



**DATE:** July 15, 2014  
**TO:** Cary Teague – Planning Director  
**CC:** Chad Millner – City Engineer  
**FROM:** Ross Bintner P.E. - Environmental Engineer  
**RE:** **3330 66th Street West – Development Review**

The Engineering Department has reviewed the subject property for street and utility connections, grading, storm water, erosion and sediment control.

1. City Standard Plates available here: [http://edinamn.gov/index.php?section=construction\\_standards](http://edinamn.gov/index.php?section=construction_standards)
2. A separate permit is required from Nine Mile Creek Watershed District: [www.ninemilecreek.org](http://www.ninemilecreek.org)

#### *Survey*

3. No comments.

#### *Soils*

4. Submit soils, soil boring and geotechnical report.

#### *Details*

5. No comments

#### *Traffic and Street*

6. A traffic study has been reviewed and shows no undue burden on the transportation network.
7. Show replacement of brick sidewalk with salvaged or like for utility service crossing location.
8. Show replacement of concrete sidewalk with like for utility service crossing location.
9. Commercial entrance should follow standard plate 400 and 410.

#### *Sanitary and Water Utilities*

10. Verify location, and remove moribund water service on southwest property corner to main if it exists.

#### *Storm Water Utility*

11. Provide hydraulic and hydrology calculations that meet Nine Mile Creek Watershed District standards. Capacity is available in public stormwater system from NC\_III subwatershed, downstream of project.
12. Provide copies of maintenance agreement for private stormwater systems.
13. A revised SAC unit determination will be required at building permit application.
14. Provide drainage outlet from raingarden.

#### *Grading, Erosion and Sediment Control*

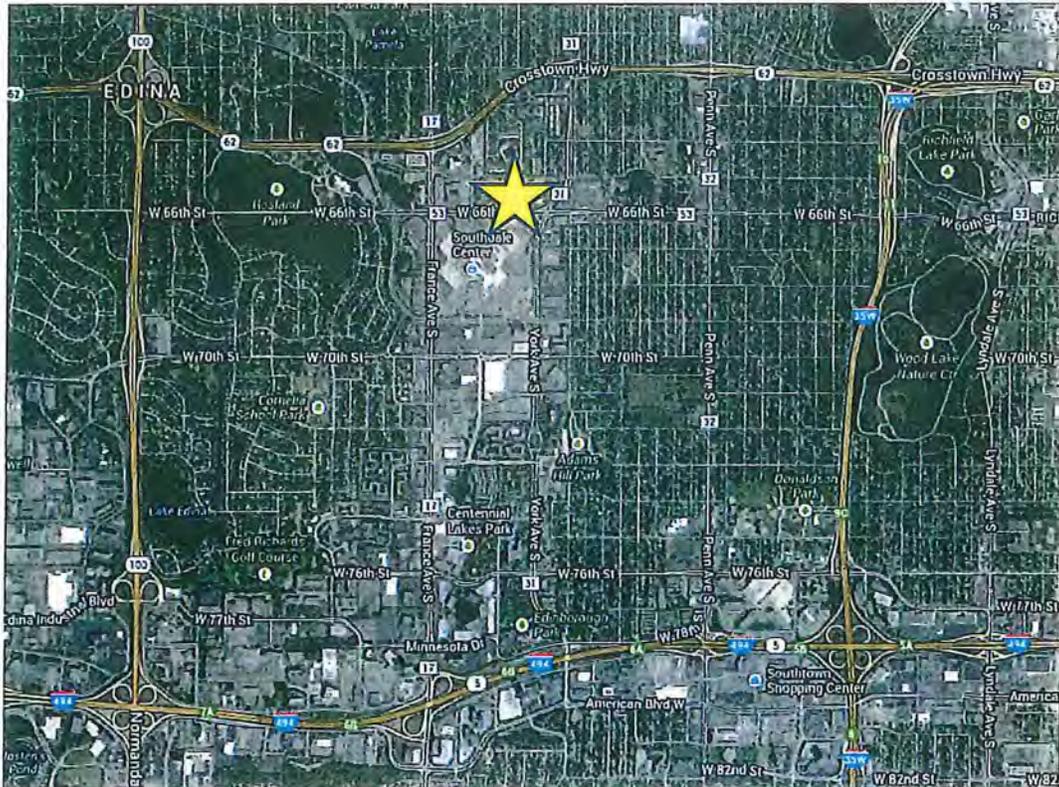
15. No comments.



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*Other Agency Coordination*

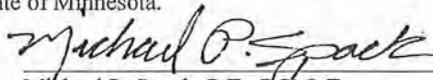
16. Nine Mile Creek Watershed permit is required. MDH, MPCA and MCES permits may be required.



## Traffic Impact Study

### 66 West Apartments Edina, MN

I hereby certify that this report was prepared by me or under my direct supervision, and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

By:   
Michael P. Spack, P.E., P.T.O.E.  
License No. 40936

Date: July 11, 2014

## Executive Summary

Background: Beacon Interfaith Housing Collaborative (Beacon) is proposing to develop a 39 unit apartment building at the site of an existing TCF Bank located northeast of the 66<sup>th</sup> Street/Barrie Road intersection in Edina, MN. The purpose of this study is to determine if transportation improvements are needed to accommodate the proposed building and to ensure there will be adequate parking available on site after the apartment building is fully occupied.

Results: The traffic impacts of the proposed apartment building on the study intersections were analyzed in the 2015 build-out conditions. The principal findings are:

- i. The forecast traffic from the proposed development will have little impact on the operations of the study intersections.
- ii. All study intersections will operate acceptably through the 2015 build-out scenarios.
- iii. The proposed 19 unit parking lot is forecast to be adequate for the 66 West Apartment building.

Recommendations: Other than the proposed changes of closing the east leg of the existing site southern driveway and converting the northern driveway to a full access intersection, no modifications are needed to be made by the developer to the study intersections.

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## 1. Introduction

### **a. Purpose of Study**

Beacon Interfaith Housing Collaborative (Beacon) is proposing to develop a 39 unit apartment building at the site of an existing TCF Bank located northeast of the 66<sup>th</sup> Street/Barrie Road intersection in Edina, MN. The purpose of this study is to determine if transportation improvements are needed to accommodate the proposed building and to ensure there will be adequate parking available on site after the apartment building is fully occupied.

### **b. Study Objectives**

The objectives of this study are:

- i. Document how the study intersections currently operate.
- ii. Forecast the amount of traffic expected to be generated by the proposed development.
- iii. Determine how the study intersections will operate in the year 2015 with development traffic.
- iv. Determine if there will be adequate parking on site when the apartment is fully occupied.
- v. Recommend improvements, if needed.

The study intersections are:

- i. 66<sup>th</sup> Street/Barrie Road
- ii. Barrie Road/Existing Southern Site Access
- iii. Barrie Road/Existing Northern Site Access

## 2. Proposed Development

### **a. Site Location**

The site is located north of the Southdale Shopping Center on the northeast corner of the 66<sup>th</sup> Street/Barrie Road intersection in Edina, MN (see Figure 1 in the Appendix).

### **b. Land Use Intensity and Development Timing**

The proposed site will have 39 apartment units. The site is currently being used as a TCF Bank with a drive through. The existing bank building will be remodeled and an addition will be constructed to make up the apartment building. Site access will be via the Barrie Road/Existing Northern Site Access intersection. The Existing Southern Site Access east leg will be removed as part of the development.

The site is proposed to have a 19 stall parking lot. A conceptual site plan is shown in Figure 2 in the Appendix.

For the purposes of this study, the development is anticipated to be built and fully occupied by the year 2015.

### **3. Analysis of Existing Traffic Conditions**

#### ***a. Transportation Network Characteristics***

66<sup>th</sup> Street West is also Hennepin County State Aid Highway 53. It is a divided road with five lanes (three westbound and two eastbound) and a 35 mph speed limit near the site. According to MnDOT it has an average of 16,000 vehicles per day using it near the site.

Barrie Road is a local Edina road. It is a two lane, undivided road with a 30 mph speed limit near the site.

All of the study intersections are two-way stop controlled with stop signs on the minor approaches. The 66<sup>th</sup> Street/Barrie Road intersection is a  $\frac{3}{4}$  intersection restricting vehicles from making left turns or through movements from Barrie Road. Existing traffic control and travel lanes are shown in Figure 3 in the Appendix for each study intersection.

#### ***b. Traffic Volumes***

Intersection video was collected at each of the study intersections under normal weekday conditions in June 2014 when there was clear weather. Using these videos, turning movement counts were collected from 6:30 to 9:30 a.m. and from 3:30 to 6:30 p.m. at the three existing study intersections. The peak hours for each intersection were found to be:

- 66<sup>th</sup> Street/Barrie Road: 7:30 to 8:30 a.m. and 4:15 to 5:15 p.m.
- Barrie Road/Existing Southern Site Access: 8:30 to 9:30 a.m. and 4:30 to 5:30 p.m.
- Barrie Road/Existing Northern Site Access: 8:30 to 9:30 a.m. and 4:30 to 5:30 p.m.

The turning movement count data from the counts are contained in fifteen minute intervals in the Appendix.

### c. Level of Service



Source: City of San Jose, CA

An intersection capacity analysis was conducted for the existing intersections per the *Highway Capacity Manual, 2010*. Intersections are assigned a "Level of Service" letter grade for the peak hour of traffic based on the number of lanes at the intersection, traffic volumes, and traffic control. Level of Service A (LOS A) represents light traffic flow (free flow conditions) while Level of Service F (LOS F) represents heavy traffic flow (over capacity conditions). LOS D at intersections is typically considered acceptable in the Twin Cities region. Individual movements are also assigned LOS grades. One or more individual movements typically operate at LOS F when the overall intersection is operating acceptably at LOS D. The pictures on the left represent some of the LOS grades (from a signal controlled intersection in San Jose, CA). These LOS grades represent the overall intersection operation, not individual movements.

The LOS results for the existing study hours are shown in Table 1. These are based on the existing traffic control and lane configurations as shown in Figure 3 in the Appendix. The existing turning movement volumes from the Appendix were used in the LOS calculations. The LOS calculations were done in accordance with the *Highway Capacity Manual 2010* using VISTRO™ software. The complete LOS calculations, which include grades for individual movements, are included in the Appendix. The study intersections currently operate acceptably at LOS A or better with all movements operating at LOS C or better.

**Table 1 – Existing Peak Hour Level of Service (LOS)<sup>1</sup>**

Intersection	A.M. Peak	P.M. Peak
66 <sup>th</sup> St/Barrie Rd	A (c)	A (b)
Barrie Rd/Existing Southern Site Access	A (b)	A (b)
Barrie Rd/Existing Northern Site Access	A (a)	A (b)

<sup>1</sup>The first letter is the Level of Service for the intersection. The second letter (in parentheses) is the Level of Service for the worst operating movement.

## 4. Projected Traffic

### a. Site Traffic Forecasting

A trip generation analysis was performed for the development site based on the methods and rates published in the *ITE Trip Generation Manual, 9<sup>th</sup>*

*Edition.* Based on Land Use Code 220, the 39 unit apartment building will generate:

- 130 vehicles entering and 130 vehicles exiting the subdivision per day
- 4 vehicles entering and 16 vehicles exiting the subdivision in the a.m. peak hour
- 16 vehicles entering and 8 vehicles exiting the subdivision in the p.m. peak hour

A trip distribution pattern was developed for the generated traffic to and from the site. This pattern is based on existing traffic counts as well as taking into account site access and access to the regional transportation system. The trip distribution pattern is:

- 35% to the west on 66<sup>th</sup> Street
- 25% from the west on 66<sup>th</sup> Street
- 65% to the north on Barrie Road
- 35% from the north on Barrie Road
- 40% from the east on 66<sup>th</sup> Street

The traffic generated by the site development was assigned to the area roadways per this distribution pattern.

Since the 66 West Apartments will be taking over the site of the existing TCF Bank, the existing traffic to and from the bank was deleted from the network for the future Build scenarios.

#### ***b. Non-site Traffic Forecasting***

Since the site is expected to be built and fully occupied in 2015, a background growth rate was applied to the existing traffic volumes to represent future traffic. The MnDOT State Aid office has a 20 year growth rate projection for Hennepin County of 10%. This means that 20 years from now, MnDOT projects traffic in the area will be 10% higher than current volumes. This leads to an annual growth rate of 0.5%. This growth rate of 0.5% was applied to existing traffic on the network.

#### ***c. Total Traffic***

Traffic forecasts were developed for the year 2015 Build Scenarios by adding the traffic generated by the proposed development to the existing traffic with the 0.5% growth rate applied and subtracting out the existing TCF Bank traffic. The resultant 2015 Build peak hour forecasts are shown in the Appendix under the capacity analysis section for each scenario.

## 5. Traffic and Improvement Analysis for 2034 Scenarios

### a. Level of Service Analysis

The LOS results for the 2015 Scenario study hours are shown in Table 2. These are based on the existing traffic control and lane configurations at the study intersections with the deletion of the east leg of the Barrie Road/Existing Southern Site Access (named Barrie Road/Southern Driveway in Table 2) and the conversion of the northern site access to a full access intersection (named Barrie Road/66 West Site Access in Table 2). The lane configurations used can be seen in the capacity analysis section of the Appendix for the Build scenarios. The forecast turning movement volumes for the 2015 peak hour scenarios as shown in the Appendix were used in the LOS calculations. The LOS calculations were done in accordance with the 2010 *Highway Capacity Manual* using VISTRO™ software. The complete LOS calculations, which include queue lengths and grades for individual movements, are included in the Appendix.

**Table 2 – 2015 Build Level of Service (LOS)<sup>1</sup>**

Intersection	A.M. Peak Hour	P.M. Peak Hour
66 <sup>th</sup> St/Barrie Rd	A (c)	A (b)
Barrie Rd/Southern Driveway	A (b)	A (b)
Barrie Rd/66 West Site Access	A (a)	A (a)

<sup>1</sup>The first letter is the Level of Service for the intersection. The second letter (in parentheses) is the Level of Service for the worst operating movement.

