TRIP GENERATION & TRAFFIC IMPACT STUDY
FAIR WIND VILLAGE
17 UNIT RESIDENTIAL DEVELOPMENT
206 BAYVIEW AVENUE
BRISTOL, RI

Prepared by: Crossman Engineering
Engineers & Surveyors
151 Centerville Road
Warwick, RI 02886

AUGUST 2022
REVISED MAY 2025

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INTRODUCTION

A Traffic Impact Study was performed to assess the potential impact of 17 new residential rental apartments. The proposed units will be located on the south side of Bayview Avenue behind the existing 3-unit house located at 206 Bayview Avenue.

This traffic study examines existing conditions, proposed development conditions and our subsequent conclusions/recommendations. The existing conditions consist of geometric data gathered from an on-site visit and existing traffic volume data collected for AM and PM peak hours. The proposed development section examines the site design, access and circulation, sight distance, projected site generated traffic, and capacity analysis of existing and proposed conditions. Our conclusions and recommendations are prepared following a comprehensive review of the capacity analysis.

EXISTING CONDITIONS

As stated, the site is located on the south side of Bay View Avenue at number 206. The property is currently occupied by a three-family home.

A. Roadway Geometrics

Bayview Avenue is classified as a minor arterial and runs east/west from Metacom Avenue to High Street. In the vicinity of the project, it is 36 feet wide with one travel lane in each direction and parking allowed on each side. The posted speed limit is 25 mph. The surrounding land uses along Bayview Avenue are residential.

The closest major intersection to the site is the signalized intersection at Metacom Avenue approximately 620 feet to the east.

B. Existing Traffic Volumes

Manual traffic counts were conducted between 7-9 AM and 4-6 PM at the Metacom Avenue/Bayview Avenue intersection and also at the Roger Williams University Almeida Apartments which is located opposite the site. The Almeida Apartments were not full due to Roger Williams University not being in session. The Almeida Apartments were then recounted in April 2025.

	Weekday AM Peak	Weekday PM Peak
Bay View Avenue	278	471
East	190	229
West	88	242
Metacom Avenue	1077	1496
North	451	772
South	626	724

When Almeida Apartments was recounted, it was found that the apartment driveway volumes were higher and were used for existing analysis. The Bayview volumes were similar in the AM peak but lower during the PM Peak so the original Bayview Avenue Volumes were used.

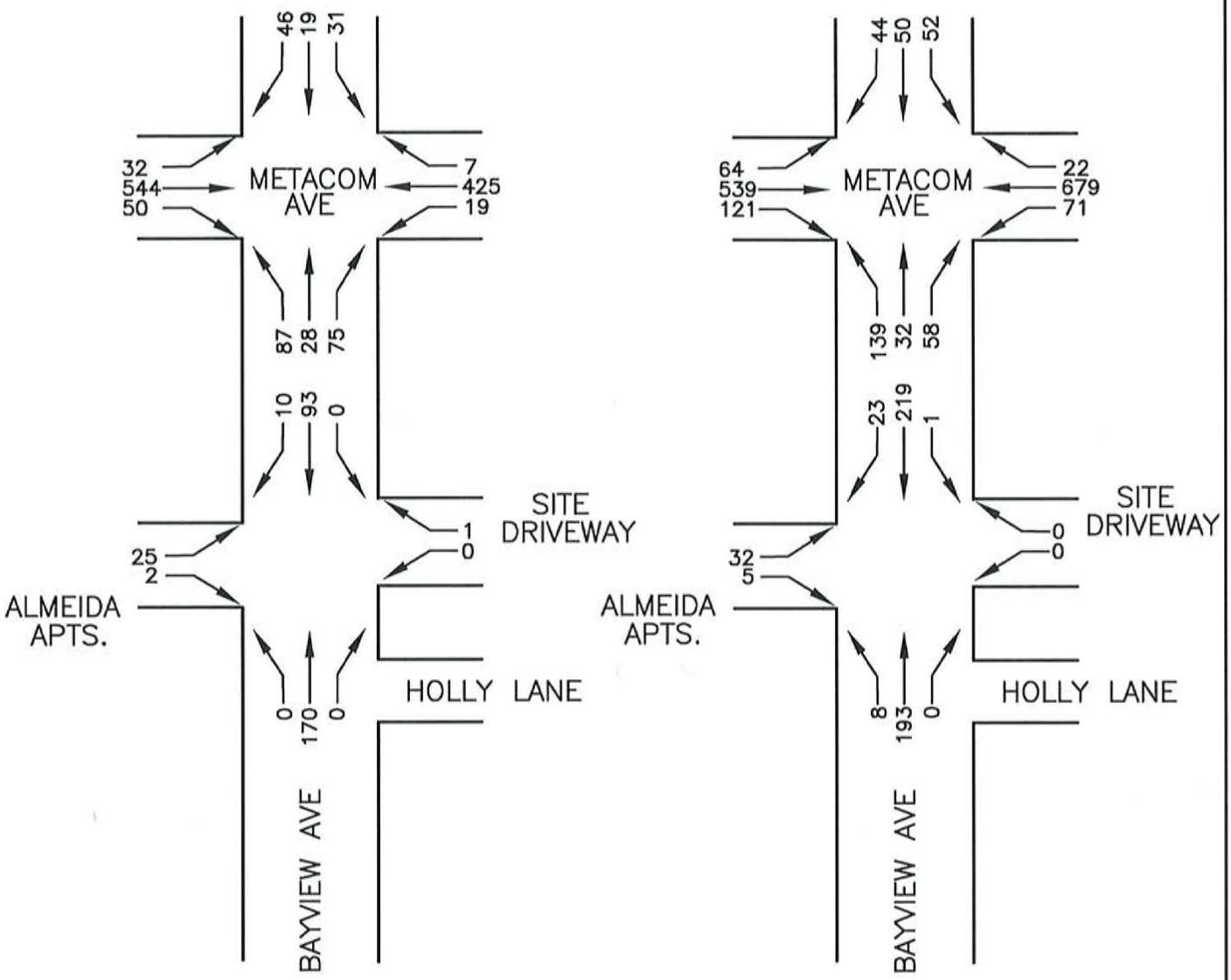
The manual traffic counts can be found in the Appendix and the peak hour volumes are shown in Figure 1.

C. Accident Summary

Crash data for Bayview Avenue was provided by the Bristol Police Department for the most recent three-year period. From January 2019 to the end of December 2021, a total of 9 accidents occurred in the project study area between the intersections of Metacom Avenue and Holly Lane. The majority of the accidents were rear end type accidents (6). Four of the accidents were motorists hitting parked cars; one said headlight glare caused it and another said an opposing vehicle made him shift over.

Year	# of Accidents
2019	4
2020	2
2021	3
Average per Year	3

The collision diagram is included in the appendix.



A.M. PEAK HOUR

P.M. PEAK HOUR

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PROJECT TITLE:

FIGURE 1

PROPOSED 20 UNIT
APARTMENTS
206 BAYVIEW AVENUE
BRISTOL, RI

PREPARED FOR:

EXISTING
TRAFFIC VOLUMES

DATE: MAY 2025

SCALE: NOT TO SCALE

REVISIONS:

D. Future Conditions

Traffic volumes were projected to the year 2030. Future traffic forecasts were developed for two scenarios: 2030 No-Build Conditions and 2030 Build Conditions (with project in place). Metacom Avenue and Bayview Avenue traffic was adjusted but Almeida Apartments traffic was not because the number of apartments will remain the same.

No-Build Conditions include existing traffic and all additional traffic due to future growth including:

- Historic annual traffic growth
- Specific Planned Development by others

Build Conditions were determined by adding the expected traffic generated by the proposed development to the 2030 No-Build Volumes.

E. Historic and Future traffic Growth

Information received from the Rhode Island Department of Administration indicated a yearly traffic growth of approximately 0.5% through 2030.

F. Specific Planned Development by Others

CE contracted Bristol Planning Department and inquired about any local future project that should be included as part of 2030 No-Build Conditions. They stated that there were no known projects that would impact future traffic in the area at this time.

G. No-Build Traffic Volumes

The existing peak hour traffic volumes were grown by 0.5 percent per year to establish the 2030 future base traffic volumes.

H. 2030 Build Traffic Volumes

Build conditions represents traffic conditions with the proposed development in place. 2030 Build volumes were determined by adding the expected vehicle trips generated by the proposed development to the 2030 No-Build volumes.

PROPOSED DEVELOPMENT

A. Site Design

The proposed development of the subject property is for the construction of two six-unit and one, five-unit multi-family buildings consisting of a total of 17 units. The existing house at 206 Bayview Avenue consists of three units so there will be a total of 20 units on the property.

B. Access and Circulation

The proposed multi-family development will have access to Bayview Avenue at the same location of the existing driveway to the site. The access will be located diagonally across from the access to Almeida Apartments. The driveway will be widened to 20 feet.

C. Sight Distance

The available safe stopping sight distance was measured at the proposed driveway. The posted speed limit on Bayview Avenue is 25 mph so a design speed of 30 mph was utilized which requires a stopping sight distance of 200 feet. This distance is exceeded at the driveway in both directions.

D. Projected Traffic

The projected number of vehicle trips was based on trip generation rates published by the Institute of Transportation Engineers (ITE), a national professional organization for traffic and transportation engineers. The data provided by ITE is based on similar land uses and is an industry standard.

Apartments (20 Units)

AM Peak (0.4 trips/unit)	8 Trips
24% Enter	2
76% Exit	6
PM Peak (0.51 trips/unit	10 Trips
63% Enter	6
37% Exit	4

The projected traffic as shown on Figure 2 was then superimposed onto the 2030 No-Build traffic volumes for analysis.

E. Capacity Analysis

Capacity analyses were performed for the signalized intersection of Metacom Avenue at Bayview Avenue and for the site access driveway/Almeida Apartment. The analysis was performed for the Existing Conditions (Figure 1), No-Build Conditions (Figure 3) and Build Conditions (Figure 4).

The analyses result in a Level of Service being assigned to the intersection. Level of Service is defined as a qualitative measure describing operational conditions based on vehicular delay. There are six levels of service ranging from Level A to Level F with Level D being considered acceptable for peak hour conditions at signalized intersections.

1. Signalized Intersections

The levels of service at signalized intersections are determined by a procedure described in the 2010 Highway Capacity Manual and as shown in Table 1.

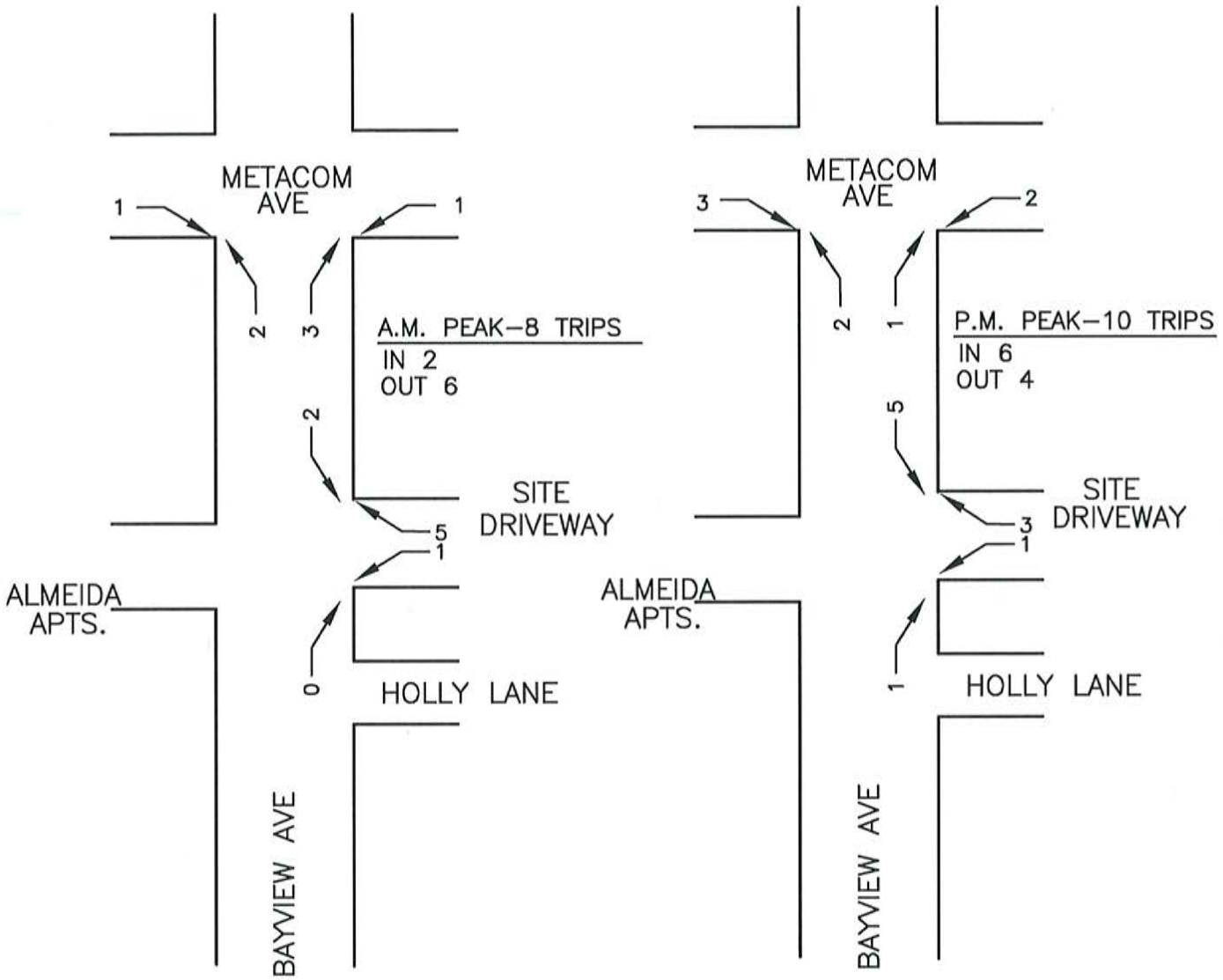
TABLE 1

Level of Service for Signalized Intersections

Level of Service	Control Delay per Vehicle (SEC)
A	<10
B	>10.0 to 20.0
C	>20.0 to 35.0
D	>35.0 to 55.0
E	>55.0 to 80 .0
F	>80.0

2. Un-Signalized Intersections

The levels of service at un-signalized intersections are determined by a procedure described in the 2010 Highway Capacity Manual. The level of service criteria for un-signalized intersections is described in Table 2.



A.M. PEAK HOUR

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PROJECT TITLE:

FIGURE 2

PROPOSED 20 UNIT APARTMENTS
206 BAYVIEW AVENUE
BRISTOL, RI

PREPARED FOR:

PROJECTED GENERATED TRAFFIC VOLUMES

DATE: MAY 2025

SCALE: NOT TO SCALE

REVISIONS:

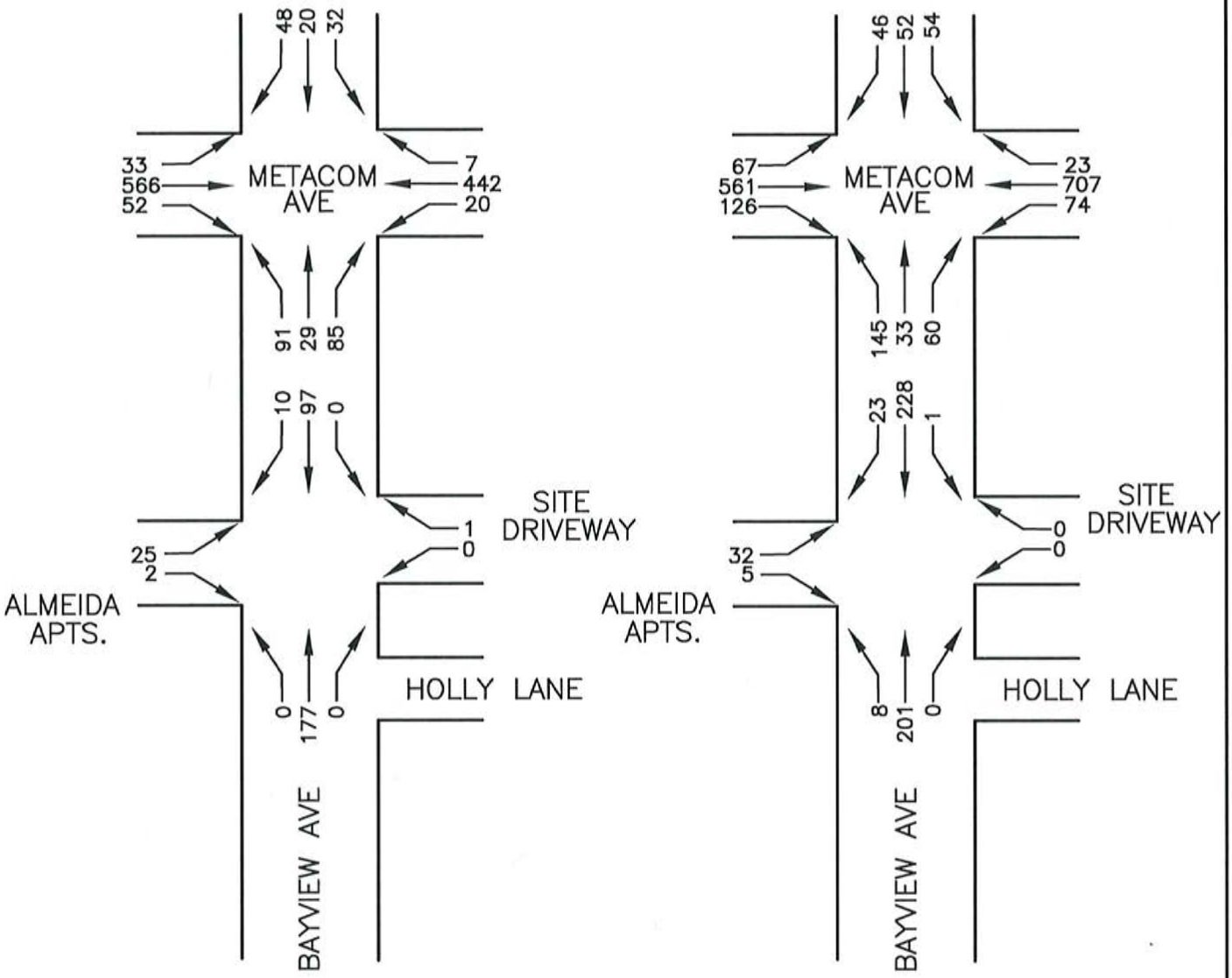

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FIGURE 3

PROPOSED 20 UNIT APARTMENTS
206 BAYVIEW AVENUE
BRISTOL, RI

PREPARED FOR:

2030 NO-BUILD TRAFFIC VOLUMES

DATE: MAY 2025

SCALE: NOT TO SCALE

REVISIONS:

