

# CITY OF ALBUQUERQUE



Richard J. Berry, Mayor

April 17, 2017

Thomas D. Johnston, P.S., P.E.  
TGC Engineering  
330 Louisiana Blvd NE  
Albuquerque, NM, 87108

**RE: 5619 Cinder Cone Drive NW**  
**Grading Plan**  
**Stamp Date: 4/11/17**  
**Hydrology File: E10D030**

Dear Mr. Johnston:

PO Box 1293

Based upon the information provided in your submittal received 4/12/2017, the Grading Plan is approved for Building Permit.

Albuquerque

Please attach a copy of this approved plan in the construction sets for Building Permit processing. Prior to Certificate of Occupancy release, Engineer Certification per the DPM checklist will be required.

New Mexico 87103

If you have any questions, please contact me at 924-3995 or [rbrissette@cabq.gov](mailto:rbrissette@cabq.gov)

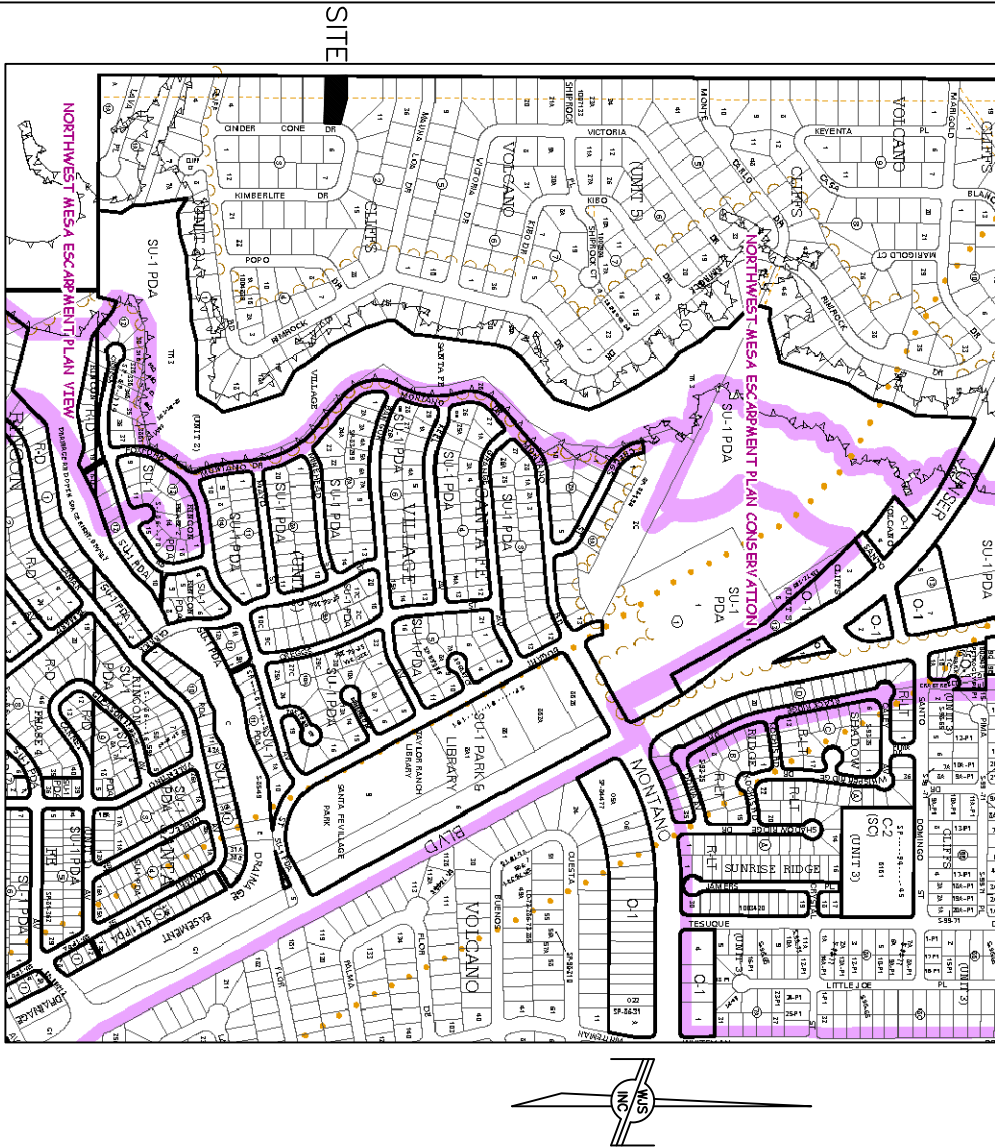
[www.cabq.gov](http://www.cabq.gov)

