

DREXEL BARRELL & Co.

Engineers - Surveyors

MEMORANDUM

TO: Bradley Heights Metropolitan District

119 N. Wahsatch Avenue Colorado Springs, CO 80903

FROM: Derek Schuler, P.E., PTOE

DATE: January 16, 2024

RE: Traffic Memorandum for Bradley Heights Filing 5 – Parcel 13C

Bradley Heights Metropolitan District, Colorado Springs, Colorado

This memorandum serves to verify trip generation compliance for parcel 13C with the previous full traffic study and PUD Concept Plan for Bradley Heights, the overall multi-use site. The overall site is located in the southwest corner of Bradley Rd and Marksheffel Rd and is divided into 17 parcels. The previous study is "Bradley Heights Master Development Traffic Impact Study, Matrix Design Group, Inc., September 14, 2021." The current master plan is "Bradley Heights PUD Concept Plan Minor Amendment, N.E.S., Inc., March 22, 2023." The study provided overall trip generation, access locations to the existing arterial streets, and trip distribution. The master plan shows the overall street network plus use and density of each parcel. This proposed residential site will have a access onto both Bradley Landing Blvd and Bliss Rd. and should comply with the findings of the overall study and master plan. One change to note is that an elementary school was designated on the original study for parcel 9A. The master plan has changed the use to residential and moved the elementary school to parcel 13D. This change does not directly impact parcel 13C but will be a factor with the adjacent 13D parcel.

The proposed site is 13.6 acres and is zoned as residential. The existing land is vacant, and the proposal is to add 44 units of single family housing. See the associated site plan for vicinity map and site layout. The resulting proposed density is 3.2 dwelling units/acre which is towards the lower end of the range shown for this parcel on the master plan (3.0-7.99 DU/AC). This will result in a trip generation below the average expected from this range and well below the maximum.

Trip Generation

Table 1 below shows the trip generation values for the single proposed use. The table shows the number of expected vehicular trips using the latest ITE trip rates. This manual is currently in its 11th edition and is an industry accepted informational report published by the Institute of Transportation Engineers. The proposed use is per ITE codes: #210 Single Family Detached Housing (4 units) and #215 Single Family Attached Housing (40 units). Using the ITE rates,

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Parcel 13C is expected to generate about 326 daily trips, 31 trips (9 in/22 out) in the morning peak hour and 42 trips (24 in/18 out) in the evening peak hour.

Table 1 - Trip Generation Estimate for Bradley Heights Filing 5, Parcel 13C															
		Trip Generation Rates			Average				PM Peak-Hour (4 - 6)						
					Weekday	Inbo	und	Outb	ound	Total	Inbou	ınd	Outb	ound	Total
ITE Code / Land Use	Size	Avg. Weekday	AM PEAK	PM PEAK	Trips	% Trips	Trips	% Trips	Trips		% Trips	Trips	% Trips	Trips	
#210 - SF Detached Housing 1	4 DU	9.43	0.70	0.94	38	26%	1	74%	2	3	63%	2	37%	1	4
#215 - SF Attached Housing ¹	40 DU	7.20	0.70	0.94	288	31%	9	69%	19	28	57%	21	43%	16	38
				TOTALS	326		9		22	31		24		18	42

¹Source: "Trip Generation" Institute of Transportation Engineers, 11th Edition, 2021

Existing Roads & Distribution

The previous full traffic study presented the adjacent street classifications, the proposed local internal streets, access locations, and trip distribution. The proposed changes to this parcel only affect the decrease in expected trips.

Fair Share Contribution

This contribution is determined per Table 2 below following the same procedure as completed with previous filings. Filings 1-3 are located on the northern portion of the overall site while Filings 4 and 5 are more centrally located. The traffic impact to the Powers / Bradley intersection is projected to be slightly less.

Table 2:

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Filing	Daily Trips (DT)	DT thru Powers/ Bradley Intx	New DT thru Powers/Bradley	% Fair Share of New DT
Filing 1	1,384	750	25,200	2.98%
Filing 2	2,500	1,140	25,200	4.52%
Filing 3	2,482	1,110	25,200	4.40%
Filing 4	1,132	464	25,200	1.84%
Filing 5	326	134	25,200	0.53%

When the fair share for each development is multiplied by the estimated intersection improvement costs (\$1,360,692.26), the financial responsibility for Filing 5 is \$7,211.67.

Conclusion

Parcel 13C is located within Bradley Heights, the overall multi-use site. The currently proposed trip generation is less than that designated in the master study and plan. The vehicular traffic will be accommodated by the proposed internal street network and access locations to existing arterial streets. If you have any questions or would like to discuss my analysis further, please don't hesitate to contact me.

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Traffic Engineer's Statement:

Attachment: Development Plan

This 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 agency for traffic reports.

Out Plue	1-16-2024_
Derek Schuler, Colorado P.E. #40125	Date
For and on behalf of Drexel, Barrell & Co.	

