



DREXEL BARRELL & Co.

Engineers - Surveyors

MEMORANDUM

TO: **El Paso County Planning and Community Development**
2880 International Circle, Suite 110
Colorado Springs, CO 80910

FROM: Kurt Crawford, P.E.

DATE: November 22, 2024

RE: Traffic Memorandum for Owl Marketplace, Lot #4, Starbucks
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.

[Kurt Crawford, Colorado P.E. #56985]



11/22/2024

Date

Developer's Statement

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

Brain Zurek

2/2/24

Date

Double Tree Ventures

4148 N Arcadia Drive, Phoenix, AZ 85018

Traffic Memorandum for Owl Marketplace, Lot #4, Starbucks

Page 2

This memorandum serves to verify trip generation compliance for lot #4 with the previous Owl Place Commercial Traffic Impact Study, for the overall multi-use site. The site is located in the northwest corner of Eastonville Road and Meridian Road in El Paso County, CO and is divided into 4 lots. The previous study is "Owl Place Commercial / Traffic Impact Study Addendum, SM Rocha, LLC, May 21, 2024." The study provided overall trip generation, access locations to the existing arterial streets, and trip distribution. Lot #4 will have shared access with lot #3 onto the internal street only and comply with the findings of the overall study. See the associated site plan for vicinity map and site layout. Lot #4 is 1.01 acres and is zoned as CR. The existing land is vacant, and the proposal is to add a 2,489 SF coffee shop, drive-thru aisle, and a parking lot. There are 31 parking spaces proposed including 2 handicap accessible spaces.

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 code: #937 – Coffee/Donut Shop w/ Drive Thru. Using the ITE rates, Lot #4 is expected to generate about 1,329 daily trips, 214 trips (109 in/105 out) in the morning peak hour and 98 trips (49 in/49 out) in the evening peak hour.

Table 1 - Trip Generation Estimate for Lot #4 Owl Marketplace, Arvada, CO																
ITE Code / Land Use Size ²		Trip Generation Rates ¹			Trips Generated											
					Average Weekday Trips	AM Peak-Hour (7 - 9)					Total	PM Peak-Hour (4 - 6)				
		Avg. Weekday	AM PEAK	PM PEAK		% Trips	Trips	% Trips	Trips	% Trips		Trips	% Trips	Trips	% Trips	Trips
#937 - Coffee/Donut Shop w/ DTW	2.49 KSF	533.57	85.88	38.99	1,329	51%	109	49%	105	214	50%	49	50%	49	98	
Total Trips					1,329	109		105		214	49		49		98	

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

² KSF = 1000 Gross Floor Area

The proposed trip generation is compared with the estimated trips per the previous full study. The proposed use for Lot #4 of #937 – Coffee/Donut Shop w/ Drive Thru does not match that designated in the full study as the size of the building has been increased from 2.0 KSF (from initial approved study) to 2.49 KSF. However, by tracking some reassignment of lot uses by previous submittals it can be shown that this use is available. The initial approved traffic study had a total daily traffic total of 7,153 vehicles with 624 total in the AM peak hour and 557 total in the PM peak hour. As shown below in **Table 2**, the revised proposed site traffic has a daily total of 5,105 vehicles with 544 total in the AM peak hour and 388 total in the PM peak hour.

Please note that the previous addendum to the traffic study had 5.5 KSF for land use #934 FF Restaurant with drive thru. This was representative of the total for lot #2 and lot #4. For this study, lot #4 has been reverted to land use #937 – Coffee/Donut Shop w/ Drive Thru. The traffic memorandum for lot #2 (Whataburger) is being submitted concurrently with this submittal.