Sincerely,

*Renee C. Brissette*

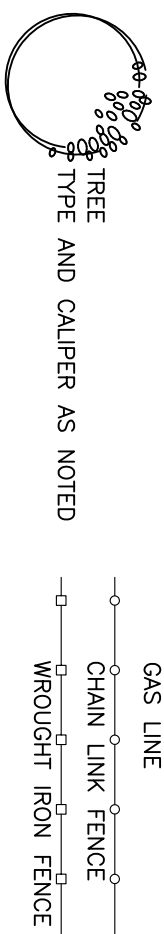
Reneé C. Brissette, P.E.  
Senior Engineer, Hydrology  
Planning Department

VICINITY MAP (E-10-Z)



LEGEND

- WM WATER METER
- FM FIRE HYDRANT
- LP LIGHT POLE
- OM ELECTRIC METER
- OGM GAS METER
- OTR TELEPHONE RINGER
- OTR TELEPHONE
- OTR TELEPHONE TRANSFORMER
- SPOT ELEVATION
- ELEVATIONS ARE TO ANNOTATED SPOTS
- EC EDGE OF CONCRETE
- TA TOP OF ASPHALT
- TC TOP OF CONCRETE
- FL FLOWLINE
- TW TOP OF WALL
- BURIED ELECTRIC LINE
- GAS LINE
- CHAIN LINK FENCE
- WROUGHT IRON FENCE



- EXISTING CONTOURS @ 0.5 FT. INTERVALS
- INDEX CONTOURS @ 1 FT. INTERVALS
- PROPOSED CONTOURS @ 0.5' INTERVALS
- PROPOSED SPOT ELEVATION
- TC TOP OF CONCRETE
- FL FLOW LINE
- TW TOP OF WALL
- TA TOP OF ASPHALT

LEGAL DESCRIPTION

Lot numbered Nine (9) in Block numbered Two (2) of VOLCANO CLIFFS UNIT 2, as the same is shown and designated on said plat filed in the office of the County Clerk of Bernalillo County, New Mexico on February 15, 1966 in Plat Book 06, Page 106.

FLOOD ZONE DESIGNATION

It is hereby certified that this property is not located within a 100-year flood hazard boundary in accordance with current HUD Federal Administration Flood Hazard Boundary Maps dated August 16, 2012, Zone X (No Flood Hazard) Panel 350002 0113 G.

BENCH MARK

Basis of elevations: ACS STATION "20-510" NAD 88 MSL ELEVATION: 5314.612  
TABLE #4 RECORD AT NORTHWEST CORNER OF PROPERTY MSL: 5357.703

NOTICE TO CONTRACTOR

PROPOSED CONTOURS AND SPOT ELEVATIONS SHOWN ARE TO FINISHED SURFACES AND ARE PROVIDED FOR THE PURPOSE OF SHOWING FLOW ROUTING.

CONTRACTOR IS RESPONSIBLE FOR THE ABATEMENT OF SEDIMENT ONTO ADJOINING PUBLIC RIGHTS-OF-WAY DURING CONSTRUCTION AND FOR THE REMOVAL OF ANY SEDIMENT DEPOSITED IN PUBLIC RIGHT-OF-WAY.

CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS PRIOR TO ANY GRADING OR CONSTRUCTION.

SITE IS NOT SUBJECT TO NPDES SWPPP REQUIREMENTS (DISTURBED AREA < 1 ACRE).