Comparing the results from Table 2 to Table 1, the LOS results are forecast to not get any worse with the conversion of the existing bank site to the 66 West Apartments. The northern driveway intersection actually improves with the conversion to the 66 West Apartments because the existing bank is generating more traffic than the apartment is forecast to. No additional improvements or modifications are needed to accommodate traffic from the 66 West Apartments.

## 6. Parking Analysis

### a. Existing Parking Counts

The 66 West Apartment building is proposing a 19 stall parking lot for its 39 unit building. Typically this would be considered not enough parking for a building of its size, but the 66 West Apartments is housing for young adults who have experienced homelessness. Because of this, the parking demand is likely to be lower than most apartment buildings since vehicle ownership rates are expected to be lower at 66 West than a typical suburban apartment building.

In order to determine how much parking can be expected at the 66 West Apartments, parking lot counts were conducted at three similar sites in Minneapolis that are also managed by Beacon. The three sites were:

- Nicollet Square: 3700 Nicollet Avenue South, Minneapolis, MN
- Lydia Apartments: 1920 LaSalle Avenue South, Minneapolis, MN
- Cedar View: 3146 Cedar Avenue South, Minneapolis, MN

The number of vehicles in each of these parking lots was counted after 10:00 p.m. every day for a week in June of 2014. The highest number of parked vehicles at each lot can be seen in Table 3. Full parking counts can be seen in Figure 4 in the Appendix.

**Table 3 – Existing Parking Lot Counts**

Apartment Building	Number of Apartment Units	Highest Parking Lot Count	Rate of Maximum Parked Vehicles to Apartment Units
Nicollet Square	42	10	0.18
Lydia Apartments	40	7	0.24
Cedar View	10	3	0.30

**b. Projected 66 West Apartments Parking**

Looking at Table 3, it can be seen that the maximum parking space to apartment unit demand is 0.3. For the 39 units at the 66 West Apartments, that leads to 12 parking spaces needed. Since the proposed parking lot includes 19 parking spaces, there will be adequate parking on site.



**7. Conclusions and Recommendations**

The traffic and parking impacts of the proposed apartment building on the study intersections were analyzed in the 2015 build-out conditions. The principal findings are:

- i. The forecast traffic from the proposed development will have little impact on the operations of the study intersections.
- ii. All study intersections will operate acceptably through the 2015 build-out scenarios.
- iii. The proposed 19 unit parking lot is forecast to be adequate for the 66 West Apartment building.



Other than the proposed changes of closing the east leg of the existing site southern driveway and converting the northern driveway to a full access intersection, no modifications are needed to be made by the developer to the study intersections.

## **8. Appendix**

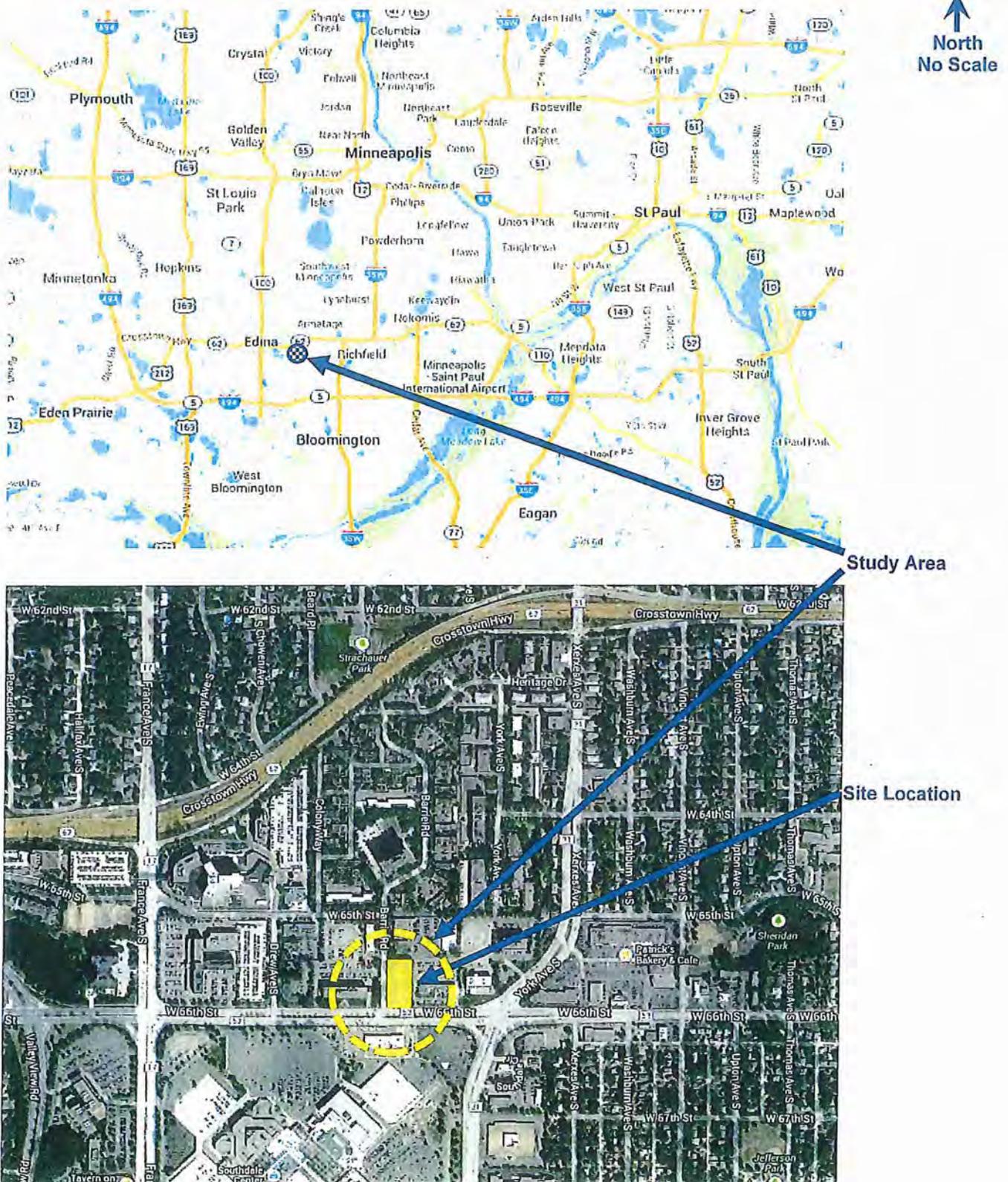
### ***A. Figures 1-4***

### ***B. Traffic Counts***

### ***C. Capacity Analysis Backup***

- AM Existing
- PM Existing
- AM 2015 Build
- PM 2015 Build

## Figure 1 Location Maps



Appendix A - Figures



Figure 2  
Concept Plan



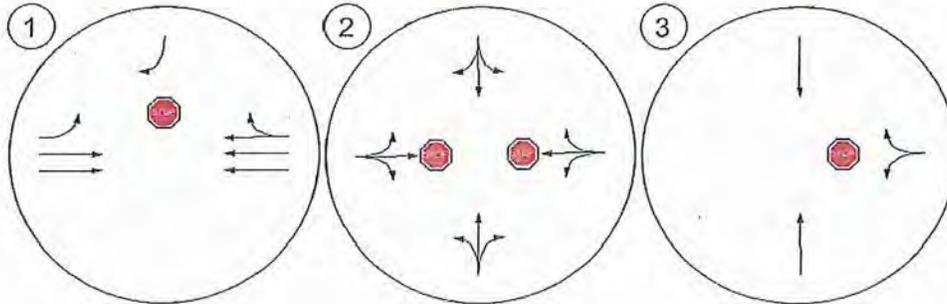
66 West Apartments  
RD121.004 | 01.19.2014 | 14-0018



SITE LOCATION

A51

**Figure 3**  
**Existing Lanes & Traffic Control**



Appendix A - Figures



**Figure 4  
Existing Parking Data**

Occupied Vehicles (counted after 10pm)

Date		Beacon Counts			Spack Consulting Counts		
		Lydia Apartments	Nicollet Square	Cedar View	Lydia Apartments	Nicollet Square	Cedar View
Monday	6/9/2014	7	7	3	7	5	3
Tuesday	6/10/2014	6	7	3	--	--	--
Wednesday	6/11/2014	5	6	3	--	--	--
Thursday	6/12/2014	6	7	3	5*	9*	3*
Friday	6/13/2014	5	7	3	--	--	--
Saturday	6/14/2014	5	10	2	--	--	--
Sunday	6/15/2014	5	2	3	--	--	--
<b>Maximum</b>		<b>7</b>	<b>10</b>	<b>3</b>	<b>*At 11 am</b>		
<b>Number of Units</b>		<b>40</b>	<b>42</b>	<b>10</b>			
<b>Max Parking Demand</b>		<b>0.18</b>	<b>0.24</b>	<b>0.30</b>			

AG1



# Traffic Data Inc Appendix B - Traffic Counts

PO Box 16296  
St. Louis Park, MN 55416

File Name : 1 - Barrie Rd & 66th St, 6-10-14, 630-930am, 330-630pm  
Site Code : 1  
Start Date : 6/10/2014  
Page No : 1

Barrie Rd & 66th St  
Edina, MN

Groups Printed- Cars + - Trucks

Start Time	Barrie Rd Southbound					66th St Westbound					Barrie Rd Northbound					66th St Eastbound					Int. Total					
	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left		Thru	Right	Peds	App. Total	
06:30 AM	0	0	0	2	1	3	0	0	95	13	1	110	0	0	0	0	0	0	0	0	4	36	0	0	40	153
06:45 AM	0	0	0	7	0	7	0	0	132	22	0	154	0	0	0	0	0	0	0	0	5	56	0	0	61	222
Total	0	0	0	9	1	10	0	0	228	35	1	264	0	0	0	0	0	0	0	0	9	92	0	0	101	375
07:00 AM	0	2	0	5	2	9	0	0	138	11	1	150	0	0	0	0	0	0	0	0	10	60	0	0	70	229
07:15 AM	0	0	0	5	4	9	0	0	239	19	0	258	0	0	0	0	0	0	0	0	12	82	0	0	94	361
07:30 AM	0	0	0	9	4	13	1	0	288	28	0	317	0	0	0	0	0	0	0	0	7	88	0	0	95	425
07:45 AM	0	0	0	15	6	21	0	0	293	35	0	328	0	0	0	0	1	1	1	1	15	82	0	0	98	448
Total	0	2	0	34	16	52	1	0	958	93	1	1053	0	0	0	0	1	1	1	1	44	312	0	0	357	1463
08:00 AM	0	2	0	9	1	12	0	0	282	23	0	305	0	0	0	0	0	0	0	0	12	89	0	1	102	419
08:15 AM	0	1	0	9	0	10	0	0	246	27	2	275	0	0	0	0	0	0	0	0	9	100	0	0	109	394
08:30 AM	0	0	0	18	2	20	0	0	234	26	1	261	0	0	0	0	0	0	2	2	6	110	0	0	118	399
08:45 AM	0	1	0	17	3	21	0	0	220	25	0	246	0	0	0	0	0	0	0	0	11	98	0	1	110	377
Total	0	4	0	53	6	63	0	0	982	102	3	1087	0	0	0	0	0	0	2	2	38	397	0	2	439	1689
09:00 AM	0	0	0	19	2	21	0	0	164	16	0	180	0	0	0	0	0	0	1	1	12	106	0	0	119	320
09:15 AM	0	0	0	26	2	28	0	0	148	16	0	164	0	0	0	0	0	0	0	0	11	91	0	0	102	264
Total	0	0	0	45	4	49	0	0	312	32	0	344	0	0	0	0	0	0	1	1	23	197	0	0	221	614
03:30 PM	0	0	0	26	4	30	0	0	166	17	1	184	0	0	0	0	0	0	2	2	16	211	0	0	229	443
03:45 PM	0	0	0	25	3	28	0	0	211	22	0	233	0	0	0	0	0	0	0	0	19	248	0	0	267	528
Total	0	0	0	51	7	58	0	0	377	39	1	417	0	0	0	0	0	0	2	2	35	459	0	0	496	971
04:00 PM	0	1	0	28	2	31	0	0	172	18	3	193	0	0	0	0	0	0	1	1	11	238	0	0	250	474
04:15 PM	0	0	0	22	3	25	0	0	193	26	0	219	0	0	0	0	0	0	0	0	16	236	0	3	255	499
04:30 PM	0	0	0	24	4	28	0	0	171	11	0	182	0	0	0	0	0	0	1	1	13	242	0	1	257	467
04:45 PM	0	0	0	20	0	20	0	0	231	27	0	258	0	0	0	0	1	1	0	0	9	226	0	0	235	514
Total	0	1	0	94	9	104	0	0	767	82	3	852	0	0	0	0	1	1	2	2	49	942	0	4	997	1954
05:00 PM	0	1	0	28	1	30	0	0	225	19	1	245	0	0	0	0	1	1	1	1	9	244	0	1	255	531
05:15 PM	0	1	0	22	3	26	0	0	188	33	1	222	0	0	0	0	0	0	0	0	15	226	0	0	241	489
05:30 PM	0	0	0	17	1	18	0	0	196	15	0	211	0	0	0	0	0	0	0	0	7	230	0	1	238	467
05:45 PM	0	0	0	18	4	22	0	0	204	25	1	230	0	0	0	0	0	0	1	1	9	228	0	0	238	490
Total	0	.2	0	85	9	96	0	0	813	92	3	908	0	0	0	0	1	1	2	2	40	928	0	2	972	1977
06:00 PM	0	1	0	10	5	16	0	0	176	13	1	190	0	0	0	0	0	0	0	0	5	205	0	0	210	416
06:15 PM	0	1	0	8	3	12	0	0	166	13	0	179	0	0	0	0	0	0	0	0	8	185	0	0	193	384
Grand Total	0	11	0	389	60	460	1	0	4779	501	13	5294	0	0	0	0	3	3	10	10	251	3717	0	8	3986	9743
Apprch %	0	2.4	0	84.6	13	0	0	90.3	9.5	0.2	0	0	0	0	0	100	0	0	0.3	6.3	93.3	0	0.2			
Total %	0	0.1	0	4	0.6	4.7	0	0	49.1	5.1	0.1	54.3	0	0	0	0	0	0	0.1	0.1	2.6	38.2	0	0.1	40.9	
Cars +	0	11	0	383	46	440	1	0	4651	492	13	5157	0	0	0	0	0	0	10	10	247	3710	0	6	3973	9570
% Cars +	0	100	0	98.5	76.7	95.7	100	0	97.3	98.2	100	97.4	0	0	0	0	0	0	100	98.4	99.8	99.8	0	75	99.7	98.2
Trucks	0	0	0	6	14	20	0	0	128	9	0	137	0	0	0	0	3	3	0	0	4	7	0	2	13	173
% Trucks	0	0	0	1.5	23.3	4.3	0	0	2.7	1.8	0	2.6	0	0	0	0	100	100	0	1.6	0.2	0	25	0.3	1.8	

