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TRAFFIC IMPACT ANALYSIS

FOR

ONE BAY URBAN RENEWAL LLC

PROPOSED MEDICAL OFFICE BUILDING

BLOCK 4215, LOT 1
TOWNSHIP OF MONTCLAIR
BLOCK 106, LOT 15
BOROUGH OF GLEN RIDGE
1 BAY AVENUE (CR 654)
ESSEX COUNTY, NEW JERSEY

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Revised: March 15, 2018
December 8, 2017
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INTRODUCTION

Atlantic Traffic & Design Engineers, Inc. (ATDE) has prepared this revised Traffic Impact Analysis to examine the future traffic impacts of a medical office building proposed in the Township of Montclair and the Borough of Glen Ridge. The subject site is located on the northeast quadrant of the Bay Avenue (CR 654) intersection with Walnut Crescent, adjacent to the Mountainside Hospital in the Township of Montclair/Borough of Glen Ridge, Essex County, New Jersey, as shown on Figure 1 in Appendix A. The subject property is currently occupied by an approximately 77,000 square foot nursing school with access provided via one full-movement driveway along Walnut Crescent.

Under the development proposal, the existing 77,000 square foot nursing school will be removed and a 45,735 square foot medical office building is proposed to be constructed. Primary access will be provided via a new driveway located along Bay Avenue (CR 654) which will align opposite the south Walnut Crescent intersection approach. This intersection is proposed to be signalized.

Additionally, as part of the construction of the proposed signal, the Bay Avenue (CR 654) and Walnut Crescent approaches will be modified to provide one (1) exclusive left-turn lane and one (1) shared through/right-turn lane. The driveway approach will provide one (1) full-movement egress lane and two (2) ingress lanes.

This study has been performed to evaluate potential traffic impacts associated with the proposed medical office building. Accordingly, this analysis includes the following:

- A review of existing roadway and traffic conditions in the vicinity of the site, including roadway geometrics and traffic volumes;
- Projection of the volume of traffic expected to be generated by the proposed medical office building;
- An analysis of future roadway and site driveway operations;
- An evaluation of the Site Plan focusing on access and parking supply; and
- Recommendations and conclusions.

EXISTING TRAFFIC CONDITIONS

EXISTING SUBJECT PROPERTY

The subject property is located on the northeast corner of the Bay Avenue (CR 654) intersection with Walnut Crescent in the Township of Montclair/Borough of Glen Ridge, Essex County, New Jersey. The following characteristics describe the subject property:

- The site is designated as Lot 1 in Block 4215 in the Township of Montclair and Lot 15 in Block 106 in the Borough of Glen Ridge.
- The subject property is currently occupied by an approximately 77,000 square foot nursing school.
- Access is provided via one full-movement driveway along Walnut Crescent.
- Mountainside Hospital is located opposite the subject property along Bay Avenue (CR 654).

EXISTING ROADWAY NETWORK

The subject property has frontage along westbound Bay Avenue (CR 654) and northbound Walnut Crescent. The following is a description of the adjacent roadway network:

Bay Avenue (CR 654)

- Designated as an urban minor arterial under Essex County jurisdiction.
- Has a general east/west orientation along the property frontage.
- Provides 1 lane to accommodate each direction of travel.
- Has a posted speed limit of 25 miles per hour in the vicinity of the site.

Walnut Crescent

- Local roadway under municipal jurisdiction.
- Has a general north/south orientation.
- Provides 1 lane to accommodate each direction of travel.
- Intersects Bay Avenue (CR 654) at an unsignalized intersection STOP-controlled on the northbound Walnut Crescent approach.

Claremont Avenue

- Local roadway under municipal jurisdiction.
- Has a general east/west orientation.
- Provides 1 lane to accommodate each direction of travel.
- Intersects Walnut Crescent at an unsignalized intersection STOP-controlled on the southbound Walnut Crescent approach.

Walnut Street

- Local roadway under municipal jurisdiction.
- Has a general east/west orientation.
- Provides 1 lane to accommodate each direction of travel.
- Intersects Walnut Crescent at an unsignalized intersection STOP-controlled on the northbound and southbound Walnut Crescent approaches.

EXISTING TRAFFIC CONDITIONS

To examine the existing traffic conditions in the vicinity of the subject property, traffic counts were conducted during the weekday morning, weekday evening and Saturday midday peak periods. Specifically, manual turning movement counts were conducted on Wednesday, December 3, 2014 from 7:00 a.m. to 9:00 a.m. and from 4:00 p.m. to 6:00 p.m. and on Saturday, December 6, 2014 from 11:00 a.m. to 2:00 p.m. at the following locations:

- Bay Avenue (CR 654) and Mountainside Hospital driveway
- Bay Avenue (CR 654) and Walnut Crescent
- Walnut Crescent and Claremont Avenue
- Walnut Crescent and Walnut Street
- Walnut Crescent and Nursing School driveway

The results of the traffic counts indicate there are distinct hours during the periods of study when traffic experienced its highest levels. The weekday morning peak hour was found to occur between 7:45 a.m. and 8:45 a.m., the weekday evening peak hour was found to occur between 4:45 p.m. and 5:45 p.m. and the Saturday midday peak hour was found to occur between 12:15 p.m.

and 1:15 p.m. The manual turning movement count summaries are contained in **Appendix B**. The existing weekday morning, weekday evening and Saturday midday peak hour traffic volumes are summarized on **Figure 2** in **Appendix A**. Pedestrian crossing volumes were also noted during each of the study periods and are summarized on **Figure 3** in **Appendix A**.

In addition to the manual turning movement counts, 24-hour traffic volume data was collected along the Bay Avenue (CR 654) and Walnut Crescent using Automatic Traffic Recorders (ATRs). The ATR summaries are contained in the Appendix of the October 13, 2017 Traffic Signal Warrant Analysis prepared by ATDE.

PROPOSED DEVELOPMENT TRAFFIC CHARACTERISTICS

TRIP GENERATION

The next step in the analysis procedure is to project the volume of traffic generated as a result of the proposed medical office. For the purpose of this analysis, complete project approval, construction and occupancy is assumed to occur within two years.

Traffic projections for the proposed medical office have been prepared utilizing data published by the Institute of Transportation Engineers (ITE) in the 10th Edition of *Trip Generation*. Specifically, trip generation for the proposed 45,735 square foot medical office was prepared utilizing ITE Land Use Code 720: "Medical-Dental Office Building." **Table I** displays the ITE trip generation projections associated with the proposed medical office building. The ITE trip generation summary printouts are contained in **Appendix C**.

TABLE I
ITE TRIP GENERATION
PROPOSED 45,735 SF MEDICAL OFFICE BUILDING

Peak Hour	Enter	Exit	Total
Weekday Morning	98	28	126
Weekday Evening	44	112	156
Saturday Midday	80	60	140

At the time of the traffic counts the 77,000 square foot nursing school, which also at one time included dormitories and a day care center, was only partially occupied. ITE *Trip Generation* does not include research to allow for accurate projections for this type of facility at full occupancy. However, given the larger size of the existing building and its land use components, it is reasonable to assume the nursing school would be a comparable generator to the proposed medical office building.

TRIP DISTRIBUTION

The site-generated traffic attributed to the proposed medical office space has been oriented to the adjacent roadway network based on travel patterns identified from the collected traffic count data. Note, it was assumed vehicles utilizing the proposed additional parking areas for the Mountainside Hospital along Walnut Crescent are already circulating on the roadway and would not significantly alter traffic patterns along the study network.

The resulting site-generated traffic volumes are illustrated on **Figure 4** in **Appendix A** for the weekday morning, weekday evening and Saturday midday peak hours.

FUTURE TRAFFIC CONDITIONS

FUTURE NO-BUILD TRAFFIC VOLUMES

It is recognized traffic routinely fluctuates along various State and County roadways, as well as local streets, and varies not only day-to-day, but also on a monthly and yearly basis. It is expected as development continues in the vicinity of the site, traffic may be expected to increase on a regular basis. It is anticipated the construction of the proposed medical office building will be completed within one (1) year. As a result, minimal (if any) additional "background" traffic growth can be anticipated with such a short build-out. However, in order to perform a conservative analysis, the existing traffic volumes on the study roadway system were increased by a 1.00% growth rate per year in accordance with the NJDOT growth factor for urban minor arterials in Essex County to develop the future 2018 No-Build traffic volumes summarized on **Figure 5** in **Appendix A**.

OTHER AREA DEVELOPMENTS

The Township of Montclair Planning and Borough of Glen Ridge were contacted to determine if there are any proposed or planned developments in the vicinity of the site which could impact traffic conditions on the adjacent roadway network. According to the Township a mixed-use development comprised of residential and retail uses was recently approved at the intersection of Pine Street and Bloomfield Avenue in Township of Montclair. The 1.00% background growth rate is deemed sufficient to accommodate the traffic generated by the approved uses given the proximity to the proposed development. Additionally, Mountainside Hospital proposes to construct additional parking along Walnut Crescent, south of its intersection with Bay Avenue. This parking supply is proposed to serve the Hospital's existing parking demands. The new parking is proposed to be accessed on southbound Walnut Crescent and will help reduce existing Hospital traffic circulating the adjacent roadway network searching for available parking. As such, additional traffic is not anticipated as a result of the additional parking as the vehicles are already circulating the roadway network looking for available parking.

ANALYSIS OF FUTURE NO-BUILD TRAFFIC VOLUMES

A Volume/Capacity and Level of Service Analysis[1] was conducted for the future No-Build weekday morning and weekday evening peak hour traffic volumes at the study intersections using the Synchro 10 Software. This type of analysis is performed to gauge the operational state of traffic activity, and to identify any areas of excessive delay or congestion. The Synchro 10 summary printouts are contained in **Appendix E** and Level of Service summary tables are contained in **Appendix F**.

The unsignalized intersections are calculated to operate at Level of Service D or better during each of the study peak hours with the following exception. The Walnut Crescent northbound approach at its intersection with Bay Avenue (CR 654) is calculated to operate at Level of Service F during each of the weekday peak hours. The study driveways are calculated to operate at Level of Service C or better during each of the peak hours.

FUTURE ROADWAY IMPROVEMENTS

In conjunction with the development of the proposed medical office building, improvements are also proposed at the Bay Avenue (CR 654)/Walnut Crescent intersection to improve capacity. Specifically, the site driveway is proposed to align with the northbound Walnut Crescent leg and a traffic signal is proposed to be constructed at the intersection. Based on the October 13, 2017 Traffic Signal Warrant Analysis prepared by ATDE, installation of a traffic signal is warranted at this location based on Federal Highway Administration criteria. The Bay Avenue (CR 654) and Walnut Crescent approaches will be modified to provide one (1) exclusive left-turn lane and one (1) through/right-turn lane. The driveway approach will provide one (1) full-movement egress lane and two (2) ingress lanes. It is understood from Essex County they would only provide a cursory review of the traffic signal design. Ultimately, the new traffic signal would fall under municipal jurisdiction.

FUTURE BUILD TRAFFIC VOLUMES

The future Build traffic volumes were established by surcharging the additional site-generated traffic volumes onto the future No-Build traffic volumes. The resulting future Build traffic

[1] See Appendix D for Volume/Capacity and Level of Service description.

volumes are summarized on **Figure 6** in **Appendix A**, for the weekday morning, weekday evening and Saturday midday peak hours.

ANALYSIS OF FUTURE BUILD TRAFFIC VOLUMES

A Volume/Capacity and Level of Service analysis was conducted for the future Build weekday morning, weekday evening and Saturday midday peak hour traffic volumes at the study unsignalized intersections and site driveways. Level of Service summary tables are included in **Appendix F**.

The various movements at the adjacent unsignalized intersections are calculated to continue to operate at No-Build Levels of Service during each of the study peak hours under future Build conditions.

The proposed signalized site access point located along the Bay Avenue (CR 654) is calculated to operate at Level of Service C or better during each of the study peak hours. The northbound Walnut Crescent approach to Bay Avenue (CR 654) is calculated to improve from Level of Service F under No-Build conditions to Level of Service B under Build conditions. The proposed site driveway approach to the signalized intersection is calculated to have a 95th percentile queue length of approximately two (2) vehicles, which can be entirely accommodated on site without impeding site circulation.

SITE ACCESS AND CIRCULATION

The Site Layout Plan for the proposed medical office building, prepared by Bohler Engineering, dated March 15, 2018 has been evaluated. The following items address on-site design characteristics:

ACCESS

- Access to the proposed medical office building will be provided via a signalized full-movement driveway along Bay Avenue (CR 654). The proposed Bay Avenue (CR 654) access will align opposite Walnut Crescent. The site driveway provides one (1) full-movement egress lane and two (2) inbound lanes.

PARKING

- The Township requires 5 parking stalls per 1,000 square feet of gross floor area or 229 parking stalls for the proposed MOB.

- The Site Plan provides 229 parking stalls which exceeds the Township requirement and is therefore deemed to be sufficient.

- The Site Plan proposes self-serving parking spaces that are a minimum of 9 feet in width and 18 feet deep. Compact car parking stalls are proposed along the Bay Avenue frontage which are 8 feet wide by 17 feet deep. A total of 27% of the proposed parking stalls are compact stalls which is in compliance with the maximum allowable of 30% of the total parking supply. The parking area is served by a minimum of 24 foot wide two-way circulation aisles which is in compliance with Township requirements and accepted engineering design standards.

- An area designated for valet parking is proposed at the northwest portion of the property. The proposed valet spaces are 8 feet wide by 18 feet deep.

CONCLUSIONS

In summary, it has been determined from review of projected future site-generated traffic conditions, the proposed medical office building would not significantly impact traffic conditions in the vicinity of the site. The adjacent unsignalized intersections are calculated to continue to operate at No-Build Levels of Service or better under Build conditions during each of the study peak hours.

With the installation of a new traffic signal, the proposed site driveway intersection with Bay Avenue (CR 654) and Walnut Crescent is calculated to operate at Level of Service C or better during each of the study peak hours. The northbound Walnut Crescent approach to the intersection is calculated to improve from Level of Service F under No-Build conditions to Level of Service B or better under Build conditions.

