CITY OF ALBUQUERQUE

Planning Department Alan Varela, Director



Mayor Timothy M. Keller

June 10, 2022

Mark H. Burak, P.E. 1512 Sagebrush Trail SE Albuquerque, NM 87123

RE: 13141 Montgomery Blvd. NE

Grading and Drainage Plan for Swimming Pool

Engineer's Stamp Date: 05/25/22

Hydrology File: G23D017

Dear Mr. Burak:

Based upon the information provided in your submittal received 06/01/2022, the Grading and Drainage Plan for Swimming Pool is approved for Grading Permit and Building Permit (Pool).

Albuquerque

PO Box 1293

As a reminder, if the project total area of disturbance (including the staging area and any work within the adjacent Right-of-Way) is 1 acre or more, then an Erosion and Sediment Control (ESC) Plan and Owner's certified Notice of Intent (NOI) is required to be submitted to the Stormwater Quality Engineer (Doug Hughes, PE, jhughes@cabq.gov, 924-3420) 14 days prior to any earth disturbance.

NM 87103

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

www.cabq.gov

Sincerely,

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

Renée C. Brissette

Planning Department



City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 6/2018)

Project Title: Salvino Swimming Pool	_ Building Perm	it #: Hydrology File #:
DRB#:	_ EPC#:	Work Order#:
	Hills Addition,	Unit 3
Applicant: Mark Burak, PE Address: 1512 Sagebrush Tr SE		Contact:
		E-mail: mburak@comcast.ne
Other Contact: Dwayne Salvino		Contact:
Address: 13141 Montgomery B		
		E-mail: panoy21@gmail.com
TYPE OF DEVELOPMENT: PLAT	(# of lots) X	RESIDENCE DRB SITE ADMIN SITE
IS THIS A RESUBMITTAL? Yes	X _{No}	
DEPARTMENT TRANSPORTATION		OLOGY/DRAINAGE
Check all that Apply: TYPE OF SUBMITTAL: ENGINEER/ARCHITECT CERTIFICATIO PAD CERTIFICATION CONCEPTUAL G & D PLAN X GRADING PLAN DRAINAGE REPORT DRAINAGE MASTER PLAN FLOODPLAIN DEVELOPMENT PERMIT ELEVATION CERTIFICATE CLOMR/LOMR TRAFFIC CIRCULATION LAYOUT (TCL TRAFFIC IMPACT STUDY (TIS) STREET LIGHT LAYOUT OTHER (SPECIFY) PRE-DESIGN MEETING?	APPLIC)	TYPE OF APPROVAL/ACCEPTANCE SOUGHT: BUILDING PERMIT APPROVAL CERTIFICATE OF OCCUPANCY PRELIMINARY PLAT APPROVAL SITE PLAN FOR SUB'D APPROVAL SITE PLAN FOR BLDG. PERMIT APPROVAL FINAL PLAT APPROVAL SIA/ RELEASE OF FINANCIAL GUARANTEE FOUNDATION PERMIT APPROVAL X GRADING PERMIT APPROVAL SO-19 APPROVAL PAVING PERMIT APPROVAL GRADING/ PAD CERTIFICATION WORK ORDER APPROVAL CLOMR/LOMR FLOODPLAIN DEVELOPMENT PERMIT OTHER (SPECIFY)
DATE SUBMITTED: <u>05/31/2022</u>	By: N	Mark Burak, PE
COA STAFF:	ELECTRONIC SU	JBMITTAL RECEIVED:

FEE PAID:__

Site Location - As shown by the Vicinity Map (Zone Atlas Map G-23), the proposed residential project site is located on a single 0.36-acre parcel on the north side of Montgomery Boulevard east of Tramway Boulevard. At present, the site is fully developed with a single residence. Single homes are adjacent on all surrounding properties. This grading and drainage plan is for the construction of a swimming pool on the property.

Legal Description..

