

Erosion and Sediment Control Plan (ESCP)

PONDING VOLUME REQUIREMENTS (90TH PERCENTILE/FIRST FLUSH)

VOLUME REQUIRED = 0.34 INCHES x IMPERVIOUS AREA =
(0.34/12 x 37,802.35) = 1,071.07 CF

PONDING VOLUME CALCULATION

TOTAL POND AREA PROVIDED =
PONDING CALCULATIONS:

POND A:
AREA @ ELEV. 5134.50 = 1,077.24 SF
AREA @ ELEV. 5131.50 = 94.02 SF
POND VOLUME=(1,077.24+94.02)/2*3.00=1,756.89 CF
TOTAL PONDING VOLUME PROVIDED = 1,756.89 CF

Location
TRACT A-2-B-2, Fountain Hills Subdivision is located at the northeast corner of Nunzio Avenue NW and Paradise Blvd., NW, containing 1.1941 acre. See attached portion of Vicinity Map C-12-Z for exact location.

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

Existing Drainage Conditions
This site falls within Master Drainage Plan for Fountain Hills under the City project number C12-D003B. This project falls within Basin B-1-A. The site currently drain from northwest to southeast side of the site to Vista Fuente Road and Nunzio Avenue NW.

Proposed Conditions and On-Site Drainage Management Plan
We are proposing to pond the 90th Percentile First Flush requirement (1,071.07 cf). Total retention volume provided (1,756.89 cf) exceeds the ponding requirement for First Flush (1,071.07 cf).

Calculations
City of Albuquerque, Development Process Manual, Section 22.2, Hydrology Section, was used for runoff calculations. See this plan for AHYMO input and Summary output files.

* ZONE 1	
* 100-YEAR, 6-HR STORM (UNDER EXISTING CONDITIONS)	
* START RAINFALL	TIME=0.0 TYPE=1 RAIN QUARTER=0.0 IN RAIN ONE=1.87 IN RAIN SIX=2.20 IN RAIN DAY=2.66 IN DT=0.03333 HR
* ON-SITE COMPUTE NM HYD	ID=1 HYD NO=101.0 AREA=0.002413 SQ MI PER A=100.00 PER B=0.00 PER C=0.00 PER D=0.00 TP=0.1333 HR MASS RAINFALL=-1
* 10-YEAR, 6-HR STORM (UNDER EXISTING CONDITIONS)	
* START RAINFALL	TIME=0.0 TYPE=1 RAIN QUARTER=0.0 IN RAIN ONE=1.25 IN RAIN SIX=1.47 IN RAIN DAY=1.77 IN DT=0.03333 HR
* ON-SITE COMPUTE NM HYD	ID=1 HYD NO=111.0 AREA=0.002413 SQ MI PER A=100.00 PER B=0.00 PER C=0.00 PER D=0.00 TP=0.1333 HR MASS RAINFALL=-1
* 100-YEAR, 6-HR STORM (UNDER PROPOSED CONDITIONS)	
* START RAINFALL	TIME=0.0 TYPE=1 RAIN QUARTER=0.0 IN RAIN ONE=1.87 IN RAIN SIX=2.20 IN RAIN DAY=2.66 IN DT=0.03333 HR
* ON-SITE COMPUTE NM HYD	ID=1 HYD NO=103.1 AREA=0.002413 SQ MI PER A=0.00 PER B=15.00 PER C=0.00 PER D=70.00 TP=0.1333 HR MASS RAINFALL=-1
* 10-YEAR, 6-HR STORM (UNDER PROPOSED CONDITIONS)	
* START RAINFALL	TIME=0.0 TYPE=1 RAIN QUARTER=0.0 IN RAIN ONE=1.25 IN RAIN SIX=1.47 IN RAIN DAY=1.77 IN DT=0.03333 HR
* ON-SITE COMPUTE NM HYD	ID=1 HYD NO=111.1 AREA=0.002413 SQ MI PER A=0.00 PER B=15.00 PER C=15.00 PER D=70.00 TP=0.1333 HR MASS RAINFALL=-1
* FINISH	

