

March 16, 2016

Jim Shano
Town of Paradise Valley
6401 East Lincoln Drive
Paradise Valley, Arizona 85253

Re: *Ritz Carlton Property Parking Analysis Amendment – Paradise Valley, Arizona*

Dear Mr. Shano,

This letter represents an amendment to the *Ritz Carlton Property Parking Analysis* prepared by CivTech in October, 2015. The proposed site plan has been updated since the previous parking analysis was submitted. This letter identifies how parcels' parking have been modified.

The Ritz Carlton hotel and its corresponding villas and amenities are located on Parcels A and A1. The number of villas has been reduced from 120 to 94. As a minimum of 2 parking spaces for residents are required per unit, residential parking requirements for the villas has decreased from 240 parking spaces to 188 parking spaces. The proposal for the hotel has not changed. Thus, the hotel parking requirements per the *Town of Paradise Valley SUP Guidelines* indicate that 406 parking spaces are needed for the peak of typical use and 535 parking spaces for the peak time of a peak season/event. CivTech maintains that the hotel provide at least 406 parking spaces during typical operations. If fewer than 535 parking spaces are provided, a valet assist program, shared parking, or other program is recommended to provide at least 535 parking spaces.

As indicated in the original parking analysis, the residential parcels (B, C and D) are encouraged to provide parking consistent with the Town's code requirements.

Parcel E has been split into two parcels, E and E1, with Parcel E1 deferred. The previous parking analysis considered the area as part of the overall Palmeraie resort-related retail development, a portion of which is within the City of Scottsdale. As such, parking needs were considered under the City of Scottsdale's parking requirements. Parking for the Palmeraie development will be considered by the City of Scottsdale and when a site plan is proposed for Parcel E1.

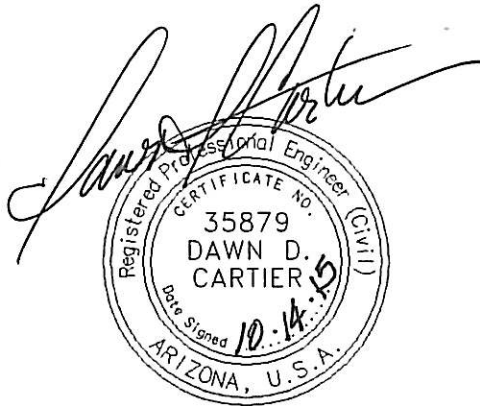
Should you wish to discuss this information further, please contact me at (480) 659-4250.

Sincerely,


Dawn Cartier, P.E., PTOE
President

**RITZ CARLTON PROPERTY
PARKING ANALYSIS**

**Northeast Corner of Section 10
Township 2 North, Range 4 East**



Expires 3/31/2016

Prepared for:

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**October 2015
CivTech Project # 15-360**

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A parking demand analysis was conducted for the Ritz Carlton Resort (“Resort”) and the surrounding Palmeraie mixed-use area to determine the number of parking spaces required to support the new resort hotel, amenities and retail area when fully utilized. These calculations determine the average parking requirements and the overall peak parking requirements for the area pursuant to the site plan revised in July 2015. A shared parking analysis was also completed to account for the changes in parking demand created by alternate uses within the Resort and retail areas including the hotel, restaurants, offices, event areas and recreation areas during various times of the day. The shared parking analysis for the resort was conducted using a shared parking methodology approved by the Town of Paradise Valley for two scenarios, Average Use and Peak Use for both Weekdays and Weekends, between the hours of 6:00 a.m. and 12:00 a.m. Shared parking for the Palmeraie development was calculated using the City of Scottsdale’s approved shared parking methodology. This letter documents the findings of the analysis for the resort and retail portions of the Ritz Carlton. There are three other parcels within the development, Parcels B, C and D, which will be developed with residential land uses and are encouraged to provide parking consistent with the Town’s code requirements.

EXECUTIVE SUMMARY

Shared parking calculations were performed for the Ritz Carlton Resort for the average utilization and the peak utilization. Average utilization of the resort requires 406 parking spaces while peak utilization requires 535 parking spaces. The current resort plan provides for 710 parking spaces which includes the required parking for the resort villas, an ownership product which can revert into the resort rental pool. A total of 390 parking spaces are provided adjacent to the resort and 320 parking spaces are provided adjacent to the villas and resort retail shops. 240 parking spaces are reserved for the resort villas leaving 470 parking spaces to be shared amongst the resort uses, 48 shared spaces are located adjacent to the resort retail. These spaces, along with miscellaneous spaces provided around the site, provide enough parking supply for the highest use during the non-peak season. **Table 1** provides a summary of the resort parking.