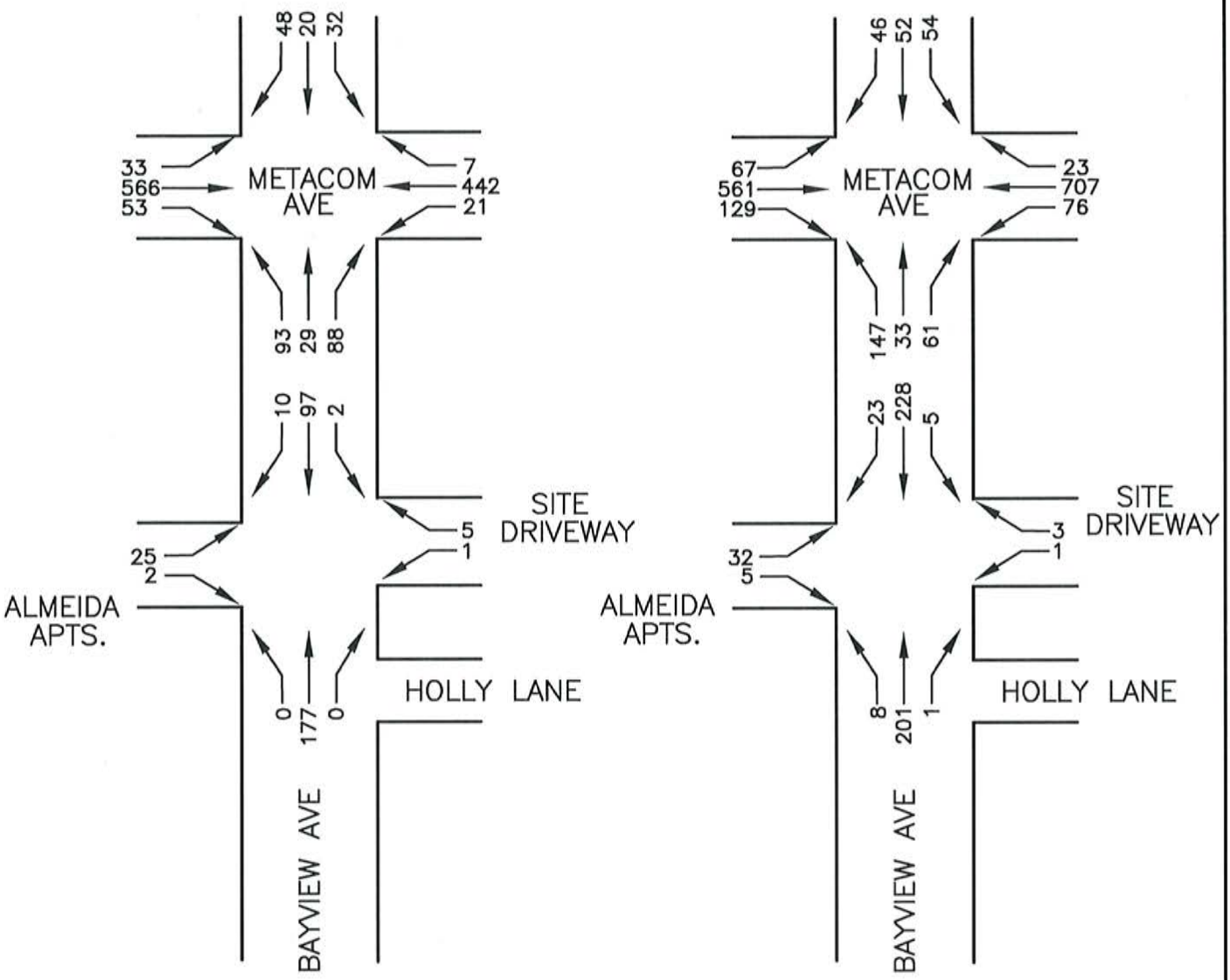

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FIGURE 4

PROPOSED 20 UNIT APARTMENTS
206 BAYVIEW AVENUE
BRISTOL, RI

PREPARED FOR:

2030 BUILD TRAFFIC VOLUMES

DATE: MAY 2025

SCALE: NOT TO SCALE

REVISIONS:

TABLE 2

Level of Service Criteria for Un-Signalized Intersections

Level of Service	Control Delay per Vehicle (SEC)
A	<10.
B	>10.0 to 15.0
C	>15.0 to 25.0
D	>25.0 to 35.0
E	>35.0 to 50.0
F	>50.0

The capacity analyses indicated the following overall levels of service:

	AM Peak LOS (Secs.)			PM Peak LOS (Secs)		
	Existing	2030 No Build	2030 Build	Existing	2030 No Build	2030 Build
Metacom Avenue at Bayview Avenue						
Overall	**C (21.4))**	**C (22.7)**	**C (23.0)**	**E (59.5)**	**E (71.0)**	**E (71.5)**
Northbound	B (15.8)	B (17.2)	B (17.6)	D (39.7)	D (44.9)	D (45.3)
Southbound	B (19.7)	B (22.1)	C (22.6)	D (44.0)	D (50.7)	D (51.5)
Eastbound	C (30.6)	C (29.8)	C (29.6)	D (40.2)	D (42.8)	D (43.4)
Westbound	D (33.9)	C (33.5)	C933.3)	F (266)	F (348)	F (348)
Site Access/Almeida						
Apartments, Site Drive						
Northbound	A (9.3)	A (9.4)	A (9.7)	A (0)	A (0)	B (10.5)
Southbound	B (11.0)	B (11.1)	B 11.2)	B (13.3)	B (13.5)	B (13.8)

CONCLUSION

After reviewing the data in this study, we conclude that the proposed 17-unit Multi-Family Development will not have a detrimental impact on adjacent roadways. This conclusion is based on the following facts:

- No detrimental impact on the level of service at the Metacom Avenue at Bayview Avenue intersection.
- The driveway of the development will operate at a good level of service.
- The proposed use is not a high traffic generator.
- The proposed safe stopping sight distance at the access driveway is more than sufficient.

APPENDIX

SIGHT DISTANCE

Metric					US Customary				
			Stopping sight distance					Stopping sight distance	
Design speed (km/h)	Brake reaction distance (m)	Braking distance on level (m)	Calculated (m)	Design (m)	Design speed (mph)	Brake reaction distance (ft)	Braking distance on level (ft)	Calculated (ft)	Design (ft)
20	13.9	4.6	18.5	20	15	55.1	21.6	76.7	80
30	20.9	10.3	31.2	35	20	73.5	38.4	111.9	115
40	27.8	18.4	46.2	50	25	91.9	60.0	151.9	155
50	34.8	28.7	63.5	65	30	110.3	86.4	196.7	200
60	41.7	41.3	83.0	85	35	128.6	117.6	246.2	250
70	48.7	56.2	104.9	105	40	147.0	153.6	300.6	305
80	55.6	73.4	129.0	130	45	165.4	194.4	359.8	360
90	62.6	92.9	155.5	160	50	183.8	240.0	423.8	425
100	69.5	114.7	184.2	185	55	202.1	290.3	492.4	495
110	76.5	138.8	215.3	220	60	220.5	345.5	566.0	570
120	83.4	165.2	248.6	250	65	238.9	405.5	644.4	645
130	90.4	193.8	284.2	285	70	257.3	470.3	727.6	730
					75	275.6	539.9	815.5	820
					80	294.0	614.3	908.3	910

Note: Brake reaction distance predicated on a time of 2.5 s; deceleration rate of 3.4 m/s^2 [11.2 ft/s^2] used to determine calculated sight distance.

Exhibit 3-1. Stopping Sight Distance

TRAFFIC COUNTS

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N/S: Metacom Avenue (Route 136)
E/W: Bayview Avenue
City, State: Bristol, RI
Client: Crossman/J. Cronan

File Name : 05587A
Site Code : 05587
Start Date : 7/21/2022
Page No : 1

Groups Printed- Cars & Peds - Trucks & Buses - Bikes by Direction

	Metacom Avenue (Route 136) From North				Bayview Avenue From East				Metacom Avenue (Route 136) From South				Bayview Avenue From West				
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
07:00 AM	14	106	10	2	20	6	13	0	1	95	9	0	10	6	16	0	308
07:15 AM	8	129	11	0	16	8	9	0	1	88	4	0	15	9	18	0	316
07:30 AM	13	134	5	0	6	4	9	0	2	119	4	0	13	8	19	0	336
07:45 AM	19	143	4	0	16	4	4	0	2	116	4	0	16	6	33	0	367
Total	54	512	30	2	58	22	35	0	6	418	21	0	54	29	86	0	1327
08:00 AM	10	138	12	0	8	3	9	0	2	102	4	0	16	5	17	0	326
08:15 AM	15	118	13	0	13	4	6	0	3	92	4	0	12	5	28	0	313
08:30 AM	12	140	8	0	14	5	8	0	2	90	8	0	10	7	23	0	327
08:45 AM	11	121	9	0	12	7	10	0	4	133	6	0	12	8	20	0	353
Total	48	517	42	0	47	19	33	0	11	417	22	0	50	25	88	0	1319
Grand Total	102	1029	72	2	105	41	68	0	17	835	43	0	104	54	174	0	2646
Apprch %	8.5	85.4	6	0.2	49.1	19.2	31.8	0	1.9	93.3	4.8	0	31.3	16.3	52.4	0	
Total %	3.9	38.9	2.7	0.1	4	1.5	2.6	0	0.6	31.6	1.6	0	3.9	2	6.6	0	
Cars & Peds	99	1010	72	2	105	41	67	0	17	813	41	0	104	53	173	0	2597
% Cars & Peds	97.1	98.2	100	100	100	100	98.5	0	100	97.4	95.3	0	100	98.1	99.4	0	98.1
Trucks & Buses																	
% Trucks & Buses	2	1.8	0	0	0	0	1.5	0	0	2.6	4.7	0	0	1.9	0	0	1.8
Bikes by Direction	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2
% Bikes by Direction	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.6	0	0.1

	Metacom Avenue (Route 136) From North					Bayview Avenue From East					Metacom Avenue (Route 136) From South					Bayview Avenue From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	8	129	11	0	148	16	8	9	0	33	1	88	4	0	93	15	9	18	0	42	316
07:30 AM	13	134	5	0	152	6	4	9	0	19	2	119	4	0	125	13	8	19	0	40	336
07:45 AM	19	143	4	0	166	16	4	4	0	24	2	116	4	0	122	16	6	33	0	55	367
08:00 AM	10	138	12	0	160	8	3	9	0	20	2	102	4	0	108	16	5	17	0	38	326
Total Volume	50	544	32	0	626	46	19	31	0	96	7	425	16	0	448	60	28	87	0	175	1345
% App. Total	8	86.9	5.1	0		47.9	19.8	32.3	0		1.6	94.9	3.6	0		34.3	16	49.7	0		
PHF	.658	.951	.667	.000	.943	.719	.594	.861	.000	.727	.875	.893	1.00	.000	.896	.938	.778	.659	.000	.795	.916
Cars & Peds	48	536	32	0	616	46	19	30	0	95	7	410	15	0	432	60	27	86	0	173	1316
% Cars & Peds	96.0	98.5	100	0	98.4	100	100	96.8	0	99.0	100	96.5	93.8	0	96.4	100	96.4	98.9	0	98.9	97.8
Trucks & Buses	2	8	0	0	10	0	0	1	0	1	0	15	1	0	16	0	1	0	0	1	28
% Trucks & Buses	4.0	1.5	0	0	1.6	0	0	3.2	0	1.0	0	3.5	6.3	0	3.6	0	3.6	0	0	0.6	2.1
Bikes by Direction	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
% Bikes by Direction	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.1	0	0.6	0.1

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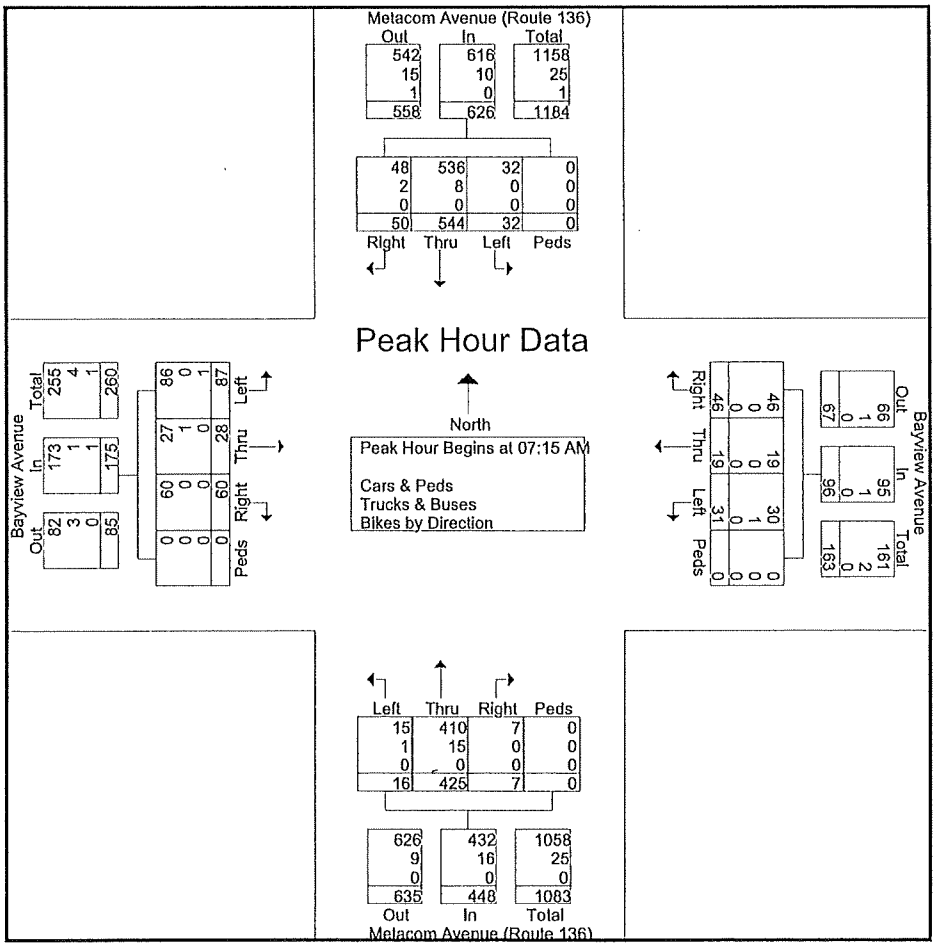
07:45 AM	19	143	4	0	166	16	4	4	0	24	2	116	4	0	122	16	6	33	0	55	367
08:00 AM	10	138	12	0	160	8	3	9	0	20	2	102	4	0	108	16	5	17	0	38	326
Total Volume	50	544	32	0	626	46	19	31	0	96	7	425	16	0	448	60	28	87	0	175	1345
% App. Total	8	86.9	5.1	0		47.9	19.8	32.3	0		1.6	94.9	3.6	0		34.3	16	49.7	0		
PHF	.658	.951	.667	.000	.943	.719	.594	.861	.000	.727	.875	.893	1.00	.000	.896	.938	.778	.659	.000	.795	.916
Cars & Peds	48	536	32	0	616	46	19	30	0	95	7	410	15	0	432	60	27	86	0	173	1316
% Cars & Peds	96.0	98.5	100	0	98.4	100	100	96.8	0	99.0	100	96.5	93.8	0	96.4	100	96.4	98.9	0	98.9	97.8
Trucks & Buses	2	8	0	0	10	0	0	1	0	1	0	15	1	0	16	0	1	0	0	1	28
% Trucks & Buses	4.0	1.5	0	0	1.6	0	0	3.2	0	1.0	0	3.5	6.3	0	3.6	0	3.6	0	0	0.6	2.1
Bikes by Direction	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
% Bikes by Direction	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.1	0	0.6	0.1



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City, State: Bristol, RI
Client: Crossman/J. Cronan

File Name : 05587B
Site Code : 05587
Start Date : 7/21/2022
Page No : 1

Groups Printed- Cars & Peds - Trucks & Buses - Bikes by Direction

	#201 Almeida Apartments Driveway From North				Bayview Avenue From East				#206 Driveway From South				Bayview Avenue From West				
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
07:00 AM	1	0	1	0	0	28	0	0	0	0	0	0	0	31	0	0	61
07:15 AM	0	0	4	0	2	20	0	0	1	0	0	0	0	36	1	0	64
07:30 AM	0	0	6	0	0	20	0	0	0	0	0	0	0	36	0	0	62
07:45 AM	1	0	3	0	1	26	0	0	1	0	0	0	0	53	0	0	85
Total	2	0	14	0	3	94	0	0	2	0	0	0	0	156	1	0	272
08:00 AM	1	0	3	0	0	20	0	0	0	0	0	0	0	36	0	0	60
08:15 AM	1	0	2	0	0	24	0	0	1	0	0	0	0	42	0	0	70
08:30 AM	0	0	2	0	2	23	0	0	0	0	0	0	0	39	0	0	66
08:45 AM	3	0	3	1	0	22	0	0	0	0	0	0	0	38	0	1	68
Total	5	0	10	1	2	89	0	0	1	0	0	0	0	155	0	1	264
Grand Total	7	0	24	1	5	183	0	0	3	0	0	0	0	311	1	1	536
Apprch %	21.9	0	75	3.1	2.7	97.3	0	0	100	0	0	0	0	99.4	0.3	0.3	
Total %	1.3	0	4.5	0.2	0.9	34.1	0	0	0.6	0	0	0	0	58	0.2	0.2	
Cars & Peds	7	0	24	1	5	178	0	0	3	0	0	0	0	309	1	1	529
% Cars & Peds	100	0	100	100	100	97.3	0	0	100	0	0	0	0	99.4	100	100	98.7
Trucks & Buses																	
% Trucks & Buses	0	0	0	0	0	2.2	0	0	0	0	0	0	0	0.3	0	0	0.9
Bikes by Direction	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	2
% Bikes by Direction	0	0	0	0	0	0.5	0	0	0	0	0	0	0	0.3	0	0	0.4

	#201 Almeida Apartments Driveway From North					Bayview Avenue From East					#206 Driveway From South					Bayview Avenue From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
07:45 AM	1	0	3	0	4	1	26	0	0	27	1	0	0	0	1	0	53	0	0	53	85
08:00 AM	1	0	3	0	4	0	20	0	0	20	0	0	0	0	0	0	36	0	0	36	60
08:15 AM	1	0	2	0	3	0	24	0	0	24	1	0	0	0	1	0	42	0	0	42	70
08:30 AM	0	0	2	0	2	2	23	0	0	25	0	0	0	0	0	0	39	0	0	39	66
Total Volume	3	0	10	0	13	3	93	0	0	96	2	0	0	0	2	0	170	0	0	170	281
% App. Total	23.1	0	76.9	0		3.1	96.9	0	0		100	0	0	0		0	100	0	0		
PHF	.750	.000	.833	.000	.813	.375	.894	.000	.000	.889	.500	.000	.000	.000	.500	.000	.802	.000	.000	.802	.826
Cars & Peds	3	0	10	0	13	3	91	0	0	94	2	0	0	0	2	0	168	0	0	168	277
% Cars & Peds	100	0	100	0	100	100	97.8	0	0	97.9	100	0	0	0	100	0	98.8	0	0	98.8	98.6
Trucks & Buses	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	3
% Trucks & Buses	0	0	0	0	0	0	2.2	0	0	2.1	0	0	0	0	0	0	0.6	0	0	0.6	1.1
Bikes by Direction	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
% Bikes by Direction	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.6	0	0	0.6	0.4

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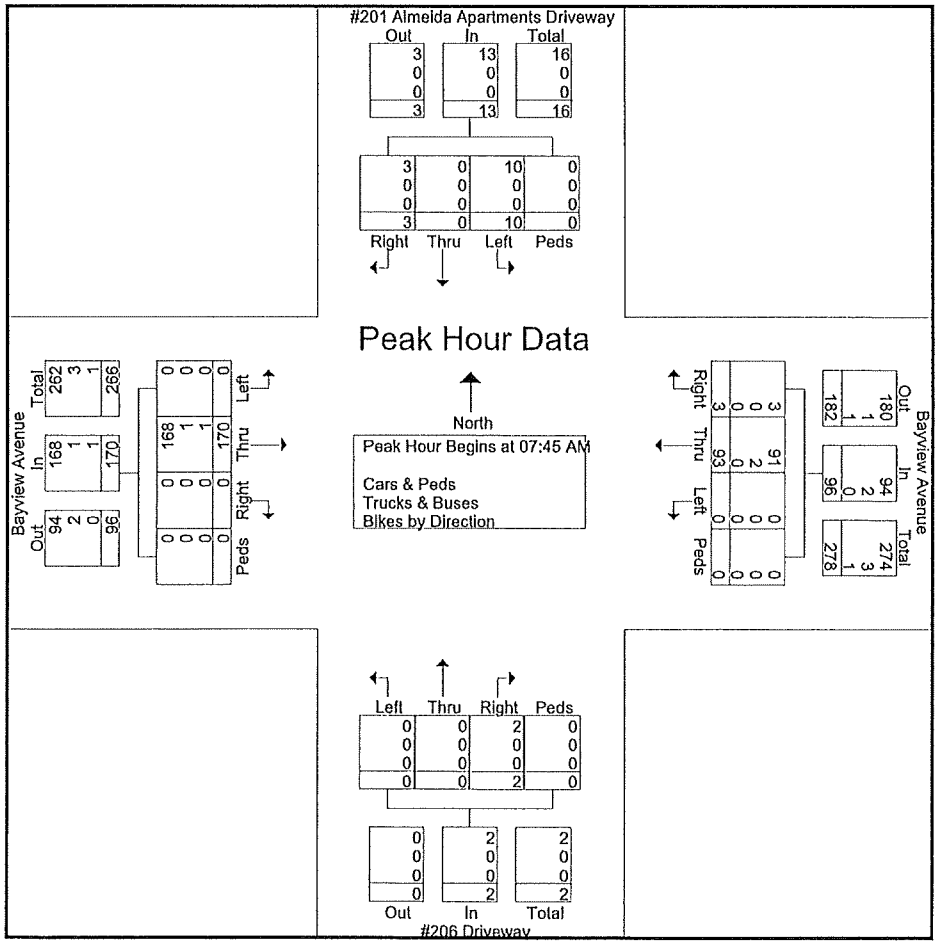
N/S: #201 Drive/#206 Drive
E/W: Bayview Avenue
City, State: Bristol, RI
Client: Crossman/J. Cronan