Table 2 - Trip Generation Estimate for Overall Site Owl Marketplace, Arvada, CO																
ITE Code / Land Use		Trip Generation Rates ¹			Trips Generated											
					Average Weekday	AM Peak-Hour (7 - 9)					PM Peak-Hour (4 - 6)					
		Avg. Weekday	AM PEAK	PM PEAK		Trips	% Trips	Trips	Outbound	Total	Inbound	Outbound	Total			
ITE Code / Land Use	Size ²	Avg. Weekday	AM PEAK	PM PEAK	Trips	% Trips	Trips	% Trips	Trips		% Trips	Trips	% Trips	Trips	Total	
#934 - Fast-Food Restaurant w/ DTW	3.51 KSF	467.48	44.61	33.03	1,641	51%	80	49%	77	157	52%	60	48%	56	116	
#937 - Coffee/Donut Shop w/ DTW	2.49 KSF	533.57	85.88	38.99	1,329	51%	109	49%	105	214	50%	49	50%	49	98	
#941 - Quick Lubrication Vehicle Shop	2.50 KSF	69.57	5.80	8.70	174	75%	11	25%	4	15	42%	9	58%	13	22	
#945 - Convenience Store/Gas Station	2.80 KSF	700.43	56.52	54.52	1,961	50%	79	50%	79	158	50%	76	50%	76	152	
Total Trips					5,105	279			265			194			384	

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

² KSF = 1000 Gross Floor Area

Table 3 – Trip Generation Summary from previous Traffic Impact Study

ITE CODELAND USESIZE			TOTAL TRIPS GENERATED							
			24 HOUR	AM PEAK HOUR			PM PEAK HOUR			
				ENTER	EXIT	TOTAL	ENTER	EXIT	TOTAL	
<u>Site Development - Previously Approved</u>										
934	Fast-Food Restaurant w/DTW	3.4 KSF	1,599	78	75	153	59	54	113	
937	Coffe/Donut Shop w/DTW	2.0 KSF	1,067	88	84	172	39	39	78	
945	Convenience Store/Gas Station	5.3 KSF	3,712	150	150	300	144	144	289	
948	Automated Car Wash	1.0 CWT	775	*	*	*	39	39	78	
Previously Approved Total:			7,153	315	309	624	281	276	557	
<u>Site Development - Proposed</u>										
934	Fast-Food Restaurant w/DTW	5.5 KSF	2,562	125	120	244	87	87	174	
941	Quick Lubrication Vehicle Shop	2.5 KSF	174	11	4	15	13	13	25	
945	Convenience Store/Gas Station	2.8 KSF	1,982	80	80	160	77	77	154	
Proposed Total:			4,718	216	203	419	177	177	353	
Difference Total:			-2,435	-100	-105	-205	-104	-100	-204	

Key: KSF = Thousand Square Feet Gross Floor Area. CWT = Car Wash Tunnel.

* = ITE does not report significant AM peak hour generation due to the nature of the business (ie. Operating hours typically open after AM peak)

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

Table 3 shows the original planned trips versus the proposed trips from the previous traffic impact study by SM Rocha, LLC. The proposed traffic totals shown in **Table 2** are greater than the revised total from the previous study but are still well below the initial approved totals.

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 Lot #4 are in general conformance with the previous study.

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 Convenience Commercial. Pursuant to the latest proposed site plan and land use densities as previously described, it is anticipated that 2,489 square feet of on-site building area may be considered for determination of applicable fees. Based on this square footage, a resulting impact fee of \$21,903.20 is estimated (\$8,800 / 1,000 sqft).