TECHNICAL APPENDIX

APPENDIX A – TRAFFIC VOLUME FIGURES

ATLANTIC TRAFFIC+DESIGN

Figure 1

PROPOSED MEDICAL OFFICE BUILDING
TOWNSHIP OF MONTCLAIR/BOROUGH OF GLEN RIDGE
ESSEX COUNTY, NEW JERSEY

SITE LOCATION MAP

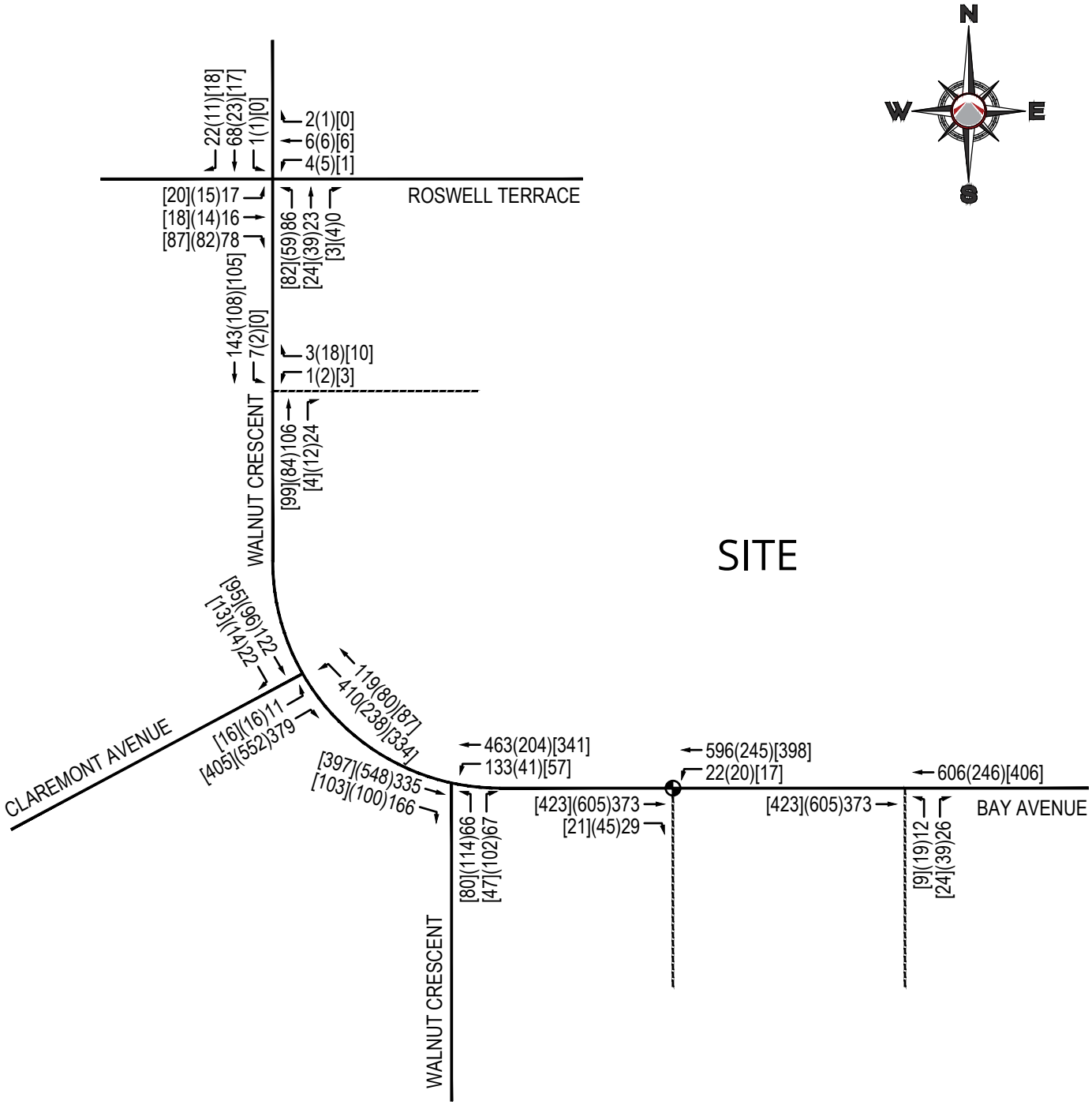
K:\2015\AJ15088\TRAFFIC DATA\FIGURES – OCTOBER 2017\AJ14201 FIGURES-->>LAYOUT: FIG 1

ATLANTIC TRAFFIC+DESIGN

Figure 2

PROPOSED MEDICAL OFFICE BUILDING
TOWNSHIP OF MONTCLAIR/BOROUGH OF GLEN RIDGE
ESSEX COUNTY, NEW JERSEY

EXISTING TRAFFIC VOLUMES



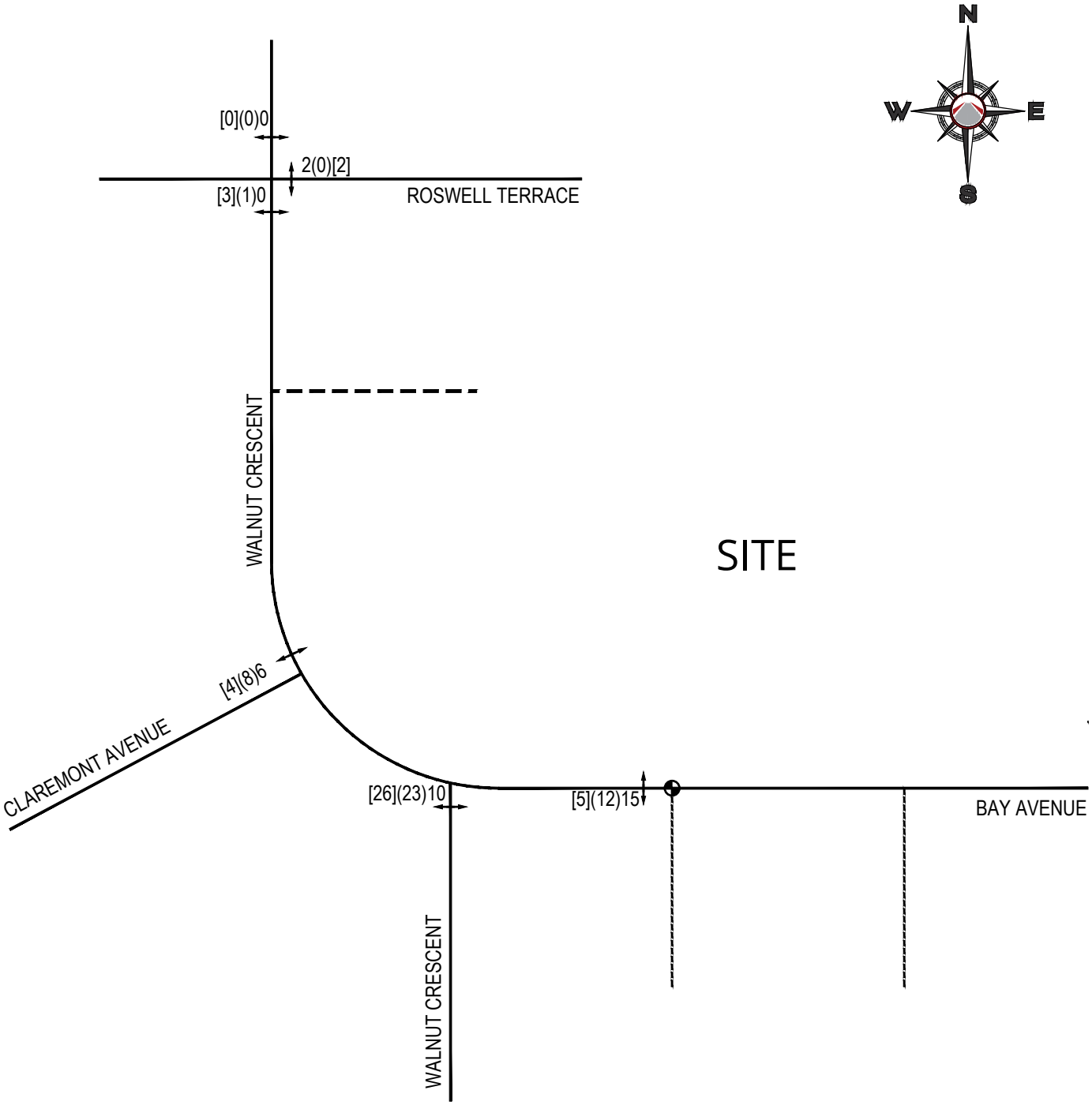
K:\2015\AJ15088\TRAFFIC DATA\FIGURES – OCTOBER 2017\AJ14201 FIGURES-->>LAYOUT: FIG 2

ATLANTIC TRAFFIC+DESIGN

Figure 3

PROPOSED MEDICAL OFFICE BUILDING
TOWNSHIP OF MONTCLAIR/BOROUGH OF GLEN RIDGE
ESSEX COUNTY, NEW JERSEY

EXISTING PEDESTRIAN VOLUMES



LEGEND

AA (BB)	AM(PM)[SAT] PEAK HOUR VOLUME
———	EXISTING ROADWAY
- - - - - - - - - -	EXISTING DRIVEWAY
⊕	PEDESTRIAN SIGNAL

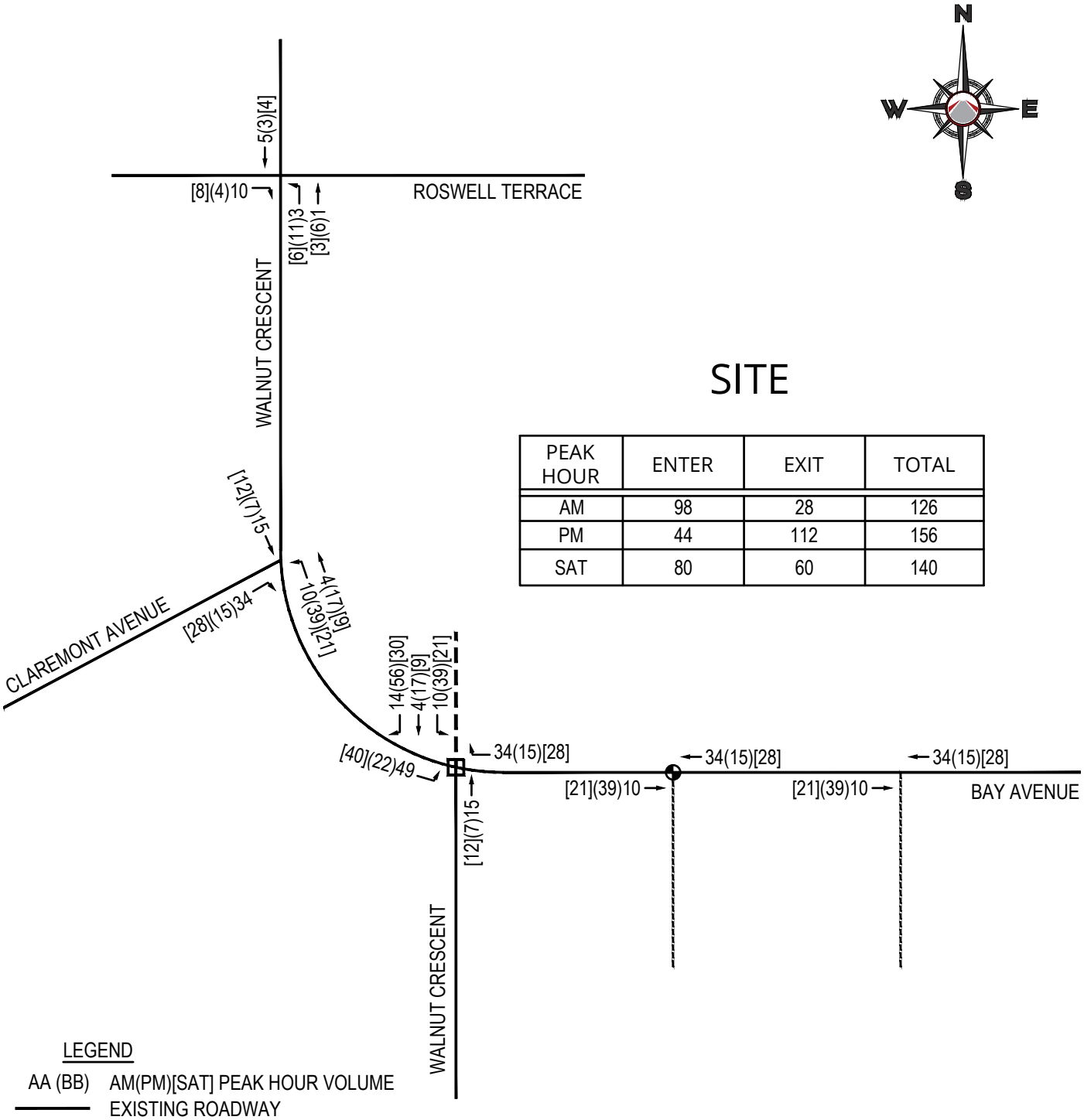
K:\2015\AJ15088\TRAFFIC DATA\FIGURES - OCTOBER 2017\AJ14201 FIGURES-->>LAYOUT: FIG 3

ATLANTIC TRAFFIC+DESIGN

Figure 4

PROPOSED MEDICAL OFFICE BUILDING
TOWNSHIP OF MONTCLAIR/BOROUGH OF GLEN RIDGE
ESSEX COUNTY, NEW JERSEY

SITE GENERATED TRAFFIC VOLUMES



PEAK HOUR	ENTER	EXIT	TOTAL
AM	98	28	126
PM	44	112	156
SAT	80	60	140

LEGEND

AA (BB)	AM(PM)[SAT] PEAK HOUR VOLUME
———	EXISTING ROADWAY
- - - - - -	EXISTING DRIVEWAY
— — —	PROPOSED DRIVEWAY
	PEDESTRIAN SIGNAL
	PROPOSED TRAFFIC SIGNAL

