Appendix E

TRAFFIC ANALYSIS CAPACITY CALCULATIONS

CAPACITY CALCULATIONS APPENDIX E

EXISTING

NO-BUILD

BUILD

TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	*JAG*
Agency/Co.	*TMA*
Date Performed	*10/22/03*
Analysis Time Period	*AM Peak Hour*

Site Information

Intersection	*US Route 6/ Windsor Road*
Jurisdiction	*Town of Somers*
Analysis Year	*Existing Condition*

Project Description *Yorktown Farms*

East/West Street: *US Route 6* | North/South Street: *Windsor Road (west)*

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)	*14*	*760*	*0*	*0*	*588*	*11*
Peak-hour factor, PHF	*0.90*	*0.90*	*1.00*	*1.00*	*0.91*	*0.91*
Hourly Flow Rate (veh/h)	*15*	*844*	*0*	*0*	*646*	*12*
Proportion of heavy vehicles, P_{HV}	*5*	--	--	*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*	*7*	*0*	*8*
Peak-hour factor, PHF	*1.00*	*1.00*	*1.00*	*0.75*	*1.00*	*0.75*
Hourly Flow Rate (veh/h)	*0*	*0*	*0*	*9*	*0*	*10*
Proportion of heavy vehicles, P_{HV}	*0*	*0*	*0*	*0*	*0*	*0*
Percent grade (%)	*0*			*5*		
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)	*15*						*19*	
Capacity, c_m (vph)	*916*						*208*	
v/c ratio	*0.02*						*0.09*	
Queue length (95%)	*0.05*						*0.30*	
Control Delay (s/veh)	*9.0*						*24.0*	
LOS	*A*						*C*	
Approach delay (s/veh)	--	--				*24.0*		
Approach LOS	--	--				*C*		

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*JAG*	Intersection	*Gay Ridge Road/ Curry Street*
Agency/Co.	*TMA*	Jurisdiction	*Town of Yorktown*
Date Performed	*10/26/03*	Analysis Year	*Existing Condition*
Analysis Time Period	*AM Peak Hour*		

Project Description *Yorktown Farms*

East/West Street: *Gay Ridge Road* | North/South Street: *Curry Street*

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*	*215*	*0*	*2*	*145*	*0*
Peak-Hour Factor, PHF	*1.00*	*0.87*	*0.87*	*0.97*	*0.97*	*1.00*
Hourly Flow Rate, HFR	*0*	*247*	*0*	*2*	*149*	*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*	*5*	*0*	*0*	*0*
Peak-Hour Factor, PHF	*0.42*	*1.00*	*0.42*	*1.00*	*1.00*	*1.00*
Hourly Flow Rate, HFR	*0*	*0*	*11*	*0*	*0*	*0*
Percent Heavy Vehicles	*0*	*0*	*0*	*0*	*0*	*0*
Percent Grade (%)		*-5*			*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	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		*LT*		*LR*				
v (vph)		*2*		*11*				
C (m) (vph)		*1331*		*797*				
v/c		*0.00*		*0.01*				
95% queue length		*0.00*		*0.04*				
Control Delay		*7.7*		*9.6*				
LOS		*A*		*A*				
Approach Delay	–	–	*9.6*					
Approach LOS	–	–	*A*					

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*JAG*	Intersection	*Gomer Street/Curry Street*
Agency/Co.	*TMA*	Jurisdiction	*Town of Yorktown*
Date Performed	*10/29/03*	Analysis Year	*Existing Condition*
Analysis Time Period	*AM Peak Hour*		
Project Description	*Yorktown Farms*		
East/West Street:	*Gomer Street*	North/South Street:	*Curry Street*
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	*4*	*156*	*0*	*0*	*52*	*93*
Peak-Hour Factor, PHF	*0.70*	*0.70*	*1.00*	*1.00*	*0.99*	*0.99*
Hourly Flow Rate, HFR	*5*	*222*	*0*	*0*	*52*	*93*
Percent Heavy Vehicles	*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	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	*0*	*0*	*0*	*59*	*0*	*1*
Peak-Hour Factor, PHF	*1.00*	*1.00*	*1.00*	*0.93*	*1.00*	*0.93*
Hourly Flow Rate, HFR	*0*	*0*	*0*	*63*	*0*	*1*
Percent Heavy Vehicles	*0*	*0*	*0*	*10*	*0*	*10*
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	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	*LT*						*LR*	
v (vph)	*5*						*64*	
C (m) (vph)	*1450*						*650*	
v/c	*0.00*						*0.10*	
95% queue length	*0.01*						*0.33*	
Control Delay	*7.5*						*11.1*	
LOS	*A*						*B*	
Approach Delay	–	–				*11.1*		
Approach LOS	–	–				*B*		

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*JAG*	Intersection	*Jefferson Court/Curry Street*
Agency/Co.	*TMA*	Jurisdiction	*Town of Yorktown*
Date Performed	*11/2/03*	Analysis Year	*Existing Condition*
Analysis Time Period	*AM Peak Hour*		

Project Description *Yorktown Farms*

East/West Street: *Jefferson Court* | North/South Street: *Curry Street*

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*	*85*	*1*	*1*	*51*	*0*
Peak-Hour Factor, PHF	*1.00*	*0.86*	*0.86*	*0.76*	*0.76*	*1.00*
Hourly Flow Rate, HFR	*0*	*98*	*1*	*1*	*67*	*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	*1*	*0*	*9*	*0*	*0*	*0*
Peak-Hour Factor, PHF	*0.63*	*1.00*	*0.63*	*1.00*	*1.00*	*1.00*
Hourly Flow Rate, HFR	*1*	*0*	*14*	*0*	*0*	*0*
Percent Heavy Vehicles	*0*	*0*	*0*	*0*	*0*	*0*
Percent Grade (%)	*-6*			*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	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		*LT*		*LR*				
v (vph)		*1*		*15*				
C (m) (vph)		*1507*		*954*				
v/c		*0.00*		*0.02*				
95% queue length		*0.00*		*0.05*				
Control Delay		*7.4*		*8.8*				
LOS		*A*		*A*				
Approach Delay	–	–	*8.8*					
Approach LOS	–	–	*A*					

HCS2000™ DETAILED REPORT

General Information		Site Information	
Analyst	JAG	Intersection	US Route 6/Curry Street
Agency or Co.	TMA	Area Type	All other areas
Date Performed	9/9/04	Jurisdiction	Town of Yorktown
Time Period	AM Peak Hour	Analysis Year	Existing Condition
		Project ID	Yorktown Farms

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of lanes, N_1	1	2	0	1	2	0	0	1	0	0	1	0
Lane group	L	TR		L	TR			LTR			LTR	
Volume, V (vph)	5	599	48	50	492	45	71	50	99	83	49	2
% Heavy vehicles, %HV	4	4	4	8	8	8	4	4	4	7	7	7
Peak-hour factor, PHF	0.95	0.95	0.95	0.89	0.89	0.89	0.85	0.85	0.85	0.87	0.87	0.87
Pretimed (P) or actuated (A)	A	A	A	A	A	A	A	A	A	A	A	A
Start-up lost time, l_1	2.0	2.0		2.0	2.0			2.0			2.0	
Extension of effective green, e	2.0	2.0		2.0	2.0			2.0			2.0	
Arrival type, AT	3	3		3	3			3			3	
Unit extension, UE	3.0	3.0		3.0	3.0			3.0			3.0	
Filtering/metering, I	1.000	1.000		1.000	1.000			1.000			1.000	
Initial unmet demand, Q_b	0.0	0.0		0.0	0.0			0.0			0.0	
Ped / Bike / RTOR volumes	0		0	0		0	0		0	0		0
Lane width	12.0	12.0		12.0	12.0			16.0			14.0	
Parking / Grade / Parking	N	7	N	N	-4	N	N	-3	N	N	6	N
Parking maneuvers, N_m												
Buses stopping, N_B	0	0		0	0			0			0	
Min. time for pedestrians, G_p	3.2			3.2			3.2			3.2		