File Name : 05587B
Site Code : 05587
Start Date : 7/21/2022
Page No : 1

	#201 Almeida Apartments Driveway From North					Bayview Avenue From East					#206 Driveway From South					Bayview Avenue From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
07:45 AM	1	0	3	0	4	1	26	0	0	27	1	0	0	0	1	0	53	0	0	53	85
08:00 AM	1	0	3	0	4	0	20	0	0	20	0	0	0	0	0	0	36	0	0	36	60
08:15 AM	1	0	2	0	3	0	24	0	0	24	1	0	0	0	1	0	42	0	0	42	70
08:30 AM	0	0	2	0	2	2	23	0	0	25	0	0	0	0	0	0	39	0	0	39	66
Total Volume	3	0	10	0	13	3	93	0	0	96	2	0	0	0	2	0	170	0	0	170	281
% App. Total	23.1	0	76.9	0		3.1	96.9	0	0		100	0	0	0		0	100	0	0		
PHF	.750	.000	.833	.000	.813	.375	.894	.000	.000	.889	.500	.000	.000	.000	.500	.000	.802	.000	.000	.802	.826
Cars & Peds	3	0	10	0	13	3	91	0	0	94	2	0	0	0	2	0	168	0	0	168	277
% Cars & Peds	100	0	100	0	100	100	97.8	0	0	97.9	100	0	0	0	100	0	98.8	0	0	98.8	98.6
Trucks & Buses	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	3
% Trucks & Buses	0	0	0	0	0	0	2.2	0	0	2.1	0	0	0	0	0	0	0.6	0	0	0.6	1.1
Bikes by Direction	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
% Bikes by Direction	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.6	0	0	0.6	0.4



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N/S: Metacom Avenue (Route 136)
E/W: Bayview Avenue
City, State: Bristol, RI
Client: Crossman/J. Cronan

File Name : 05587AA
Site Code : 05587
Start Date : 7/21/2022
Page No : 1

Groups Printed- Cars & Peds - Trucks & Buses - Bikes by Direction

	Metacom Avenue (Route 136) From North				Bayview Avenue From East				Metacom Avenue (Route 136) From South				Bayview Avenue From West				
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
04:00 PM	23	144	9	0	12	16	7	0	6	154	9	0	6	11	32	0	429
04:15 PM	22	144	5	0	11	9	10	0	4	170	12	0	5	9	25	0	426
04:30 PM	26	133	10	0	7	9	15	0	5	184	13	1	7	9	29	0	448
04:45 PM	30	125	23	0	18	12	12	0	6	177	10	0	5	7	31	1	457
Total	101	546	47	0	48	46	44	0	21	685	44	1	23	36	117	1	1760
05:00 PM	29	126	19	0	8	13	15	0	2	167	19	0	13	10	39	0	460
05:15 PM	36	155	12	2	11	16	10	1	9	151	19	0	5	6	40	0	473
05:30 PM	22	117	17	0	18	8	9	0	1	154	11	2	4	9	30	0	402
05:45 PM	22	121	16	0	15	14	15	0	4	145	9	1	15	7	24	0	408
Total	109	519	64	2	52	51	49	1	16	617	58	3	37	32	133	0	1743
Grand Total	210	1065	111	2	100	97	93	1	37	1302	102	4	60	68	250	1	3503
Apprch %	15.1	76.7	8	0.1	34.4	33.3	32	0.3	2.6	90.1	7.1	0.3	15.8	17.9	66	0.3	
Total %	6	30.4	3.2	0.1	2.9	2.8	2.7	0	1.1	37.2	2.9	0.1	1.7	1.9	7.1	0	
Cars & Peds	209	1060	110	2	99	96	93	1	37	1295	102	4	59	68	246	1	3482
% Cars & Peds	99.5	99.5	99.1	100	99	99	100	100	100	99.5	100	100	98.3	100	98.4	100	99.4
Trucks & Buses																	
% Trucks & Buses	0.5	0.4	0.9	0	1	1	0	0	0	0.5	0	0	0	0	0.8	0	0.5
Bikes by Direction	0	1	0	0	0	0	0	0	0	0	0	0	1	0	2	0	4
% Bikes by Direction	0	0.1	0	0	0	0	0	0	0	0	0	0	1.7	0	0.8	0	0.1

	Metacom Avenue (Route 136) From North					Bayview Avenue From East					Metacom Avenue (Route 136) From South					Bayview Avenue From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	26	133	10	0	169	7	9	15	0	31	5	184	13	1	203	7	9	29	0	45	448
04:45 PM	30	125	23	0	178	18	12	12	0	42	6	177	10	0	193	5	7	31	1	44	457
05:00 PM	29	126	19	0	174	8	13	15	0	36	2	167	19	0	188	13	10	39	0	62	460
05:15 PM	36	155	12	2	205	11	16	10	1	38	9	151	19	0	179	5	6	40	0	51	473
Total Volume	121	539	64	2	726	44	50	52	1	147	22	679	61	1	763	30	32	139	1	202	1838
% App. Total	16.7	74.2	8.8	0.3		29.9	34	35.4	0.7		2.9	89	8	0.1		14.9	15.8	68.8	0.5		
PHF	.840	.869	.696	.250	.885	.611	.781	.867	.250	.875	.611	.923	.803	.250	.940	.577	.800	.869	.250	.815	.971
Cars & Peds	121	537	63	2	723	44	49	52	1	146	22	675	61	1	759	30	32	137	1	200	1828
% Cars & Peds	100	99.6	98.4	100	99.6	100	98.0	100	100	99.3	100	99.4	100	100	99.5	100	100	98.6	100	99.0	99.5
Trucks & Buses	0	1	1	0	2	0	1	0	0	1	0	4	0	0	4	0	0	2	0	2	9
% Trucks & Buses	0	0.2	1.6	0	0.3	0	2.0	0	0	0.7	0	0.6	0	0	0.5	0	0	1.4	0	1.0	0.5
Bikes by Direction	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
% Bikes by Direction	0	0.2	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1

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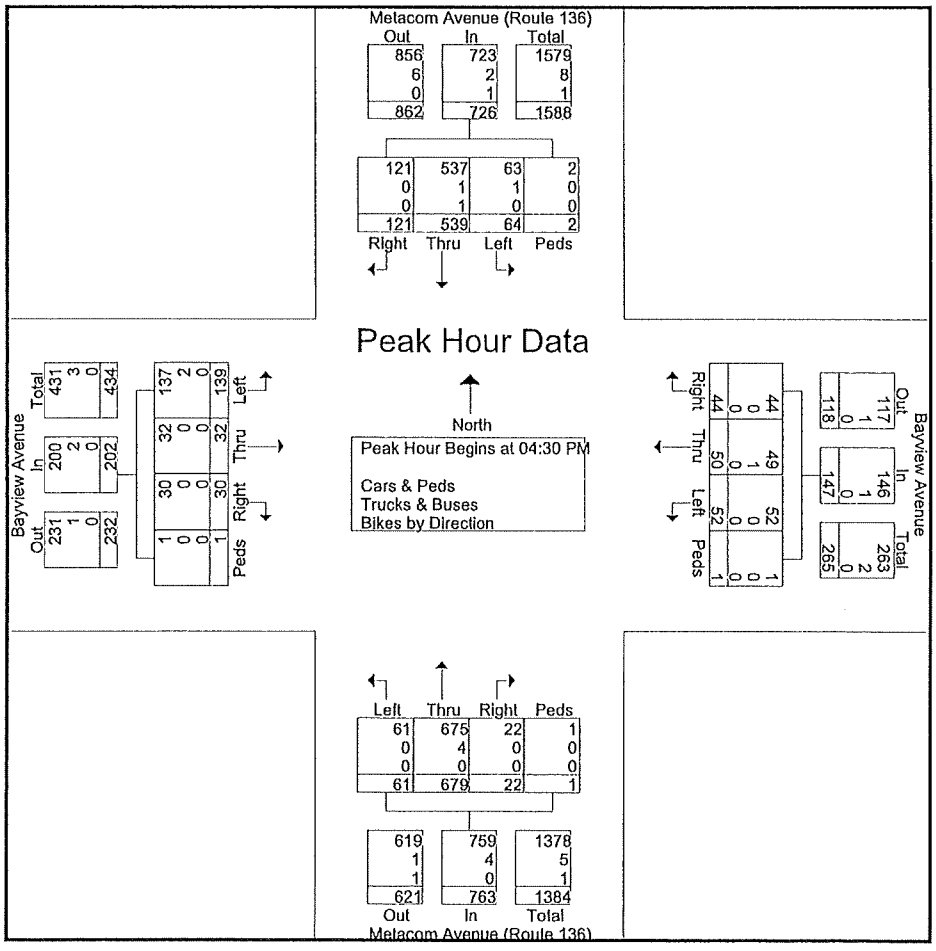
N/S: Metacom Avenue (Route 136)
E/W: Bayview Avenue
City, State: Bristol, RI
Client: Crossman/J. Cronan

File Name : 05587AA
Site Code : 05587
Start Date : 7/21/2022
Page No : 1

	Metacom Avenue (Route 136) From North					Bayview Avenue From East					Metacom Avenue (Route 136) From South					Bayview Avenue From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	26	133	10	0	169	7	9	15	0	31	5	184	13	1	203	7	9	29	0	45	448
04:45 PM	30	125	23	0	178	18	12	12	0	42	6	177	10	0	193	5	7	31	1	44	457
05:00 PM	29	126	19	0	174	8	13	15	0	36	2	167	19	0	188	13	10	39	0	62	460
05:15 PM	36	155	12	2	205	11	16	10	1	38	9	151	19	0	179	5	6	40	0	51	473
Total Volume	121	539	64	2	726	44	50	52	1	147	22	679	61	1	763	30	32	139	1	202	1838
% App. Total	16.7	74.2	8.8	0.3		29.9	34	35.4	0.7		2.9	89	8	0.1		14.9	15.8	68.8	0.5		
PHF	.840	.869	.696	.250	.885	.611	.781	.867	.250	.875	.611	.923	.803	.250	.940	.577	.800	.869	.250	.815	.971
Cars & Peds	121	537	63	2	723	44	49	52	1	146	22	675	61	1	759	30	32	137	1	200	1828
% Cars & Peds	100	99.6	98.4	100	99.6	100	98.0	100	100	99.3	100	99.4	100	100	99.5	100	100	98.6	100	99.0	99.5
Trucks & Buses	0	1	1	0	2	0	1	0	0	1	0	4	0	0	4	0	0	2	0	2	9
% Trucks & Buses	0	0.2	1.6	0	0.3	0	2.0	0	0	0.7	0	0.6	0	0	0.5	0	0	1.4	0	1.0	0.5
Bikes by Direction	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
% Bikes by Direction	0	0.2	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1



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N/S: #201 Drive/#206 Drive
E/W: Bayview Avenue
City, State: Bristol, RI
Client: Crossman/J. Cronan

File Name : 05587BB
Site Code : 05587
Start Date : 7/21/2022
Page No : 1

Groups Printed- Cars & Peds - Trucks & Buses - Bikes by Direction

	#201 Almeida Apartments Driveway From North				Bayview Avenue From East				#206 Driveway From South				Bayview Avenue From West				
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
04:00 PM	0	0	2	0	1	47	0	0	0	0	0	0	0	44	0	0	94
04:15 PM	0	0	0	0	1	47	0	0	0	0	0	0	0	45	2	0	95
04:30 PM	0	0	0	0	2	44	0	0	0	0	0	0	0	44	0	0	90
04:45 PM	1	0	1	0	4	50	0	0	0	0	0	0	0	47	1	0	104
Total	1	0	3	0	8	188	0	0	0	0	0	0	0	180	3	0	383
05:00 PM	0	0	1	0	4	56	1	0	0	0	0	0	0	55	1	0	118
05:15 PM	0	0	2	0	3	69	0	0	0	0	0	0	0	47	3	0	124
05:30 PM	1	0	2	0	6	36	1	0	0	0	0	0	0	44	0	0	90
05:45 PM	1	0	2	0	1	44	0	0	0	0	0	0	0	44	2	0	94
Total	2	0	7	0	14	205	2	0	0	0	0	0	0	190	6	0	426
Grand Total	3	0	10	0	22	393	2	0	0	0	0	0	0	370	9	0	809
Apprch %	23.1	0	76.9	0	5.3	94.2	0.5	0	0	0	0	0	0	97.6	2.4	0	
Total %	0.4	0	1.2	0	2.7	48.6	0.2	0	0	0	0	0	0	45.7	1.1	0	
Cars & Peds	3	0	10	0	21	390	2	0	0	0	0	0	0	363	8	0	797
% Cars & Peds	100	0	100	0	95.5	99.2	100	0	0	0	0	0	0	98.1	88.9	0	98.5
Trucks & Buses																	
% Trucks & Buses	0	0	0	0	4.5	0.5	0	0	0	0	0	0	0	0.5	0	0	0.6
Bikes by Direction	0	0	0	0	0	1	0	0	0	0	0	0	0	5	1	0	7
% Bikes by Direction	0	0	0	0	0	0.3	0	0	0	0	0	0	0	1.4	11.1	0	0.9

	#201 Almeida Apartments Driveway From North					Bayview Avenue From East					#206 Driveway From South					Bayview Avenue From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	0	0	0	0	0	2	44	0	0	46	0	0	0	0	0	0	44	0	0	44	90
04:45 PM	1	0	1	0	2	4	50	0	0	54	0	0	0	0	0	0	47	1	0	48	104
05:00 PM	0	0	1	0	1	4	56	1	0	61	0	0	0	0	0	0	55	1	0	56	118
05:15 PM	0	0	2	0	2	3	69	0	0	72	0	0	0	0	0	0	47	3	0	50	124
Total Volume	1	0	4	0	5	13	219	1	0	233	0	0	0	0	0	0	193	5	0	198	436
% App. Total	20	0	80	0		5.6	94	0.4	0		0	0	0	0		0	97.5	2.5	0		
PHF	.250	.000	.500	.000	.625	.813	.793	.250	.000	.809	.000	.000	.000	.000	.000	.000	.877	.417	.000	.884	.879
Cars & Peds	1	0	4	0	5	13	217	1	0	231	0	0	0	0	0	0	190	5	0	195	431
% Cars & Peds	100	0	100	0	100	100	99.1	100	0	99.1	0	0	0	0	0	0	98.4	100	0	98.5	98.9
Trucks & Buses	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	3
% Trucks & Buses	0	0	0	0	0	0	0.5	0	0	0.4	0	0	0	0	0	0	1.0	0	0	1.0	0.7
Bikes by Direction	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	2
% Bikes by Direction	0	0	0	0	0	0	0.5	0	0	0.4	0	0	0	0	0	0	0.5	0	0	0.5	0.5

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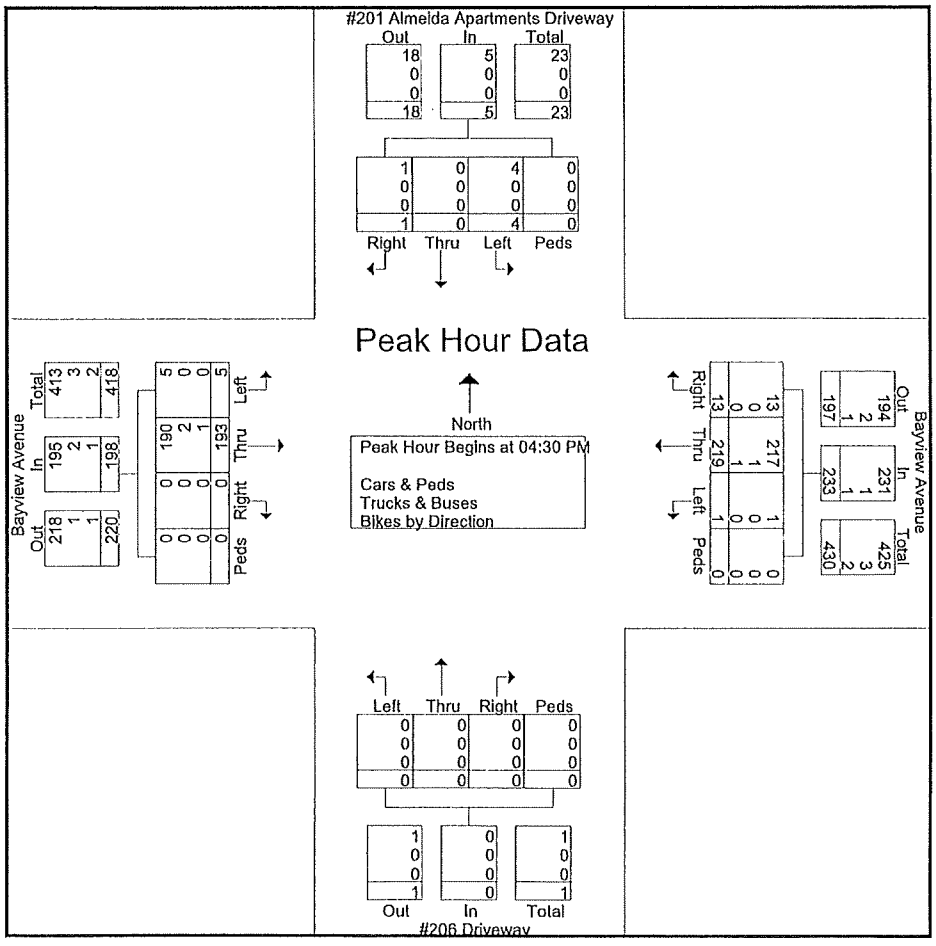
N/S: #201 Drive/#206 Drive
E/W: Bayview Avenue
City, State: Bristol, RI
Client: Crossman/J. Cronan

File Name : 05587BB
Site Code : 05587
Start Date : 7/21/2022
Page No : 1

	#201 Almeida Apartments Driveway From North					Bayview Avenue From East					#206 Driveway From South					Bayview Avenue From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	0	0	0	0	0	2	44	0	0	46	0	0	0	0	0	0	44	0	0	44	90
04:45 PM	1	0	1	0	2	4	50	0	0	54	0	0	0	0	0	0	47	1	0	48	104
05:00 PM	0	0	1	0	1	4	56	1	0	61	0	0	0	0	0	0	**55**	1	0	**56**	118
05:15 PM	0	0	2	0	2	3	69	0	0	72	0	0	0	0	0	0	47	3	0	50	124
Total Volume	1	0	4	0	5	13	219	1	0	233	0	0	0	0	0	0	193	5	0	198	436
% App. Total	20	0	80	0		5.6	94	0.4	0		0	0	0	0		0	97.5	2.5	0		
PHF	.250	.000	.500	.000	.625	.813	.793	.250	.000	.809	.000	.000	.000	.000	.000	.000	.877	.417	.000	.884	.879
Cars & Peds	1	0	4	0	5	13	217	1	0	231	0	0	0	0	0	0	190	5	0	195	431
% Cars & Peds	100	0	100	0	100	100	99.1	100	0	99.1	0	0	0	0	0	0	98.4	100	0	98.5	98.9
Trucks & Buses	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	3
% Trucks & Buses	0	0	0	0	0	0	0.5	0	0	0.4	0	0	0	0	0	0	1.0	0	0	1.0	0.7
Bikes by Direction	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	2
% Bikes by Direction	0	0	0	0	0	0	0.5	0	0	0.4	0	0	0	0	0	0	0.5	0	0	0.5	0.5