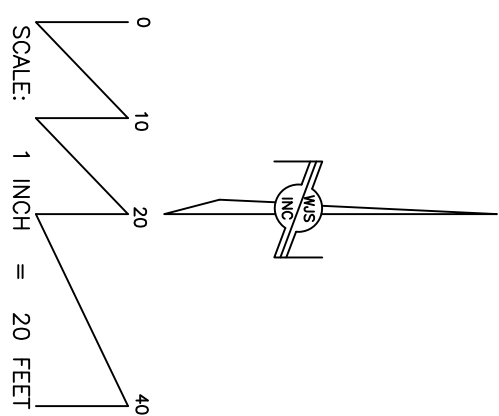
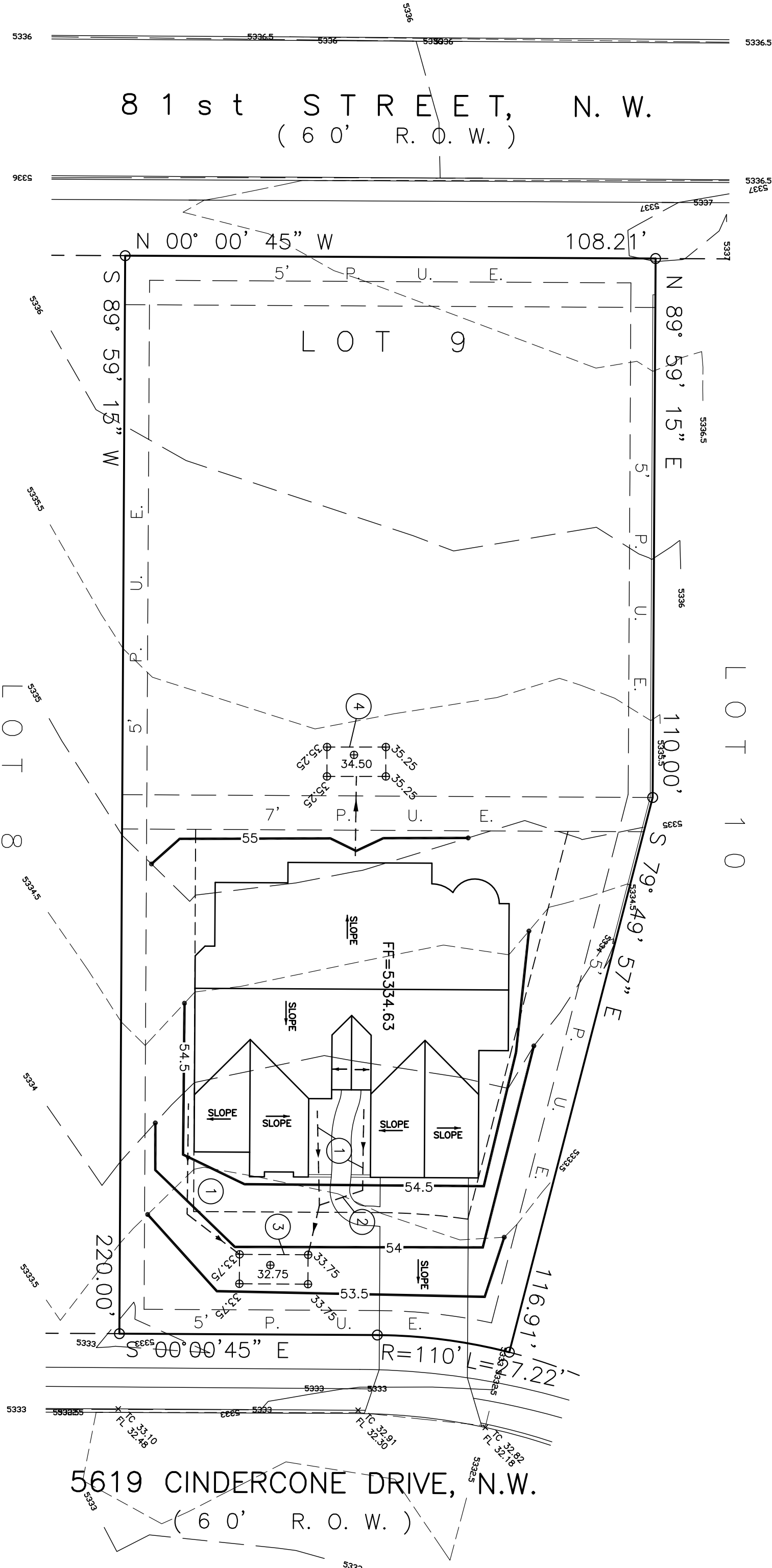
ALL IMPROVEMENTS WITHIN CITY OF ALBUQUERQUE RIGHT OF WAY MUST BE CONSTRUCTED BY SO-19 PERMIT.