Phasing	EW Perm	WB Only	03	04	NS Perm	06	07	08
Timing	G = 32.0	G = 5.0	G =	G =	G = 18.0	G =	G =	G =
	Y = 5	Y = 5	Y =	Y =	Y = 5	Y =	Y =	Y =

Duration of Analysis, T = 0.25 | Cycle Length, C = 70.0

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Adjusted flow rate, v	5	682		56	604			259			153	
Lane group capacity, c	331	1514		521	2020			434			292	
v/c ratio, X	0.02	0.45		0.11	0.30			0.60			0.52	
Total green ratio, g/C	0.46	0.46		0.60	0.60			0.26			0.26	
Uniform delay, d_1	10.4	13.0		8.2	6.8			22.8			22.3	
Progression factor, PF	1.000	1.000		1.000	1.000			1.000			1.000	
Delay calibration, k	0.11	0.11		0.11	0.11			0.19			0.13	
Incremental delay, d_2	0.0	0.2		0.1	0.1			2.2			1.7	
Initial queue delay, d_3												
Control delay	10.4	13.2		8.3	6.9			25.1			24.1	
Lane group LOS	B	B		A	A			C			C	
Approach delay	13.2			7.0			25.1			24.1		
Approach LOS	B			A			C			C		
Intersection delay	13.6			X_c = 0.00			Intersection LOS			B		

TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	JAG
Agency/Co.	TMA
Date Performed	10/26/03
Analysis Time Period	PM Peak Hour

Site Information

Intersection	US Route 6/Windsor Road
Jurisdiction	Town of Southeast
Analysis Year	Existing Condition

Project Description *Yorktown Farms*

East/West Street: *US Route 6* | North/South Street: *Windsor Road*

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)	3	759	0	0	781	2
Peak-hour factor, PHF	0.95	0.95	1.00	1.00	0.90	0.90
Hourly Flow Rate (veh/h)	3	798	0	0	867	2
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	6	0	7
Peak-hour factor, PHF	1.00	1.00	1.00	0.36	1.00	0.36
Hourly Flow Rate (veh/h)	0	0	0	16	0	19
Proportion of heavy vehicles, P_{HV}	0	0	0	0	0	0
Percent grade (%)	0			5		
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)	3						35	
Capacity, c_m (vph)	784						171	
v/c ratio	0.00						0.20	
Queue length (95%)	0.01						0.74	
Control Delay (s/veh)	9.6						31.4	
LOS	A						D	
Approach delay (s/veh)	--	--				31.4		
Approach LOS	--	--				D		

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*JAG*	Intersection	*Gay Ridge Road/ Curry Street*
Agency/Co.	*TMA*	Jurisdiction	*Town of Yorktown*
Date Performed	*10/26/03*	Analysis Year	*Existing Condition*
Analysis Time Period	*PM Peak Hour*		

Project Description *Yorktown Farms*

East/West Street: *Gay Ridge Road* | North/South Street: *Curry Street*

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*	*3*	*9*	*238*	*0*
Peak-Hour Factor, PHF	*1.00*	*0.79*	*0.79*	*0.96*	*0.96*	*1.00*
Hourly Flow Rate, HFR	*0*	*286*	*3*	*9*	*247*	*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	*3*	*0*	*8*	*0*	*0*	*0*
Peak-Hour Factor, PHF	*0.55*	*1.00*	*0.55*	*1.00*	*1.00*	*1.00*
Hourly Flow Rate, HFR	*5*	*0*	*14*	*0*	*0*	*0*
Percent Heavy Vehicles	*0*	*0*	*0*	*0*	*0*	*0*
Percent Grade (%)		*-5*			*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	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		*LT*		*LR*				
v (vph)		*9*		*19*				
C (m) (vph)		*1284*		*664*				
v/c		*0.01*		*0.03*				
95% queue length		*0.02*		*0.09*				
Control Delay		*7.8*		*10.6*				
LOS		*A*		*B*				
Approach Delay	–	–		*10.6*				
Approach LOS	–	–		*B*				

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*JAG*	Intersection	*Gomer Street/Curry Street*
Agency/Co.	*TMA*	Jurisdiction	*Town of Yorktown*
Date Performed	*10/29/03*	Analysis Year	*Existing Condition*
Analysis Time Period	*PM Peak Hour*		
Project Description	*Yorktown Farms*		
East/West Street:	*Gomer Street*	North/South Street:	*Curry Street*
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	*6*	*122*	*0*	*0*	*145*	*96*
Peak-Hour Factor, PHF	*0.73*	*0.73*	*1.00*	*1.00*	*0.94*	*0.94*
Hourly Flow Rate, HFR	*8*	*167*	*0*	*0*	*154*	*102*
Percent Heavy Vehicles	*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	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	*0*	*0*	*0*	*107*	*0*	*7*
Peak-Hour Factor, PHF	*1.00*	*1.00*	*1.00*	*0.78*	*1.00*	*0.78*
Hourly Flow Rate, HFR	*0*	*0*	*0*	*137*	*0*	*8*
Percent Heavy Vehicles	*0*	*0*	*0*	*4*	*0*	*4*
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	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	*LT*						*LR*	
v (vph)	*8*						*145*	
C (m) (vph)	*1321*						*617*	
v/c	*0.01*						*0.24*	
95% queue length	*0.02*						*0.91*	
Control Delay	*7.7*						*12.6*	
LOS	*A*						*B*	
Approach Delay	–	–					*12.6*	
Approach LOS	–	–					*B*	

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*JAG*	Intersection	*Jefferson Court/Curry Street*
Agency/Co.	*TMA*	Jurisdiction	*Town of Yorktown*
Date Performed	*11/2/03*	Analysis Year	*Existing Condition*
Analysis Time Period	*PM Peak Hour*		

Project Description *Yorktown Farms*

East/West Street: *Jefferson Court* | North/South Street: *Curry Street*

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*	*86*	*6*	*6*	*107*	*0*
Peak-Hour Factor, PHF	*1.00*	*0.62*	*0.62*	*0.94*	*0.94*	*1.00*
Hourly Flow Rate, HFR	*0*	*138*	*9*	*6*	*113*	*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	*1*	*0*	*9*	*0*	*0*	*0*
Peak-Hour Factor, PHF	*0.63*	*1.00*	*0.63*	*1.00*	*1.00*	*1.00*
Hourly Flow Rate, HFR	*1*	*0*	*14*	*0*	*0*	*0*
Percent Heavy Vehicles	*20*	*0*	*20*	*0*	*0*	*0*
Percent Grade (%)		*-6*			*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	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		*LT*		*LR*				
v (vph)		*6*		*15*				
C (m) (vph)		*1447*		*845*				
v/c		*0.00*		*0.02*				
95% queue length		*0.01*		*0.05*				
Control Delay		*7.5*		*9.3*				
LOS		*A*		*A*				
Approach Delay	–	–	*9.3*					
Approach LOS	–	–	*A*					