CROSSMAN ENGINEERING

DAY: Tuesday

DATE: 4/22/25

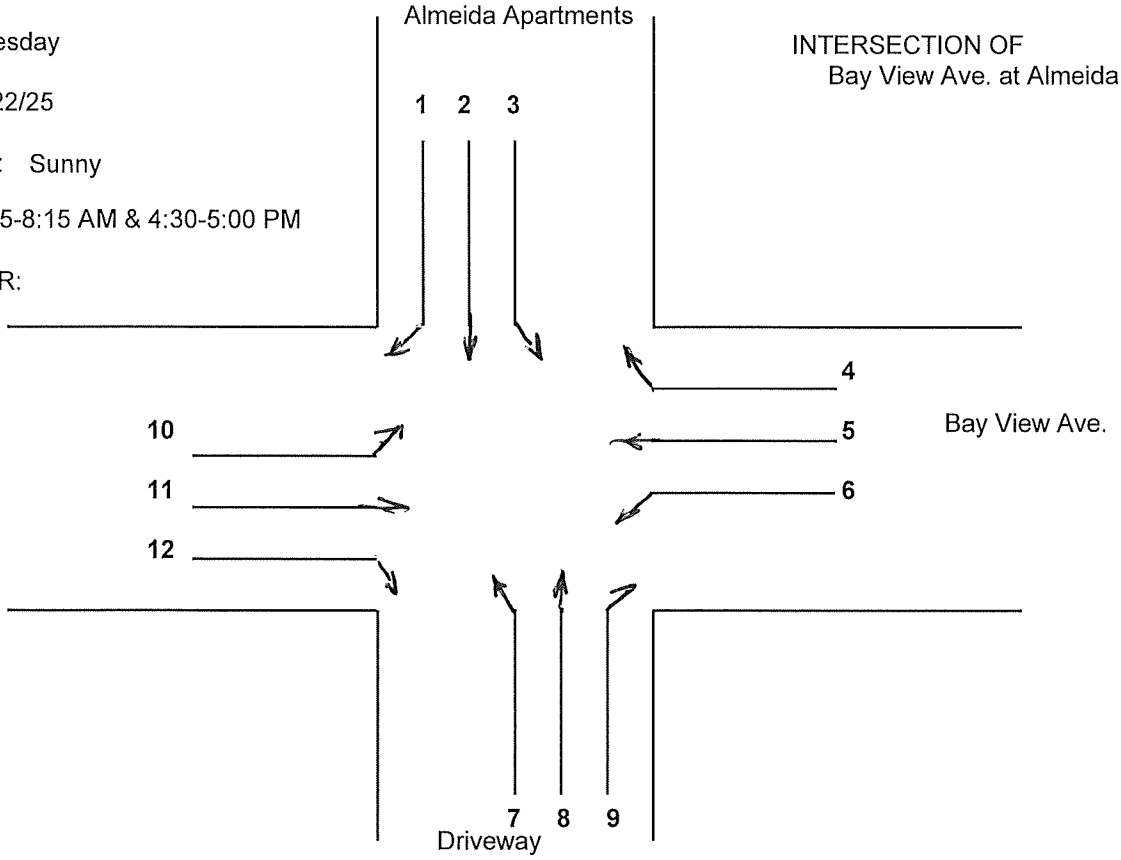
WEATHER: Sunny

TIME: 7:15-8:15 AM & 4:30-5:00 PM

RECORDER:

CITY/TOWN: Bristol

INTERSECTION OF
Bay View Ave. at Almeida Apartments



START TIME	END TIME	RD # 1			RD # 2			RD # 3			RD # 4			
		1	2	3	4	5	6	7	8	9	10	11	12	
7:15	7:30	1	0	3	3	26	0	0	0	1	0	37	0	0
7:30	7:45	0	0	6	3	24	0	0	0	0	0	38	0	0
7:45	8:00	0	0	11	1	19	0	0	0	0	0	46	0	0
8:00	8:15	1	0	5	3	23	0	0	0	0	0	44	0	0
														0
	Total	2	0	25	10	92	0	0	0	1	0	165	0	0
														0
4:30	4:45	2	0	9	9	42	1	0	0	0	2	43	1	0
4:45	5:00	2	0	11	6	41	0	0	0	0	3	43	0	0
5:00	5:15	0	0	5	6	43	0	0	0	0	1	44	0	0
5:15	5:30	1	0	7	2	48	0	0	0	0	2	49	0	0
														0
	Total	5	0	32	23	174	1	0	0	0	8	174	1	0
														0
														0
														0
TOTAL		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

TRIP GENERATION COMPUTATIONS

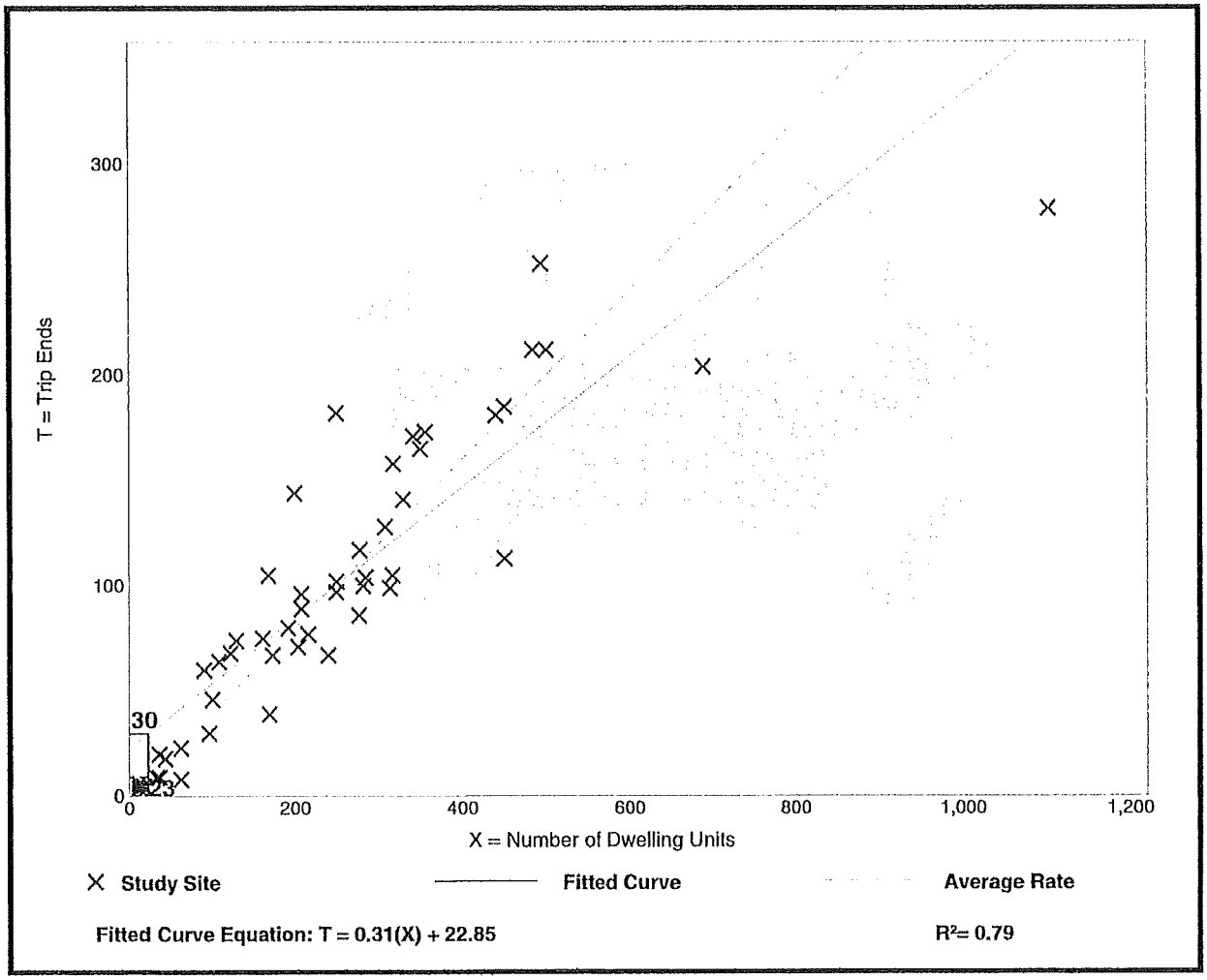
Multifamily Housing (Low-Rise)
Not Close to Rail Transit (220)

Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 49
Avg. Num. of Dwelling Units: 249
Directional Distribution: 24% entering, 76% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.40	0.13 - 0.73	0.12

Data Plot and Equation



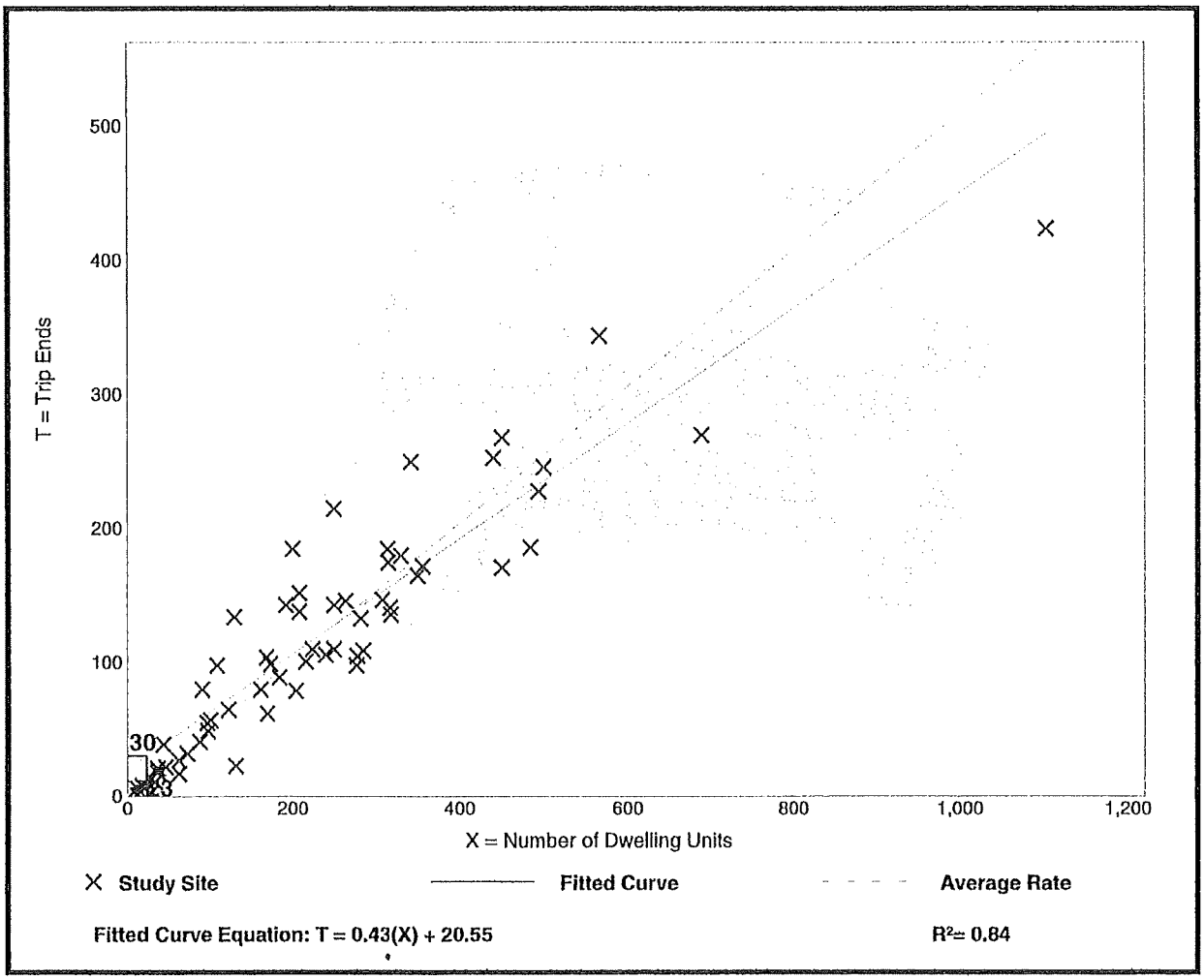
Multifamily Housing (Low-Rise)
Not Close to Rail Transit (220)

Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 59
Avg. Num. of Dwelling Units: 241
Directional Distribution: 63% entering, 37% exiting

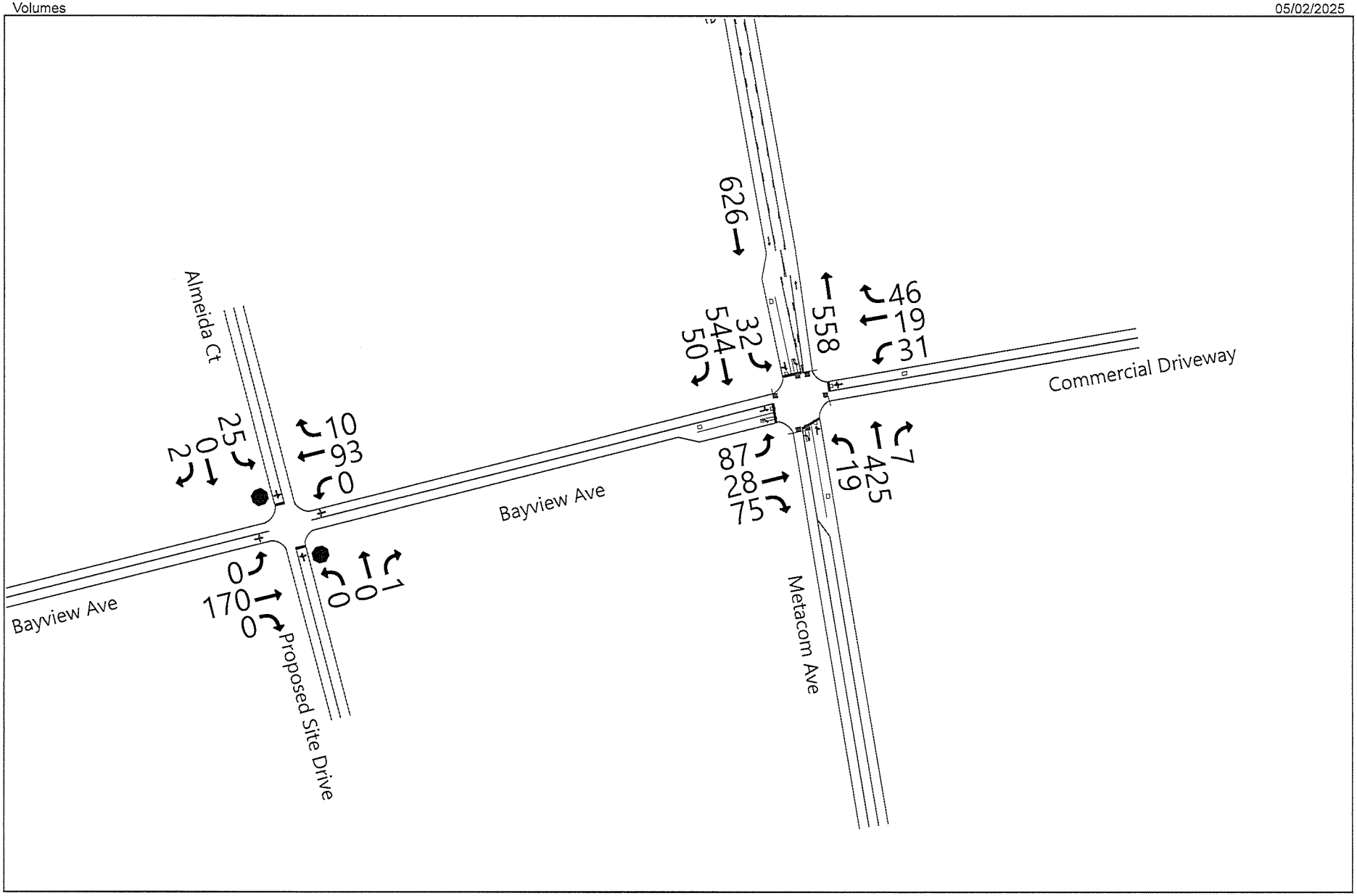
Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.51	0.08 - 1.04	0.15

Data Plot and Equation



CAPACITY ANALYSES


626
558
46
19
31
32
544
50
Commercial Driveway
Almeida Ct
25
0
2
10
93
0
Bayview Ave
87
28
75
7
425
19
Bayview Ave
0
170
0
0
0
1
Proposed Site Drive
Metacom Ave

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	87	28	75	31	19	46	19	425	7	32	544	50
Future Volume (veh/h)	87	28	75	31	19	46	19	425	7	32	544	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1710	1657	1710	1670	1710	1710	1630	1657	1710	1710	1683	1657
Adj Flow Rate, veh/h	109	35	94	42	26	63	21	472	8	34	579	53
Peak Hour Factor	0.80	0.80	0.80	0.73	0.73	0.73	0.90	0.90	0.90	0.94	0.94	0.94
Percent Heavy Veh, %	0	4	0	3	0	0	6	4	0	0	2	4
Cap, veh/h	211	57	353	83	56	80	35	915	16	52	853	78
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.02	0.56	0.56	0.03	0.56	0.56
Sat Flow, veh/h	577	234	1449	122	231	327	1552	1624	28	1629	1519	139
Grp Volume(v), veh/h	144	0	94	131	0	0	21	0	480	34	0	632
Grp Sat Flow(s),veh/h/ln	811	0	1449	681	0	0	1552	0	1652	1629	0	1658
Q Serve(g_s), s	0.0	0.0	4.7	3.5	0.0	0.0	1.2	0.0	16.1	1.9	0.0	24.3
Cycle Q Clear(g_c), s	15.9	0.0	4.7	19.4	0.0	0.0	1.2	0.0	16.1	1.9	0.0	24.3
Prop In Lane	0.76		1.00	0.32		0.48	1.00		0.02	1.00		0.08
Lane Grp Cap(c), veh/h	268	0	353	219	0	0	35	0	930	52	0	931
V/C Ratio(X)	0.54	0.00	0.27	0.60	0.00	0.00	0.60	0.00	0.52	0.66	0.00	0.68
Avail Cap(c_a), veh/h	498	0	620	480	0	0	121	0	930	145	0	931
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	31.4	0.0	27.5	32.1	0.0	0.0	43.6	0.0	12.1	43.1	0.0	14.0
Incr Delay (d2), s/veh	1.1	0.0	0.3	1.8	0.0	0.0	10.5	0.0	2.0	9.2	0.0	4.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	0.0	1.7	2.9	0.0	0.0	0.6	0.0	5.7	0.9	0.0	8.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	32.5	0.0	27.8	33.9	0.0	0.0	54.0	0.0	14.1	52.3	0.0	18.0
LnGrp LOS	C		C	C			D		B	D		B
Approach Vol, veh/h		238			131			501			666	
Approach Delay, s/veh		30.6			33.9			15.8			19.7	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	4	5	6	8
Phs Duration (G+Y+Rc), s	6.9	55.7	27.4	7.0	55.5	27.4
Change Period (Y+Rc), s	4.0	5.0	5.5	5.0	5.0	* 5.5
Max Green Setting (Gmax), s	8.0	29.0	38.5	7.0	29.0	* 39
Max Q Clear Time (g_c+I1), s	3.9	18.1	17.9	3.2	26.3	21.4
Green Ext Time (p_c), s	0.0	1.7	0.9	0.0	0.9	0.5