Table 1 – Resort Parking Summary

	Spaces
Shared Peak Parking Required	535
Shared Non-Peak Parking Required	406
Traditional Parking Provided	470
Valet Parking Provided	540

Additionally, to accommodate parking demand in excess of the highest peak hour calculated, a valet scenario has been established. The Ritz Carlton resort will operate with a full time mandatory valet service although traditional parking was considered in the report to evaluate a more conservative condition. Parking spaces shown in the plan are striped for traditional parking. The valet scenario considers the use of both the resort and resort villa parking areas.

An increase of 15 percent may be applied to the available parking when providing valet services, thus increasing the available parking to 540 spaces $[(710 - 240) \times 1.15]$. With the valet, there would be a surplus of 5 parking spaces during the peak event. A valet service is required during the peak event to meet the parking demand.

Without shared parking, the Town of Paradise Valley SUP Guidelines indicate that 472 parking spaces are required during the average use period and that 621 parking spaces are required during the peak use period.

The proposed resort facility meets the parking requirements as determined by the Town of Paradise Valley's SUP Guidelines using a shared parking demand model.

Shared parking calculations were also prepared for the Palmeraie development using the shared parking model established by the City of Scottsdale. A total of 2,291 parking spaces are required for the Palmeraie development without consideration for shared parking. Using the City's shared parking model, a total of 1,876 parking spaces are required. The current plan for the Palmeraie indicates that 3,366 parking spaces will be provided. These values are summarized in **Table 2**.

Table 2 – Palmeraie Parking Summary

	Spaces
Shared Peak Parking Required	1,876
Parking Provided	3,366

A total of 3,366 parking spaces will be provided at the Palmeraie development which indicates that a surplus of as many as 1,490 spaces could be available for use by the Ritz Carlton. Both Palmeraie and Ritz Carlton have agreed to share these excess spaces in the case of large events at the Ritz Carlton Resort. Retail and office parking needs diminish greatly in the evening which is the typical peak for resort parking.

CONCLUSION

The parking provided by the Ritz Carlton Resort will accommodate the average resort utilization. During a peak event, the resort will provide a valet only scenario which will accommodate the required parking.

The adjacent Palmeraie development provides an opportunity to share some additional parking due to their symbiotic uses. The parking for a resort hotel typically peaks during an event which happens in the evening. Palmeraie will contain retail and some office uses. Parking spaces associated with office uses are typically available for other users after 5:00 PM. Retail parking tends to peak in the late afternoon and then steadily decrease through the evening with most retail stores closed by 9:00 PM. Palmeraie is currently showing excess parking of more than 1,000 spaces that could be shared with the Ritz Carlton development should the need arise. A shared parking with the Palmeraie and an agreement should be in place once operational.

Parking should be designed to meet the Town of Paradise Valley code and should meet all ADA requirements. Parking stall depth and width along with isle width should be design in accordance with Town standards. ADA accessible parking should be designed in a location convenient for resort entry. Although a valet option will be available for ADA patrons, ADA accessible parking will still be required.

PROPOSED DEVELOPMENT

This parking evaluation considers the effects of both the Ritz Carlton Resort and the Palmeraie Center. These two properties are adjacently located and will have cross access for shared parking.

Regular parking for the resort will be provided by two parking areas connected by internal driveways. The main parking area for the Resort as proposed will consist of 390 spaces. Approximately 320 additional parking spaces are located adjacent to the resort villas and the 30,000 square foot resort commercial use.

The Ritz Carlton development is proposed with a 200 room resort hotel and 120 villas including a spa, lodge, meeting facilities, gardens, outdoor function space, and retail. The residential component of the plan consists of 144 lots/units of low density single family residential and 100 units/lots of attached residences. The commercial component of the site within the Town limits is planned to consist of 151,000 square feet of retail/restaurant use and 200 attached residential dwelling units.

The adjacent Palmeraie development, located within the City limits of Scottsdale, will be cohesively designed with the retail portion of the Ritz Carlton. Palmeraie is located on the southwest corner of Scottsdale Road and Indian Bend Road. Palmeraie is a planned retail development consisting of approximately 300,000 SF of retail and restaurant land uses, a 175 room hotel and 235 resort hotel condominium units. There has been some discussion of allowing the City of Scottsdale to annex the retail portion of the Ritz Carlton plan. Therefore the parking analysis for the Palmeraie development has been evaluated using criteria from the City of Scottsdale. The current Palmeraie plan indicates that 3,366 spaces will be provided in the parking garage and surrounding surface parked areas.