- o **UPC:** 102306024252820301
- o Situs Address: 13141 MONTGOMERY BLVD NE ALBUQUERQUE NM 87111
- o Legal Description: *17 10 GLENWOOD HILLS ADDN UNIT #3
- o **Acres:** 0.3641

Benchmark - Basis of elevation is ACS Station "17-G23" Elevation 6,064.981 NAVD 1988.

Flood Zone - As shown by Panels 35001-C0163H of the National Flood Insurance Program Flood Insurance Rate Maps (FIRM) for the City of Albuquerque, New Mexico, dated 08/16/2012 none of this site lies within a designated flood hazard zone.

Existing Conditions - Currently, Montgomery Boulevard slopes west at about four percent and Glenwood Hills slopes south at 11.7%. The elevation difference across the lot from the SW corner to the NE corner is seventeen feet. The west side of the property is elevated above the neighbor with terraced retaining walls. A five foot garden wall is set about thirty feet back from the curb on Montgomery and is elevated up to five feet above the curb. The area between the wall and the street is landscaped with bushes and trees and slopes at 5:1. No offsite runoff impacts the property since it is on a ridgeline with development and streets upstream.

Proposed Grading - The Grading and Drainage Plan shows 1) existing and proposed grades indicated by spot elevations and contours; 2) the limit of existing and proposed improvements.

All runoff on the property is to be discharged into the existing flow paths at the property line and roadways. A portion of the SW portion of the site will incorporate a new 18'x 36' swimming pool with a four foot deck surrounding. The pool will fit between the westerly wall and the existing planter box near the house. The pool elevation will be set two feet below the finish floor of the existing house. The pool decking is to slope away from the pool at one-half inch per foot minimum. The deck is also sloped south along the planter edge at one percent.

A new retaining wall is to be installed along the southern property line to improve the landscaped area around the proposed pool. The wall will be six feet high at the SW corner of the property and will maintain a level top as it extends east about 44-feet feet and north for 33-feet. A four foot garden wall is proposed for the top of the retaining wall. The area within the new retaining/garden wall area is to be lawn. The new lawn space will be slightly lower than the pool deck and will be utilized for a small amount of runoff retention up against the retaining wall.

Hydrologic Methods - The drainage basin map shows four separate sub-basins (A-D) within the project area to assess peak flow rates at various points around the project site culminating at either the natural flow path or the retention area within the new lawn space. The calculations which appear hereon analyze both the existing and developed conditions for the 100-year, 6-hour rainfall event. The process outlined in the DPM, Chapter 6 was used to quantify the peak flow rates and volumes. As shown by these calculations, the fully developed improvements will result in a slight increase in runoff generated by the site. When incorporating the proposed ponding and swimming pool, the downstream impact is similar or slightly reduced when comparing to existing and/or historical conditions.

The proposed improvements will increase the existing peak runoff due to the higher percentage of impervious area proposed by the development. By controlling the calculated runoff within the retention area, scour and erosion is expected to be reduced to a minimum amount. A spreadsheet for Precipitation Zone 4 is included on this plan. This spreadsheet outlines the peak runoff and volume generated for each sub-basin for existing and proposed fully developed conditions. Percentage of each land treatment is shown to illustrate the addition of impervious area related to the proposed construction. By routing the proposed developed discharge rates and volumes through the retention basin and existing street.

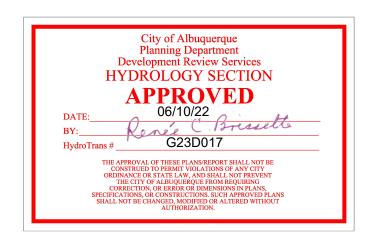
90% Compensatory Volume Management - The water quality retention has been mitigated based on the impervious areas listed on the attached spreadsheet. This equates to the total impervious area of the site multiplied by 0.615-inches or about 474 cubic feet for the ponding area. This storage has been provided on the plan by the retention area as shown.