Intersection Summary	
HCM 7th Control Delay, s/veh	21.4
HCM 7th LOS	C

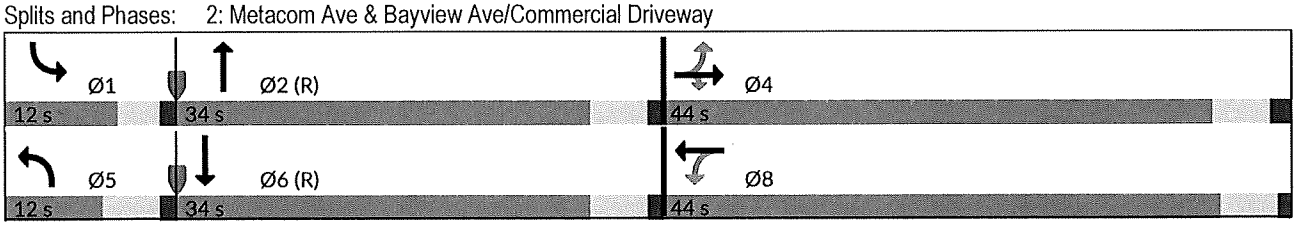
Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	87	28	75	31	19	46	19	425	7	32	544	50
Future Volume (vph)	87	28	75	31	19	46	19	425	7	32	544	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		100	0		0	110		0	100		0
Storage Lanes	0		1	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			25			40			40	
Link Distance (ft)		659			426			547			169	
Travel Time (s)		18.0			11.6			9.3			2.9	
Peak Hour Factor	0.80	0.80	0.80	0.73	0.73	0.73	0.90	0.90	0.90	0.94	0.94	0.94
Heavy Vehicles (%)	0%	4%	0%	3%	0%	0%	6%	4%	0%	0%	2%	4%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	144	94	0	131	0	21	480	0	34	632	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8								
Detector Phase	4	4	4	8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0		5.0	10.0		5.0	10.0	
Minimum Split (s)	20.5	20.5	20.5	20.0	20.0		10.0	19.0		9.0	22.0	
Total Split (s)	44.0	44.0	44.0	44.0	44.0		12.0	34.0		12.0	34.0	
Total Split (%)	48.9%	48.9%	48.9%	48.9%	48.9%		13.3%	37.8%		13.3%	37.8%	
Maximum Green (s)	38.5	38.5	38.5	39.0	39.0		7.0	29.0		8.0	29.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		3.0	4.0	
All-Red Time (s)	1.5	1.5	1.5	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.5	5.5		5.0		5.0	5.0		4.0	5.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.4	2.4	2.4	2.4	2.4		2.4	2.4		2.4	2.4	
Recall Mode	None	None	None	None	None		None	C-Min		None	C-Min	
Walk Time (s)	7.0	7.0	7.0	7.0	7.0			7.0			7.0	
Flash Don't Walk (s)	8.0	8.0	8.0	8.0	8.0			7.0			10.0	
Pedestrian Calls (#/hr)	0	0	0	0	0			0			0	
v/c Ratio		0.73	0.28		0.44		0.20	0.47		0.28	0.59	
Control Delay (s/veh)		55.1	8.5		21.3		43.2	13.5		44.2	15.1	
Queue Delay		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)		55.1	8.5		21.3		43.2	13.5		44.2	15.1	
Queue Length 50th (ft)		78	0		34		12	145		19	142	
Queue Length 95th (ft)		112	27		55		34	297		47	#464	
Internal Link Dist (ft)		579			346			467			89	
Turn Bay Length (ft)			100				110			100		
Base Capacity (vph)		481	675		622		123	1031		148	1079	
Starvation Cap Reductn		0	0		0		0	0		0	0	
Spillback Cap Reductn		0	0		0		0	0		0	0	
Storage Cap Reductn		0	0		0		0	0		0	0	
Reduced v/c Ratio		0.30	0.14		0.21		0.17	0.47		0.23	0.59	

Intersection Summary	
Area Type:	CBD
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	

Splits and Phases: 2: Metacom Ave & Bayview Ave/Commercial Driveway



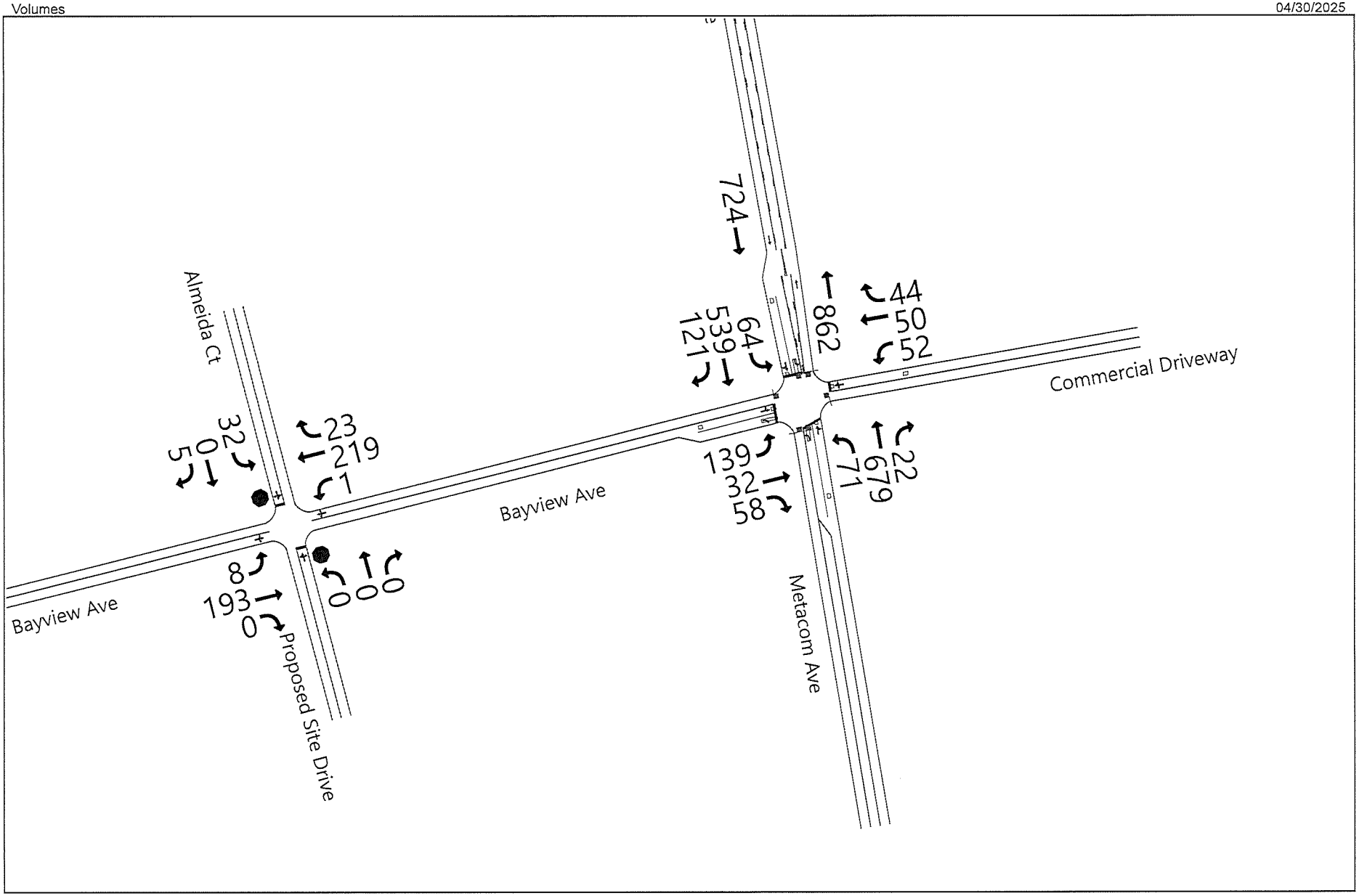
Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	170	0	0	93	10	0	0	1	25	0	2
Future Vol, veh/h	0	170	0	0	93	10	0	0	1	25	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	89	89	89	50	50	50	61	61	61
Heavy Vehicles, %	0	1	0	0	2	0	0	0	0	0	0	0
Mvmt Flow	0	213	0	0	104	11	0	0	2	41	0	3

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	116	0	0	213	0	0	317	328	213	323	323	110
Stage 1	-	-	-	-	-	-	213	213	-	110	110	-
Stage 2	-	-	-	-	-	-	104	116	-	213	213	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1486	-	-	1370	-	-	640	594	833	634	598	949
Stage 1	-	-	-	-	-	-	794	730	-	900	808	-
Stage 2	-	-	-	-	-	-	906	804	-	794	730	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1486	-	-	1370	-	-	637	594	833	633	598	949
Mov Cap-2 Maneuver	-	-	-	-	-	-	637	594	-	633	598	-
Stage 1	-	-	-	-	-	-	794	730	-	900	808	-
Stage 2	-	-	-	-	-	-	903	804	-	792	730	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0	0	9.33	10.96
HCM LOS			A	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	833	1486	-	-	1370	-	-	649
HCM Lane V/C Ratio	0.002	-	-	-	-	-	-	0.068
HCM Ctrl Dly (s/v)	9.3	0	-	-	0	-	-	11
HCM Lane LOS	A	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.2


724
862
44
50
52
64
539
121
Commercial Driveway
Almeida Ct
32
0
5
23
219
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Bayview Ave
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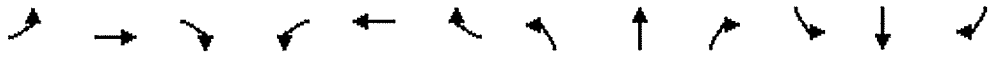
32
58
71
679
22
Bayview Ave
8
193
0
0
0
0
Proposed Site Drive
Metacom Ave



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	139	32	58	52	50	44	71	679	22	64	539	121
Future Volume (veh/h)	139	32	58	52	50	44	71	679	22	64	539	121
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1697	1710	1710	1710	1683	1710	1710	1697	1710	1683	1710	1710
Adj Flow Rate, veh/h	170	39	71	59	57	50	76	722	23	72	606	136
Peak Hour Factor	0.82	0.82	0.82	0.88	0.88	0.88	0.94	0.94	0.94	0.89	0.89	0.89
Percent Heavy Veh, %	1	0	0	0	2	0	0	1	0	2	0	0
Cap, veh/h	238	40	435	53	44	21	95	816	26	89	658	148
Arrive On Green	0.30	0.30	0.30	0.30	0.30	0.30	0.06	0.50	0.50	0.06	0.49	0.49
Sat Flow, veh/h	575	135	1449	13	147	69	1629	1635	52	1603	1352	303
Grp Volume(v), veh/h	209	0	71	166	0	0	76	0	745	72	0	742
Grp Sat Flow(s),veh/h/ln	709	0	1449	228	0	0	1629	0	1687	1603	0	1655
Q Serve(g_s), s	0.0	0.0	3.6	0.8	0.0	0.0	4.6	0.0	39.6	4.4	0.0	41.7
Cycle Q Clear(g_c), s	29.2	0.0	3.6	30.0	0.0	0.0	4.6	0.0	39.6	4.4	0.0	41.7
Prop In Lane	0.81		1.00	0.36		0.30	1.00		0.03	1.00		0.18
Lane Grp Cap(c), veh/h	278	0	435	117	0	0	95	0	842	89	0	806
V/C Ratio(X)	0.75	0.00	0.16	1.42	0.00	0.00	0.80	0.00	0.88	0.81	0.00	0.92
Avail Cap(c_a), veh/h	278	0	435	117	0	0	98	0	842	112	0	811
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	34.7	0.0	25.8	36.1	0.0	0.0	46.5	0.0	22.4	46.7	0.0	23.9
Incr Delay (d2), s/veh	10.3	0.0	0.1	229.7	0.0	0.0	34.6	0.0	13.1	25.2	0.0	17.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.8	0.0	1.3	10.4	0.0	0.0	2.7	0.0	17.2	2.3	0.0	18.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	45.0	0.0	25.9	265.8	0.0	0.0	81.2	0.0	35.5	71.9	0.0	41.3
LnGrp LOS	D		C	F			F		D	E		D
Approach Vol, veh/h		280			166			821			814	
Approach Delay, s/veh		40.2			265.8			39.7			44.0	
Approach LOS		D			F			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.6	54.9		35.5	10.8	53.7		35.5				
Change Period (Y+Rc), s	4.0	5.0		5.5	5.0	5.0		* 5.5				
Max Green Setting (Gmax), s	7.0	49.0		29.5	6.0	49.0		* 30				
Max Q Clear Time (g_c+I1), s	6.4	41.6		31.2	6.6	43.7		32.0				
Green Ext Time (p_c), s	0.0	2.3		0.0	0.0	1.9		0.0				

Intersection Summary	
HCM 7th Control Delay, s/veh	59.5
HCM 7th LOS	E

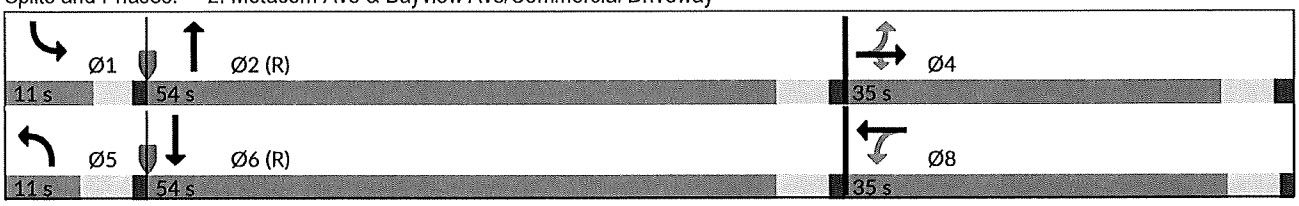
Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	139	32	58	52	50	44	71	679	22	64	539	121
Future Volume (vph)	139	32	58	52	50	44	71	679	22	64	539	121
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		100	0		0	110		0	100		0
Storage Lanes	0		1	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			25			40			40	
Link Distance (ft)		659			426			547			169	
Travel Time (s)		18.0			11.6			9.3			2.9	
Peak Hour Factor	0.82	0.82	0.82	0.88	0.88	0.88	0.94	0.94	0.94	0.89	0.89	0.89
Heavy Vehicles (%)	1%	0%	0%	0%	2%	0%	0%	1%	0%	2%	0%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	209	71	0	166	0	76	745	0	72	742	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8								
Detector Phase	4	4	4	8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0		5.0	10.0		5.0	10.0	
Minimum Split (s)	20.5	20.5	20.5	20.0	20.0		10.0	19.0		9.0	22.0	
Total Split (s)	35.0	35.0	35.0	35.0	35.0		11.0	54.0		11.0	54.0	
Total Split (%)	35.0%	35.0%	35.0%	35.0%	35.0%		11.0%	54.0%		11.0%	54.0%	
Maximum Green (s)	29.5	29.5	29.5	30.0	30.0		6.0	49.0		7.0	49.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		3.0	4.0	
All-Red Time (s)	1.5	1.5	1.5	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.5	5.5		5.0		5.0	5.0		4.0	5.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.4	2.4	2.4	2.4	2.4		2.4	2.4		2.4	2.4	
Recall Mode	None	None	None	None	None		None	C-Min		None	C-Min	
Walk Time (s)	7.0	7.0	7.0	7.0	7.0			7.0			7.0	
Flash Don't Walk (s)	8.0	8.0	8.0	8.0	8.0			7.0			10.0	
Pedestrian Calls (#/hr)	0	0	0	0	0			0			0	
v/c Ratio		0.87	0.18		0.55		0.60	0.78		0.59	0.83	
Control Delay (s/veh)		68.4	7.0		34.7		65.8	27.2		64.7	30.4	
Queue Delay		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)		68.4	7.0		34.7		65.8	27.2		64.7	30.4	
Queue Length 50th (ft)		127	0		79		46	392		44	401	
Queue Length 95th (ft)		179	23		132		#130	#668		#111	#648	
Internal Link Dist (ft)		579			346			467			89	
Turn Bay Length (ft)			100				110			100		
Base Capacity (vph)		306	482		377		127	953		127	897	
Starvation Cap Reductn		0	0		0		0	0		0	0	
Spillback Cap Reductn		0	0		0		0	0		0	0	
Storage Cap Reductn		0	0		0		0	0		0	0	
Reduced v/c Ratio		0.68	0.15		0.44		0.60	0.78		0.57	0.83	

Intersection Summary	
Area Type:	CBD
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	

Splits and Phases: 2: Metacom Ave & Bayview Ave/Commercial Driveway



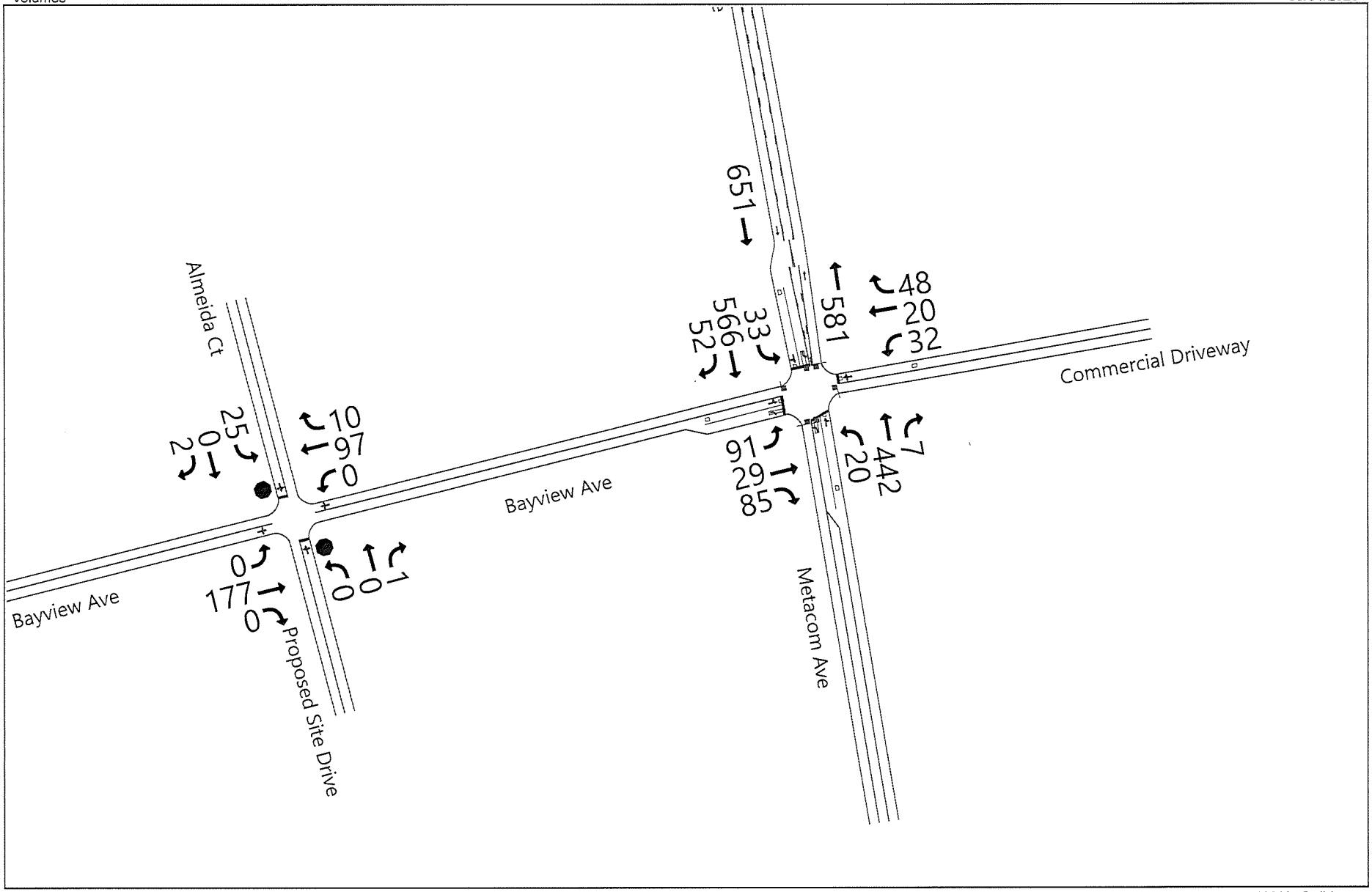
Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	8	193	0	1	219	23	0	0	0	32	0	5
Future Vol, veh/h	8	193	0	1	219	23	0	0	0	32	0	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	81	81	81	25	25	25	71	71	71
Heavy Vehicles, %	0	1	0	0	1	0	0	0	0	0	0	0
Mvmt Flow	9	219	0	1	270	28	0	0	0	45	0	7

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	299	0	0	219	0	0	510	539	219	525	525	285
Stage 1	-	-	-	-	-	-	238	238	-	287	287	-
Stage 2	-	-	-	-	-	-	273	301	-	238	238	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1274	-	-	1362	-	-	477	452	825	467	461	759
Stage 1	-	-	-	-	-	-	770	712	-	725	678	-
Stage 2	-	-	-	-	-	-	738	668	-	770	712	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1274	-	-	1362	-	-	468	448	825	462	456	759
Mov Cap-2 Maneuver	-	-	-	-	-	-	468	448	-	462	456	-
Stage 1	-	-	-	-	-	-	764	707	-	724	677	-
Stage 2	-	-	-	-	-	-	730	668	-	764	707	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.31	0.03	0	13.25
HCM LOS			A	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	72	-	-	7	-	-	488
HCM Lane V/C Ratio	-	0.007	-	-	0.001	-	-	0.107
HCM Ctrl Dly (s/v)	0	7.8	0	-	7.6	0	-	13.3
HCM Lane LOS	A	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	-	0	-	-	0	-	-	0.4