Parking for the surrounding residences, as proposed in the Town of Paradise Valley *Draft October 2005 Special Use Permit (SUP) Guidelines*, which are separately “owned” components of the plan, will be self-contained.

RITZ CARLTON PARKING CALCULATION METHODOLOGY

Parking Generation

Parking demand was calculated using the rates provided by the Town of Paradise Valley SUP Guidelines. Square footage areas for various uses (i.e. restaurant, meeting rooms, etc.) and/or the number of units were based on a summary Resort program and corresponding site plan as shown within the Ritz Carlton SUP submittal dated July 2015. The Resort Summary Program is attached in Appendix A. Site plans for the Resort and for Palmeraie have been included in Appendix B. The following assumptions were made when generating parking for each use.

- ◆ Section 4 of the *Town of Paradise Valley Special Use Permit Guidelines* was used to determine the number of spaces required for the resort and uses located within and around the hotel.¹

¹ Town of Paradise Valley Special Use Permit Guidelines Section 4 “Resorts”, DRAFT October 27, 2005

Each use within the Resort was placed into one of the six categories presented within Section 4 of the SUP Guidelines. Section 4b states that the *“requirements may be modified in conjunction with special use permit or major amendment approval based on information documenting overlapping usage of on-site facilities by guests or visitors and as contained in an approved traffic analysis.”*

Parking Calculation

Parking was calculated for individual uses within the Resort using the rates documented in Section 4 of the SUP Guidelines. The gross parking required for each use was calculated. The gross parking was then prorated by assigning a percentage indicating the overlap from guests already staying within the resort (“onsite demand”) vs. drawing new trips (vehicles) from non-guests (“offsite demand”). All parking for guest rooms and employees was determined to be completely “off-site”. Parking generated by all other uses was assumed to be used by Resort occupants (“on-site”) and non-Resort occupants (“off-site”). Therefore, overlap percentages were applied to these uses to account for the “on-site” occupants who will already be parked as part of the resort guest room rate or within the Ritz Carlton community housing. This occurrence is known as internal capture. The percentages applied to the uses were originally determined from data provided by Marriott International for their resort at Camelback Inn and a verification letter provided by The Ritz Carlton Hotel Company, LLC. In subsequent parking evaluations within the Town of Paradise Valley, the assumptions have been refined to reflect the character and demographics of a typical resort user.

The parking demand was calculated for both the average use and peak use of the hotel. The average use of the hotel would likely occur during the resort off-season. The number of occupied rooms during the off-season was assumed at full occupancy to maintain a conservative approach to these calculations. Peak demand calculations were prepared to provide a parking demand during the resorts peak season including events which would have a higher number of local users.

The net number of parking spaces for each use was summed to obtain the minimum *non-shared* parking requirements for the average and peak scenarios. The results of the calculations are presented in **Table 3**. Detailed calculations are attached in Appendix C.

Table 3 – Non-Shared Parking Spaces Required

Calculation Method	Parking Spaces	
	Average Use	Peak Use
Town of Paradise Valley SUP Guidelines	472	621

Shared Parking Analysis

For projects with a variety of land uses, the parking demand for each land use would peak at different hours. Therefore, the actual number of spaces needed at a given hour is less than cumulative parking demand. *Shared Parking* Urban Land Institute [ULI] describes shared parking as follows:

“Shared parking is defined as a parking space that can be used to serve two or more individual land uses without conflict or encroachment. The opportunity to implement shared parking is the result of two conditions:

- Variations in the peak accumulation of parked vehicles as the result of different activity patterns of adjacent or nearby land uses (by hour, by day, by season)
- Relationships among land use activities that result in people’s attraction to two or more land uses on a single auto trip to a given area or development”

To determine the total number of shared parking spaces required between different land uses, a parking occupancy rate analysis was conducted. To calculate the total number of shared spaces required, the non-shared parking spaces (as previously calculated and shown in Table 3) are multiplied by the occupancy rate for that hour represented as a percentage of use. This analysis was completed using the distribution data as suggested by the Urban Land Institute’s *Shared Parking*. ITE does not provide time of day data for a ‘Leisure Hotel’ or a ‘Resort Hotel’.

