

CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Director



Mayor Timothy M. Keller

November 22, 2023

Fred C. Arfman, P.E.
Isaacson & Arfman, P.A.
128 Monroe St. N.E
Albuquerque, NM 87108

RE: Dutch Brothers - Juan Tabo
Permanent C.O. - Accepted
Engineer's Certification Date: 11/17/23
Engineer's Stamp Date: 10/24/22
Hydrology File: H21D004B

Dear Mr. Arfman:

PO Box 1293

Based on the Certification received 11/20/2023 and site visit on 11/21/2023, this letter serves as a "green tag" from Hydrology Section for a Permanent Certificate of Occupancy to be issued by the Building and Safety Division.

Albuquerque

If you have any questions, please contact me at 924-3995 or rbrissette@cabq.gov.

Sincerely,

NM 87103

www.cabq.gov

Renée C. Brissette, P.E. CFM
Senior Engineer, Hydrology
Planning Department

DATE SUBMITTED: 11/17/2023



DRAINAGE CERTIFICATION

I, Fred C. Arfman, NMPE 7322, of the firm Isaacson & Arfman, Inc., hereby certify that this project has been graded and will drain in substantial compliance with and in accordance with the design intent of the approved plan dated 11/24/2022. The record information edited onto the original design document has been obtained by Brian Martinez, NMPS 18374, of the firm Cartesian Surveying, Inc. I further certify that I have personally visited the project site on Nov. 06, 2023 and have determined by visual inspection that the survey data provided is representative of actual site conditions and is true and correct to the best of my knowledge and belief. This certification is submitted in support of a request for Permanent Certificate of Occupancy.

The record information presented hereon is not necessarily complete and intended only to verify substantial compliance of the grading and drainage aspects of this project. Those relying on this record document are advised to obtain independent verification of its accuracy before using it for any other purpose.

Fred C. Arfman, PE NMPE 7322

Date 11-17-23



S.O.19 : NOTICE TO CONTRACTORS

PRIVATE DRAINAGE FACILITIES WITHIN CITY RIGHT-OF-WAY

- Build sidewalk culvert per COA STD DWG 2236.
- Contact Storm Drain Maintenance at (505) 857-8033 to schedule a meeting prior to forming.
- An excavation permit will be required before beginning any work within City Right-Of-Way.
- All work on this project shall be performed in accordance with applicable federal, state and local laws, rules and regulations concerning construction safety and health.
- Two working days prior to any excavation, the contractor must contact **New Mexico One Call, dial "811"** (or (505) 260-1990) for the location of existing utilities.
- Prior to construction, the contractor shall excavate and verify the locations of all obstructions. Should a conflict exist, the contractor shall notify the engineer so that the conflict can be resolved with a minimum amount of delay.
- Backfill compaction shall be according to traffic/street use.
- Maintenance of the facility shall be the responsibility of the owner of the property being served.
- Work on arterial streets may be required on a 24-hour basis.
- Contractor must contact Storm Drain Maintenance at (505) 857-8033 to schedule a construction inspection. For excavating and barricading inspections, contact Construction Coordination at (505) 924-3416.

GENERAL CALCULATIONS

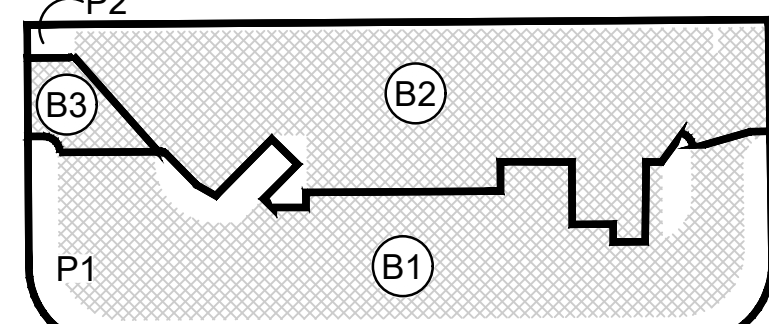
CALCULATIONS: 2513 Dutch Bros. Coffee - Juan Tabo : 10/17/2022									
Based on Drainage Design Criteria for City of Albuquerque Section 22.2, DPM, Vol 2, dated Jan., 1993									
100-YEAR, 6-HOUR CALCULATIONS									
AREA OF SITE:		23119		SF		=		0.53 ACRE	
100-year, 6-hour									
HISTORIC FLOWS:				DEVELOPED FLOWS:				EXCESS PRECIP:	
		Treatment SF	%			Treatment SF	%	Precip. Zone	4
Area A	=	0	0%	Area A	=	0	0%	E _A	= 0.80
Area B	=	1156	5%	Area B	=	4554	20%	E _B	= 1.08
Area C	=	0	0%	Area C	=	0	0%	E _C	= 1.46
Area D	=	21963	95%	Area D	=	18565	80%	E _D	= 2.64
Total Area	=	23119	100%	Total Area	=	23119	100%		
On-Site Weighted Excess Precipitation (100-Year, 6-Hour Storm)									
Weighted E =		$\frac{E_A A_A + E_B A_B + E_C A_C + E_D A_D}{A_A + A_B + A_C + A_D}$							
Historic E	=	2.56 in.	Developed E	=	2.33 in.				
On-Site Volume of Runoff: V ₃₆₀ = E*A / 12									
Historic V ₃₆₀	=	4936 CF	Developed V ₃₆₀	=	4494 CF				
On-Site Peak Discharge Rate: Q _p = Q _{pA} A _A +Q _{pB} A _B +Q _{pC} A _C +Q _{pD} A _D / 43,560									
For Precipitation Zone 4									
Q _{pA}	=	2.20	Q _{pC}	=	3.73				
Q _{pB}	=	2.92	Q _{pD}	=	5.25				
Historic Q _p	=	2.7 CFS	Developed Q _p	=	2.5 CFS				

