



**Wooten Engineering**

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November 2, 2021

Mr. Nilo Salgado-Fernandez, P.E.  
Transportation Engineer  
City of Albuquerque  
600 2nd Street NW, 1st Floor  
Albuquerque, NM 87102

**VIA E-Mail:** [nsalgado-fernandez@cabq.gov](mailto:nsalgado-fernandez@cabq.gov)

RE: Proposed Dutch Bros located at the NEQ of Paseo Del Norte and Universe (B10-D003I),  
Queueing Analysis for the Proposed Drive-Thru Lane

Dear Mr. Salgado-Fernandez:

Wooten Engineering, has completed research for the subject queueing analysis. The project consists of a new 1,000 square-foot Dutch Bros Coffee located at the northeast quadrant of Paseo Del Norte and Universe in Albuquerque, NM. The proposed Site Plan is attached for reference and the results are presented below.

#### Requirements of the IDO

Per the attached Site Plan, we are proposing 25 vehicle queueing spaces in the drive-thru, which is over double the quantity required by the recently updated IDO which requires a minimum of 12 queueing spaces. The prior requirement for drive-thru queueing was 6 vehicles.

#### Dutch Bros Operations

Dutch Bros (DB) does not offer an electronic menu board ordering system and currently only offers person to person ordering. DB has a phone app available which gives full access to the menu and ultimately lessens the learning curve of the customers during the ordering process.

The number of employees manning the drive-thru lane varies and increases as the number of vehicles in the drive-thru lane increases. DB has a goal of processing 20 vehicles (orders) in 12 minutes which equates to an average of 100 vehicles per hour. In addition, Dutch Bros staff will be available to utilize their standard blue cones to redirect traffic in the event traffic starts to back up into the main access driveway. In the near term and until the site to the north develops, it is recommended that DB re-route traffic so that overflow queueing will occur eastward in the main access driveway rather than allowing traffic to queue into Universe Blvd. When the property to the north develops, DB will be able to re-route some of the backup northward if it occurs. Ultimately, Dutch Bros is responsible for operations and shall always maintain traffic flow.

#### Comparison to other Facilities

As mentioned above, we are proposing 25 vehicle queueing spaces in the drive-thru lane for the proposed DB. Below is a table of the drive-thru queueing provided for other fast-food restaurants in Albuquerque as well as existing Dutch Bros locations throughout the region. It should be noted that this particular location is providing more drive-thru lane queueing than any of these facilities, including the Chik-Fil-A located at Paseo Del Norte and San Pedro which is one of the busiest fast-food restaurants in the Albuquerque area.

#### Location

#### # of Drive Thru Queueing Spaces

Chik-Fil-A at PDN/San Pedro	18 cars
Multiple Starbucks Locations in ABQ	Average +/-8 car
Dutch Bros ABQ – Coors	18 cars
Dutch Bros ABQ – Juan Tabo	13 cars
Dutch Bros Rio Rancho – Unser Blvd	13 cars
Dutch Bros Rio Rancho – NM 528	19 cars
Dutch Bros Denver CO – Arapahoe Rd	8 cars
Dutch Bros Denver CO – Union Blvd	5 cars
Dutch Bros Denver CO – 84 <sup>th</sup> Ave	10 cars
Dutch Bros Denver CO – Colfax Ave	7 cars
Dutch Bros Denver CO – S Parker Rd	12 cars
Dutch Bros Denver CO – 15431 104 <sup>th</sup> Ave	18 cars
Dutch Bros Denver CO – Peoria St	11 cars
Dutch Bros Denver CO – Iliff Ave	17 cars
Dutch Bros Phoenix AZ – Indian School Rd	8 cars
Dutch Bros Phoenix AZ – Hayden Rd	13 cars
Dutch Bros Phoenix AZ – Bell Rd	8 cars
Dutch Bros Tempe AZ – Mill Ave	5 cars
Dutch Bros Tempe AZ – Rural Rd #1	12 cars
Dutch Bros Tempe AZ – Rural Rd #2	6 cars
Dutch Bros Scottsdale AZ – Scottsdale Rd	8 cars
Dutch Bros Scottsdale AZ – N Scottsdale Rd	20 cars

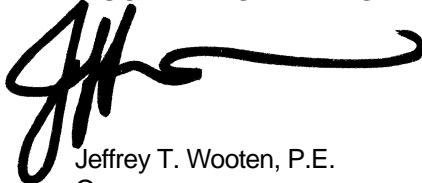
## Summary

- A Drive-Thru Lane Queueing Analysis is not an exact science and is dependent on many factors such as demographics and speed of order processing.
- This Dutch Bros location is providing 25 vehicle queueing spaces in the drive-thru which is much greater than any other location in the region. This is also over double the quantity required by the IDO.
- Dutch Bros does not offer indoor dining and they pride themselves on managing their drive-thru operations. This not only minimizes potential traffic issues; it also keeps their customers happy and ensures repeat business.
- The Dutch Bros phone app allows customers to peruse the menu before ordering which helps to minimize the customer's learning curve.
- This Dutch Bros facility may be very busy upon Grand Opening but traffic will quickly normalize just like at all other locations.
- Traffic can be re-routed around the site if necessary to keep traffic from backing up into Universe Blvd. If traffic issues persist, Dutch Bros should hire a Traffic Engineer to review the situation and recommend alternatives. Ultimately, Dutch Bros is responsible for operations and shall always maintain traffic flow.

