Eastwood Village Traffic Compliance Letter

El Paso County, Colorado

Traffic Engineer's Statement

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.



Jeffrey R. Planck, P.E., PE #53006

April 19, 2023 Date

Developer's Statement

I, the Developer, have read and will comply with all commitments made on my behalf within this report.

4/20/2023

Date

Mr. John Raptis Rockwood Homes, LLC 6613 Folsom Heights Colorado Springs, CO 80923

imley-horn.com 4582 South Ulster Street, Suite 1500, Denver, CO 80237

303 228 2300

Eastwood Village Traffic Compliance Letter 096726002 Page 2

April 19, 2023

Mr. John Raptis Rockwood Homes, LLC 6613 Folsom Heights Colorado Springs, CO 80923

Re: Eastwood Village Traffic Compliance Letter El Paso County, Colorado

Dear Mr. Raptis:

The purpose of this letter is to provide a trip generation comparison to identify compliance with the original traffic impact study for the Claremont Filing 7 project to be located on the southeast corner of the Meadowbrook Parkway and Marksheffel Road intersection in El Paso County, Colorado. The purpose of this study is to compare the trip generation of the proposed Eastwood Village project to the land use in the same development area evaluated previously in the *Claremont Filing 7 Traffic Impact Study* completed in May 2022 and approved by El Paso County in July 2022. Applicable documents from the original traffic study are attached for reference. In addition, a conceptual site plan for the proposed development program is attached for reference.

SITE INFORMATION AND TRIP GENERATION COMPARISON

The current proposal includes 107 single family attached homes. The *Claremont Filing* 7 *Traffic Impact Study* identified 150 multifamily low-rise dwelling units. Regional access to Claremont Filing 7 will be provided by Interstate 25 (I-25) and US-24. Primary access will be provided by Marksheffel Road. Direct access will be provided by a proposed full movement access located approximately 550 feet east of the Meadowbrook Parkway and Marksheffel Road intersection (measured right-of-way to centerline). The currently proposed project access is consistent with the original study.

Site-generated traffic estimates are determined through a process known as trip generation. Rates and equations are applied to the proposed land use to estimate traffic generated by the development during a specific time interval. The acknowledged source for trip generation rates is the *Trip Generation Manual*¹ published by the Institute of Transportation Engineers (ITE). ITE has established trip rates in nationwide studies of similar land uses. Trip generation was calculated using the 11th Edition fitted equations for Multifamily Low-Rise Housing (ITE Code 220) within the original traffic study and Single-Family Attached Housing (ITE 215) for the current proposal. The following table compares the trip generation from the original study to the expected trip generation for the proposed development. The trip generation calculation sheets from the original traffic study, as well as from the current proposal are attached for reference.

¹ Institute of Transportation Engineers, Trip Generation Manual, Eleventh Edition, Washington DC, 2021.

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	Weekday	Weekday Vehicle Trips						
	Daily	AN	I Peak	Hour	PM Peak Hour			
Use and Size	Trips	In	Out	Total	In	Out	Total	
Original Traffic Study								
Multifamily Low-Rise Housing (ITE 220) – 150 Dwelling Units	1,038	17	53	70	54	32	86	
Current Proposal								
Single Family Attached Housing (ITE 215) – 107 Dwelling Units	766	14	36	50	34	26	60	
Net Difference in Trips	-272	-3	-17	-20	-20	-6	-26	

Trip Generation Comparison: Eastwood Village

As summarized in the table, the currently proposed development is anticipated to generate approximately 766 weekday daily trips with 50 trips occurring during the morning peak hour and 60 trips occurring during the afternoon peak hour. Based on the original traffic study assuming 150 multifamily dwelling units, the proposed project is anticipated to generate traffic within the volume limits previously studied. The proposed development is anticipated to account for 272 fewer daily trips, 20 fewer trips in the morning peak hour, and 26 fewer trips in the afternoon peak hour than originally studied.

