

CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Director



Mayor Timothy M. Keller

October 3, 2024

Shawn Biazar, P.E.
SBS Construction and Engineering, LLC
7632 William Moyers Avenue, NE
Albuquerque, NM 87114

RE: 845 Juan Tabo NE
Grading and Drainage Plan
Hydrology File: K21D019

Dear Mr. Biazar,

Based upon the information provided in your submittal received 09/27/2024, the Grading and Drainage plan is **not approved** for Building Permit / Grading Permit. The following comments need to be addressed for the approval of the above referenced project.

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov

1. This site qualifies as redevelopment and is only required to retain runoff from the 80th percentile storm (Vol. = 0.26"*Imp.Area). To calculate the required SWQV, multiply the impervious area draining to the BMP by 0.26 inches for redevelopment sites.
2. Please show the Land Treatment (A, B, C, D) percentages for the existing and proposed development.
3. Please show the 100-yr 6-hr Weighted E, Volume, and Flow calculations for existing and Proposed development.
4. Please provide the SWQV calculations for each basin draining to each pond. The stormwater quality ponds need to be sized for the areas draining to them.
5. For trash enclosures serving food service developments, trash enclosures must demonstrate control of liquids from dumpster areas per DPM by containing runoff from the dumpster area, preventing outside drainage from entering the dumpster area, and discharging to the sanitary sewer. Per the DPM Section 6-12(D)(2), a berm around the pad may be required to ensure that stormwater runoff from the site will not mix with stormwater falling on the trash enclosure pad. Please show a berm or other means to prevent storm water from entering the dumpster area.
6. Pond Calculation Section – Pond C is not shown. Pond B is shown twice. The calculation is different for the middle Pond B Volume. 55000 cf for the middle Pond B does not match the other references. Total Pond Volume does not match the other calculated values. Please check these calculations and verify that they are matching the other volumes in the plan.
7. There is a conflict with Pond C and the existing transformer at the SE corner of the site. Please adjust Pond C to exclude the transformer from that area.

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If you have any questions, please contact me at 505-924-3314 or amontoya@cabq.gov.

PO Box 1293

Sincerely,

Albuquerque

Anthony Montoya, Jr., P.E.
Senior Engineer, Hydrology
Planning Department, Development Review Services

NM 87103

www.cabq.gov

Location
LOT B, BLOCK 124, PRINCESS JEANNE PARK ADDITION is located at 845 Juan Tabo Blvd., NE containing 0.7002 acre. See attached Vicinity Map K-21-Z for exact location.

Purpose

The purpose of this drainage report is to present a grading and drainage solution for new site and building improvements with this tract of land.

Existing Drainage Conditions

There was existing gas station on this site and fully developed with existing buildings, asphalt pavement, concrete pavement on most of this site. The site does not fall within a 100 year floodplain. No offsite flows enter this site. The site drains from South to North and drains into Lomas Blvd., NE.

Proposed Conditions and On-Site Drainage Management Plan

Under the proposed conditions, the runoff will drain into the proposed ponds and eventually drain into Lomas Blvd., NE via two proposed sidewalk culvert. We are proposing a new +/- 5400 sf building with a drive thru and new parking layout which will consist of removing existing building and all the site improvement and build the new building and parkings. This will not increase our site flow. The total site impervious area consist of 22,600 sf for the First Flush. We are proposing to pond the 90th Percentile/First Flush requirement which is 0.42 inches times the impervious area. Total retention volume provided within pond A, B and C is 1148.00 cf which by far exceeds the ponding volume requirement for First Flush 791.35 cf

FIRST FLUSH PONDING REQUIREMENT

IMPERVIOUS AREA = 22,600.00 SF
FIRST FLUSH VOL. REQ. = $0.42" \times 22,600.00 / 12 = 791.00$ CF

POND VOLUME REQUIRED

TOTAL PONDING VOLUME REQUIRED (90TH PERCENTILE/FIRST FLUSH) = 0.34 INCHES \times IMPERVIOUS AREA = $(0.42/12 \times 22,610.00) = 791.35$ CF

