

January 15, 2021

Forum Investment Group
Attn: Kristen Link
Director – Development
4500 Cherry Creek Drive South, Suite 550
Glendale, CO 80246

**RE: Promenade Forum Apartments - Traffic Impact Study
Castle Rock, Colorado**

Dear Ms. Link,

This study provides a traffic volume comparison to previous land use assumptions approved for the development site under the Promenade at Castle Rock study prepared by Felsburg Holt & Ullevig in January 2015, and consider potential impacts to the adjacent roadway network. The development is located near the intersection of Castle Rock Parkway and Promenade Parkway in Castle Rock, Colorado. The intent of this analysis is to present traffic volumes that are anticipated with the proposed development. The following is a summary of analysis results.

Site Description and Access

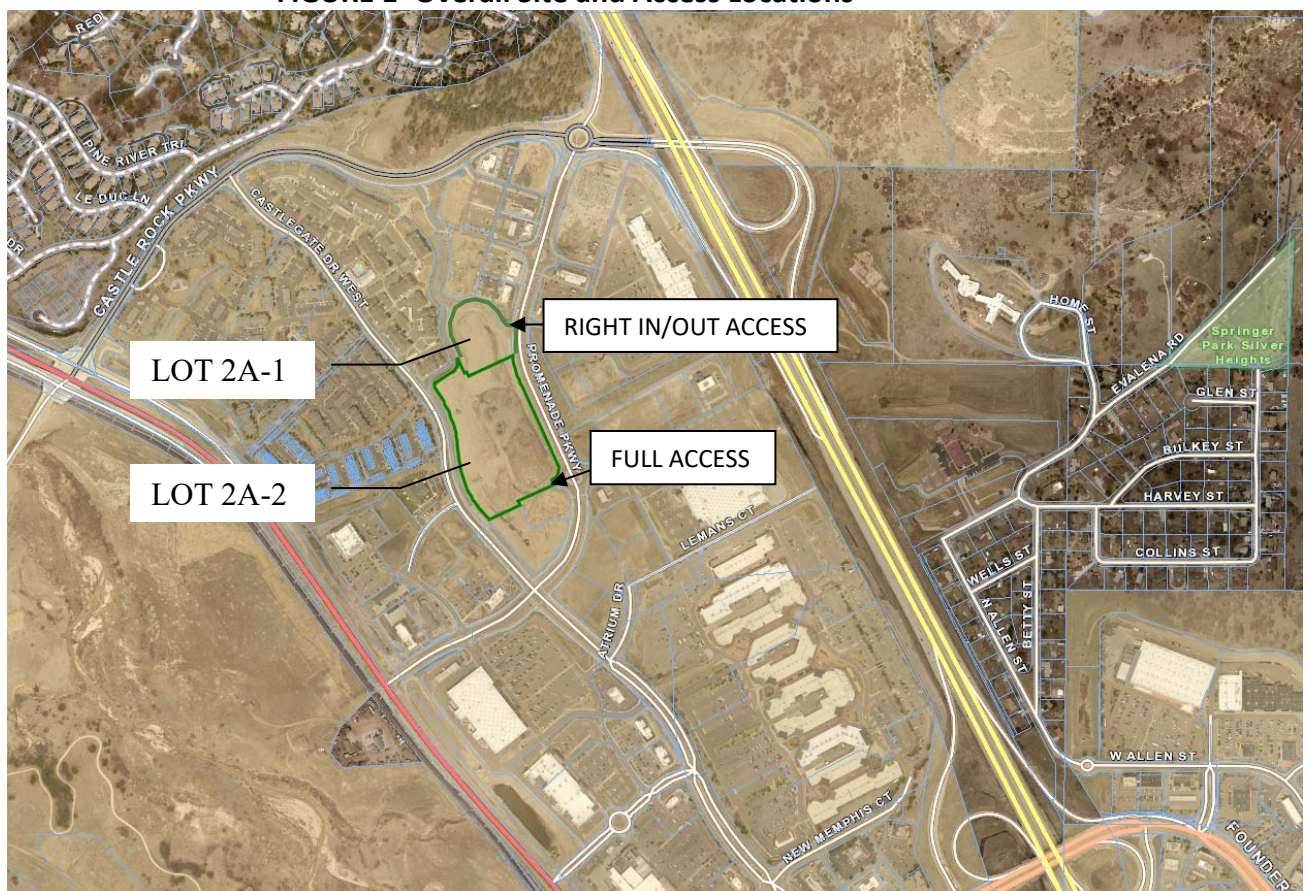
The location of Lot 2A-1, 2A-2, 2A-3 and 2A-4, Block 3, Promenade at Castle Rock, Filing No. 1, Amendment No. 8 (Site) is at the north corner of Promenade Parkway and Castlegate Drive West in the Town of Castle Rock. The Site boundaries are shown on the Vicinity Map below. The Site is bounded on the east by Promenade Parkway, on the west by Castlegate Drive West, on the south by the intersection of Promenade Parkway and Castlegate Drive West and on the north by Promenade of Castle Rock commercial/restaurant, open space and multi-family tracts. The Site is in Section 22 and 27, Township 7 South, Range 67 West of the 6th P.M. Approximate geodetic coordinates for the site are: 39°25'10"N, 104°52'45"W.