HCS2000™ DETAILED REPORT

General Information		Site Information	
Analyst	JAG	Intersection	US Route 6/Curry Street
Agency or Co.	TMA	Area Type	All other areas
Date Performed	11/2/03	Jurisdiction	Town of Yorktown
Time Period	PM Peak Hour	Analysis Year	Existing Condition
		Project ID	Yorktown Farms

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of lanes, N_1	1	2	0	1	2	0	0	1	0	0	1	0
Lane group	L	TR		L	TR			LTR			LTR	
Volume, V (vph)	23	681	117	78	635	83	79	58	64	42	57	10
% Heavy vehicles, %HV	2	2	2	1	1	1	3	3	3	3	3	3
Peak-hour factor, PHF	0.92	0.92	0.92	0.94	0.94	0.94	0.88	0.88	0.88	0.65	0.65	0.65
Pretimed (P) or actuated (A)	A	A	A	A	A	A	A	A	A	A	A	A
Start-up lost time, l_1	2.0	2.0		2.0	2.0			2.0			2.0	
Extension of effective green, e	2.0	2.0		2.0	2.0			2.0			2.0	
Arrival type, AT	3	3		3	3			3			3	
Unit extension, UE	3.0	3.0		3.0	3.0			3.0			3.0	
Filtering/metering, I	1.000	1.000		1.000	1.000			1.000			1.000	
Initial unmet demand, Q_b	0.0	0.0		0.0	0.0			0.0			0.0	
Ped / Bike / RTOR volumes	0		0	0		0	0		0	0		0
Lane width	12.0	12.0		12.0	12.0			16.0			14.0	
Parking / Grade / Parking	N	7	N	N	-4	N	N	-3	N	N	6	N
Parking maneuvers, N_m												
Buses stopping, N_B	0	0		0	0			0			0	
Min. time for pedestrians, G_p	3.2			3.2			3.2			3.2		

Phasing	EW Perm	WB Only	03	04	NS Perm	06	07	08
Timing	G = 32.0	G = 5.0	G =	G =	G = 18.0	G =	G =	G =
	Y = 5	Y = 5	Y =	Y =	Y = 5	Y =	Y =	Y =
Duration of Analysis, T = 0.25						Cycle Length, C = 70.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Adjusted flow rate, v	25	867		83	764			229			168	
Lane group capacity, c	269	1527		476	2150			422			386	
v/c ratio, X	0.09	0.57		0.17	0.36			0.54			0.44	
Total green ratio, g/C	0.46	0.46		0.60	0.60			0.26			0.26	
Uniform delay, d_1	10.8	13.9		10.6	7.1			22.4			21.7	
Progression factor, PF	1.000	1.000		1.000	1.000			1.000			1.000	
Delay calibration, k	0.11	0.16		0.11	0.11			0.14			0.11	
Incremental delay, d_2	0.2	0.5		0.2	0.1			1.4			0.8	
Initial queue delay, d_3												
Control delay	10.9	14.4		10.8	7.2			23.9			22.5	
Lane group LOS	B	B		B	A			C			C	
Approach delay	14.3			7.6			23.9			22.5		
Approach LOS	B			A			C			C		
Intersection delay	13.3			X_c = 0.00			Intersection LOS			B		

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	JAG	Intersection	US Route 6/ Windsor Road
Agency/Co.	TMA	Jurisdiction	Town of Somers
Date Performed	9/09/04	Analysis Year	No Build Condition
Analysis Time Period	AM Peak Hour		

Project Description *Yorktown Farms*

East/West Street: *US Route 6*	North/South Street: *Windsor Road (west)*
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)	20	879	0	0	727	12
Peak-hour factor, PHF	0.90	0.90	1.00	1.00	0.91	0.91
Hourly Flow Rate (veh/h)	22	976	0	0	798	13
Proportion of heavy vehicles, P_{HV}	5	--	--	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	8	0	24
Peak-hour factor, PHF	1.00	1.00	1.00	0.75	1.00	0.75
Hourly Flow Rate (veh/h)	0	0	0	10	0	32
Proportion of heavy vehicles, P_{HV}	0	0	0	0	0	0
Percent grade (%)		0			5	
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)	22						42	
Capacity, c_m (vph)	802						207	
v/c ratio	0.03						0.20	
Queue length (95%)	0.08						0.74	
Control Delay (s/veh)	9.6						26.8	
LOS	A						D	
Approach delay (s/veh)	--	--				26.8		
Approach LOS	--	--				D		

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*JAG*	Intersection	*Gay Ridge Road/ Curry Street*
Agency/Co.	*TMA*	Jurisdiction	*Town of Yorktown*
Date Performed	*9/9/04*	Analysis Year	*No Build Condition*
Analysis Time Period	*AM Peak Hour*		

Project Description *Yorktown Farms*

East/West Street: *Gay Ridge Road* | North/South Street: *Curry Street*

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*	*257*	*0*	*2*	*169*	*0*
Peak-Hour Factor, PHF	*1.00*	*0.87*	*0.87*	*0.97*	*0.97*	*1.00*
Hourly Flow Rate, HFR	*0*	*295*	*0*	*2*	*174*	*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*	*6*	*0*	*0*	*0*
Peak-Hour Factor, PHF	*0.42*	*1.00*	*0.42*	*1.00*	*1.00*	*1.00*
Hourly Flow Rate, HFR	*0*	*0*	*14*	*0*	*0*	*0*
Percent Heavy Vehicles	*0*	*0*	*0*	*0*	*0*	*0*
Percent Grade (%)	*-5*			*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	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		*LT*		*LR*				
v (vph)		*2*		*14*				
C (m) (vph)		*1278*		*749*				
v/c		*0.00*		*0.02*				
95% queue length		*0.00*		*0.06*				
Control Delay		*7.8*		*9.9*				
LOS		*A*		*A*				
Approach Delay	–	–	*9.9*					
Approach LOS	–	–	*A*					

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*JAG*	Intersection	*Gomer Street/Curry Street*
Agency/Co.	*TMA*	Jurisdiction	*Town of Yorktown*
Date Performed	*9/09/04*	Analysis Year	*No Build Condition*
Analysis Time Period	*AM Peak Hour*		

Project Description *Yorktown Farms*

East/West Street: *Gomer Street* | North/South Street: *Curry Street*

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	*4*	*187*	*0*	*0*	*62*	*107*
Peak-Hour Factor, PHF	*0.70*	*0.70*	*1.00*	*1.00*	*0.99*	*0.99*
Hourly Flow Rate, HFR	*5*	*267*	*0*	*0*	*62*	*108*
Percent Heavy Vehicles	*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	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	*0*	*0*	*0*	*70*	*0*	*1*
Peak-Hour Factor, PHF	*1.00*	*1.00*	*1.00*	*0.93*	*1.00*	*0.93*
Hourly Flow Rate, HFR	*0*	*0*	*0*	*75*	*0*	*1*
Percent Heavy Vehicles	*0*	*0*	*0*	*10*	*0*	*10*
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	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	*LT*						*LR*	
v (vph)	*5*						*76*	
C (m) (vph)	*1420*						*597*	
v/c	*0.00*						*0.13*	
95% queue length	*0.01*						*0.43*	
Control Delay	*7.5*						*11.9*	
LOS	*A*						*B*	
Approach Delay	–	–				*11.9*		
Approach LOS	–	–				*B*		