Traffic Impact Study

B1

66 West Apartments

AG2

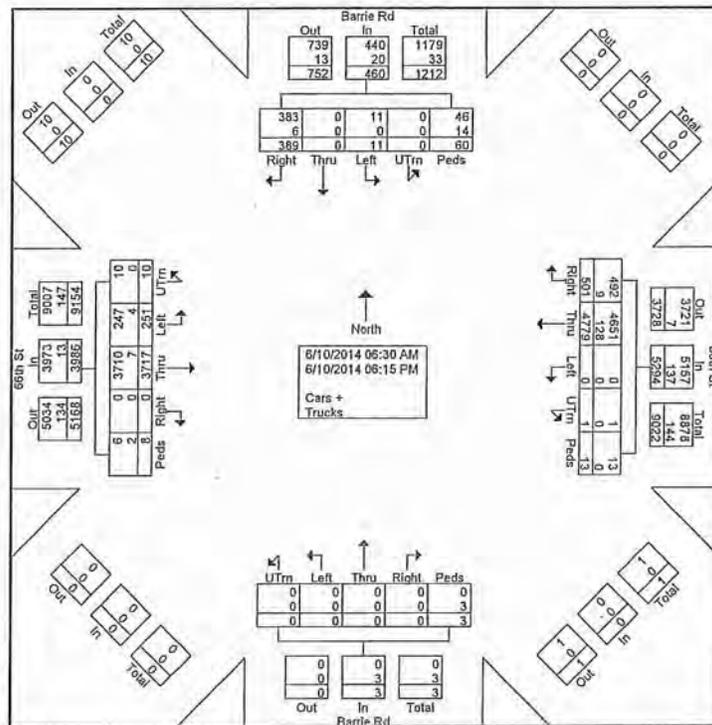


# Traffic Data Inc Appendix B - Traffic Counts

P.O. Box 16296  
St. Louis Park, MN 55416

Barrie Rd & 66th St  
Edina, MN

File Name : 1 - Barrie Rd & 66th St, 6-10-14, 630-930am, 330-630pm  
Site Code : 1  
Start Date : 6/10/2014  
Page No : 2



AG3



# Traffic Data Inc Appendix B - Traffic Counts

PO Box 16296  
St. Louis Park, MN 55416

Barrie Rd & 66th St  
Edina, MN

File Name : 1 - Barrie Rd & 66th St, 6-10-14, 630-930am, 330-630pm  
Site Code : 1  
Start Date : 6/10/2014  
Page No : 3

Start Time	Barrie Rd Southbound						66th St Westbound						Barrie Rd Northbound						66th St Eastbound						Int. Total
	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 06:30 AM to 12:30 PM - Peak 1 of 1																									
Peak Hour for Entire Intersection Begins at 07:30 AM																									
07:30 AM	0	0	0	9	4	13	1	0	288	28	0	317	0	0	0	0	0	0	0	7	88	0	0	95	425
07:45 AM	0	0	0	15	6	21	0	0	293	35	0	328	0	0	0	0	1	1	1	15	82	0	0	98	448
08:00 AM	0	2	0	9	1	12	0	0	282	23	0	305	0	0	0	0	0	0	0	12	89	0	1	102	419
08:15 AM	0	1	0	9	0	10	0	0	246	27	2	275	0	0	0	0	0	0	0	9	100	0	0	109	394
Total Volume	0	3	0	42	11	56	1	0	1109	113	2	1225	0	0	0	0	1	1	1	43	359	0	1	404	1686
% App. Total	0	5.4	0	75	19.6		0.1	0	90.5	9.2	0.2		0	0	0	0	100		0.2	10.6	88.9	0	0.2		
PHF	.000	.375	.000	.700	.458	.667	.250	.000	.946	.807	.250	.934	.000	.000	.000	.000	.250	.250	.250	.717	.898	.000	.250	.927	.941

Peak Hour Analysis From 12:45 PM to 06:15 PM - Peak 1 of 1																									
Peak Hour for Entire Intersection Begins at 04:15 PM																									
04:15 PM	0	0	0	22	3	25	0	0	193	26	0	219	0	0	0	0	0	0	0	16	236	0	3	255	499
04:30 PM	0	0	0	24	4	28	0	0	171	11	0	182	0	0	0	0	0	0	1	13	242	0	1	257	467
04:45 PM	0	0	0	20	0	20	0	0	231	27	0	258	0	0	0	0	1	1	0	9	226	0	0	235	514
05:00 PM	0	1	0	28	1	30	0	0	225	19	1	245	0	0	0	0	1	1	1	9	244	0	1	255	531
Total Volume	0	1	0	94	8	103	0	0	820	83	1	904	0	0	0	0	2	2	2	47	948	0	5	1002	2011
% App. Total	0	1	0	91.3	7.8		0	0	90.7	9.2	0.1		0	0	0	0	100		0.2	4.7	94.6	0	0.5		
PHF	.000	.250	.000	.839	.500	.858	.000	.000	.887	.769	.250	.878	.000	.000	.000	.000	.500	.500	.500	.734	.971	.000	.417	.975	.947

A64



# Traffic Data Inc Appendix B - Traffic Counts

PO Box 16296  
St. Louis Park, MN 55416

File Name : 2 - Barrie Rd & Southern Driveways, 6-10-14, 630-930am, 330-630pm  
Site Code : 2  
Start Date : 6/10/2014  
Page No : 1

Barrie Rd & Southern Site Access  
Edina, MN

Groups Printed- Cars + - Trucks

Start Time	Barrie Rd Southbound						Driveway Westbound						Barrie Rd Northbound						Driveway Eastbound						Int. Total						
	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total							
06:30 AM	0	0	2	0	0	2	0	0	0	0	1	1	0	6	10	1	0	17	0	0	0	0	0	0	0	0	0	0	0	0	20
06:45 AM	0	1	7	0	0	8	0	0	0	0	0	0	0	8	18	1	0	27	0	1	0	0	0	0	0	1	0	0	0	1	36
<b>Total</b>	0	1	9	0	0	10	0	0	0	0	1	1	0	14	28	2	0	44	0	1	0	0	0	0	0	1	0	0	0	1	56
07:00 AM	0	0	7	0	1	8	0	0	0	0	1	1	0	9	11	1	0	21	0	0	0	0	0	0	0	0	0	0	0	0	30
07:15 AM	0	0	5	1	0	6	0	0	0	0	0	0	0	10	19	2	0	31	0	0	0	0	0	0	0	0	0	0	0	0	37
07:30 AM	0	0	9	0	0	9	0	0	0	0	2	2	0	8	25	2	0	35	0	0	0	0	0	1	0	1	1	1	1	47	
07:45 AM	0	0	13	0	1	14	0	0	0	0	0	0	0	14	33	3	0	50	0	1	0	2	1	4	0	2	1	4	68		
<b>Total</b>	0	0	34	1	2	37	0	0	0	0	3	3	0	41	88	8	0	137	0	1	0	2	2	5	0	2	2	5	182		
08:00 AM	0	2	9	1	0	12	0	0	0	0	0	0	0	12	22	1	0	35	0	0	0	2	0	2	0	2	0	2	49		
08:15 AM	0	2	9	0	2	13	0	0	0	1	0	1	0	12	22	2	1	37	0	0	0	1	0	1	0	1	0	1	52		
08:30 AM	0	2	17	2	1	22	0	0	0	1	1	2	0	9	23	0	0	32	0	2	0	1	0	3	0	3	0	3	59		
08:45 AM	0	0	18	3	0	21	0	0	0	0	0	0	0	13	21	3	0	37	0	3	0	0	0	3	0	3	0	3	61		
<b>Total</b>	0	6	53	6	3	68	0	0	0	2	1	3	0	46	88	6	1	141	0	5	0	4	0	9	0	9	0	9	221		
09:00 AM	0	1	15	1	0	17	0	2	0	0	1	3	0	7	14	7	0	28	0	1	0	2	0	3	0	3	0	3	51		
09:15 AM	0	5	22	1	0	28	0	3	0	1	2	6	0	4	19	4	0	27	0	4	0	1	0	5	0	5	0	5	66		
<b>Total</b>	0	6	37	2	0	45	0	5	0	1	3	9	0	11	33	11	0	55	0	5	0	3	0	8	0	8	0	8	117		
03:30 PM	0	5	15	1	0	21	0	2	0	0	0	2	0	2	24	7	1	34	0	4	0	9	0	13	0	13	0	13	70		
03:45 PM	0	4	19	1	0	24	0	3	0	2	2	7	0	8	27	6	1	42	0	1	0	3	0	4	0	4	0	4	77		
<b>Total</b>	0	9	34	2	0	45	0	5	0	2	2	9	0	10	51	13	2	76	0	5	0	12	0	17	0	17	0	17	147		
04:00 PM	0	3	21	0	0	24	0	2	0	6	1	9	0	4	17	8	0	29	0	5	0	6	0	11	0	11	0	11	73		
04:15 PM	0	5	13	2	0	20	0	5	0	1	0	6	0	4	29	9	0	42	0	1	2	4	0	7	0	7	0	7	75		
04:30 PM	0	4	14	0	0	18	0	2	1	3	2	8	0	4	18	4	1	25	0	5	0	8	2	15	0	15	0	15	66		
04:45 PM	0	5	15	0	0	20	0	2	0	4	0	6	0	5	26	5	0	38	0	2	0	3	1	6	0	6	0	6	68		
<b>Total</b>	0	17	63	2	0	82	0	11	1	14	3	29	0	17	88	26	1	132	0	13	2	21	3	39	0	39	0	39	282		
05:00 PM	0	7	22	1	0	30	0	2	0	3	0	5	0	2	22	4	1	29	0	7	1	5	1	14	0	14	0	14	78		
05:15 PM	0	4	17	0	0	21	0	4	0	5	3	12	0	12	30	6	1	49	0	4	0	2	1	7	0	7	0	7	89		
05:30 PM	0	0	14	1	0	15	0	1	0	1	5	7	0	4	15	3	0	22	0	0	0	2	2	4	0	4	0	4	48		
05:45 PM	0	2	15	0	0	17	0	2	0	1	2	5	0	1	28	5	1	35	0	0	0	1	2	3	0	3	0	3	60		
<b>Total</b>	0	13	68	2	0	83	0	9	0	10	10	29	0	19	95	18	3	135	0	11	1	10	6	28	0	28	0	28	275		
06:00 PM	0	2	7	0	0	9	0	1	0	0	4	5	0	1	15	2	0	18	0	0	0	3	0	3	0	3	0	3	35		
06:15 PM	0	0	9	0	0	9	0	0	0	1	3	4	0	0	18	3	0	21	0	0	0	0	2	2	0	2	0	2	36		
<b>Grand Total</b>	0	54	314	15	5	388	0	31	1	30	30	92	0	159	504	89	7	759	0	41	3	55	13	112	0	112	0	112	1351		
<b>Approch %</b>	0	13.9	80.9	3.9	1.3		0	33.7	1.1	32.6	32.6		0	20.9	66.4	11.7	0.9		0	36.6	2.7	49.1	11.6		0	11.6	0	11.6			
<b>Total %</b>	0	4	23.2	1.1	0.4	28.7	0	2.3	0.1	2.2	2.2	6.8	0	11.8	37.3	6.6	0.5	56.2	0	3	0.2	4.1	1	8.3	0	8.3	0	8.3			
<b>Cars +</b>	0	54	314	14	4	386	0	31	1	30	27	89	0	158	504	89	6	757	0	39	3	54	13	109	0	109	0	109	1341		
<b>% Cars +</b>	0	100	100	93.3	80	99.5	0	100	100	100	90	96.7	0	99.4	100	100	85.7	99.7	0	95.1	100	98.2	100	97.3	0	97.3	0	97.3	99.3		
<b>Trucks</b>	0	0	0	1	1	2	0	0	0	0	3	3	0	1	0	0	1	2	0	2	0	1	0	3	0	3	0	3	10		
<b>% Trucks</b>	0	0	0	6.7	20	0.5	0	0	0	0	10	3.3	0	0.6	0	0	14.3	0.3	0	4.9	0	1.8	0	2.7	0	2.7	0	2.7	0.7		

Traffic Impact Study

B4

66 West Apartments

AG5

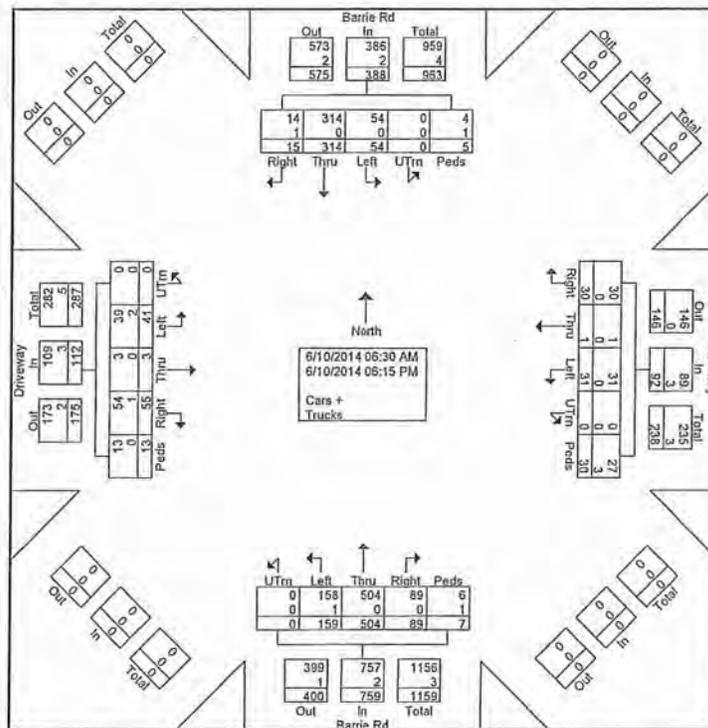


# Traffic Data Inc Appendix B - Traffic Counts

PO Box 16296  
St. Louis Park, MN 55416

File Name : 2 - Barrie Rd & Southern Driveways, 6-10-14, 630-930am, 330-630pm  
 Site Code : 2  
 Start Date : 6/10/2014  
 Page No : 2

