

MEMORANDUM

Date: October 31, 2018

To: Mr. Greg Yawitz
Keat Properties, LLC
9200 Olive Boulevard, Suite 200
Olivette, Missouri 63132

From: Lee Cannon, PE, PTOE

CBB Job Number: 023-17

Project: Trip Generation Update
Proposed Commercial Redevelopment

As an addendum to the traffic impact study update submitted on October 27, 2017 for a proposed commercial redevelopment in Olivette, Missouri, CBB has calculated new trip generation totals based on a new site plan with alternative land uses provided by you dated October 20, 2018.

The trip generation table from the October 2017 study is shown in **Table 1**. As can be seen, the site was expected to generate 725, 935, and 1,430 total trips during the weekday midday, weekday PM, and Saturday midday peak hours, respectively, according to the previous site plan. That site plan showed a supermarket and an office supply store serving as anchors with mainly retail stores and a few restaurants on the outlots.

The new site plan is shown in **Figure 1** and consists of a hotel, office building, supermarket, and a 15,000-square-foot building to be used for retail, service or a fitness club. Outlot uses include a mixture of restaurants, retail, and a medical clinic. A parking garage is also proposed on the site plan, but this would not be a generator of trips. The trip generation estimate based on the new site plan is shown in **Table 2**.





Table 1: ITE Trip Generation Estimate for Proposed Development (October 2017 Plan)

Land Use Code	Land Use	Size (Sq. Ft.)	Weekday Midday Peak Hour			Weekday PM Peak Hour			Saturday Midday Peak Hour		
			IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL
931	Restaurant (Quality)	3,800	15	10	25	20	10	30	25	15	40
820	Shopping Center	2,000	15	20	35	20	25	45	35	35	70
820	Shopping Center	2,000	15	20	35	20	25	45	35	35	70
934	Fast Food w/ Drive-Thru	4,400	55	55	110	75	70	145	130	125	255
936	Coffee Shop	2,000	30	30	60	40	40	80	65	70	135
931	Restaurant (HTSD)	2,800	10	10	20	15	10	25	20	20	40
820	Shopping Center	3,800	20	25	45	30	35	65	55	50	105
931	Restaurant (HTSD)	4,400	15	10	25	20	15	35	35	30	65
Ex. Volumes	Retail (OfficeMax)	15,300	35	30	65	35	25	60	30	25	55
820	Shopping Center	2,150	15	20	35	20	25	45	35	35	70
820	Shopping Center	2,780	20	25	45	25	30	55	45	40	85
820	Shopping Center	4,350	25	30	55	35	40	75	60	55	115
820	Shopping Center	3,850	20	25	45	30	35	65	55	50	105
850	Supermarket	32,000	125	125	250	170	165	335	240	230	470
Total		85,630	415	435	850	555	550	1,105	865	815	1,680
Common Trip Reduction (15%)			60	65	125	85	85	170	130	120	250
Net Trips			355	370	725	470	465	935	735	695	1,430
Pass-By	Shopping Center		105	105	210	135	135	270	150	150	300
	Fast Food		30	30	60	35	35	70	65	65	130
	HTSD		10	10	20	15	15	30	10	10	20
	Total		145	145	290	185	185	370	225	225	450
New Trips			210	225	435	285	280	565	510	470	980