AHYMO PROGRAM SUMMARY TABLE (AHYMO_97) -
INPUT FILE = FUENTE.TXT

VERSION: 1997.02d RUN DATE (MON/DAY/YR) =12/01/2017
USER NO.= AHYMO-I-9702c01000R31-AH

COMMAND	HYDROGRAPH IDENTIFICATION	FROM ID NO.	TO ID NO.	AREA (SQ MI)	PEAK DISCHARGE (CFS)	RUNOFF VOLUME (AC-FT)	RUNOFF (INCHES)	TIME TO PEAK (HOURS)	CFS PER ACRE	PAGE = 1	NOTATION
START RAINFALL	TYPE= 1										TIME= RAIN= 2.200
COMPUTE NM HYD	101.00	-	1	.00241	2.01	.057	.43925	1.533	1.301		PER IMP= .00
START RAINFALL	TYPE= 1										TIME= RAIN= 1.470
COMPUTE NM HYD	111.00	-	1	.00241	.38	.011	.08264	1.533	.247		PER IMP= .00
START RAINFALL	TYPE= 1										TIME= RAIN= 2.200
COMPUTE NM HYD	103.10	-	1	.00241	5.87	TRW=39.50 BW=35.00 TF=33.50	1.62054	1.533	33.50		PER IMP= 70.00
START RAINFALL	TYPE= 1										TIME= RAIN= 2.200
COMPUTE NM HYD	111.10	-	1	.00241	3.64	.124	.96184	1.500	2.355		PER IMP= 70.00
FINISH											

- NOTICE TO CONTRACTORS
- AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY.
 - ALL WORK DETAILLED ON THESE PLANS TO BE PERFORMED, EXCEPT AS OTHERWISE STATED OR PROVIDED HEREON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH CITY OF ALBUQUERQUE INTERIM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1985.
 - TWO WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL FOR LOCATING SERVICE, 260-1990 OR "811", FOR LOCATION OF EXISTING UTILITIES.
 - 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.
 - BACKFILL COMPACTION SHALL BE ACCORDING TO TRAFFIC/STREET USE.
 - MAINTENANCE OF THESE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY SERVED.
 - WORK ON ARTERIAL STREETS SHALL BE PERFORMED ON A 24-HOUR BASIS.