Land for the development is currently vacant and surrounded by a mix of commercial, residential, and institutional land uses. The proposed development is understood to entail the new construction of various multifamily buildings accommodating 300 apartment units. The adjacent commercial use is to consist of an approximate 40,000 square foot office building, and various retail buildings totaling approximately 22,000 square feet.

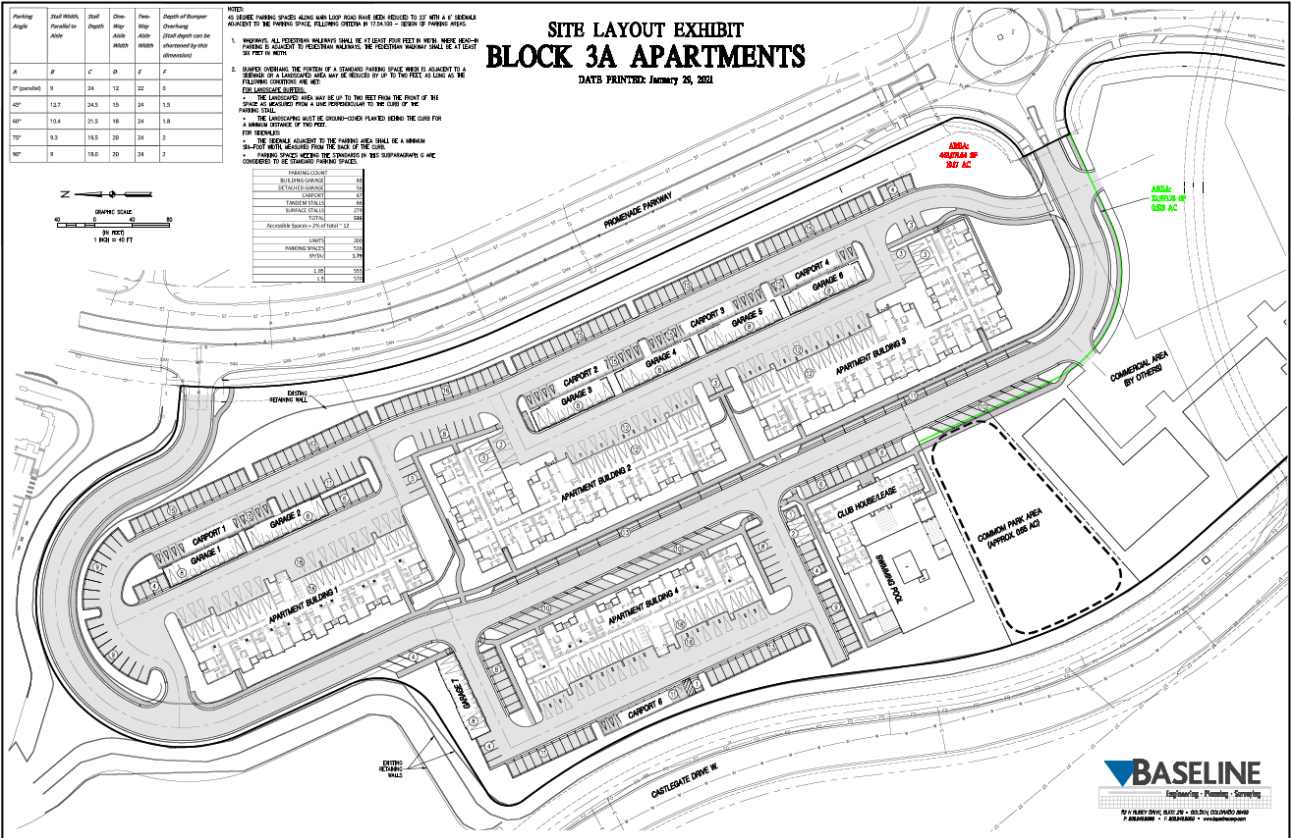
Proposed access to the development is provided at the following locations: one right-in / right-out access onto Promenade Parkway at an existing curb cut near the northeastern half of the development area, and one full-movement access onto Promenade Parkway at the existing roundabout intersection. Overall site and access locations are shown below on Figure 1.

