

November 3, 2017

Mr. John Witt
Witt Construction Inc.
563 North Broadway
Saratoga Springs, NY 12966

**RE: Excelsior Park Trip Generation Update and Special Use Permit Evaluation (revised)
Saratoga Springs, New York; GPI project # ALB 2017119.00**

Dear Mr. Witt:

Greenman-Pedersen, Inc. (GPI) has reviewed the current proposed site plan for the build out of Excelsior Park (dated 10/5/2017) prepared by the LA Group to estimate traffic generating potential of the land use being proposed. These trip generation estimates were then compared to the traffic mitigation thresholds as contained in the Special Use Permit was granted by the City of Saratoga Springs for this project in October 2002. Currently, Excelsior Park Phase I has been constructed and Phase II has been approved and is under construction. With Phase I and Phase II the site will contain a 100 room extended stay hotel and 160 residential housing units (a mix of single family, condominiums, townhomes, and apartments). The proposed build-out on the current LA Group site plan will add 147 additional housing units (split between townhomes, apartments and townhomes with attached apartments), 36,200 square feet of commercial space, and a 60 room hotel with supporting restaurant, spa and other amenities. A copy of the current Site Plan is attached for reference.

For the trip generation assessment, the new development on-site was broken down into three separate areas that could be constructed all at once or in phases. These areas, which are graphically depicted in Figure 1 on the next page include the following proposed land uses:

Area "A"

52 Townhomes
24 Apartments (includes six short-term guest rooms)

Area "B"

10 Townhomes
61 Apartments
36,200 SF Commercial*

* Since the exact breakdown of this commercial development area is not yet known, trip generation will be estimated for this area under the Shopping Center land use.

Area "C"

60 Room Hotel, which includes all amenities (restaurant, spa, etc.)

In addition to these areas, the site contains a fourth area, which is the already constructed and previously approved development from Phases I and II of the site construction. As will be discussed subsequently, the trips generated by this previously approved land uses will be added to the trips estimated for each of the new development areas noted above to estimate the trip generation potential for the build out of the site.

Existing Site Traffic

As part of a previous study GPI performed for this site, Traffic counters were placed along the site access road from May 7 to May 15, 2015 to determine the existing trip generation of the site with Phase I development in place. Additionally, the trip generation potential of Phase II site development was detailed in a June 10, 2015 Traffic Generation Analysis letter. These volumes, as detailed in the previous study, will be used as the existing condition base for the overall trip generation of the site in all development scenarios presented. These existing site trips are as shown in Table 1 below.

TABLE 1 – EXISTING SITE TRIPS

Development	AM Peak Hour			PM Peak Hour		
	Enter	Exit	Total	Enter	Exit	Total
Phase I Development	13	26	39	27	26	53
Phase II Development	13	55	68	59	31	90
Total Existing and/or Approved Site Trips	26	81	107	86	57	143

Trip Generation Estimates of Current Proposal

The current standard for estimating trips being generated by a particular development is the *Trip Generation Manual*, 9th edition, published by the Institute of Transportation Engineers (ITE). This publication offers average rates and equations based on hundreds of case studies to estimate the trip generation potential of various land uses. For the purposes of this assessment, Land Use Codes (LUC) 220 "Apartments"; LUC 230 "Townhouses"; LUC 310 "Hotel"; and LUC 820 Shopping Center were used to forecast the additional peak hour trips that would be generated by each of the future development areas. For this analysis the following is noted:

- The spa, restaurant, community space, meeting rooms and other amenities included in the proposed hotel are all considered within the LUC 310 land use and are not estimated separately.
- Area "A" includes six short-term guest room units. There is no land use code for these type rooms, so LUC 220 "Apartments" was used to approximate the trip generation potential of these units.
- The commercial space in the mixed use building in area "B" could encompass a multitude of land uses such as restaurants, specialty shops, banks, retail stores, etc., but this has not yet been defined. As such, it is being estimated under the catch-all land use for commercial development, Shopping Center (LUC 820), which by definition may include any or all of these individual land uses.
- Additionally, the estimated ratio of commercial space in this mixed use building has been maximized to provide a conservative or "worst case" estimate of trip generation.

Table 2 below summarizes the trip generation potential for each of the future development areas. It should be noted that Table 2 represents the Gross number of trips before any adjustments are made to account for trips that remain internal to the site. As discussed in ITE's *Trip Generation Handbook*, development with multiple land uses will tend to capture some trips internal to the site, where one user may visit 2 or more of the land uses within. The handbook defines a procedure to

estimate the number of trips internally captured based on the land uses and their sizes on site. Using these procedures, internal capture rate percentages were calculated for each of the development scenarios. These percentages and the resulting number of trips, which will be subtracted from the trip generation totals to define the number of trips external to the site, are shown in Table 3.

TABLE 2 – NEW DEVELOPMENT TRIP GENERATION

Development Scenario	Land Use	Size	AM Peak Hour			PM Peak Hour		
			Enter	Exit	Total	Enter	Exit	Total
Proposed Development Area "A"	LUC 220 Apartments	24 Units	2	10	12	10	5	15
	LUC 230 Townhouse/Condo	52 Units	4	19	23	18	9	27
Total Area "A" Trip Generation			6	29	35	28	14	42
Proposed Development Area "B"	LUC 220 Apartments	61 Units	6	25	31	25	13	38
	LUC 230 Townhouse/Condo	10 Units	1	3	4	3	2	5
	LUC 820 Shopping Center	36.2 kSF	22	13	35	47	51	98
Total Area "B" Trip Generation			29	41	70	75	66	141
Proposed Development Area "C"	LUC 310 Hotel	60 Rooms	19	13	32	18	18	36
Total Area "C" Trip Generation			19	13	32	18	18	36
Total New Development Trip Generation			54	83	137	121	98	219