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*JAG*	Intersection	*Jefferson Court/Curry Street*
Agency/Co.	*TMA*	Jurisdiction	*Town of Yorktown*
Date Performed	*9/09/04*	Analysis Year	*No Build Condition*
Analysis Time Period	*AM Peak Hour*		

Project Description *Yorktown Farms*

East/West Street: *Jefferson Court* | North/South Street: *Curry Street*

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*	*109*	*1*	*1*	*61*	*0*
Peak-Hour Factor, PHF	*1.00*	*0.86*	*0.86*	*0.76*	*0.76*	*1.00*
Hourly Flow Rate, HFR	*0*	*126*	*1*	*1*	*80*	*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	*1*	*0*	*10*	*0*	*0*	*0*
Peak-Hour Factor, PHF	*0.63*	*1.00*	*0.63*	*1.00*	*1.00*	*1.00*
Hourly Flow Rate, HFR	*1*	*0*	*15*	*0*	*0*	*0*
Percent Heavy Vehicles	*0*	*0*	*0*	*0*	*0*	*0*
Percent Grade (%)	*-6*			*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	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		*LT*		*LR*				
v (vph)		*1*		*16*				
C (m) (vph)		*1472*		*919*				
v/c		*0.00*		*0.02*				
95% queue length		*0.00*		*0.05*				
Control Delay		*7.4*		*9.0*				
LOS		*A*		*A*				
Approach Delay	--	--	*9.0*					
Approach LOS	--	--	*A*					

HCS2000™ DETAILED REPORT

General Information		Site Information	
Analyst	JAG	Intersection	US Route 6/Curry Street
Agency or Co.	TMA	Area Type	All other areas
Date Performed	9/09/04	Jurisdiction	Town of Yorktown
Time Period	AM Peak Hour	Analysis Year	No Build Condition
		Project ID	Yorktown Farms

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of lanes, N_1	1	2	0	1	2	0	0	1	0	0	1	0
Lane group	L	TR		L	TR			LTR			LTR	
Volume, V (vph)	6	738	53	64	585	61	79	55	129	117	54	2
% Heavy vehicles, %HV	4	4	4	8	8	8	4	4	4	7	7	7
Peak-hour factor, PHF	0.95	0.95	0.95	0.89	0.89	0.89	0.85	0.85	0.85	0.87	0.87	0.87
Pretimed (P) or actuated (A)	A	A	A	A	A	A	A	A	A	A	A	A
Start-up lost time, l_1	2.0	2.0		2.0	2.0			2.0			2.0	
Extension of effective green, e	2.0	2.0		2.0	2.0			2.0			2.0	
Arrival type, AT	3	3		3	3			3			3	
Unit extension, UE	3.0	3.0		3.0	3.0			3.0			3.0	
Filtering/metering, I	1.000	1.000		1.000	1.000			1.000			1.000	
Initial unmet demand, Q_b	0.0	0.0		0.0	0.0			0.0			0.0	
Ped / Bike / RTOR volumes	0		0	0		0	0		0	0		0
Lane width	12.0	12.0		12.0	12.0			16.0			14.0	
Parking / Grade / Parking	N	7	N	N	-4	N	N	-3	N	N	6	N
Parking maneuvers, N_m												
Buses stopping, N_B	0	0		0	0			0			0	
Min. time for pedestrians, G_p	3.2			3.2			3.2			3.2		

Phasing	EW Perm	WB Only	03	04	NS Perm	06	07	08
Timing	G = 32.0	G = 5.0	G =	G =	G = 18.0	G =	G =	G =
	Y = 5	Y = 5	Y =	Y =	Y = 5	Y =	Y =	Y =
Duration of Analysis, T = 0.25						Cycle Length, C = 70.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Adjusted flow rate, v	6	833		72	726			310			198	
Lane group capacity, c	279	1516		459	2017			428			256	
v/c ratio, X	0.02	0.55		0.16	0.36			0.72			0.77	
Total green ratio, g/C	0.46	0.46		0.60	0.60			0.26			0.26	
Uniform delay, d_1	10.4	13.8		10.1	7.1			23.7			24.1	
Progression factor, PF	1.000	1.000		1.000	1.000			1.000			1.000	
Delay calibration, k	0.11	0.15		0.11	0.11			0.28			0.32	
Incremental delay, d_2	0.0	0.4		0.2	0.1			6.0			13.7	
Initial queue delay, d_3												
Control delay	10.4	14.2		10.2	7.3			29.7			37.8	
Lane group LOS	B	B		B	A			C			D	
Approach delay	14.2			7.5			29.7			37.8		
Approach LOS	B			A			C			D		
Intersection delay	16.1			X_c = 0.00			Intersection LOS			B		

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	JAG	Intersection	US Route 6/Windsor Road
Agency/Co.	TMA	Jurisdiction	Town of Southeast
Date Performed	9/09/04	Analysis Year	No Build Condition
Analysis Time Period	PM Peak Hour		

Project Description *Yorktown Farms*

East/West Street: *US Route 6*	North/South Street: *Windsor Road*
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)	19	968	0	0	949	2
Peak-hour factor, PHF	0.95	0.95	1.00	1.00	0.90	0.90
Hourly Flow Rate (veh/h)	20	1018	0	0	1054	2
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	7	0	17
Peak-hour factor, PHF	1.00	1.00	1.00	0.36	1.00	0.36
Hourly Flow Rate (veh/h)	0	0	0	19	0	47
Proportion of heavy vehicles, P_{HV}	0	0	0	0	0	0
Percent grade (%)		0			5	
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)	20						66	
Capacity, c_m (vph)	667						126	
v/c ratio	0.03						0.52	
Queue length (95%)	0.09						2.48	
Control Delay (s/veh)	10.6						61.4	
LOS	B						F	
Approach delay (s/veh)	--	--	61.4					
Approach LOS	--	--	F					

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*JAG*	Intersection	*Gay Ridge Road/ Curry Street*
Agency/Co.	*TMA*	Jurisdiction	*Town of Yorktown*
Date Performed	*9/09/04*	Analysis Year	*No Build Condition*
Analysis Time Period	*PM Peak Hour*		

Project Description *Yorktown Farms*

East/West Street: *Gay Ridge Road* | North/South Street: *Curry Street*

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*	*273*	*3*	*10*	*295*	*0*
Peak-Hour Factor, PHF	*1.00*	*0.79*	*0.79*	*0.96*	*0.96*	*1.00*
Hourly Flow Rate, HFR	*0*	*345*	*3*	*10*	*307*	*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	*3*	*0*	*9*	*0*	*0*	*0*
Peak-Hour Factor, PHF	*0.55*	*1.00*	*0.55*	*1.00*	*1.00*	*1.00*
Hourly Flow Rate, HFR	*5*	*0*	*16*	*0*	*0*	*0*
Percent Heavy Vehicles	*0*	*0*	*0*	*0*	*0*	*0*
Percent Grade (%)	*-5*			*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	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		*LT*		*LR*				
v (vph)		*10*		*21*				
C (m) (vph)		*1222*		*606*				
v/c		*0.01*		*0.03*				
95% queue length		*0.02*		*0.11*				
Control Delay		*8.0*		*11.2*				
LOS		*A*		*B*				
Approach Delay	--	--	*11.2*					
Approach LOS	--	--	*B*					

