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September 6, 2016

Robert Siegmann  
 President  
 Icebox Cafe, LC  
 1855 Purdy Avenue  
 Miami Beach, FL 33139

**RE: Icebox Cafe Traffic Statement (Revised)**  
**Project No. 201627.02**

Dear Mr. Siegmann:

Thomas A. Hall, Inc. has completed a revised traffic statement for a proposed new development in the City of Hallandale Beach, Florida. The revisions are the result of comments received from Mr. Eric Czerniejewski, P.E., traffic engineering consultant to the City of Hallandale Beach, as well as other city staff in attendance at a DRC meeting on August 31, 2016.

The proposed project is to be located on NE 3<sup>rd</sup> Street between NE 2<sup>nd</sup> and NE 3<sup>rd</sup> Avenues and will be comprised of a 2,700-square-foot Icebox Café restaurant, a 9,300-square-foot commissary and a 2,100-square-foot greenhouse. The enclosed site plan shows the location and layout of the proposed project.

**1. Trip Generation Analysis**

The Icebox Café development is proposed to replace three existing single family homes and one small apartment building (with a total of three apartments). See the table below for the addresses of each building:

Development Type	Location (Address)
Single Family Home	301 NE 3 <sup>rd</sup> Avenue
Single Family Home	215 NE 3 <sup>rd</sup> Street
Single Family Home	219 NE 3 <sup>rd</sup> Street
Apartment Building (3 units)	211 NE 3 <sup>rd</sup> Street

In order to determine the traffic impact associated with the proposed development, a comparison of trips generated by the existing residential development and those expected to be generated by the proposed development was conducted. Trip generation characteristics provided in the Institute of Transportation Engineers' (ITE) *Trip Generation* manual, 9<sup>th</sup> Edition, were consulted and the trips generated by the existing land uses (ITE Codes 210 and 220 – Single Family Homes and Apartments, respectively) were estimated. For the proposed new development, land uses (ITE Code 140 and 931 – Manufacturing and Quality Restaurant, respectively) were used to estimate the expected new trips. It should be noted that there is no ITE land use code for commissaries. Manufacturing was selected as most

representative of the commissary since it is proposed that the commissary will prepare food for sale at Miami International Airport and on South Beach. No customers will be served at the commissary.

ITE offers more than one independent variable for Manufacturing. At the request of the city's traffic consultant, the proposed commissary has been analyzed using both building square footage and number of employees.

**Tables 1, 2 and 3** (enclosed) show the trips expected to be generated by the proposed new restaurant and commissary using building square footage as the independent variable, as well as the existing residential development. Note that the greenhouse was considered to be an ancillary use to the commissary and, as such, is not anticipated to generate any new trips. As Tables 1, 2 and 3 show, the proposed project results in an increase in trips on both a daily and p.m. peak-hour basis. On a daily basis, there is an increase of 89 net new trips. On a morning peak-hour basis, there is a decrease of 6 trips and on an afternoon peak-hour basis (the peak hour of the day), there is an increase of 13 net new trips.

**Tables 4, 5 and 6** (enclosed) show the trips expected to be generated by the proposed new restaurant and commissary using employees as the independent variable, as well as the existing residential development. As in the previous tables, the greenhouse was considered an ancillary use that doesn't generate any new trips. As Tables 4, 5 and 6 show, the proposed project results in an increase in trips on both a daily and p.m. peak-hour basis. On a daily basis, there is an increase of 91 net new trips. On a morning peak-hour basis, there is a decrease of 12 trips and on an afternoon peak-hour basis (the peak hour of the day), there is an increase of 6 net new trips.

Based on the results of the trip generation analyses provided in either Table 1 or 4, it would appear that the proposed Icebox Café development will generate less than 100 net new trips per day. Therefore, no further traffic impact analysis is required under the City of Hallandale Beach Code of Ordinances.

Although the developer of the site anticipates as many as 71 employees in the commissary each day, no more than twenty (20) employees are expected to be on site at any one time. Also, 90 percent of the employees for the commissary are expected to be from the surrounding community and are not expected to drive. For this reason, only ten percent of the expected daily and peak hour employees were used in the employee-based trip generation analysis for the proposed commissary portion of the development.

