

JAMES ONNEN 4100 ABBEYWOOD VILLAGE DRIVE LOUISVILLE KY 40241

APRIL 5, 2016

Ms. Julia Williams, Case Manager
Louisville Metro Planning and Design Services
444 S. Fifth St. Third Floor
Louisville Ky 40202

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Ref: Case 15zone1070

Two documents are attached regarding the apartment project planned under this case.

Traffic Study dated March 1, 2016

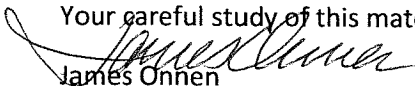
Traffic and Road System Analysis dated April 5, 2016

I am a resident of the Village of Abbeywood, a neighborhood that will be impacted by the apartment project described in the referenced case. I serve on the neighborhood governing board for the community, however this work was not done specifically for the board.

Many Abbywood residents have voiced their disapproval of the project, as evidenced by more than 75% of the residents signing the petition to have the public meeting at a time and place making it practical for them to attend.

The traffic study is of limited scope, intending only to deal with traffic entering and exiting Simcoe Lane at Brownsboro Road, and identifying the traffic that exits Simcoe Lane through the Avish Gardens parking lot in order to safely access Brownsboro Road westbound.

Your careful study of this material will be greatly appreciated.


James Onnen

Cc: Mr. Jeff Wilson, President

Village of Abbeywood Homeowners Association

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TRAFFIC AND ROAD SYSTEM
ANALYSIS

CASE 15ZONE1070

James Onnen

April 5, 2016

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ISSUES WITH APPLICANTS TRAFFIC STUDY

TRAFFIC PROJECTIONS

In the March 1 developer's traffic report, current traffic on Brownsboro Rd was shown as 23,100vpd. In the March 8 meeting it was pointed out to Ms Zimmerman that the 23,100 figure was from 2008, not 2015.. The traffic count was updated in the March 17 report, with an estimated figure of 33,000 vpd. This calculates to an increase of more than 5% per year since 2008, yet in projecting traffic through 2019 an annual increase of only 2% was used. The 2% rate appears to be a serious understatement, and needs to be adjusted upward.

Neither of these rates would appear reasonable once the East End bridge project is completed. Brownsboro Rd. is the first surface road exit south of the bridge on I-265, and the last surface road entrance onto I-265 north prior to the bridge. Within a fraction of a mile from this interchange, there are many restaurants, hospital and medical facilities and retail stores. It should be expected that much through traffic will exit for use of these facilities, and that they will also be destinations for Indiana residents living near the interchange at Old Salem Road. Neither of these types of traffic sources appear to have been considered in the traffic projections.

LOCATIONS STUDIED

Traffic movements appear to have been studied at only two locations; Simcoe Lane at Brownsboro Rd., and the Avish Gardens exit at Brownsboro Rd. There are at least two additional locations that impact or are impacted by the proposed project.

First, there is a traffic light on Brownsboro Rd. just a few hundred feet east of Simcoe Lane that controls ramps to and from I-265 as well as Brownsboro Rd. When the light is red for eastbound traffic on Brownsboro Rd., traffic backs up through the Simcoe Lane intersection, blocking left turns from Brownsboro Rd. That left turn lane is only 300 ft long, not 350 ft as reported by Ms. Zimmerman to Ms Markert. Once traffic growth is more accurately projected it is likely that the turn lane will not be sufficient to accommodate vehicles needing to turn into Simcoe Lane, cars will be backed up into the inside traffic lane and delays will be substantial. See attached photos.

Second, there is a 4 way stop sign in the path of vehicles cutting through the parking lot in Avish Gardens that has not been studied. By not including delays at this location, the overall delays for vehicles using that path are understated; ie, the stoplight at Brownsboro Rd. is not the only delay point along that path. See

TRAFFIC DISTRIBUTION

A review of the applicant's traffic counts, traffic projections and delay times for the PM Kentucky 22 westbound left turns shows:

2016 peak hour count	114	11.9 second delays
2019 no Build volume	135	13.5 second delay
Trip distribution for site	58	
2019 Build peak hour	193	16.4 second delay

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The increase in delay time from the no Build to the Build condition, from 13.5 to 16.4, is an increase of 21.5%.

Traffic distribution from the site, however, was not done properly. Total site generated traffic was 98 trips, with 40 shown from the west and 58 from the east, giving a distribution of 40.8% from the west and 59.2% from the east. At article 4.3.4 of the KYTC Traffic Impact Study Guidelines it dictates that "Trips generated by the development should be distributed onto the public roadway network consistent with existing traffic patterns in the area ----." and a calculation process is described.

The current distribution is shown as 114 trips from the east and 15 from the west, for a distribution of 11.6% from the west and 88.4% from the east. Using this distribution, the site would produce 86 trips from the east, not 58 trips, and the delay increase should be expected to be greater than 30%, not the 21.5%. A delay increase of more than 30% is unacceptable under Article 5.1 Operational Thresholds of the KYTC guidelines which states "At existing intersections, average intersection delay shall not exceed 80 seconds and shall not increase more than 30% over the No Build condition." Other traffic increase information may be similarly impacted.

RISKS OF RESIDENTIAL TRAFFIC USING PARKING LOT PATH

The applicants report does not address the pathway to be taken through the parking lot, and the hazards and risks associated with it. The east-west portion of the route is less than 500ft. long. In that short distance there are 10 locations where vehicles can enter and exit the parking areas creating opportunities for accidents and causing traffic to slow to a crawl. Pedestrian traffic is not controlled, and there are no sidewalks. There is a compound curve at the east end, restricting vision. Since it is not publicly owned, a police report cannot be secured in the event of a non-injury accident, whether for insurance or other purposes. The north-south path is shorter, and has a service entrance/exit at a service station that causes delays and hazards. This pathway simply does not meet public road standards. The risks are far greater than on a regulated public street or road. See attached photos.

Residents of the proposed apartments will likely not be aware of the possible financial risk of using this traffic route. In the event of a non-injury accident it would not be possible to secure a police report for insurance or other purposes. While it may not completely relieve local government of any

responsibility, for not clearly revealing this risk, it would seem important that it be addressed in all apartment leases in fairness to prospective tenants.

THE APARTMENT SITE IS NOT SUFFICIENTLY SERVED BY THE PUBLIC ROAD SYSTEM

There are many references to streets, roads and vehicular traffic in the Land Development Code. Among them are the following that clearly apply to this zoning case:

6.1.1

“The site access approval procedures established herein are intended to balance the right of reasonable access to private property with the right of the citizens of Louisville to safe and efficient travel.”

Apartment tenants are certainly citizens of Louisville. By not having “safe and efficient” access to westbound Brownsboro Rd. and having to get that access by driving through a privately owned parking lot, the objective of this article is clearly not met.

Page 62, Section 3

“---, expected traffic entering and exiting the site, and assignment of those trips to the street system.”

Applicants study only actually assigned part of the trips directly to the street system. The remainder were assigned directly to a parking lot, providing them with fewer rights than on a public street.

At Section 5

“---briefly describe the roadway systems ability to handle the traffic generated.”

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The applicant greatly understates the inability of the public road system to handle the traffic generated, stating only that “Due to the existing difficulty of making a left turn from Simcoe Lane during the peak hours, the left turns have been added to the Avish Gardens exit.” It would appear more accurate to state that, from the left turn traffic counts off Simcoe Lane, drivers have concluded that the risks of accidents and delays are too great to attempt that maneuver, so we will shove this traffic through a private parking lot. In a January 8 email to Ms. Zimmerman, Ms Markert tends to reinforce this conclusion, stating “This became more apparent ---once I pulled the accident data.” The public road system is not capable of handling the present traffic, let alone that to be added by the proposed development.

Nearly all present traffic in the area, both on Simcoe Lane and at the commercial parking lot, is business related. There are only four residences on Simcoe Lane, and they were constructed long before the closing of Simcoe to through traffic, and long before construction of I-265 and enormous development along Brownsboro Rd., and these homes will be taken by the proposed development. Nearly all drivers are going to or from a commercial destination, and surely expect that they will need to use a parking lot in order to do so. This is not the case with future residents of the apartment building. They will be travelling to and from their homes to various destinations. They have every right to expect that, once they enter the public road system on Simcoe Lane that they can stay on that road system to their destination.