K:\2015\AJ15088\TRAFFIC DATA\FIGURES – OCTOBER 2017\AJ14201 FIGURES-->>LAYOUT: FIG 4

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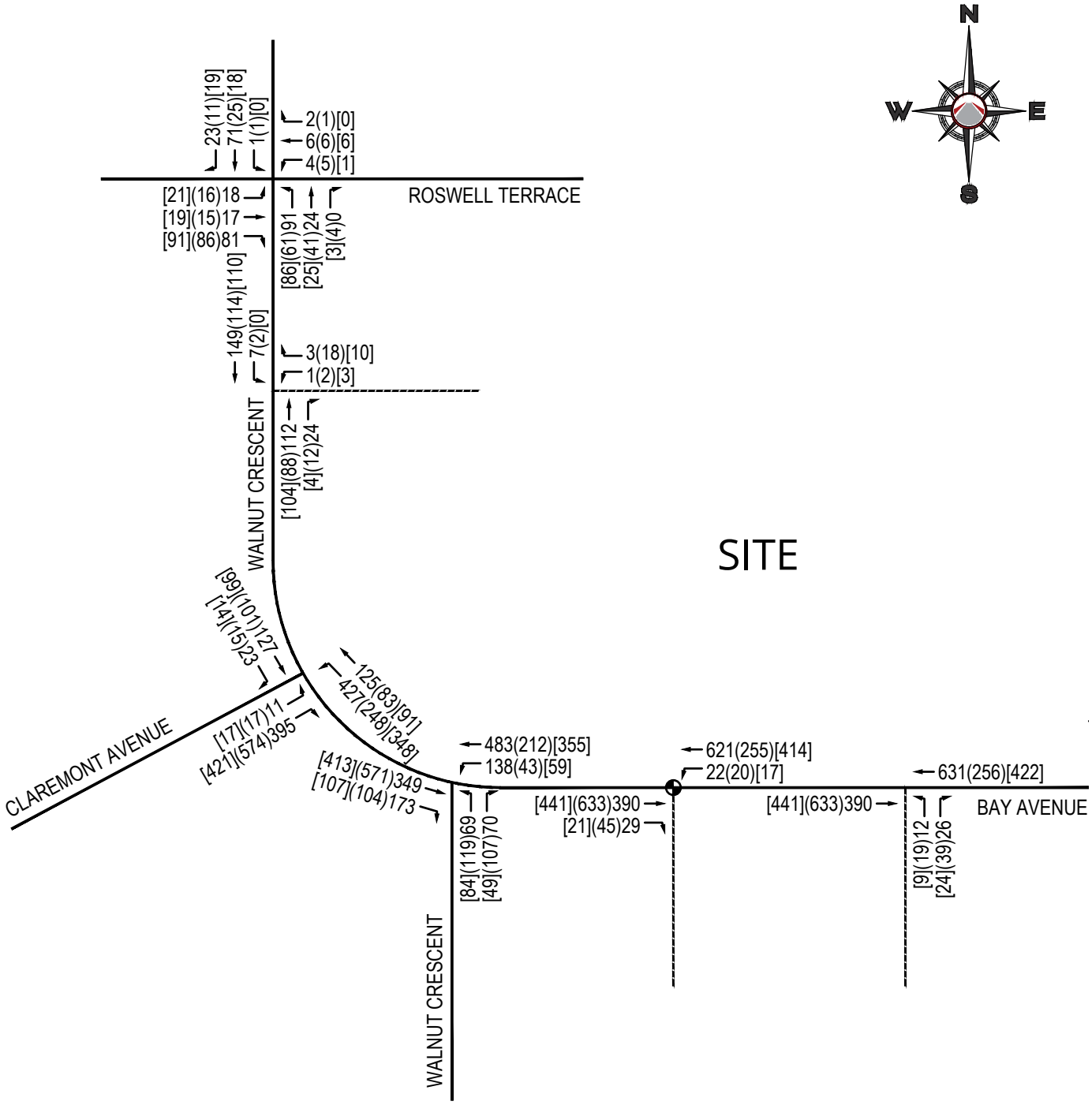
Figure 5

PROPOSED MEDICAL OFFICE BUILDING
TOWNSHIP OF MONTCLAIR/BOROUGH OF GLEN RIDGE
ESSEX COUNTY, NEW JERSEY

FUTURE NO-BUILD TRAFFIC VOLUMES



LEGEND

AA (BB)	AM(PM)[SAT] PEAK HOUR VOLUME
———	EXISTING ROADWAY
- - - - - - - - - -	EXISTING DRIVEWAY
⊕	SIGNALIZED INTERSECTION

K:\2015\AJ15088\TRAFFIC DATA\FIGURES – OCTOBER 2017\AJ14201 FIGURES-->>LAYOUT: FIG 5

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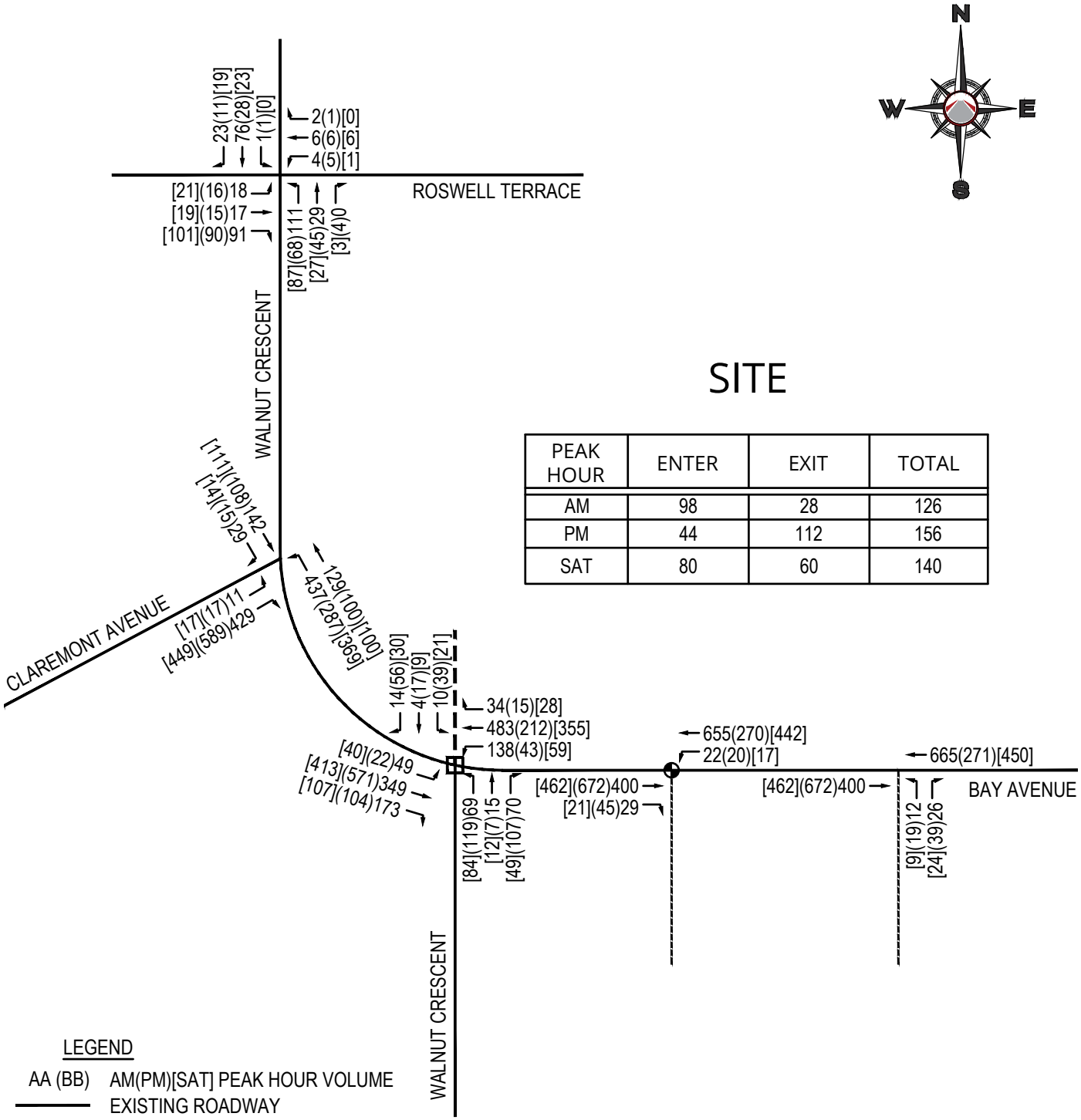
Figure 6

PROPOSED MEDICAL OFFICE BUILDING
TOWNSHIP OF MONTCLAIR/BOROUGH OF GLEN RIDGE
ESSEX COUNTY, NEW JERSEY

FUTURE BUILD TRAFFIC VOLUMES



PEAK HOUR	ENTER	EXIT	TOTAL
AM	98	28	126
PM	44	112	156
SAT	80	60	140

LEGEND

AA (BB) AM(PM)[SAT] PEAK HOUR VOLUME
EXISTING ROADWAY
EXISTING DRIVEWAY
PROPOSED DRIVEWAY
PEDESTRIAN SIGNAL
PROPOSED TRAFFIC SIGNAL

K:\2015\AJ15088\TRAFFIC DATA\FIGURES – OCTOBER 2017\AJ14201 FIGURES-->LAYOUT: FIG 6

APPENDIX B – TRAFFIC VOLUME DATA

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Proposed Medical Office Building
1 Bay Avenue
Borough of Glen Ridge
Essex County, New Jersey

Turning Movement Count Summary

WeekdayMorning Peak Period (7:00am-9:00am)
Wednesday, December 03, 2014

Start Time	Hospital Driveway: Middle Driveway NBL	Middle Driveway NBR	Westerly Driveway WBL	Westerly Driveway WBT	Westerly Driveway EBT	Westerly Driveway EBR	Westerly Driveway Peds	15 Min Total
7:00 AM	2	8	9	101	30	5	4	155
7:15 AM	2	11	5	115	71	7	8	211
7:30 AM	4	4	2	114	59	4	3	187
7:45 AM	3	8	5	153	77	7	3	253
8:00 AM	3	5	6	154	99	9	3	276
8:15 AM	5	6	4	132	71	8	3	226
8:30 AM	1	7	7	134	69	5	6	223
8:45 AM	5	8	6	134	58	8	11	219
Pk. Hr. Ttl.	12	26	22	573	316	29	15	
HV %	0%	0%	5%	8%	5%	0%	0%	
PHF	0.91							

Start Time	Bay Avenue & Walnut Crescent WBL	NBL	NBR	EBR	Peds	Walnut Crescent & Claremont Ave SBR	NBL	EBL	EBR	Peds	Walnut Crescent & Driveway SBL	WBL	WBR	NBR	15 Min Total
7:00 AM	20	14	5	34	4	4	75	8	45	2	0	1	0	7	213
7:15 AM	23	16	10	27	2	4	69	4	73	1	0	0	1	6	233
7:30 AM	24	16	7	26	1	3	84	4	81	1	1	2	0	6	254
7:45 AM	34	15	11	51	1	5	110	3	107	1	0	0	4	6	346
8:00 AM	29	18	20	39	6	6	108	5	119	2	5	0	0	5	354
8:15 AM	33	20	21	35	2	6	96	2	69	1	2	1	0	5	290
8:30 AM	37	13	15	41	1	5	96	1	84	2	0	0	2	8	302
8:45 AM	38	12	12	43	6	4	110	8	131	2	2	0	3	6	369
Pk. Hr. Ttl.	133	66	67	166	10	22	410	11	379	6	7	1	6	24	
HV %	2%	2%	3%	2%		9%	2%	0%	1%		0%	0%	0%	0%	
PHF	0.91														

Start Time	Walnut Crescent & Walnut Street/Roswell Terrace SBL	SBT	SBR	WBL	WBT	WBR	NBL	NBT	NBR	EBL	EBT	EBR	PED1	PED2	PED3	15 Min Total	Hourly Total
7:00 AM	1	5	5	1	1	0	16	1	1	6	3	6	0	0	0	46	2109
7:15 AM	0	8	5	1	1	0	22	6	0	3	3	13	1	0	0	62	2409
7:30 AM	0	18	4	0	1	0	20	14	0	2	2	9	1	0	0	70	2503
7:45 AM	0	18	6	0	1	1	19	5	0	4	4	21	0	0	1	79	2594
8:00 AM	1	19	3	2	3	0	20	7	0	5	4	20	0	0	0	84	2588
8:15 AM	0	19	6	0	2	0	23	4	0	4	6	20	0	0	1	84	
8:30 AM	0	12	7	3	0	1	24	7	0	4	2	17	0	0	0	77	
8:45 AM	0	17	8	1	9	1	22	6	0	3	3	14	1	0	0	84	
Pk. Hr. Ttl.	1	68	22	5	6	2	86	23	0	17	16	78	0	0	2		
HV %	0%	3%	5%	0%	0%	0%	2%	0%	0%	0%	0%	1%					
PHF	0.91																

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1 Bay Avenue
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Turning Movement Count Summary

Weekday Evening Peak Period (4:00pm-6:00pm)
Wednesday, December 03, 2014

Start Time	Hospital Driveway							15 Min Total
	Egress Driveway		Ingress Driveway					
	NBL	NBR	WBL	WBT	EBT	EBR	Peds	
4:00 PM	5	6	3	19	124	10	5	167
4:15 PM	5	5	2	14	116	9	6	151
4:30 PM	2	5	1	18	133	7	8	166
4:45 PM	5	3	2	7	135	3	2	155
5:00 PM	1	9	3	13	151	14	2	191
5:15 PM	12	11	5	71	135	14	4	248
5:30 PM	4	9	5	75	132	7	3	232
5:45 PM	2	10	7	77	110	10	3	216
Pk. Hr. Ttl.	19	39	20	236	528	45	12	
HV %	42%	8%	30%	3%	4%	20%		
PHF	0.90							