A ninety percent reduction in employees driving themselves to work seems, at first thought, very large. However, multi-modal transportation opportunities abound in this part of Hallandale Beach. For example, Broward County Mass Transit maintains five bus routes (Routes 1, 4, 6, 28, and the Breeze) serving this area along US 1, Hallandale Beach Boulevard and NE 1<sup>st</sup> Avenue/Dixie Highway. Because of their close proximity to the proposed Icebox Café, a passenger using any of these bus routes is only a maximum of a quarter mile from the site. In addition, the City of Hallandale Beach operates four local community bus routes (Routes 1, 2, 3, and 4). All four of these community bus routes bring passengers within a maximum of 1,000 feet of the Icebox Café. Route 4 actually travels along NE 3<sup>rd</sup> Street, thus bringing passengers right to the site.



Mass transit opportunities aside, the site plan for the project calls for the installation of dedicated bicycle parking spaces on site and new sidewalks that will serve to connect pedestrians to the neighborhoods surrounding the new development.

Typically, those walking to work are assumed to only travel about a half-mile distance in South Florida. An employee bicycling to work is generally assumed to travel an average of five miles or less in South Florida. A half-mile radius in this area of South Florida encompasses hundreds of homes. A five-mile radius in this area encompasses thousands of homes.

Bicycle travel is supported locally by bike lanes or wide outside lanes on US 1, Hallandale Beach Boulevard, Pembroke Road and, with the impending reconstruction project, on NE 3<sup>rd</sup> Street leading directly to the proposed development.

Given the mass transit, pedestrian and bicycle amenities provided in the City of Hallandale Beach, potential customers and employees of Icebox Café have ample multi-modal travel opportunities. It is the expectation of Icebox Café's owners that these multi-modal alternatives will result in few employees of the development relying upon personal automobiles for transportation to and from work.

Note that pass-by capture rates for land uses such as restaurants are generally very high. ITE's *Trip Generation Handbook*, 3<sup>rd</sup> Edition, provides pass-by capture rates for this specific land use, Quality Restaurant. Based on the information contained in the ITE Handbook, the average pass-by capture rate for quality restaurants is 44 percent. That is, 44 percent of the drivers stopping at the restaurant were on their way to another destination and pulled into the restaurant along the way before continuing their trip to their original destination.

It should be noted that the city's traffic engineering consultant suggested that the pass-by capture rate of 44 percent was too high because the proposed restaurant isn't on either US 1 or Hallandale Beach Boulevard. We respectfully disagree and suggest that the consultant hasn't fully appreciated the effect of the new commercial developments along NE 3<sup>rd</sup> Street (and the rebuilding of the road itself) as creating a new, important, commercial corridor in the City of Hallandale Beach.

## **2. Parking Analysis**

The proposed Icebox Café development is to have 36 on-site parking spaces. The 36 spaces represent 90 percent of the required parking by code (12,000 s.f. / 300 s.f. per parking space = 40 parking spaces). The building area requiring parking is divided between a 9,300-square-foot commissary and a 2,700-square-foot restaurant. City staff has asked that a parking analysis be completed to justify the reduction in parking spaces from 40 to 36.

Using the ITE *Parking Generation* manual, 4<sup>th</sup> Edition, parking characteristics data for ITE Land Use Code 140 – Manufacturing and ITE Land Use Code 931 – Quality Restaurant were examined. Based on the ITE manual, manufacturing uses have a weekday peak parking demand between 2:00 and 3:00 p.m. while the restaurant land use has a weekday peak parking demand between 7:00 and 9:00 p.m.

Average weekday peak period parking demand for the restaurant use was 10.60 vehicles per 1,000 square feet of gross floor area. Based on this demand ratio, the 2,700-square-foot Icebox Café will require 29 parking spaces.

