

PARKING ANALYSIS

SADDLE ROCK CROSSING

SOLDIERS PASS ROAD/STATE ROUTE 89A (SR 89A)

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PREPARED FOR

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Project Description

The Baney Corporation is proposing to develop the property immediately south of the intersection of Soldiers Pass Road/State Route 89A (SR 89A) in Sedona, Arizona. The vicinity of the project is shown in **Figure 1**. The site will be located as shown in **Figure 2**. The site proposes the construction of 40 units of multifamily housing; a 110-room hotel, eight (8) of which are suite accommodation only; a 900 square foot public, rooftop bar; and a 3,800 square foot high-turnover sit-down restaurant where a minimum half of the business is expected to be from hotel guests. The purpose of this parking analysis is to determine the parking needs/requirements of the fully completed development.

The author of this report is a registered Professional Engineer (Civil) in the State of Arizona having specific expertise and experience in the preparation of parking analyses.

Study Methodology

In order to analyze and evaluate the parking requirements for the project:

- A review of the site plan was performed to determine the various types of existing/proposed land uses and to define distinct parking zones within the site.
- The various land uses and associated building sizes were determined for each parking zone as well as the proposed number of parking spaces for each parking zone.
- A review of City of Sedona and Institute of Transportation Engineers (ITE) parking requirements was performed to determine the parking ratios for each proposed land use.
- The required number of parking spaces was determined for each land use.
- With a minimum of half of the hotel restaurant business expected to be from hotel guests that will not drive additional parking needs, the parking calculations associated with the restaurant space were based on half of the restaurant's actual size (i.e. 1,900 square feet).
- A shared parking (interaction) evaluation was completed for the project site.
- Peak parking demand analyses were performed for each parking zone.