Residents of the apartments are not being given the "right to safe and efficient travel" as set forth in the Land Development Code. They have every right to expect that, once they enter the public road system on Simcoe Lane that they can stay on that road system to their destination

Availability of using the parking lot for through traffic would appear to be at the whim of its owners. There are presently signs posted regulating truck traffic. It is both possible and likely that, at such time that through traffic interferes with that of patrons of businesses served by the lot, the owners could simply post a sign preventing through traffic.

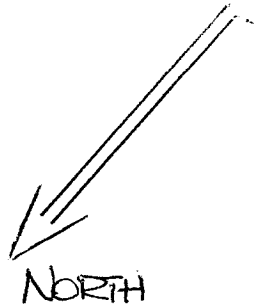
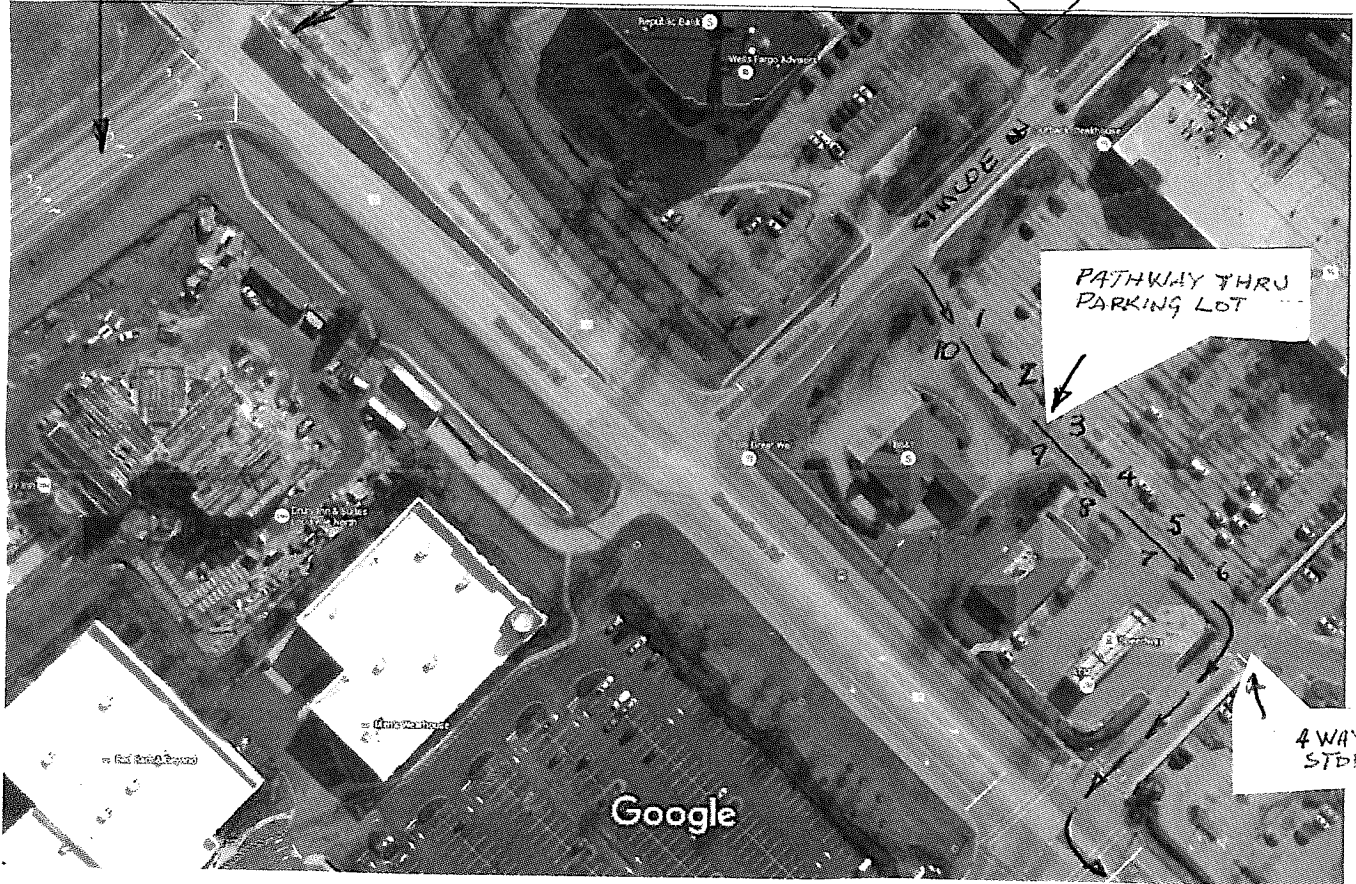
This project should not be approved.

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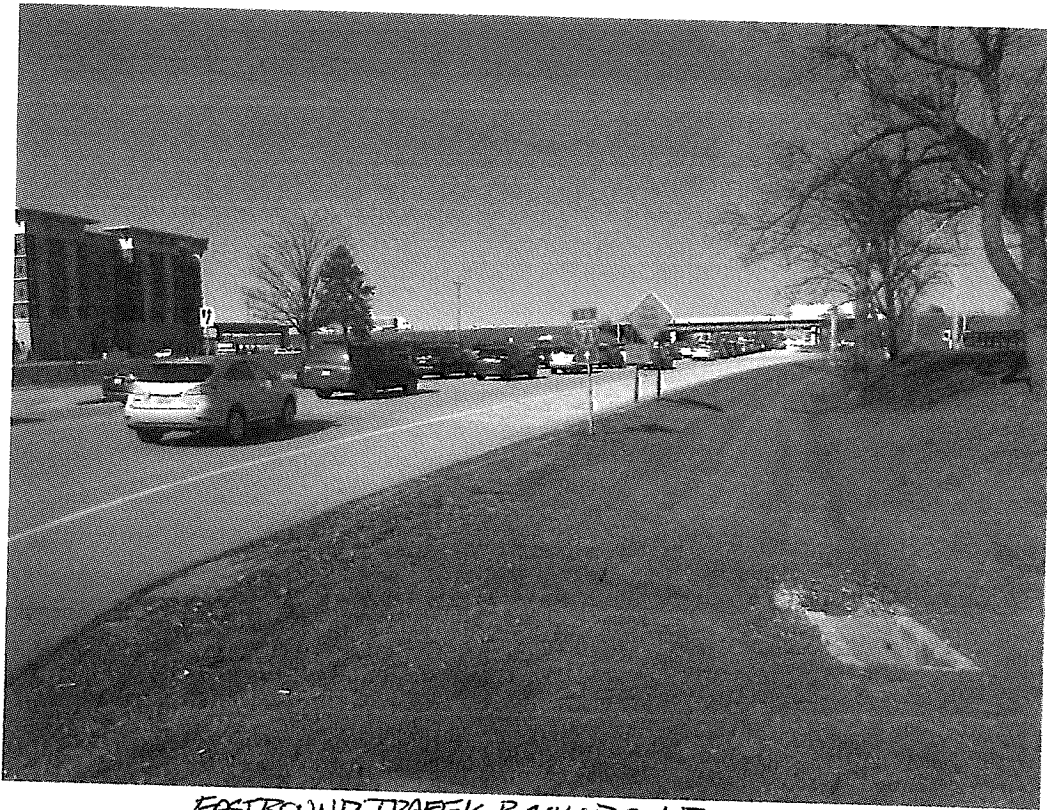
I-265 SOUTHBOUND
EXTRAMP

STOPLIGHTS

PROPOSED
APARTMENTS



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EASTBOUND TRAFFIC BACKUP ON BROWNSBORO RD
AT I-265 RAMPS VIEWED FROM SIMCOE LN



WESTBOUND PATHWAY THRU PARKING LOT
VIEWED FROM SIMCOE LANE

TRAFFIC
AND
SITE ACCESS STUDY
CASE 15ZONE1070
MARCH 1, 2016

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James Onnen
BSME, MBA

The initial purpose of conducting a limited-scope traffic study was to determine the present traffic flow on Simcoe Lane, and the extent of backups or delays at the intersection with Ky Rt 22(see map 4). Upon analyzing field data it became apparent that there was a threshold issue of even greater significance, that of whether the planned development is actually fully served by the public roadway system.

