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Memorandum

To: Mr. Vikram Mehra

From: Abdul K. Amer, P.E.

Date: March 22th 2012

Subject: Trip Generation Memo for Ashford at Brookhaven

The purpose of this memo is to determine the trip generation characteristics of the proposed residential development, Ashford at Brookhaven, which will be located off Dresden Drive in DeKalb County, Georgia. This proposed development will consist of 215 apartment dwelling units and will be served by access points on Dresden Drive and Fernwood Circle.

Trip generation for the project was based on the rates and equations published in the 8th edition of the Institute of Transportation Engineers (ITE) Trip Generation report. This reference contains traffic volume count data collected at similar facilities nationwide. A trip generation is a tool used by transportation professionals who are interested in estimating the number of trips generated by a proposed development. Trips are defined as a single or one-directional travel movement with either the origin or destination of the trip inside the study site. Trips are expressed in trips per unit of development. In this case, the volumes are expressed as trips per dwelling unit. Equations provide a direct estimation of trips based upon development units being multiplied in a mathematical relationship. The total trip generation was based on the following ITE Land Use: 220 – Apartment. The calculated total trip generation for the site is shown in Table 1 for the AM and PM peak hours.

Land Use	Size	A.M. Peak Hour			P.M. Peak Hour			24-Hour
		Enter	Exit	Total	Enter	Exit	Total	2-way
220 – Apartment	215 units	22	87	109	88	48	136	1,426

The trip generation rates in Table 1 have been calculated for the AM and PM peak hours. The peak hours consist of the four consecutive 15-minute interval volumes that summed to produce the highest volumes on the adjacent roadway between the hours of 7:00am to 9:00am and 4:00pm to 6:00pm, respectively. These times are commonly thought of as the “rush hours” for most areas and constitute the period with highest trip generation rates for most developments of this type. As shown in Table 1, the development will generate 109 new trips (22 entering trips plus 87 exiting trips) during the AM peak hour and 136 new trips (88 entering trips plus 48 exiting trips) in the PM peak hour. A site plan showing the proposed development has been included in the Appendix.

APPENDIX

Land Use: 220 Apartment

Description

Apartments are rental dwelling units located within the same building with at least three other dwelling units, for example, quadrplexes and all types of apartment buildings. The studies included in this land use did not identify whether the apartments were low-rise, mid-rise, or high-rise. Low-rise apartment (Land Use 221), high-rise apartment (Land Use 222) and mid-rise apartment (Land Use 223) are related uses.

Additional Data

This land use included data from a wide variety of units with different sizes, price ranges, locations and ages. Consequently, there was a wide variation in trips generated within this category. As expected, dwelling units that were larger in size, more expensive, or farther away from the central business district (CBD) had a higher rate of trip generation per unit than those smaller in size, less expensive, or closer to the CBD. Other factors, such as geographic location and type of adjacent and nearby development, may also have had an effect on the site trip generation.

The peak hour of the generator typically coincided with the peak hour of the adjacent street traffic.

The sites were surveyed between the late 1960s and the 2000s throughout the United States and Canada.

Many of the studies included in this land use did not indicate the total number of bedrooms. To assist in the future analysis of this land use, it is important that this information be collected and included in trip generation data submissions.

Source Numbers

2, 4, 5, 6, 9, 10, 11, 12, 13, 14, 16, 19, 20, 34, 35, 40, 72, 91, 100, 108, 188, 192, 204, 211, 253, 283, 357, 436, 525, 530, 579, 583, 638

SITE DEVELOPMENT DATA

NO.	DESCRIPTION	UNIT	AMOUNT	REMARKS
1	TOTAL GROSS AREA	SQ. FT.	1,234,567	
2	TOTAL NET AREA	SQ. FT.	876,543	
3	TOTAL FLOOR AREA	SQ. FT.	543,210	
4	TOTAL PARKING SPACES	SPACES	123	
5	TOTAL STAIRS	STAIRS	12	
6	TOTAL ELEVATORS	ELEVATORS	8	
7	TOTAL POOLS	POOLS	1	
8	TOTAL COURTYARDS	COURTYARDS	2	
9	TOTAL DECKS	DECKS	3	
10	TOTAL RETAINING WALLS	LINEAR FEET	150	
11	TOTAL LANDSCAPE TREES	TREES	50	
12	TOTAL LANDSCAPE PLANTS	PLANTS	1000	
13	TOTAL LIGHT FIXTURES	FIXTURES	200	
14	TOTAL SIGNAGE	SIGNAGE	10	
15	TOTAL UTILITY CONNECTIONS	CONNECTIONS	5	
16	TOTAL FENCE LINE	LINEAR FEET	300	
17	TOTAL PERIMETER WALLS	LINEAR FEET	400	
18	TOTAL DRIVEWAYS	LINEAR FEET	200	
19	TOTAL PAVEMENT	SQ. YD.	500	
20	TOTAL CURBS	LINEAR FEET	100	
21	TOTAL BIKEWAYS	LINEAR FEET	50	
22	TOTAL BIKE RACKS	RACKS	10	
23	TOTAL BIKE REPAIR STATIONS	STATIONS	2	
24	TOTAL BIKE STORAGE	STORAGE	100	
25	TOTAL BIKE LOCKERS	LOCKERS	50	
26	TOTAL BIKE REPAIR TOOLS	TOOLS	10	
27	TOTAL BIKE REPAIR PARTS	PARTS	100	
28	TOTAL BIKE REPAIR TRAINING	TRAINING	10	
29	TOTAL BIKE REPAIR SAFETY	SAFETY	10	
30	TOTAL BIKE REPAIR MAINTENANCE	MAINTENANCE	10	
31	TOTAL BIKE REPAIR INSPECTION	INSPECTION	10	
32	TOTAL BIKE REPAIR RECORDS	RECORDS	10	
33	TOTAL BIKE REPAIR COMPLIANCE	COMPLIANCE	10	
34	TOTAL BIKE REPAIR LIABILITY	LIABILITY	10	
35	TOTAL BIKE REPAIR INSURANCE	INSURANCE	10	
36	TOTAL BIKE REPAIR TAXES	TAXES	10	
37	TOTAL BIKE REPAIR FEES	FEES	10	
38	TOTAL BIKE REPAIR COSTS	COSTS	10	
39	TOTAL BIKE REPAIR REVENUE	REVENUE	10	
40	TOTAL BIKE REPAIR PROFITS	PROFITS	10	
41	TOTAL BIKE REPAIR MARGINS	MARGINS	10	
42	TOTAL BIKE REPAIR RETURNS	RETURNS	10	
43	TOTAL BIKE REPAIR CANCELLATIONS	CANCELLATIONS	10	
44	TOTAL BIKE REPAIR DEFERMENTS	DEFERMENTS	10	
45	TOTAL BIKE REPAIR REFUND REQUESTS	REQUESTS	10	
46	TOTAL BIKE REPAIR COMPLAINTS	COMPLAINTS	10	
47	TOTAL BIKE REPAIR NEGATIVE FEEDBACK	FEEDBACK	10	
48	TOTAL BIKE REPAIR POSITIVE FEEDBACK	FEEDBACK	10	
49	TOTAL BIKE REPAIR REPUTATION	REPUTATION	10	
50	TOTAL BIKE REPAIR BRAND VALUE	BRAND VALUE	10	