Start Time	Bay Avenue & Walnut Crescent					Walnut Crescent & Claremont Ave					Walnut Crescent & Driveway				15 Min Total
	WBL	NBL	NBR	EBR	Peds	SBR	NBL	EBL	EBR	Peds	SBL	WBL	WBR	NBR	
4:00 PM	9	37	22	40	6	14	33	4	120	0	0	4	9	0	292
4:15 PM	11	32	21	35	8	11	40	5	126	0	0	0	4	6	291
4:30 PM	10	33	18	31	8	11	36	6	129	1	0	3	3	1	281
4:45 PM	3	28	19	30	11	5	20	4	127	2	0	2	1	2	241
5:00 PM	5	40	29	25	2	8	31	3	164	2	0	1	7	5	318
5:15 PM	10	30	24	39	2	2	69	4	140	1	1	0	3	5	327
5:30 PM	8	25	23	19	7	3	69	8	138	1	0	1	5	0	299
5:45 PM	18	19	26	17	12	1	69	1	110	4	1	0	3	2	267
Pk. Hr. Ttl.	41	114	102	100	23	14	238	16	552	8	2	2	18	12	
HV %	5%	0%	0%	0%		0%	2%	0%	1%		0%	0%	0%	0%	
PHF	0.90														

Start Time	Walnut Crescent & Walnut Street/Roswell Terrace															15 Min Total	Hourly Total
	SBL	SBT	SBR	WBL	WBT	WBR	NBL	NBT	NBR	EBL	EBT	EBR	PED1	PED2	PED3		
4:00 PM	0	21	11	1	2	0	14	9	3	4	1	23	1	0	0	89	2058
4:15 PM	1	12	5	2	1	1	10	7	2	4	6	17	1	0	0	68	2090
4:30 PM	1	14	10	1	2	1	9	12	3	5	5	23	1	1	0	86	2232
4:45 PM	1	4	7	2	2	0	12	5	2	8	6	22	1	0	0	71	2285
5:00 PM	0	9	2	1	1	0	9	11	1	3	3	31	0	0	0	71	2357
5:15 PM	1	7	3	3	1	1	17	12	0	5	5	22	1	0	0	77	
5:30 PM	0	3	4	0	2	0	20	10	2	1	2	11	0	0	0	55	
5:45 PM	0	4	2	0	2	0	13	6	1	6	4	18	0	0	0	56	
Pk. Hr. Ttl.	1	23	11	4	6	1	59	39	4	15	14	82	1	0	0		
HV %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%					
PHF	0.90																

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Proposed Medical Office Building
1 Bay Avenue
Borough of Glen Ridge
Essex County, New Jersey

Turning Movement Count Summary

Saturday Midday Peak Period (11:00am-2:00pm)
Saturday, December 06, 2014

Start Time	Hospital Driveway							15 Min Total
	Egress Driveway		Ingress Driveway					
	NBL	NBR	WBL	WBT	EBT	EBR	Peds	
11:00 AM	4	6	3	95	84	6	3	198
11:15 AM	4	8	7	116	83	8	4	226
11:30 AM	3	5	4	106	90	2	3	210
11:45 AM	3	3	1	98	87	9	1	201
12:00 PM	5	9	5	87	85	7	1	198
12:15 PM	0	9	1	105	86	7	1	208
12:30 PM	6	6	5	98	94	8	2	217
12:45 PM	0	4	4	84	123	2	2	217
1:00 PM	3	5	7	90	96	4	0	205
1:15 PM	4	9	3	88	96	4	4	204
1:30 PM	2	4	4	78	101	5	1	194
1:45 PM	3	6	7	81	75	6	0	178
Pk. Hr. Ttl.	9	24	17	377	399	21	5	
HV &	22%	4%	35%	7%	5%	5%	0%	
PHF	0.93							

Start Time	Bay Avenue & Walnut Crescent					Walnut Crescent & Claremont Ave					Walnut Crescent & Driveway				15 Min Total
	WBL	NBL	NBR	EBR	Peds	SBR	NBL	EBL	EBR	Peds	SBL	WBL	WBR	NBR	
11:00 AM	8	16	10	19	6	9	74	2	69	0	0	3	15	3	228
11:15 AM	21	9	24	22	6	4	103	4	83	0	0	0	1	3	274
11:30 AM	19	11	6	25	9	7	68	3	96	1	0	0	1	2	238
11:45 AM	16	25	15	17	5	5	85	4	79	1	0	6	2	2	256
12:00 PM	13	16	14	24	3	3	86	0	83	1	0	3	3	1	246
12:15 PM	16	14	12	20	2	4	88	5	86	0	0	0	4	2	251
12:30 PM	14	18	8	24	9	0	83	4	86	1	0	3	4	0	244
12:45 PM	15	24	15	31	9	5	72	4	132	2	0	0	1	1	300
1:00 PM	12	24	12	28	6	4	91	3	101	1	0	0	1	1	277
1:15 PM	10	14	10	25	4	3	71	3	91	0	0	0	1	5	233
1:30 PM	7	11	10	21	5	1	64	2	90	0	1	1	1	1	210
1:45 PM	9	19	11	24	7	5	81	2	91	0	0	0	2	5	249
Pk. Hr. Ttl.	57	80	47	103	26	13	334	16	405	4	0	3	10	4	
HV &	9%	3%	6%	6%		0%	1%	0%	1%		0%	0%	0%	0%	
PHF	0.93														

Start Time	Walnut Crescent & Walnut Street/Roswell Terrace															15 Min Total	Hourly Total
	SBL	SBT	SBR	WBL	WBT	WBR	NBL	NBT	NBR	EBL	EBT	EBR	PED1	PED2	PED3		
11:00 AM	0	3	4	0	2	0	15	4	1	3	4	15	3	0	0	51	2098
11:15 AM	0	7	6	0	0	0	17	5	0	3	5	21	0	1	1	64	2132
11:30 AM	0	9	8	0	2	0	18	6	1	6	5	27	1	0	0	82	2084
11:45 AM	0	5	4	1	0	0	23	8	1	5	4	19	1	1	0	70	2091
12:00 PM	0	6	4	0	1	0	16	5	0	10	4	21	0	0	0	67	2156
12:15 PM	0	5	3	0	1	0	19	6	0	2	2	19	0	0	0	57	2195
12:30 PM	0	3	8	1	1	0	25	4	3	5	5	21	0	0	0	76	2191
12:45 PM	0	3	3	0	2	0	18	10	0	7	6	26	2	0	0	75	2117
1:00 PM	0	6	4	0	2	0	20	4	0	6	5	21	1	0	2	68	2004
1:15 PM	0	3	4	0	2	0	19	9	0	6	5	27	0	1	1	75	
1:30 PM	0	2	6	3	1	0	18	5	0	3	4	17	0	0	0	59	
1:45 PM	0	8	6	0	1	0	16	3	0	2	2	14	0	0	0	52	
Pk. Hr. Ttl.	0	17	18	1	6	0	82	24	3	20	18	87	3	0	2		
HV &	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%					
PHF	0.93																

APPENDIX C – ITE TRIP GENERATION SUMMARY PRINTOUTS

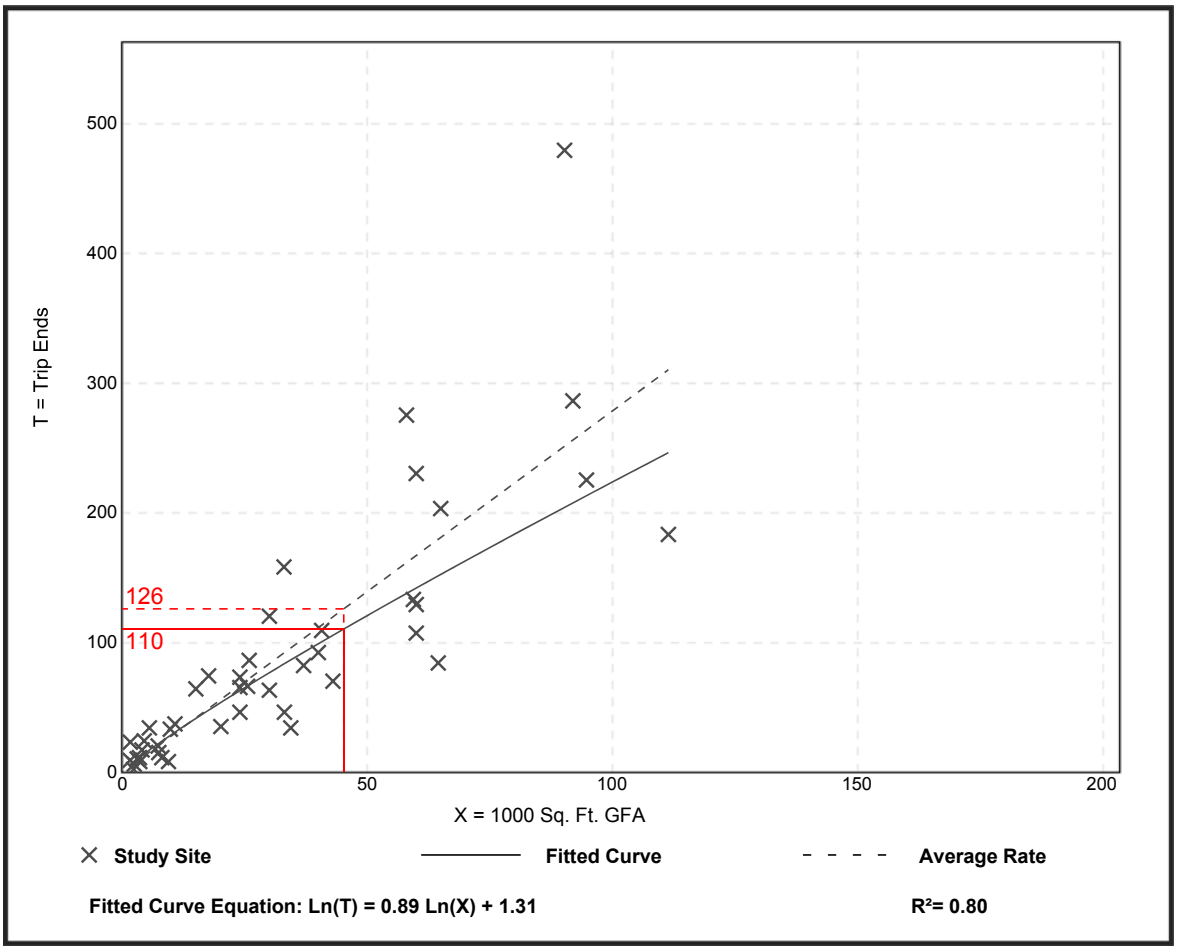
Medical-Dental Office Building
(720)

Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
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: 44
1000 Sq. Ft. GFA: 32
Directional Distribution: 78% entering, 22% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
2.78	0.85 - 14.30	1.28

Data Plot and Equation



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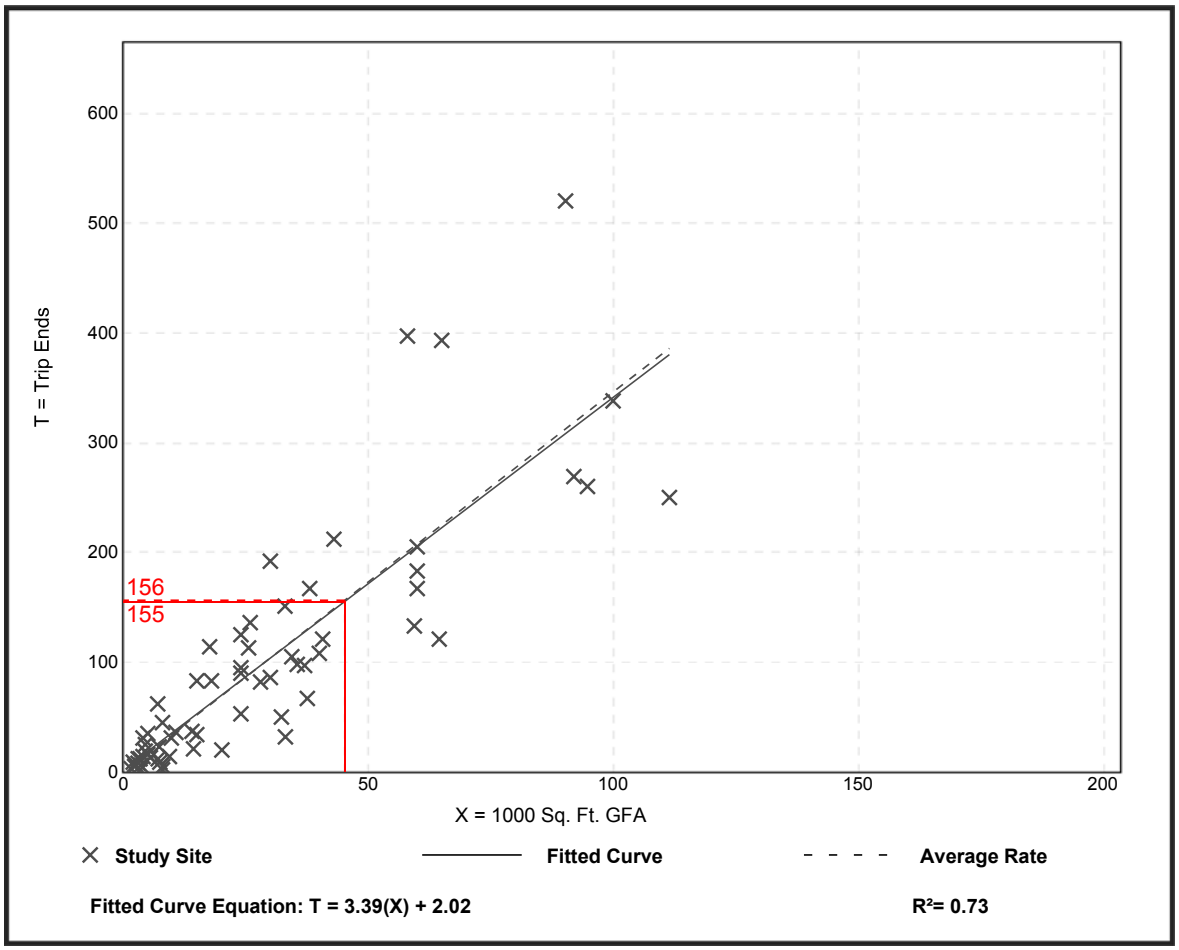
Medical-Dental Office Building
(720)

Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
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: 65
1000 Sq. Ft. GFA: 28
Directional Distribution: 28% entering, 72% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
3.46	0.25 - 8.86	1.58

Data Plot and Equation



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Medical-Dental Office Building
(720)

Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Saturday, Peak Hour of Generator**

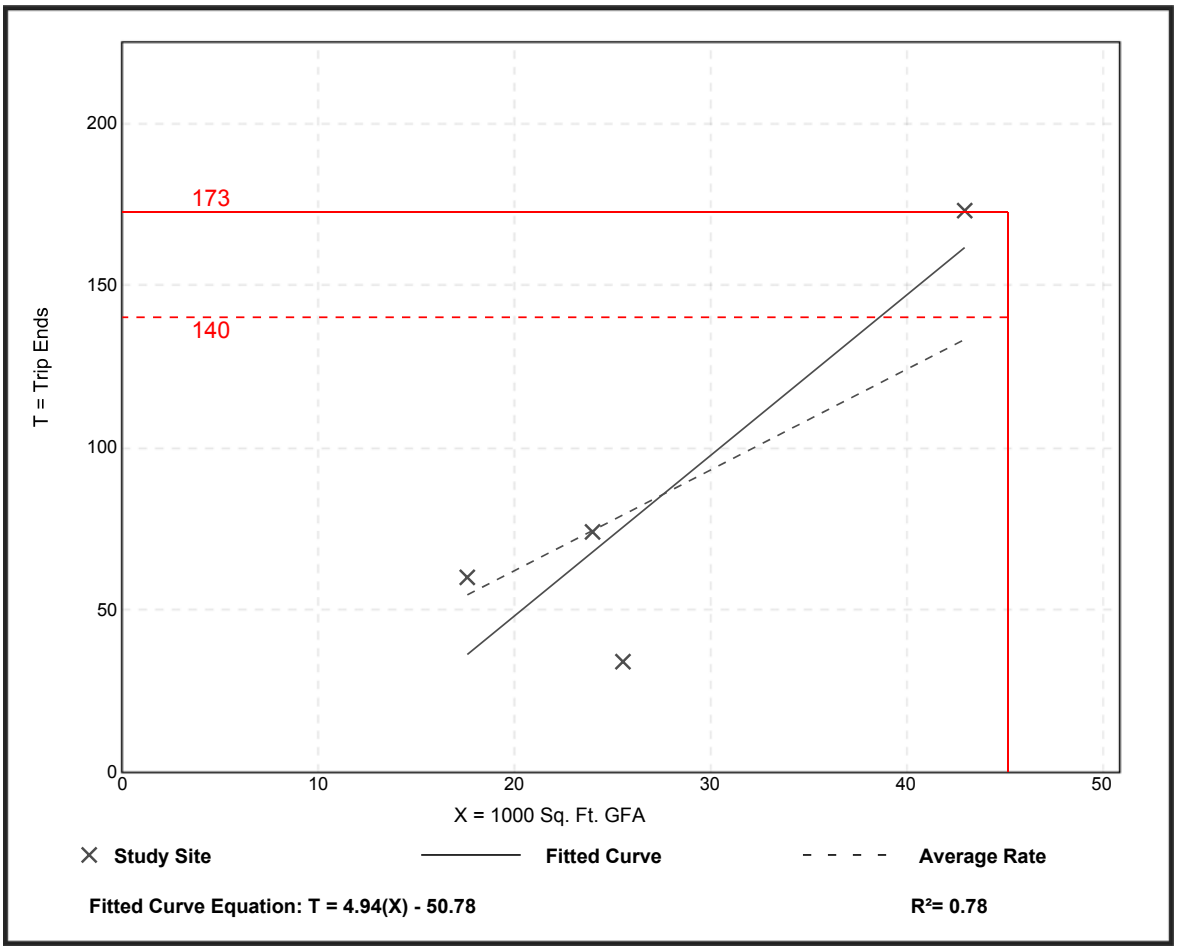
Setting/Location: **General Urban/Suburban**
Number of Studies: 4
1000 Sq. Ft. GFA: 28
Directional Distribution: 57% entering, 43% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
3.10	1.33 - 4.02	1.20

Data Plot and Equation

Caution – Small Sample Size



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APPENDIX D – LEVEL OF SERVICE DESCRIPTION

TABLE D-I
LEVEL OF SERVICE AND EXPECTED DELAY
FOR UNSIGNALIZED INTERSECTIONS

LEVEL OF SERVICE	AVERAGE TOTAL DELAY (SEC./VEH.)
A	≤10
B	>10 and ≤ 15
C	>15 and ≤ 25
D	> 25 and ≤ 35
E	> 35 and ≤ 50
F	> 50

* Transportation Research Board, Highway Capacity Manual, HCM2010, 2010, by the Transportation Research Board, Washington, D.C.

TABLE D-II
LEVEL OF SERVICE
FOR SIGNALIZED INTERSECTIONS

LEVEL OF SERVICE	DESCRIPTION	AVERAGE TOTAL DELAY (SEC./VEH.)
A	Very short delay, good progression; most vehicles do not stop at intersection.	≤ 10
B	Generally good signal progression and/or short cycle length; more vehicles stop at intersection than Level of Service A.	>10 and ≤ 20
C	Fair progression and/or longer cycle length; significant number of vehicles stop at intersection.	>20 and ≤ 35
D	Congestion becomes noticeable; individual cycle failures; longer delays from unfavorable progression, long cycle length; or high volume/capacity ratios; most vehicles stop at intersection.	>35 and ≤ 55
E	Usually considered limit of acceptable delay indicative of poor progression long cycle length, or high volume/capacity ratio; frequent individual cycle failures.	>55 and ≤ 80
F	Could be considered excessive delay in some areas, frequently an indication or over-saturation (i.e., arrival flows exceeds capacity), or very long cycle lengths with minimal side street green time. Capacity is not necessarily exceeded under this Level of Service.	> 80.0

* Transportation Research Board, Highway Capacity Manual, HCM2010, 2010, published by the Transportation Research Board, Washington, D.C.

APPENDIX E – SYNCHRO 10 SUMMARY PRINTOUTS

Intersection	
Int Delay, s/veh	6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	18	17	81	4	6	2	91	24	0	1	71	23
Future Vol, veh/h	18	17	81	4	6	2	91	24	0	1	71	23
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	2	2	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	0	0	1	0	0	0	2	0	0	0	3	5
Mvmt Flow	20	19	89	4	7	2	100	26	0	1	78	25

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	324	321	91	375	333	28	103	0	0	28	0	0
Stage 1	93	93	-	228	228	-	-	-	-	-	-	-
Stage 2	231	228	-	147	105	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.21	7.1	6.5	6.2	4.12	-	-	4.1	-	-
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	3.5	4	3.309	3.5	4	3.3	2.218	-	-	2.2	-	-
Pot Cap-1 Maneuver	633	599	969	586	590	1053	1489	-	-	1599	-	-
Stage 1	919	822	-	779	719	-	-	-	-	-	-	-
Stage 2	776	719	-	860	812	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	593	556	969	490	548	1051	1489	-	-	1596	-	-
Mov Cap-2 Maneuver	593	556	-	490	548	-	-	-	-	-	-	-
Stage 1	857	821	-	724	669	-	-	-	-	-	-	-
Stage 2	715	669	-	762	811	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.3	11.5	6	0.1
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1489	-	-	803	571	1596	-	-
HCM Lane V/C Ratio	0.067	-	-	0.159	0.023	0.001	-	-
HCM Control Delay (s)	7.6	0	-	10.3	11.5	7.3	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0.6	0.1	0	-	-

Intersection	
Int Delay, s/veh	4.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	11	395	427	125	127	23
Future Vol, veh/h	11	395	427	125	127	23
Conflicting Peds, #/hr	6	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	0	1	2	0	3	9
Mvmt Flow	12	434	469	137	140	25

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	612	0	-	0	1002	544
Stage 1	-	-	-	-	544	-
Stage 2	-	-	-	-	458	-
Critical Hdwy	4.1	-	-	-	6.43	6.29
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.2	-	-	-	3.527	3.381
Pot Cap-1 Maneuver	977	-	-	-	268	526
Stage 1	-	-	-	-	580	-
Stage 2	-	-	-	-	635	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	971	-	-	-	260	523
Mov Cap-2 Maneuver	-	-	-	-	260	-
Stage 1	-	-	-	-	567	-
Stage 2	-	-	-	-	631	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	34.3
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	971	-	-	-	282
HCM Lane V/C Ratio	0.012	-	-	-	0.585
HCM Control Delay (s)	8.8	0	-	-	34.3
HCM Lane LOS	A	A	-	-	D
HCM 95th %tile Q(veh)	0	-	-	-	3.4

Intersection	
Int Delay, s/veh	6.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	349	173	138	483	69	70
Future Vol, veh/h	349	173	138	483	69	70
Conflicting Peds, #/hr	0	10	10	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	5	2	2	8	2	3
Mvmt Flow	384	190	152	531	76	77

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	584	0	1324	489
Stage 1	-	-	-	-	489	-
Stage 2	-	-	-	-	835	-
Critical Hdwy	-	-	4.12	-	6.42	6.23
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.327
Pot Cap-1 Maneuver	-	-	991	-	172	577
Stage 1	-	-	-	-	616	-
Stage 2	-	-	-	-	426	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	980	-	133	571
Mov Cap-2 Maneuver	-	-	-	-	133	-
Stage 1	-	-	-	-	475	-
Stage 2	-	-	-	-	426	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.1	53.4
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	217	-	-	980	-
HCM Lane V/C Ratio	0.704	-	-	0.155	-
HCM Control Delay (s)	53.4	-	-	9.3	0
HCM Lane LOS	F	-	-	A	A
HCM 95th %tile Q(veh)	4.6	-	-	0.5	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	390	29	22	621	0	0	0	0	0	0	0
Future Vol, veh/h	0	390	29	22	621	0	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	15
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	-	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	0	5	0	5	8	0	0	0	0	0	0	2
Mvmt Flow	0	429	32	24	682	0	0	0	0	0	0	0

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	461	0	0	1175	1191	697
Stage 1	-	-	-	-	-	-	730	730	-
Stage 2	-	-	-	-	-	-	445	461	-
Critical Hdwy	-	-	-	4.15	-	-	6.4	6.5	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	-	-	-	2.245	-	-	3.5	4	3.318
Pot Cap-1 Maneuver	0	-	-	1084	-	0	214	189	441
Stage 1	0	-	-	-	-	0	481	431	-
Stage 2	0	-	-	-	-	0	650	569	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	1084	-	-	206	0	434
Mov Cap-2 Maneuver	-	-	-	-	-	-	206	0	-
Stage 1	-	-	-	-	-	-	464	0	-
Stage 2	-	-	-	-	-	-	650	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0.3	0
HCM LOS			A

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1
Capacity (veh/h)	-	-	1084	-	-
HCM Lane V/C Ratio	-	-	0.022	-	-
HCM Control Delay (s)	-	-	8.4	0	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.1	-	-

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	390	0	0	631	0	12	0	26	0	0	0
Future Vol, veh/h	0	390	0	0	631	0	12	0	26	0	0	0
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	-	-	-	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	0	5	0	5	8	0	0	0	0	0	0	0
Mvmt Flow	0	429	0	0	693	0	13	0	29	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	693	0	-	-	-	0	1122	1122	429
Stage 1	-	-	-	-	-	-	429	429	-
Stage 2	-	-	-	-	-	-	693	693	-
Critical Hdwy	4.1	-	-	-	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	912	-	0	0	-	-	230	208	630
Stage 1	-	-	0	0	-	-	661	587	-
Stage 2	-	-	0	0	-	-	500	448	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	912	-	-	-	-	-	230	0	630
Mov Cap-2 Maneuver	-	-	-	-	-	-	230	0	-
Stage 1	-	-	-	-	-	-	661	0	-
Stage 2	-	-	-	-	-	-	500	0	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	14.9
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR
Capacity (veh/h)	407	912	-	-	-
HCM Lane V/C Ratio	0.103	-	-	-	-
HCM Control Delay (s)	14.9	0	-	-	-
HCM Lane LOS	B	A	-	-	-
HCM 95th %tile Q(veh)	0.3	0	-	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	1	3	112	24	7	149
Future Vol, veh/h	1	3	112	24	7	149
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	0	0	0	0	0	3
Mvmt Flow	1	3	123	26	8	164

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	316	136	0	0	149	0
Stage 1	136	-	-	-	-	-
Stage 2	180	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	681	918	-	-	1445	-
Stage 1	895	-	-	-	-	-
Stage 2	856	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	677	918	-	-	1445	-
Mov Cap-2 Maneuver	677	-	-	-	-	-
Stage 1	890	-	-	-	-	-
Stage 2	856	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.3	0	0.3
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	843	1445	-
HCM Lane V/C Ratio	-	-	0.005	0.005	-
HCM Control Delay (s)	-	-	9.3	7.5	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection	
Int Delay, s/veh	6.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	16	15	86	5	6	1	61	41	4	1	25	11
Future Vol, veh/h	16	15	86	5	6	1	61	41	4	1	25	11
Conflicting Peds, #/hr	0	0	1	1	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	18	17	96	6	7	1	68	46	4	1	28	12