It is realized that, while our field work was done by graduate engineers with decades of technical experience in several specialties, it was not done by certified traffic engineers. We are confident that their work was done competently, and met the basic standards of counting on Tuesdays through Thursdays, from 7-9 am and from 4-6pm, on days with schools in session and at times when roads were clean and no precipitation. Field logs, traffic path diagrams and other details a part of the traffic counts are attached (see sheets 1 thru 12)

Traffic on Simcoe Lane is almost entirely business/commercial. There are only 4 residences on the street, and those properties are to be taken by the developer for the proposed apartment building (see maps 1 and 2). These residences remain from the time period several decades ago when Simcoe Lane was a through street from Ky Rt 22 to Westport Road (see map 3), and prior to the substantial residential and commercial development in the general area, as well as the construction of I-265. Traffic level on Ky Rt 22 in the area of the Simcoe Lane intersection has grown from less than 4400 vpd in 1993 to 23,100 vpd according to the most recent count made in 2008 (see trip generation sheets 1 and 2). With the ongoing development in the general area, traffic flow is reasonably assumed to be much greater in 2016.

Results of the traffic counts revealed that more than 10% of the peak hour traffic had turned onto Simcoe Lane from eastbound Ky Rt 22, yet less than 1% of the peak hour traffic travelling north on Simcoe Lane turned to go back west onto Ky Rt 22 (see traffic comparison sheet 1). Instead, the traffic that would have made that left hand turn left the public road system, drove through the commercial parking lot immediately west of Simcoe Lane, and subsequently turned north to enter Ky Rt 22 at a stoplight. It appears a reasonable conclusion that drivers felt compelled to avoid the dangers or delays of attempting to turn left onto Ky Rt 22, as it requires crossing two lanes of 35 mph eastbound traffic and making a nearly blind turn into two lanes of westbound traffic. There is not even a left turn lane at the intersection, nor is there road width to have one. During one peak hour observation period a vehicle travelling north on Simcoe Lane stopped at the intersection, waited more than a minute due to heavy cross traffic, then actually backed down Simcoe and turned left into the paved pathway shown on photo sheet 1, and drove west toward the 4 way stop noted on the photo

We do reserve the right to comment further upon having the opportunity to study the developers traffic study and related materials.

ATTACHMENTS:

Maps 1 thru 4

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Field data sheets 1 thru 12

Trip generation sheets 1 and 2

Traffic comparison sheet 1

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Page 2 of 2

15 ZONE 1070

DATE 2-23-16

PATH SIMCOE LN ONTO E. BOUND RT 22

BY J.A. Owen
 START TIME 8:00 AM
 WEATHER: CLEAR

INTERVAL (MIN)	LEFT TURNS	DELAY TIME (SEC)				
		0-20	20-40	40-60	60-80	80+
0-15	-0-			-0-	-0-	-0-
	0	8	2	0	0	0
15-30	-0-			-0-	-0-	-0-
	0	15	1	0	0	0
30-45	-0-			-0-	-0-	-0-
	0	7	1	0	0	0
45-60	1					
	1	7	2	0	0	0
TOTALS	1	37	6	0	0	0

DATE 2-23-16

PATH SIMCOE TURN ONTO EASTBOUND RT 22

BY J.A. Owen
 START TIME 5:00 PM
 WEATHER: CLEAR

INTERVAL (MIN)	LEFT TURNS	DELAY TIME (SEC)				
		0-20	20-40	40-60	60-80	80+
0-15	-0-					-0-
	0	27	27	7	3	0
15-30	-0-				-0-	-0-
	0	9	11	3	0	0
30-45	1				-0-	-0-
	1	31	9	1	0	0
45-60	0					-0-
	0	19	5	9	1	0
TOTALS	1	86	52	20	4	0

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VEHICLE DELAY COUNTS

SHEET 1 OF 12

15 ZONE 1070

DATE 2/25/16

PATH LEFT TURN ON TO SIMCOE FROM WESTBOUND RT 22

BY Bill Doyal

START TIME 8:00 - 9:00 AM

WEATHER: CLEAR

INTERVAL(MIN)	DELAY TIME(SEC)				
	0-20	20-40	40-60	60-80	80+
0-15	HTT HTT HTT HTT 1 (21)	HTT 11 (7)	11 (3)		0
15-30	HTT HTT HTT HTT HTT HTT HTT (21)	11 (1)	11 (3)		0
30-45	HTT HTT HTT HTT HTT HTT HTT HTT HTT HTT HTT HTT (25)				0
45-60	HTT HTT HTT HTT HTT (25)				0
	(144)	(8)	(4)	(0)	(0)

11 11 11 11 11

DATE 3/1/16

PATH LEFT TURN ON TO SIMCOE FROM WESTBOUND RT 22

BY Bill Doyal

START TIME 5:00 - 6:00 PM

WEATHER: CLOUDY

INTERVAL(MIN)	DELAY TIME(SEC)				
	0-20	20-40	40-60	60-80	80+
0-15	HTT HTT HTT HTT HTT HTT HTT (35)	11 11 (1)			0
15-30	HTT HTT HTT HTT (24)	HTT HTT (3)	HTT HTT (8)		0
30-45	HTT HTT HTT HTT HTT HTT HTT HTT (35)	HTT HTT (7)	11 (3)		0
45-60	HTT HTT HTT HTT HTT (25)	11 (2)			0
	(119)	(31)	(10)	(1)	(3)

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VEHICLE DELAY COUNTS

VEHICLE COUNT

LOCATION: SIMCOE LANE AT LY RT 22

DATE: 2/4/16

DAY OF WEEK: THURSDAY

WEATHER: CLEAR

START TIME: 7:00 AM

COUNT TAKEN BY: BILL DOYAL

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TIME PERIOD	①	②	③	④	TOTAL
7:00-9:00 AM					
0-15 MIN					21
15-30 MIN				-	20
30-45 MIN				-	24
45-60 MIN				-	29
60-75 MIN				-	40
75-90 MIN				-	40
90-105 MIN				-	37
105-120 MIN				-	48
60-120 MIN					
PEAK HOUR	16	113	35	1	

VEHICLE COUNT

LOCATION: SMOGUE LN, WEST TO PARKING LOT, NORTH
AT 4WAY STOP TO KP, RT 22

DATE: 2/4/16

DAY OF WEEK: THURS.

WEATHER: 35°F CLEAR

START TIME: 7:00AM

COUNT TAKEN BY: JAMES OWEN

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TIME SEGMENT	①	②	③	④	⑤	⑥
0-15 MIN	11				11	
15-30 MIN					11	
30-45 MIN					11	
45-60 MIN					11 11 11 11	
60-75 MIN					11 11	
75-90 MIN					11 11 11 11	1
90-105 MIN					11 11 11	
105-120 MIN	1				11 11 11 11	

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VEHICLE COUNT

LOCATION: SIMCOE LN AT KYRTZ

DATE: 2/4/16

DAY OF WEEK: THURSDAY

WEATHER: CLEAR

START TIME: 4:00 PM

COUNT TAKEN BY: BILL DOYAL

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TIME SEGMENT	VEHICLE COUNTS				TOTAL
	①	②	③	④	
4:00 - 6:00 PM					
0-15 MIN	1	1	1	1	105
15-30 MIN	1	1	1	1	63
30-45 MIN	1	1	1	1	68
45-60 MIN	1	1	1	1	74
60-75 MIN	1	1	1	1	95
75-90 MIN	1	1	1	1	77
90-105 MIN	1	1	1	1	71
105-120 MIN	1	1	1	1	90
60-120 MIN Total	10	130	195	1	