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*JAG*	Intersection	*Gomer Street/Curry Street*
Agency/Co.	*TMA*	Jurisdiction	*Town of Yorktown*
Date Performed	*9/09/04*	Analysis Year	*No Build Condition*
Analysis Time Period	*PM Peak Hour*		

Project Description *Yorktown Farms*

East/West Street: *Gomer Street* | North/South Street: *Curry Street*

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	*7*	*149*	*0*	*0*	*170*	*118*
Peak-Hour Factor, PHF	*0.73*	*0.73*	*1.00*	*1.00*	*0.94*	*0.94*
Hourly Flow Rate, HFR	*9*	*204*	*0*	*0*	*180*	*125*
Percent Heavy Vehicles	*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	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	*0*	*0*	*0*	*127*	*0*	*8*
Peak-Hour Factor, PHF	*1.00*	*1.00*	*1.00*	*0.78*	*1.00*	*0.78*
Hourly Flow Rate, HFR	*0*	*0*	*0*	*162*	*0*	*10*
Percent Heavy Vehicles	*0*	*0*	*0*	*4*	*0*	*4*
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	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	*LT*						*LR*	
v (vph)	*9*						*172*	
C (m) (vph)	*1267*						*559*	
v/c	*0.01*						*0.31*	
95% queue length	*0.02*						*1.30*	
Control Delay	*7.9*						*14.3*	
LOS	*A*						*B*	
Approach Delay	--	--				*14.3*		
Approach LOS	--	--				*B*		

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*JAG*	Intersection	*Jefferson Court/Curry Street*
Agency/Co.	*TMA*	Jurisdiction	*Town of Yorktown*
Date Performed	*9/9/04*	Analysis Year	*No Build Condition*
Analysis Time Period	*PM Peak Hour*		

Project Description *Yorktown Farms*

East/West Street: *Jefferson Court* | North/South Street: *Curry Street*

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*	*109*	*7*	*7*	*138*	*0*
Peak-Hour Factor, PHF	*1.00*	*0.62*	*0.62*	*0.94*	*0.94*	*1.00*
Hourly Flow Rate, HFR	*0*	*175*	*11*	*7*	*146*	*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	*1*	*0*	*10*	*0*	*0*	*0*
Peak-Hour Factor, PHF	*0.63*	*1.00*	*0.63*	*1.00*	*1.00*	*1.00*
Hourly Flow Rate, HFR	*1*	*0*	*15*	*0*	*0*	*0*
Percent Heavy Vehicles	*20*	*0*	*20*	*0*	*0*	*0*
Percent Grade (%)	*-6*			*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	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		*LT*		*LR*				
v (vph)		*7*		*16*				
C (m) (vph)		*1401*		*803*				
v/c		*0.00*		*0.02*				
95% queue length		*0.02*		*0.06*				
Control Delay		*7.6*		*9.6*				
LOS		*A*		*A*				
Approach Delay	--	--	*9.6*					
Approach LOS	--	--	*A*					

HCS2000™ DETAILED REPORT

General Information		Site Information	
Analyst	JAG	Intersection	US Route 6/Curry Street
Agency or Co.	TMA	Area Type	All other areas
Date Performed	9/09/04	Jurisdiction	Town of Yorktown
Time Period	PM Peak Hour	Analysis Year	No Build Condition
		Project ID	Yorktown Farms

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of lanes, N_1	1	2	0	1	2	0	0	1	0	0	1	0
Lane group	L	TR		L	TR			LTR			LTR	
Volume, V (vph)	25	854	129	118	835	129	87	64	94	72	63	11
% Heavy vehicles, %HV	2	2	2	1	1	1	3	3	3	3	3	3
Peak-hour factor, PHF	0.92	0.92	0.92	0.94	0.94	0.94	0.88	0.88	0.88	0.65	0.65	0.65
Pretimed (P) or actuated (A)	A	A	A	A	A	A	A	A	A	A	A	A
Start-up lost time, l_1	2.0	2.0		2.0	2.0			2.0			2.0	
Extension of effective green, e	2.0	2.0		2.0	2.0			2.0			2.0	
Arrival type, AT	3	3		3	3			3			3	
Unit extension, UE	3.0	3.0		3.0	3.0			3.0			3.0	
Filtering/metering, I	1.000	1.000		1.000	1.000			1.000			1.000	
Initial unmet demand, Q_b	0.0	0.0		0.0	0.0			0.0			0.0	
Ped / Bike / RTOR volumes	0		0	0		0	0		0	0		0
Lane width	12.0	12.0		12.0	12.0			16.0			14.0	
Parking / Grade / Parking	N	7	N	N	-4	N	N	-3	N	N	6	N
Parking maneuvers, N_m												
Buses stopping, N_B	0	0		0	0			0			0	
Min. time for pedestrians, G_p	3.2			3.2			3.2			3.2		

Phasing	EW Perm	WB Only	03	04	NS Perm	06	07	08
Timing	G = 32.0	G = 5.0	G =	G =	G = 18.0	G =	G =	G =
	Y = 5	Y = 5	Y =	Y =	Y = 5	Y =	Y =	Y =
Duration of Analysis, T = 0.25					Cycle Length, C = 70.0			

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Adjusted flow rate, v	27	1068		126	1025			279			225	
Lane group capacity, c	180	1531		405	2144			408			320	
v/c ratio, X	0.15	0.70		0.31	0.48			0.68			0.70	
Total green ratio, g/C	0.46	0.46		0.60	0.60			0.26			0.26	
Uniform delay, d_1	11.1	15.1		15.3	7.9			23.4			23.6	
Progression factor, PF	1.000	1.000		1.000	1.000			1.000			1.000	
Delay calibration, k	0.11	0.26		0.11	0.11			0.25			0.27	
Incremental delay, d_2	0.4	1.4		0.4	0.2			4.7			6.8	
Initial queue delay, d_3												
Control delay	11.5	16.6		15.8	8.0			28.1			30.4	
Lane group LOS	B	B		B	A			C			C	
Approach delay	16.4			8.9			28.1			30.4		
Approach LOS	B			A			C			C		
Intersection delay	15.6			X_c = 0.00			Intersection LOS			B		

TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	JAG
Agency/Co.	TMA
Date Performed	9/09/04
Analysis Time Period	AM Peak Hour

Site Information

Intersection	US Route 6/ Windsor Road
Jurisdiction	Town of Somers
Analysis Year	Build Condition

Project Description *Yorktown Farms*

East/West Street: *US Route 6* | North/South Street: *Windsor Road (west)*

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)	20	889	0	0	730	12
Peak-hour factor, PHF	0.90	0.90	1.00	1.00	0.91	0.91
Hourly Flow Rate (veh/h)	22	987	0	0	802	13
Proportion of heavy vehicles, P_{HV}	5	--	--	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	8	0	24
Peak-hour factor, PHF	1.00	1.00	1.00	0.75	1.00	0.75
Hourly Flow Rate (veh/h)	0	0	0	10	0	32
Proportion of heavy vehicles, P_{HV}	0	0	0	0	0	0
Percent grade (%)	0			5		
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)	22						42	
Capacity, c_m (vph)	799						205	
v/c ratio	0.03						0.20	
Queue length (95%)	0.08						0.75	
Control Delay (s/veh)	9.6						27.0	
LOS	A						D	
Approach delay (s/veh)	--	--				27.0		
Approach LOS	--	--				D		

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*JAG*	Intersection	*Gay Ridge Road/ Curry Street*
Agency/Co.	*TMA*	Jurisdiction	*Town of Yorktown*
Date Performed	*9/9/04*	Analysis Year	*Build Condition*
Analysis Time Period	*AM Peak Hour*		