APPROVALS	NAME	DATE
INSPECTOR		

LEGEND

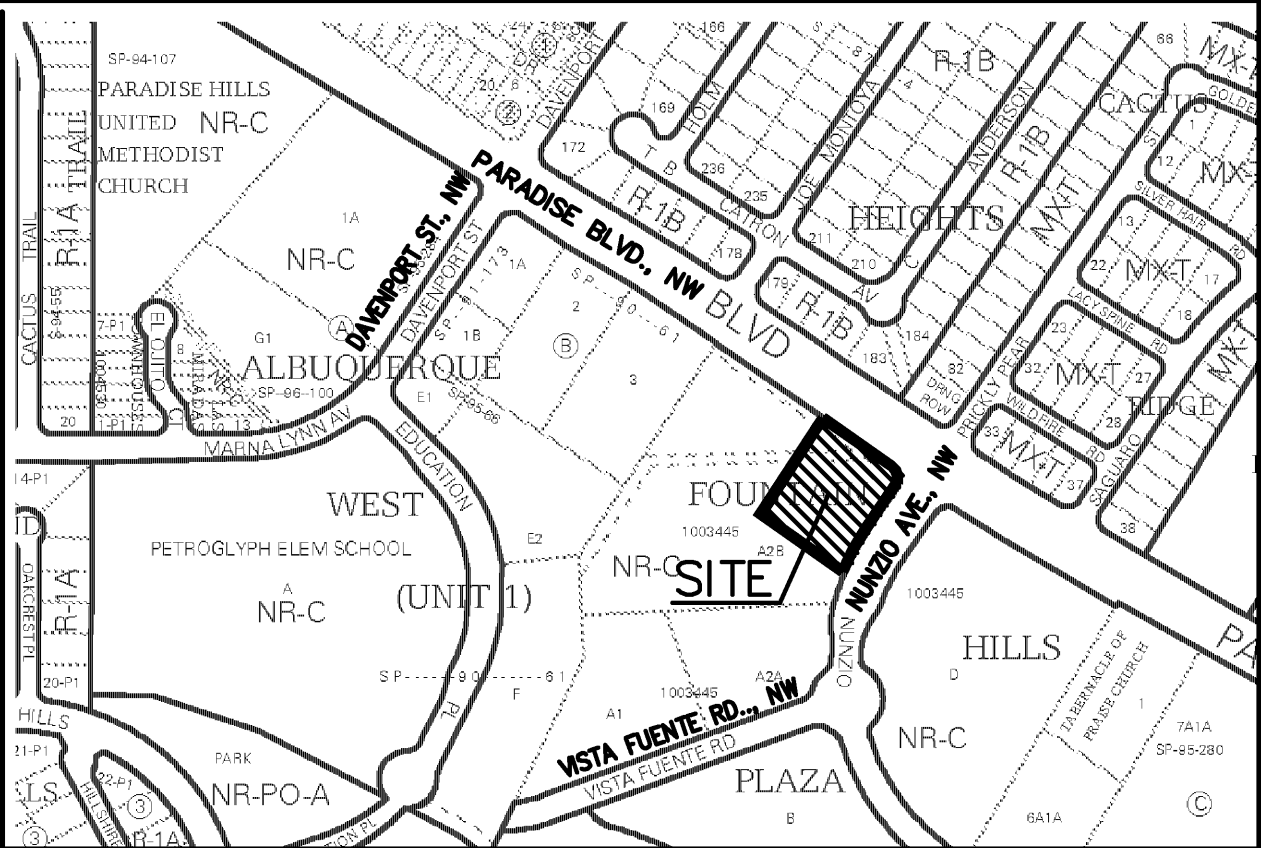
Wattle

Silt Fence

Construction Entrance

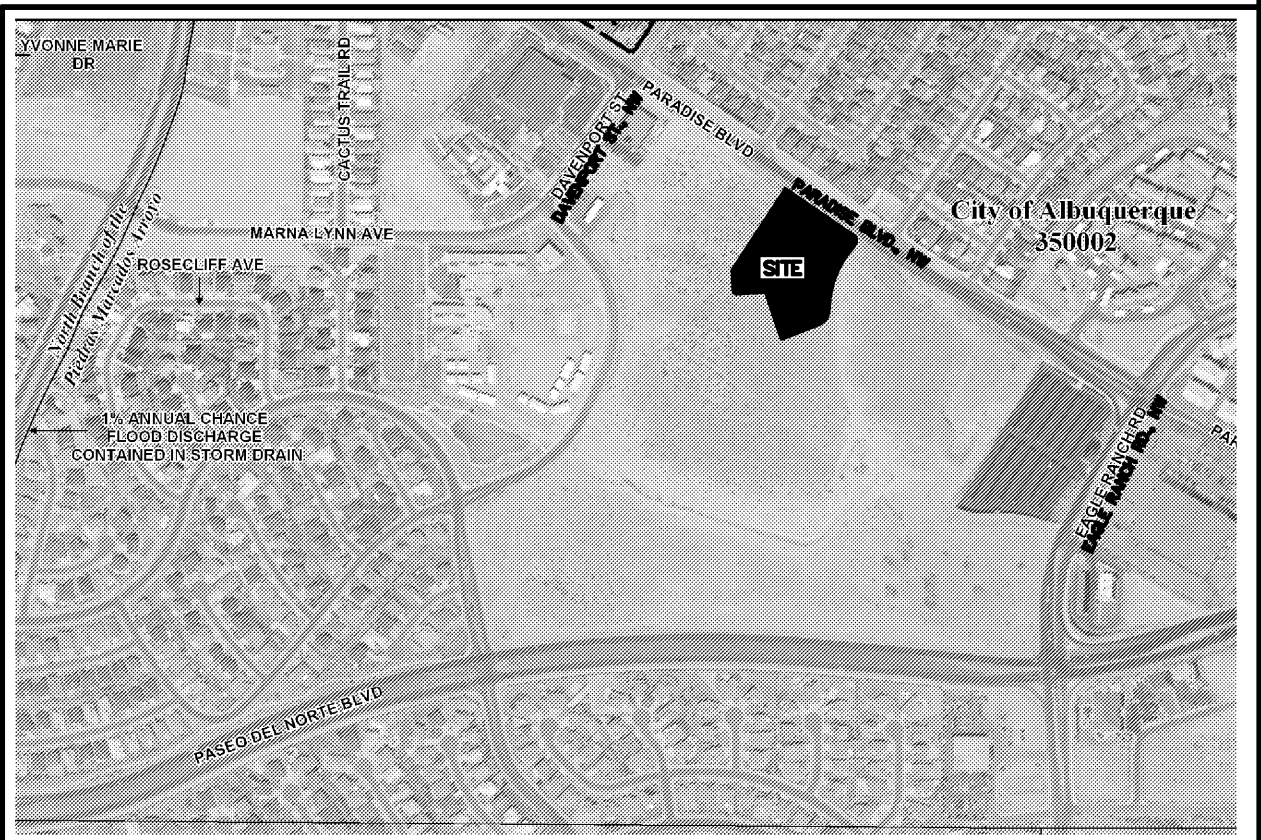
KEYED NOTES:

- 24" CURB OPENING.
- PROPOSED 24" SIDEWALK CULVERT.
- 24" CONCRETE VALLEY GUTTER.
- DEPRESSED LANDSCAPING ARE.
- PROPOSED 8" STORM DRAIN PIPE, SDR 35.
- 8" NYLOPLAST DRAIN, 7001-110-272.