CONCLUSION

In summary, this traffic study letter provides a trip generation comparison of the proposed Eastwood Village to the applicable use previously studied in the original traffic study. Based on the results of this trip generation comparison, the proposed Eastwood Village is in traffic compliance with the original use studied in the *Claremont Filing 7 Traffic Impact Study* completed in May 2022 and approved by El Paso County in July 2022. The proposed development program is expected to generate less traffic than what was evaluated for the same development area within the original traffic study. Therefore, it is believed that all potential traffic impact study. Please let us know if you have any questions or require anything further.

Sincerely,

KIMLEY-HORN AND ASSOCIATES, INC.

effrey R. Flanck

Jeffrey R. Planck, P.E. Project Manager



Trip Generation Calculations

ProjectEastwood VillageSubjectTrip Generation for Single-Family AtDesigned byMAGChecked byDate	tached Housing March 22, 2023 Job No. 096726002 Sheet No. of					
TRIP GENERATION MANUAL TECHNIQUES						
ITE Trip Generation Manual 11th Edition, Fitted Curve Equations						
Land Use Code - Single-Family Attached Housing (215)						
Independent Variable - Dwelling Units (X)						
X = 107 T = Average Vehicle Trip Ends						
Peak Hour of Adjacent Street Traffic, One Hour	r Between 7 and 9 a.m. (200 Series Page 239)					
(T) = 0.52 (X) - 5.70 (T) = 0.52 * (107) - 5.70	Directional Distribution: 31% ent. 69% exit. T = 50 Average Vehicle Trip Ends 14 entering 35 exiting					
Peak Hour of Adjacent Street Traffic One Hour	14 + 30 = 50					
reak nour of Aujacent Street Trainc, One nou	Between 4 and 0 p.m. (200 Series Fage 240)					
(T) = 0.60 (X) - 3.93 (T) = 0.60 * (107) - 3.93	Directional Distribution: 57% ent. 43% exit. T = 60 Average Vehicle Trip Ends 34 entering 26 exiting					
	34 + 26 = 60					
Weekday (200 Series Page 238)						
(T) = 7.62 (X) - 50.48 (T) = 7.62 * (107) - 50.48	Directional Distribution: 50% entering, 50% exiting T = 766 Average Vehicle Trip Ends 383 entering 383 exiting					
	383 + 383 = 766					

THP GENERATION MANUAL TECHNIQUESITE Trip Generation Manual 11th Edition, Fitted Curve EquationsLand Use Code - Multifamily Housing (Low-Rise) (220)Independent Variable - Dwelling Units (X) $\chi = 150$ T = Average Vehicle Trip EndsDetection of Adjacent Street Traffic. One Hour Between 7 and 9 a.m. (200 Series Page 255)Other to for the form of Adjacent Street Traffic. One Hour Between 7 and 9 a.m. (200 Series Page 256)Directional Distribution: 24% ent. 76% exit. T = 70 Average Vehicle Trip Ends 17 entering 53 exiting 17 + 53 = 70Directional Distribution: 63% ent. 37% exit. T = 86 Average Vehicle Trip Ends 54 entering 32 exiting 54 + 32 = 86Directional Distribution: 63% ent. 37% exit. T = 86 Average Vehicle Trip Ends 54 entering 32 exiting 54 + 32 = 86Directional Distribution: 50% ent. 50% exit. T = 1038 Average Vehicle Trip Ends 519 entering 519 exiting	ProjectEastwood VillageSubjectTrip Generation for Multifamily HousDesigned byMAGChecked byDate	sing (Low-Rise) February 02, 2022 Job No. 096726002 Sheet No. of					
$ \begin{array}{llllllllllllllllllllllllllllllllllll$	TRIP GENERATION MANUAL TECHNIQUES						
Land Use Code - Multifamily Housing (Low-Rise) (220) Independent Variable - Dwelling Units (X) X = 150 T = Average Vehicle Trip Ends Deak Hour of Adjacent Street Traffic. One Hour Between 7 and 9 a.m. (200 Series Page 255) (T) = 0.31 (X) + 22.85 (T) = 0.31 (X) + 22.85 (T) = 0.31 * (150.0) + 22.85 Directional Distribution: 24% ent. 76% exit. T = 70 Average Vehicle Trip Ends 17 + 53 = 70 Peak Hour of Adjacent Street Traffic. One Hour Between 4 and 6 p.m. (200 Series Page 256) (T) = 0.43 (X) + 20.55 (T) = 0.43 * (150.0) + 20.55 T = 86 Average Vehicle Trip Ends 54 + 32 = 86 Weekday (200 Series Page 254) (T) = 6.41 (X) + 75.31 (T) = 6.41 * (150.0) + 75.31 T = 1038 Average Vehicle Trip Ends 519 + 519 = 1038	ITE Trip Generation Manual 11th Edition, Fitted Curve Equations						
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	(T) = 6.41 (X) + 75.31 (T) = 6.41 * (150.0) + 75.31	Directional Distribution: 50% ent. 50% exit. T = 1038 Average Vehicle Trip Ends 519 entering 519 exiting 519 + 519 = 1038					