Project Description *Yorktown Farms*

East/West Street: *Gay Ridge Road* | North/South Street: *Curry Street*

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*	*257*	*1*	*2*	*169*	*0*
Peak-Hour Factor, PHF	*1.00*	*0.87*	*0.87*	*0.97*	*0.97*	*1.00*
Hourly Flow Rate, HFR	*0*	*295*	*1*	*2*	*174*	*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	*2*	*0*	*6*	*0*	*0*	*0*
Peak-Hour Factor, PHF	*0.42*	*1.00*	*0.42*	*1.00*	*1.00*	*1.00*
Hourly Flow Rate, HFR	*4*	*0*	*14*	*0*	*0*	*0*
Percent Heavy Vehicles	*0*	*0*	*0*	*0*	*0*	*0*
Percent Grade (%)	*-5*			*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	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		*LT*		*LR*				
v (vph)		*2*		*18*				
C (m) (vph)		*1277*		*693*				
v/c		*0.00*		*0.03*				
95% queue length		*0.00*		*0.08*				
Control Delay		*7.8*		*10.3*				
LOS		*A*		*B*				
Approach Delay	--	--	*10.3*					
Approach LOS	--	--	*B*					

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*JAG*	Intersection	*Gomer Street/Curry Street*
Agency/Co.	*TMA*	Jurisdiction	*Town of Yorktown*
Date Performed	*9/09/04*	Analysis Year	*Build Condition*
Analysis Time Period	*AM Peak Hour*		

Project Description *Yorktown Farms*

East/West Street: *Gomer Street* | North/South Street: *Curry Street*

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	*4*	*188*	*0*	*0*	*63*	*108*
Peak-Hour Factor, PHF	*0.70*	*0.70*	*1.00*	*1.00*	*0.99*	*0.99*
Hourly Flow Rate, HFR	*5*	*268*	*0*	*0*	*63*	*109*
Percent Heavy Vehicles	*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	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	*0*	*0*	*0*	*70*	*0*	*1*
Peak-Hour Factor, PHF	*1.00*	*1.00*	*1.00*	*0.93*	*1.00*	*0.93*
Hourly Flow Rate, HFR	*0*	*0*	*0*	*75*	*0*	*1*
Percent Heavy Vehicles	*0*	*0*	*0*	*10*	*0*	*10*
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	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	*LT*						*LR*	
v (vph)	*5*						*76*	
C (m) (vph)	*1417*						*595*	
v/c	*0.00*						*0.13*	
95% queue length	*0.01*						*0.44*	
Control Delay	*7.5*						*11.9*	
LOS	*A*						*B*	
Approach Delay	–	–					*11.9*	
Approach LOS	–	–					*B*	

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*JAG*	Intersection	*Jefferson Court/Curry Street*
Agency/Co.	*TMA*	Jurisdiction	*Town of Yorktown*
Date Performed	*9/09/04*	Analysis Year	*Build Condition*
Analysis Time Period	*AM Peak Hour*		

Project Description *Yorktown Farms*

East/West Street: *Jefferson Court* | North/South Street: *Curry Street*

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*	*110*	*1*	*1*	*62*	*0*
Peak-Hour Factor, PHF	*1.00*	*0.86*	*0.86*	*0.76*	*0.76*	*1.00*
Hourly Flow Rate, HFR	*0*	*127*	*1*	*1*	*81*	*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	*1*	*0*	*10*	*0*	*0*	*0*
Peak-Hour Factor, PHF	*0.63*	*1.00*	*0.63*	*1.00*	*1.00*	*1.00*
Hourly Flow Rate, HFR	*1*	*0*	*15*	*0*	*0*	*0*
Percent Heavy Vehicles	*0*	*0*	*0*	*0*	*0*	*0*
Percent Grade (%)	*-6*			*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	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		*LT*		*LR*				
v (vph)		*1*		*16*				
C (m) (vph)		*1470*		*917*				
v/c		*0.00*		*0.02*				
95% queue length		*0.00*		*0.05*				
Control Delay		*7.5*		*9.0*				
LOS		*A*		*A*				
Approach Delay	--	--	*9.0*					
Approach LOS	--	--	*A*					

HCS2000™ DETAILED REPORT

General Information		Site Information	
Analyst	JAG	Intersection	US Route 6/Curry Street
Agency or Co.	TMA	Area Type	All other areas
Date Performed	9/09/04	Jurisdiction	Town of Yorktown
Time Period	AM Peak Hour	Analysis Year	Build Condition
		Project ID	Yorktown Farms

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of lanes, N_1	1	2	0	1	2	0	0	1	0	0	1	0
Lane group	L	TR		L	TR			LTR			LTR	
Volume, V (vph)	6	742	53	64	597	62	79	55	129	117	54	2
% Heavy vehicles, %HV	4	4	4	8	8	8	4	4	4	7	7	7
Peak-hour factor, PHF	0.95	0.95	0.95	0.89	0.89	0.89	0.85	0.85	0.85	0.87	0.87	0.87
Pretimed (P) or actuated (A)	A	A	A	A	A	A	A	A	A	A	A	A
Start-up lost time, l_1	2.0	2.0		2.0	2.0			2.0			2.0	
Extension of effective green, e	2.0	2.0		2.0	2.0			2.0			2.0	
Arrival type, AT	3	3		3	3			3			3	
Unit extension, UE	3.0	3.0		3.0	3.0			3.0			3.0	
Filtering/metering, I	1.000	1.000		1.000	1.000			1.000			1.000	
Initial unmet demand, Q_b	0.0	0.0		0.0	0.0			0.0			0.0	
Ped / Bike / RTOR volumes	0		0	0		0	0		0	0		0
Lane width	12.0	12.0		12.0	12.0			16.0			14.0	
Parking / Grade / Parking	N	7	N	N	-4	N	N	-3	N	N	6	N
Parking maneuvers, N_m												
Buses stopping, N_B	0	0		0	0			0			0	
Min. time for pedestrians, G_p	3.2			3.2			3.2			3.2		

Phasing	EW Perm	WB Only	03	04	NS Perm	06	07	08
Timing	G = 32.0	G = 5.0	G =	G =	G = 18.0	G =	G =	G =
	Y = 5	Y = 5	Y =	Y =	Y = 5	Y =	Y =	Y =
Duration of Analysis, T = 0.25						Cycle Length, C = 70.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Adjusted flow rate, v	6	837		72	741			310			198	
Lane group capacity, c	273	1516		457	2017			428			256	
v/c ratio, X	0.02	0.55		0.16	0.37			0.72			0.77	
Total green ratio, g/C	0.46	0.46		0.60	0.60			0.26			0.26	
Uniform delay, d_1	10.4	13.8		10.1	7.2			23.7			24.1	
Progression factor, PF	1.000	1.000		1.000	1.000			1.000			1.000	
Delay calibration, k	0.11	0.15		0.11	0.11			0.28			0.32	
Incremental delay, d_2	0.0	0.4		0.2	0.1			6.0			13.7	
Initial queue delay, d_3												
Control delay	10.5	14.2		10.3	7.3			29.7			37.8	
Lane group LOS	B	B		B	A			C			D	
Approach delay	14.2			7.6			29.7			37.8		
Approach LOS	B			A			C			D		
Intersection delay	16.1			X_c = 0.00			Intersection LOS			B		