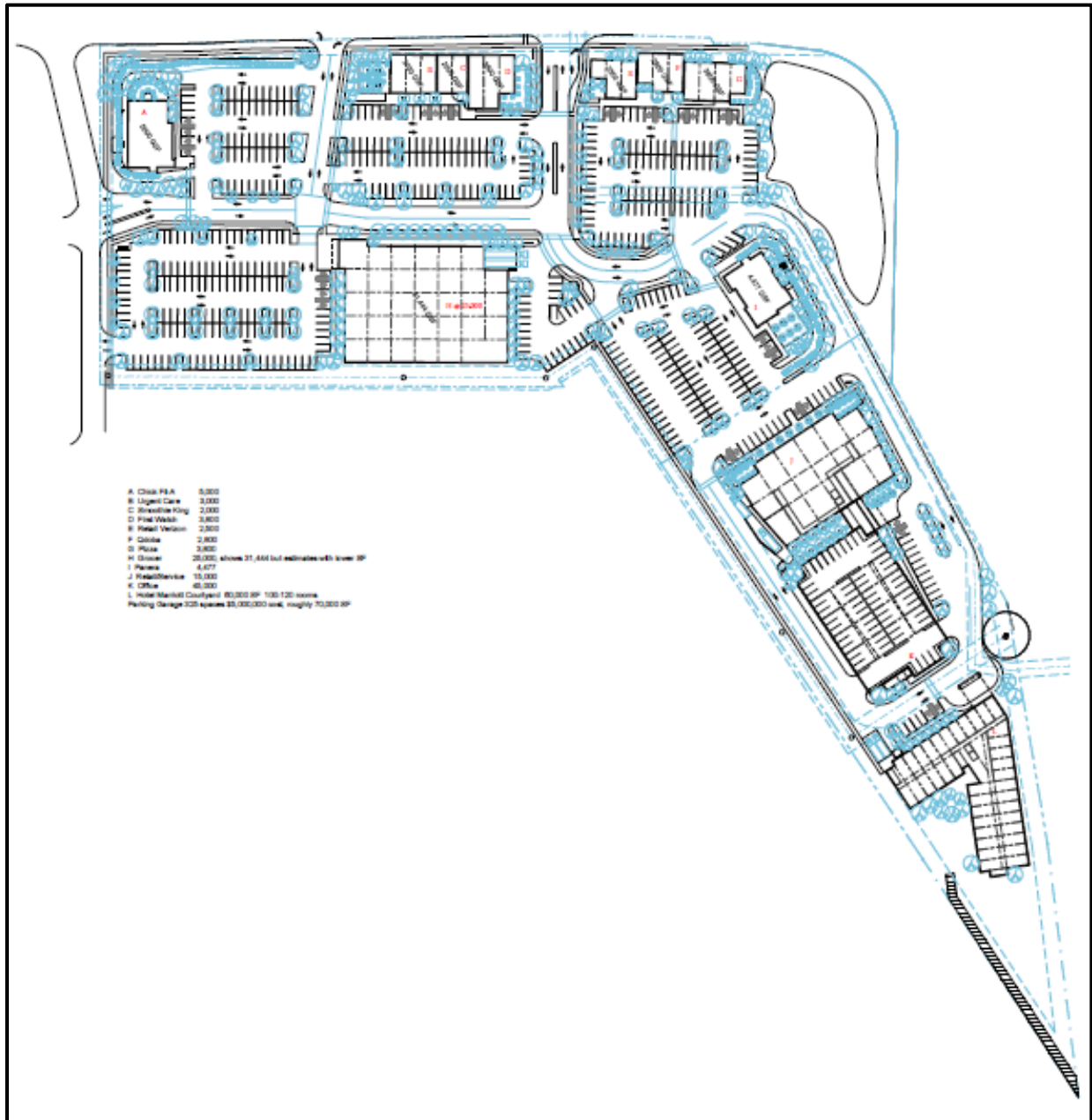


Figure 1: New Site Plan (provided by others)



Table 2: ITE Trip Generation Estimate for Proposed Development (New Site Plan – October 2018)

Land Use Code	Land Use	Size (Sq. Ft.)	Weekday Midday Peak Hour			Weekday PM Peak Hour			Saturday Midday Peak Hour		
			IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL
934	Fast Food w/ Drive-Thru	5,000	65	60	125	85	80	165	140	135	275
630	Clinic	3,000	5	10	15	5	10	15	5	10	15
933	Fast Food w/o Drive-Thru	2,000	20	25	45	30	30	60	55	55	110
932	Restaurant (HTSD)	3,800	15	10	25	0	0	0	20	20	40
820	Shopping Center	2,500	10	15	25	15	20	35	20	15	35
930	Fast Casual Restaurant	2,800	15	15	30	20	20	40	50	45	95
930	Fast Casual Restaurant	3,800	20	20	40	30	25	55	70	60	130
850	Supermarket	25,000	105	100	205	140	135	275	175	165	340
934	Fast Food w/ Drive-Thru	4,477	55	55	110	75	70	145	125	120	245
820	Shopping Center	15,000	50	55	105	65	70	135	70	65	135
710	General Office Building	45,000	5	35	40	10	45	55	5	5	10
310	Hotel (120 rooms)	60,000	25	25	50	35	35	70	50	35	85
	Parking Garage	NA									
Total		172,377	390	425	815	510	540	1050	785	730	1,515
Common Trip Reduction (15%)			60	60	65	125	75	80	155	120	110
Net Trips			330	360	690	435	460	895	665	620	1285
Pass-By	Shopping Center		20	20	40	30	30	60	20	20	40
	Fast Food		70	70	140	95	95	190	160	160	320
	HTSD		20	20	40	20	20	40	25	25	50
	Total		110	110	220	145	145	290	205	205	410
New Trips			220	250	470	290	315	605	460	415	875

As shown in Table 2, the revised development plan is expected to generate 690, 895, and 1,285 total trips during the weekday midday, weekday PM, and Saturday midday peak hours, respectively. This represents a reduction of 35, 40, and 145 trips during the respective peak hours as compared to the original site plan.

It should be noted that the 15,000-square-foot building with an undetermined use was assumed to be a Shopping Center for a conservatively high trip generation. If that building were to be developed as a fitness center, another listed potential use, it would generate 55, 70, and 50 total trips during the three peak hours. The fitness center trip levels would represent roughly one



half of the 105, 135, and 135 total trips generated by a Shopping Center use of the same size during the respective peak hours.

We trust that you will find this information useful. Should there be any questions, please contact me in our St. Louis, Missouri office at LCannon@cbbtraffic.com or on my mobile phone at 314-308-6547.