

Town of Vail

Attn: Tom Kassmel
75 S. Frontage Road
Vail, CO 81657

May 21, 2019

Re: **East Vail Residential Parking Analysis – Affordable Housing Apartments
Vail, Colorado**

Purpose:

This memorandum was developed to give a recommendation for the affordable housing apartments being proposed as part of Triumph's East Vail Residential development project. The recommendation is based upon two methodologies.

- Institute of Transportation Engineers' (ITE) parking demand data
- Local parking rates at comparable apartment complexes

National Parking Rate:

The Institute of Transportation Engineers' *Parking Generation Manual*¹ states that the average peak period parking demand for a mid-rise apartment (Land Use #221) is 1.31 vehicles per dwelling unit. The statistic is given based upon the 95th Percent Confidence Interval for a nationwide study of 73 apartment complexes. The 95th Percent Confidence Interval indicates that there is a 95% likelihood that the parking demand will fall within 1.26 to 1.36 parking spaces per unit.

These rates were taken in general urban/suburban multifamily complexes throughout the United States. These complexes do not necessarily have the same access to transit, employee workforce, and restricted workplace parking that the East Vail Residential residents will likely experience. The *Parking Generation Manual* does not specify the number of bedrooms for the multifamily units, but given the broad range of studies, it is anticipated that the individual studies contained a mix of 1, 2, and 3-bedroom units. The statistical analysis on this data set is considered good with a low coefficient of variation of 17%.

Observed Local Parking Rate:

As stated in the *Parking Generation Manual*, "The quality and quantity of parking demand data vary significantly by land use code. The *Parking Generation Manual* should be considered only the beginning point of information to be used in estimating parking demand. Local conditions and area type can influence parking demand. The wide array of data in the manual blends many site conditions and may not best reflect a particular local condition. Therefore, a survey of a site in a comparable local condition should always be considered as one potential means to estimate parking demand."

Therefore, local data provides a more accurate representation of parking for Vail's local workforce housing. The Lions Ridge and Timber Ridge Apartments in Vail have similar characteristics to the proposed residential apartments. They primarily serve work force housing, have similar amenities, and have direct access to Vail's transit system. The site is located within walking and bus proximity to recreation and

¹ *Parking Generation Manual*, 5th Edition, Institute of Transportation Engineers, 2019

amenities. Residents of both properties typically have restricted workplace parking. The East Vail Residential development is proposing to have managed parking, like the Lions Ridge and Timber Ridge Apartments.

The design team performed observations at the comparable Lions Ridge and Timber Ridge Apartments on Thursday, February 28 and Friday, March 1, 2019. The data collection included the total number of parking spaces and number of parked cars. It snowed overnight on February 28, therefore there was evidence of vehicles that had been parked onsite overnight but had been moved before 7:15am. These vehicles are included in the overnight count data.

Name	Units (du)	Parking Spaces	Observed Parking ¹	
			Evening	Overnight
			2/28/19 @ 6:15pm	3/1/2019 @ 7:15am ²
Timber Ridge and Lions Ridge Apartments Vail, CO	210	Cars Parked	153	189
		Evidence of Overnight Parking	N/A	33
		Open Spaces	94	25
		Total Parking Spaces	247	247
		Total Parking Spaces Per Unit	1.18	
		Observed Parking Rate per Unit	0.73	1.06

¹Data was collected onsite February 28 and March 1, 2019.

²It snowed overnight. Therefore, several spaces had evidence of cars parked overnight that had left before the 7:15am data collection.

The observed parking rate was 0.73 vehicles per unit in the evening and 1.06 vehicles per unit overnight. Overall, it was observed that the Timber Ridge and Lions Ridge Apartments have excess parking, as not all the available spaces were utilized overnight.

Proposed Parking Rate:

The parking rate for this facility is best determined by using local parking data. Triumph Development is proposing to provide 44 parking spaces for 42 affordable housing apartments. This equates to a parking rate of 1.05 per unit. This rate has an insignificant difference to the observed Timber Ridge and Lions Ridge parking demand of 1.06. Therefore, with proper parking management, it is anticipated that a parking rate of 1.05 spaces per unit will be adequate for the proposed workforce housing facility.

Please call if you would like any additional information or have any questions regarding this matter.

Sincerely,

McDowell Engineering, LLC

Kari J. McDowell Schroeder, PE, PTOE
Traffic Engineer