SHEET 5 of 12

15 ZONE 1070

VEHICLE COUNT

LOCATION: SIMCOE LN, WEST TO PARKING LOT, NORTH
AT 4th AVE STOP TO RPT 22

DATE: 2/4/16

DAY OF WEEK: THURSDAY

WEATHER: CLEAR

START TIME: 4:00 PM

COUNT TAKEN BY: JAMES ONNEN

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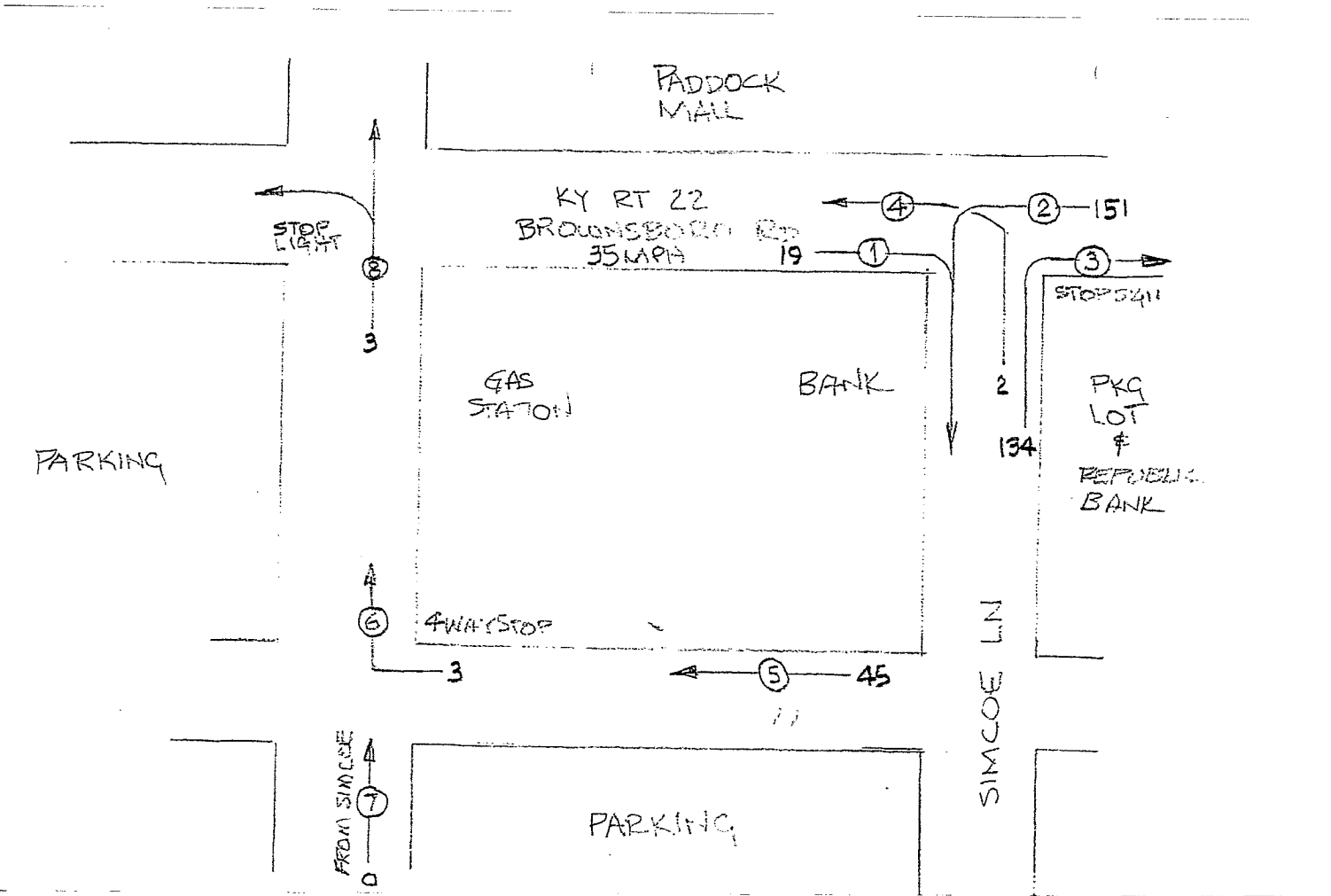
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TIME SEGMENT	VEHICLE COUNTS			
	(7)	(8)	(5)	(6)
0-15 MIN	II	III	II	III
15-30 MIN	III	II	II	II
30-45 MIN	III	II	II	II
45-60 MIN	III	III	III	III
60-75 MIN	III	III	III	III
75-90 MIN	III	III	III	III
90-105 MIN	III	III	III	III
105-120 MIN	II	II	II	II