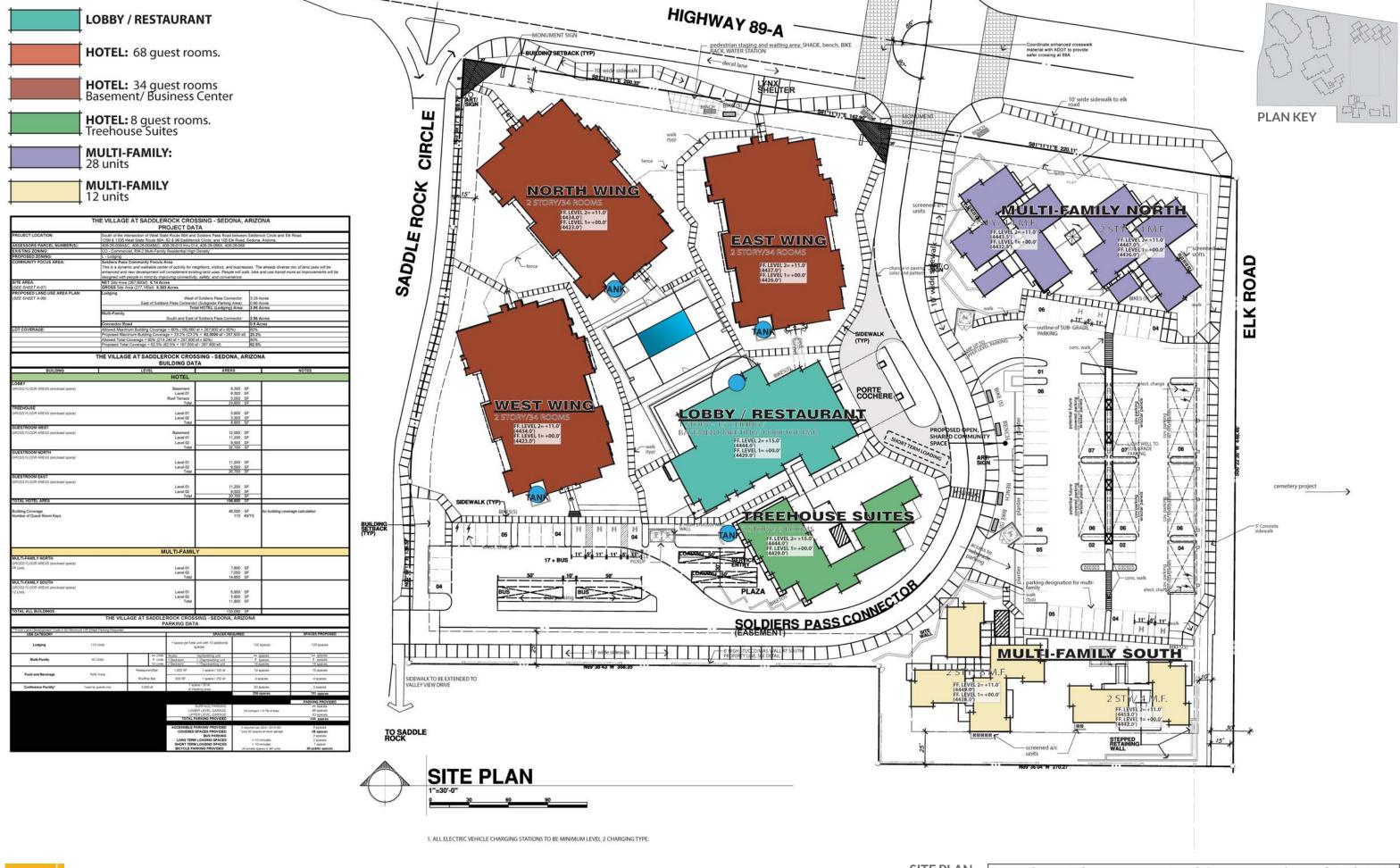
Figure 1 – Vicinity Map



LEGEND:

—— EXISTING ROAD







Proposed Development

The Saddle Rock Crossing project will be served by two driveways: one will form the south leg of the existing intersection of Soldiers Pass Road/SR 89A and one along Saddlerock Circle and will provide 208 total parking stalls.

Figure 3 shows the parking zones analyzed within the proposed Saddle Rock Crossing site. Zone 1 provides 17 surface parking stalls and two bus bays (which can also be used for twelve regular vehicle parking spaces), Zone 2 encompasses the remaining 179 parking spaces in a two-tiered parking structure (with 96 parking spaces provided on the subsurface level). Due to the configuration of the site, Zone 1 is expected be exclusively used by the hotel land use and its guests, while Zone 2 will accommodate parking demand for the hotel, restaurant, rooftop bar, and the onsite residences.

If needed, the subsurface level of the parking structure in Zone 2 can be designated as valet parking only to obtain up to eight (8) additional parking spaces as valet parking allows the more efficient use of parking space by 'double stacking' vehicles within parking areas.

It should be noted that the proposed hotel will include a meeting facility/conference area which is not expected to generate any additional parking demand from guests or staff. The use of the conference center will be limited to hotel guests only with existing hotel staff fulfilling any necessary tasks for the conference center. Furthermore, the conference center is expected to be most heavily used during the off-season when tourism levels are lower, allowing the hotel staff to serve the conference center activities more sufficiently without additional dedicated staff for these facilities.

The patrons of the hotel restaurant will be constrained to 50% public and 50% hotel guests only. To ensure these levels are maintained, 50% of the seating will be reserved for hotel guests at all times and the general public will be required to make reservations. This will allow staff to track the seating capacity in real time and ensure that there is always adequate parking on-site for nonguest patrons.

Local Parking Requirements

City of Sedona provides parking requirements for various land uses in their Sedona City Code Chapter 5.5 – Off-Street Parking and Loading and are shown in **Table 1**. Per Section D.4 of the city code, bus parking areas are credited as six standard spaces each which may be counted to "satisfy the required number of off-street parking spaces." Furthermore, the City of Sedona requires "bike racks, bike lockers, or similar parking facilities" to accommodate bicycles at a ratio of one bicycle space per ten vehicle parking spaces.