Almeida Ct
Bayview Ave
Bayview Ave
Proposed Site Drive
Metacom Ave
Commercial Driveway
651
581
48
20
32
33
566
52
25
0
2
10
97
0
91
29
85
7
442
20
0
177
0
0
0
1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	91	29	85	32	20	48	20	442	7	33	566	52
Future Volume (veh/h)	91	29	85	32	20	48	20	442	7	33	566	52
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1710	1657	1710	1670	1710	1710	1630	1657	1710	1710	1683	1657
Adj Flow Rate, veh/h	114	36	106	44	27	66	22	491	8	35	602	55
Peak Hour Factor	0.80	0.80	0.80	0.73	0.73	0.73	0.90	0.90	0.90	0.94	0.94	0.94
Percent Heavy Veh, %	0	4	0	3	0	0	6	4	0	0	2	4
Cap, veh/h	218	58	375	85	57	83	36	890	15	53	829	76
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.02	0.55	0.55	0.03	0.55	0.55
Sat Flow, veh/h	569	225	1449	122	222	320	1552	1625	26	1629	1520	139
Grp Volume(v), veh/h	150	0	106	137	0	0	22	0	499	35	0	657
Grp Sat Flow(s),veh/h/ln	793	0	1449	664	0	0	1552	0	1652	1629	0	1658
Q Serve(g_s), s	0.0	0.0	5.3	3.9	0.0	0.0	1.3	0.0	17.6	1.9	0.0	26.8
Cycle Q Clear(g_c), s	16.8	0.0	5.3	20.8	0.0	0.0	1.3	0.0	17.6	1.9	0.0	26.8
Prop In Lane	0.76		1.00	0.32		0.48	1.00		0.02	1.00		0.08
Lane Grp Cap(c), veh/h	276	0	375	225	0	0	36	0	905	53	0	905
V/C Ratio(X)	0.54	0.00	0.28	0.61	0.00	0.00	0.60	0.00	0.55	0.66	0.00	0.73
Avail Cap(c_a), veh/h	486	0	620	464	0	0	121	0	905	145	0	905
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	30.6	0.0	26.7	31.7	0.0	0.0	43.5	0.0	13.2	43.1	0.0	15.4
Incr Delay (d2), s/veh	1.1	0.0	0.3	1.8	0.0	0.0	10.4	0.0	2.4	9.3	0.0	5.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	0.0	1.8	3.0	0.0	0.0	0.6	0.0	6.3	0.9	0.0	10.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	31.7	0.0	27.0	33.5	0.0	0.0	53.9	0.0	15.6	52.3	0.0	20.5
LnGrp LOS	C		C	C			D		B	D		C
Approach Vol, veh/h		256			137			521			692	
Approach Delay, s/veh		29.8			33.5			17.2			22.1	
Approach LOS		C			C			B			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.9	54.3		28.8	7.1	54.1		28.8
Change Period (Y+Rc), s	4.0	5.0		5.5	5.0	5.0		* 5.5
Max Green Setting (Gmax), s	8.0	29.0		38.5	7.0	29.0		* 39
Max Q Clear Time (g_c+I1), s	3.9	19.6		18.8	3.3	28.8		22.8
Green Ext Time (p_c), s	0.0	1.6		0.9	0.0	0.1		0.5

Intersection Summary		
HCM 7th Control Delay, s/veh		22.7
HCM 7th LOS		C

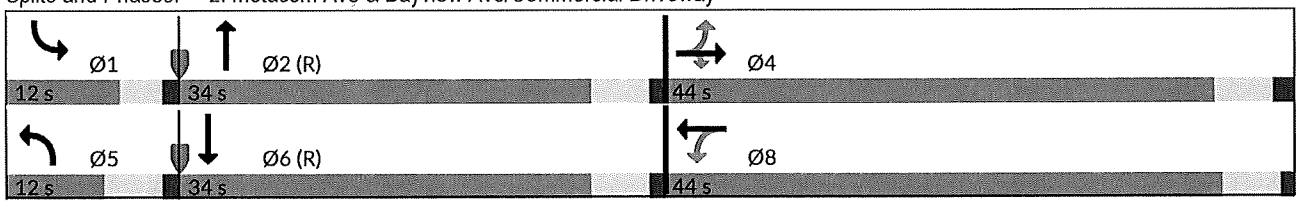
Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	91	29	85	32	20	48	20	442	7	33	566	52
Future Volume (vph)	91	29	85	32	20	48	20	442	7	33	566	52
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		100	0		0	110		0	100		0
Storage Lanes	0		1	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			25			40			40	
Link Distance (ft)		659			426			547			169	
Travel Time (s)		18.0			11.6			9.3			2.9	
Peak Hour Factor	0.80	0.80	0.80	0.73	0.73	0.73	0.90	0.90	0.90	0.94	0.94	0.94
Heavy Vehicles (%)	0%	4%	0%	3%	0%	0%	6%	4%	0%	0%	2%	4%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	150	106	0	137	0	22	499	0	35	657	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8								
Detector Phase	4	4	4	8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0		5.0	10.0		5.0	10.0	
Minimum Split (s)	20.5	20.5	20.5	20.0	20.0		10.0	19.0		9.0	22.0	
Total Split (s)	44.0	44.0	44.0	44.0	44.0		12.0	34.0		12.0	34.0	
Total Split (%)	48.9%	48.9%	48.9%	48.9%	48.9%		13.3%	37.8%		13.3%	37.8%	
Maximum Green (s)	38.5	38.5	38.5	39.0	39.0		7.0	29.0		8.0	29.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		3.0	4.0	
All-Red Time (s)	1.5	1.5	1.5	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.5	5.5		5.0		5.0	5.0		4.0	5.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.4	2.4	2.4	2.4	2.4		2.4	2.4		2.4	2.4	
Recall Mode	None	None	None	None	None		None	C-Min		None	C-Min	
Walk Time (s)	7.0	7.0	7.0	7.0	7.0			7.0			7.0	
Flash Don't Walk (s)	8.0	8.0	8.0	8.0	8.0			7.0			10.0	
Pedestrian Calls (#/hr)	0	0	0	0	0			0			0	
v/c Ratio		0.75	0.30		0.45		0.21	0.49		0.28	0.61	
Control Delay (s/veh)		56.6	8.1		21.0		43.4	14.2		44.3	16.3	
Queue Delay		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)		56.6	8.1		21.0		43.4	14.2		44.3	16.3	
Queue Length 50th (ft)		82	0		35		12	156		19	155	
Queue Length 95th (ft)		116	28		56		35	318		48	#530	
Internal Link Dist (ft)		579			346			467			89	
Turn Bay Length (ft)			100				110			100		
Base Capacity (vph)		473	682		621		123	1023		149	1070	
Starvation Cap Reductn		0	0		0		0	0		0	0	
Spillback Cap Reductn		0	0		0		0	0		0	0	
Storage Cap Reductn		0	0		0		0	0		0	0	
Reduced v/c Ratio		0.32	0.16		0.22		0.18	0.49		0.23	0.61	

Intersection Summary	
Area Type:	CBD
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	

Splits and Phases: 2: Metacom Ave & Bayview Ave/Commercial Driveway



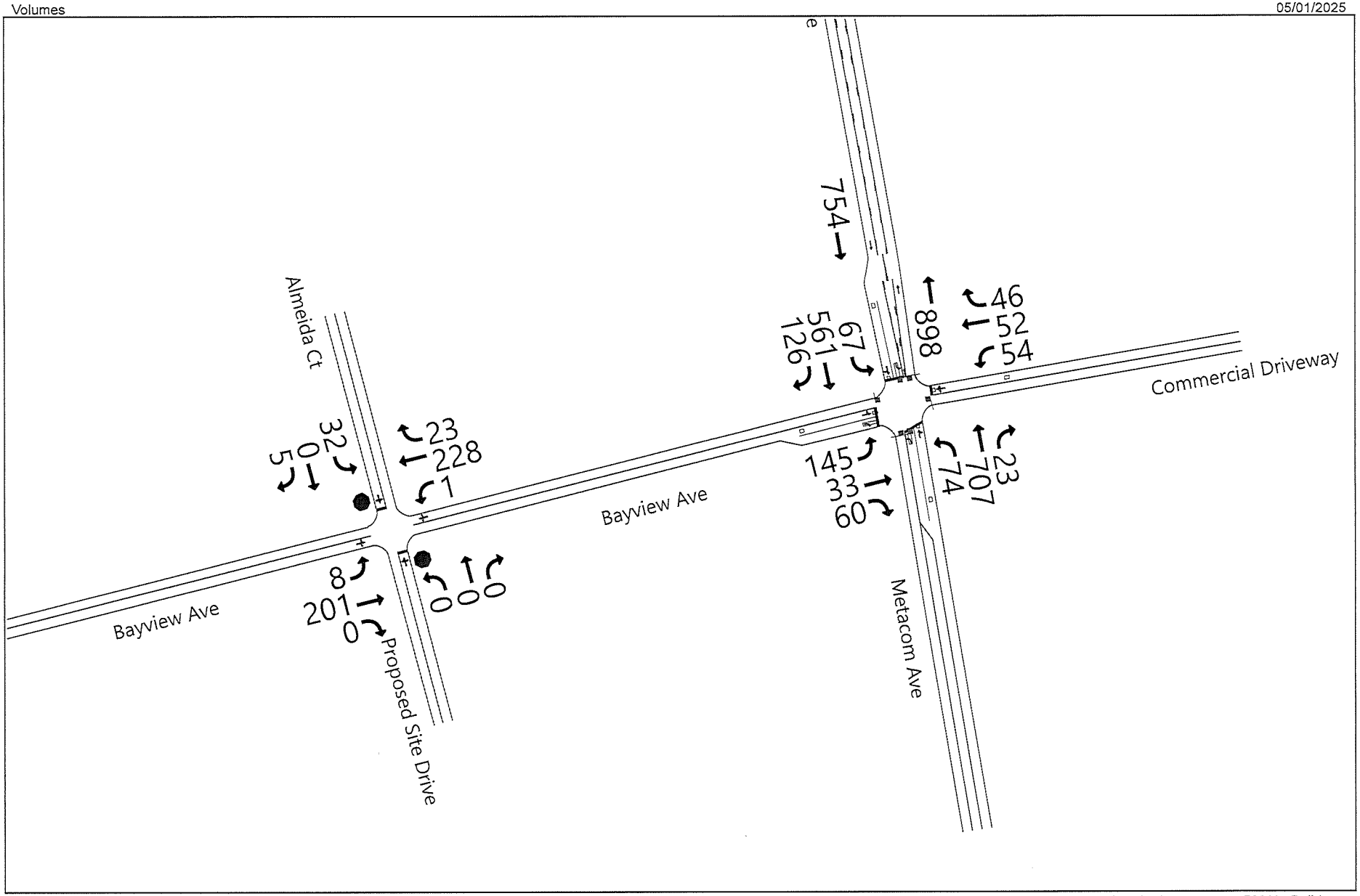
Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	177	0	0	97	10	0	0	1	25	0	2
Future Vol, veh/h	0	177	0	0	97	10	0	0	1	25	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	89	89	89	50	50	50	61	61	61
Heavy Vehicles, %	0	1	0	0	2	0	0	0	0	0	0	0
Mvmt Flow	0	221	0	0	109	11	0	0	2	41	0	3

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	120	0	0	221	0	0	330	341	221	336	336	115
Stage 1	-	-	-	-	-	-	221	221	-	115	115	-
Stage 2	-	-	-	-	-	-	109	120	-	221	221	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1480	-	-	1360	-	-	627	584	823	622	588	943
Stage 1	-	-	-	-	-	-	786	724	-	895	805	-
Stage 2	-	-	-	-	-	-	901	800	-	786	724	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1480	-	-	1360	-	-	625	584	823	620	588	943
Mov Cap-2 Maneuver	-	-	-	-	-	-	625	584	-	620	588	-
Stage 1	-	-	-	-	-	-	786	724	-	895	805	-
Stage 2	-	-	-	-	-	-	898	800	-	784	724	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0	0	9.38	11.08
HCM LOS			A	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	823	1480	-	-	1360	-	-	636
HCM Lane V/C Ratio	0.002	-	-	-	-	-	-	0.07
HCM Ctrl Dly (s/v)	9.4	0	-	-	0	-	-	11.1
HCM Lane LOS	A	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.2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898
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561
126
46
52
54
Commercial Driveway
Almeida Ct
32
0
5
23
228
1
Bayview Ave
145
33
60
74
707
23
Bayview Ave
8
201
0
0
0
0
Proposed Site Drive
Metacom Ave

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	145	33	60	54	52	46	74	707	23	67	561	126
Future Volume (veh/h)	145	33	60	54	52	46	74	707	23	67	561	126
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1697	1710	1710	1710	1683	1710	1710	1697	1710	1683	1710	1710
Adj Flow Rate, veh/h	177	40	73	61	59	52	79	752	24	75	630	142
Peak Hour Factor	0.82	0.82	0.82	0.88	0.88	0.88	0.94	0.94	0.94	0.89	0.89	0.89
Percent Heavy Veh, %	1	0	0	0	2	0	0	1	0	2	0	0
Cap, veh/h	238	39	435	49	40	18	98	813	26	93	655	148
Arrive On Green	0.30	0.30	0.30	0.30	0.30	0.30	0.06	0.50	0.50	0.06	0.49	0.49
Sat Flow, veh/h	575	130	1449	0	135	58	1629	1635	52	1603	1351	304
Grp Volume(v), veh/h	217	0	73	172	0	0	79	0	776	75	0	772
Grp Sat Flow(s),veh/h/ln	705	0	1449	193	0	0	1629	0	1687	1603	0	1655
Q Serve(g_s), s	0.0	0.0	3.7	0.0	0.0	0.0	4.8	0.0	42.8	4.6	0.0	45.0
Cycle Q Clear(g_c), s	30.0	0.0	3.7	30.0	0.0	0.0	4.8	0.0	42.8	4.6	0.0	45.0
Prop In Lane	0.82		1.00	0.35		0.30	1.00		0.03	1.00		0.18
Lane Grp Cap(c), veh/h	277	0	435	107	0	0	98	0	839	93	0	803
V/C Ratio(X)	0.78	0.00	0.17	1.61	0.00	0.00	0.81	0.00	0.93	0.81	0.00	0.96
Avail Cap(c_a), veh/h	277	0	435	107	0	0	98	0	839	112	0	811
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	35.4	0.0	25.8	34.7	0.0	0.0	46.4	0.0	23.4	46.5	0.0	24.9
Incr Delay (d2), s/veh	13.1	0.0	0.1	313.8	0.0	0.0	36.7	0.0	17.5	26.8	0.0	23.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.3	0.0	1.3	12.0	0.0	0.0	2.9	0.0	19.4	2.5	0.0	21.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	48.4	0.0	25.9	348.4	0.0	0.0	83.1	0.0	40.9	73.3	0.0	48.6
LnGrp LOS	D		C	F			F		D	E		D
Approach Vol, veh/h		290			172			855			847	
Approach Delay, s/veh		42.8			348.4			44.8			50.7	
Approach LOS		D			F			D			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.8	54.7		35.5	11.0	53.5		35.5
Change Period (Y+Rc), s	4.0	5.0		5.5	5.0	5.0		* 5.5
Max Green Setting (Gmax), s	7.0	49.0		29.5	6.0	49.0		* 30
Max Q Clear Time (g_c+I1), s	6.6	44.8		32.0	6.8	47.0		32.0
Green Ext Time (p_c), s	0.0	1.6		0.0	0.0	0.9		0.0

Intersection Summary		
HCM 7th Control Delay, s/veh		71.0
HCM 7th LOS		E

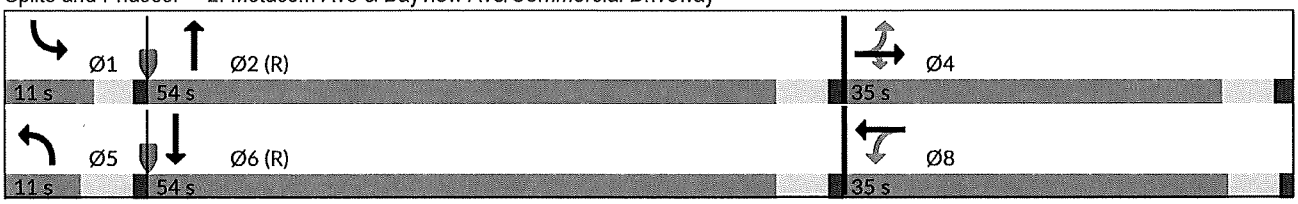
Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	145	33	60	54	52	46	74	707	23	67	561	126
Future Volume (vph)	145	33	60	54	52	46	74	707	23	67	561	126
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		100	0		0	110		0	100		0
Storage Lanes	0		1	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			25			40			40	
Link Distance (ft)		659			426			547			169	
Travel Time (s)		18.0			11.6			9.3			2.9	
Peak Hour Factor	0.82	0.82	0.82	0.88	0.88	0.88	0.94	0.94	0.94	0.89	0.89	0.89
Heavy Vehicles (%)	1%	0%	0%	0%	2%	0%	0%	1%	0%	2%	0%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	217	73	0	172	0	79	776	0	75	772	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8								
Detector Phase	4	4	4	8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0		5.0	10.0		5.0	10.0	
Minimum Split (s)	20.5	20.5	20.5	20.0	20.0		10.0	19.0		9.0	22.0	
Total Split (s)	35.0	35.0	35.0	35.0	35.0		11.0	54.0		11.0	54.0	
Total Split (%)	35.0%	35.0%	35.0%	35.0%	35.0%		11.0%	54.0%		11.0%	54.0%	
Maximum Green (s)	29.5	29.5	29.5	30.0	30.0		6.0	49.0		7.0	49.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		3.0	4.0	
All-Red Time (s)	1.5	1.5	1.5	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.5	5.5		5.0		5.0	5.0		4.0	5.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.4	2.4	2.4	2.4	2.4		2.4	2.4		2.4	2.4	
Recall Mode	None	None	None	None	None		None	C-Min		None	C-Min	
Walk Time (s)	7.0	7.0	7.0	7.0	7.0			7.0			7.0	
Flash Don't Walk (s)	8.0	8.0	8.0	8.0	8.0			7.0			10.0	
Pedestrian Calls (#/hr)	0	0	0	0	0			0			0	
v/c Ratio		0.88	0.18		0.55		0.64	0.83		0.62	0.87	
Control Delay (s/veh)		68.4	7.1		34.5		69.8	30.3		67.8	34.6	
Queue Delay		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)		68.4	7.1		34.5		69.8	30.3		67.8	34.6	
Queue Length 50th (ft)		131	0		82		48	437		46	440	
Queue Length 95th (ft)		187	25		138		#135	#713		#115	#691	
Internal Link Dist (ft)		579			346			467			89	
Turn Bay Length (ft)			100				110			100		
Base Capacity (vph)		304	482		374		124	940		125	884	
Starvation Cap Reductn		0	0		0		0	0		0	0	
Spillback Cap Reductn		0	0		0		0	0		0	0	
Storage Cap Reductn		0	0		0		0	0		0	0	
Reduced v/c Ratio		0.71	0.15		0.46		0.64	0.83		0.60	0.87	

Intersection Summary	
Area Type:	CBD
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	