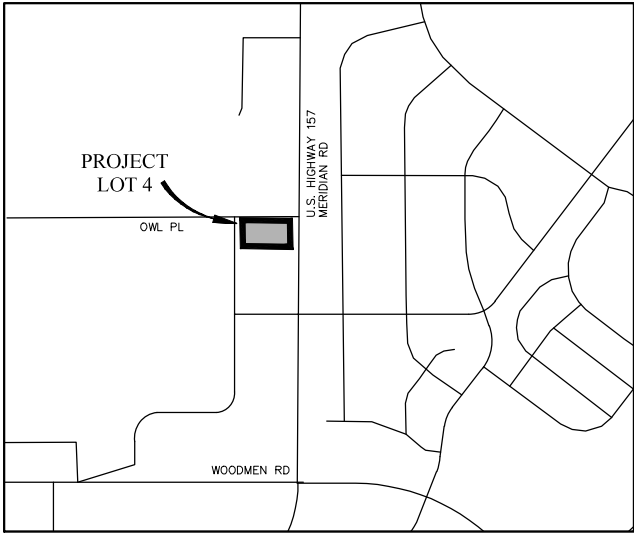
Conclusion

The vehicular traffic for the revised land use for Lot #4 will be accommodated by the proposed internal street network and access locations to existing arterial streets. The proposed traffic from this site will increase the ADT by 387 daily trips, 125 AM peak hour trips and 35 PM peak hour trips when compared to the previous TIS (PCD File VR2321). However, these estimates are still well below the trip generation estimates from the initial approved Owl Place Commercial Traffic Impact Study having 2,048 less daily trips, 80 less AM peak hour trips, and 169 less PM peak hour trips. Operations of the signalized intersections with Meridian Road will be comparable to or better than those previously stated in the Owl Place Commercial Traffic Impact Study. All roadway improvements and intersection improvements identified in the previous studies remain valid. If you have any questions or would like to discuss my analysis further, please don't hesitate to contact me.

LOT 4, OWL MARKETPLACE
11745 OWL PLACE
EL PASO COUNTY, COLORADO
CIVIL CONSTRUCTION PLANS

CONTACTS:

OWNER:	STARBUCKS CORPORATION P.O BOX 35126 SEATTLE, WA 98124-5126 BRIAN ZUREK 480-313-2724	ELECTRIC:	MVEA 11140 E. WOODMEN RD. FALCON, CO 80831 719-495-2283
DEVELOPER:	STARBUCKS CORPORATION P.O BOX 35126 SEATTLE, WA 98124-5126 BRIAN ZUREK 480-313-2724	FIRE PREVENTION	FALCON FIRE DEPARTMENT 7030 OLD MERIDIAN RD. PEYTON, CO 80831 CHIEF TRENT HARWIG 719-495-4050
CIVIL ENGINEER:	DREXEL BARRELL & CO. 101 SAHWATCH STREET, SUITE #100 COLORADO SPRINGS, CO 80903 TIM D. McCONNELL, P.E. 719-260-0887	TELEPHONE:	CENTURY LINK 303 E. PIKES PEAK AVENUE COLORADO SPRINGS, CO. 80903 PAT NEELY 719-636-4859
GAS:	COLORADO SPRINGS UTILITIES 7710 DURANT DRIVE COLORADO SPRINGS, CO 80920 TIM WENDT 719-668-4962	WATER & WASTEWATER:	WOODMEN HILLS METROPOLITAN DISTRICT 8046 EASTONVILLE RD. FALCON, CO 80831 CODY RITTER 719-495-2500



VICINITY MAP

NTS

LEGAL DESCRIPTION:

LOT 4, OWL MARKETPLACE,

FLOODPLAIN STATEMENT:

THE EFFECTIVE FLOODPLAIN ZONE A LIMITS ARE DEFINED ON THE FIRM FOR EL PASO COUNTY, COLORADO AND UNINCORPORATED AREAS, MAP NUMBER 08041CD553G, EFFECTIVE DATE DECEMBER 7, 2018.

A LOMR TO MODIFY THE FLOODPLAIN WAS APPROVED BY FEMA, CASE NO. 22-08-0669R (DEC 21, 2022)

BENCHMARK:

ELEVATIONS ARE BASED ON DREXEL, BARRELL & CO. "CONTROL POINT #300", A 2" ALUMINUM CFAP LOCATED 30' NORTH OF THE SE CORNER OF LOT 2 OWL MARKETPLACE, WITH AN ELEVATION OF 6912.90 (NAVD 88).