Barrie Rd & Southern Site Access  
Edina, MN



K66





# Traffic Data Inc Appendix B - Traffic Counts

PO Box 16296  
St. Louis Park, MN 55416

Barrie Rd & Southern Site Access  
Edina, MN

File Name : 2 - Barrie Rd & Southern Driveways, 6-10-14, 630-930am, 330-630pm  
Site Code : 2  
Start Date : 6/10/2014  
Page No : 3

Start Time	Barrie Rd Southbound					Driveway Westbound					Barrie Rd Northbound					Driveway Eastbound					Int. Total				
	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left		Thru	Right	Peds	App. Total
Peak Hour Analysis From 06:30 AM to 12:30 PM - Peak 1 of 1																									
Peak Hour for Entire Intersection Begins at 08:30 AM																									
08:30 AM	0	2	17	2	1	22	0	0	0	1	1	2	0	9	23	0	0	32	0	2	0	1	0	3	59
08:45 AM	0	0	18	3	0	21	0	0	0	0	0	0	0	13	21	3	0	37	0	3	0	0	0	3	61
09:00 AM	0	1	15	1	0	17	0	2	0	0	1	3	0	7	14	7	0	28	0	1	0	2	0	3	51
09:15 AM	0	5	22	1	0	28	0	3	0	1	2	6	0	4	19	4	0	27	0	4	0	1	0	5	66
Total Volume	0	8	72	7	1	88	0	5	0	2	4	11	0	33	77	14	0	124	0	10	0	4	0	14	237
% App. Total	0	9.1	81.8	8	1.1		0	45.5	0	18.2	36.4		0	26.6	62.1	11.3	0		0	71.4	0	28.6	0		
PHF	.000	.400	.818	.583	.250	.788	.000	.417	.000	.500	.500	.458	.000	.635	.837	.500	.000	.838	.000	.625	.000	.500	.000	.700	.898
Peak Hour Analysis From 12:45 PM to 06:15 PM - Peak 1 of 1																									
Peak Hour for Entire Intersection Begins at 04:30 PM																									
04:30 PM	0	4	14	0	0	18	0	2	1	3	2	8	0	4	16	4	1	25	0	5	0	8	2	15	66
04:45 PM	0	5	15	0	0	20	0	2	0	4	0	6	0	5	26	5	0	36	0	2	0	3	1	6	68
05:00 PM	0	7	22	1	0	30	0	2	0	3	0	5	0	2	22	4	1	29	0	7	1	5	1	14	78
05:15 PM	0	4	17	0	0	21	0	4	0	5	3	12	0	12	30	6	1	49	0	4	0	2	1	7	89
Total Volume	0	20	68	1	0	89	0	10	1	15	5	31	0	23	94	19	3	139	0	18	1	18	5	42	301
% App. Total	0	22.5	76.4	1.1	0		0	32.3	3.2	48.4	16.1		0	16.5	67.6	13.7	2.2		0	42.9	2.4	42.9	11.9		
PHF	.000	.714	.773	.250	.000	.742	.000	.625	.250	.750	.417	.646	.000	.479	.783	.792	.750	.709	.000	.643	.250	.563	.625	.700	.846

AG7



# Traffic Data Inc Appendix B - Traffic Counts

PO Box 16296  
St. Louis Park, MN 55416

File Name : 3 - Barrie Rd & Northern Driveway, 6-10-14, 630-930am, 330-630pm  
Site Code : 3  
Start Date : 6/10/2014  
Page No : 1

Barrie Rd & Northern Site Access  
Edina, MN

Groups Printed- Cars + - Trucks

Start Time	Barrie Rd Southbound						Driveway Westbound						Barrie Rd Northbound						Eastbound						Int. Total						
	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total							
06:30 AM	0	0	2	0	0	2	0	0	0	0	0	0	0	0	10	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	12
06:45 AM	0	0	8	0	0	8	0	0	0	1	0	1	0	0	19	0	0	19	0	0	0	0	0	0	0	0	0	0	0	0	28
Total	0	0	10	0	0	10	0	0	0	1	0	1	0	0	29	0	0	29	0	0	0	0	0	0	0	0	0	0	0	0	40
07:00 AM	0	0	6	0	0	6	0	1	0	0	0	1	0	0	11	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	18
07:15 AM	0	0	5	0	0	5	0	1	0	1	0	2	0	0	19	0	0	19	0	0	0	0	0	0	0	0	0	0	0	0	26
07:30 AM	0	0	8	0	0	8	0	1	0	1	0	2	0	0	25	0	0	25	0	0	0	0	0	0	0	0	0	0	0	0	35
07:45 AM	0	0	12	0	0	12	0	1	0	0	0	1	0	0	34	0	0	34	0	0	0	0	0	0	0	0	0	0	0	0	47
Total	0	0	31	0	0	31	0	4	0	2	0	6	0	0	89	0	0	89	0	0	0	0	0	0	0	0	0	0	0	0	126
08:00 AM	0	0	12	0	0	12	0	0	0	3	0	3	0	0	22	0	0	22	0	0	0	0	0	0	0	0	0	0	0	0	37
08:15 AM	0	0	10	0	0	10	0	1	0	1	0	2	0	0	23	0	0	23	0	0	0	0	0	0	0	0	0	0	0	0	35
08:30 AM	0	0	21	0	0	21	0	0	0	1	0	1	0	0	26	0	0	26	0	0	0	0	0	0	0	0	0	0	0	0	48
08:45 AM	0	0	19	0	0	19	0	2	0	2	0	4	0	0	24	0	0	24	0	0	0	0	0	0	0	0	0	0	0	0	47
Total	0	0	62	0	0	62	0	3	0	7	0	10	0	0	95	0	0	95	0	0	0	0	0	0	0	0	0	0	0	0	167
09:00 AM	0	0	15	0	0	15	0	2	0	1	0	3	0	0	15	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0	33
09:15 AM	0	0	24	0	0	24	0	4	0	4	0	8	0	0	24	0	0	24	0	0	0	0	0	0	0	0	0	0	0	0	56
Total	0	0	39	0	0	39	0	6	0	5	0	11	0	0	39	0	0	39	0	0	0	0	0	0	0	0	0	0	0	0	89
03:30 PM	0	0	19	0	0	19	0	2	0	1	0	3	0	0	28	0	0	28	0	0	0	0	0	0	0	0	0	0	0	0	50
03:45 PM	0	0	22	0	0	22	0	2	0	5	0	7	0	0	30	0	0	30	0	0	0	0	0	0	0	0	0	0	0	0	59
Total	0	0	41	0	0	41	0	4	0	6	0	10	0	0	58	0	0	58	0	0	0	0	0	0	0	0	0	0	0	0	109
04:00 PM	0	0	19	0	0	19	0	5	0	0	0	5	0	0	28	0	0	28	0	0	0	0	0	0	0	0	0	0	0	0	52
04:15 PM	0	0	16	0	0	16	0	4	0	1	0	5	0	0	31	0	0	31	0	0	0	0	0	0	0	0	0	0	0	0	52
04:30 PM	0	0	13	0	0	13	0	5	0	2	0	7	0	0	24	0	0	24	0	0	0	0	0	0	0	0	0	0	0	0	44
04:45 PM	0	0	16	0	0	16	0	4	0	0	0	4	0	0	32	0	0	32	0	0	0	0	0	0	0	0	0	0	0	0	52
Total	0	0	64	0	0	64	0	18	0	3	0	21	0	0	115	0	0	115	0	0	0	0	0	0	0	0	0	0	0	0	200
05:00 PM	0	0	24	0	0	24	0	6	0	3	0	9	0	0	32	0	0	32	0	0	0	0	0	0	0	0	0	0	0	0	65
05:15 PM	0	0	19	0	0	19	0	2	0	1	0	3	0	0	39	0	0	39	0	0	0	0	0	0	0	0	0	0	0	0	61
05:30 PM	0	0	14	0	0	14	0	1	0	0	0	1	0	0	16	0	0	16	0	0	0	0	0	0	0	0	0	0	0	0	31
05:45 PM	0	0	15	0	0	15	0	2	0	3	0	5	0	0	29	0	0	29	0	0	0	0	0	0	0	0	0	0	0	0	49
Total	0	0	72	0	0	72	0	11	0	7	0	18	0	0	116	0	0	116	0	0	0	0	0	0	0	0	0	0	0	0	206
06:00 PM	0	0	9	0	0	9	0	0	0	2	0	2	0	0	15	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0	28
06:15 PM	0	0	9	0	0	9	0	0	0	2	0	2	0	0	19	0	0	19	0	0	0	0	0	0	0	0	0	0	0	0	30
Grand Total	0	0	337	0	0	337	0	46	0	35	0	81	0	0	575	0	0	575	0	0	0	0	0	0	0	0	0	0	0	0	993
Approch %	0	0	100	0	0	100	0	56.8	0	43.2	0	81	0	0	100	0	0	100	0	0	0	0	0	0	0	0	0	0	0	0	100
Total %	0	0	33.9	0	0	33.9	0	4.6	0	3.5	0	8.2	0	0	57.9	0	0	57.9	0	0	0	0	0	0	0	0	0	0	0	0	100
Cars +	0	0	337	0	0	337	0	46	0	35	0	81	0	0	575	0	0	575	0	0	0	0	0	0	0	0	0	0	0	0	993
% Cars +	0	0	100	0	0	100	0	100	0	100	0	100	0	0	100	0	0	100	0	0	0	0	0	0	0	0	0	0	0	0	100
Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Traffic Impact Study

B7

66 West Apartments

ACB



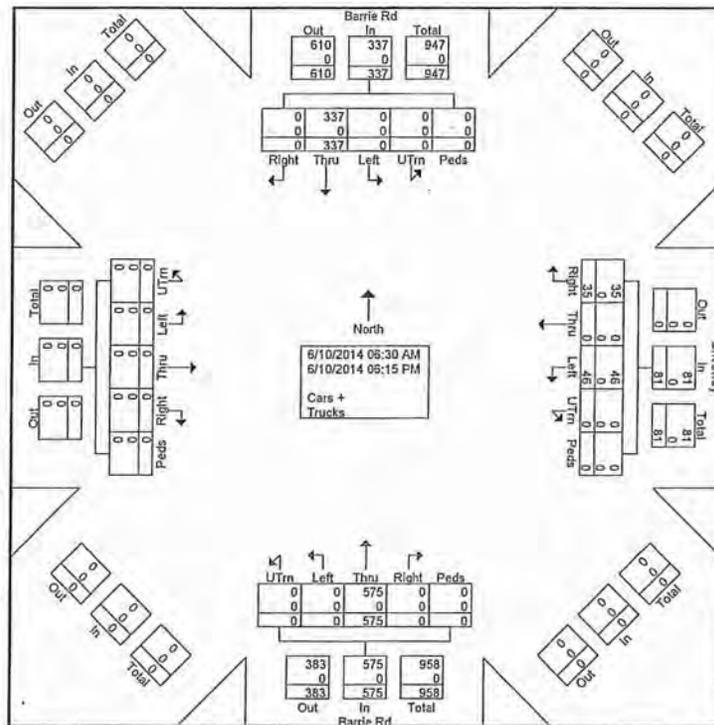
# Traffic Data Inc

## Appendix B - Traffic Counts

PO Box 16296  
St. Louis Park, MN 55416

File Name : 3 - Barrie Rd & Northern Driveway, 6-10-14, 630-930am, 330-630pm  
 Site Code : 3  
 Start Date : 6/10/2014  
 Page No : 2

Barrie Rd & Northern Site Access  
Edina, MN



AG9



# Traffic Data Inc Appendix B - Traffic Counts

PO Box 16296  
St. Louis Park, MN 55416

File Name : 3 - Barrie Rd & Northern Driveway, 6-10-14, 630-930am, 330-630pm  
 Site Code : 3  
 Start Date : 6/10/2014  
 Page No : 3

Barrie Rd & Northern Site Access  
Edina, MN

Start Time	Barrie Rd Southbound						Driveway Westbound						Barrie Rd Northbound						Eastbound						Int. Total							
	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total								
Peak Hour Analysis From 06:30 AM to 12:30 PM - Peak 1 of 1																																
Peak Hour for Entire Intersection Begins at 06:30 AM																																
08:30 AM	0	0	21	0	0	21	0	0	0	1	0	1	0	0	26	0	0	26	0	0	0	0	0	0	0	0	0	0	0	0	0	48
08:45 AM	0	0	19	0	0	19	0	2	0	2	0	4	0	0	24	0	0	24	0	0	0	0	0	0	0	0	0	0	0	0	0	47
09:00 AM	0	0	15	0	0	15	0	2	0	1	0	3	0	0	15	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0	33
09:15 AM	0	0	24	0	0	24	0	4	0	4	0	8	0	0	24	0	0	24	0	0	0	0	0	0	0	0	0	0	0	0	0	58
Total Volume	0	0	79	0	0	79	0	8	0	8	0	16	0	0	89	0	0	89	0	0	0	0	0	0	0	0	0	0	0	0	0	184
% App. Total	0	0	100	0	0	100	0	50	0	50	0	50	0	0	100	0	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0	184
PHF	.000	.000	.823	.000	.000	.823	.000	.500	.000	.500	.000	.500	.000	.000	.858	.000	.000	.858	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.821

Peak Hour Analysis From 12:45 PM to 06:15 PM - Peak 1 of 1																																
Peak Hour for Entire Intersection Begins at 04:30 PM																																
04:30 PM	0	0	13	0	0	13	0	5	0	2	0	7	0	0	24	0	0	24	0	0	0	0	0	0	0	0	0	0	0	0	0	44
04:45 PM	0	0	16	0	0	16	0	4	0	0	0	4	0	0	32	0	0	32	0	0	0	0	0	0	0	0	0	0	0	0	0	52
05:00 PM	0	0	24	0	0	24	0	6	0	3	0	9	0	0	32	0	0	32	0	0	0	0	0	0	0	0	0	0	0	0	0	65
05:15 PM	0	0	19	0	0	19	0	2	0	1	0	3	0	0	39	0	0	39	0	0	0	0	0	0	0	0	0	0	0	0	0	61
Total Volume	0	0	72	0	0	72	0	17	0	6	0	23	0	0	127	0	0	127	0	0	0	0	0	0	0	0	0	0	0	0	0	222
% App. Total	0	0	100	0	0	100	0	73.9	0	26.1	0	73.9	0	0	100	0	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0	222
PHF	.000	.000	.750	.000	.000	.750	.000	.708	.000	.500	.000	.639	.000	.000	.814	.000	.000	.814	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.854

# Appendix C - Capacity Analysis Backup

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66 West Apartments

Vistro File: C:\...\66 West.vistropdb  
Report File: C:\...\AM Existing.pdf

Scenario 1: AM Existing  
6/18/2014

## Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Barrie Rd & 66th St	Two-way stop	HCM2010	SBR	0.118	15.5	C
2	Barrie Rd & Southern Site Access	Two-way stop	HCM2010	EBT	0.000	11.0	B
3	Barrie Rd & Northern Site Access	Two-way stop	HCM2010	WBL	0.011	9.6	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value; for all other control types, they are taken for the whole intersection.