Splits and Phases: 2: Metacom Ave & Bayview Ave/Commercial Driveway



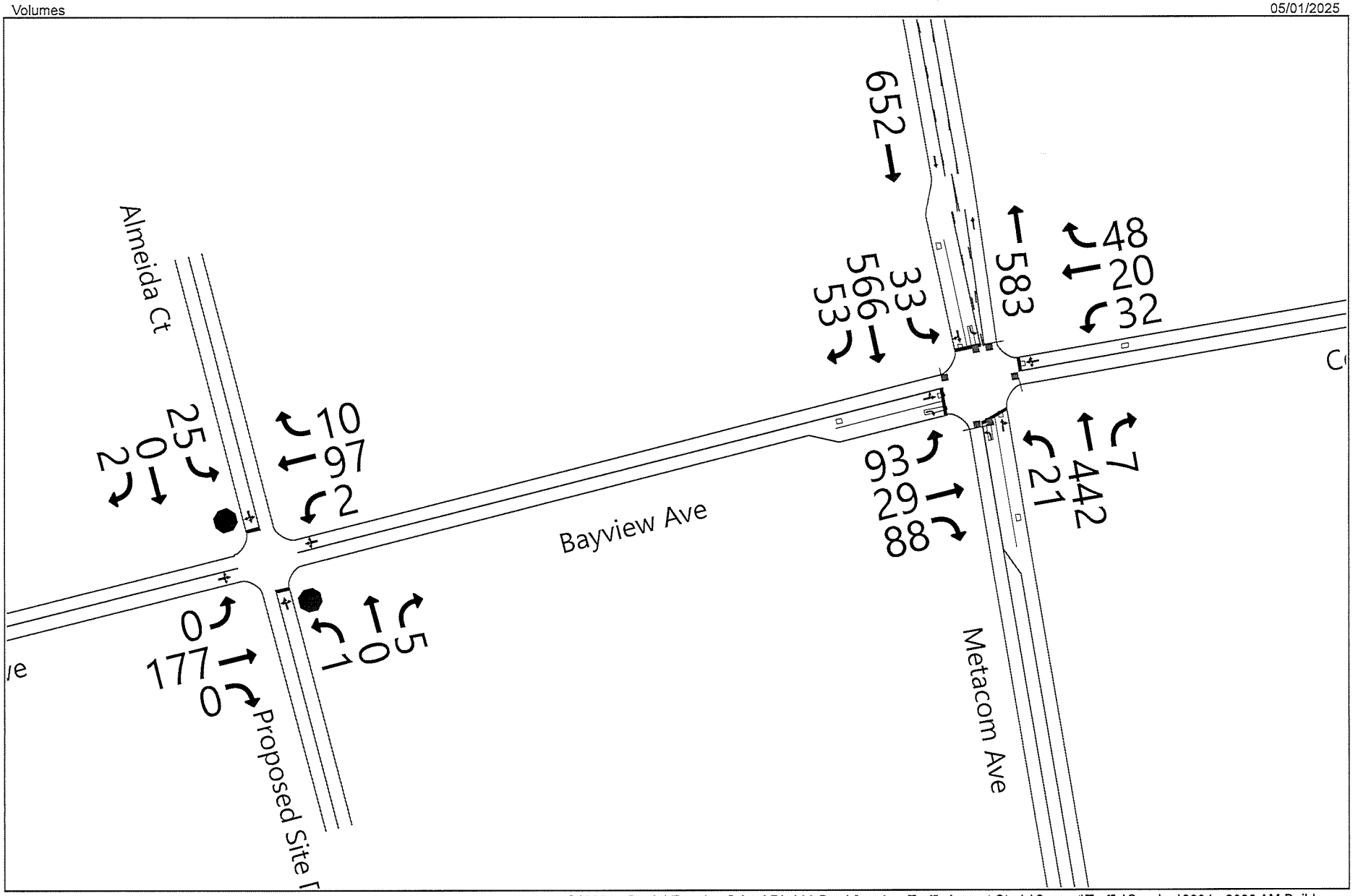
Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	8	201	0	1	228	23	0	0	0	32	0	5
Future Vol, veh/h	8	201	0	1	228	23	0	0	0	32	0	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	81	81	81	25	25	25	71	71	71
Heavy Vehicles, %	0	1	0	0	1	0	0	0	0	0	0	0
Mvmt Flow	9	228	0	1	281	28	0	0	0	45	0	7

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	310	0	0	228	0	0	531	559	228	545	545	296
Stage 1	-	-	-	-	-	-	247	247	-	298	298	-
Stage 2	-	-	-	-	-	-	284	312	-	247	247	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1262	-	-	1352	-	-	462	440	816	452	449	748
Stage 1	-	-	-	-	-	-	762	706	-	715	670	-
Stage 2	-	-	-	-	-	-	728	661	-	762	706	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1262	-	-	1352	-	-	454	436	816	448	444	748
Mov Cap-2 Maneuver	-	-	-	-	-	-	454	436	-	448	444	-
Stage 1	-	-	-	-	-	-	755	700	-	714	670	-
Stage 2	-	-	-	-	-	-	720	660	-	755	700	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.3	0.03	0	13.53
HCM LOS			A	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	69	-	-	7	-	-	474
HCM Lane V/C Ratio	-	0.007	-	-	0.001	-	-	0.11
HCM Ctrl Dly (s/v)	0	7.9	0	-	7.7	0	-	13.5
HCM Lane LOS	A	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	-	0	-	-	0	-	-	0.4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Almeida Ct
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2
10
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Bayview Ave
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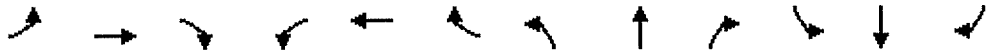
29
88
7
442
21
0
177
0
10
5
Proposed Site
Metacom Ave



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	93	29	88	32	20	48	21	442	7	33	566	53
Future Volume (veh/h)	93	29	88	32	20	48	21	442	7	33	566	53
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1710	1657	1710	1670	1710	1710	1630	1657	1710	1710	1683	1657
Adj Flow Rate, veh/h	116	36	110	44	27	66	23	491	8	35	602	56
Peak Hour Factor	0.80	0.80	0.80	0.73	0.73	0.73	0.90	0.90	0.90	0.94	0.94	0.94
Percent Heavy Veh, %	0	4	0	3	0	0	6	4	0	0	2	4
Cap, veh/h	220	58	381	84	57	83	38	884	14	53	820	76
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.02	0.54	0.54	0.03	0.54	0.54
Sat Flow, veh/h	568	220	1449	120	218	315	1552	1625	26	1629	1517	141
Grp Volume(v), veh/h	152	0	110	137	0	0	23	0	499	35	0	658
Grp Sat Flow(s),veh/h/ln	787	0	1449	653	0	0	1552	0	1652	1629	0	1658
Q Serve(g_s), s	0.0	0.0	5.4	3.9	0.0	0.0	1.3	0.0	17.8	1.9	0.0	27.2
Cycle Q Clear(g_c), s	17.2	0.0	5.4	21.1	0.0	0.0	1.3	0.0	17.8	1.9	0.0	27.2
Prop In Lane	0.76		1.00	0.32		0.48	1.00		0.02	1.00		0.09
Lane Grp Cap(c), veh/h	277	0	381	224	0	0	38	0	898	53	0	896
V/C Ratio(X)	0.55	0.00	0.29	0.61	0.00	0.00	0.61	0.00	0.56	0.66	0.00	0.73
Avail Cap(c_a), veh/h	483	0	620	458	0	0	121	0	898	145	0	896
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	30.4	0.0	26.5	31.5	0.0	0.0	43.5	0.0	13.4	43.1	0.0	15.7
Incr Delay (d2), s/veh	1.1	0.0	0.3	1.8	0.0	0.0	10.3	0.0	2.5	9.3	0.0	5.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	0.0	1.9	3.0	0.0	0.0	0.6	0.0	6.4	0.9	0.0	10.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	31.6	0.0	26.7	33.3	0.0	0.0	53.8	0.0	15.9	52.3	0.0	21.0
LnGrp LOS	C		C	C			D		B	D		C
Approach Vol, veh/h		262			137			522			693	
Approach Delay, s/veh		29.6			33.3			17.6			22.6	
Approach LOS		C			C			B			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.9	53.9		29.2	7.2	53.7		29.2
Change Period (Y+Rc), s	4.0	5.0		5.5	5.0	5.0		* 5.5
Max Green Setting (Gmax), s	8.0	29.0		38.5	7.0	29.0		* 39
Max Q Clear Time (g_c+I1), s	3.9	19.8		19.2	3.3	29.2		23.1
Green Ext Time (p_c), s	0.0	1.6		0.9	0.0	0.0		0.5

Intersection Summary	
HCM 7th Control Delay, s/veh	23.0
HCM 7th LOS	C

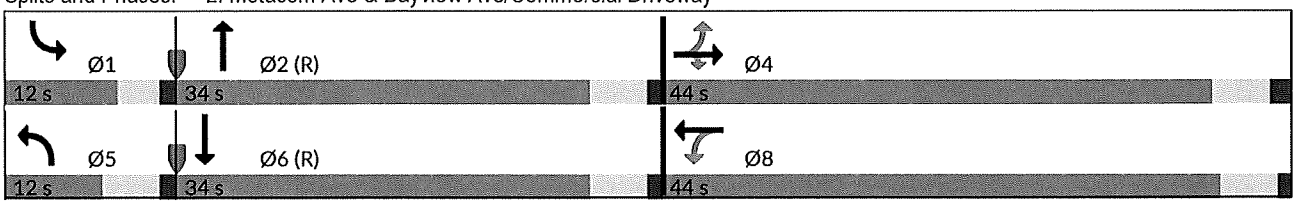
Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	93	29	88	32	20	48	21	442	7	33	566	53
Future Volume (vph)	93	29	88	32	20	48	21	442	7	33	566	53
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		100	0		0	110		0	100		0
Storage Lanes	0		1	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			25			40			40	
Link Distance (ft)		659			426			547			169	
Travel Time (s)		18.0			11.6			9.3			2.9	
Peak Hour Factor	0.80	0.80	0.80	0.73	0.73	0.73	0.90	0.90	0.90	0.94	0.94	0.94
Heavy Vehicles (%)	0%	4%	0%	3%	0%	0%	6%	4%	0%	0%	2%	4%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	152	110	0	137	0	23	499	0	35	658	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8								
Detector Phase	4	4	4	8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0		5.0	10.0		5.0	10.0	
Minimum Split (s)	20.5	20.5	20.5	20.0	20.0		10.0	19.0		9.0	22.0	
Total Split (s)	44.0	44.0	44.0	44.0	44.0		12.0	34.0		12.0	34.0	
Total Split (%)	48.9%	48.9%	48.9%	48.9%	48.9%		13.3%	37.8%		13.3%	37.8%	
Maximum Green (s)	38.5	38.5	38.5	39.0	39.0		7.0	29.0		8.0	29.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		3.0	4.0	
All-Red Time (s)	1.5	1.5	1.5	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.5	5.5		5.0		5.0	5.0		4.0	5.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.4	2.4	2.4	2.4	2.4		2.4	2.4		2.4	2.4	
Recall Mode	None	None	None	None	None		None	C-Min		None	C-Min	
Walk Time (s)	7.0	7.0	7.0	7.0	7.0			7.0			7.0	
Flash Don't Walk (s)	8.0	8.0	8.0	8.0	8.0			7.0			10.0	
Pedestrian Calls (#/hr)	0	0	0	0	0			0			0	
v/c Ratio		0.76	0.31		0.45		0.21	0.49		0.28	0.62	
Control Delay (s/veh)		57.0	8.1		20.9		43.4	14.3		44.3	16.5	
Queue Delay		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)		57.0	8.1		20.9		43.4	14.3		44.3	16.5	
Queue Length 50th (ft)		83	0		35		13	157		19	157	
Queue Length 95th (ft)		117	28		56		36	319		48	#533	
Internal Link Dist (ft)		579			346			467			89	
Turn Bay Length (ft)			100				110			100		
Base Capacity (vph)		473	684		621		124	1022		149	1067	
Starvation Cap Reductn		0	0		0		0	0		0	0	
Spillback Cap Reductn		0	0		0		0	0		0	0	
Storage Cap Reductn		0	0		0		0	0		0	0	
Reduced v/c Ratio		0.32	0.16		0.22		0.19	0.49		0.23	0.62	

Intersection Summary	
Area Type:	CBD
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	

Splits and Phases: 2: Metacom Ave & Bayview Ave/Commercial Driveway



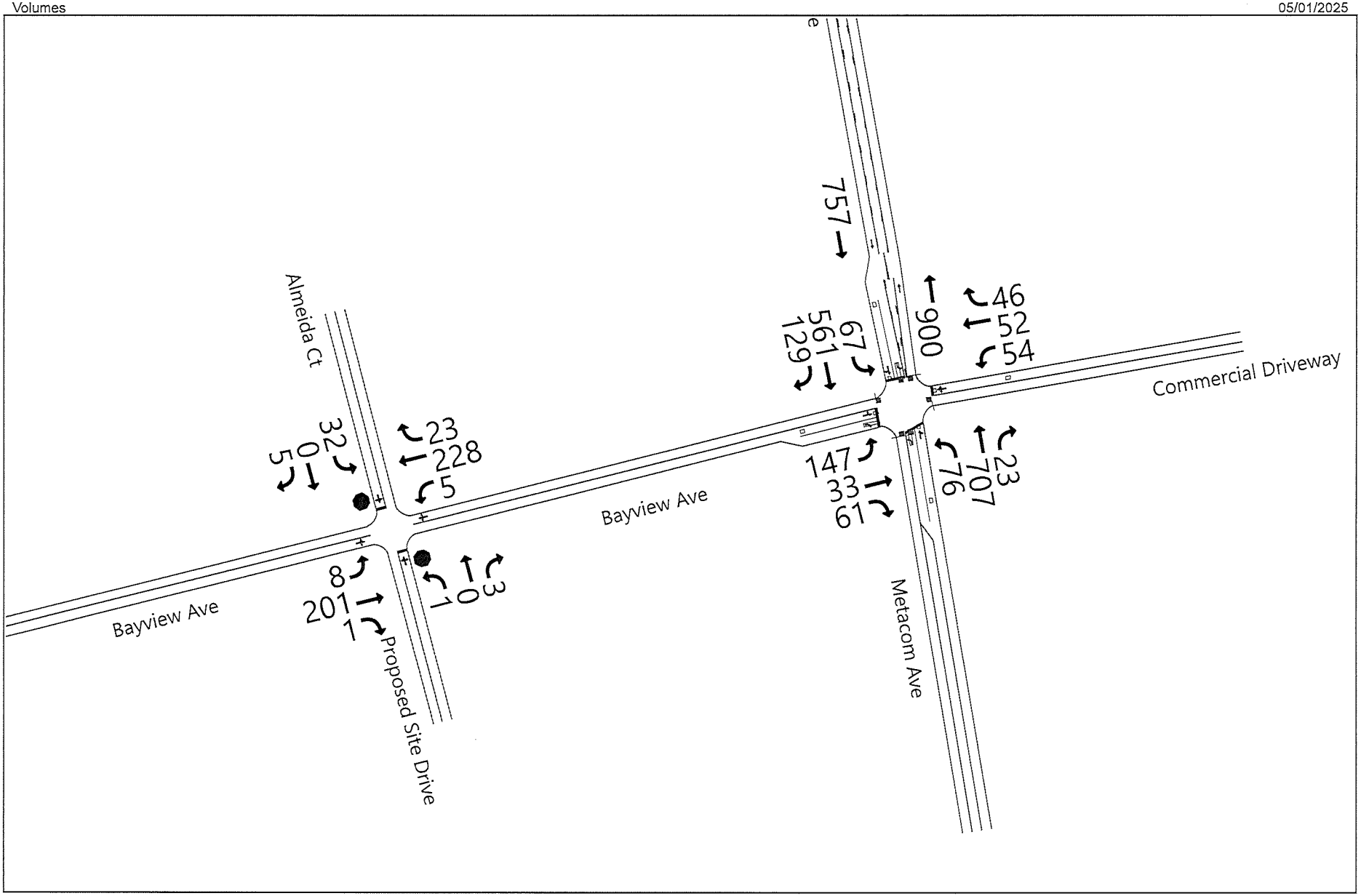
Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	177	0	2	97	10	1	0	5	25	0	2
Future Vol, veh/h	0	177	0	2	97	10	1	0	5	25	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	89	89	89	50	50	50	61	61	61
Heavy Vehicles, %	0	1	0	0	2	0	0	0	0	0	0	0
Mvmt Flow	0	221	0	2	109	11	2	0	10	41	0	3

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	120	0	0	221	0	0	335	346	221	340	340	115
Stage 1	-	-	-	-	-	-	221	221	-	119	119	-
Stage 2	-	-	-	-	-	-	113	125	-	221	221	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1480	-	-	1360	-	-	623	580	823	617	585	943
Stage 1	-	-	-	-	-	-	786	724	-	890	801	-
Stage 2	-	-	-	-	-	-	896	797	-	786	724	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1480	-	-	1360	-	-	619	579	823	609	584	943
Mov Cap-2 Maneuver	-	-	-	-	-	-	619	579	-	609	584	-
Stage 1	-	-	-	-	-	-	786	724	-	889	800	-
Stage 2	-	-	-	-	-	-	892	795	-	776	724	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0	0.14	9.68	11.2
HCM LOS			A	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	781	1480	-	-	32	-	-	625
HCM Lane V/C Ratio	0.015	-	-	-	0.002	-	-	0.071
HCM Ctrl Dly (s/v)	9.7	0	-	-	7.7	0	-	11.2
HCM Lane LOS	A	A	-	-	A	A	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.2


e
757
900
67
561
129
46
52
54
Commercial Driveway
Almeida Ct
32
0
5
23
228
5
Bayview Ave
147
33
61
76
707
23
Bayview Ave
8
201
1
1
0
3
Proposed Site Drive
Metacom Ave

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	147	33	61	54	52	46	76	707	23	67	561	129
Future Volume (veh/h)	147	33	61	54	52	46	76	707	23	67	561	129
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1697	1710	1710	1710	1683	1710	1710	1697	1710	1683	1710	1710
Adj Flow Rate, veh/h	179	40	74	61	59	52	81	752	24	75	630	145
Peak Hour Factor	0.82	0.82	0.82	0.88	0.88	0.88	0.94	0.94	0.94	0.89	0.89	0.89
Percent Heavy Veh, %	1	0	0	0	2	0	0	1	0	2	0	0
Cap, veh/h	238	39	435	49	40	18	98	813	26	93	652	150
Arrive On Green	0.30	0.30	0.30	0.30	0.30	0.30	0.06	0.50	0.50	0.06	0.49	0.49
Sat Flow, veh/h	576	129	1449	0	135	58	1629	1635	52	1603	1345	310
Grp Volume(v), veh/h	219	0	74	172	0	0	81	0	776	75	0	775
Grp Sat Flow(s),veh/h/ln	704	0	1449	193	0	0	1629	0	1687	1603	0	1654
Q Serve(g_s), s	0.0	0.0	3.8	0.0	0.0	0.0	4.9	0.0	42.8	4.6	0.0	45.4
Cycle Q Clear(g_c), s	30.0	0.0	3.8	30.0	0.0	0.0	4.9	0.0	42.8	4.6	0.0	45.4
Prop In Lane	0.82		1.00	0.35		0.30	1.00		0.03	1.00		0.19
Lane Grp Cap(c), veh/h	277	0	435	107	0	0	98	0	839	93	0	802
V/C Ratio(X)	0.79	0.00	0.17	1.61	0.00	0.00	0.83	0.00	0.93	0.81	0.00	0.97
Avail Cap(c_a), veh/h	277	0	435	107	0	0	98	0	839	112	0	811
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	35.5	0.0	25.8	34.7	0.0	0.0	46.5	0.0	23.4	46.5	0.0	24.9
Incr Delay (d2), s/veh	13.8	0.0	0.1	313.8	0.0	0.0	41.2	0.0	17.5	26.8	0.0	24.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.4	0.0	1.3	12.0	0.0	0.0	3.1	0.0	19.4	2.5	0.0	21.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	49.4	0.0	25.9	348.4	0.0	0.0	87.7	0.0	40.9	73.3	0.0	49.4
LnGrp LOS	D		C	F			F		D	E		D
Approach Vol, veh/h		293			172			857			850	
Approach Delay, s/veh		43.4			348.4			45.3			51.5	
Approach LOS		D			F			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.8	54.7		35.5	11.0	53.5		35.5				
Change Period (Y+Rc), s	4.0	5.0		5.5	5.0	5.0		* 5.5				
Max Green Setting (Gmax), s	7.0	49.0		29.5	6.0	49.0		* 30				
Max Q Clear Time (g_c+I1), s	6.6	44.8		32.0	6.9	47.4		32.0				
Green Ext Time (p_c), s	0.0	1.6		0.0	0.0	0.7		0.0				

