane	50			50		

Approach	Northbound			Southbound		
Movement	L	T	R	L	T	R
Volume	0	81	12	3	13	0
%Thrus Left Lane	50			50		

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	LTR				TR		LT	
PHF	0.59				0.50		0.71	
Flow Rate	62				186		22	
% Heavy Vehicles	0				0		0	
No. Lanes	1		0		1		1	
Geometry Group	1				1		1	
Duration, T	0.25							

Saturation Headway Adjustment Worksheet

	Eastbound		Westbound		Northbound		Southbound	
Prop. Left-Turns	0.6				0.0		0.2	
Prop. Right-Turns	0.2				0.1		0.0	
Prop. Heavy Vehicle								
hLT-adj	0.2	0.2			0.2	0.2	0.2	0.2
hRT-adj	-0.6	-0.6			-0.6	-0.6	-0.6	-0.6
hHV-adj	1.7	1.7			1.7	1.7	1.7	1.7
hadj, computed	4.35				4.35		4.35	

Departure Headway and Service Time

	Eastbound		Westbound		Northbound		Southbound	
hd, initial value	3.20				3.20		3.20	
x, initial	0.06				0.17		0.02	
hd, final value	4.35				4.35		4.35	
x, final value	0.07				0.21		0.03	
Move-up time, m	2.0				2.0		2.0	
Service Time	2.3		2.3		2.3		2.3	

Capacity and Level of Service

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Capacity	312				436		272	
Delay	7.70				8.03		7.37	
LOS	A				A		A	
Approach: Delay	7.70				8.03		7.37	
LOS	A				A		A	
Intersection Delay	7.90							
Intersection LOS	A							

F-10

APPENDIX

G

CAPACITY ANALYSIS WORKSHEETS
2008 TOTAL TRAFFIC SITUATION

ALL-WAY STOP CONTROL ANALYSIS

General Information		Site Information	
Analyst	ORGA-IJB	Intersection	T ST. @ NORTH CAPITOL RAMP
Agency/Co.	O.R.GEORGE & ASSOCIATES	Jurisdiction	D.C
Date Performed	10/18/2005	Analysis Year	Future 2008
Analysis Time Period	AM PEAK		

Project ID SAINT MARTINS PUD

East/West Street: T STREET, N.E | North/South Street: NORTH CAPITOL STREET RAMP

Volume Adjustments and Site Characteristics

Approach	Eastbound			Westbound		
Movement	L	T	R	L	T	R
Volume	37	115	0	0	36	36
%Thrus Left Lane	50			50		

Approach	Northbound			Southbound		
Movement	L	T	R	L	T	R
Volume	11	58	14	0	0	0
%Thrus Left Lane	50			50		

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	LT		T	R	LTR			
PHF	0.72		0.73	0.73	0.83			
Flow Rate	210		49	49	98			
% Heavy Vehicles	0		0	0	0			
No. Lanes	1		2		1		0	
Geometry Group	3a		5		1			
Duration, T	0.25							

Saturation Headway Adjustment Worksheet

Prop. Left-Turns	0.2		0.0	0.0	0.1			
Prop. Right-Turns	0.0		0.0	1.0	0.2			
Prop. Heavy Vehicle								
hLT-adj	0.2	0.2	0.5	0.5	0.2	0.2		
hRT-adj	-0.6	-0.6	-0.7	-0.7	-0.6	-0.6		
hHV-adj	1.7	1.7	1.7	1.7	1.7	1.7		
hadj, computed	4.40		4.40	4.40	4.40			

Departure Headway and Service Time

hd, initial value	3.20		3.20	3.20	3.20			
x, initial	0.19		0.04	0.04	0.09			
hd, final value	4.40		4.40	4.40	4.40			
x, final value	0.26		0.07	0.06	0.12			
Move-up time, m	2.0		2.3		2.0			
Service Time	2.4		2.4		2.4		2.4	

Capacity and Level of Service

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Capacity	460		299	299	348			
Delay	8.91		7.95	7.15	8.14			
LOS	A		A	A	A			
Approach: Delay	8.91		7.55		8.14			
LOS	A		A		A			
Intersection Delay	8.40							
Intersection LOS	A							

G-1

ALL-WAY STOP CONTROL ANALYSIS

General Information

Analyst	ORGA-IJB
Agency/Co.	O.R.GEORGE & ASSOCIATES
Date Performed	10/18/2005
Analysis Time Period	PM PEAK

