March 18, 2024

Chris Jeub Monument Glamping 16315 Rickenbacker Avenue Monument, Colorado 80132

RE: Monument Glamping II / Traffic Generation Analysis El Paso County, Colorado PCD File No. AL2318

Dear Chris,

SM ROCHA, LLC is pleased to provide traffic generation information for the development entitled Monument Glamping II. This development is located at 18065 Highway 83 in El Paso County, Colorado.

This information has been revised to address County Staff review comments made to the February 2024 version of the traffic generation analysis regarding the inclusion of the project's PCD file number and county signature blocks.

The intent of this analysis is to present traffic volumes likely generated by the proposed development and consider potential impacts to the adjacent roadway network.

The following is a summary of analysis results.

## Site Description and Access

Land for the development is currently occupied by a single-family home and surrounded by open space and a mix of residential, recreational, and school land uses. The proposed development is understood to entail the new construction of a 5.95-acre campsite supporting a total of 24 glamping shelters with associated amenities.

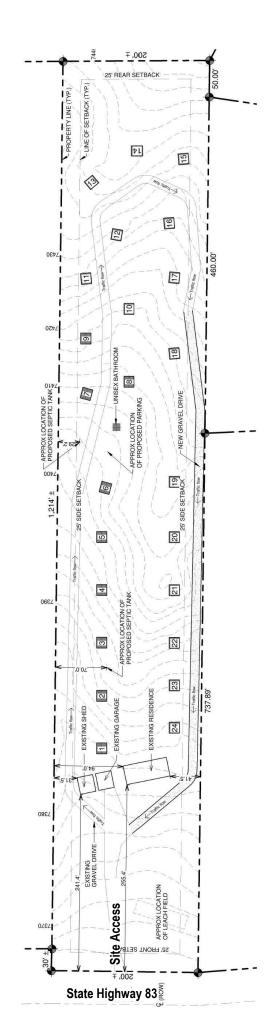
Proposed access to the development is provided via one full-movement access onto State Highway 83 (referred to as Site Access).

General site and access locations are shown on Figure 1.

A site plan is shown on Figure 2. This plan is provided for illustrative purposes only.

March 2024 Page 2 Figure 1 SITE LOCATION











## **Vehicle Trip Generation**

Standard traffic generation characteristics compiled by the Institute of Transportation Engineers (ITE) in their report entitled Trip Generation Manual, 11<sup>th</sup> Edition, were applied to the proposed land use in order to estimate the average daily traffic (ADT) and peak hour vehicle trips. A vehicle trip is defined as a one-way vehicle movement from point of origin to point of destination.

Table 1 presents average trip generation rates for the development area proposed. Use of average trip generation rates presents a conservative analysis. ITE land use code 416 (Campground/Recreational Vehicle Park) was used for analysis because of its best fit to the proposed land use.

**Table 1 – Trip Generation Rates** 

			TRIP GENERATION RATES						
ITE			24	AM	PEAK H	OUR	PM	PEAK H	OUR
CODE	LAND USE	UNIT	HOUR	ENTER	EXIT	TOTAL	ENTER	EXIT	TOTAL
416	Campground/Recreational Vehicle Park	ocs	2.70	0.08	0.13	0.21	0.18	0.09	0.27

Key: OCS = Occupied Camp Sites.

Note: All data and calculations above are subject to being rounded to nearest value.

Table 2 summarizes the projected ADT and peak hour traffic volumes likely generated by the additional land use area proposed.

**Table 2 – Trip Generation Summary** 

			TOTAL TRIPS GENERATED						
ITE			24	AM PEAK HOUR			PM PEAK HOUR		
CODE	LAND USE	SIZE	HOUR	ENTER	EXIT	TOTAL	ENTER	EXIT	TOTAL
416	Campground/Recreational Vehicle Park	24 OCS	65	2	3	5	4	2	6
		Total:	65	2	3	5	4	2	6

Key: OCS = Occupied Camp Sites.

Note: All data and calculations above are subject to being rounded to nearest value.

As Table 2 shows, the development area has the potential to generate approximately 65 daily trips with 5 of those occurring during the morning peak hour and 6 during the afternoon peak hour.