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	224	222	35	278	226	48	40	0	0	50	0	0
Stage 1	36	36	-	184	184	-	-	-	-	-	-	-
Stage 2	188	186	-	94	42	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
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	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	736	680	1044	678	677	1027	1583	-	-	1570	-	-
Stage 1	985	869	-	822	751	-	-	-	-	-	-	-
Stage 2	818	750	-	918	864	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	704	649	1043	582	647	1027	1583	-	-	1570	-	-
Mov Cap-2 Maneuver	704	649	-	582	647	-	-	-	-	-	-	-
Stage 1	942	868	-	786	718	-	-	-	-	-	-	-
Stage 2	774	717	-	816	863	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.6	10.8	4.2	0.2
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1583	-	-	912	637	1570	-	-
HCM Lane V/C Ratio	0.043	-	-	0.143	0.021	0.001	-	-
HCM Control Delay (s)	7.4	0	-	9.6	10.8	7.3	0	-
HCM Lane LOS	A	A	-	A	B	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.5	0.1	0	-	-

Intersection	
Int Delay, s/veh	3.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	17	574	248	83	101	15
Future Vol, veh/h	17	574	248	83	101	15
Conflicting Peds, #/hr	8	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	0	1	2	0	0	0
Mvmt Flow	19	638	276	92	112	17

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	376	0	-	0	1006	330
Stage 1	-	-	-	-	330	-
Stage 2	-	-	-	-	676	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1194	-	-	-	270	716
Stage 1	-	-	-	-	733	-
Stage 2	-	-	-	-	509	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1184	-	-	-	259	710
Mov Cap-2 Maneuver	-	-	-	-	259	-
Stage 1	-	-	-	-	709	-
Stage 2	-	-	-	-	505	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	28.1
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1184	-	-	-	282
HCM Lane V/C Ratio	0.016	-	-	-	0.457
HCM Control Delay (s)	8.1	0	-	-	28.1
HCM Lane LOS	A	A	-	-	D
HCM 95th %tile Q(veh)	0	-	-	-	2.3

Intersection	
Int Delay, s/veh	12.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	571	104	43	212	119	107
Future Vol, veh/h	571	104	43	212	119	107
Conflicting Peds, #/hr	0	23	23	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	4	0	5	3	0	0
Mvmt Flow	634	116	48	236	132	119

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	773	0	1047	715
Stage 1	-	-	-	-	715	-
Stage 2	-	-	-	-	332	-
Critical Hdwy	-	-	4.15	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.245	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	829	-	255	434
Stage 1	-	-	-	-	488	-
Stage 2	-	-	-	-	731	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	808	-	232	423
Mov Cap-2 Maneuver	-	-	-	-	232	-
Stage 1	-	-	-	-	443	-
Stage 2	-	-	-	-	731	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.6	59.9
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	295	-	-	808	-
HCM Lane V/C Ratio	0.851	-	-	0.059	-
HCM Control Delay (s)	59.9	-	-	9.7	0
HCM Lane LOS	F	-	-	A	A
HCM 95th %tile Q(veh)	7.3	-	-	0.2	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	633	45	20	255	0	0	0	0	0	0	0
Future Vol, veh/h	0	633	45	20	255	0	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	12
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	-	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	4	20	30	3	0	0	0	0	0	0	2
Mvmt Flow	0	703	50	22	283	0	0	0	0	0	0	0

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	753	0	0	1055	1080	295
Stage 1	-	-	-	-	-	-	327	327	-
Stage 2	-	-	-	-	-	-	728	753	-
Critical Hdwy	-	-	-	4.4	-	-	6.4	6.5	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	-	-	-	2.47	-	-	3.5	4	3.318
Pot Cap-1 Maneuver	0	-	-	743	-	0	252	220	744
Stage 1	0	-	-	-	-	0	735	651	-
Stage 2	0	-	-	-	-	0	482	420	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	743	-	-	243	0	735
Mov Cap-2 Maneuver	-	-	-	-	-	-	243	0	-
Stage 1	-	-	-	-	-	-	709	0	-
Stage 2	-	-	-	-	-	-	482	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0.7	0
HCM LOS			A

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1
Capacity (veh/h)	-	-	743	-	-
HCM Lane V/C Ratio	-	-	0.03	-	-
HCM Control Delay (s)	-	-	10	0	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.1	-	-

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	633	0	0	256	0	19	0	39	0	0	0
Future Vol, veh/h	0	633	0	0	256	0	19	0	39	0	0	0
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	-	-	-	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	4	0	0	3	0	16	0	21	0	0	0
Mvmt Flow	0	703	0	0	284	0	21	0	43	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	284	0	-	-	-	0	987	987	703
Stage 1	-	-	-	-	-	-	703	703	-
Stage 2	-	-	-	-	-	-	284	284	-
Critical Hdwy	4.1	-	-	-	-	-	6.56	6.5	6.41
Critical Hdwy Stg 1	-	-	-	-	-	-	5.56	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.56	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.644	4	3.489
Pot Cap-1 Maneuver	1290	-	0	0	-	-	259	249	407
Stage 1	-	-	0	0	-	-	466	443	-
Stage 2	-	-	0	0	-	-	733	680	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	1290	-	-	-	-	-	259	0	407
Mov Cap-2 Maneuver	-	-	-	-	-	-	259	0	-
Stage 1	-	-	-	-	-	-	466	0	-
Stage 2	-	-	-	-	-	-	733	0	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	17.9
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR
Capacity (veh/h)	343	1290	-	-	-
HCM Lane V/C Ratio	0.188	-	-	-	-
HCM Control Delay (s)	17.9	0	-	-	-
HCM Lane LOS	C	A	-	-	-
HCM 95th %tile Q(veh)	0.7	0	-	-	-

Intersection	
Int Delay, s/veh	0.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	2	18	88	12	2	114
Future Vol, veh/h	2	18	88	12	2	114
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	2	20	98	13	2	127

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	236	105	0	0	111	0
Stage 1	105	-	-	-	-	-
Stage 2	131	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	757	955	-	-	1492	-
Stage 1	924	-	-	-	-	-
Stage 2	900	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	756	955	-	-	1492	-
Mov Cap-2 Maneuver	756	-	-	-	-	-
Stage 1	923	-	-	-	-	-
Stage 2	900	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9	0	0.1
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	931	1492	-
HCM Lane V/C Ratio	-	-	0.024	0.001	-
HCM Control Delay (s)	-	-	9	7.4	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Int Delay, s/veh	7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	21	19	91	1	6	0	86	25	3	0	18	19
Future Vol, veh/h	21	19	91	1	6	0	86	25	3	0	18	19
Conflicting Peds, #/hr	0	0	3	3	0	0	0	0	2	2	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	23	20	98	1	6	0	92	27	3	0	19	20

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	245	245	32	306	254	31	39	0	0	32	0	0
Stage 1	29	29	-	215	215	-	-	-	-	-	-	-
Stage 2	216	216	-	91	39	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
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	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	713	661	1048	650	653	1049	1584	-	-	1593	-	-
Stage 1	993	875	-	792	729	-	-	-	-	-	-	-
Stage 2	791	728	-	921	866	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	675	621	1045	546	613	1047	1584	-	-	1590	-	-
Mov Cap-2 Maneuver	675	621	-	546	613	-	-	-	-	-	-	-
Stage 1	934	875	-	744	685	-	-	-	-	-	-	-
Stage 2	737	684	-	813	866	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.9	11.1	5.6	0
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1584	-	-	880	602	1590	-	-
HCM Lane V/C Ratio	0.058	-	-	0.16	0.013	-	-	-
HCM Control Delay (s)	7.4	0	-	9.9	11.1	0	-	-
HCM Lane LOS	A	A	-	A	B	A	-	-
HCM 95th %tile Q(veh)	0.2	-	-	0.6	0	0	-	-

Intersection	
Int Delay, s/veh	2.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	17	421	348	91	99	14
Future Vol, veh/h	17	421	348	91	99	14
Conflicting Peds, #/hr	4	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	0	1	1	0	0	0
Mvmt Flow	18	453	374	98	106	15

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	476	0	-	0	916	427
Stage 1	-	-	-	-	427	-
Stage 2	-	-	-	-	489	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1097	-	-	-	305	632
Stage 1	-	-	-	-	662	-
Stage 2	-	-	-	-	621	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1092	-	-	-	296	629
Mov Cap-2 Maneuver	-	-	-	-	296	-
Stage 1	-	-	-	-	645	-
Stage 2	-	-	-	-	619	-

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	23.2
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1092	-	-	-	317
HCM Lane V/C Ratio	0.017	-	-	-	0.383
HCM Control Delay (s)	8.4	0	-	-	23.2
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	1.7

Intersection	
Int Delay, s/veh	4.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	413	107	59	355	84	49
Future Vol, veh/h	413	107	59	355	84	49
Conflicting Peds, #/hr	0	26	26	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	5	6	9	7	3	6
Mvmt Flow	444	115	63	382	90	53

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	585	0	1036	528
Stage 1	-	-	-	-	528	-
Stage 2	-	-	-	-	508	-
Critical Hdwy	-	-	4.19	-	6.43	6.26
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.281	-	3.527	3.354
Pot Cap-1 Maneuver	-	-	956	-	255	543
Stage 1	-	-	-	-	590	-
Stage 2	-	-	-	-	602	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	928	-	226	527
Mov Cap-2 Maneuver	-	-	-	-	226	-
Stage 1	-	-	-	-	523	-
Stage 2	-	-	-	-	602	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.3	29.5
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	286	-	-	928	-
HCM Lane V/C Ratio	0.5	-	-	0.068	-
HCM Control Delay (s)	29.5	-	-	9.2	0
HCM Lane LOS	D	-	-	A	A
HCM 95th %tile Q(veh)	2.6	-	-	0.2	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	441	21	17	414	0	0	0	0	0	0	0
Future Vol, veh/h	0	441	21	17	414	0	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	5
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	-	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	5	5	35	7	0	0	0	0	0	0	0
Mvmt Flow	0	474	23	18	445	0	0	0	0	0	0	0

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	497	0	0	967	978	450
Stage 1	-	-	-	-	-	-	481	481	-
Stage 2	-	-	-	-	-	-	486	497	-
Critical Hdwy	-	-	-	4.45	-	-	6.4	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.4	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.4	5.5	-
Follow-up Hdwy	-	-	-	2.515	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	0	-	-	917	-	0	284	252	613
Stage 1	0	-	-	-	-	0	626	557	-
Stage 2	0	-	-	-	-	0	623	548	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	917	-	-	277	0	610
Mov Cap-2 Maneuver	-	-	-	-	-	-	277	0	-
Stage 1	-	-	-	-	-	-	610	0	-
Stage 2	-	-	-	-	-	-	623	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0.4	0
HCM LOS			A

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1
Capacity (veh/h)	-	-	917	-	-
HCM Lane V/C Ratio	-	-	0.02	-	-
HCM Control Delay (s)	-	-	9	0	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.1	-	-

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	441	0	0	422	0	9	0	24	0	0	0
Future Vol, veh/h	0	441	0	0	422	0	9	0	24	0	0	0
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	-	-	-	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	5	0	0	7	0	22	0	4	0	0	0
Mvmt Flow	0	474	0	0	454	0	10	0	26	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	454	0	-	-	-	0	928	928	474
Stage 1	-	-	-	-	-	-	474	474	-
Stage 2	-	-	-	-	-	-	454	454	-
Critical Hdwy	4.1	-	-	-	-	-	6.62	6.5	6.24
Critical Hdwy Stg 1	-	-	-	-	-	-	5.62	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.62	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.698	4	3.336
Pot Cap-1 Maneuver	1117	-	0	0	-	-	274	270	586
Stage 1	-	-	0	0	-	-	587	561	-
Stage 2	-	-	0	0	-	-	600	573	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	1117	-	-	-	-	-	274	0	586
Mov Cap-2 Maneuver	-	-	-	-	-	-	274	0	-
Stage 1	-	-	-	-	-	-	587	0	-
Stage 2	-	-	-	-	-	-	600	0	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	13.7
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR
Capacity (veh/h)	447	1117	-	-	-
HCM Lane V/C Ratio	0.079	-	-	-	-
HCM Control Delay (s)	13.7	0	-	-	-
HCM Lane LOS	B	A	-	-	-
HCM 95th %tile Q(veh)	0.3	0	-	-	-

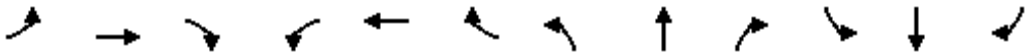
Intersection	
Int Delay, s/veh	0.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	3	10	104	4	0	110
Future Vol, veh/h	3	10	104	4	0	110
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	3	11	112	4	0	118

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	232	114	0	0	116	0
Stage 1	114	-	-	-	-	-
Stage 2	118	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	761	944	-	-	1485	-
Stage 1	916	-	-	-	-	-
Stage 2	912	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	761	944	-	-	1485	-
Mov Cap-2 Maneuver	761	-	-	-	-	-
Stage 1	916	-	-	-	-	-
Stage 2	912	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.1	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	894	1485	-
HCM Lane V/C Ratio	-	-	0.016	-	-
HCM Control Delay (s)	-	-	9.1	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0	0	-