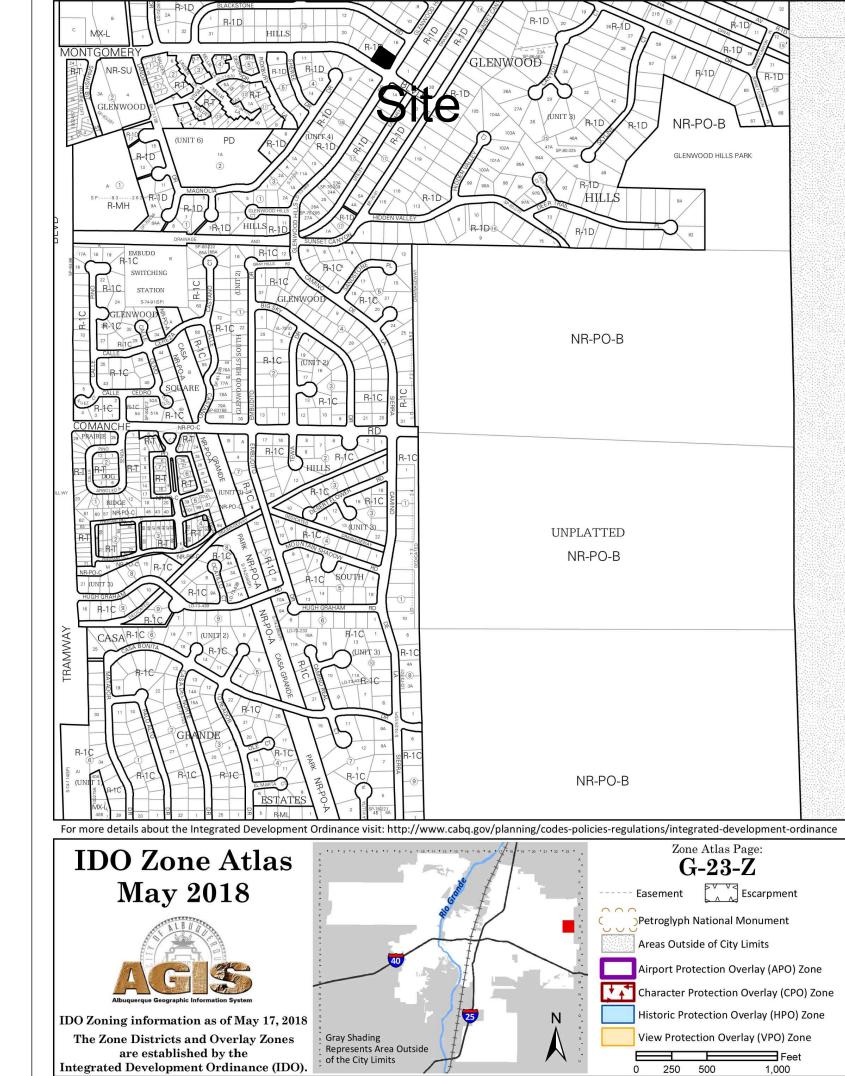
Hydrologic (ns - COA [OPM Ch	6 (10	0-Year	, 6-Ho	ur Stor	m)						nery Bl	lvd. Gle	nwood	Hills	
Burak Cons		T-1-1- (CO)	P60	P360	P1440	DAda	Diode				(DDM C	May 25, 202		P360	P1440	DAdam	Dioderin	
Precipitation Zone 4	(DPM Ch6	Table 6.2)	1.96	2.64	3.6	4.75	P10days 6.27			Precipitation Zone 1	(DPINI CI	6 Table 6.2	1.96	2.64	3.6	P4days 4.75	P10days 6.27	
Excess	(DDM Che	T-bl- 6 7)	1.90	2.04	3.0	4.75	0.27				(DDM Ch	6 T-bl- 6 7	7.00.0	2.04	3.0	4.75	0.27	
Precipitation	(DPM Ch6 0.76	inches-A	0.95	inches	1.2	inches-	3.34	inches-D		Excess Precipitation	0.76	6 Table 6.7 inches-A		inches-B	1.2	inches-C	3.34	inc
Peak	(DPM Ch6									Peak		6 Table 6.8						
Discharge	2.09	cfs/ac-A	2.73	cfs/ac	3.41	cfs/ac-(4.78	cfs/ac-D		Discharge	2.09	cfs/ac-A		cfs/ac-B	3.41	cfs/ac-C	4.78	cfs
Drainage	Land Treatments - Existing Conditions									Land Treatn	nents - Ful	ly Develop	ed Condit	ions				
Areas	Α	Percent A	В	ercent B	С	ercent C	D	Percent D	Area (sf)	Α	Percent A	В	Percent B	С	Percent C	D	Percent D	Area (sf)
Basin A	0.00	0%	0.01	10%	0.03	50%	0.02	40%	2,309	0.00	0%	0.01	10%	0.03	50%	0.02	40%	2,30
Basin B	0.00	0%	0.02	20%	0.05	50%	0.03	30%	3,944	0.00	0%	0.05	50%	0.02	20%	0.03	30%	3,94
Basin C	0.00	0%	0.03	20%	0.07	50%	0.04	30%	6,498	0.00	0%	0.03	20%	0.07	50%	0.04	30%	6,49
Basin D	0.00	0%	0.00	0%	0.00	0%	0.12	100%	5,201	0.00	0%	0.00	0%	0.00	0%	0.12	100%	5,20