Figure 3 – Parking Zones





Table 1 – City of Sedona Parking Requirements

Land Use		Size	City of Sedona Parking Requirements	Minimum Parking Spaces
	Studio	24 units	1 spaces per unit	24
Dwelling, Multifamily	1 Bedroom	6 units	1.25 spaces per unit	8
	2 Bedroom	10 units	1.75 spaces per unit	18
Lodging	Medium- Density	110 units	1 spaces per unit and an additional 10 spaces	120
Food and Beverage	Restaurant	1,900 sq.ft.	1 spaces per 100 square feet	19
Service	Bar	900 sq.ft.	1 spaces per 250 square feet	4
	193			
	20			

As shown in **Table 1**, City of Sedona parking requirements show a minimum of 193 parking spaces needed to serve the proposed Saddle Rock Crossing site. This requirement is 15 parking spaces less than the 208 parking stalls currently proposed, or 23 spaces less than the 216 parking stalls that would be available if valet parking is used for the subsurface level of Zone 2.

The Saddle Rock Crossing site should provide no less than 20 bicycle parking stalls throughout the site.

It should be noted that the proposed hotel will include meeting space (typically provided at hotels) that will be exclusively for hotel guests and is not expected to require additional parking. Moreover, it is estimated that a minimum of half of the hotel restaurant business is expected to be from hotel guests that will not drive additional parking needs.

National Parking Ratio Evaluation

Based on City of Sedona requirements, the Saddle Rock Crossing site currently proposes two fewer parking spaces than will be required. National parking rates established by the Institute of Transportation of Engineering (ITE) were calculated to provide a comparison to the City of Sedona requirements and the currently proposed 208 parking spaces (or 216 spaces if valet parking is used).

Multi-family, hotel, and restaurant establishments in North America have been analyzed to identify the average rates for weekday peak parking demand. These results have been compiled into the ITE *Parking Generation Manual*, *5th Edition* (January 2019).



Table 2 shows the peak parking demand rates from ITE during the weekday peak periods. Where the number of studies presented within the data exceeded twenty sites, the parking requirements and calculations were based on the fitted curve equation opposed to the average rate provided.

Table 2 – Weekday ITE Parking Requirements

Land Use	Size	Weekday ITE Parking Requirements	Minimum Parking Spaces
	24 units		28
Multifamily Housing (Low-Rise), LUC 220	6 units	Ln(P) = 0.99Ln(units) + 0.15	7
	10 units		12
Hotel, LUC 310	102 units	Ln(P) = 0.90Ln(units) + 0.26	84
All Suites Hotel, LUC 311	8 units	0.77 spaces per unit	7
High-Turnover (Sit Down)	1,900 sq.ft.	0.44 spaces par 1.000 sq.ft	18
Restaurant, LUC 932	900 sq.ft.	9.44 spaces per 1,000 sq ft	9
	_	TOTAL	165

As shown in **Table 2**, the parking rates established by ITE result in a minimum parking space requirement of 165 parking spaces on weekdays. The currently proposed 208 parking spaces are expected to adequately accommodate weekday ITE peak parking demands.

Peak Parking Evaluation

Taking the parking calculations another step further, a peak parking demand analysis was completed for each parking zone within Saddle Rock Crossing. Each proposed land use has a distinct high parking demand time. For example, offices and employment centers experience peak parking during working hours. Retail and restaurant developments usually experience peaks during the midday, while fitness centers are expected to experience peaks in the evening.

The Urban Land Institute (ULI) provides nationally agreed upon peak parking demand data for multiple land uses, including those proposed within the Saddle Rock Crossing development. This data is used by many jurisdictions within the State of Arizona. ULI peak parking demand data was applied to the parking space requirements for the project site based on City of Sedona guidelines (shown in **Table 1**) and are summarized in **Table 3**. Complete calculations can be found in the Appendix.