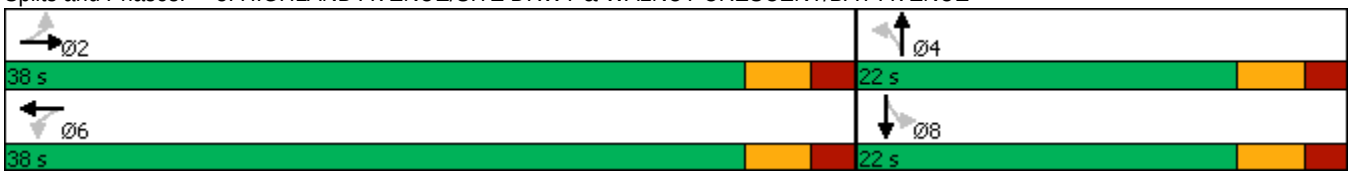


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	49	349	173	138	483	34	69	15	70	10	4	14
Future Volume (vph)	49	349	173	138	483	34	69	15	70	10	4	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	11	11	11	11	11	11
Storage Length (ft)	50		0	50		0	50		0	50		0
Storage Lanes	1		0	1		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.950			0.990			0.876			0.932	
Flt Protected	0.950			0.950			0.950				0.982	
Satd. Flow (prot)	1745	1739	0	1745	1818	0	1711	1609	0	0	1648	0
Flt Permitted	0.392			0.387			0.738				0.840	
Satd. Flow (perm)	720	1739	0	711	1818	0	1329	1609	0	0	1410	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		66			9			77			15	
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		153			161			203			176	
Travel Time (s)		4.2			4.4			5.5			4.8	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	0%	0%	1%	0%	0%	0%	2%	0%	0%	2%	2%	2%
Adj. Flow (vph)	54	384	190	152	531	37	76	16	77	11	4	15
Shared Lane Traffic (%)												
Lane Group Flow (vph)	54	574	0	152	568	0	76	93	0	0	30	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Detector Phase	2	2		6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	21.0	21.0		21.0	21.0		21.0	21.0		21.0	21.0	
Total Split (s)	38.0	38.0		38.0	38.0		22.0	22.0		22.0	22.0	
Total Split (%)	63.3%	63.3%		63.3%	63.3%		36.7%	36.7%		36.7%	36.7%	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0			0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None		None	None		None	None		None	None	
Act Effct Green (s)	20.9	20.9		20.9	20.9		9.0	9.0			9.0	
Actuated g/C Ratio	0.61	0.61		0.61	0.61		0.26	0.26			0.26	
v/c Ratio	0.12	0.53		0.35	0.51		0.22	0.19			0.08	
Control Delay	5.8	7.5		8.7	7.9		16.1	7.3			11.1	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0			0.0	
Total Delay	5.8	7.5		8.7	7.9		16.1	7.3			11.1	
LOS	A	A		A	A		B	A			B	
Approach Delay		7.4			8.1			11.3			11.1	
Approach LOS		A			A			B			B	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	5	58		16	65		12	3			2	
Queue Length 95th (ft)	19	149		53	156		49	33			20	
Internal Link Dist (ft)		73			81			123			96	
Turn Bay Length (ft)	50			50			50					
Base Capacity (vph)	630	1529		622	1591		743	934			795	
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	0.09	0.38		0.24	0.36		0.10	0.10			0.04	

Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 34.1			
Natural Cycle: 50			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.53			
Intersection Signal Delay: 8.2		Intersection LOS: A	
Intersection Capacity Utilization 58.1%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 3: HIGHLAND AVENUE/SITE DRWY & WALNUT CRESCENT/BAY AVENUE



Intersection	
Int Delay, s/veh	6.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	18	17	91	4	6	2	111	29	0	1	76	23
Future Vol, veh/h	18	17	91	4	6	2	111	29	0	1	76	23
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	2	2	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	0	0	1	0	0	0	2	0	0	0	3	5
Mvmt Flow	20	19	100	4	7	2	122	32	0	1	84	25

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	380	377	97	436	389	34	109	0	0	34	0	0
Stage 1	99	99	-	278	278	-	-	-	-	-	-	-
Stage 2	281	278	-	158	111	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.21	7.1	6.5	6.2	4.12	-	-	4.1	-	-
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	3.5	4	3.309	3.5	4	3.3	2.218	-	-	2.2	-	-
Pot Cap-1 Maneuver	581	558	962	534	549	1045	1481	-	-	1591	-	-
Stage 1	912	817	-	733	684	-	-	-	-	-	-	-
Stage 2	730	684	-	849	807	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	537	509	962	434	501	1043	1481	-	-	1588	-	-
Mov Cap-2 Maneuver	537	509	-	434	501	-	-	-	-	-	-	-
Stage 1	835	816	-	670	625	-	-	-	-	-	-	-
Stage 2	660	625	-	743	806	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.6	12.1	6.1	0.1
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1481	-	-	780	519	1588	-	-
HCM Lane V/C Ratio	0.082	-	-	0.178	0.025	0.001	-	-
HCM Control Delay (s)	7.6	0	-	10.6	12.1	7.3	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0.3	-	-	0.6	0.1	0	-	-

Intersection	
Int Delay, s/veh	3.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	11	429	437	129	142	29
Future Vol, veh/h	11	429	437	129	142	29
Conflicting Peds, #/hr	6	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	0	1	2	0	3	9
Mvmt Flow	12	471	480	142	156	32

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	628	0	-	0	1052	557
Stage 1	-	-	-	-	557	-
Stage 2	-	-	-	-	495	-
Critical Hdwy	4.1	-	-	-	6.43	6.29
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.2	-	-	-	3.527	3.381
Pot Cap-1 Maneuver	964	-	-	-	250	517
Stage 1	-	-	-	-	572	-
Stage 2	-	-	-	-	611	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	958	-	-	-	243	514
Mov Cap-2 Maneuver	-	-	-	-	374	-
Stage 1	-	-	-	-	559	-
Stage 2	-	-	-	-	607	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	22.4
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	958	-	-	-	392
HCM Lane V/C Ratio	0.013	-	-	-	0.479
HCM Control Delay (s)	8.8	0	-	-	22.4
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	2.5

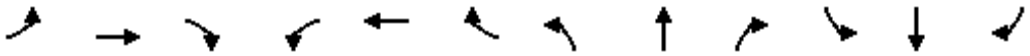
Intersection	
Int Delay, s/veh	0.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	400	0	0	665	12	26
Future Vol, veh/h	400	0	0	665	12	26
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	440	0	0	731	13	29

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	-	-	-	1171	440
Stage 1	-	-	-	-	440	-
Stage 2	-	-	-	-	731	-
Critical Hdwy	-	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	-	0	0	-	213	617
Stage 1	-	0	0	-	649	-
Stage 2	-	0	0	-	476	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	-	-	213	617
Mov Cap-2 Maneuver	-	-	-	-	213	-
Stage 1	-	-	-	-	649	-
Stage 2	-	-	-	-	476	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	15.5
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	WBT
Capacity (veh/h)	386	-	-
HCM Lane V/C Ratio	0.108	-	-
HCM Control Delay (s)	15.5	-	-
HCM Lane LOS	C	-	-
HCM 95th %tile Q(veh)	0.4	-	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	22	571	104	43	212	15	119	7	107	39	17	56
Future Volume (vph)	22	571	104	43	212	15	119	7	107	39	17	56
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	11	11	11	11	11	11
Storage Length (ft)	50		0	50		0	50		0	50		0
Storage Lanes	1		0	1		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.977			0.990			0.859			0.932	
Flt Protected	0.950			0.950			0.950				0.983	
Satd. Flow (prot)	1745	1736	0	1662	1769	0	1745	1578	0	0	1650	0
Flt Permitted	0.602			0.262			0.861				0.834	
Satd. Flow (perm)	1106	1736	0	458	1769	0	1581	1578	0	0	1400	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		24			10			119			62	
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		153			161			203			176	
Travel Time (s)		4.2			4.4			5.5			4.8	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	4%	0%	5%	3%	0%	0%	0%	0%	2%	2%	2%
Adj. Flow (vph)	24	634	116	48	236	17	132	8	119	43	19	62
Shared Lane Traffic (%)												
Lane Group Flow (vph)	24	750	0	48	253	0	132	127	0	0	124	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Detector Phase	2	2		6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	21.0	21.0		21.0	21.0		21.0	21.0		21.0	21.0	
Total Split (s)	38.0	38.0		38.0	38.0		22.0	22.0		22.0	22.0	
Total Split (%)	63.3%	63.3%		63.3%	63.3%		36.7%	36.7%		36.7%	36.7%	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0			0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None		None	None		None	None		None	None	
Act Effct Green (s)	27.8	27.8		27.8	27.8		11.1	11.1			11.0	
Actuated g/C Ratio	0.65	0.65		0.65	0.65		0.26	0.26			0.26	
v/c Ratio	0.03	0.66		0.16	0.22		0.32	0.26			0.31	
Control Delay	5.5	11.8		7.6	6.0		19.2	6.3			12.1	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0			0.0	
Total Delay	5.5	11.8		7.6	6.0		19.2	6.3			12.1	
LOS	A	B		A	A		B	A			B	
Approach Delay		11.6			6.2			12.9			12.1	
Approach LOS		B			A			B			B	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	2	124		5	28		30	2			14	
Queue Length 95th (ft)	12	#335		24	74		77	35			52	
Internal Link Dist (ft)		73			81			123			96	
Turn Bay Length (ft)	50			50			50					
Base Capacity (vph)	826	1303		342	1324		762	822			707	
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	0.03	0.58		0.14	0.19		0.17	0.15			0.18	

Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 42.8			
Natural Cycle: 60			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.66			
Intersection Signal Delay: 10.8		Intersection LOS: B	
Intersection Capacity Utilization 58.0%		ICU Level of Service B	
Analysis Period (min) 15			

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 3: HIGHLAND AVENUE/SITE DRWY & WALNUT CRESCENT/BAY AVENUE

Intersection	
Int Delay, s/veh	6.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	16	15	90	5	6	1	68	45	4	1	28	11
Future Vol, veh/h	16	15	90	5	6	1	68	45	4	1	28	11
Conflicting Peds, #/hr	0	0	1	1	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	18	17	100	6	7	1	76	50	4	1	31	12

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	247	245	38	303	249	52	43	0	0	54	0	0
Stage 1	39	39	-	204	204	-	-	-	-	-	-	-
Stage 2	208	206	-	99	45	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
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	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	711	661	1040	653	657	1021	1579	-	-	1564	-	-
Stage 1	981	866	-	803	737	-	-	-	-	-	-	-
Stage 2	799	735	-	912	861	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	677	627	1039	555	623	1021	1579	-	-	1564	-	-
Mov Cap-2 Maneuver	677	627	-	555	623	-	-	-	-	-	-	-
Stage 1	932	865	-	763	700	-	-	-	-	-	-	-
Stage 2	751	698	-	807	860	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.7	11	4.3	0.2
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1579	-	-	902	612	1564	-	-
HCM Lane V/C Ratio	0.048	-	-	0.149	0.022	0.001	-	-
HCM Control Delay (s)	7.4	0	-	9.7	11	7.3	0	-
HCM Lane LOS	A	A	-	A	B	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0.5	0.1	0	-	-

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	17	589	287	100	108	15
Future Vol, veh/h	17	589	287	100	108	15
Conflicting Peds, #/hr	8	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	0	1	2	0	0	0
Mvmt Flow	19	654	319	111	120	17

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	438	0	-	0	1075	383
Stage 1	-	-	-	-	383	-
Stage 2	-	-	-	-	692	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1133	-	-	-	245	669
Stage 1	-	-	-	-	694	-
Stage 2	-	-	-	-	500	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1124	-	-	-	234	663
Mov Cap-2 Maneuver	-	-	-	-	356	-
Stage 1	-	-	-	-	670	-
Stage 2	-	-	-	-	496	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	19.9
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1124	-	-	-	377
HCM Lane V/C Ratio	0.017	-	-	-	0.363
HCM Control Delay (s)	8.3	0	-	-	19.9
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	1.6

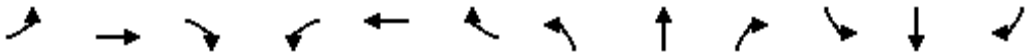
Intersection	
Int Delay, s/veh	1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	672	0	0	271	19	39
Future Vol, veh/h	672	0	0	271	19	39
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	747	0	0	301	21	43

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	-	-	-	1048	747
Stage 1	-	-	-	-	747	-
Stage 2	-	-	-	-	301	-
Critical Hdwy	-	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	-	0	0	-	252	413
Stage 1	-	0	0	-	468	-
Stage 2	-	0	0	-	751	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	-	-	252	413
Mov Cap-2 Maneuver	-	-	-	-	252	-
Stage 1	-	-	-	-	468	-
Stage 2	-	-	-	-	751	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	18
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	WBT
Capacity (veh/h)	342	-	-
HCM Lane V/C Ratio	0.188	-	-
HCM Control Delay (s)	18	-	-
HCM Lane LOS	C	-	-
HCM 95th %tile Q(veh)	0.7	-	-

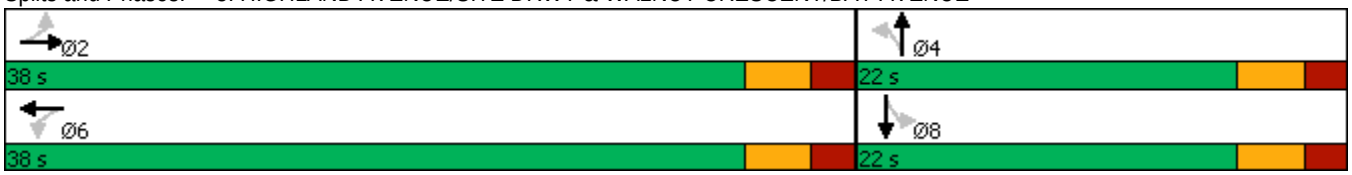


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	40	413	107	59	355	28	84	12	49	21	9	30
Future Volume (vph)	40	413	107	59	355	28	84	12	49	21	9	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	11	11	11	11	11	11
Storage Length (ft)	50		0	50		0	50		0	50		0
Storage Lanes	1		0	1		0	1		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.969			0.989			0.880			0.934	
Flt Protected	0.950			0.950			0.950				0.983	
Satd. Flow (prot)	1745	1692	0	1601	1706	0	1694	1542	0	0	1653	0
Flt Permitted	0.521			0.418			0.889				0.856	
Satd. Flow (perm)	957	1692	0	704	1706	0	1585	1542	0	0	1440	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		35			10			53			32	
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		153			161			194			210	
Travel Time (s)		4.2			4.4			5.3			5.7	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	0%	5%	6%	9%	7%	0%	3%	0%	6%	2%	2%	2%
Adj. Flow (vph)	43	444	115	63	382	30	90	13	53	23	10	32
Shared Lane Traffic (%)												
Lane Group Flow (vph)	43	559	0	63	412	0	90	66	0	0	65	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Detector Phase	2	2		6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	21.0	21.0		21.0	21.0		21.0	21.0		21.0	21.0	
Total Split (s)	38.0	38.0		38.0	38.0		22.0	22.0		22.0	22.0	
Total Split (%)	63.3%	63.3%		63.3%	63.3%		36.7%	36.7%		36.7%	36.7%	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0			0.0	
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None		None	None		None	None		None	None	
Act Effct Green (s)	23.3	23.3		23.3	23.3		9.8	9.8			9.4	
Actuated g/C Ratio	0.72	0.72		0.72	0.72		0.30	0.30			0.29	
v/c Ratio	0.06	0.46		0.12	0.34		0.19	0.13			0.15	
Control Delay	5.2	6.8		5.8	5.9		14.7	7.5			10.3	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0			0.0	
Total Delay	5.2	6.8		5.8	5.9		14.7	7.5			10.3	
LOS	A	A		A	A		B	A			B	
Approach Delay		6.7			5.9			11.7			10.3	
Approach LOS		A			A			B			B	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	4	64		6	44		14	2			5	
Queue Length 95th (ft)	16	165		23	112		54	28			33	
Internal Link Dist (ft)		73			81			114			130	
Turn Bay Length (ft)	50			50			50					
Base Capacity (vph)	828	1469		609	1478		991	984			912	
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	0.05	0.38		0.10	0.28		0.09	0.07			0.07	

Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 32.4			
Natural Cycle: 50			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.46			
Intersection Signal Delay: 7.2		Intersection LOS: A	
Intersection Capacity Utilization 55.2%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 3: HIGHLAND AVENUE/SITE DRWY & WALNUT CRESCENT/BAY AVENUE



Intersection	
Int Delay, s/veh	6.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	21	19	101	1	6	0	87	27	3	0	23	19
Future Vol, veh/h	21	19	101	1	6	0	87	27	3	0	23	19
Conflicting Peds, #/hr	0	0	3	3	0	0	0	0	2	2	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	23	20	109	1	6	0	94	29	3	0	25	20

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	257	257	38	324	266	33	45	0	0	34	0	0
Stage 1	35	35	-	221	221	-	-	-	-	-	-	-
Stage 2	222	222	-	103	45	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
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	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	700	651	1040	633	643	1046	1576	-	-	1591	-	-
Stage 1	986	870	-	786	724	-	-	-	-	-	-	-
Stage 2	785	723	-	908	861	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	662	610	1037	524	602	1044	1576	-	-	1588	-	-
Mov Cap-2 Maneuver	662	610	-	524	602	-	-	-	-	-	-	-
Stage 1	926	870	-	736	678	-	-	-	-	-	-	-
Stage 2	730	677	-	791	861	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.9	11.2	5.5	0
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1576	-	-	880	589	1588	-	-
HCM Lane V/C Ratio	0.059	-	-	0.172	0.013	-	-	-
HCM Control Delay (s)	7.4	0	-	9.9	11.2	0	-	-
HCM Lane LOS	A	A	-	A	B	A	-	-
HCM 95th %tile Q(veh)	0.2	-	-	0.6	0	0	-	-

Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	17	449	369	100	111	14
Future Vol, veh/h	17	449	369	100	111	14
Conflicting Peds, #/hr	4	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	0	1	1	0	0	0
Mvmt Flow	18	483	397	108	119	15

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	509	0	-	0	974	455
Stage 1	-	-	-	-	455	-
Stage 2	-	-	-	-	519	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1066	-	-	-	282	609
Stage 1	-	-	-	-	643	-
Stage 2	-	-	-	-	601	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1062	-	-	-	273	606
Mov Cap-2 Maneuver	-	-	-	-	399	-
Stage 1	-	-	-	-	626	-
Stage 2	-	-	-	-	599	-

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	17.8
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1062	-	-	-	415
HCM Lane V/C Ratio	0.017	-	-	-	0.324
HCM Control Delay (s)	8.4	0	-	-	17.8
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	1.4

Intersection	
Int Delay, s/veh	0.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	462	0	0	450	9	24
Future Vol, veh/h	462	0	0	450	9	24
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	497	0	0	484	10	26

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	-	-	-	981	497
Stage 1	-	-	-	-	497	-
Stage 2	-	-	-	-	484	-
Critical Hdwy	-	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	-	0	0	-	277	573
Stage 1	-	0	0	-	611	-
Stage 2	-	0	0	-	620	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	-	-	277	573
Mov Cap-2 Maneuver	-	-	-	-	277	-
Stage 1	-	-	-	-	611	-
Stage 2	-	-	-	-	620	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	13.8
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	WBT
Capacity (veh/h)	444	-	-
HCM Lane V/C Ratio	0.08	-	-
HCM Control Delay (s)	13.8	-	-
HCM Lane LOS	B	-	-
HCM 95th %tile Q(veh)	0.3	-	-

APPENDIX F – LEVEL OF SERVICE SUMMARY TABLES

TABLE F-I
LEVEL OF SERVICE SUMMARY
WALNUT CRESCENT & WALNUT STREET/ROSWELL TERRACE
WEEKDAY MORNING PEAK HOUR

Approach/Movement	No-Build	Build
EB Left/Through/Right	B (10.3)	B (10.6)
WB Left/Through/Right	B (11.5)	B (12.1)
NB Left/Through/Right	A (7.6)	A (7.6)
SB Left/Through/Right	A (7.3)	A (7.3)

-EB (Eastbound) approach is Walnut Street.
-WB (Westbound) approach is Roswell Terrace.
-NB (Northbound) and SB (Southbound) approaches are Walnut Crescent.
-Levels of delay are in seconds and are shown in parenthesis.

TABLE F-II
LEVEL OF SERVICE SUMMARY
WALNUT CRESCENT & WALNUT STREET/ROSWELL TERRACE
WEEKDAY EVENING PEAK HOUR

Approach/Movement	No-Build	Build
EB Left/Through/Right	A (9.6)	A (9.7)
WB Left/Through/Right	B (10.8)	B (11.0)
NB Left/Through/Right	A (7.4)	A (7.4)
SB Left/Through/Right	A (7.3)	A (7.3)

-EB (Eastbound) approach is Walnut Street.
-WB (Westbound) approach is Roswell Terrace.
-NB (Northbound) and SB (Southbound) approaches are Walnut Crescent.
-Levels of delay are in seconds and are shown in parenthesis.

TABLE F-III
LEVEL OF SERVICE SUMMARY
WALNUT CRESCENT & WALNUT STREET/ROSWELL TERRACE
SATURDAY MIDDAY PEAK HOUR

Approach/Movement	No-Build	Build
EB Left/Through/Right	A (9.9)	A (9.9)
WB Left/Through/Right	B (11.1)	B (11.2)
NB Left/Through/Right	A (7.4)	A (7.4)
SB Left/Through/Right	-	-

-EB (Eastbound) approach is Walnut Street.
-WB (Westbound) approach is Roswell Terrace.
-NB (Northbound) and SB (Southbound) approaches are Walnut Crescent.
-Levels of delay are in seconds and are shown in parenthesis.

TABLE F-IV
LEVEL OF SERVICE SUMMARY
WALNUT CRESCENT & CLAREMONT AVENUE
WEEKDAY MORNING PEAK HOUR

Approach/Movement	No-Build	Build
EB Left/Right	A (8.8)	A (8.8)
SB Left/Through	D (34.3)	C (22.4)

-EB (Eastbound) approach is Claremont Avenue.
-SB (Southbound) approach is Walnut Crescent.
-Levels of delay are in seconds and are shown in parenthesis.

TABLE F-V
LEVEL OF SERVICE SUMMARY
WALNUT CRESCENT & CLAREMONT AVENUE
WEEKDAY EVENING PEAK HOUR

Approach/Movement	No-Build	Build
EB Left/Right	A (8.1)	A (8.3)
SB Left/Through	D (28.1)	C (19.9)

-EB (Eastbound) approach is Claremont Avenue.
-SB (Southbound) approach is Walnut Crescent.
-Levels of delay are in seconds and are shown in parenthesis.

TABLE F-VI
LEVEL OF SERVICE SUMMARY
WALNUT CRESCENT & CLAREMONT AVENUE
SATURDAY MIDDAY PEAK HOUR

Approach/Movement	No-Build	Build
EB Left/Right	A (8.4)	A (8.4)
SB Left/Through	C (23.2)	C (17.8)

-EB (Eastbound) approach is Claremont Avenue.
-SB (Southbound) approach is Walnut Crescent.
-Levels of delay are in seconds and are shown in parenthesis.

TABLE F-VII
LEVEL OF SERVICE SUMMARY
BAY AVENUE & WALNUT CRESCENT
WEEKDAY MORNING PEAK HOUR

Approach/Movement	No-Build	Build
EB Left	-	A (5.8)
EB Left/Through/Right	-	-
EB Through/Right	-	A (7.5)
WB Left	-	A (8.7)
WB Left/Through	A (9.3)	-
WB Left/Through/Right	-	-
WB Through/Right	-	A (7.9)
NB Left	-	B (16.1)
NB Left/Right	F (53.4)	-
NB Left/Through/Right	-	-
NB Through/Right	-	A (7.3)
SB Left/Through/Right	-	B (11.1)

-WB (Westbound) approach is Bay Avenue.
-EB (Eastbound) and NB (Northbound) approaches are Walnut Crescent.
-Levels of delay are in seconds and are shown in parenthesis.

TABLE F-VIII
LEVEL OF SERVICE SUMMARY
BAY AVENUE & WALNUT CRESCENT
WEEKDAY EVENING PEAK HOUR

Approach/Movement	No-Build	Build
EB Left	-	A (5.5)
EB Left/Through/Right	-	-
EB Through/Right	-	B (11.8)
WB Left	-	A (7.6)
WB Left/Through	A (9.7)	-
WB Left/Through/Right	-	-
WB Through/Right	-	A (6.0)
NB Left	-	B (19.2)
NB Left/Right	F (59.9)	-
NB Left/Through/Right	-	-
NB Through/Right	-	A (6.3)
SB Left/Through/Right	-	B (12.1)

-WB (Westbound) approach is Bay Avenue.
-EB (Eastbound) and NB (Northbound) approaches are Walnut Crescent.
-Levels of delay are in seconds and are shown in parenthesis.

TABLE F-IX
LEVEL OF SERVICE SUMMARY
BAY AVENUE & WALNUT CRESCENT
SATURDAY MIDDAY PEAK HOUR

Approach/Movement	No-Build	Build
EB Left	-	A (5.2)
EB Left/Through/Right	-	-
EB Through/Right	-	A (6.8)
WB Left	-	A (5.8)
WB Left/Through	A (9.2)	-
WB Left/Through/Right	-	-
WB Through/Right	-	A (5.9)
NB Left	-	B (14.7)
NB Left/Right	D (29.5)	-
NB Left/Through/Right	-	-
NB Through/Right	-	A (7.5)
SB Left/Through/Right	-	B (10.3)

-WB (Westbound) approach is Bay Avenue.
-EB (Eastbound) and NB (Northbound) approaches are Walnut Crescent.
-Levels of delay are in seconds and are shown in parenthesis.

TABLE F-X
LEVEL OF SERVICE SUMMARY
BAY AVENUE & HOSPITAL INGRESS DRIVEWAY
WEEKDAY MORNING PEAK HOUR

Approach/Movement	No-Build	Build
WB Left/Through/Right	A (8.4)	-

-WB (Westbound) approach is Bay Avenue.
-SB (Northbound) approach is the proposed egress driveway.
-Levels of delay are in seconds and are shown in parenthesis.

TABLE F-XI
LEVEL OF SERVICE SUMMARY
BAY AVENUE & HOSPITAL INGRESS DRIVEWAY
WEEKDAY EVENING PEAK HOUR

Approach/Movement	No-Build	Build
WB Left/Through/Right	A (10.0)	-

-WB (Westbound) approach is Bay Avenue.
-SB (Northbound) approach is the proposed egress driveway.
-Levels of delay are in seconds and are shown in parenthesis.

TABLE F-XII
LEVEL OF SERVICE SUMMARY
BAY AVENUE & HOSPITAL INGRESS DRIVEWAY
SATURDAY MIDDAY PEAK HOUR

Approach/Movement	No-Build	Build
WB Left/Through/Right	A (9.0)	-

-WB (Westbound) approach is Bay Avenue.
-SB (Northbound) approach is the proposed egress driveway.
-Levels of delay are in seconds and are shown in parenthesis.

TABLE F-XIII
LEVEL OF SERVICE SUMMARY
BAY AVENUE & HOSPITAL EGRESS DRIVEWAY
WEEKDAY MORNING PEAK HOUR

Approach/Movement	No-Build	Build
NB Left/Through/Right	B (14.9)	C (15.5)

-EB (Eastbound) approach is Bay Avenue.
-NB (Northbound) approach is the Hospital egress driveway.
-Levels of delay are in seconds and are shown in parenthesis.

TABLE F-XIV
LEVEL OF SERVICE SUMMARY
BAY AVENUE & HOSPITAL EGRESS DRIVEWAY
WEEKDAY EVENING PEAK HOUR

Approach/Movement	No-Build	Build
NB Left/Through/Right	C (17.9)	C (18.0)

-EB (Eastbound) approach is Bay Avenue.
-NB (Northbound) approach is the Hospital egress driveway.
-Levels of delay are in seconds and are shown in parenthesis.

TABLE F-V
LEVEL OF SERVICE SUMMARY
BAY AVENUE & HOSPITAL EGRESS DRIVEWAY
SATURDAY MIDDAY PEAK HOUR

Approach/Movement	No-Build	Build
NB Left/Through/Right	B (13.7)	B (13.8)

-EB (Eastbound) approach is Bay Avenue.
-NB (Northbound) approach is the Hospital egress driveway.
-Levels of delay are in seconds and are shown in parenthesis.