Site Information

Intersection	T ST. @ NORTH CAPITOL RAMP
Jurisdiction	D.C
Analysis Year	Future 2008

Project ID *SAINT MARTINS PUD*

East/West Street: *T STREET, N.E*

North/South Street: *NORTH CAPITOL STREET RAMP*

Volume Adjustments and Site Characteristics

Approach	Eastbound			Westbound		
Movement	L	T	R	L	T	R
Volume	53	72	0	0	21	47
%Thrus Left Lane	50			50		

Approach	Northbound			Southbound		
Movement	L	T	R	L	T	R
Volume	19	118	6	0	0	0
%Thrus Left Lane	50			50		

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	LT		T	R	LTR			
PHF	0.91		0.78	0.78	0.94			
Flow Rate	137		26	60	151			
% Heavy Vehicles	0		0	0	0			
No. Lanes	1		2		1		0	
Geometry Group	3a		5		1			
Duration, T	0.25							

Saturation Headway Adjustment Worksheet

Prop. Left-Turns	0.4		0.0	0.0	0.1			
Prop. Right-Turns	0.0		0.0	1.0	0.0			
Prop. Heavy Vehicle								
hLT-adj	0.2	0.2	0.5	0.5	0.2	0.2		
hRT-adj	-0.6	-0.6	-0.7	-0.7	-0.6	-0.6		
hHV-adj	1.7	1.7	1.7	1.7	1.7	1.7		
hadj, computed	4.55		4.55	4.55	4.55			

Departure Headway and Service Time

hd, initial value	3.20		3.20	3.20	3.20			
x, initial	0.12		0.02	0.05	0.13			
hd, final value	4.55		4.55	4.55	4.55			
x, final value	0.17		0.04	0.07	0.18			
Move-up time, m	2.0		2.3		2.0			
Service Time	2.5		2.5		2.5		2.5	

Capacity and Level of Service

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Capacity	387		276	310	401			
Delay	8.50		7.87	7.31	8.41			
LOS	A		A	A	A			
Approach: Delay	8.50		7.48		8.41			
LOS	A		A		A			
Intersection Delay	8.23							
Intersection LOS	A							

G-2

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	ORGA-IJB	Intersection	T ST. @ SUMMIT PL, N.E
Agency/Co.	O.R.GEORGE & ASSOCIATES	Jurisdiction	D.C.
Date Performed	10/18/2005	Analysis Year	Background 2008
Analysis Time Period	AM PEAK		

Project Description: SAINT MARTINS PUD

East/West Street: T STREET, N.E | North/South Street: SUMMIT PLACE, N.E

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 (veh/h)	49	141	0	0	51	76
Peak-hour factor, PHF	0.64	0.64	1.00	1.00	0.79	0.79
Hourly Flow Rate (veh/h)	76	220	0	0	64	96
Proportion of heavy vehicles, P_{HV}	0	--	--	0	--	--
Median type	Undivided					
RT Channelized?			0			0
Lanes	0	1	0	0	1	0
Configuration	LT					TR
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	0	0	0	11	0	12
Peak-hour factor, PHF	1.00	1.00	1.00	0.69	1.00	0.69
Hourly Flow Rate (veh/h)	0	0	0	15	0	17
Proportion of heavy vehicles, P_{HV}	0	0	0	0	0	0
Percent grade (%)		0			0	
Flared approach		N			N	
Storage		0			0	
RT Channelized?			0			0
Lanes	0	0	0	0	0	0
Configuration					LR	

Control Delay, Queue Length, Level of Service

Approach	EB	WB	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT						LR	
Volume, v (vph)	76						32	
Capacity, c_m (vph)	1432						681	
v/c ratio	0.05						0.05	
Queue length (95%)	0.17						0.15	
Control Delay (s/veh)	7.7						10.5	
LOS	A						B	
Approach delay (s/veh)	--	--					10.5	
Approach LOS	--	--					B	

G-3

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	ORGA-IJB	Intersection	T ST. @ SUMMIT PL, N.E
Agency/Co.	O.R.GEORGE & ASSOCIATES	Jurisdiction	D.C.
Date Performed	10/18/2005	Analysis Year	Future 2008
Analysis Time Period	PM PEAK		