Table 3 – Peak Parking Demand (City of Sedona)

		Proposed Parking	City of Sedona Peak Parking Demand			
	Zone/Land Use	Spaces	Weekday	Weekend		
	One or two-family residence; multiple dwellings; efficiency units; one-bedroom units; two or more bedroom units.					
Zones 1+2	Hotels, motels	208 216 spaces (If valet parking is used)	187	191		
	Restaurants, bars, cocktail lounges					

As shown in **Table 3**, the proposed 208 parking spaces (or 216 parking spaces) are expected to adequately accommodate the peak parking demands on weekdays and weekends.

Conclusion

The Saddle Rock Crossing development proposes to construct 196 parking spaces and two bus bays, which may be credited to required parking as six (6) vehicles spaces per bus bay, for a total of 208 parking spaces. An on-site underground parking structure will house 96 of the proposed parking spaces, however, if needed this parking area can be designated as valet only which can provide an additional eight (8) parking spaces. Based on the most basic application of the City of Sedona parking requirements, Saddle Rock Crossing will require 193 parking spaces (15 less than is proposed). Analysis of peak parking demand throughout the site shows that a minimum of 191 parking spaces can be provided (17 less than is proposed).

The proposed 208 parking spaces (or potentially 216 parking spaces with valet) within the Saddle Rock Crossing site are expected to adequately serve the weekday and weekend peak parking demands, based on City of Sedona requirements.

As buses or shuttles will be available to transport visitors staying at the hotel to the sites of natural beauty surrounding the City of Sedona, other visitor accommodations, and local recreational activities, parking requirements for the Saddle Rock Crossing development may experience further reduced demand. The use of these buses or shuttles could impact the assumptions made for the peak parking demand analysis, as hotel guests that would otherwise use their vehicle to travel to nearby destinations would instead utilize the buses or shuttles. This could potentially increase the typical peak parking demand of hotels, which is lower during the midday hours with the peak parking demand occurring overnight. However, an adequate number of parking spaces are expected to be available regardless of the peak parking demand analysis, based on City of Sedona standards.

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APPENDIX

Peak Parking Demand Calculations Comment Resolution



APPENDIX

Peak Parking Demand Calculations

Saddlerock Crossing Parking Analysis

ZONE 1+2

City of Sedona Requirements

Total Deduction	Λ0/
Multi-Modal Reduction	0%
Shared Interaction	0%

					Apartments	Casual	Hotel	Total Zone
		Peak Pa	rking Demands (Weekday)			Restaurant		
Time	Residential	Casual Restaurant	Hotel	Required Parking	50	23	120	193
7:00	90%	20%	95%		45	5	114	164
8:00	85%	50%	90%		43	12	108	162
9:00	80%	75%	80%		40	17	96	153
10:00	75%	15%	70%		38	3	84	125
11:00	70%	40%	70%		35	9	84	128
12:00	65%	75%	65%		33	17	78	128
1:00	70%	75%	65%		35	17	78	130
2:00	70%	65%	70%		35	15	84	134
3:00	70%	40%	70%		35	9	84	128
4:00	75%	50%	75%		38	12	90	139
5:00	85%	75%	80%		43	17	96	156
6:00	90%	95%	85%		45	22	102	169
7:00	97%	100%	85%		49	23	102	174
8:00	98%	100%	90%		49	23	108	180
9:00	99%	100%	95%		50	23	114	187
10:00	100%	95%	95%		50	22	114	186
11:00	100%	75%	100%		50	17	120	187
12:00	100%	25%	100%		50	6	120	176
				Peak Parking Demand	50	23	120	187