Occupancy is dependent upon peak seasonal factors, days of the week, and time periods. Per the development code two scenarios were established, weekday and weekend. Each scenario looks at time periods beginning at 6:00 a.m. and ending at 12:00 a.m.

The “adjusted” net number of parking spaces required for each use during each time period is aggregated. The resultant is the required number of spaces for each time period. The shared parking demand required is determined by the greatest of the aggregate values calculated, weekday total or weekend total. The shared parking results are presented in **Table 4**. Detailed calculations are attached within Appendix D.

Table 4 – Shared Parking Spaces Required*

Scenario	Shared Parking Spaces	
	Weekday	Weekend
<i>Average Use</i>	387	406
<i>Peak Use</i>	535	535

*Shared totals do not include the 240 spaces required by the Resort Villas which will be valet parked in an independent lot.

A total of 406 shared parking spaces are required for the Resort based on average utilization while 535 will be required during the peak utilization.

RESORT DESIGN AVERAGE WEEKDAY AND WEEKEND RESULTS

Using shared parking distributions, the average use parking demand for the resort is estimated to be 406 parked vehicles. Without shared parking, the Resort will require 472 parking spaces. The site plan for the resort currently shows 470 parking spaces available for shared parking (710 total spaces – 240 resort villa spaces) which indicates the resort has excess parking of 58 spaces. The peak demand period is in the weekend evening period, 7:00 p.m. – 8:00 p.m.

RESORT PEAK SEASON WEEKDAY AND WEEKEND RESULTS

During the peak season the resort will be fully utilized with full occupancy of the guest rooms and the ballrooms and event areas. A peak season parking calculation was prepared to account for the possibility that the users of the ballrooms and event areas could be different from the guests within the resort. To account for the possibility of a higher number of non-guest (“off-site”) users, the ratios applied to the Guest Lawn and the Ballrooms were modified to allow for 50 percent on-site and 50 percent off-site use. The analysis was also prepared assuming that all ballroom and event areas would contain individual non-related groups during the same time period. This would require the resort to provide 535 shared parking spaces to accommodate the likelihood of a peak event. This is 67 spaces less than the provided parking as shown on the site plan.

RESORT VALET ONLY SCENARIO

Most Ritz Carlton Resorts operate on a valet only basis. The parking design in this location has been designed for self-parking with the option to switch to a valet only scenario as needed. Due to the advanced booking of hotel rooms and events which will take place in the ballrooms, the resort can easily determine when a valet only scenario must be used to accommodate the required parking. Discussions with Ritz Carlton operations indicate that the parking would begin the transition from traditional parking to valet-only parking 24-hours in advance of the peak event. The valet only scenario can be applied to achieve a higher rate of parking within the same field provided for self parking. On average, the parking rate achieved by a valet only scenario increases the number of spaces by 20 to 30 percent when planned. This evaluation assumes that an efficiency of 15 percent can be achieved since specific valet plans have not been created. The resort can self park 470 vehicles within the main parking areas and an additional 240 vehicles as required for the resort villas. This same area, when converted to a valet assist scenario would allow parking for a minimum of 540 cars [(710 total spaces – 240 resort villa spaces) x 1.15 efficiency]. With the valet, there would be a surplus of 2 parking spaces. The valet only scenario provides more parking than that required by the peak event during the peak season.

Although it is not anticipated that any additional parking will be necessary to support the Ritz Carlton project, an agreement to park vehicles at the Palmeraie during the evenings and weekends, the peak usage of the resort, will provide in excess of 1,000 spaces in addition to the 540 spaces mentioned above.

This information has been summarized in **Table 5** below.

Table 5 – Peak Season Peak Event Resort Parking Summary

Calculation Methodology	Parking Required		Parking Provided	
	Gross	Shared	Traditional	Valet Assist
Town SUP Guidelines	621	535	470	540

PALMERAIE PARKING CALCULATION METHODOLOGY

Parking Generation

Parking demand calculations were generated separately for the Palmeraie development which will provide separate parking facilities from the Ritz Carlton Resort. It should be noted that a large portion of the proposed Palmeraie mix-use development is located within the City of Scottsdale limits. Therefore, parking rates and calculations for the Palmeraie development were computed using the City of Scottsdale parking requirements.