If you have any questions or need additional information regarding this matter, please do not hesitate to contact me.

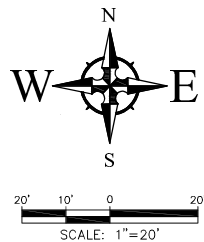
Respectfully submitted,

**WOOTEN ENGINEERING**



Jeffrey T. Wooten, P.E.  
Owner



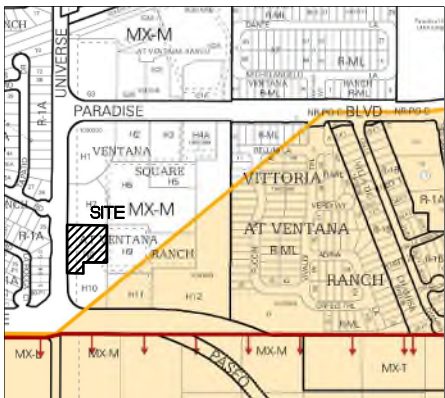


PARKING CALCULATIONS		
BUILDING AREA:		AREA (SQUARE FEET)
RESTAURANT		+/- 950 SF
OUTDOOR DINING		+/- 400 SF
PARKING REQUIREMENTS:		REQUIRED PROVIDED
RESTAURANT (8/1,000 SF)	8 spaces	
OUTDOOR DINING (5/1,000 SF)	2 spaces	
TOTAL	10 spaces	13 spaces
DRIVE-THRU QUEUEING		REQUIRED PROVIDED
RESTAURANT	12 spaces	25 spaces
		REQUIRED PROVIDED
HANDICAP PARKING	1 spaces	2 spaces
MOTORCYCLE PARKING	1 spaces	2 spaces
BICYCLE PARKING	3 spaces	3 spaces

GENERAL NOTES (REQUIRED INFORMATION)

Site: 1.1064 Acres  
Zoning: MX-M (Mixed Use Medium Density)  
Proposed Use: Restaurant w/ Drive-Thru  
Building Area: ±950 SF  
Building Height: Maximum Allowed = 45'; Proposed 24'  
Building Setback: Per MX-M Zone

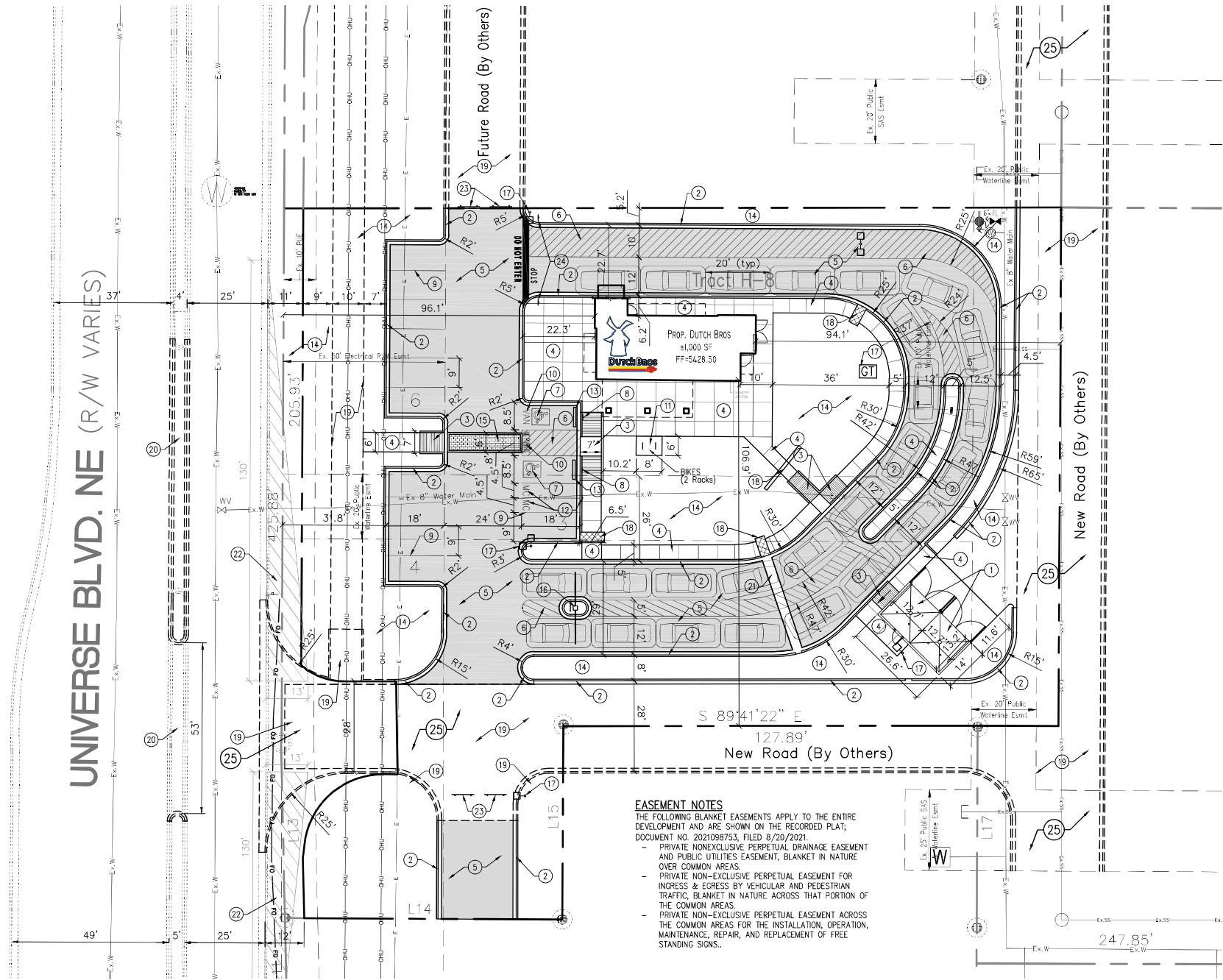
Allowed: Actual:  
Front: 5' 96.1'  
Side: 0' 22.7'  
Side: 0' 106.9'  
Rear: 15' 94.9'