Average weekday peak period parking demand for the manufacturing use was 1.02 vehicles per thousand square feet of gross floor area. Based on this demand ratio, the 9,300-square-foot commissary will require 9 parking spaces. It should be noted that, as discussed in the trip generation analysis for this project, few vehicles are expected to be in use by employees of the commissary; therefore, this number is expected to be higher than that which actually occurs. Nonetheless, for the purposes of this analysis, the parking generation characteristics contained in the ITE manual were assumed to be appropriate.

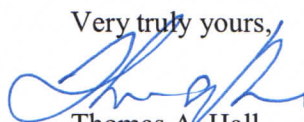
If the two land uses' peak parking demand were simply to be added together, they would equal 38 parking spaces, which is two more than proposed. However, per ITE, the peak time of parking demand for the manufacturing use is 2:00 p.m. to 3:00 p.m. while the restaurant peak time of parking demand is the early evening between 7:00 and 9:00 p.m. Neither the manufacturing nor quality restaurant parking generation characteristics data includes hourly percentages of parked vehicles so it is impossible to estimate the exact percentage of parking demand for each use for each hour. However, what is clear is that manufacturing tends to have a peak parking demand in the afternoon while quality restaurants experience their peak parking demand in the early evening.

### 3. Conclusion

According to the findings shown in Tables 1 and 4, and described above, it appears that the proposed Icebox Café development will generate less than 100 net new daily trips. Based on the City of Hallandale Beach's Transportation Element, Policy 1.3.7, a traffic impact study is not required for this proposed development, as the project will not generate over 100 net new trips per day. Further, the 36 on-site parking spaces proposed for the project should be more than enough to accommodate the project's needs, given the different peak parking demand hours of the two land uses within the development.

Should you have any questions or comments regarding this statement, please do not hesitate to contact this office.

Very truly yours,

  
Thomas A. Hall  
President

Mohan Gopalakrishna, P.E., PTOE  
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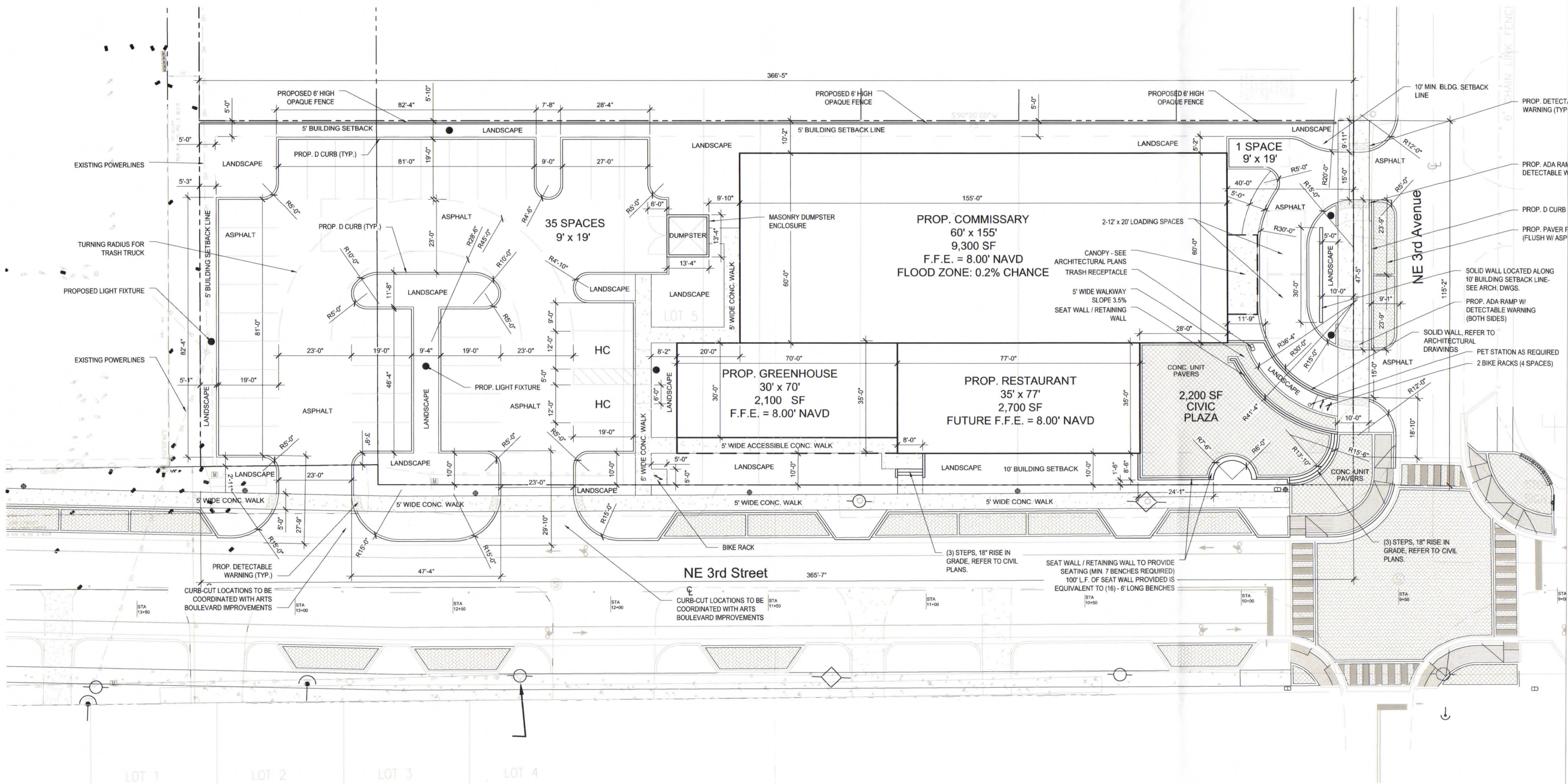
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Enclosures