Original Traffic Study Documents

ACCEPTED for FILE Engineering Review 07/05/2022 10:06:32 AM dsdnijkamp EPC Planning & Community Development Department

Traffic Impact Study

Claremont Filing 7 El Paso County, Colorado

PCD File NO. SKP222 & P223

Prepared for:

Rockwood Homes, LLC

Kimley »Horn

TRAFFIC IMPACT STUDY

Traffic Engineer's Statement

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.

TOAL

Jeffrey R. Planck, P.E., PE #53006

May 18, 2022 Date

Developer's Statement

I, the Developer, have read and will comply with all commitments made on my behalf within this report.

Mr. John Raptis Rockwood Homes, LLS 5436 Carvel Grove Colorado Springs, CO 80922

WE

Claremont Filing 7

PCD File No. SKP222 & P223

El Paso County, Colorado

Prepared for

Rockwood Homes, LLC 5436 Carvel Grove Colorado Springs, CO 80922

Prepared by Kimley-Horn and Associates, Inc. 4582 South Ulster Street Suite 1500 Denver, Colorado 80237 (303) 228-2300

May 2022



This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

4.1 Trip Generation

Site-generated traffic estimates are determined through a process known as trip generation. Rates and equations are applied to the proposed land use to estimate traffic generated by the development during a specific time interval. The acknowledged source for trip generation rates is the *Trip Generation Manual*¹ published by the Institute of Transportation Engineers (ITE). ITE has established trip rates in nationwide studies of similar land uses. For this study, Kimley-Horn used the ITE Trip Generation Report fitted curve equations that applies to Multifamily Low-Rise Housing (ITE Land Use Code 220), for traffic associated with the development.

Claremont Filing 7 is expected to generate approximately 1,038 weekday daily trips, with 70 of these trips occurring during the morning peak hour and 86 of these trips occurring during the afternoon peak hour. Calculations were based on the procedure and information provided in the ITE *Trip Generation Manual, 11th Edition – Volume 1: User's Guide and Handbook,* 2021. **Table 1** summarizes the estimated trip generation for the Claremont Filing 7. The trip generation worksheets are included in **Appendix C**.

Land Use and Size	Weekday Vehicle Trips							
	Daily	AM Peak Hour			PM Peak Hour			
		In	Out	Total	In	Out	Total	
Multifamily Low-Rise Housing (ITE 220) – 150 Dwelling Units	1,038	17	53	70	54	32	86	

Table 1 – Claremont Filing 7 Traffic Generation

4.2 Trip Distribution

Distribution of site traffic on the street system was based on the area street system characteristics, existing traffic patterns, existing and anticipated surrounding demographic information, and the proposed access system for the project. The directional distribution of traffic is a means to quantify the percentage of site-generated traffic that approaches the site from a given direction and departs the site back to the original source. The difference of traffic making left turns versus right turns during the peak hour of the adjacent street creates the higher percentage of departures to

¹ Institute of Transportation Engineers, *Trip Generation Manual*, Eleventh Edition, Washington DC, 2021.

Conceptual Site Plan