## Adjustments to Trip Generation Rates

A development of this type is not likely to attract trips from within area land uses nor pass-by or diverted link trips from the adjacent roadway system, therefore no trip reduction was taken in this analysis.

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## **Trip Generation Distribution and Assignment**

Overall directional distribution of site-generated traffic was determined based on existing area land uses, the site location within the County, and the available roadway network. Site-generated traffic is anticipated to be distributed through the proposed access. Distribution along State Highway 83 is general and assumed to be 50 percent to/from the north and south.

Traffic assignment is how the site-generated and distributed trips are expected to be loaded on the roadway network. Applying assumed trip distribution patterns to site-generated traffic provides the peak hour trip volume assignments for the proposed access. These volumes are then divided further upon travel through adjacent roadways serving the overall development area. Table 3 below uses the trip generation volumes from Table 2 and denotes projected traffic volumes at the proposed access.

**Table 3 – Site Generated Trip Assignment** 

DEVELOPMENT ACCESS	AM PEA	K HOUR	PM PEAK HOUR			
TURNING MOVEMENTS	Inbound Volume	Outbound Volume	Inbound Volume	Outbound Volume		
Site Access / State Highway 83						
Westbound Left	-	2	-	1		
Westbound Right	-	1	-	1		
Northbound Right	1	-	2	-		
Southbound Left	1	-	2	-		

### **Development Impacts**

As Tables 2 and 3 show, there is an increase in peak hour traffic volumes anticipated for the proposed development. However, these volumes are considered minor and are not likely to negatively impact operations of State Highway 83 nor other adjacent roadways or intersections.

#### **Auxiliary Lane Analysis**

Auxiliary lanes for site development access are to be based on the Colorado Department of Transportation's (CDOT) State Highway Access Code (SHAC)<sup>1</sup>.

Considering development build-out, an evaluation of auxiliary lane requirements, pursuant to Section 3.8.5 of CDOT's SHAC, reveals that no additional turn lanes at Site Access along State Highway 83 are required since the development's projected peak hour left and right turn ingress volumes do not exceed CDOT's threshold of 10 vehicles per hour and 25 vehicles per hour, respectively.

<sup>&</sup>lt;sup>1</sup> State Highway Access Code, The Transportation Commission of Colorado, March 2002.

## **Road Impact Fees**

This site is subject to the El Paso County Road Impact Fee Program (Resolution 19-471), as amended and falls within the category of Hotel/Motel, in coordination with County Staff. Pursuant to the latest proposed site plan and land use densities as previously described, it is anticipated that a maximum of 24 camp sites is being proposed which may be considered for determination of applicable fees. Based on this density, a resulting impact fee of \$67,344 is estimated, assuming that the site is not within a Public Improvement District (PID). Obligation for payment will be selected at the final land use approval stage, which is understood to be concurrent with the site plan application.

#### Conclusion

This analysis assessed traffic generation for the Monument Glamping II development and potential impacts to the adjacent roadway network.

It is our professional opinion that the proposed site-generated traffic resulting from the development is expected to create no negative impact to traffic operations for the surrounding roadway network and proposed site access. Analysis of site-generated traffic concludes that proposed development traffic volumes are minor.

This site may be subject to the El Paso County Road Impact Fee program. An option for payment is to be coordinated with the project's developer and will be selected at the final land use approval stage.

We trust that our findings will assist in the planning and approval of the Monument Glamping II development. Please contact us should further assistance be needed.

Sincerely,

SM ROCHA, LLC

Traffic and Transportation Consultants

Brandon Wilson, EIT

Traffic Engineer | Project Manager

Branker Wilson

Fred Lantz, PE Traffic Engineer

# **Traffic Engineer's Statement**

16315 Rickenbacker Avenue Monument, CO 80132

The attached traffic report and supporting information were prepared under my responsible charge and they comport with the standard of care. So far as is consistent with the standard of care, said report was prepared in general conformance with the criteria established by the County for traffic reports.

Just Last	03/18/2024
Fred Lantz, P.E. #23410	Date
<u>Developer's Statement</u>	
I, the Developer, have read and will comply with all committed	ments made on my behalf within this report.
Chris Jeub	 Date
Monument Glamping	