KEYED NOTES

- NO WORK SHALL BE PERFORMED IN THE PUBLIC R/W WITHOUT AN APPROVED WORK ORDER OR EXCAVATION PERMIT.
- CONSTRUCT NEW PAVING AT ELEVATIONS SHOWN.
- CONSTRUCT ADA COMPLIANT PARKING SPACES AND ACCESS AISLES AT ELEVATIONS SHOWN.
- CONSTRUCT ADA COMPLIANT CURB RAMP AT ELEVATIONS SHOWN.
- CONSTRUCT ADA COMPLIANT PEDESTRIAN ACCESS WALK AT ELEVATIONS SHOWN.
- 6" HIGH CURB / TURNED DOWN WALK. TYPICAL. NOTE: TO ENSURE READABILITY, NOT ALL CURBS ARE LABELED WITH BOTH FLOWLINE AND TOP OF CURB ELEVATION. ALL SPOT ELEVATIONS SHOWN WITHIN GUTTER ARE FLOWLINE ELEVATION. ADD CURB HEIGHT FOR ADJACENT TOP OF CURB ELEVATION. SEE PAVING PLAN AND DETAILS FOR CURB TYPES AND ADDITIONAL INFORMATION.
- SIDEWALK GRADE BREAK, NORTH SIDE @ 5% MAX FOR ADA COMPLIANCE. SOUTH SIDE SLOPES DOWN TO DUMPSTER AREA AT GRADES SHOWN (NOT ADA COMPLIANT @ 1:132). INSTALL GUARDRAIL.
- CONCENTRATED ROOF DISCHARGE LOCATION. EXTEND AND DAYLIGHT TO FACE OF CURB.
- MAIN CONCENTRATED ROOF DISCHARGE LOCATION. CONSTRUCT 12" BOTTOM WIDTH COVERED SIDEWALK CULVERT TO PASS ROOF DISCHARGE TO ASPHALT PAVEMENT.
- PROVIDE 18" WIDE OPENING IN CURB TO PASS FLOW.
- CONSTRUCT 18" BOTTOM WIDTH COVERED CONCRETE SIDEWALK CULVERT PER COA STD. DWG. 2236.
- CONSTRUCT STORMWATER QUALITY RETENTION POND (SWQV) AT ELEVATIONS SHOWN. TYPICAL. SLOPE = 2:1 ARMORED WITH 8" THICK X 4" AVG. DIAMETER ANGULAR ROCK OVER PERMANENT EROSION CONTROL MATERIAL. ALL STORMWATER QUALITY PONDING VOLUMES WILL BE VERIFIED AS PART OF AS-BUILT CERTIFICATION. PONDS WHICH DO NOT PROVIDE THE REQUIRED VOLUME WILL BE CORRECTED AT CONTRACTOR'S EXPENSE.
- CONCRETE DUMPSTER PAD SLOPED TO INTERIOR DRAIN INLET(S). SEE UTILITY PLAN FOR CONTINUATION.
- INSTALL ANGULAR ROCK EROSION PROTECTION TO LIMITS HATCHED.
- EROSION PROTECTION MUST BE PLACED TO PERMIT STORMWATER TO PASS SMOOTHLY, HAND PLACE AT CURB OPENINGS AND SWALES TO ENSURE RUNOFF CAN BE CAPTURED AND CONVEYED PROPERLY.
- CONSTRUCT GARDEN RETAINING WALL(S) (RETAINING < 18") TO ACHIEVE GRADE DIFFERENCE SHOWN. TOP OF GRADE PROVIDED ON BOTH SIDES. DESIGN BY OTHERS.
- DRIVE-THROUGH LANES ADJACENT TO PUBLIC RIGHTS-OF-WAY ARE REQUIRED TO HAVE A VEGETATIVE SCREEN OR WALL CONSTRUCTED OF A MATERIAL SIMILAR IN TEXTURE, APPEARANCE, AND COLOR TO THE PRIMARY BUILDING (EXCLUDING EXPOSED CMU BLOCK) AT LEAST 3' BUT NOT MORE THAN 4' TALL. INTEGRATE WITH GARDEN RETAINING WALLS WHERE REQUIRED.