**VICINITY MAP**  
**LEGAL DESCRIPTION:**  
Tract H-8, Ventana Square at Ventana Ranch, 1.1064 Acres.

#### KEYED NOTES

- PROPOSED TRASH ENCLOSURE AND STORAGE AREA. TRASH ENCLOSURE TO COMPLY WITH MINIMUM COA SOLID WASTE STANDARDS. REF. ARCHITECTURAL PLANS FOR DETAILS.
- INSTALL MEDIAN CURB/GUTTER (6" HIGH) PER COA STD DWG 2415B.
- INSTALL PARALLEL CURB RAMP PER COA STD DWGS 2440-2448.
- INSTALL CONCRETE SIDEWALK PER COA STD DWG 2430.
- INSTALL NMDOT SP-IV ASPHALT PAVEMENT PER GEOTECHNICAL REPORT RECOMMENDATIONS. PARKING SPACES CAN BE ASSUMED TO BE 'LOW TRAFFIC FREQUENCY'. ALL OTHER PAVED AREAS SHALL BE CONSIDERED 'MEDIUM TRAFFIC FREQUENCY'. FOR THE TRASH ENCLOSURE PAD AND OTHER CONCRETE PAVEMENT, USE A 6-INCH THICK 4,000 PSI PCC CONCRETE OVER A 4-INCH AGGREGATE BASE COURSE.
- INSTALL 4" WIDE PAINT STRIPES AT 45° ANGLE TO PARKING STRIPES OR DRIVEWAY, SPACED AT 1'-6" (WHITE PAINT IN PARKING LOT, BLUE PAINT IN ACCESSIBLE PARKING AREAS). MIN. TWO COATS.
- PAINTED INTERNATIONAL WHEELCHAIR SYMBOL (BLUE) PER ADA STANDARDS. MIN. TWO COATS. INDICATE VAN ONLY SPACE AS SHOWN ON PLAN.
- INSTALL H/C SIGNAGE PER DETAIL, SHEET C-101. ADD VAN ACCESSIBLE SIGNAGE WHERE NOTED. SIGNAGE SHALL BE MOUNTED TO BUILDING. H/C SIGN MUST INCLUDE LANGUAGE PER 66-7-352.4C NMSA 1978 "VIOLATORS ARE SUBJECT TO A FINE AND/OR TOWING." REF DETAIL ON SHEET C-101.
- INSTALL 4" WIDE PAINT STRIPES (WHITE) FOR ALL PARKING SPACES. MIN. TWO COATS.
- PAINT WORDS 'NO PARKING' &/OR 'VAN' WITH LETTERS AT LEAST ONE FOOT HIGH AND 2 INCHES WIDE. MIN. TWO COATS.
- INSTALL BIKE RACK PER DETAIL ON SHEET C-101. TWO BIKE RACKS FOR THREE (3) SPACES MINIMUM.
- MOTORCYCLE PARKING; 2 SPACES. ADD PAINT LABEL (2 COATS) AND SIGNAGE PER COA CODE. SIGN DETAIL ON SHEET C-101.
- INSTALL PRE-CAST WHEEL STOP PER DETAIL, SHEET C-101.
- LANDSCAPED AREA. REF. LANDSCAPE PLAN.
- INSTALL 6' WIDE COLORED / TEXTURED CONCRETE PEDESTRIAN CROSSING. CONCRETE PAVEMENT SHALL BE 6" THICK 3,500 PSI MINIMUM. REF. DETAIL, SHEET C-101.
- INSTALL DOUBLE SIDED DUTCH BROS VERTICAL CLEARANCE SIGN PER DETAIL SHEET C-101.
- LIGHT POLE AND LED FIXTURE. REF SHEET E001.
- INSTALL 24" WIDE SIDEWALK CULVERT PER COA STD DWG 2236. EXTEND 12" BEYOND SIDEWALK.
- ADJACENT SHARED ACCESS ROADWAYS, WHEELCHAIR RAMPS, AND MULTI-USE TRAIL BY OTHERS.
- EXISTING MEDIAN OPENING TO BE RELOCATED BY OTHERS (REF. CPN 670982).
- INSTALL 3' WIDE VALLEY GUTTER. REF SHEET C-200.
- 13'X130' CLEAR SIGHT TRIANGLE. LANDSCAPING, FENCING, AND SIGNAGE WILL NOT INTERFERE WITH CLEAR SIGHT REQUIREMENTS. THEREFORE, SIGNS, WALLS, TREES, AND SHRUBBERY BETWEEN 3 AND 8 FEET TALL (AS MEASURED FROM THE GUTTER PAN) WILL NOT BE ACCEPTABLE IN THE CLEAR SIGHT TRIANGLE.
- INSTALL TYPE 3 BARRICADE PER COA STD DWG 2803. IF ADJACENT DEVELOPMENT IS COMPLETED, BARRICADE IS NOT NEEDED.
- INSTALL 'DO NOT ENTER' SIGN ON EACH POLE AT DRIVE-THRU EXIT PER DETAIL ON SHEET C-101.
- NOTE THAT THE MAIN COMMON ACCESS DRIVEWAYS MUST BE INSTALLED (CPN 670982) AND ACCEPTED BY THE CITY BEFORE A CERTIFICATE OF OCCUPANCY WILL BE ISSUED.