# Appendix C - Capacity Analysis Backup

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Version 2.00-06



## Intersection Level Of Service Report #1: Barrie Rd & 66th St

Control Type:	Two-way stop	Delay (sec / veh):	15.5
Analysis Method:	HCM2010	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.118

### Intersection Setup

Name	Barrie Rd		66th St		66th St	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration	↗		↖↑↑		↑↑↔	
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	0
Pocket Length [ft]	100.00	100.00	125.00	100.00	100.00	100.00
Speed [mph]	30.00		35.00		35.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	yes		no		no	

### Volumes

Name	Barrie Rd		66th St		66th St	
Base Volume Input [veh/h]	0	42	44	359	1109	113
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	42	44	359	1109	113
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	11	12	98	301	31
Total Analysis Volume [veh/h]	0	46	48	390	1205	123
Pedestrian Volume [ped/h]	11		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

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# Appendix C - Capacity Analysis Backup

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Version 2.00-06



## Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	no		
Number of Storage Spaces in Median	0	0	0

## Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.12	0.10	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	0.00	15.46	12.96	0.00	0.00	0.00
Movement LOS		C	B	A	A	A
95th-Percentile Queue Length [veh]	0.00	0.40	0.32	0.00	0.00	0.00
95th-Percentile Queue Length [ft]	0.00	9.94	7.92	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	15.46		1.42		0.00	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]				0.74		
Intersection LOS				C		

# Appendix C - Capacity Analysis Backup

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## Intersection Level Of Service Report #2: Barrie Rd & Southern Site Access

Control Type:	Two-way stop	Delay (sec / veh):	11.0
Analysis Method:	HCM2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.000

### Intersection Setup

Name	Barrie Rd			Barrie Rd			Driveway			Driveway		
	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	⬅➡			⬅➡			⬅➡			⬅➡		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	yes			yes			yes			yes		

### Volumes

Name	Barrie Rd			Barrie Rd			Driveway			Driveway		
	Base Volume Input [veh/h]	33	77	14	8	72	7	10	0	4	5	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	33	77	14	8	72	7	10	0	4	5	0	2
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	9	21	4	2	20	2	3	0	1	1	0	1
Total Analysis Volume [veh/h]	36	84	15	9	78	8	11	0	4	5	0	2
Pedestrian Volume [ped/h]	0			1			0			4		
Bicycle Volume [bicycles/h]	0			0			0			0		

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# Appendix C - Capacity Analysis Backup

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Version 2.00-06

## Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			no	no
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			no	no
Number of Storage Spaces in Median	0	0	0	0

## Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.00	0.00	0.01	0.00	0.00	0.02	0.00	0.00	0.01	0.00	0.00
d_M, Delay for Movement [s/veh]	7.45	0.00	0.00	7.45	0.00	0.00	10.50	11.02	8.80	10.51	10.94	8.83
Movement LOS	A	A	A	A	A	A	B	B	A	B	B	A
95th-Percentile Queue Length [veh]	0.30	0.30	0.30	0.21	0.21	0.21	0.06	0.06	0.06	0.03	0.03	0.03
95th-Percentile Queue Length [ft]	7.38	7.38	7.38	5.15	5.15	5.15	1.58	1.58	1.58	0.73	0.73	0.73
d_A, Approach Delay [s/veh]	1.99			0.71			10.05			10.03		
Approach LOS	A			A			B			B		
d_I, Intersection Delay [s/veh]	2.21											
Intersection LOS	B											

# Appendix C - Capacity Analysis Backup

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## Intersection Level Of Service Report #3: Barrie Rd & Northern Site Access

Control Type:	Two-way stop	Delay (sec / veh):	9.6
Analysis Method:	HCM2010	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.011

### Intersection Setup

Name	Barrie Rd		Barrie Rd		Driveway	
	Northbound		Southbound		Westbound	
Approach	Northbound		Southbound		Westbound	
Lane Configuration	↑		↑		←→	
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	yes		yes		yes	

### Volumes

Name	Barrie Rd		Barrie Rd		Driveway	
	Northbound		Southbound		Westbound	
Base Volume Input [veh/h]	89	0	0	79	8	8
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	89	0	0	79	8	8
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	24	0	0	21	2	2
Total Analysis Volume [veh/h]	97	0	0	86	9	9
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

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# Appendix C - Capacity Analysis Backup

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## Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			no
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			no
Number of Storage Spaces in Median	0	0	0

## Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.01	0.01
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	9.56	8.85
Movement LOS	A			A	A	A
95th-Percentile Queue Length [veh]	0.00	0.00	0.00	0.00	0.06	0.06
95th-Percentile Queue Length [ft]	0.00	0.00	0.00	0.00	1.58	1.58
d_A, Approach Delay [s/veh]	0.00		0.00		9.21	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.82					
Intersection LOS	A					

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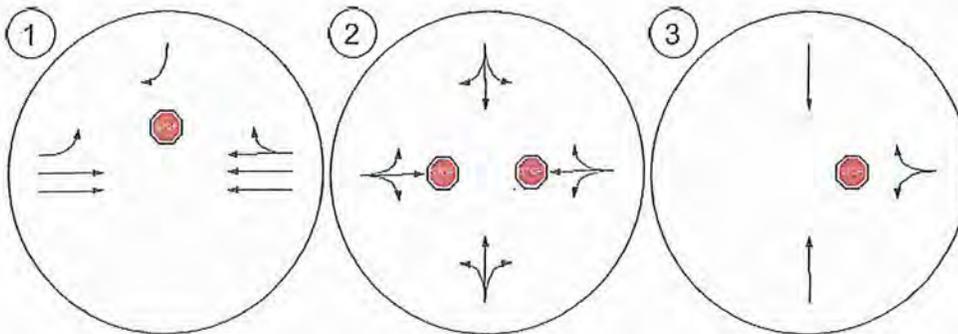
# Appendix C - Capacity Analysis Backup

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THE TRAFFIC EXPERT COMPANY

Version 2.00-06

## Lane Configuration and Traffic Control



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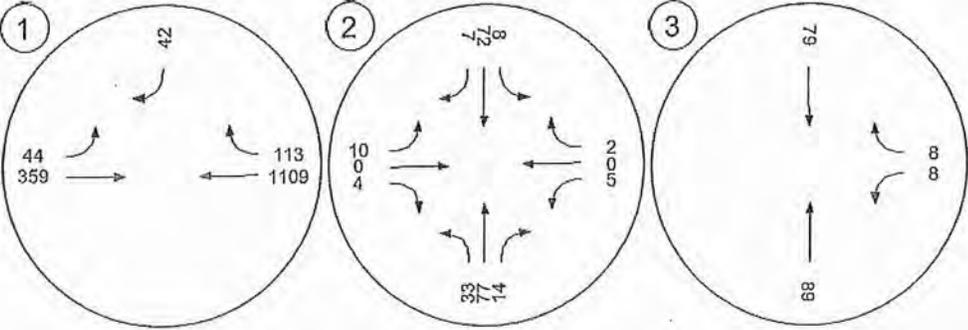
# Appendix C - Capacity Analysis Backup

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Traffic Volume - Base Volume



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# Appendix C - Capacity Analysis Backup

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66 West Apartments

Vistro File: C:\...\66 West.vistropdb

Scenario 3: PM Existing

Report File: C:\...\IPM Existing.pdf

6/18/2014

## Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Barrie Rd & 66th St	Two-way stop	HCM2010	SBR	0.200	13.8	B
2	Barrie Rd & Southern Site Access	Two-way stop	HCM2010	EBT	0.002	11.4	B
3	Barrie Rd & Northern Site Access	Two-way stop	HCM2010	WBL	0.023	9.8	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value; for all other control types, they are taken for the whole intersection.

ASD

# Appendix C - Capacity Analysis Backup

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## Intersection Level Of Service Report #1: Barrie Rd & 66th St

Control Type:	Two-way stop	Delay (sec / veh):	13.8
Analysis Method:	HCM2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.200

### Intersection Setup

Name	Barrie Rd		66th St		66th St	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration	↶		↶		↷	
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	0
Pocket Length [ft]	100.00	100.00	125.00	100.00	100.00	100.00
Speed [mph]	30.00		35.00		35.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	yes		no		no	

### Volumes

Name	Barrie Rd		66th St		66th St	
Base Volume Input [veh/h]	0	94	49	948	820	83
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	94	49	948	820	83
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	26	13	258	223	23
Total Analysis Volume [veh/h]	0	102	53	1030	891	90
Pedestrian Volume [ped/h]	8		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

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# Appendix C - Capacity Analysis Backup

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### Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	no		
Number of Storage Spaces in Median	0	0	0

### Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.20	0.08	0.01	0.01	0.00
d_M, Delay for Movement [s/veh]	0.00	13.80	10.71	0.00	0.00	0.00
Movement LOS		B	B	A	A	A
95th-Percentile Queue Length [veh]	0.00	0.74	0.25	0.00	0.00	0.00
95th-Percentile Queue Length [ft]	0.00	18.45	6.29	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	13.80		0.52		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.91					
Intersection LOS	B					

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# Appendix C - Capacity Analysis Backup

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Version 2.00-06



## Intersection Level Of Service Report #2: Barrie Rd & Southern Site Access

Control Type:	Two-way stop	Delay (sec / veh):	11.4
Analysis Method:	HCM2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.002

### Intersection Setup

Name	Barrie Rd			Barrie Rd			Driveway			Driveway		
	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	⊕			⊕			⊕			⊕		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	yes			yes			yes			yes		

### Volumes

Name	Barrie Rd			Barrie Rd			Driveway			Driveway		
	Base Volume Input [veh/h]	23	94	19	20	68	1	18	1	18	10	1
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	23	94	19	20	68	1	18	1	18	10	1	15
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	26	5	5	18	0	5	0	5	3	0	4
Total Analysis Volume [veh/h]	25	102	21	22	74	1	20	1	20	11	1	16
Pedestrian Volume [ped/h]	3			0			5			5		
Bicycle Volume [bicycles/h]	0			0			0			0		

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# Appendix C - Capacity Analysis Backup

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### Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
Flared Lane			no	no
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance			no	no
Number of Storage Spaces in Median	0	0	0	0

### Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.00	0.00	0.02	0.00	0.00	0.03	0.00	0.02	0.02	0.00	0.02
d_M, Delay for Movement [s/veh]	7.43	0.00	0.00	7.53	0.00	0.00	11.04	11.45	9.00	11.03	11.27	9.06
Movement LOS	A	A	A	A	A	A	B	B	A	B	B	A
95th-Percentile Queue Length [veh]	0.33	0.33	0.33	0.22	0.22	0.22	0.17	0.17	0.17	0.11	0.11	0.11
95th-Percentile Queue Length [ft]	8.17	8.17	8.17	5.39	5.39	5.39	4.31	4.31	4.31	2.86	2.86	2.86
d_A, Approach Delay [s/veh]	1.26			1.71			10.06			9.91		
Approach LOS	A			A			B			A		
d_I, Intersection Delay [s/veh]	3.32											
Intersection LOS	B											

# Appendix C - Capacity Analysis Backup

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Version 2.00-06



## Intersection Level Of Service Report #3: Barrie Rd & Northern Site Access

Control Type:	Two-way stop	Delay (sec / veh):	9.8
Analysis Method:	HCM2010	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.023

### Intersection Setup

Name	Barrie Rd		Barrie Rd		Driveway	
	Northbound		Southbound		Westbound	
Lane Configuration	↑		↑		←	
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	yes		yes		yes	

### Volumes

Name	Barrie Rd		Barrie Rd		Driveway	
	Northbound		Southbound		Westbound	
Base Volume Input [veh/h]	127	0	0	72	17	6
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	127	0	0	72	17	6
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	35	0	0	20	5	2
Total Analysis Volume [veh/h]	138	0	0	78	18	7
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

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# Appendix C - Capacity Analysis Backup

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## Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			no
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			no
Number of Storage Spaces in Median	0	0	0

## Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.02	0.01
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	9.82	9.11
Movement LOS	A			A	A	A
95th-Percentile Queue Length [veh]	0.00	0.00	0.00	0.00	0.10	0.10
95th-Percentile Queue Length [ft]	0.00	0.00	0.00	0.00	2.40	2.40
d_A, Approach Delay [s/veh]	0.00		0.00		9.62	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	1.00					
Intersection LOS	A					