PARKING

Sheet 12

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LEGEND



VEHICLE PATH

VEHICLE

COUNT

SKETCH IS NOT INTENDED TO SHOW

ALL ROAD FEATURES, AND DIAGRAM

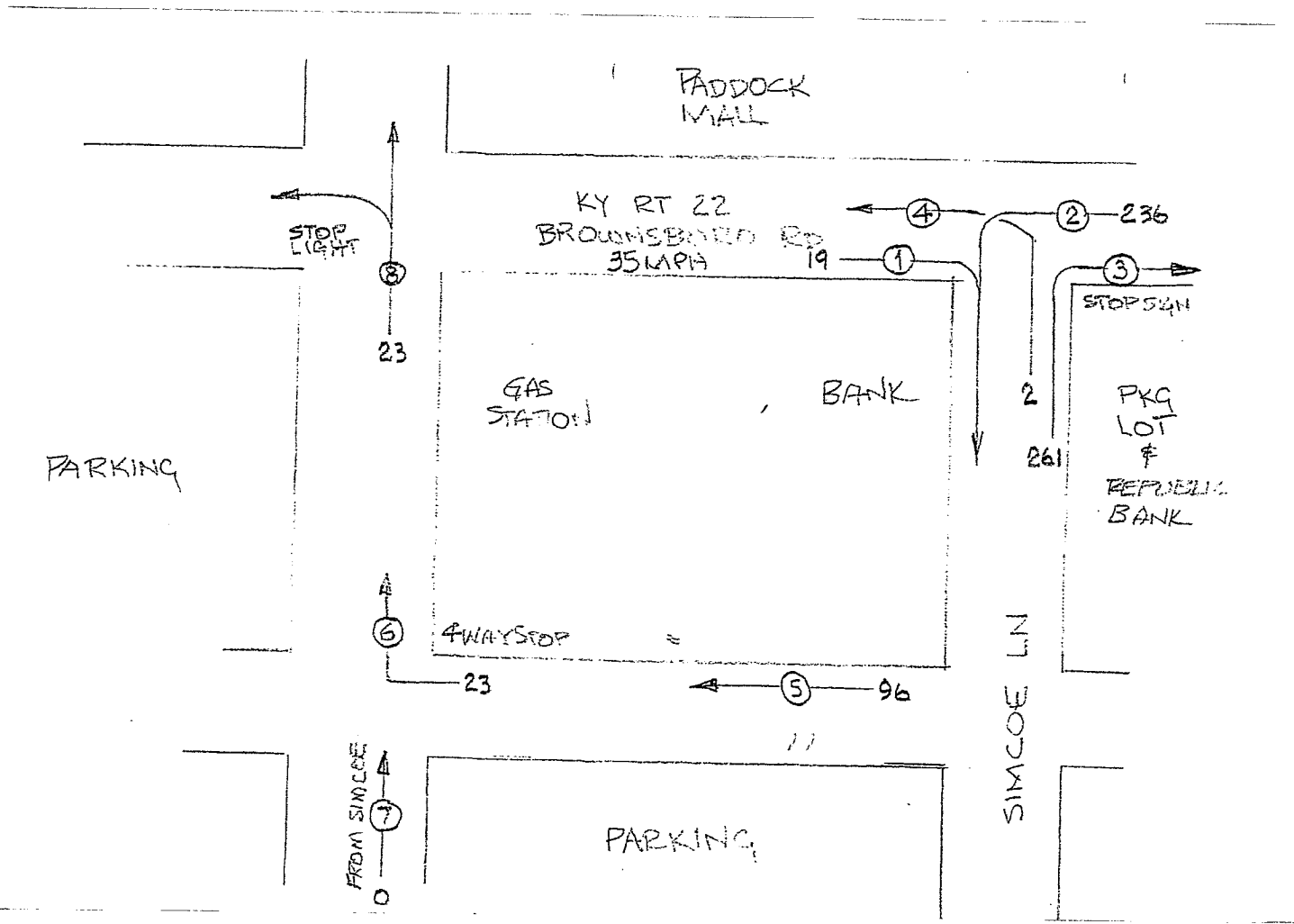
IS ONLY FOR VEHICLE PATHS SHOWN

SEE MAP #1 FOR STUDY AREA

A.M. PEAK HOUR TRAFFIC - PRESENT COUNT + PROPOSED ARTS



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SHEET 7 OF 12



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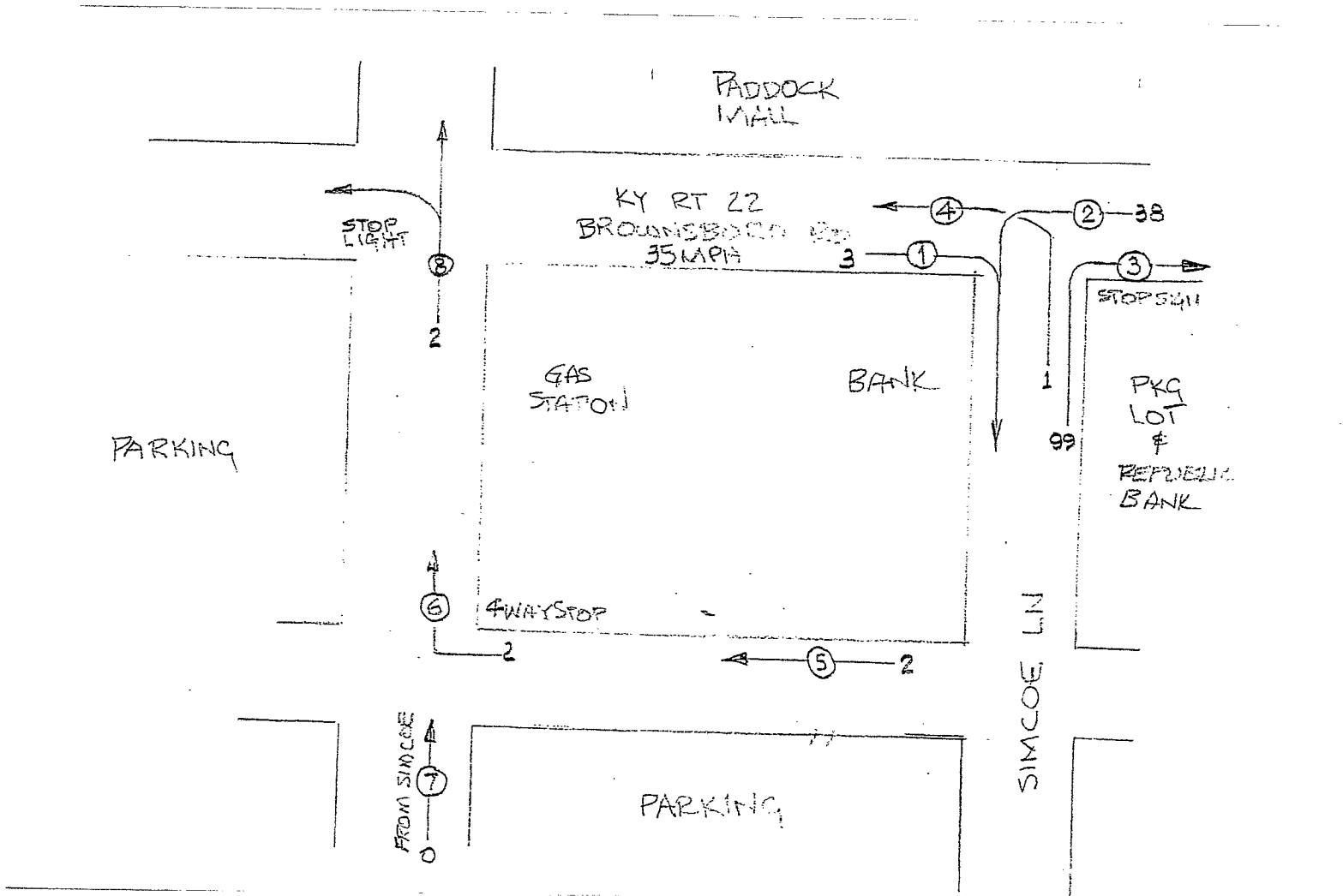
LEGEND