ADA DESIGN PROFESSIONAL STANDARDS:

THE DESIGN PROFESSIONAL RESPONSIBLE FOR THIS PLAN HAS FAMILIARIZED THEMSELVES WITH ALL CURRENT ADA CRITERIA AND SPECIFICATIONS, AND THE PROPOSED PLAN REFLECTS REQUIRED SITE ELEMENTS. SEE "2010 ADA STANDARDS FOR ACCESSIBLE DESIGN", AS PUBLISHED BY THE DEPARTMENT OF JUSTICE (DOJ)

SHEET INDEX

SHT1	C1	COVER SHEET
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SHT4	C4	SITE PLAN
SHT5	C5	GRADING PLAN
SHT6	C6	STORM SEWER PLAN & PROFILES
SHT7	C7	SITE DETAILS
SHT8	UT1	UTILITY COVER SHEET
SHT9	UT2	UTILITY SERVICE PLAN & PROFILES
SHT10	UT3	WATER & WASTEWATER DETAILS

NOT FOR CONSTRUCTION

EL PASO COUNTY PCD FILE NO: PPR-####

PREPARED BY:



DREXEL, BARRELL & CO.
Engineers • Surveyors
101 SAHWATCH STREET, #100
COLORADO SPGS, COLORADO 80903
CONTACT: TIM D. McCONNELL, P.E.
(719)260-0887
COLORADO SPRINGS • LAFAYETTE

CLIENT:

STARBUCKS CORPORATION
P.O. BOX 35126
SEATTLE, WA 98124
(480)-313-2724

CONSTRUCTION PLANS FOR:

LOT 4, OWL
MARKETPLACE
EL PASO COUNTY, COLORADO

ISSUE	DATE
INITIAL ISSUE	08/13/2024
DESIGNED BY:	KGV
DRAWN BY:	CGH
CHECKED BY:	TDM
FILE NAME:	21611-03-01CV

PREPARED UNDER MY DIRECT
SUPERVISION FOR AND ON BEHALF
OF DREXEL, BARRELL & CO.