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**Table 1**  
**Daily Trip Generation**  
**Icebox Café Traffic Statement**

Land Use	ITE Code	Intensity	Trip Generation Rate <sup>(1)</sup>	Total Trips			Internal Trips				External Trips			Pass-by Trips <sup>(2)</sup>		New Trips		
				In	Out	Total	In	Out	Total	%	In	Out	Total			In	Out	Total
<b>Existing Use</b>																		
Single-Family Housing	210	3 d.u.	$\ln(T)=0.92\ln(X)+2.72$ (50/50)	21	21	42	0	0	0	0.0%	21	21	42	0	0.0%	21	21	42
Apartment	220	3 d.u.	$T=6.65(X)$ (50/50)	10	10	20	0	0	0	0.0%	10	10	20	0	0.0%	10	10	20
Subtotal				31	31	62	0	0	0		31	31	62	0		31	31	62
<b>Proposed Use</b>																		
Manufacturing	140	9,300 s.f.	$T=3.88(X)-20.70$ (50/50)	8	7	15	0	0	0	0.0%	8	7	15	0	0.0%	8	7	15
Quality Restaurant	931	2,700 s.f.	$T=89.95(X)$ (50/50)	121	122	243	0	0	0	0.0%	121	122	243	107	44.0%	68	68	136
Subtotal				129	129	258	0	0	0		129	129	258	107		76	75	151
<b>Net Increase</b>				<b>98</b>	<b>98</b>	<b>196</b>	<b>0</b>	<b>0</b>	<b>0</b>		<b>98</b>	<b>98</b>	<b>196</b>	<b>107</b>		<b>45</b>	<b>44</b>	<b>89</b>

<sup>(1)</sup> Trip generation data obtained from the Institute of Transportation Engineers' *Trip Generation* manual, 9th Edition.

<sup>(2)</sup> Pass-by trip percentage obtained from Table F.29 in the Institute of Transportation Engineers' *Trip Generation Handbook*, 3rd Edition.