-  VEHICLE PATH
-  VEHICLE COUNT

SKETCH IS NOT INTENDED TO SHOW ALL ROAD FEATURES, AND DIAGRAM IS ONLY FOR VEHICLE PATHS SHOWN

SEE MAP #1 FOR STUDY AREA

P.M., PEAK HOUR TRAFFIC - PRESENT COUNT + PROPOSED AAS

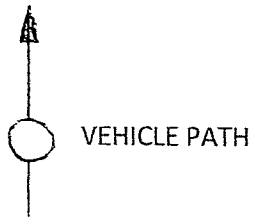


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LEGEND

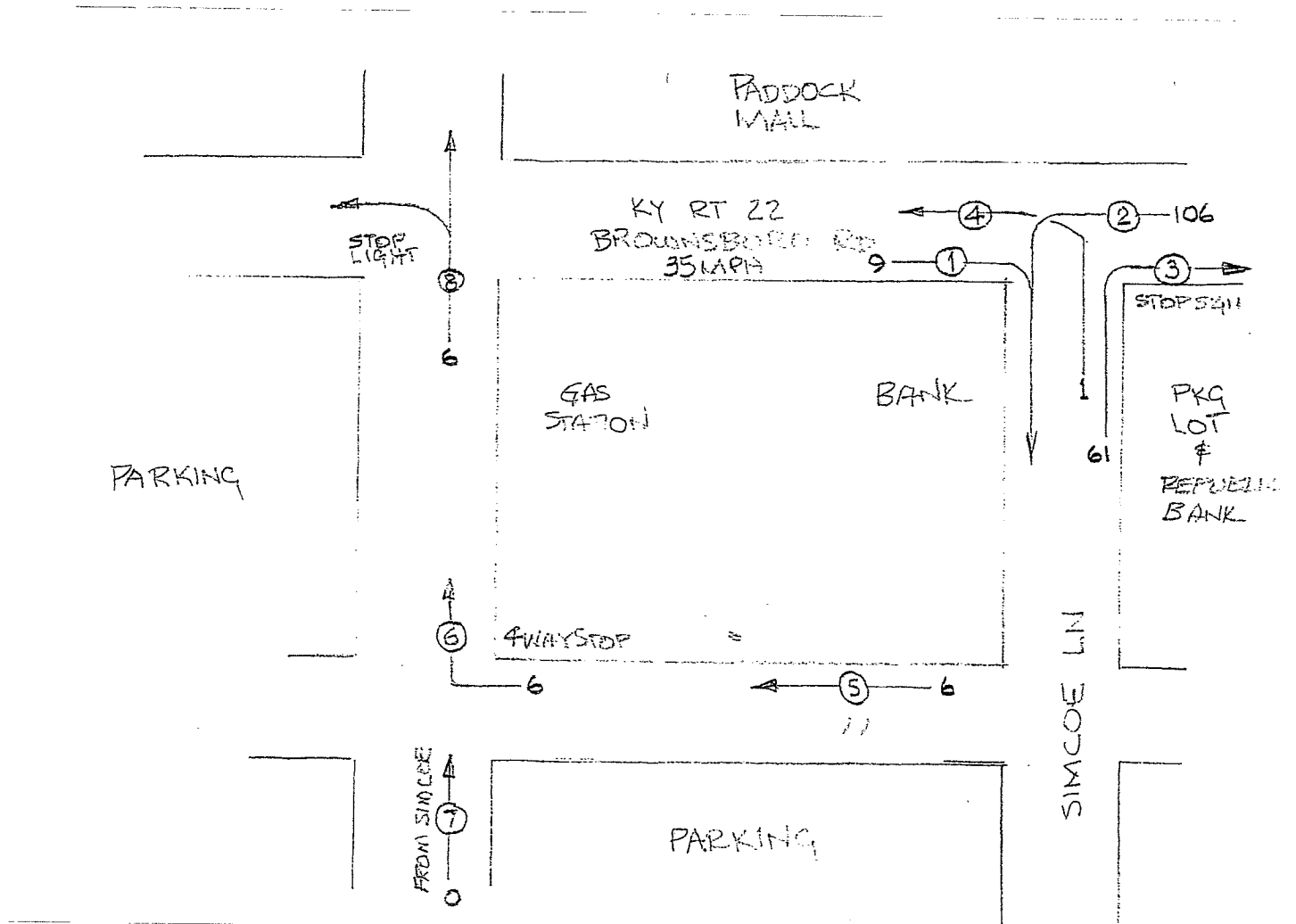


VEHICLE COUNT

SKETCH IS NOT INTENDED TO SHOW ALL ROAD FEATURES, AND DIAGRAM IS ONLY FOR VEHICLE PATHS SHOWN

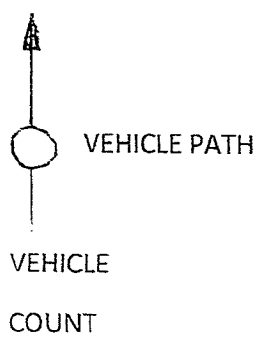
SEE MAP #1 FOR STUDY AREA

A.M. PEAK HOUR TRAFFIC - FROM PROPOSED ARTS.



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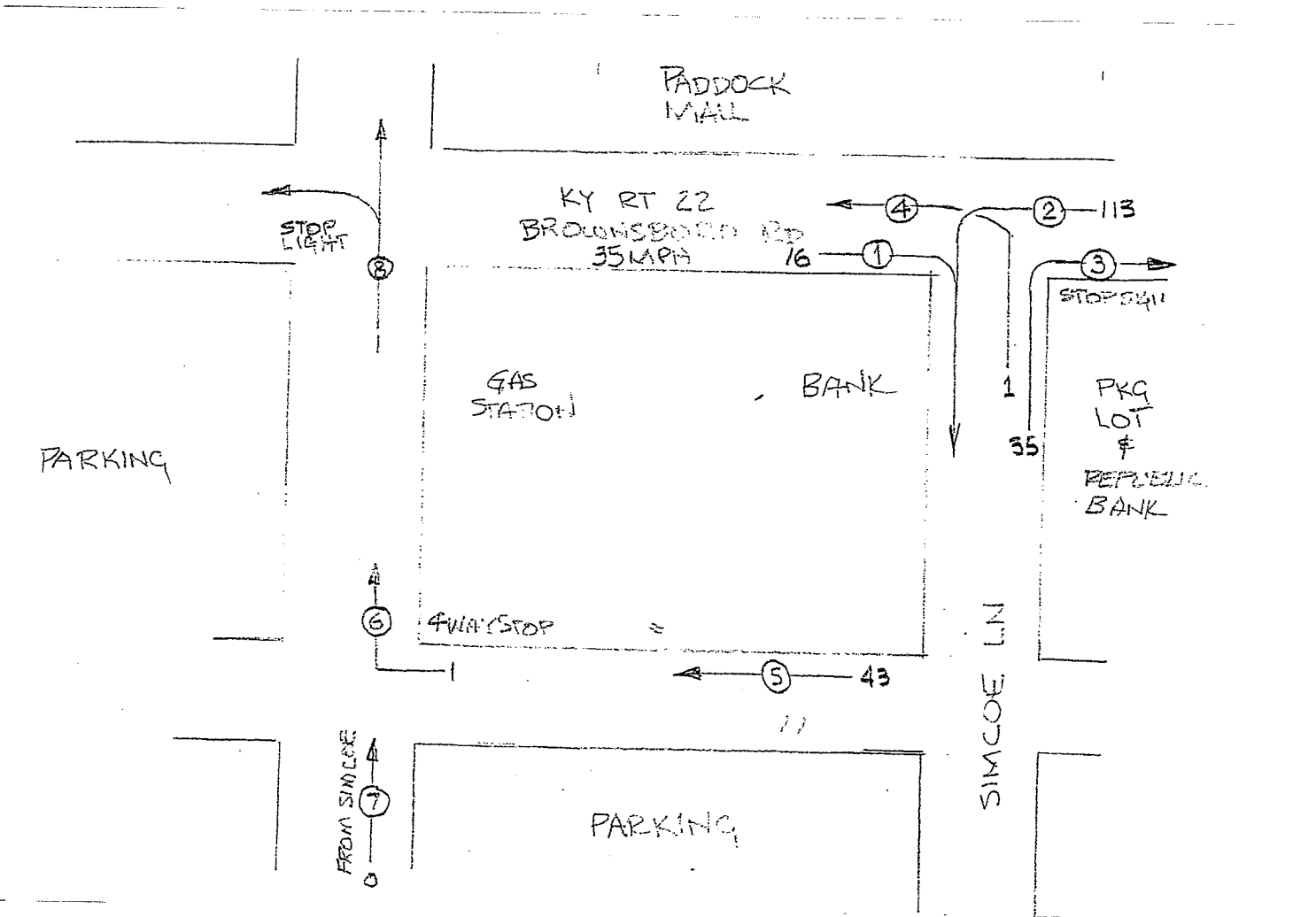


SKETCH IS NOT INTENDED TO SHOW
 ALL ROAD FEATURES, AND DIAGRAM
 IS ONLY FOR VEHICLE PATHS SHOWN

SEE MAP #1 FOR STUDY AREA

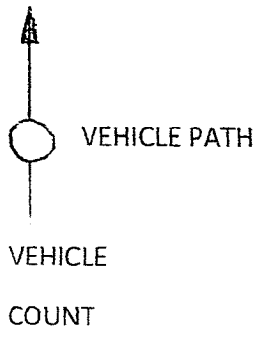
P.M. PEAK HOUR TRAFFIC - FROM PROPOSED APTS

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 SHEET 10 OF 12



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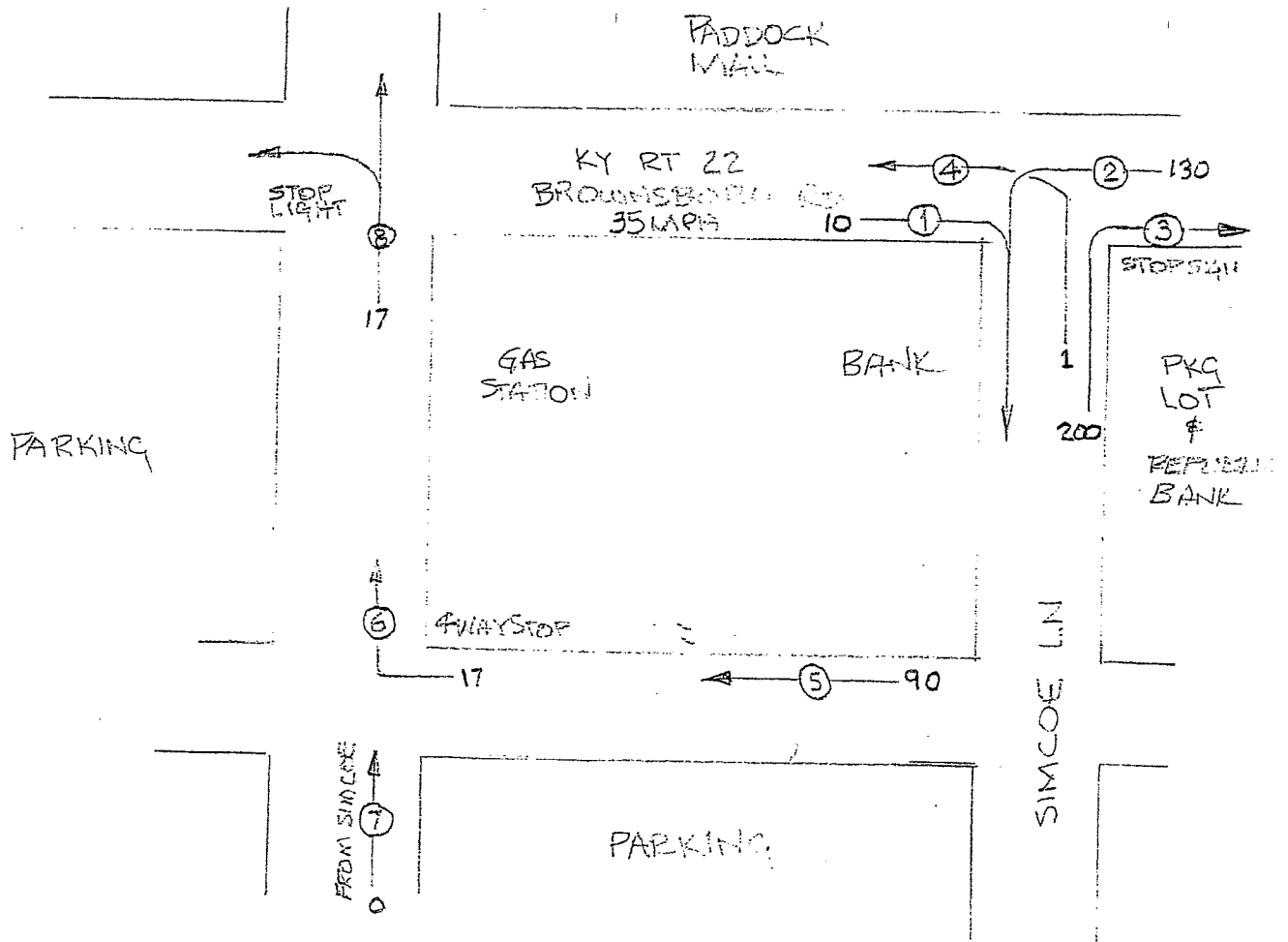
LEGEND