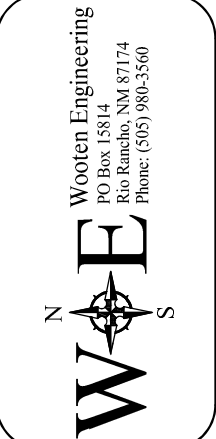
NO WORK SHALL BE PERFORMED IN THE PUBLIC RIGHT-OF-WAY WITHOUT AN APPROVED WORK ORDER OR EXCAVATION PERMIT.

ALL BROKEN OR CRACKED SIDEWALK AND CURB AND GUTTER MUST BE REPLACED WITH NEW SIDEWALK AND STANDARD CURB AND GUTTER PER COA STD DWGS 2415A & 2430.

**EASEMENT NOTES**  
THE FOLLOWING BLANKET EASEMENTS APPLY TO THE ENTIRE DEVELOPMENT AND ARE SHOWN ON THE RECORDED PLAT; DOCUMENT NO. 2021098753, FILED 8/20/2021.  
- PRIVATE NON-EXCLUSIVE PERPETUAL DRAINAGE EASEMENT AND PUBLIC UTILITIES EASEMENT, BLANKET IN NATURE OVER COMMON AREAS.  
- PRIVATE NON-EXCLUSIVE PERPETUAL EASEMENT FOR INGRESS & EGRESS BY VEHICULAR AND PEDESTRIAN TRAFFIC, BLANKET IN NATURE ACROSS THAT PORTION OF THE COMMON AREAS.  
- PRIVATE NON-EXCLUSIVE PERPETUAL EASEMENT ACROSS THE COMMON AREAS FOR THE INSTALLATION, OPERATION, MAINTENANCE, REPAIR, AND REPLACEMENT OF FREE STANDING SIGNS.

BENCH MARK  
ACS MONUMENT 13-B10  
PUB. EL=5424.81 NAVD 1988

NO.	DATE	REMARKS	BY
DESIGN			
REVISIONS			
DESIGNED BY: JW			
DRAWN BY: RG			
CHECKED BY: JW			
DATE: July 2021			
DATE: July 2021			
JOB NO.: 2020057			
DATE: July 2021			



Dutch Bros  
NEQ Paseo Del Norte & Universe  
Albuquerque, NM 87114  
Site Plan

C-100