**Table 2**  
**AM Peak Hour Trip Generation**  
**Icebox Café Traffic Statement**

Land Use	ITE Code	Intensity	Trip Generation Rate <sup>(1)</sup>	Total Trips			Internal Trips				External Trips			Pass-by Trips <sup>(2)</sup>		New Trips		
				In	Out	Total	In	Out	Total	%	In	Out	Total			In	Out	Total
<b>Existing Use</b>																		
Single-Family Housing	210	3 d.u.	$T=0.70(X)+9.74$ (25/75)	3	9	12	0	0	0	0.0%	3	9	12	0	0.0%	3	9	12
Apartment	220	3 d.u.	$T=0.51(X)$ (20/80)	0	2	2	0	0	0	0.0%	0	2	2	0	0.0%	0	2	2
Subtotal				3	11	14	0	0	0		3	11	14	0		3	11	14
<b>Proposed Use</b>																		
Manufacturing	140	9,300 s.f.	$T=0.73(X)$ (78/22)	5	2	7	0	0	0	0.0%	5	2	7	0	0.0%	5	2	7
Quality Restaurant	931	2,700 s.f.	$T=0.81(X)$ (50/50)	1	1	2	0	0	0	0.0%	1	1	2	1	44.0%	1	0	1
Subtotal				7	2	9	0	0	0		7	2	9	1		6	2	8
<b>Net Increase</b>				<b>4</b>	<b>-9</b>	<b>-5</b>	<b>0</b>	<b>0</b>	<b>0</b>		<b>4</b>	<b>-9</b>	<b>-5</b>	<b>1</b>		<b>3</b>	<b>-9</b>	<b>-6</b>

<sup>(1)</sup> Trip generation data obtained from the Institute of Transportation Engineers' *Trip Generation* manual, 9th Edition.

<sup>(2)</sup> Pass-by trip percentage obtained from Table F.29 in the Institute of Transportation Engineers' *Trip Generation Handbook*, 3rd Edition.

**Table 3**  
**PM Peak Hour Trip Generation**  
**Icebox Café Traffic Statement**

Land Use	ITE Code	Intensity	Trip Generation Rate <sup>(1)</sup>	Total Trips			Internal Trips				External Trips			Pass-by Trips <sup>(2)</sup>		New Trips		
				In	Out	Total	In	Out	Total	%	In	Out	Total			In	Out	Total
<b>Existing Use</b>																		
Single-Family Housing	210	3 d.u.	$\ln(T)=0.90\ln(X)+0.51$ (63/37)	3	1	4	0	0	0	0.0%	3	1	4	0	0.0%	3	1	4
Apartment	220	3 d.u.	$T=0.62(X)$ (65/35)	1	1	2	0	0	0	0.0%	1	1	2	0	0.0%	1	1	2
Subtotal				4	2	6	0	0	0		4	2	6	0		4	2	6
<b>Proposed Use</b>																		
Manufacturing	140	9,300 s.f.	$T=0.73(X)$ (36/64)	2	5	7	0	0	0	0.0%	2	5	7	0	0.0%	2	5	7
Quality Restaurant	931	2,700 s.f.	$T=7.49(X)$ (67/33)	14	6	20	0	0	0	0.0%	14	6	20	9	44.0%	7	5	12
Subtotal				16	11	27	0	0	0		16	11	27	9		9	10	19
<b>Net Increase</b>				<b>12</b>	<b>9</b>	<b>21</b>	<b>0</b>	<b>0</b>	<b>0</b>		<b>12</b>	<b>9</b>	<b>21</b>	<b>9</b>		<b>5</b>	<b>8</b>	<b>13</b>

<sup>(1)</sup> Trip generation data obtained from the Institute of Transportation Engineers' *Trip Generation* manual, 9th Edition.

**Table 4**  
**Daily Trip Generation**  
**Icebox Café Traffic Statement**

Land Use	ITE Code	Intensity		Trip Generation Rate <sup>(1)</sup>	Total Trips			Internal Trips				External Trips			Pass-by Trips <sup>(2)</sup>		New Trips		
					In	Out	Total	In	Out	Total	%	In	Out	Total			In	Out	Total
Existing Use																			
Single-Family Housing	210	3	d.u.	Ln(T)=0.92Ln(X)+2.72 (50/50)	21	21	42	0	0	0	0.0%	21	21	42	0	0.0%	21	21	42
Apartment	220	3	d.u.	T=6.65(X) (50/50)	10	10	20	0	0	0	0.0%	10	10	20	0	0.0%	10	10	20
Subtotal					31	31	62	0	0	0		31	31	62	0		31	31	62
Proposed Use																			
Manufacturing	140	8	emp.	T=2.13(X) (50/50)	9	8	17	0	0	0	0.0%	9	8	17	0	0.0%	9	8	17
Quality Restaurant	931	2,700	s.f.	T=89.95(X) (50/50)	121	122	243	0	0	0	0.0%	121	122	243	107	44.0%	68	68	136
Subtotal					130	130	260	0	0	0		130	130	260	107		77	76	153
Net Increase					99	99	198	0	0	0		99	99	198	107		46	45	91