Intersection Summary	
HCM 7th Control Delay, s/veh	71.5
HCM 7th LOS	E

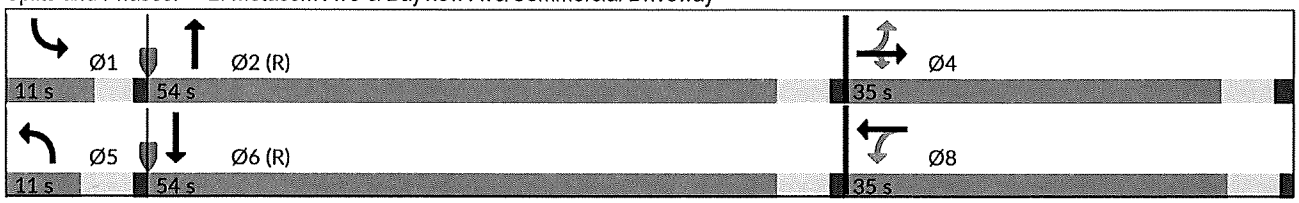
Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	147	33	61	54	52	46	76	707	23	67	561	129
Future Volume (vph)	147	33	61	54	52	46	76	707	23	67	561	129
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		100	0		0	110		0	100		0
Storage Lanes	0		1	0		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		25			25			40			40	
Link Distance (ft)		659			426			547			169	
Travel Time (s)		18.0			11.6			9.3			2.9	
Peak Hour Factor	0.82	0.82	0.82	0.88	0.88	0.88	0.94	0.94	0.94	0.89	0.89	0.89
Heavy Vehicles (%)	1%	0%	0%	0%	2%	0%	0%	1%	0%	2%	0%	0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	219	74	0	172	0	81	776	0	75	775	0
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8								
Detector Phase	4	4	4	8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	8.0	8.0	8.0	8.0	8.0		5.0	10.0		5.0	10.0	
Minimum Split (s)	20.5	20.5	20.5	20.0	20.0		10.0	19.0		9.0	22.0	
Total Split (s)	35.0	35.0	35.0	35.0	35.0		11.0	54.0		11.0	54.0	
Total Split (%)	35.0%	35.0%	35.0%	35.0%	35.0%		11.0%	54.0%		11.0%	54.0%	
Maximum Green (s)	29.5	29.5	29.5	30.0	30.0		6.0	49.0		7.0	49.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		3.0	4.0	
All-Red Time (s)	1.5	1.5	1.5	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.5	5.5		5.0		5.0	5.0		4.0	5.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	2.4	2.4	2.4	2.4	2.4		2.4	2.4		2.4	2.4	
Recall Mode	None	None	None	None	None		None	C-Min		None	C-Min	
Walk Time (s)	7.0	7.0	7.0	7.0	7.0			7.0			7.0	
Flash Don't Walk (s)	8.0	8.0	8.0	8.0	8.0			7.0			10.0	
Pedestrian Calls (#/hr)	0	0	0	0	0			0			0	
v/c Ratio		0.88	0.18		0.55		0.65	0.83		0.62	0.88	
Control Delay (s/veh)		68.5	7.2		34.3		71.0	30.5		68.0	35.4	
Queue Delay		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)		68.5	7.2		34.3		71.0	30.5		68.0	35.4	
Queue Length 50th (ft)		132	0		82		50	440		46	443	
Queue Length 95th (ft)		189	25		138		#139	#713		#115	#696	
Internal Link Dist (ft)		579			346			467			89	
Turn Bay Length (ft)			100				110			100		
Base Capacity (vph)		304	482		373		124	938		124	881	
Starvation Cap Reductn		0	0		0		0	0		0	0	
Spillback Cap Reductn		0	0		0		0	0		0	0	
Storage Cap Reductn		0	0		0		0	0		0	0	
Reduced v/c Ratio		0.72	0.15		0.46		0.65	0.83		0.60	0.88	

Intersection Summary	
Area Type:	CBD
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	

Splits and Phases: 2: Metacom Ave & Bayview Ave/Commercial Driveway



Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	8	201	1	5	228	23	1	0	3	32	0	5
Future Vol, veh/h	8	201	1	5	228	23	1	0	3	32	0	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	81	81	81	25	25	25	71	71	71
Heavy Vehicles, %	0	1	0	0	1	0	0	0	0	0	0	0
Mvmt Flow	9	228	1	6	281	28	4	0	12	45	0	7

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	310	0	0	230	0	0	541	569	229	555	556	296
Stage 1	-	-	-	-	-	-	247	247	-	308	308	-
Stage 2	-	-	-	-	-	-	294	322	-	247	248	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1262	-	-	1350	-	-	455	434	815	446	442	748
Stage 1	-	-	-	-	-	-	761	706	-	706	664	-
Stage 2	-	-	-	-	-	-	719	654	-	762	705	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1262	-	-	1350	-	-	445	428	815	433	436	748
Mov Cap-2 Maneuver	-	-	-	-	-	-	445	428	-	433	436	-
Stage 1	-	-	-	-	-	-	755	700	-	702	660	-
Stage 2	-	-	-	-	-	-	708	651	-	744	699	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.3	0.15	10.47	13.84
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	675	69	-	-	35	-	-	459
HCM Lane V/C Ratio	0.024	0.007	-	-	0.005	-	-	0.113
HCM Ctrl Dly (s/v)	10.5	7.9	0	-	7.7	0	-	13.8
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.4

COLLISION DIAGRAM

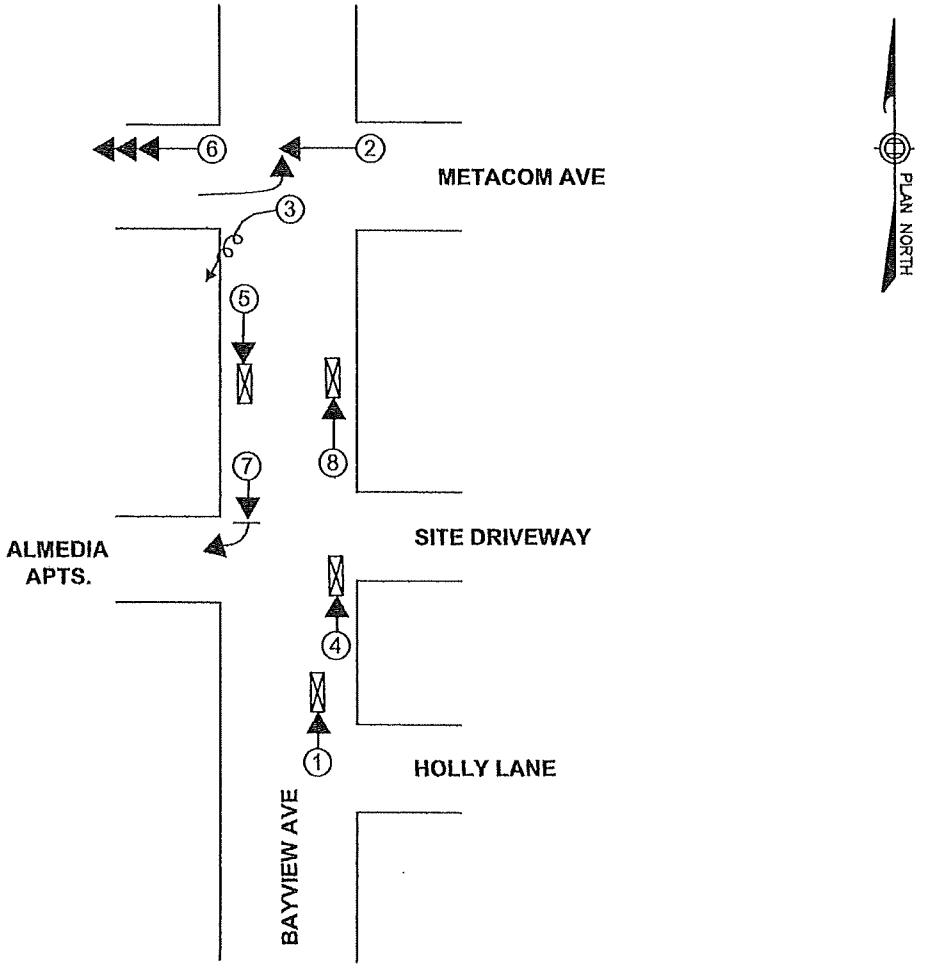
COLLISION DIAGRAM

EAST/WEST: BAYVIEW AVE

BETWEEN HOLLY LANE & METACOM AVE

TIME PERIOD: JANUARY 2019 - DECEMBER 2021

DATE: 08-02-2022



LEGEND

Moving Vehicle	Driver at Fault	Light:	Weather:	Surface:
Parked Vehicle	Pedestrian	L = Daylight	X = Other/Unknown	D = Dry
X Fixed Object	Bicycle/Moped	DN = Dawn	S = Snow/Ice	W = Wet
Head On	○ Deer/Animal	DU = Dusk	R = Rain	S = Snow/Ice
Rear End	Ⓚ Fatal Crash	D = Dark	C = Clear or Cloudy	X = Other/Unknown
Right Angle	Ⓐ Injury Crash A	X = Other/Unknown		
Turning	Ⓑ Injury Crash B			
Backing	Ⓒ Injury Crash C			
Sideswipe	Ⓞ Property Damage Only Crash			
Out of Control				

• Civil
• Transportation
• Environmental
• Site Planning
• Land Surveying

CROSSMAN ENGINEERING

151 Centerville Road | Warwick, Rhode Island 02886
Phone: (401) 738-5660 | Fax: (401) 738-8157

Email: cel@crossmaneng.com

PROJECT TITLE:

COLLISION DIAGRAM
PROPOSED 20 UNIT APARTMENTS AT 206 BAYVIEW AVE
BRISTOL, RI

DATE: AUGUST 2022

SCALE: NOT TO SCALE

REVISIONS:

FUTURE TRAFFIC GROWTH

VMT

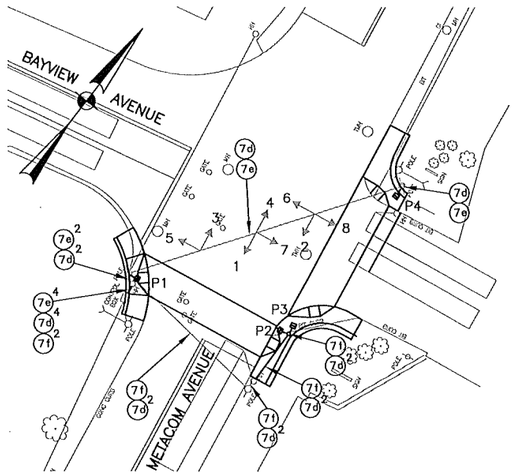
	2019	2025	2030	2035	2040	2045
Scituate	379,487	400,565	415,505	424,211	423,195	434,742
Johnston	952,470	982,461	1,003,677	1,010,589	1,014,466	1,026,987
Woonsocket	339,699	344,268	347,506	347,395	346,037	348,613
Bristol	235,402	243,264	249,028	252,218	254,568	255,977

Delta	2019	2025	2030	2035	2040	2045
Scituate	-	5.55%	3.73%	2.10%	-0.24%	2.73%
Johnston	-	3.15%	2.16%	0.69%	0.38%	1.23%
Woonsocket	-	1.35%	0.94%	-0.03%	-0.39%	0.74%
Bristol	-	3.34%	2.37%	1.28%	0.93%	0.55%

Information received from the RI department of Administration on Future Traffic Increases

RIDOT SIGNAL PLAN & TIMINGS

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	RI	STP-AWDA(025)	2012	V1_049	V1_049



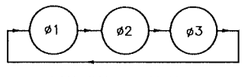
WIRING DIAGRAM

			SEQUENCE AND TIMING DIAGRAM									
APPROACH	DIRECTION	HOUSING	ø1			ø2			ø3			FLASHING OPERATION
MINIMUM INTERVAL			5			5			5			
VEHICLE EXTENSION			2.1			2.4			2.4			
MAXIMUM 1			8			47			25			
MAXIMUM 2			5			41			20			
YELLOW CLEARANCE				3			4			4		
RED CLEARANCE					1			1			1	
PED. WALK/CLEARANCE						4/9			4/10			
METACOM AVENUE	NB	1	G/G	G/Y	G	G	Y	R	R	R	R	Y
METACOM AVENUE	SB	3,4	R	R	R	G	Y	R	R	R	R	Y
METACOM AVENUE	NB	2	R	R	R	G	Y	R	R	R	R	Y
BAYVIEW AVENUE	EB	5,6	R	R	R	R	R	R	G	Y	R	R
CVS ACCESS ROAD	WB	7,8	R	R	R	R	R	R	G	Y	R	R
PEDESTRIAN		P1, P2	DW	DW	DW	DW	DW	DW	W/FDW	DW	DW	DARK
PEDESTRIAN		P3, P4	DW	DW	DW	W/FDW	DW	DW	DW	DW	DW	DARK
DETECTOR			NON-LOCK			NON-LOCK			NON-LOCK			
RECALL			SOFT			OFF			OFF			

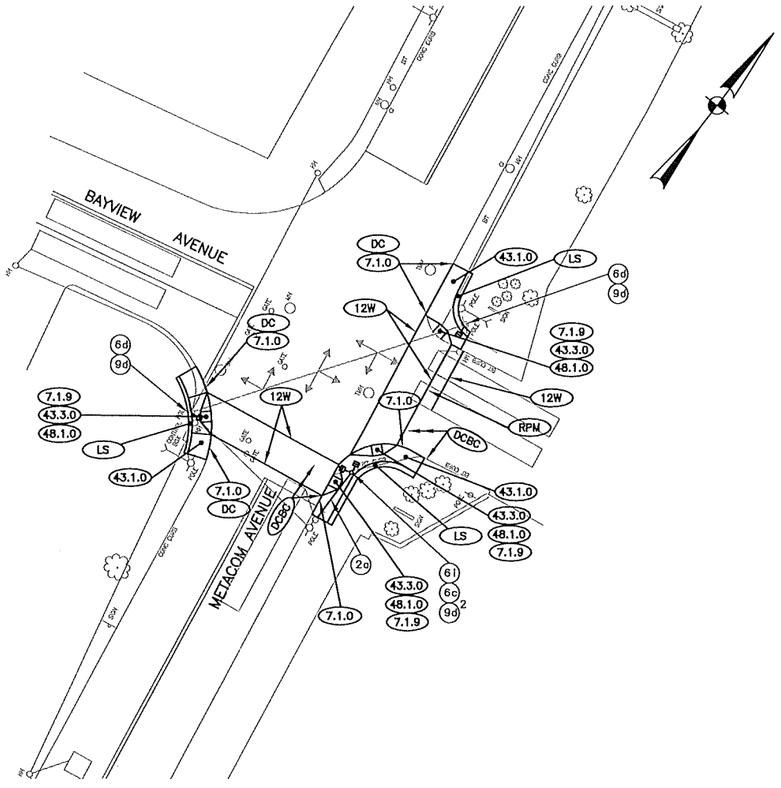
SEQUENCE AND TIMING NOTES:
1. MAXIMUM 1 = AM PEAK
2. MAXIMUM 2 = PM PEAK
3. PED. W/FDW UPON PUSHBUTTON ACTUATION ONLY

ø1	ø2	ø3	ø4
			NOT USED

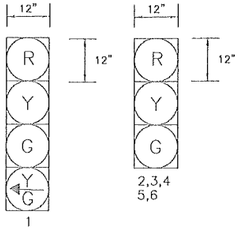
PHASING AND TIMING DIAGRAM



PHASING SEQUENCE



EXISTING SIGNAL FACES



PROPOSED SIGNAL FACES

COUNTDOWN PEDESTRIAN SIGNAL
P1, P2, P3, P4

NOTE: HAND / PERSON SYMBOL SHALL BE FILLED.

TRAFFIC SIGNAL LEGEND

T05.0100 1a	Precast Type A Handhole Standard 18.2.0
T06.5030 2a	3 Inch Polyvinyl Chloride Plastic Conduit Underground
T11.2008 6a	Traffic Signal Standard, 8 foot, std. 19.4.0
T11.2010 6i	Traffic Signal Standard 10ft Std. 19.4.0 Aluminum Pedestal Pole and Foundation.
T04.5303 7d	14 AWG 3 Conductor Cable
T04.5305 7e	14 AWG 5 Conductor Cable
T04.5307 7f	14 AWG 7 Conductor Cable
T04.9901 7j	36 Strand Single Mode Fiber Optic Cable
T05.9902 8d	Dual 1 ¼" HDPE Duct (Under Exist. Pvmt.)
T05.9903 8c	Dual 1 ¼" HDPE Duct (underground)
T06.9901 2a	4 Inch Polyvinyl Chloride Plastic Conduit (Schedule 80) (Underground)
T14.3911 6b	Pedestrian Signal Head, 1 Way, 12 Inch Pedestal Mounted (Top Post) with Countdown Pedestrian Signal
T14.3912 6c	Pedestrian Signal Head, 2 Way, 12 Inch Pedestal Mounted with Countdown Pedestrian Signal
T14.3913 6d	Pedestrian Signal Head, 1 Way, 12 Inch Bracket Mounted with Countdown Pedestrian Signal
T13.1000 9a	Traffic Detector Loop Std. 19.6.0
T13.8200 9d	Pedestrian Detector – Pushbutton with Sign RP-1000
T13.9901 10a	Global Positioning Satellite (GPS) Clock Assembly

FIBER OPTIC LEGEND

T05.9901 8b	Fiber Optic Handhole
T06.9901 2p	4 Inch Polyvinyl Chloride Plastic Conduit (Schedule 80) (Under Existing Pavement)

0 10' 20' 40'
SCALE: 1"=20'

Maguire Group Inc.
Architects/Engineers/Planners
225 Chapman Street
Providence, Rhode Island 02905

REVISIONS		
NO.	DATE	BY

TRAFFIC SIGNAL 296

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

ADA IMPROVEMENTS TO
METACOM AVENUE (RTE. 136)
WARREN, RHODE ISLAND

TRAFFIC SIGNAL PLAN #6
METACOM / BAYVIEW AVE.

CHECKED BY _____ DATE _____ SCALE _____

0078X_V1_049_TSIGNAL006

S:\PROJECTS\14581.00-RI_DOT-ADA_Improvements\Metacom_Avenue-Warren\ACAD\HIWY\Plans\Traffic\0078X_V1_049_TSIGNAL006.dwg, 6/22/2012 11:50:48 AM

RHODE ISLAND DEPARTMENT OF TRANSPORTATION
TRAFFIC ENGINEERING DESIGN SECTION
TRAFFIC SIGNAL TIMING SHEET

City or town: BRISTOL
Major Road: METACOM AVE (RT 136)
Minor Street: BAYVIEW AVE / DRIVEWAY

Traffic Signal #: 296
Today's Date: 3/5/20
Last Update: / /

Controller Make: SIEMENS Model: 8132-1900-018 Serial No.: 164489
Firmware: SEPAC 3.58d (MAR 2018) LINUX

Phase 1 RT 136 SBLT Phase 2 RT 136 NB Phase 3 _____ Phase 4 BAYVIEW
Phase 5 RT 136 NBLT Phase 6 RT 136 SB Phase 7 _____ Phase 8 DRIVEWAY
Phase _____ Phase _____ Phase _____ Phase _____

BASIC TIMING:

Phase	1	2	3	4	5	6	7	8	
Min Green	5	10		8	5	10		8	
Passage	2.4	2.4		2.4	2.4	2.4		2.4	
Max Green 1	8	50		20	8	50		20	
Max Green 2	8	50		20	8	50		20	
Yellow	3	4		4	4	4		4	
Red	1	1		1.5	1	1		1	
Ped. Walk		7		7		7		7	
Ped. Clear		7		8		10		8	
Recall		SOFT				SOFT			
Memory – On/Off	NL	NL		NL	NL	NL		NL	
Delay									

COORDINATION: ϕ4 + ϕ8 = DUAL ENTRY NO FDW THRU Y OR R (EXTPCL = 0)

Setup		Coordinated phase(s)				X				X			
Oper.	1	D/S/O	Off.	Cycle									
Mode	0	1/2/1	26	90	12	34		44	12	34		44	
Max.	0	2/2/1	8	100	11	54		35	11	54		35	
Corr.	2	3/2/1	8	100	11	54		35	11	54		35	
Ofst.	0												
Prc. Off	0												
MD = 20													

YP = 6 TIME OF DAY:
CZ = 2400
DST OK
GPS OK

~~Weekdays~~ ALL DAYS		~~Weekends~~	
D/S/O, Max 2 or 3, etc.	Time	D/S/O, Max 2 or 3, etc.	Time
1/2/1	0630 - 0900		
2/2/1	0900 - 1400		
3/2/1	1400 - 1900		
2/2/1	1900 - 2200		

Comments: ① TIMINGS FINE-TUNED FOR SILVER CREEK (HOPE ST) DETOUR

These timings have been field recorded or adjusted by JF/MDL - VHB Date 3/5/20