Project Description: SAINT MARTINS PUD

East/West Street: T STREET, N.E | North/South Street: SUMMIT PLACE, N.E

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 (veh/h)	53	132	0	0	12	53
Peak-hour factor, PHF	0.65	0.65	1.00	1.00	0.85	0.85
Hourly Flow Rate (veh/h)	81	203	0	0	14	62
Proportion of heavy vehicles, P_{HV}	0	--	--	0	--	--
Median type	Undivided					
RT Channelized?			0			0
Lanes	0	1	0	0	1	0
Configuration	LT					TR
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	0	0	0	14	0	5
Peak-hour factor, PHF	1.00	1.00	1.00	0.60	1.00	0.60
Hourly Flow Rate (veh/h)	0	0	0	23	0	8
Proportion of heavy vehicles, P_{HV}	0	0	0	0	0	0
Percent grade (%)		0			0	
Flared approach		N			N	
Storage		0			0	
RT Channelized?			0			0
Lanes	0	0	0	0	0	0
Configuration					LR	

Control Delay, Queue Length, Level of Service

Approach	EB	WB	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT						LR	
Volume, v (vph)	81						31	
Capacity, c_m (vph)	1536						644	
v/c ratio	0.05						0.05	
Queue length (95%)	0.17						0.15	
Control Delay (s/veh)	7.5						10.9	
LOS	A						B	
Approach delay (s/veh)	--	--					10.9	
Approach LOS	--	--					B	

G-4

SHORT REPORT

General Information		Site Information	
Analyst	ORGA-IJB	Intersection	T ST. @ LINCOLN RD, N.E
Agency or Co.	O.R.GEORGE & ASSOCIATES	Area Type	All other areas
Date Performed	10/18/2005	Jurisdiction	D.C
Time Period	AM PEAK	Analysis Year	2008 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	0	0	1	0	0	1	0	0	1	0
Lane group		LTR			LTR			LTR			LTR	
Volume (vph)	18	75	32	48	47	15	3	205	96	42	264	14
% Heavy veh	0	0	0	0	0	0	0	0	0	0	0	0
PHF	0.82	0.82	0.82	0.58	0.58	0.58	0.80	0.80	0.80	0.88	0.88	0.8
Actuated (P/A)	P	P	P	P	P	P	P	P	P	P	P	P
Startup lost time		2.0			2.0			2.0			2.0	
Ext. eff. green		2.0			2.0			2.0			2.0	
Arrival type		3			3			3			3	
Unit Extension		3.0			3.0			3.0			3.0	
Ped/Bike/RTOR Volume	0		0	0		0	0		0	0		0
Lane Width		12.0			12.0			12.0			12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/hr												
Bus stops/hr		0			0			0			0	
Unit Extension		3.0			3.0			3.0			3.0	

Phasing	EW Perm	02	03	04	NS Perm	06	07	08
Timing	G = 25.0	G =	G =	G =	G = 65.0	G =	G =	G =
	Y = 5	Y =	Y =	Y =	Y = 5	Y =	Y =	Y =

Duration of Analysis (hrs) = 0.25 Cycle Length C = 100.0

Lane Group Capacity, Control Delay, and LOS Determination

	EB	WB	NB	SB
Adj. flow rate	152	190	380	364
Lane group cap.	431	357	1179	1121
v/c ratio	0.35	0.53	0.32	0.32
Green ratio	0.25	0.25	0.65	0.65
Unif. delay d1	30.8	32.4	7.7	7.8
Delay factor k	0.50	0.50	0.50	0.50
Increm. delay d2	2.3	5.6	0.7	0.8
PF factor	1.000	1.000	1.000	1.000
Control delay	33.1	38.0	8.5	8.5
Lane group LOS	C	D	A	A
Apprch. delay	33.1	38.0	8.5	8.5
Approach LOS	C	D	A	A
Intersec. delay	17.1	Intersection LOS		B

G-5

SHORT REPORT

General Information		Site Information	
Analyst	ORGA-IJB	Intersection	T ST. @ LINCOLN RD, N.E
Agency or Co.	O.R.GEORGE & ASSOCIATES	Area Type	All other areas
Date Performed	10/18/2005	Jurisdiction	D.C
Time Period	PM PEAK	Analysis Year	Future 2008