TABLE 3 – INTERNAL CAPTURE TRIPS

Development Scenario	Internal Capture Rate	AM Peak Hour			PM Peak Hour		
		Enter	Exit	Total	Enter	Exit	Total
Internal Trip Credit with Area "A" Only (AM%/PM%)	(0% / 0%)	0	0	0	0	0	0
Internal Trip Credit with Area "B" Only (AM%/PM%)	(0% / 15%)	0	0	0	-11	-10	-21
Internal Trip Credit with Area "C" Only (AM%/PM%)	(0% / 0%)	0	0	0	0	0	0
Internal Trip Credit with Area "A+B" Only (AM%/PM%)	(2% / 15%)	-1	-1	-2	-15	-12	-27
Internal Trip Credit with Area "A+C" Only (AM%/PM%)	(0% / 2%)	0	0	0	-1	-1	-2
Internal Trip Credit with Area "B+C" Only (AM%/PM%)	(2% / 15%)	-1	-1	-2	-14	-13	-27
Internal Trip Credit with all New Development (AM%/PM%)	(2% / 15%)	-1	-2	-3	-18	-15	-33

Combining the existing site trips with the trip generation potential of the new development and subtracting the internally captured trips results in the number of new trips external to the site and distributed onto the roadway network. These external trips, which are the trips to be used when considering the improvement requirements of the special use permit, are included in Table 4. It should be noted that this table breaks down the potential new development into several scenarios to allow the design team flexibility in project, while still defining which of the special use permit improvements are triggered under each possible scenario.

TABLE 4 – ESTIMATED EXTERNAL (NEW) TRIPS FOR EXCELSIOR PARK DEVELOPMENT

Development Scenario	AM Peak Hour			PM Peak Hour		
	Enter	Exit	Total	Enter	Exit	Total
Total External Site Trips with Only Area "A" Added to Existing	32	110	142	114	71	185
Total External Site Trips with Only Area "B" Added to Existing	55	122	177	150	113	263
Total External Site Trips with Only Area "C" Added to Existing	45	94	139	104	75	179
Total External Site Trips with Only Area "A+B" Added to Existing	60	150	210	174	125	299
Total External Site Trips with Only Area "A+C" Added to Existing	51	123	174	131	88	219
Total External Site Trips with Only Area "B+C" Added to Existing	73	134	207	165	128	293
Total External Site Trips for Full Buildout of All Areas (A+B+C) Added to Existing	79	162	241	189	140	329

Special Use Permit Improvement Requirements

The special use permit put in place when Excelsior Park was first approved by the City of Saratoga Springs in 2002 listed several requirements for roadway improvements that would be triggered as different trip generation thresholds were reached by Excelsior Park. Table 5 lists the improvement requirements of the special use permit, the trigger threshold and current status for each improvement and whether a particular improvement is warranted under each of the development scenarios.

TABLE 5 – SPECIAL USE PERMIT TRAFFIC MITIGATION IMPROVEMENT REQUIREMENTS

Improvement	Trigger Threshold	Current Status	Development Options - Improvement Triggered?							
			Current	A	B	C	A+B	A+C	B+C	Full Bid
Installation of traffic signal at the Excelsior Ave and East Ave intersection	100	Already installed (sometime before 2007)	IMPROVEMENT IN PLACE							
Extend westbound left turn lane from 100' to 200' at the Route 50 & Gick Rd/Veterans Way intersection	100	Lane is not yet extended. Requirement currently waived by Planning Board for Phase II development.	Waived	YES	YES	YES	YES	YES	YES	YES
Construct northbound right turn lane on Veterans Way at its intersection with Route 50	150	Lane has not yet been constructed.	no	YES	YES	YES	YES	YES	YES	YES
Traffic calming measures at the Excelsior Springs Ave and Victoria Ln/Audrey Ln intersection	200	Stop signs already installed. Some curbing in place, but not fully. Crosswalk not yet striped. Concrete pad not yet installed.	no	no	YES	no	YES	YES	YES	YES
Installation of a traffic signal at the Excelsior Ave and Marion Ave intersection	250	Currently configured as an All-Way Stop.	no	no	YES	no	YES	no	YES	YES
Follow-up traffic analysis, which may trigger modification to the mitigation requirements	250	Additional traffic analysis was conducted after Phase II development at Veterans Way/Excelsior Ave intersection and Route 50/Veterans Way Intersection.	no	no	YES	no	YES	no	YES	YES
Widen Veterans Way at Excelsior Ave to provide a southbound right turn only lane	300	Intersection is currently All-Way Stop, but lane widening has not yet been done.	no	no	no	no	no	no	no	YES
In Phase II, construct paved ped./bike path from projects main Street to Spring Run Trail	0	Completed	YES	YES	YES	YES	YES	YES	YES	YES

Summary

Upon full build out of the land uses presented in the 10/5/2016 LA Group site plan for Excelsior Park, it's estimated a total of a total of 329 PM peak hour trips would be generated. These 329 peak hour trips do meet volume thresholds for all the traffic mitigation requirements conditions listed in the 2002 special use permit.

Given the time since the preparation of special use permit and the recent development in the corridor, it would seem to be appropriate to revisit the 2002 Special Use Permit to see if the traffic mitigation improvements listed are still applicable.

If you have any questions or need additional information, please give us a call.

Sincerely,

GPI/Greenman-Pedersen, Inc.



Michael R. Wieszchowski, P.E., PTOE
Sr. Traffic Engineer



Peter Faith, P.E.
Vice President

Cc: Dave Carr; LA Group

Enclosure: Site Plan, October 2002 Special Use Permit