<sup>(1)</sup> Trip generation data obtained from the Institute of Transportation Engineers' *Trip Generation* manual, 9th Edition.

<sup>(2)</sup> Pass-by trip percentage obtained from the average value of Table F.29 in the Institute of Transportation Engineers' *Trip Generation Handbook*, 3rd Edition.

**Table 5**  
**AM Peak Hour Trip Generation**  
**Icebox Café Traffic Statement**

Land Use	ITE Code	Intensity		Trip Generation Rate <sup>(1)</sup>	Total Trips			Internal Trips				External Trips			Pass-by Trips <sup>(2)</sup>		New Trips		
					In	Out	Total	In	Out	Total	%	In	Out	Total			In	Out	Total
Existing Use																			
Single-Family Housing	210	3	d.u.	T=0.70(X)+9.74 (25/75)	3	9	12	0	0	0	0.0%	3	9	12	0	0.0%	3	9	12
Apartment	220	3	d.u.	T=0.51(X) (20/80)	0	2	2	0	0	0	0.0%	0	2	2	0	0.0%	0	2	2
Subtotal					3	11	14	0	0	0		3	11	14	0		3	11	14
Proposed Use																			
Manufacturing	140	2	emp.	T=0.40(X) (73/27)	1	0	1	0	0	0	0.0%	1	0	1	0	0.0%	1	0	1
Quality Restaurant	931	2,700	s.f.	T=0.81(X) (50/50)	1	1	2	0	0	0	0.0%	1	1	2	1	44.0%	1	0	1
Subtotal					2	1	3	0	0	0		2	1	3	1		2	0	2
Net Increase					-1	-10	-11	0	0	0		-1	-10	-11	1		-1	-11	-12

<sup>(1)</sup> Trip generation data obtained from the Institute of Transportation Engineers' *Trip Generation* manual, 9th Edition.

<sup>(2)</sup> Pass-by trip percentage obtained from the average value of Table F.29 in the Institute of Transportation Engineers' *Trip Generation Handbook*, 3rd Edition.

**Table 6**  
**PM Peak Hour Trip Generation**  
**Icebox Café Traffic Statement**

Land Use	ITE Code	Intensity	Trip Generation Rate <sup>(1)</sup>	Total Trips			Internal Trips				External Trips			Pass-by Trips <sup>(2)</sup>	New Trips			
				In	Out	Total	In	Out	Total	%	In	Out	Total		In	Out	Total	
Existing Use																		
Single-Family Housing	210	3 d.u.	Ln(T)=0.90Ln(X)+0.51 (63/37)	3	1	4	0	0	0	0.0%	3	1	4	0	0.0%	3	1	4
Apartment	220	3 d.u.	T=0.62(X) (65/35)	1	1	2	0	0	0	0.0%	1	1	2	0	0.0%	1	1	2
Subtotal				4	2	6	0	0	0		4	2	6	0		4	2	6
Proposed Use																		
Manufacturing	140	2 emp.	T=0.36(X) (44/56)	0	1	1	0	0	0	0.0%	0	1	1	0	0.0%	0	1	1
Quality Restaurant	931	2,700 s.f.	T=7.49(X) (67/33)	14	6	20	0	0	0	0.0%	14	6	20	9	44.0%	8	3	11
Subtotal				14	7	21	0	0	0		14	7	21	9		8	4	12
Net Increase				10	5	15	0	0	0		10	5	15	9		4	2	6

<sup>(1)</sup> Trip generation data obtained from the Institute of Transportation Engineers' *Trip Generation* manual, 9th Edition.