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	0	0	1	0	0	1	0	0	1	0
Lane group		LTR			LTR			LTR			LTR	
Volume (vph)	17	68	18	16	16	6	13	332	84	39	180	20
% Heavy veh	0	0	0	0	0	0	0	0	0	0	0	0
PHF	0.75	0.75	0.75	0.77	0.77	0.77	0.94	0.94	0.94	0.99	0.99	0.99
Actuated (P/A)	P	P	P	P	P	P	P	P	P	P	P	P
Startup lost time		2.0			2.0			2.0			2.0	
Ext. eff. green		2.0			2.0			2.0			2.0	
Arrival type		3			3			3			3	
Unit Extension		3.0			3.0			3.0			3.0	
Ped/Bike/RTOR Volume	0		0	0		0	0		0	0		0
Lane Width		12.0			12.0			12.0			12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/hr												
Bus stops/hr		0			0			0			0	
Unit Extension		3.0			3.0			3.0			3.0	

Phasing	EW Perm	02	03	04	NS Perm	06	07	08
Timing	G = 25.0	G =	G =	G =	G = 65.0	G =	G =	G =
	Y = 5	Y =	Y =	Y =	Y = 5	Y =	Y =	Y =

Duration of Analysis (hrs) = 0.25 Cycle Length C = 100.0

Lane Group Capacity, Control Delay, and LOS Determination

	EB	WB	NB	SB
Adj. flow rate	138	50	456	241
Lane group cap.	442	404	1189	1087
v/c ratio	0.31	0.12	0.38	0.22
Green ratio	0.25	0.25	0.65	0.65
Unif. delay d1	30.5	29.0	8.2	7.2
Delay factor k	0.50	0.50	0.50	0.50
Increm. delay d2	1.8	0.6	0.9	0.5
PF factor	1.000	1.000	1.000	1.000
Control delay	32.3	29.7	9.1	7.6
Lane group LOS	C	C	A	A
Apprch. delay	32.3	29.7	9.1	7.6
Approach LOS	C	C	A	A
Intersec. delay	13.5	Intersection LOS		B

G-6

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	ORGA-IJB	Intersection	TODD PL. @ LINCOLN RD, N.E
Agency/Co.	O.R.GEORGE & ASSOCIATES	Jurisdiction	D.C.
Date Performed	10/18/2005	Analysis Year	Future 2008
Analysis Time Period	AM PEAK		
Project Description	SAINT MARTINS PUD		
East/West Street:	TODD PLACE, N.E	North/South Street:	LINCOLN ROAD, N.E
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	0	228	11	6	321	0
Peak-Hour Factor, PHF	1.00	0.75	0.75	0.83	0.83	0.67
Hourly Flow Rate, HFR	0	304	14	7	386	0
Percent Heavy Vehicles	0	--	--	0	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration			TR	LT		
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	4	8	2
Peak-Hour Factor, PHF	1.00	0.91	0.91	0.88	0.88	0.88
Hourly Flow Rate, HFR	0	0	0	4	9	2
Percent Heavy Vehicles	0	0	0	0	0	0
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	0	1	0
Configuration					LTR	

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		LT					LTR	
v (vph)		7					15	
C (m) (vph)		1253					391	
v/c		0.01					0.04	
95% queue length		0.02					0.12	
Control Delay		7.9					14.6	
LOS		A					B	
Approach Delay	--	--				14.6		
Approach LOS	--	--				B		

G-7

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	ORGA-IJB	Intersection	TODD PL. @ LINCOLN RD, N.E
Agency/Co.	O.R.GEORGE & ASSOCIATES	Jurisdiction	D.C.
Date Performed	10/18/2005	Analysis Year	Future 2008
Analysis Time Period	PM PEAK		
Project Description	SAINT MARTINS PUD		
East/West Street:	TODD PLACE, N.E	North/South Street:	LINCOLN ROAD, N.E
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	0	352	4	6	242	0
Peak-Hour Factor, PHF	1.00	0.89	0.89	0.98	0.98	0.67
Hourly Flow Rate, HFR	0	395	4	6	246	0
Percent Heavy Vehicles	0	--	--	0	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration			TR	LT		
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	4	3	1
Peak-Hour Factor, PHF	1.00	0.91	0.91	0.67	0.67	0.67
Hourly Flow Rate, HFR	0	0	0	5	4	1
Percent Heavy Vehicles	0	0	0	0	0	0
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	0	1	0
Configuration					LTR	

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		LT					LTR	
v (vph)		6					10	
C (m) (vph)		1171					431	
v/c		0.01					0.02	
95% queue length		0.02					0.07	
Control Delay		8.1					13.6	
LOS		A					B	
Approach Delay	--	--				13.6		
Approach LOS	--	--				B		