					Apartments	Casual	Hotel	Total Zone
		Peak Pa	arking Demands (Saturday)			Restaurant		
Time	Residential	Casual Restaurant	Hotel	Required Parking	50	23	120	193
7:00	90%	20%	90%		45	5	108	157
8:00	85%	30%	80%		43	7	96	145
9:00	80%	60%	70%		40	14	84	138
10:00	75%	75%	60%		38	17	72	127
11:00	70%	15%	60%		35	3	72	110
12:00	65%	50%	55%		33	12	66	110
1:00	70%	55%	55%		35	13	66	114
2:00	70%	45%	60%		35	10	72	117
3:00	70%	45%	60%		35	10	72	117
4:00	75%	45%	65%		38	10	78	126
5:00	85%	60%	70%		43	14	84	140
6:00	90%	90%	75%		45	21	90	156
7:00	97%	95%	75%		49	22	90	160
8:00	98%	100%	80%		49	23	96	168
9:00	99%	90%	85%		50	21	102	172
10:00	100%	90%	95%		50	21	114	185
11:00	100%	90%	100%		50	21	120	191
12:00	100%	50%	100%		50	12	120	182
				Peak Parking Demand	50	23	120	191

NOTES:

The peak parking demand percentages utilized are obtained from Urban Land Institute (ULI) guidelines.

For the purposes of this Peak Parking Analysis:

- 1. A 0% reduction in the parking demand was taken to account for parking interaction (multiple store visits on one vehicle trip to the site, which requires only one parking space).
- 2. No parking reductions are applied to residential land uses.
- 3. ULI assumes 0% peak parking demand during the early morning hours for a Casual Restaurant. Employee peak parking demand percentages were utilized for Casual Restaurant from 7:00AM-10:00AM for weekday peaks and 7:00AM-
- 11:00AM for weekend peaks to provide a conservative analysis.



APPENDIX

Comment Resolution



Saddle Rock Crossing PA Dated 13 September 2021 Comment Resolution

Item No.	Page No.	Reviewer	Code	Comment	Response
				City of Sedona	
1	General Comment	Sedona	D	The parking summary and parking study state that 210 parking spaces are provided (177 in parking structure, 21 in surface lot, and 2 bus spaces - counting for 12 spaces). The plans show a total of 198 spaces (165 in parking structure, 21 in surface lot, and 2 bus spaces - counting for 12 spaces). The conclusion of the parking analysis states 125 spaces will be in the structure. Amend appropriate documents so all project components show the same amount of parking being provided.	See revised report.
2	General Comment	Sedona	D	If an accessory use (restaurant, conference center) is 100% used by guests, the parking requirement cannot be "0", as additional staff would be needed for these uses.	The restaurant is expected to mostly be used by hotel guests in the morning. See revised calculation sheet (and report) for employee parking during this time.
3	General Comment	Sedona	A	On the floor plans, clearly indicate which areas are being counted towards as the restaurant area, including outdoor dining spaces.	See revised floor plan.
4	General Comment	Sedona	D	For the rooftop bar, the plans show an area of 1,800 square feet while the parking calculations show an area of 985 square feet. On floor plans, clarify what area is being used for calculations and adjust calculations as needed.	See revised floor plan.
5	General Comment	Sedona	В	Include the total square footage of conference space and include in parking calculation. If the conference space is being proposed for guests only, that would need to be included in the parking analysis, which would propose the appropriate reduction.	
6	General Comment	Sedona	A	The plans show 24 studios, 8 1-bedroom units, and 8 2-bedroom units. Amend parking calculations to match the submitted plans.	See revised report.
7	General Comment	Sedona	A	After the parking counts have been updated, update parking analysis to reflect the correct parking requirement, amount of parking provided, and justifications for requested reductions. After a revised analysis has been provided, staff will provide additional comments on the proposed parking reductions. Comments on the current parking analysis are as follows: i) Explain how the 114 hotel units only equate to a parking demand of 23 spaces. Table 3 states that the weekend parking demand would be 1.15 spaces per unit, which would equate to 131 parking spaces, not 23 as stated in the table.	See revised report.
8	General Comment	Sedona	A	If parking reductions are proposed due to hotel guest use of the restaurant and meeting facility, provide methods/strategies to ensure that the property operates as outlined when evaluating the parking reductions.	See revised report.
9	General Comment	Sedona		Parking calculations based on area shall be based on gross square footage. Ensure gross area, including restrooms, circulation, etc., are included in parking calculations.	See revised report.
10	General Comment	Sedona		Indicate location of bicycle parking on plans. Bicycle parking is required at a rate of 1 bike parking space per 10 vehicle parking spaces. See LDC Section 5.5.D(3) for standards for bicycle parking. Bicycle parking should be provided throughout the site so it is convenient to users of both the multifamily units and hotel.	See revised site plan.
11	General Comment	Sedona	A	Loading spaces are required (LDC 5.5.G). Show location. In addition, the project should anticipate trolleys, jeeps, and/or other tours needing space for pick up/drop off.	See revised site plan.
12	General Comment	Sedona	A	Please offset parking spaces that are at a 90 degree angle to each other to prevent trapping vehicles.	See revised site plan.