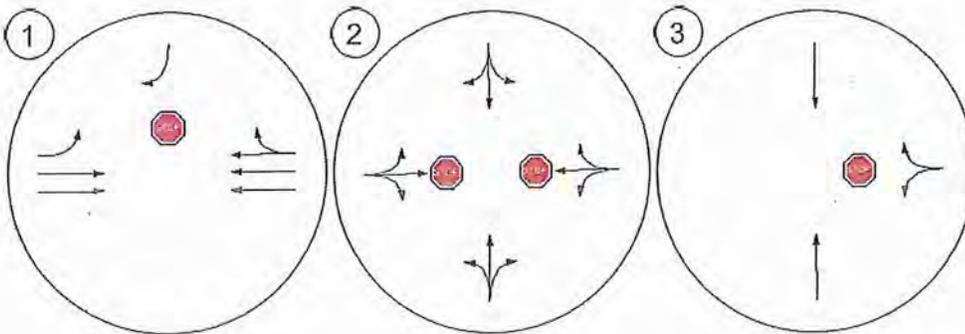
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## Lane Configuration and Traffic Control



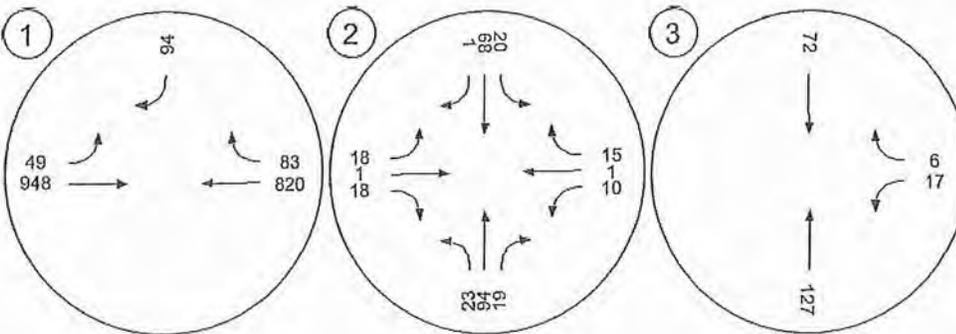
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Traffic Volume - Base Volume



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66 West Apartments

Vistro File: C:\...\66 West.vistropdb  
Report File: C:\...\AM 2015 Build.pdf

Scenario 2: AM 2015 Build  
6/18/2014

## Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Barrie Rd & 66th St	Two-way stop	HCM2010	SBR	0.098	15.3	C
2	Barrie Rd & Southern Site Access	Two-way stop	HCM2010	EBL	0.015	10.1	B
3	Barrie Rd & Northern Site Access	Two-way stop	HCM2010	WBL	0.009	9.5	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value; for all other control types, they are taken for the whole intersection.

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## Intersection Level Of Service Report #1: Barrie Rd & 66th St

Control Type:	Two-way stop	Delay (sec / veh):	15.3
Analysis Method:	HCM2010	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.098

### Intersection Setup

Name	Barrie Rd		66th St		66th St	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration	↗		↖		↗	
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	0
Pocket Length [ft]	100.00	100.00	125.00	100.00	100.00	100.00
Speed [mph]	30.00		35.00		35.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	yes		no		no	

### Volumes

Name	Barrie Rd		66th St		66th St	
Base Volume Input [veh/h]	0	42	44	359	1109	113
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00
Growth Rate	1.00	1.01	1.01	1.01	1.01	1.01
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	6	1	0	0	2
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	-13	-5	0	0	-9
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	35	40	363	1120	107
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	10	11	99	304	29
Total Analysis Volume [veh/h]	0	38	43	395	1217	116
Pedestrian Volume [ped/h]	11		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

# Appendix C - Capacity Analysis Backup

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## Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	no		
Number of Storage Spaces in Median	0	0	0

## Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.10	0.09	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	0.00	15.27	12.91	0.00	0.00	0.00
Movement LOS		C	B	A	A	A
95th-Percentile Queue Length [veh]	0.00	0.32	0.28	0.00	0.00	0.00
95th-Percentile Queue Length [ft]	0.00	8.07	7.05	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	15.27		1.27		0.00	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	0.63					
Intersection LOS	C					

# Appendix C - Capacity Analysis Backup

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## Intersection Level Of Service Report #2: Barrie Rd & Southern Site Access

Control Type:	Two-way stop	Delay (sec / veh):	10.1
Analysis Method:	HCM2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.015

### Intersection Setup

Name	Barrie Rd		Barrie Rd		Driveway	
	Northbound		Southbound		Eastbound	
Approach						
Lane Configuration	←		→		←→	
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	yes		yes		yes	

### Volumes

Name	Barrie Rd		Barrie Rd		Driveway	
Base Volume Input [veh/h]	33	77	72	7	10	4
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00
Growth Rate	1.01	1.01	1.01	1.01	1.01	1.01
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	3	6	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	-8	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	33	81	71	7	10	4
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	9	22	19	2	3	1
Total Analysis Volume [veh/h]	36	88	77	8	11	4
Pedestrian Volume [ped/h]	0		1		0	
Bicycle Volume [bicycles/h]	0		0		0	

# Appendix C - Capacity Analysis Backup

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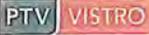
### Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			no
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			no
Number of Storage Spaces in Median	0	0	0

### Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.00	0.00	0.00	0.02	0.00
d_M, Delay for Movement [s/veh]	7.45	0.00	0.00	0.00	10.06	8.78
Movement LOS	A	A	A	A	B	A
95th-Percentile Queue Length [veh]	0.27	0.27	0.00	0.00	0.06	0.06
95th-Percentile Queue Length [ft]	6.72	6.72	0.00	0.00	1.47	1.47
d_A, Approach Delay [s/veh]	2.16		0.00		9.72	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	1.85					
Intersection LOS	B					

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### Intersection Level Of Service Report #3: Barrie Rd & Northern Site Access

Control Type:	Two-way stop	Delay (sec / veh):	9.5
Analysis Method:	HCM2010	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.009

#### Intersection Setup

Name	Barrie Rd		Barrie Rd		Driveway	
	Northbound		Southbound		Westbound	
Approach						
Lane Configuration	↔		↔		↔	
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	yes		yes		yes	

#### Volumes

Name	Barrie Rd		Barrie Rd		Driveway	
	Northbound		Southbound		Westbound	
Base Volume Input [veh/h]	89	0	0	79	8	8
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00
Growth Rate	1.01	1.01	1.01	1.01	1.01	1.01
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	3	1	0	6	10
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	-2	0	0	-8	-8	-8
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	88	3	1	72	6	10
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	24	1	0	20	2	3
Total Analysis Volume [veh/h]	96	3	1	78	7	11
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

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## Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			no
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			no
Number of Storage Spaces in Median	0	0	0

## Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.01	0.01
d_M, Delay for Movement [s/veh]	0.00	0.00	7.42	0.00	9.53	8.85
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh]	0.00	0.00	0.17	0.17	0.06	0.06
95th-Percentile Queue Length [ft]	0.00	0.00	4.20	4.20	1.54	1.54
d_A, Approach Delay [s/veh]	0.00		0.09		9.11	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]				0.87		
Intersection LOS				A		

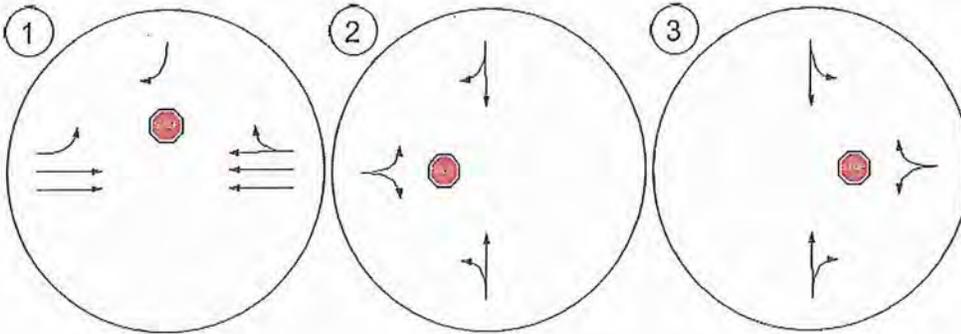
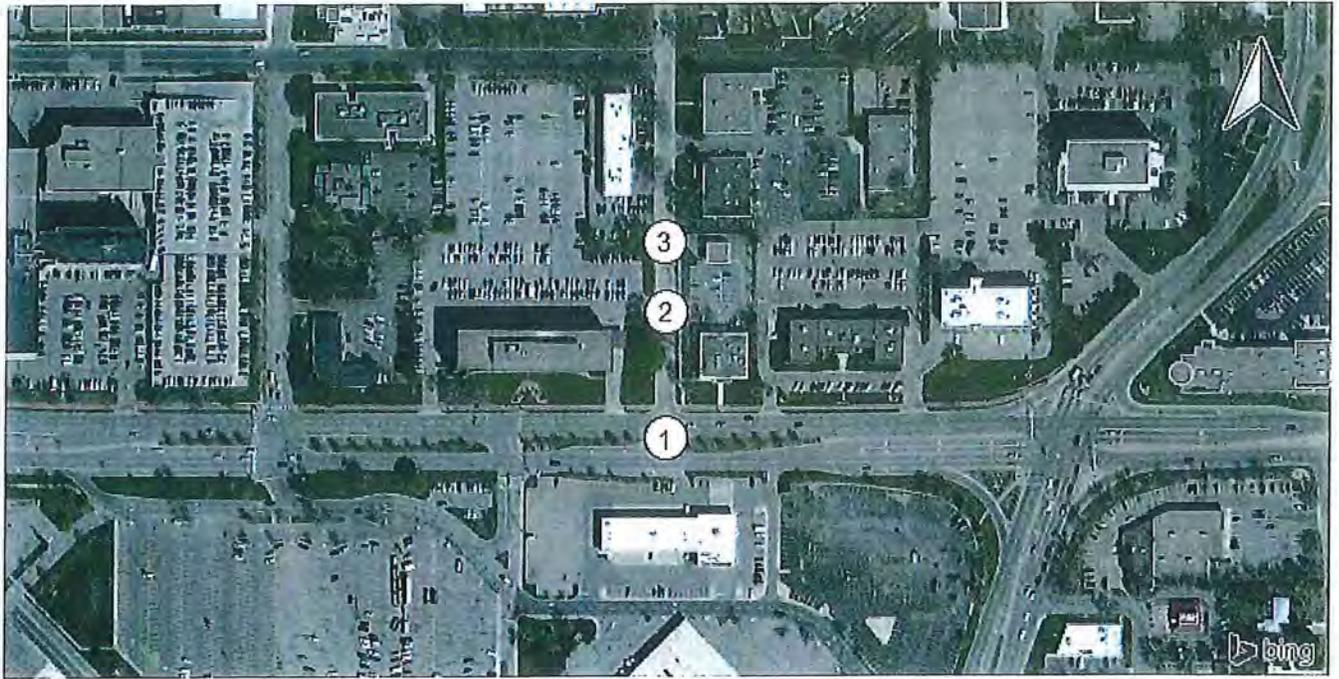
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## Lane Configuration and Traffic Control



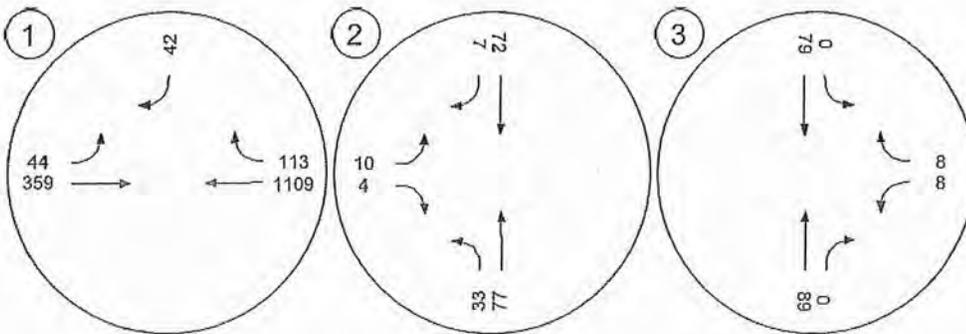
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Traffic Volume - Base Volume



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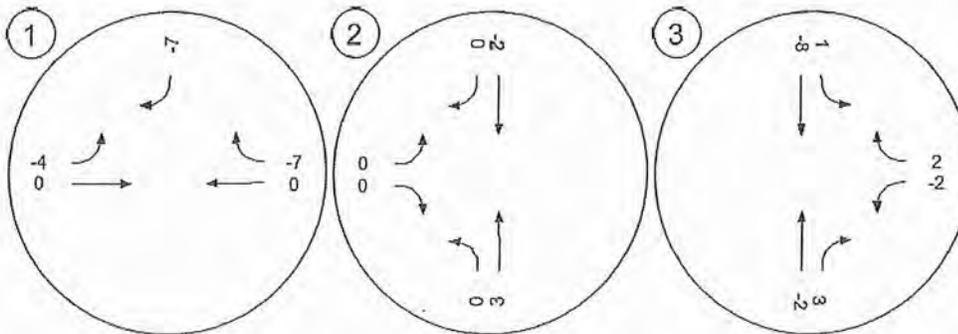
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Traffic Volume - Net New Site Trips



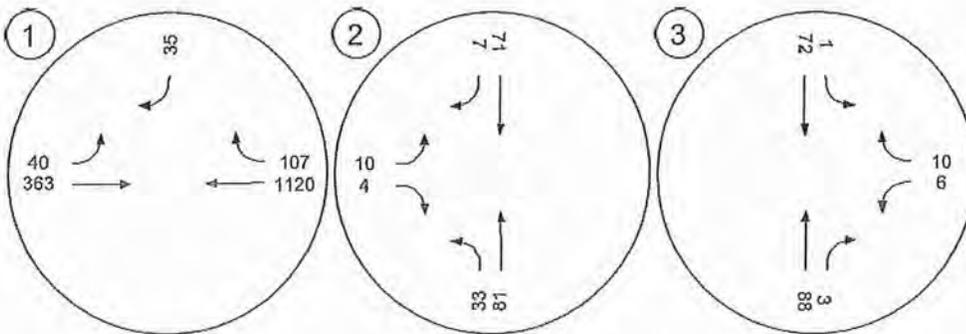
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Traffic Volume - Future Total Volume



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66 West Apartments

Vistro File: C:\...\66 West.vistropdb  
Report File: C:\...\PM 2015 Build.pdf

Scenario 4: PM 2015 Build  
6/18/2014

## Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Barrie Rd & 66th St	Two-way stop	HCM2010	SBR	0.151	13.3	B
2	Barrie Rd & Southern Site Access	Two-way stop	HCM2010	EBL	0.027	10.1	B
3	Barrie Rd & Northern Site Access	Two-way stop	HCM2010	WBL	0.004	9.6	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value; for all other control types, they are taken for the whole intersection.