SKETCH IS NOT INTENDED TO SHOW
 ALL ROAD FEATURES, AND DIAGRAM
 IS ONLY FOR VEHICLE PATHS SHOWN

SEE MAP #1 FOR STUDY AREA

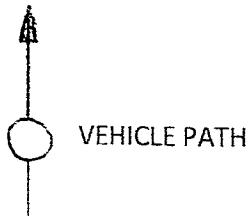
A.M. PEAK HOUR TRAFFIC - *PRESENT COUNT*



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LEGEND



VEHICLE

COUNT

SKETCH IS NOT INTENDED TO SHOW
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 IS ONLY FOR VEHICLE PATHS SHOWN

SEE MAP #1 FOR STUDY AREA

PM PEAK HOUR TRAFFIC - PRESENT COUNT

15 ZONE 1070

SHEET 12 OF 12

Pat and Jim

From: Adam Kirk <Adam@adamkirkpe.com>
Sent: Tuesday, January 19, 2016 11:43 AM
To: onne2399@bellsouth.net
Subject: KY 22 Data
Attachments: KY22_Data_Onnen.docx

Jim,

The attached word document has the estimated trips for the AM and PM peak hour based on the KYTC Trip Generation Spreadsheet and a summary of historical data for the count station on KY 22. It does not appear that any ADT counts have been completed since 2008. In conducting a Traffic Impact Study, new turning movement counts would be required at any intersections being studied.

Thanks,
Adam
859.421.2567

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TRIP GENERATION

AM PEAK HOUR TRIP GENERATION								
ITE Land Use Code	Land Use Description	Ind. Var. (X)	Ind. Var. Units	Entering/Exiting	Trips Generated	Internal Trips	Pass-by Trips	Primary Trips
TOTAL	ALL	-	-	Total entering	41	0	0	41
		-	-	Total exiting	102	0	0	102
220	Apartment	260	Dwelling Units	entering	41	0	0	41
				exiting	102	0	0	102

PM PEAK HOUR TRIP GENERATION								
ITE Land Use Code	Land Use Description	Ind. Var. (X)	Ind. Var. Units	Entering/Exiting	Trips Generated	Internal Trips	Pass-by Trips	Primary Trips
TOTAL	ALL	-	-	Total entering	106	0	0	106
		-	-	Total exiting	68	0	0	68
220	Apartment	260	Dwelling Units	entering	106	0	0	106
				exiting	68	0	0	68

HISTORICAL TRAFFIC COUNT DATA

http://datamart.business.transportation.ky.gov/EDSB_SOLUTIONS/CTS/StationDetail.aspx?STATION=056V27&TF_NE_ID=17283490

Historical Traffic Volume Summary
Station Details:

Sta ID:	056V27
Sta Type:	Volume
Map:	MapIt
District:	5
County:	Jefferson
Route:	056-KY-0022 -000
Route Desc:	

Begin MP:	3.6960
Begin Desc:	KY 1474 (SPRINGDALE ROAD)
End Mp:	4.1080
End Desc:	1 265 (GENE SNYDER FREEWAY)
Impact Year:	2003
Year Added:	

Newest Count:

AADT:	23100
Year:	2008
% Single:	
% Combo:	
K Factor:	
D Factor:	

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Definitions:

Sta. ID - Three digit county number + station number

MP - milepoint

Impact Year - year of significant change to traffic pattern within station segment

AADT - Annual Average Daily Traffic - the annualized average 24-hour volume of vehicles on a segment of roadway

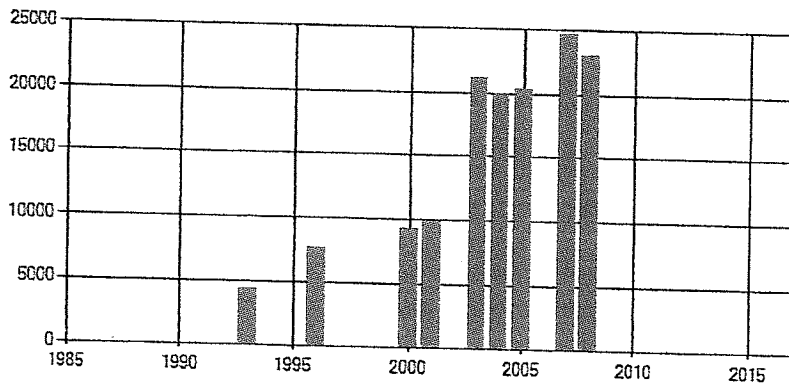
% Single - single unit truck volume as a percentage of the AADT

% Combo - combination truck volume as a percentage of the AADT

K Factor - peak hour volume as a percentage of the AADT

D Factor - percentage of peak hour volume flowing in the peak direction

Year	AADT	Year	AADT	Year	AADT
2016		2006		1996	7600
2015		2005	20400	1995	
2014		2004	20000	1994	
2013		2003	21200	1993	4380
2012		2002		1992	
2011		2001	9880	1991	
2010		2000	9280	1990	
2009		1999		1989	
2008	23100	1998		1988	
2007	24700	1997		1987	