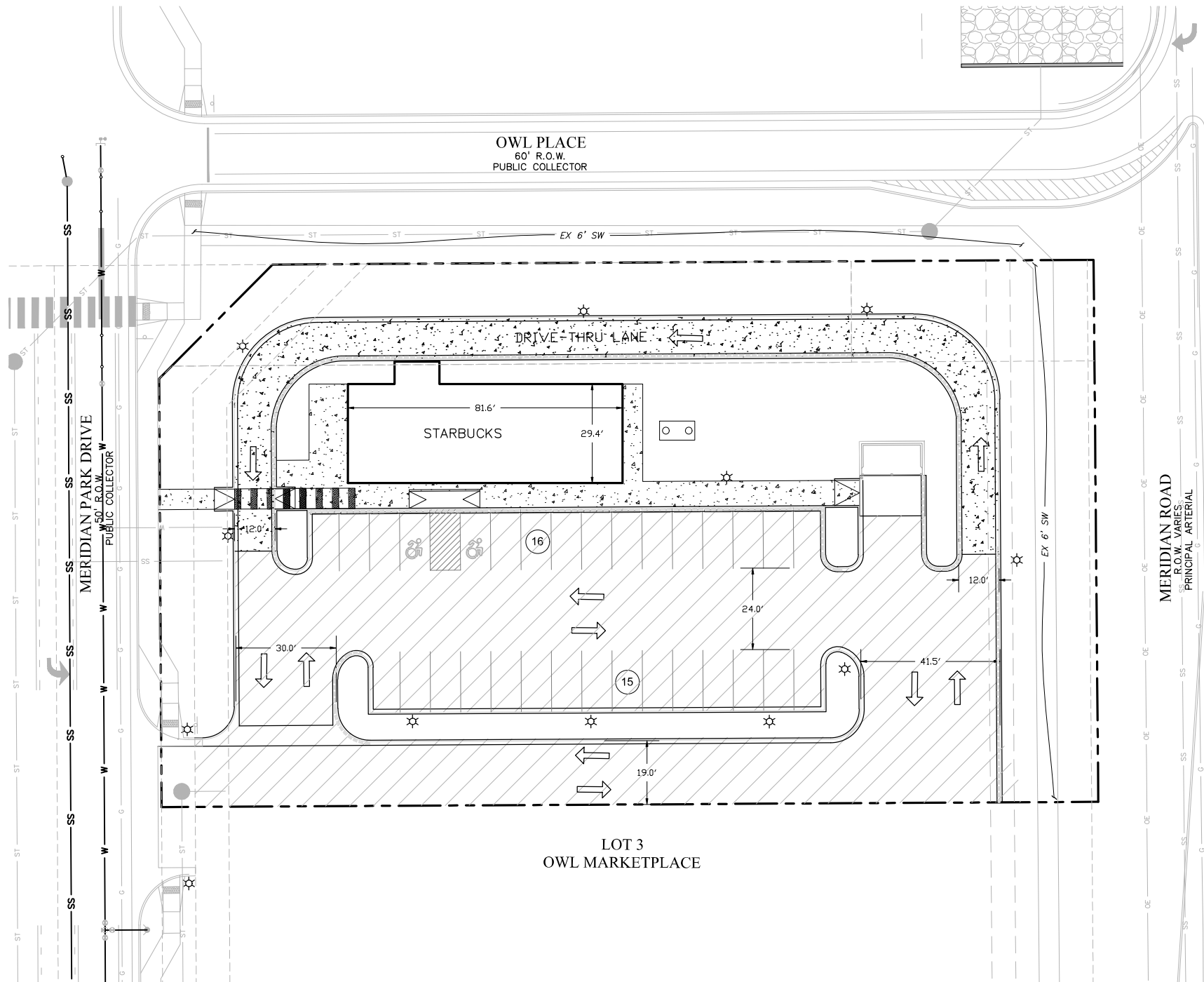
DRAWING SCALE:
HORIZONTAL: N/A
VERTICAL: N/A

COVER SHEET

PROJECT NO. 21611-03CSCV
DRAWING NO.

C1

SHEET: 1 OF 10



- OR AS DIRECTED BY
GEOTECHNICAL/
PAVING REPORT
WHICHEVER IS GREATER
- LEGEND**
- PROPERTY LINE
 - ROW
 - EASEMENT/SETBACK LINE
 - ADA ACCESSIBLE ROUTE TO PUBLIC ROW
 - CONCRETE SIDEWALK, CURB AND GUTTER
(SEE SHEET 5 OF 10)
 - 6" REINFORCED CONCRETE PAVING
 - REGULAR DUTY ASPHALT
3" HMA ON 5" CLASS 6 ABC
 - FL
 - TYPE B CATCH C&G
 - TYPE B SPILL C&G
 - THERMOPLASTIC HANDICAP SYMBOL
 - DWA PER EPC STD.
 - TRAFFIC FLOW
 - SIGN
 - PARKING STALLS
 - PP SITE LIGHT
 - EX ST & SS MH

- ABBREVIATION**
- | | |
|------|---------------------------------|
| ADA | AMERICANS WITH DISABILITIES ACT |
| C&G | CURB AND GUTTER |
| DWA | DETECTABLE WARNING AREA |
| EOA | EDGE OF ASPHALT |
| EPC | EL PASO COUNTY |
| EX | EXISTING |
| FL | FLOWLINE |
| MH | MANHOLE |
| PED | PEDESTRIAN |
| PP | PROPOSED |
| ROW | RIGHT OF WAY |
| STD | STANDARD |
| ST | STORM SEWER |
| SS | SANITARY SEWER |
| SW | SIDEWALK |
| TELE | TELEPHONE |
| TYP | TYPICAL |
| WT | WATER |

NOT FOR CONSTRUCTION

EL PASO COUNTY PCD FILE NO: PPR-####

PREPARED BY:

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CONSTRUCTION PLANS FOR:
**LOT 4, OWL
MARKETPLACE**
EL PASO COUNTY, COLORADO

ISSUE	DATE
INITIAL ISSUE	08/13/2024
DESIGNED BY:	KGV
DRAWN BY:	CGH
CHECKED BY:	TDM
FILE NAME:	21611-03-04ST1

PREPARED UNDER MY DIRECT
SUPERVISION FOR AND ON BEHALF
OF DREXEL, BARRELL & CO.

DRAWING SCALE:
HORIZONTAL: 1"=20'
VERTICAL: N/A

SITE PLAN

PROJECT NO. 21611-03CSCV
DRAWING NO.

C4

SHEET: 4 OF 10