G-8

ALL-WAY STOP CONTROL ANALYSIS

General Information		Site Information	
Analyst	ORGA-IJB	Intersection	Todd Place @ Summit Place
Agency/Co.	O.R.GEORGE & ASSOCAITES	Jurisdiction	D.C.
Date Performed	10/18/2005	Analysis Year	Future 2008
Analysis Time Period	AM PEAK		

Project ID SAINT MARTINS PUD

East/West Street: TODD PLACE | North/South Street: SUMMIT PLACE

Volume Adjustments and Site Characteristics

Approach	Eastbound			Westbound		
Movement	L	T	R	L	T	R
Volume	4	9	6	0	0	0
%Thrus Left Lane	50			50		

Approach	Northbound			Southbound		
Movement	L	T	R	L	T	R
Volume	0	88	16	2	14	0
%Thrus Left Lane	50			50		

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	LTR				TR		LT	
PHF	0.59				0.50		0.71	
Flow Rate	31				208		21	
% Heavy Vehicles	0				0		0	
No. Lanes	1		0		1		1	
Geometry Group	1				1		1	
Duration, T	0.25							

Saturation Headway Adjustment Worksheet

	Eastbound		Westbound		Northbound		Southbound	
Prop. Left-Turns	0.2				0.0		0.1	
Prop. Right-Turns	0.3				0.2		0.0	
Prop. Heavy Vehicle								
hLT-adj	0.2	0.2			0.2	0.2	0.2	0.2
hRT-adj	-0.6	-0.6			-0.6	-0.6	-0.6	-0.6
hHV-adj	1.7	1.7			1.7	1.7	1.7	1.7
hadj, computed	4.22				4.22		4.22	

Departure Headway and Service Time

	Eastbound		Westbound		Northbound		Southbound	
hd, initial value	3.20				3.20		3.20	
x, initial	0.03				0.18		0.02	
hd, final value	4.22				4.22		4.22	
x, final value	0.04				0.23		0.02	
Move-up time, m	2.0				2.0		2.0	
Service Time	2.2		2.2		2.2		2.2	

Capacity and Level of Service

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Capacity	281				458		271	
Delay	7.38				8.03		7.28	
LOS	A				A		A	
Approach: Delay	7.38				8.03		7.28	
LOS	A				A		A	
Intersection Delay	7.89							
Intersection LOS	A							

G-9

ALL-WAY STOP CONTROL ANALYSIS

General Information		Site Information	
Analyst	ORGA-IJB	Intersection	Todd Place @ Summit Place
Agency/Co.	O.R.GEORGE & ASSOCAITES	Jurisdiction	D.C.
Date Performed	10/18/2005	Analysis Year	Future 2008
Analysis Time Period	PM PEAK		

Project ID SAINT MARTINS PUD

East/West Street: TODD PLACE | North/South Street: SUMMIT PLACE

Volume Adjustments and Site Characteristics

Approach	Eastbound			Westbound		
Movement	L	T	R	L	T	R
Volume	21	10	7	0	0	0
%Thrus Left Lane	50			50		

Approach	Northbound			Southbound		
Movement	L	T	R	L	T	R
Volume	0	83	12	3	14	0
%Thrus Left Lane	50			50		

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	LTR				TR		LT	
PHF	0.59				0.50		0.71	
Flow Rate	62				190		23	
% Heavy Vehicles	0				0		0	
No. Lanes	1		0		1		1	
Geometry Group	1				1		1	
Duration, T	0.25							

Saturation Headway Adjustment Worksheet

Prop. Left-Turns	0.6				0.0		0.2	
Prop. Right-Turns	0.2				0.1		0.0	
Prop. Heavy Vehicle								
hLT-adj	0.2	0.2			0.2	0.2	0.2	0.2
hRT-adj	-0.6	-0.6			-0.6	-0.6	-0.6	-0.6
hHV-adj	1.7	1.7			1.7	1.7	1.7	1.7
hadj, computed	4.36				4.36		4.36	

Departure Headway and Service Time

hd, initial value	3.20				3.20		3.20	
x, initial	0.06				0.17		0.02	
hd, final value	4.36				4.36		4.36	
x, final value	0.08				0.21		0.03	
Move-up time, m	2.0				2.0		2.0	
Service Time	2.4		2.4		2.4		2.4	

Capacity and Level of Service

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Capacity	312				440		273	
Delay	7.71				8.06		7.38	
LOS	A				A		A	
Approach: Delay	7.71				8.06		7.38	
LOS	A				A		A	
Intersection Delay	7.92							
Intersection LOS	A							

G-10