	De als Flaus	Data Eviation	a Canditia						400	Dook Flow D	ata Dava	lanad Cand	itiana					400
Discharge	Peak Flow	Rate - Existin	g Conaillo. B	ris	С		D		100 y r Q (cfs)	Peak Flow R	ale - Devel	ореа Сопа В	ILIONS	С		D		100 y r Q (cfs)
•									, ,					0.00		0.40		, ,
Basin A Basin B	0.00		0.01 0.05		0.09 0.15		0.10 0.13		0.2 0.3	0.00		0.01 0.12		0.09 0.06		0.10 0.13		
Basin C	0.00		0.03		0.15		0.13		0.5	0.00		0.12		0.00		0.13		
Basin D	0.00		0.00		0.00		0.57		0.6	0.00		0.00		0.00		0.57		
									1.7									1
Volume	Runoff Volume - Existing Conditions								100 y r	Runoff Volum	ne - Develo	ned Condit	ions					100 yr
Volumo	Six Hour Storm Event						V (cu-ft)	Six Hour Sto							V (cu-ft)			
Basin A	0		18		115		257		391	0		18		115		257		3!
Basin B	0		62		197		329		589	0		156		79		329		5
Basin C	0		103		325		543		970	0		103		325		543		9
Basin D	0		0		0		1,448		1,448	0		0		0		1,448		1,44
Volume	Runoff Volume - Existing Conditions Ten Day Storm Event								100 yr / 10 day	Runoff Volume - Developed Conditions Ten Day Storm Event								100 yr / 10 da
	ien Day Si	om Event							V (cu-ft)	ien Day Sto	rm Event							V (cu-ft)
																47	BASIN A	
Basin A									670 947							61 100	BASIN B BASIN D	6
Basin B Basin C									1,560							267	BASIN E	1,56
Basin D									3,021			WATER QU	ALITYPON	DING:		474	CU.FT.	3,02
Duoin D									0,021			2.1. 40				717		5,0
									6,198									