POND CALCULATION

TOTAL POND AREA PROVIDED =
PONDING CALCULATIONS:

POND A: AREA @ TOP = 640.00, AREA @ BOTTOM = 640.00
POND VOLUME = $(640.00+640.00)/2 \times 0.70' = 448.00$ CF

POND B: AREA @ TOP = 1100.00, AREA @ BOTTOM = 1100.00
POND VOLUME = $(1100+1100)/2 \times 0.50' = 550.00$ CF

POND C: AREA @ TOP = 1000.00, AREA @ BOTTOM = 1000.00
POND VOLUME = $(1000+1000)/2 \times 0.70' = 700.00$ CF

TOTAL POND VOLUME PROVIDED = $(448.00+550.00+700.00) = 1148.00$ CF

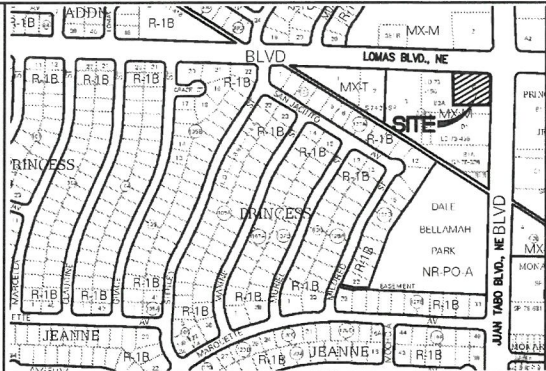
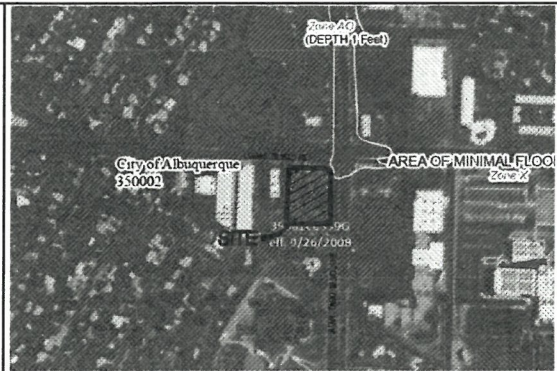
Private Drainage Facilities within City Right-of-Way Notice to Contractor

(Special Order 19 ~ "SO-19")

1. Build sidewalk culvert per COA STD DWG 2236.
2. Contact Storm Maintenance at (505) 857-8033 to schedule a meeting prior to forming.
3. An excavation permit will be required before beginning any work within City Right-Of-Way.
4. 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.
5. 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.
6. 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.
7. Backfill compaction shall be according to traffic/street use.
8. Maintenance of the facility shall be the responsibility of the owner of the property being served.
9. Work on arterial streets may be required on a 24-hour basis.
10. Contractor must contact Storm Maintenance at (505) 857-8033 to schedule a construction inspection. For excavating and barricading inspections, contact Construction Coordination at (505) 924-3416.

NOTICE TO CONTRACTORS

1. AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN BERNALILLO COUNTY RIGHT-OF-WAY.
2. ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED, EXCEPT AS OTHERWISE STATED OR PROVIDED HEREON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH BERNALILLO COUNTY STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.
3. TWO WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE, 765-1234, FOR LOCATION OF EXISTING UTILITIES.
4. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL CONSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
5. BACKFILL COMPACTION SHALL BE ACCORDING TO TRAFFIC/STREET USE.
6. MAINTENANCE OF THESE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY SERVED.
7. WORK ON ARTERIAL STREETS SHALL BE PERFORMED ON A 24-HOUR BASIS.



FIRM MAP:

35001C0359G

VICINITY MAP:

K-21-Z

LEGAL DESCRIPTION:

LOT B, BLOCK 124, PRINCESS JEANNE PARK ADD.

CONTAINING: 30,500.00 SF (0.7002 ACRE)

BENCHMARK

CITY BNCHMARK 14-J22, ELEVATION OF 5576.441 FEET ABOVE SEA LEVEL.