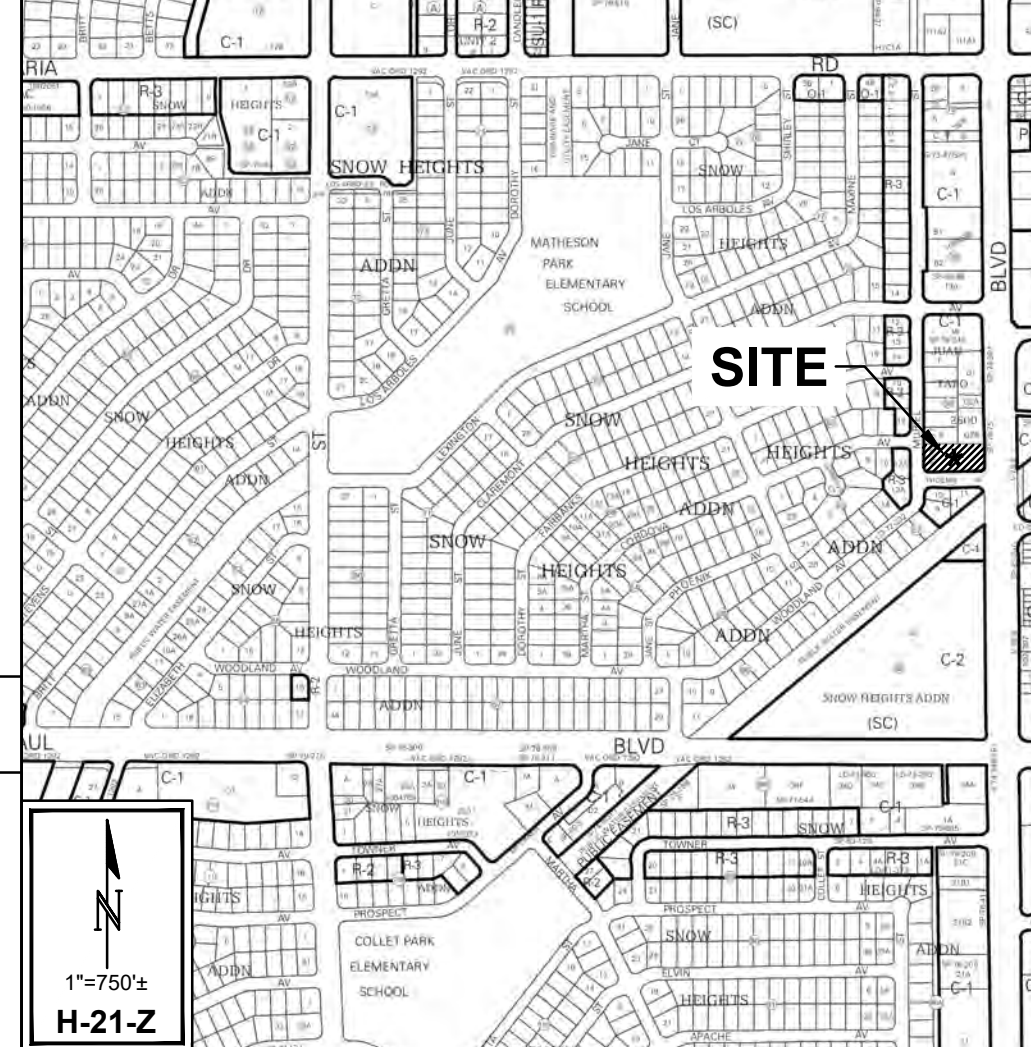
STORMWATER QUALITY PONDS

FOR REDEVELOPMENT SITES, THE CABQ STORMWATER QUALITY VOLUME (SWQV) IS BASED ON THE 80TH PERCENTILE STORM EVENT OR 0.26".



Basin	Area	Type	% D	SWQV REQ'D
B1	12,152 SF	8,491 SF	70%	184 CF
B2	10,193 SF	9,295 SF	91%	201 CF
B3	774 SF	774 SF	100%	17 CF
23,119 SF		18,560 SF	80.3%	402 CF

VICINITY MAP H-21



POND P1
VOLUME = 228 CF

POND P2
VOLUME = 62 CF

TOTAL VOLUME = 290 CF

TOTAL SWQV REQUIRED = 402 CF
TOTAL SWQV PROVIDED = 290 CF

A PAYMENT-IN-LIEU WAIVER IS REQUESTED FOR THE 112 CF (112 CF * \$8/CF = \$896.00) OF STORMWATER QUALITY VOLUME NOT RETAINED DUE TO THE LIMITED SIZE OF THE PROPERTY.