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## Intersection Level Of Service Report #1: Barrie Rd & 66th St

Control Type:	Two-way stop	Delay (sec / veh):	13.3
Analysis Method:	HCM2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.151

### Intersection Setup

Name	Barrie Rd		66th St		66th St	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration	↻		↻		↻	
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	0
Pocket Length [ft]	100.00	100.00	125.00	100.00	100.00	100.00
Speed [mph]	30.00		35.00		35.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	yes		no		no	

### Volumes

Name	Barrie Rd		66th St		66th St	
Base Volume Input [veh/h]	0	94	49	948	820	83
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00
Growth Rate	1.00	1.01	1.01	1.01	1.01	1.01
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	3	4	0	0	6
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	-27	-6	0	0	-13
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	71	47	957	828	77
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	19	13	260	225	21
Total Analysis Volume [veh/h]	0	77	51	1040	900	84
Pedestrian Volume [ped/h]	8		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

# Appendix C - Capacity Analysis Backup

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### Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	no		
Number of Storage Spaces in Median	0	0	0

### Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.15	0.07	0.01	0.01	0.00
d_M, Delay for Movement [s/veh]	0.00	13.32	10.71	0.00	0.00	0.00
Movement LOS		B	B	A	A	A
95th-Percentile Queue Length [veh]	0.00	0.53	0.24	0.00	0.00	0.00
95th-Percentile Queue Length [ft]	0.00	13.22	6.05	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	13.32		0.50		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.73					
Intersection LOS	B					

# Appendix C - Capacity Analysis Backup

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## Intersection Level Of Service Report #2: Barrie Rd & Southern Site Access

Control Type:	Two-way stop	Delay (sec / veh):	10.1
Analysis Method:	HCM2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.027

### Intersection Setup

Name	Barrie Rd		Barrie Rd		Driveway	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration	←↑		↑→		←↑→	
Turning Movement	Left	Thru	Thru	Right	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	yes		yes		yes	

### Volumes

Name	Barrie Rd		Barrie Rd		Driveway	
Base Volume Input [veh/h]	23	94	68	1	18	18
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00
Growth Rate	1.01	1.01	1.01	1.01	1.01	1.01
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	10	3	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	-17	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	23	105	55	1	18	18
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	29	15	0	5	5
Total Analysis Volume [veh/h]	25	114	60	1	20	20
Pedestrian Volume [ped/h]	3		0		5	
Bicycle Volume [bicycles/h]	0		0		0	

# Appendix C - Capacity Analysis Backup

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### Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			no
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			no
Number of Storage Spaces in Median	0	0	0

### Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.00	0.00	0.00	0.03	0.02
d_M, Delay for Movement [s/veh]	7.40	0.00	0.00	0.00	10.08	8.87
Movement LOS	A	A	A	A	B	A
95th-Percentile Queue Length [veh]	0.30	0.30	0.00	0.00	0.15	0.15
95th-Percentile Queue Length [ft]	7.52	7.52	0.00	0.00	3.72	3.72
d_A, Approach Delay [s/veh]	1.33		0.00		9.47	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	2.35					
Intersection LOS	B					

# Appendix C - Capacity Analysis Backup

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## Intersection Level Of Service Report #3: Barrie Rd & Northern Site Access

Control Type:	Two-way stop	Delay (sec / veh):	9.6
Analysis Method:	HCM2010	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.004

### Intersection Setup

Name	Barrie Rd		Barrie Rd		Driveway	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	yes		yes		yes	

### Volumes

Name	Barrie Rd		Barrie Rd		Driveway	
Base Volume Input [veh/h]	127	0	0	72	17	6
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00
Growth Rate	1.01	1.01	1.01	1.01	1.01	1.01
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	10	6	0	3	5
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	-15	0	0	-20	-17	-6
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	113	10	6	53	3	5
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	31	3	2	14	1	1
Total Analysis Volume [veh/h]	123	11	7	58	3	5
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

A105

# Appendix C - Capacity Analysis Backup

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### Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			no
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			no
Number of Storage Spaces in Median	0	0	0

### Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.01
d_M, Delay for Movement [s/veh]	0.00	0.00	7.50	0.00	9.64	8.96
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh]	0.00	0.00	0.14	0.14	0.03	0.03
95th-Percentile Queue Length [ft]	0.00	0.00	3.53	3.53	0.70	0.70
d_A, Approach Delay [s/veh]	0.00		0.81		9.21	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.61					
Intersection LOS	A					

A106

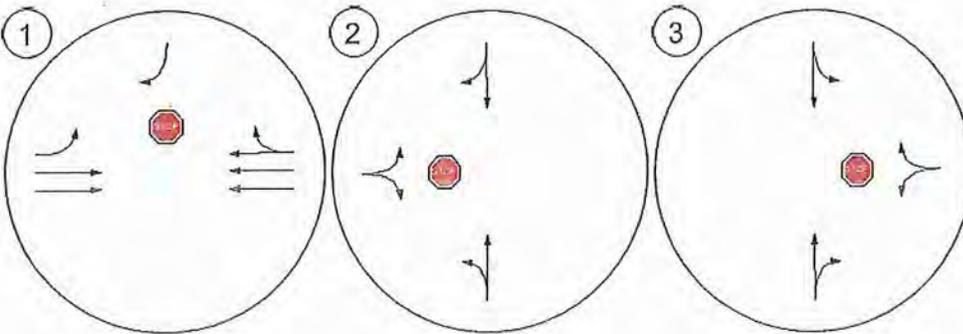
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## Lane Configuration and Traffic Control



A107

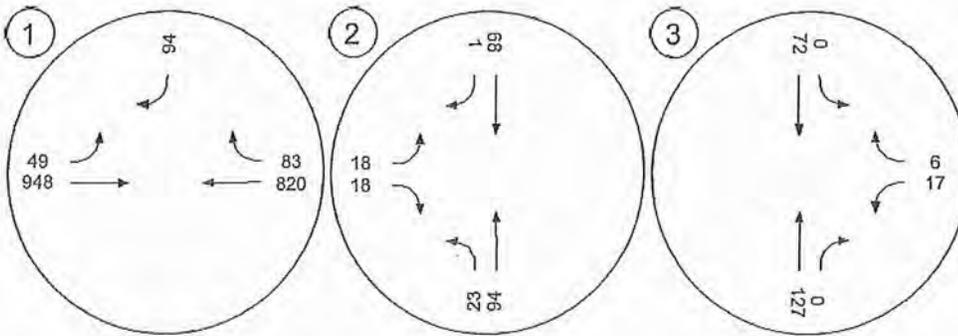
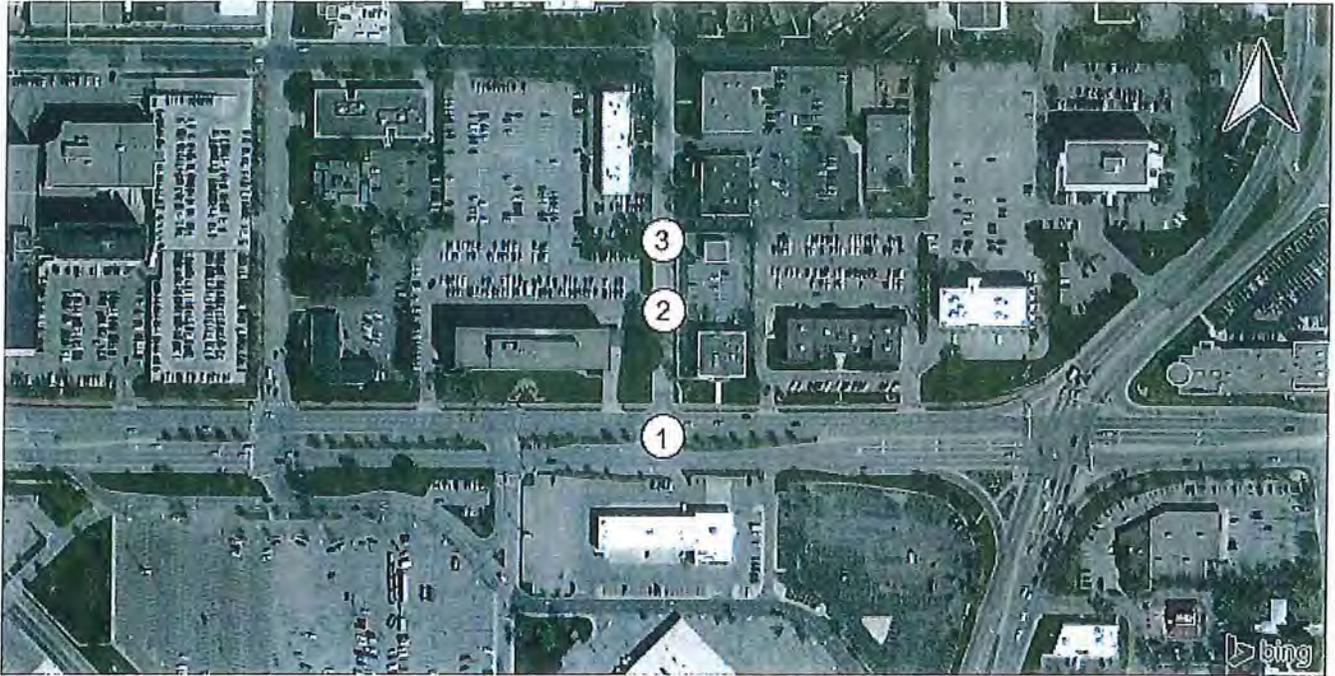
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Traffic Volume - Base Volume



*A106*

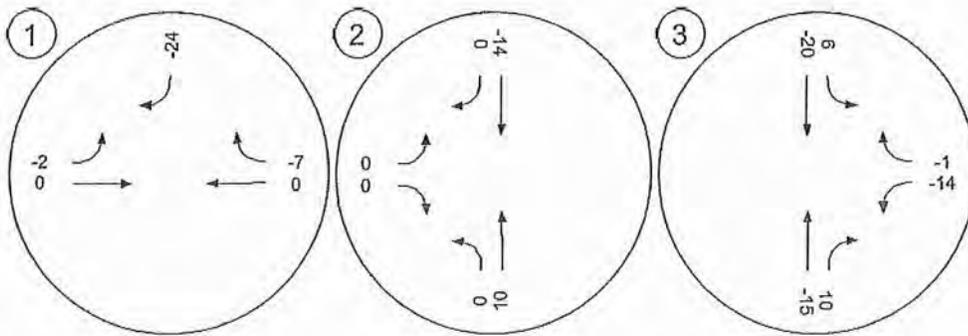
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Traffic Volume - Net New Site Trips



*A109*

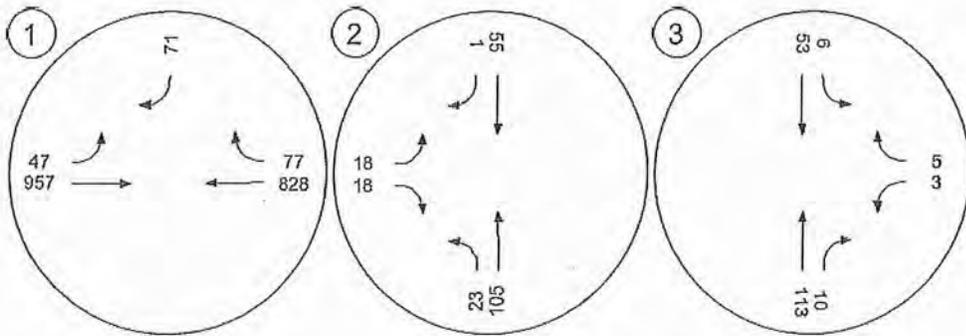
# Appendix C - Capacity Analysis Backup

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Traffic Volume - Future Total Volume



*A110*

**MINUTES OF THE  
REGULAR MEETING OF THE PLANNING COMMISSION  
CITY OF EDINA, MINNESOTA  
CITY COUNCIL CHAMBERS  
APRIL 23, 2014  
7:00 PM**

**I. CALL TO ORDER**

**II. ROLL CALL**

Answering the roll call were: Schroeder, Olsen, Kilberg, Halva, Lee, Carr, Forrest, Potts

Members absent from roll: Staunton, Scherer, Platteter

**III. APPROVAL OF MEETING AGENDA**

Commissioner Carr moved approval of the April 23, 2014 meeting agenda. Commissioner Forrest seconded the motion. All voted aye; motion carried.

**IV. APPROVAL OF CONSENT AGENDA**

**A. Minutes of the Regular Meeting of the Edina Planning Commission March 12, 2014**

Commissioner Carr moved approval of the April 9, 2014, meeting minutes. Commissioner Olson seconded the motion. Acting Chair Potts requested a change to the minutes regarding his participation in the vote on the Xerxes/York project. All voted aye; motion carried.

**V. COMMUNITY COMMENT**

Chair Staunton asked if anyone would like to speak; being none, Commissioner Carr moved to close community comment. Commissioner Olson seconded the motion. All voted aye; public comment closed.

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**VI. REPORTS/RECOMMENDATIONS**

**A. Sketch Plan Review – 66<sup>th</sup> West Apartment for Beacon Interfaith Housing, 3360 West 66<sup>th</sup> Street**

## Planner Presentation

Planner Teague reported that the Planning Commission is being asked to consider a sketch plan request to remodel and expand the existing TCF Bank building, located at 3330 66<sup>th</sup> Street. The applicant proposes to remodel and expand the building into 39 units of small studio apartments for young adults who have experienced homelessness. The size of the units would range from 355-456 square feet. Each unit would contain a full kitchen and bathroom. The building would contain offices for on-site service providers and property management. There would also be a community area for residents; a fitness area; a computer lab and a laundry room.