FIGURE 1 -Overall Site and Access Locations



The current site design as prepared by Kephart Architects and Baseline Engineering, is shown on Figure 2. This plan is provided for illustrative purposes. For additional details reference the Site Plan provided with the current application.

FIGURE 2 -Site Plan Layout



Vehicle Trip Generation

Standard traffic generation characteristics compiled by the Institute of Transportation Engineers (ITE) in their report entitled Trip Generation Manual, 10th Edition, were applied to the proposed land uses 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.

The approved transportation impact analysis¹ prepared for the overall development area used trip generation rates from ITE’s Trip Generation Manual, 9th Edition, and included “Multifamily” land use in the same development area and density (300 units) as currently proposed with this project on Lot 2A-1, and 2A-2, Block 3. Table 2 presents average trip generation rates for previously approved land uses and for the development area proposed. Use of average trip generation rates presents a conservative analysis. ITE land use codes 221 (Multifamily (Mid-Rise)), as well as the adjacent uses by others 710 (General Office Building), and 820 (Shopping Center) were used for analysis because of their best fit to the proposed land use descriptions.

Table 1 summarizes the projected ADT and peak hour traffic volumes likely generated by the land use area proposed and provides comparison to traffic volume estimates for the previously approved land use.

Table 1 – Trip Generation Summary

ITE CODELAND USESIZE				TOTAL TRIPS GENERATED						
				24 HOUR	AM PEAK HOUR			PM PEAK HOUR		
					ENTER	EXIT	TOTAL	ENTER	EXIT	TOTAL
<u>Block 3A - Previously Approved</u>										
820	Shopping Center*	158.4	KSF	6,762	94	58	152	282	306	588
Total:				6,762	94	58	152	282	306	588
<u>Site Development - Proposed</u>										
221	Multifamily Housing (Mid-Rise)	300	DU	1,632	28	80	108	81	51	132
710	General Office Building	40.0	KSF	390	40	6	46	7	39	46
820	Shopping Center	22.0	KSF	831	13	8	21	40	44	84
Proposed Total:				2,852	81	94	175	128	134	262
Difference Total:				-3,910	-13	37	23	-154	-172	-326

Key : KSF = Thousand Square Feet Gross Floor Area.

DU = Dwelling Units.

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

* Trip Generation Manual, 9th Edition.

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

As Table 1 shows, the proposed development area has the potential to generate approximately 2,852 daily trips with 175 of those occurring during the morning peak hour and 262 during the afternoon peak hour. Table 1 further shows how proposed development traffic volumes, in general, do not exceed those approved in the overall Forum Promenade Apartments at Castle Rock transportation impact analysis that was previously approved.

Adjustments to Trip Generation Rates

The Forum Promenade Apartments at Castle Rock transportation impact analysis included a 30 percent internal trip reduction and a 20 percent reduction for pass-by link trips within its analysis. While a development of this type is likely to attract trips from within area land uses as well as pass-by or diverted link trips from the adjacent roadway system, no trip reduction was taken in this analysis. This assumption provides for a conservative analysis.

As example, published ITE pass-by and diverted link trip data indicates an average trip generation reduction rate between 8 and 74 percent as typical to shopping centers. Considering the lowest reduction percentage, primary trip generation for the proposed

development equates to 92 percent of trip generation volumes presented in Table 1. A primary trip is defined by ITE as a trip made for the specific purpose of visiting the destination generator.

Vehicle Trip Generation Comparison & Development Impacts

As Table 1 shows, the proposed development, in general, does not exceed traffic volumes approved for the area in comparison to previously projected volumes of the overall development area. These volumes are not likely to negatively impact operations of adjacent roadways or intersections.

Conclusion

This analysis assessed traffic generation for the Forum Promenade Apartments at Castle Rock, Lot 2A-1, and 2A-2, Block 3 development, provided a traffic volume comparison to previous land use assumptions approved for the development site, and considered potential impacts to the adjacent roadway network.

It is our professional opinion that proposed site-generated traffic is expected to create no negative impact to traffic operations for the surrounding roadway network and proposed site accesses, and is in compliance with the Forum Promenade Apartments at Castle Rock transportation impact analysis.

We trust that our findings will assist in the planning and approval of the Forum Promenade Apartments at Castle Rock development. Please contact us should further assistance be needed.

Sincerely,



Noah J. Nemmers PE
For and on behalf of Baseline Engineering