A - Will Comply

B - Consultant to Evaluate

C - Sedona to Evaluate

D - See Response



Saddle Rock Crossing PA Dated 4 May 2023 Comment Resolution

Item No.	Page No.	Reviewer	Code	Comment	Response
				City of Sedona	
2	General Comment	Sedona	D	If an accessory use (restaurant, conference center) is 100% used by guests, the parking requirement cannot be "0", as additional staff would be needed for these uses. Include the total square footage of conference space and include in parking calculation. If the conference space is being proposed for guests only, that would need to be included in the parking analysis, which would propose the appropriate reduction.	The on-site conference facility will not require any additional parking spaces for staff or conference center guests. From a guest perspective, conference center use will be limited to hotel guests only and will not generate any additional parking demand. From a staff perspective, all Baney Corporation hotels utilize existing hotel staff already on-site for conference center tasks when the conference center is in use. Operationally, the conference center at the proposed hotel and all existing Baney hotels are most heavily utilized in the off-season when tourism is slower and corporate/group retreats are more common. This allows existing hotel staff to manage conference center activities without additional dedicated staff for the conference facilities.
8	General Comment	Sedona	D	If parking reductions are proposed due to hotel guest use of the restaurant and meeting facility, provide methods/strategies to ensure that the property operates as outlined when evaluating the parking reductions.	See response to Comment 2 for conference center explanation. The hotel restaurant and rooftop bar will be maintained at 50% public/50% guest-only via the hotel's POS (point of sale) reservation systems. To ensure this, 50% of seating capacity at both the hotel restaurant and rooftop lounge will be reserved for hotel guests at all times and the general public (non-guests) will be required to make a reservation. Making both the restaurant and lounge reservation-only for the general public will allow hotel staff to track seating capacity in real time and ensure that there is always adequate parking on-site for non-guest patrons. Hotel guests will be able to walk in to both the restaurant and rooftop lounge without a reservation because 50% of the total seating capacity will be set aside for guests at all times. If hotel guest demand exceeds 50% at either the restaurant or lounge, public seating availability can be further restricted via the POS system to allow additional capacity for hotel guests without impacting parking demand.
9	General Comment	Sedona	D	Shared parking: The project documents state that there will be a shuttle available for guests to get around town (guests leave their car at the hotel) while the parking analysis assumes that the hotel parking spaces will be available during the day for other uses (guest parking vacated during the day).	Based on City of Sedona requirements, 196 parking spaces will be necessary, which is 9 fewer spaces than have been proposed, and 17 fewer spaces than would be offered if the subsurface level of Zone 2 is utilized as valet only. The peak parking demand analysis provides a further reduction as each land use within the development is not expected to be at full capacity at all hours of the day. While providing a shuttle could have a small impact on the assumptions made for the peak parking demand, an adequate number of parking spaces will be provided (based on City standards) regardless.

A - Will Comply

B - Consultant to Evaluate

C - Sedona to Evaluate