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	JAG	Intersection	US Route 6/Windsor Road
Agency/Co.	TMA	Jurisdiction	Town of Southeast
Date Performed	9/09/04	Analysis Year	Build Condition
Analysis Time Period	PM Peak Hour		

Project Description *Yorktown Farms*

East/West Street: *US Route 6* | North/South Street: *Windsor Road*

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)	19	974	0	0	959	2
Peak-hour factor, PHF	0.95	0.95	1.00	1.00	0.90	0.90
Hourly Flow Rate (veh/h)	20	1025	0	0	1065	2
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	7	0	17
Peak-hour factor, PHF	1.00	1.00	1.00	0.36	1.00	0.36
Hourly Flow Rate (veh/h)	0	0	0	19	0	47
Proportion of heavy vehicles, P_{HV}	0	0	0	0	0	0
Percent grade (%)		0			5	
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)	20						66	
Capacity, c_m (vph)	661						124	
v/c ratio	0.03						0.53	
Queue length (95%)	0.09						2.53	
Control Delay (s/veh)	10.6						63.1	
LOS	B						F	
Approach delay (s/veh)	--	--				63.1		
Approach LOS	--	--				F		

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*JAG*	Intersection	*Gay Ridge Road/ Curry Street*
Agency/Co.	*TMA*	Jurisdiction	*Town of Yorktown*
Date Performed	*9/09/04*	Analysis Year	*Build Condition*
Analysis Time Period	*PM Peak Hour*		

Project Description *Yorktown Farms*

East/West Street: *Gay Ridge Road* | North/South Street: *Curry Street*

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*	*273*	*6*	*10*	*295*	*0*
Peak-Hour Factor, PHF	*1.00*	*0.79*	*0.79*	*0.96*	*0.96*	*1.00*
Hourly Flow Rate, HFR	*0*	*345*	*7*	*10*	*307*	*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	*4*	*0*	*9*	*0*	*0*	*0*
Peak-Hour Factor, PHF	*0.55*	*1.00*	*0.55*	*1.00*	*1.00*	*1.00*
Hourly Flow Rate, HFR	*7*	*0*	*16*	*0*	*0*	*0*
Percent Heavy Vehicles	*0*	*0*	*0*	*0*	*0*	*0*
Percent Grade (%)	*-5*			*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	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		*LT*		*LR*				
v (vph)		*10*		*23*				
C (m) (vph)		*1218*		*582*				
v/c		*0.01*		*0.04*				
95% queue length		*0.02*		*0.12*				
Control Delay		*8.0*		*11.4*				
LOS		*A*		*B*				
Approach Delay	–	–	*11.4*					
Approach LOS	–	–	*B*					

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*JAG*	Intersection	*Gomer Street/Curry Street*
Agency/Co.	*TMA*	Jurisdiction	*Town of Yorktown*
Date Performed	*9/09/04*	Analysis Year	*Build Condition*
Analysis Time Period	*PM Peak Hour*		
Project Description	*Yorktown Farms*		
East/West Street:	*Gomer Street*	North/South Street:	*Curry Street*
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	*7*	*151*	*0*	*0*	*171*	*118*
Peak-Hour Factor, PHF	*0.73*	*0.73*	*1.00*	*1.00*	*0.94*	*0.94*
Hourly Flow Rate, HFR	*9*	*206*	*0*	*0*	*181*	*125*
Percent Heavy Vehicles	*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	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	*0*	*0*	*0*	*128*	*0*	*8*
Peak-Hour Factor, PHF	*1.00*	*1.00*	*1.00*	*0.78*	*1.00*	*0.78*
Hourly Flow Rate, HFR	*0*	*0*	*0*	*164*	*0*	*10*
Percent Heavy Vehicles	*0*	*0*	*0*	*4*	*0*	*4*
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	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	*LT*						*LR*	
v (vph)	*9*						*174*	
C (m) (vph)	*1266*						*556*	
v/c	*0.01*						*0.31*	
95% queue length	*0.02*						*1.33*	
Control Delay	*7.9*						*14.4*	
LOS	*A*						*B*	
Approach Delay	--	--					*14.4*	
Approach LOS	--	--					*B*	

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*JAG*	Intersection	*Jefferson Court/Curry Street*
Agency/Co.	*TMA*	Jurisdiction	*Town of Yorktown*
Date Performed	*9/9/04*	Analysis Year	*Build Condition*
Analysis Time Period	*PM Peak Hour*		

Project Description *Yorktown Farms*

East/West Street: *Jefferson Court* | North/South Street: *Curry Street*

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*	*111*	*7*	*7*	*139*	*0*
Peak-Hour Factor, PHF	*1.00*	*0.62*	*0.62*	*0.94*	*0.94*	*1.00*
Hourly Flow Rate, HFR	*0*	*179*	*11*	*7*	*147*	*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	*1*	*0*	*10*	*0*	*0*	*0*
Peak-Hour Factor, PHF	*0.63*	*1.00*	*0.63*	*1.00*	*1.00*	*1.00*
Hourly Flow Rate, HFR	*1*	*0*	*15*	*0*	*0*	*0*
Percent Heavy Vehicles	*20*	*0*	*20*	*0*	*0*	*0*
Percent Grade (%)	*-6*			*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	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		*LT*		*LR*				
v (vph)		*7*		*16*				
C (m) (vph)		*1396*		*798*				
v/c		*0.01*		*0.02*				
95% queue length		*0.02*		*0.06*				
Control Delay		*7.6*		*9.6*				
LOS		*A*		*A*				
Approach Delay	–	–	*9.6*					
Approach LOS	–	–	*A*					

HCS2000™ DETAILED REPORT

General Information		Site Information	
Analyst	JAG	Intersection	US Route 6/Curry Street
Agency or Co.	TMA	Area Type	All other areas
Date Performed	9/9/04	Jurisdiction	Town of Yorktown
Time Period	PM Peak Hour	Analysis Year	Build Condition
		Project ID	Yorktown Farms

Volume and Timing Input

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of lanes, N_1	1	2	0	1	2	0	0	1	0	0	1	0
Lane group	L	TR		L	TR			LTR			LTR	
Volume, V (vph)	25	866	129	118	842	130	87	64	94	73	63	11
% Heavy vehicles, %HV	2	2	2	1	1	1	3	3	3	3	3	3
Peak-hour factor, PHF	0.92	0.92	0.92	0.94	0.94	0.94	0.88	0.88	0.88	0.65	0.65	0.65
Pretimed (P) or actuated (A)	A	A	A	A	A	A	A	A	A	A	A	A
Start-up lost time, l_1	2.0	2.0		2.0	2.0			2.0			2.0	
Extension of effective green, e	2.0	2.0		2.0	2.0			2.0			2.0	
Arrival type, AT	3	3		3	3			3			3	
Unit extension, UE	3.0	3.0		3.0	3.0			3.0			3.0	
Filtering/metering, I	1.000	1.000		1.000	1.000			1.000			1.000	
Initial unmet demand, Q_b	0.0	0.0		0.0	0.0			0.0			0.0	
Ped / Bike / RTOR volumes	0		0	0		0	0		0	0		0
Lane width	12.0	12.0		12.0	12.0			16.0			14.0	
Parking / Grade / Parking	N	7	N	N	-4	N	N	-3	N	N	6	N
Parking maneuvers, N_m												
Buses stopping, N_B	0	0		0	0			0			0	
Min. time for pedestrians, G_p	3.2			3.2			3.2			3.2		