DRAINAGE NOTES:

- ROOF DRAINAGE CONVECTED TO SWALES TO CAPTURE FIRST FLUSH IN RETENTION PONDS.
- ALL ELEVATIONS GIVEN ARE TO TOP OF PROPOSED GRADE

KEYED NOTES

- SWALE, 1/2" TO 1' TO POND, 6" DEPTH, 1:1 SIDE SLOPES
- INSTALL 3" PVC PIPE WITH SCUPPERS TO ALLOW FLOW UNDER SIDEWALK
- POND, 82 cf, 1 FOOT DEPTH
- POND, 43 cf, 0.75 FOOT DEPTH



DRAINAGE CONCEPT

THE DRAINAGE CONCEPT FOR THIS SITE IS TO RETAIN THE FIRST FLUSH PRECIPITATION WITHIN THE DEVELOPMENT AND DISCHARGE THE ADDITIONAL PRECIPITATION SHALL FREE DISCHARGE THE EXCESS RUNOFF FROM IMPERVIOUS SURFACES VIA THE DRIVEWAY OPENING TO CINDERCONC DRIVE, NW AS IT HAS OCCURRED HISTORICALLY.

ONSITE HYDROLOGY

THIS SITE LIES WITHIN PRECIPITATION ZONE 1									
Condition	Return Period (Years)	Treatment Type	Area (sq. ft.)	Precip. Table A-8 (in.)	Runoff Table A-9 (cu. ft.)	Volume (cu. ft.)	Rate (cfs)		
EXISTING	100	A	22,308	0.64	1.29	818.0	0.66		
		B	0	0.67	2.03	0.0	0.00		
		C	0	0.99	2.87	0.0	0.00		
		D	0	1.97	4.37	0.0	0.00		
EXISTING	10	A	22,308	0.08	0.24	148.7	0.12		
		B	0	0.22	0.76	0.0	0.00		
		C	0	0.44	1.29	0.0	0.00		
		D	0	0.99	2.87	0.0	0.00		
DEVELOPED	100	A	11,903	0.67	2.03	347.5	0.29		
		B	6,224	0.44	1.29	438.4	0.35		
		C	0	0.99	2.87	0.0	0.00		
		D	4,181	1.97	4.37	686.4	0.47		
DEVELOPED	10	A	11,903	0.08	0.24	79.4	0.02		
		B	6,224	0.22	0.76	114.1	0.01		
		C	0	0.44	1.29	148.7	0.01		
		D	4,181	1.24	2.89	432.0	0.28		
TOTAL (EXT)	100					818.0	0.7		
	10					148.7	0.1		
TOTAL (DEV)	100					1,470.3	1.1		
	10					625.5	0.5		

FLOW RATE INCREASES OF 0.4 CFS AND 0.4 CFS FOR THE 100-YEAR AND 10-YEAR STORMS MAY BE EXPECTED. THE 6-HOUR RUNOFF VOLUMES WILL INCREASE BY 692 CUBIC FEET FOR THE 100-YEAR STORM & 477 CUBIC FEET FOR THE 10-YEAR STORM.

FIRST FLUSH INFORMATION

THE FIRST FLUSH PRECIPITATION USED IS 0.34" (0.03') OF PRECIPITATION FOR ANY STORM. FIRST FLUSH RETENTION POND VOLUME = (0.03') x IMPERVIOUS SURFACE IN SF.

FIRST FLUSH VOLUME = 125 CF  
THE WEST PONDING AREA WILL CARRY 43 CF OF THE FIRST FLUSH.  
THE EAST PONDING AREA WILL CARRY 82 CF OF THE FIRST FLUSH.

OFFSITE FLOW INFORMATION

OFFSITE FLOWS FROM ADJACENT PROPERTIES ARE NEGLIGIBLE.

THOMAS D. JOHNSTON, NEW MEXICO REGISTERED PROFESSIONAL ENGINEER NO. 17158

4/11/17

THOMAS D. JOHNSTON, NAME NO. 17158

DRAINAGE AND GRADING PLAN

5619 CINDERCONC DRIVE NW RESIDENCE

TCENGINEERING INC.

330 LOUISIANA BLVD, NE  
ALBUQUERQUE, NM 87108

(505) 266-7256  
Fax: (505) 255-2887

SHEET NO. C1

DESIGN DATE: 4/11/2017

REVISION: N/A

CITY PROJECT NO: E10/