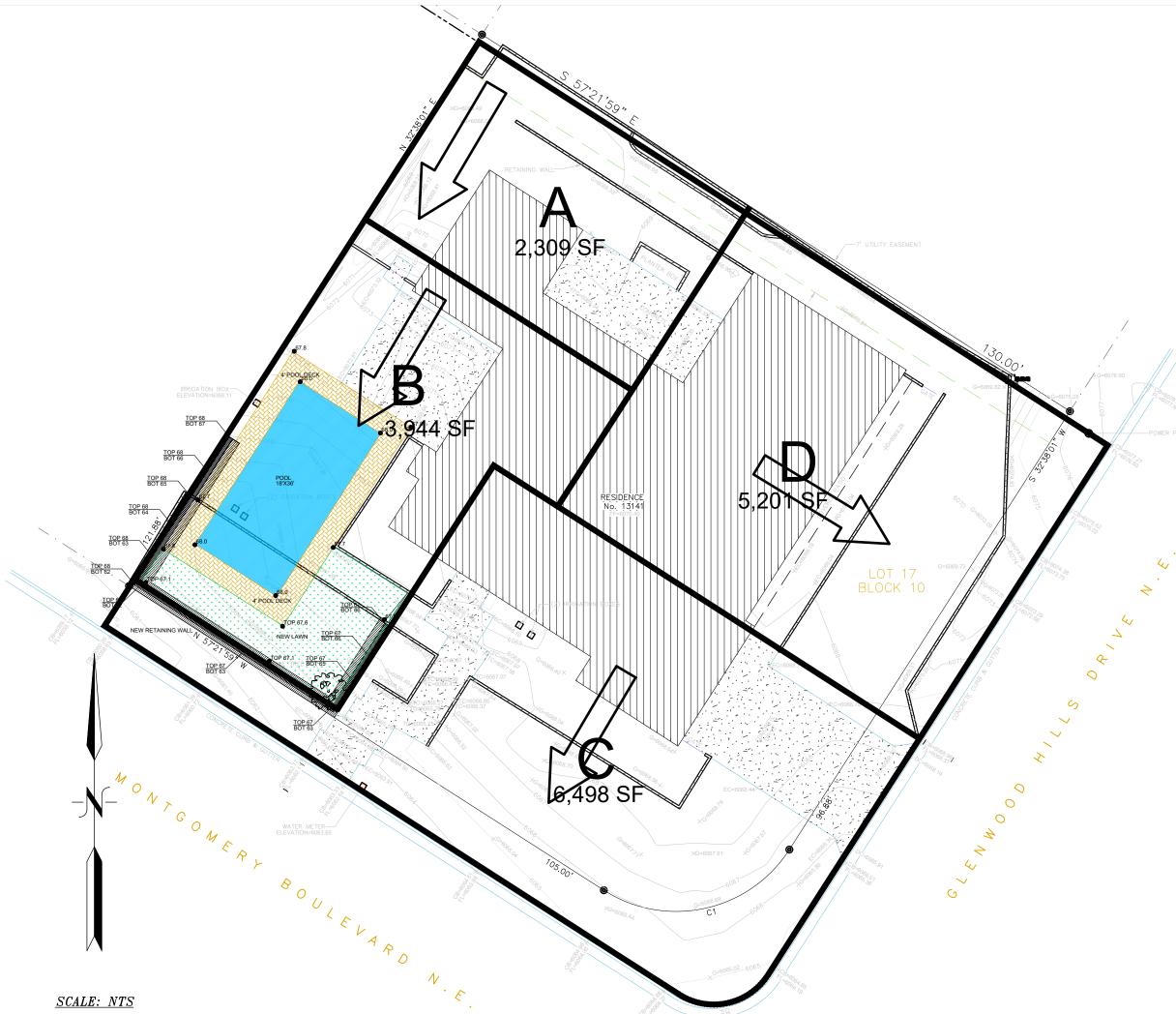
GRADING & DRAINAGE PLAN FOR SWIMMING POOL

13141 Montgomery Blvd NE

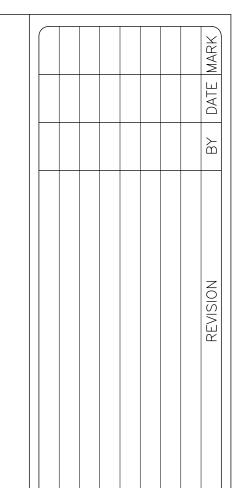
May 2022

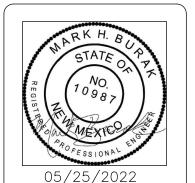














NOTES Pool Swimming DRAINAGE, Salvino

COVER, Lot 17, Bloc

C100

DRAWING NUMBER

1 OF 2