GENERAL NOTES:

1. CONTOUR INTERVAL IS HALF (1.00) FOOT.
2. ELEVATIONS ARE BASED ON CITY OF ALBUQUERQUE CONTROL STATION 14-J22, HAVING AN ELEVATION OF 5576.441 FEET ABOVE SEA LEVEL.
3. UTILITIES SHOWN HEREON ARE IN THEIR APPROXIMATE LOCATION BASED ONLY ON ABOVE GROUND EVIDENCE FOUND IN THE FIELD AND AS-BUILT INFORMATION PROVIDED BY THE CLIENT. UTILITIES SHOWN HEREON, WHETHER INDICATED AS ABANDONED OR NOT, SHALL BE VERIFIED BY OTHERS FOR EXACT LOCATION AND/ OR DEPTH PRIOR TO EXCAVATION OR DESIGN CON-SIDERATIONS.
4. THIS IS NOT A BOUNDARY SURVEY. BEARINGS ARE ASSUMED. DISTANCES AND FOUND PROPERTY CORNERS ARE FOR INFORMATIONAL PURPOSES ONLY.
5. SLOPES ARE AT 3:1 MAXIMUM.
6. ADD 5500 TO ALL PROPOSED SPOT ELEVATIONS.

LEGEND

5030	EXISTING CONTOUR (MAJOR)
	EXISTING CONTOUR (MINOR)
	BOUNDARY LINE
28.50	PROPOSED SPOT ELEVATION
X 5029.16	EXISTING GRADE
X 5028.65	EXISTING FLOWLINE ELEVATION
FL	
	PROPOSED RETAINING WALL
BC=89.08	BOTTOM OF CHANEL
TC=28.50	TOP OF CURB
TA=28.00	TOP OF ASPHALT
HP	HIGH POINT
86.65	AS-BUILT GRADES
85.47	
X 86.65	AS-BUILT SPOT ELEVATIONS

NOTES:

1. PROVIDE 24" SIDEWALK CULVERT PER CITY STD DWG 2236 (TACK WELD PLATE AT THE BOLT).
2. PROVIDE 24" CURB OPENING.
3. EXISTING RETAINING WALL.
4. REMOVE EXISTING DRIVEWAY AND INSTALL STANDARD CURB & GUTTER AND SIDEWALK PER C.O.A. STD DWG. 2415A AND 2430.
5. EXISTING BUS STOP.
6. EXISTING BUS STOP SIGN AND BENCH.
7. INSTALL A SEWER INLET AND TO BE CONNECTED TO SANITARY SEWER, SEE UTILITY PLAN.
8. EXISTING LIGHT POLE.
9. EXISTING POWER POLE.
10. PROVIDE +/-18" OF RETAINING WALL AS NEEDED FOR THE POND.
11. INSTALL 2-4" PVC STORM DRAIN PIPE.

SIDEWALK CULVERT/CONCRETE CHANNEL AND POND OPENING CALCULATIONS

24" Sidewalk Culvert 8" High Calculation Using Weir Equation

$Q = CLH^{1.5}$
 $H = 0.67', C = 2.95, L = 24" (2.00')$

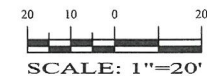
$2.95^{1.5} \times 24^{1.5} \times 0.67^{1.5} = 2.958^{1.5} \times 0.548418636$
 $Q = 3.236$ cfs

18" Wide With 8" High Concrete Channel Using Weir Equation

$Q = CLH^{1.5}$
 $H = 0.67', C = 2.95, L = 18" (1.50')$

$2.95^{1.5} \times 1.50^{1.5} \times 0.67^{1.5} = 2.958^{1.5} \times 0.548418636$
 $Q = 2.427$ cfs

GRAPHIC SCALE



REZA AFAGHPOUR
P.E. #11814

SBS CONSTRUCTION AND ENGINEERING, LLC

10209 SNOWFLAKE CT, NW
ALBUQUERQUE, NEW MEXICO 87114
(505)899-5370

**845 JUAN TABO BLVD., NE
GRADING AND DRAINAGE PLAN**

DRAWING:	DRAWN BY:	DATE:	SHEET #
202333.DWG	SH-B	09-27-2024	C 101

K21 D019