TRIP GENERATION - 2

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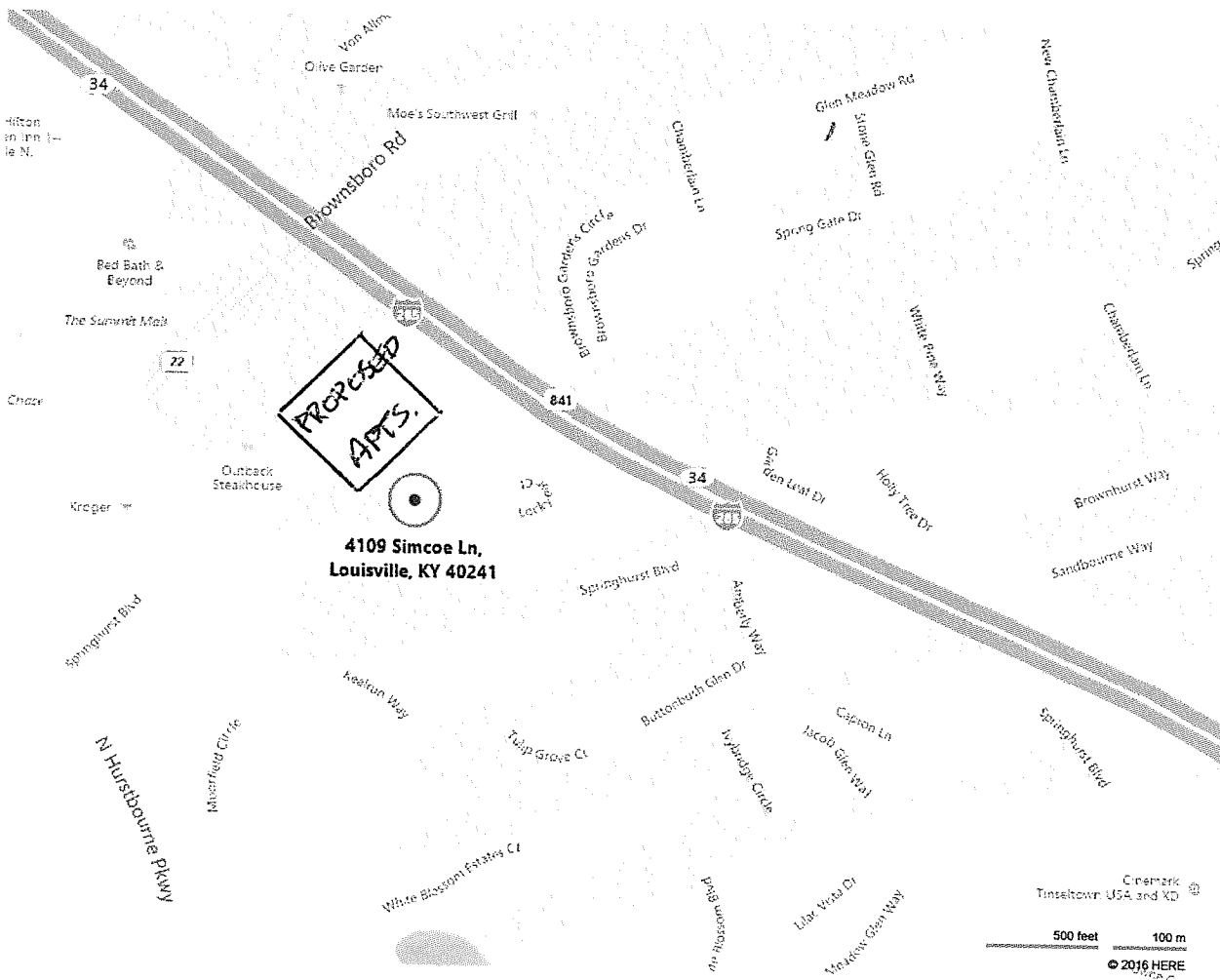
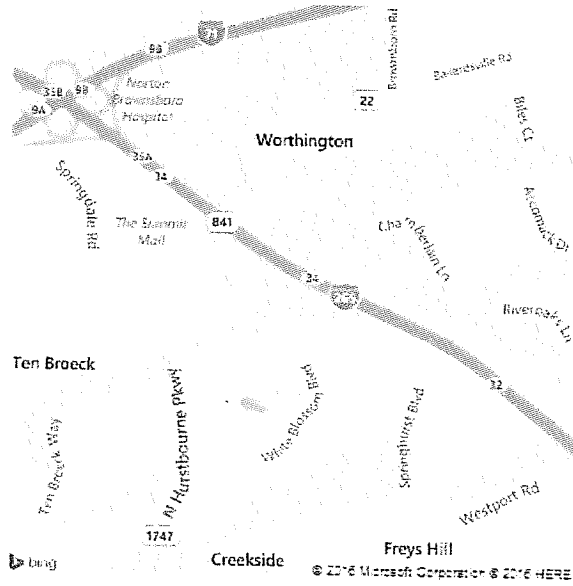
PROPOSED APARTMENT BUILDING IN ORANGE

MAP # 1

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Notes

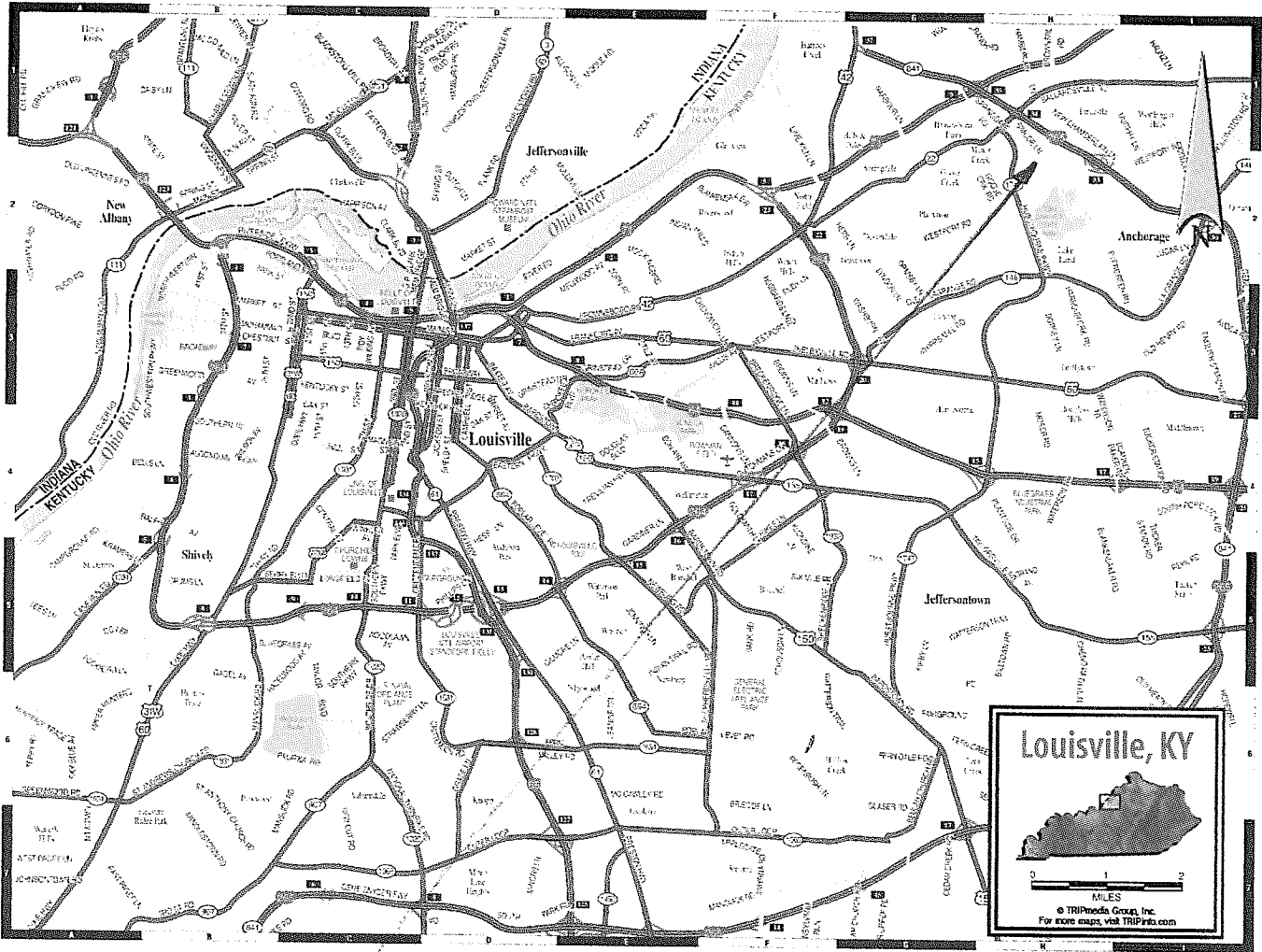
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Cinemark
 Tinseltown USA and XD
 500 feet 100 m
 © 2016 HERE

MAP #2
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NOTE: SIMCOE LN WAS A THRU STREET
PRIOR TO COMMERCIAL DEVELOPMENT

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MAP # 3



4109 Simcoe Ln.
Louisville, KY 40241

PROPOSED APT. AREA

TRAFFIC STUDY AREA

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MAP #4