PROJECT INFORMATION

PROPERTY: THE SITE IS A FULLY DEVELOPED PROPERTY LOCATED WITHIN C.O.A. VICINITY MAP H-21-2. THE SITE IS BOUND TO THE EAST BY JUAN TABO BLVD., TO THE WEST BY MURIEL ST. NE, TO THE NORTH DEVELOPED COMMERCIAL AND TO THE SOUTH BY PHOENIX AV. N.E.

PROPOSED IMPROVEMENTS: THE PROPOSED IMPROVEMENTS INCLUDE DEMOLITION OF THE EXISTING SITE. A NEW COMMERCIAL BUILDING WITH ASSOCIATED ASPHALT PAVED ACCESS, PARKING, AND LANDSCAPING.

LEGAL: TRACT "H" JUAN TABO SUBDIVISION

ADDRESS: 2501 JUAN TABO NE

BENCHMARK: ELEVATIONS ARE BASED ON CITY OF ALBUQUERQUE STATION No. "10-H22", HAVING AN ELEVATION OF 5013.801, NAVD 1988.

OFF-SITE: NO OFF-SITE DRAINAGE AFFECTS THIS PROPERTY.

FLOOD HAZARD: PER FEMA FIRM MAP #35001C0357H, DATED 8-16-2012, THE SITE IS LOCATED WITHIN FLOODZONE "X" DESIGNATED AS AREAS DETERMINED TO BE OUTSIDE 500-YEAR FLOODPLAIN.

DRAINAGE PLAN CONCEPT: THE SITE WILL SURFACE FLOW FROM THE EAST TO THE WEST TO FREE DISCHARGE TO MURIEL ST. NE. PROPOSED SITE DISCHARGE BASED ON 15% LAND TREATMENT "B" AND 80% LAND TREATMENT "D" REPRESENTS A REDUCTION IN OVERALL DISCHARGE FROM THE PREVIOUS DEVELOPMENT. STORMWATER QUALITY PONDING WILL BE PROVIDED WITHIN THE PERIMETER LANDSCAPING.

SURVEYOR: ANTHONY L. HARRIS, N.M.P.S. #11463
HARRIS SURVEYING, INC.
1308 CIELO VISTA DEL SUR, NW
CORRALES, NEW MEXICO 87048

A.D.A. COMPLIANCE

SIDEWALK(S): LONGITUDINAL SLOPE SHALL NOT EXCEED 20:1 (5%).
TARGET CROSS SLOPE = 1% TO 1.5%.
CROSS SLOPE SHALL NOT EXCEED 2%

ACCESSIBLE RAMP(S): TARGET LONGITUDINAL SLOPE = 7%.
LONGITUDINAL SLOPE SHALL NOT EXCEED 12:1 (8.33%).
TARGET CROSS SLOPE = 1% TO 1.5%.
CROSS SLOPE SHALL NOT EXCEED 2%

ACCESSIBLE PARKING: TARGET SLOPE = 1% TO 1.5%.
SLOPE SHALL NOT EXCEED 2% SLOPE IN ANY DIRECTION

LEGEND

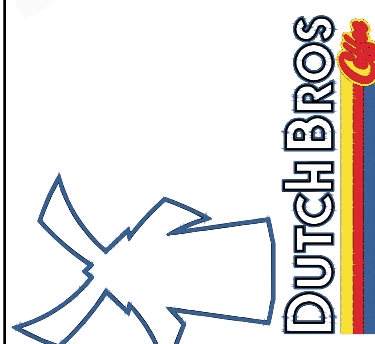
- EXISTING CONTOUR
- PROPOSED 1.0' CONTOUR
- PROPOSED SPOT ELEVATION
- FLOW DIRECTION
- FINISH FLOOR ELEVATION

Isaacson & Arfman, Inc.
Civil Engineering Consultants



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FRED C. ARFMAN
NEW MEXICO
7322
Engineer
10/24/2022



Dutch Bros. Coffee
2501 Juan Tabo NE
Accelerated
DEVELOPMENT SERVICES

CONSTRUCTION
DOCUMENT REVIEW
ISSUE: 11-21-22
PROJECT NUMBER: IA 2513
FILE: 11-21-22
DRAWN BY: 11-21-22
CHECKED BY: 11-21-22
DATE: 11-21-22

No. 1
Date 11-21-22
Description Entry drive
SHEET TITLE

GRADING & DRAINAGE PLAN

SHEET NUMBER

CG-101