



TRAFFIC MEMORANDUM

HEARTLAND DENTAL FALCON

PCD File No. PPR-21-045
Lot 2, Meridian Crossing Filing No. 1
7225 N. Meridian Road
Peyton, CO 80831

Prepared For:

WMG DEVELOPMENT

1200 Network Center Drive, Suite 3
Effingham, IL 62401

Prepared By:

Baseline Engineering Corporation

112 N. Rubey Drive, #210
Golden, CO 80403

February 2022



Engineering · Planning · Surveying

Certification Page

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.

Noah Nemmers, P.E. Colorado 39820

Date

Developer's Statement

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

Authorized Signature/Date: _____

Printed Name: _____

Title: _____

Business Name: _____

Address: _____

Traffic Memorandum Parameters

The proposed site is Lot 2 of the Meridian Crossing Filing 1 subdivision located at 7225 North Meridian Drive, in Falcon. A dental office, parking lot, and landscaping encompass the proposed improvements for this project. Access to the site will occur via private drives within the subdivision and a shared access drive with McDonald's.

The study area for this lot is encompassed by the Meridian Crossing Subdivision. Two main connections between the subdivision and public roads. The first is an intersection with Flower Road between Meridian Rd and McLaughlin Rd. A second access to the subdivision is a right-in only intersection from Meridian Rd to a private drive along the west line of the project property.

The Traffic Impact Study for the Meridian Crossing Subdivision by LSC Transportation Consultants dated March 12, 2008 (PCD No. SF-07-024) was used to ensure that the trips created by the dental clinic fall in line with prior expectations of traffic load within and around the subdivision.

Trip Generation Calculations

Trip generation values for this memorandum were calculated using the ITE 10th Edition Trip Generation Rates. The ITE code/description that most accurately represents the proposed 4,267 sq. ft. Heartland Dental building use is Code 720, Medical-Dental Office Building. ITE code 720 can be calculated utilizing both KSF (thousand square feet) and number of employees. The Heartland Dental office anticipates five employees. However, the KSF area was utilized as it represented a more conservative calculation. Results are shown below in Table 1.

Description/ ITE Code	Trip Generation Units (KSF)	Rate of Weekday Daily Traffic	Calculated Daily Trips	AM Peak Trips In (vph)	AM Peak Trips Out (vph)	Total AM Peak Trips (vph)	PM Peak Trips In (vph)	PM Peak Trips Out (vph)	Total PM Peak Trips (vph)
Medical- Dental Office Building / 720	4.267	34.80	149	8	2	10	4	11	15

Table 1. Trip Generation at Final Build Out

The traffic impact study developed for the Meridian Crossing subdivision utilized ITE 7th Edition Codes 820 (Shopping Center) and 934 (Fast-Food Restaurant with Drive-Through Window) for the basis of trip generation calculations. As shown in Table 2, both uses have higher average weekday traffic. Shopping centers have slightly lower AM trips in per KSF, but higher PM trips in per KSF compared to the dental office, but fast-food restaurants generate almost 20 times the trips in both instances.

Land Use Code	Land Use Description	Trip Generation Units	Trip Generation Rates						Total Trips Generated					New Trips Generated	
			Average Weekday Traffic	Morning Peak Hour		Afternoon Peak Hour		Average Weekday Traffic	Morning Peak Hour		Afternoon Peak Hour		Pass-By Trips ⁽¹⁾	Average New Weekday Traffic	
				In	Out	In	Out		In	Out	In	Out			
Trip Generation 7th Edition ⁽²⁾															
820	Shopping Center	33 KSF ⁽³⁾	88.45	1.29	0.83	3.88	4.21	2,919	43	27	128	139	50%	1,459	
934	Fast-Food Restaurant with Drive-Through Window	14 KSF	496.12	27.09	26.02	18.01	16.63	6,946	379	364	252	233	50%	3,473	
Total								9,865	422	392	380	372		4,932	
Trip Generation 6th Edition ⁽⁴⁾															
820	Shopping Center	33 KSF	89.25	1.32	0.85	3.90	4.22	2,945	44	28	129	139	50%	1,473	
934	Fast-Food Restaurant with Drive-Through Window	14 KSF	496.12	25.43	24.43	17.41	16.07	6,946	356	342	244	225	50%	3,473	
Total								9,891	400	370	372	364		4,946	
Notes:															
(1) Source: "Trip Generation Handbook - An ITE Proposed Recommended Practice, 2nd Edition, June 2004" by the Institute of Transportation Engineers (ITE)															
(2) Source: "Trip Generation, 7th Edition, 2003" by ITE															
(3) KSF = thousand square feet															
(4) Source: "Trip Generation, 6th Edition, 1997" by ITE															
Source: LSC Transportation Consultants, Inc.															

Table 2: Meridian Crossing Subdivision Trip Generation Estimates

Recommendations and Report Conclusions

A comparison of the trip generation rates for the proposed dental office to the estimated uses in the Meridian Crossing Traffic Impact Study from March 12, 2008 show that the use proposed for this Lot will produce minimal peak hour traffic in the morning or evening compared to the fast-food restaurants and shopping centers used in the original traffic design of this subdivision.

Since there will be a minimal increase in the peak hour traffic at the shared access with McDonald's and all other intersections surrounding the site once this project is complete, no roadway improvements are anticipated to adjacent streets based on the findings within this traffic memorandum.

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signature block from
traffic memo

Signature and Approval Block

County report review is provided only for general conformance with County standards and design criteria. The County is not responsible for the accuracy and adequacy of the data, analysis, or conclusions. The County through the approval of this document assumes not responsibility for completeness and/or accuracy of this document.

Jennifer Irvine, P.E.
County Engineer / ECM Administrator

Date

References

El Paso County Engineering Criteria Manual. Appendix B Version: October 14, 2020.