Teague explained that the site is 39,204 square feet in size. The existing bank is 18,179 square feet. The proposed addition would be 11,888 square feet. The building would remain two stories. The remodel of the building would retain the existing brick, and the addition would be brick with metal panels.

Teague noted there would be 25 surface parking stalls. No enclosed parking is proposed. The applicants have indicated in their narrative that 16% of their residents would have cars. In similar Beacon projects in other cities, 7% of their residents have cars. Therefore, they believe they would have adequate parking. They would anticipate about 8 parking stalls needed for residents and 6 for staff. Residents are expected to utilize the Metro Transit bus service available across the street at Southdale Center. Teague stated a parking and traffic study would be completed with a formal development application.

Continuing, Teague said all of the 39 units would be considered affordable housing, and would apply towards the City and Met Council's goal for affordable housing. The Comprehensive Plan defines the site and area as RM, Regional Medical. The RM allows for senior housing on a case by case basis, however, does not allow other housing. Therefore, a Comprehensive Plan Amendment would be required.

Teague said to accommodate the request, the following would be required:

1. A Rezoning from POD-1, Planned Office District-1, to PUD, Planned Unit Development.
2. A Comprehensive Guide Plan Amendment to allow housing other than Senior Housing in the Regional Medical District.

Teague pointed out this property is located within an area of the City that is designated as a "Potential Area of Change" within the 2008 Comprehensive Plan. The Comprehensive Plan states that within the Potential Areas of Change, "A development proposal that involves a Comprehensive Plan Amendment or a rezoning will require a Small Area Plan study prior to planning application. However, the authority to initiate a Small Area Plan rests with the City Council." The City Council is therefore requested to determine if a Small Area Plan is necessary.

The Comprehensive Plan was amended to allow senior housing in the RM District adjacent to the Fairview Southdale Hospital, as part of the 6500 France project. If the project is found to be acceptable, this definition could be expanded for “specialty housing” as deemed appropriate by the City Council, when specific goals of the Comprehensive Plan are achieved.

Consideration for housing in the RM District and at higher densities includes: proximity to hospitals, proximity to low density uses, utilities capacity, level of transit service available, and impact on adjacent roads. Other desired items to allow greater density for senior housing would include: Below grade parking, provision of park or open space, affordable housing, sustainable design principles, and provision of public art.

Concluding, Teague stated a case could be made for allowing specialty housing in this location as it would reuse an existing building (sustainability); provide a 100% affordable housing development; be in close proximity to Metro Transit; be located on a high visibility arterial roadway; and be completely separated from low density residential. Traffic impacts, further consideration of sustainable design and public art would be considered with a formal application.

### **Appearing for the Applicant**

Lee Blons, Beacon Interfaith

### **Discussion**

Commissioner Carr asked Planner Teague where the concept of “specialty housing” derived from. Planner Teague responded it’s a term he suggested to allow flexibility and “use” limits. Continuing, Carr also observed parking is at odds with the ordinance; however, she believes it can be resolved.

Commissioner Forrest questioned if the zoning classification and comprehensive guide plan are at odds in this location. Planner Teague responded yes and no. He explained that the zoning classification for this property is POD-1; Planned Office District and it is guided in the Comprehensive Plan as Regional Medical. Office use and senior housing is permitted in Regional Medical; however, housing is not permitted in the POD-1, Planned Office District.

Acting Chair Potts commented that for the applicant to achieve this proposal the land use needs modification. Teague responded in the affirmative.

Commissioner Olsen asked Planner Teague if the Comprehensive Plan references affordable housing. Planner Teague responded in the affirmative. He explained the Met Council has established for Edina an “affordable housing” goal of adding 212 affordable housing units by 2020.

## **Applicant Presentation**

Ms. Blons addressed the Commission and gave a brief description of their mission statement and their effort in securing affordable housing for homeless teens. Blons explained that they believe the 66<sup>th</sup> Street location is excellent and they are using the concept model from their Nicollet Square development for this project.

Blons reported that the site is .9 acres and will incorporate the entire existing 18,179 square foot building to include an 11,888 square foot addition to accommodate the 39 proposed housing units. Blons told the Commission non-profits tend to work backwards they secure the approvals first and then the funding. Continuing, Blons said their emphasis is on providing safe living accommodations so teens can focus on their education and employment. Blons pointed out the 66 West location is excellent; it's located near multiple employment opportunities and is directly across from mass transit. Concluding, Blons introduced Bart Nelson, Urban Works to speak on the architectural components of the project.

Bart Nelson gave a power point presentation highlighting aspects of the project to include parking and proposed landscaping and screening features.

## **Continued Discussion**

Commissioner Carr told the Commission she thinks the building renovations and new addition are well done. She further asked Mr. Nelson if bike racks are proposed for the site. Mr. Nelson responded in the affirmative. Continuing, Carr asked if materials for the proposed fence have been chosen. Mr. Nelson said the materials for the fence haven't been finalized; however, he believes they may go with a cedar fence.

Commissioner Forrest stated she has a concern with regard to the proposed fence on the buildings south side. Forrest explained that a redevelopment goal of the Planning Commission (where appropriate) is to provide a pedestrian experience by engaging the building and street. She observed if a tall fence is placed in this area the site would be "cut off" from the streetscape.

Acting Chair Potts said in his opinion this redevelopment proposal is intriguing not only for its proposed land use but for reuse of the building instead of teardown rebuild. Potts added if the project proceeds as proposed he would suggest that the applicant consider other sustainable strategies with regard to the building. Concluding, Potts further suggested that the applicant work with City staff on finding the "right" parking number and if appropriate develop a proof of parking agreement to ensure adequate greenspace.

Commissioner Schroeder commented that he agrees a proof of parking agreement would work well for this site, adding he believes if a proof of parking agreement were drafted and the need arose for more parking the site could yield more parking spaces. Schroeder further stated in his opinion the two access points on Barrie Road are not needed; one is

adequate. Continuing, Schroeder agreed with the comments from Commissioner Forrest on engaging the street. He said the Commission has been working hard on the relationship between building to street and in this situation he believes more work could be done to accomplish that interaction. He further suggested that simple changes be made to the façade along West 66<sup>th</sup> Street to make it more inviting. Schroeder said he appreciates the desire for a fence, but suggested redesign of the front outdoor area to ensure street engagement while affording a buffer area. This would achieve the Commission's work on living streets.

Concluding Schroeder said he likes this proposal but stated he's not sure if this request brings the site to its highest potential. He noted no one knows how far the RMD zoning district may expand and if this site is eliminated from that potential some things are lost and some gained; whichever way the redevelopment precedes that point should be kept in mind.

Commissioner Lee asked Mr. Nelson if there are windows proposed for the basement level. Mr. Nelson responded in the affirmative. He pointed out each studio apartment would have a window and there would be a window in the common area for a total of four. Continuing, Commissioner Lee said she agrees with past comments that the south elevation needs more attention; either through landscaping or architectural features. Concluding, Lee asked how many outdoor gathering areas are proposed. Nelson responded "outdoor gathering" areas are proposed on the north and south side of the building. Nelson indicated the development team would re-review landscaping and screening to soften the site and engage the streetscape on the south elevation.

Commissioner Kilberg asked if Beacon contacted neighboring property owners. Ms. Larson responded Beacon has outreached to neighboring business owners and those conversations will continue as the project proceeds. She also noted Fairview Southdale Hospital is supportive.

Acting Chair Potts asked Ms. Blons to explain the "moving in and moving out" process the teens go through. Ms. Larson explained that the goal of Beacon is to "catch" the teens as early as possible. When a teen moves in a rent is established and each year the rent goes up until the teen(s) is ready to move out. Throughout their stay the teens are provided with services that counsel them on work skills, school and independence after they leave Beacon.

Acting Chair Potts thanked the applicants for their presentation and stated in summary the City needs to be mindful of the master planning of the area in their decision making process; however, the project as presented is intriguing, adding density without an increase in traffic and providing affordable safe housing for teens. Both are goals of Edina's Comprehensive Plan.

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noted that when a PUD request comes forward, there would be a presumption of the underlying zoning district requirements.

It was acknowledged that the Council had an understanding that at some point in time, it would consider a broader application of PUDs. Concern was expressed that no such understanding was stated in the public record, this was being considered in response to a single development request and such a radical change should have included public notice and opportunity for comment. Mr. Teague stated the Planning Commission would be developing guidelines and specifics relating to sustainability.

Mayor Hovland opened the public hearing at 8:05 p.m.

Public Testimony

Carol Lansing, legal counsel for Lennar Corporation, addressed the Council.

Steven Schwab, 6740 Washburn Avenue S., Richfield, addressed the Council.

**Member Swenson made a motion, seconded by Member Sprague, to close the public hearing.**

Ayes: Bennett, Brindle, Sprague, Swenson, Hovland

Motion carried.

The Council indicated support for holding this discussion now as there had been several years' experience with PUDs and this review should have occurred regardless of the Lennar project. It was pointed out that Edina had never been known as a City that lacked flexibility but had been known for its flexibility in considering the needs of developers. Concern was expressed with lack of public notice and that the amendment would result in changing the character of the community too quickly, not providing balance or encouraging public trust. **Member Swenson made a motion to grant First Reading to Ordinance No. 2014-10, An Ordinance Amendment Regarding Planned Unit Development Applicability in an R-1, R-2, and PRD-1 District. Member Brindle seconded the motion.**

Rollcall:

Ayes: Brindle, Sprague, Swenson, Hovland

Nays: Bennett

Motion carried.

**VII. COMMUNITY COMMENT**

Jeff Solberg, 4508 Moorland Avenue, voiced his concerns and that of several residents relating to the safety of Browndale Bridge and requested extension of a centerline.

**VIII. REPORTS / RECOMMENDATIONS**

**VIII.A. SKETCH PLAN REVIEWED – 3330 66<sup>TH</sup> STREET**

Community Development Director Presentation

Mr. Teague presented the sketch plan to remodel and expand the existing TCF Bank building at 3330 66<sup>th</sup> Street into 39 units of small (355 to 456 square feet) studio apartments for young adults experiencing homelessness. In addition, the building would contain offices for on-site service providers, property management, a community area, fitness area, computer lab, and laundry room. Mr. Teague indicated that to accommodate this request, it would require a rezoning from POD-I, Planned Office District-I to PUD, Planned Unit Development, and a Comprehensive Guide Plan Amendment to allow housing other than Senior Housing in the Regional Medical District. He presented the site plan, issues identified, and stated the Planning Commission considered this sketch plan at its April 23, 2014, meeting.

Proponent Presentation

Lee Blons, Executive Director of Beacon Interfaith Collaborative, presented their mission statement and indicated they currently had 500 apartments in 15 buildings under management. Ms. Blons presented the

concept model to secure affordable housing with integrated services and adult guidance for homeless teens (18-19 year olds). She estimated that in the area of Edina, there were 250 to 300 young people in need of this type of housing and the requested 39 units was based on available funding.

The Council asked questions of Ms. Blons who assured the Council that they were committed to being the best landlord in Edina and if necessary, 24-hour staffing would be provided. She stated Lydia Apartments, built for chronically homeless adults with mental health and chemical dependent issues, provided 24-hour services and she would check whether any of their other buildings provided 24-hour service. Ms. Blons stated this would not be a shelter or drop-in facility. She answered questions of the Council related to Beacon's services and programming to successfully move young adults into the community.

Sarah Larson, Project Manager with Beacon, indicated the total development cost was estimated to be over \$10 million with an estimated per unit cost of \$250,000. It was noted that this estimated cost was similar to that of Nicollet Square (42 units) and most other projects submitted to Minnesota Housing. Ms. Blons assured the Council that this would be quality housing of which Edina would be proud. With regard to financing, she indicated they would address cost containment and were required to acquire a site prior to obtaining financing. Beacon believed there had been a high level of support for this Edina location.

Bart Nelson, Urban Works Architecture, displayed the location map, pointing out the abundance of parking, bus stops, and close proximity to the transit station. He described elements of the plan and how this project would meet the City's sustainability objectives. Ms. Larson indicated the funding for this project required compliance with the standards of Minnesota Green Communities which included exceeding the State's energy standard by 15%.

Following discussion of the 3330 – 66<sup>th</sup> Street sketch plan, the Council offered the following comments: creating an integrated streetscape and integrated fence design; change in topography to create more daylight into the three lower-level studios; providing proof of parking to address parking shortage; providing for outdoor bicycle parking; providing indoor bicycle storage during the off season; designing articulated building surfaces; exceeding State energy guidelines; consideration of affordable housing rather than specialty housing so the City had a higher level of control; and, providing best practice relating to 24-hour service. The Council expressed support for having this use in Edina, adaptive use of this site that was in close proximity to transportation, and meeting the School District's and City's core value of not leaving anyone behind. The Council indicated that a Small Area Plan was not needed in this instance as it was a good interim use and allowed the area to develop organically over time.

Ms. Blons stated they had been in conversation with the neighborhood and received a good response. The Council encouraged the proponent to continue working with the neighborhood to address their concerns.

#### **VIII.B. SKETCH PLAN REVIEWED – 7151 YORK AVENUE**

##### **Community Development Director Presentation**

Mr. Teague presented the sketch plan to build a four-story building with 100 units (70 units of senior housing with services and 30 memory care suites) of assisted living west of the Yorktown Continental Senior Living Apartments at 7151 York Avenue. The existing site was 5.85 acres in size with a density of 45 units per acre. With the proposed addition of 100 units, this density would increase to 64 units per acre.

Mr. Teague reviewed the Council's past consideration for a 76-unit senior housing project. He displayed the site plan, noting its orientation along York Avenue, surface and underground parking. It was noted that while the Comprehensive Plan described High Density Residential as 12-30 units per acre, density for senior housing might be increased. Mr. Teague presented site conditions that could be considered for higher density in this instance. It was noted the Planning Commission considered this sketch plan at its April 23, 2014, meeting. The Council asked questions of Mr. Teague relating to site plan revisions since the Planning Commission's consideration.