The City of Scottsdale stipulates the number of parking spaces required for various types of development. These parking requirements are outlined in *City of Scottsdale's Zoning Ordinance Appendix B, Article IX*. **Table 6** summarizes the City's required parking ratios by use according to the zoning ordinance.

Table 6 - City of Scottsdale Parking Demand by Land Use

Land Use	Space Requirement	
	Rate	Units
Office	1 space/300 SF	SF
Gym/Health and Wellness	1 space/200 SF	SF
Retail	1 space/300 SF	SF
Residential/Luxury Condos	1 space/DU	DU
Restaurant and Bars	1 space/120 SF	SF
Grocery Store/Gourmet Foods	1 space/300 SF	SF
Hotel	1.25 spaces/guest room	Room

Parking Calculation

Parking was calculated for individual uses within the Palmeraie development using the rates documented in Appendix B, Article IX. The gross parking required for each use was calculated. Internal capture within the site was not a consideration for the Palmeraie development.

The parking demand was calculated for the all of the uses within the Palmeraie development. The net number of parking spaces for each use was summed to obtain the minimum *non-shared* parking requirements.

The parking requirements outlined in **Table 6** were applied to the square footage for each land use within the Palmeraie development. **Table 7** summarizes the unshared parking needs for the Palmeraie development. Detailed calculations are attached in Appendix E.

Table 7- Palmeraie Required Unadjusted Parking (Not Shared)

Land Use	Intensity		Space Requirement		Parking Required
Office	102,031	SF	300	S.F./space	340
Gym/Health and Wellness	25,523	SF	200	S.F./space	128
Retail	210,879	SF	300	S.F./space	703
Residential/Luxury Condos	487	DU	1	DU/space	487
Restaurant and Bars	53,491	SF	120	S.F./space	446
Grocery Store/Gourmet Foods	18,149	SF	300	S.F./space	60
Hotel	159	Room	1.25	Room/space	127
TOTAL					2,291

The total number of spaces required by the City of Scottsdale Zoning Ordinance without consideration for shared parking by time of day is calculated at 2,291.

Shared Parking Analysis

Similar to the shared parking analysis prepared for the Ritz Carlton Resort, a separate shared parking analysis was prepared for the Palmeraie development. The City of Scottsdale has established utilization percentages for both weekday and weekend operation. Each day is divided into three blocks of time, 12am-7am, 7am-6pm and 6pm-12am. Table 8 displays the utilization percentages as shown within the City of Scottsdale's Parking Code.

Table 8 - City of Scottsdale Parking Utilization by Use

General Land Use Classification	Weekdays			Weekends		
	12AM - 7AM	7AM - 6PM	6PM - 12AM	12AM - 7AM	7AM - 6PM	6PM - 12AM
Office	5%	100%	5%	0%	60%	10%
Gym/Office Health and Wellness	5%	100%	5%	0%	60%	10%
Retail	0%	100%	80%	0%	100%	60%
Residential/Luxury Condos	100%	55%	85%	100%	65%	75%
Restaurant and Bars	50%	70%	100%	45%	70%	100%
Grocery Store/Gourmet Foods	50%	70%	100%	45%	70%	100%
Hotel	100%	65%	90%	100%	65%	80%

The total parking required for each use as shown in Table 7 was factored for each of the six categories shown in Table 8. Table 9 displays the resulting parking required for each major land use by day of the week and time of day.

Table 9 - City of Scottsdale Shared Parking Calculation

General Land Use Classification	Weekdays			Weekends		
	12AM - 7AM	7AM - 6PM	6PM - 12AM	12AM - 7AM	7AM - 6PM	6PM - 12AM
Office	17	340	17	0	204	34
Gym/Office Health and Wellness	6	128	6	0	77	13
Retail	0	703	562	0	703	422
Residential/Luxury Condos	487	268	414	487	317	365
Restaurant and Bars	223	312	446	201	312	446
Grocery Store/Gourmet Foods	30	42	60	27	42	60
Hotel	127	83	114	127	83	102
TOTAL	891	1876	1620	842	1737	1442

PALMERAIE PARKING RESULTS

Using the City of Scottsdale shared parking utilization by time of day and day of the week; the parking demand for the mixed-use retail area is estimated to be 1,876 parked vehicles. Without shared parking, Palmeraie will require 2,291 parking spaces. The site plan for Palmeraie currently shows 3,366 parking spaces available for parking which indicates the mixed-use area could have an excess of as many as 1,490 spaces. The peak demand period is in the weekday period, 7:00 a.m. – 6:00 p.m.