Phasing	EW Perm	WB Only	03	04	NS Perm	06	07	08
Timing	G = 32.0	G = 5.0	G =	G =	G = 18.0	G =	G =	G =
	Y = 5	Y = 5	Y =	Y =	Y = 5	Y =	Y =	Y =
Duration of Analysis, T = 0.25						Cycle Length, C = 70.0		

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Adjusted flow rate, v	27	1081		126	1034			279			226	
Lane group capacity, c	177	1531		401	2144			408			320	
v/c ratio, X	0.15	0.71		0.31	0.48			0.68			0.71	
Total green ratio, g/C	0.46	0.46		0.60	0.60			0.26			0.26	
Uniform delay, d_1	11.1	15.2		15.6	7.9			23.4			23.6	
Progression factor, PF	1.000	1.000		1.000	1.000			1.000			1.000	
Delay calibration, k	0.11	0.27		0.11	0.11			0.25			0.27	
Incremental delay, d_2	0.4	1.5		0.5	0.2			4.7			7.0	
Initial queue delay, d_3												
Control delay	11.5	16.7		16.1	8.1			28.1			30.6	
Lane group LOS	B	B		B	A			C			C	
Approach delay	16.6			8.9			28.1			30.6		
Approach LOS	B			A			C			C		
Intersection delay	15.7			X_c = 0.00			Intersection LOS			B		

TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	JAG
Agency/Co.	TMA
Date Performed	9/9/04
Analysis Time Period	AM Peak Hour

Site Information

Intersection	US Route 6/Site Access
Jurisdiction	Town of Yorktown
Analysis Year	Build Condition

Project Description: Yorktown Farms

East/West Street: US Route 6 | North/South Street: Site Access

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)	0	899	4	3	751	0
Peak-hour factor, PHF	1.00	0.90	0.90	0.91	0.91	1.00
Hourly Flow Rate (veh/h)	0	998	4	3	825	0
Proportion of heavy vehicles, P_{HV}	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	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	13	0	10	0	0	0
Peak-hour factor, PHF	0.95	1.00	0.95	1.00	1.00	1.00
Hourly Flow Rate (veh/h)	13	0	10	0	0	0
Proportion of heavy vehicles, P_{HV}	0	0	0	0	0	0
Percent grade (%)	-6			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)		3		23				
Capacity, c_m (vph)		699		123				
v/c ratio		0.00		0.19				
Queue length (95%)		0.01		0.66				
Control Delay (s/veh)		10.2		40.9				
LOS		B		E				
Approach delay (s/veh)	--	--	40.9					
Approach LOS	--	--	E					

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	JAG	Intersection	US Route 6/Site Access
Agency/Co.	TMA	Jurisdiction	Town of Yorktown
Date Performed	9/9/04	Analysis Year	Build Condition
Analysis Time Period	PM Peak Hour		

Project Description: Yorktown Farms

East/West Street: US Route 6 | North/South Street: Site Access

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)	0	987	13	10	966	0
Peak-hour factor, PHF	1.00	0.95	0.95	0.90	0.90	1.00
Hourly Flow Rate (veh/h)	0	1038	13	11	1073	0
Proportion of heavy vehicles, P_{HV}	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	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	8	0	6	0	0	0
Peak-hour factor, PHF	0.95	1.00	0.95	1.00	1.00	1.00
Hourly Flow Rate (veh/h)	8	0	6	0	0	0
Proportion of heavy vehicles, P_{HV}	0	0	0	0	0	0
Percent grade (%)	-6			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)		11		14				
Capacity, c_m (vph)		670		83				
v/c ratio		0.02		0.17				
Queue length (95%)		0.05		0.57				
Control Delay (s/veh)		10.5		57.0				
LOS		B		F				
Approach delay (s/veh)	--	--	57.0					
Approach LOS	--	--	F					

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	JAG	Intersection	US Route 6/Windsor Road
Agency/Co.	TMA	Jurisdiction	Town of Southeast
Date Performed	9/09/04	Analysis Year	Build Condition Peaking
Analysis Time Period	PM Peak Hour		

Project Description Yorktown Farms

East/West Street: US Route 6 | North/South Street: Windsor Road

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)	19	974	0	0	959	2
Peak-hour factor, PHF	0.95	0.95	1.00	1.00	0.90	0.90
Hourly Flow Rate (veh/h)	20	1025	0	0	1065	2
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	7	0	17
Peak-hour factor, PHF	1.00	1.00	1.00	0.75	1.00	0.75
Hourly Flow Rate (veh/h)	0	0	0	9	0	22
Proportion of heavy vehicles, P_{HV}	0	0	0	0	0	0
Percent grade (%)	0			5		
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)	20						31	
Capacity, c_m (vph)	661						124	
v/c ratio	0.03						0.25	
Queue length (95%)	0.09						0.93	
Control Delay (s/veh)	10.6						43.4	
LOS	B						E	
Approach delay (s/veh)	--	--	43.4					
Approach LOS	--	--	E					

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	JAG	Intersection	US Route 6/Site Access
Agency/Co.	TMA	Jurisdiction	Town of Yorktown
Date Performed	9/9/04	Analysis Year	Build Condition no left exit
Analysis Time Period	AM Peak Hour		

Project Description *Yorktown Farms*

East/West Street: *US Route 6*	North/South Street: *Site Access*
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)	0	899	4	3	751	0
Peak-hour factor, PHF	1.00	0.90	0.90	0.91	0.91	1.00
Hourly Flow Rate (veh/h)	0	998	4	3	825	0
Proportion of heavy vehicles, P_{HV}	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	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	0	0	10	0	0	0
Peak-hour factor, PHF	0.95	1.00	0.95	1.00	1.00	1.00
Hourly Flow Rate (veh/h)	0	0	10	0	0	0
Proportion of heavy vehicles, P_{HV}	0	0	0	0	0	0
Percent grade (%)	-6			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)		3		10				
Capacity, c_m (vph)		699		298				
v/c ratio		0.00		0.03				
Queue length (95%)		0.01		0.10				
Control Delay (s/veh)		10.2		17.5				
LOS		B		C				
Approach delay (s/veh)	--	--	17.5					
Approach LOS	--	--	C					

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	JAG	Intersection	US Route 6/Site Access
Agency/Co.	TMA	Jurisdiction	Town of Yorktown
Date Performed	9/9/04	Analysis Year	Build Condition no left exit
Analysis Time Period	PM Peak Hour		

Project Description *Yorktown Farms*

East/West Street: *US Route 6* | North/South Street: *Site Access*

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)	0	987	13	10	966	0
Peak-hour factor, PHF	1.00	0.95	0.95	0.90	0.90	1.00
Hourly Flow Rate (veh/h)	0	1038	13	11	1073	0
Proportion of heavy vehicles, P_{HV}	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	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	0	0	6	0	0	0
Peak-hour factor, PHF	0.95	1.00	0.95	1.00	1.00	1.00
Hourly Flow Rate (veh/h)	0	0	6	0	0	0
Proportion of heavy vehicles, P_{HV}	0	0	0	0	0	0
Percent grade (%)	-6			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)		11		6				
Capacity, c_m (vph)		670		281				
v/c ratio		0.02		0.02				
Queue length (95%)		0.05		0.07				
Control Delay (s/veh)		10.5		18.1				
LOS		B		C				
Approach delay (s/veh)	--	--	18.1					
Approach LOS	--	--	C					