VICINITY MAP:

C-12-Z



FIRM MAP:

EFFECTIVE DATE:

FM35001C0116G

09-06-2008

LEGAL DESCRIPTION:

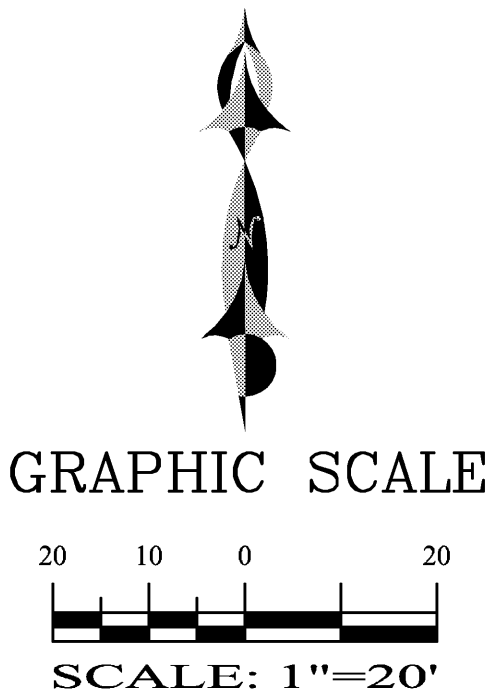
TRACT A-2-B-2 FOUNTAIN HILLS PLAZA
CONTAINING 1.1941 ACRES, 52,016.00 SF

GENERAL NOTES:

- CONTOUR INTERVAL IS HALF (1.00) FOOT.
- ELEVATIONS ARE BASED ON CITY OF ALBUQUERQUE CONTROL STATION LSS_302, HAVING AN ELEVATION OF 5444.159 FEET ABOVE SEA LEVEL.
- 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 CONSIDERATIONS.
- THIS IS NOT A BOUNDARY SURVEY, BEARINGS ARE ASSUMED, DISTANCES AND FOUND PROPERTY CORNERS ARE FOR INFORMATIONAL PURPOSES ONLY.
- SLOPES ARE AT 3:1 MAXIMUM.

LEGEND

5030	EXISTING CONTOUR (MAJOR)
5029	EXISTING CONTOUR (MINOR)
	BOUNDARY LINE
X 28.50	PROPOSED SPOT ELEVATION
X 5029.16	EXISTING GRADE
X 5075.65 FL	EXISTING FLOWLINE ELEVATION
	PROPOSED RETAINING WALL
BC=89.08	BOTTOM OF CHANEL
TC=28.50 TA=28.00	TOP OF CURB
	TOP OF ASPHALT
HP	HIGH POINT
86.65 85.47	AS-BUILT GRADES
X 86.65	AS-BUILT SPOT ELEVATIONS

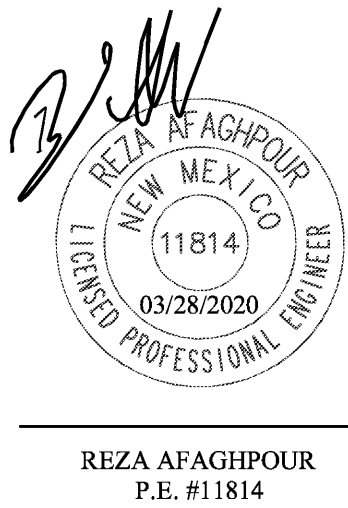


SBS CONSTRUCTION
AND ENGINEERING, LLC

10209 SNOWFLAKE CT., NW
ALBUQUERQUE, NEW MEXICO 87114
(505)899-5570

KIDDIE ACADEMY WEST SIDE
GRADING PLAN

DRAWING:	DRAWN BY:	DATE:	SHEET #
202002-GD.DWG	SH-B	03-29-2020	1 OF 2



REZA AFAGHPUR
P.E. #11814