

CITY OF ALBUQUERQUE



September 12, 2017

James Lopez, P.E.
Wilson & CO
4900 Lang Ave NE
Albuquerque, New Mexico 87121

**RE: Lot 6-A Block 12 Unit 5 Volcano Cliffs SAD 227
6520 Jade Dr NW
Grading and Drainage Plan
Engineers Stamp Date 8/17/17 (D10D032)**

Dear Mr. Lopez,

Based upon the information provided in your submittal received 9/11/17, this plan is approved for Grading Permit.

Please inform the builder/owner to attach a copy of this approved plan to the construction sets in the permitting process prior to sign-off by Hydrology.

Reiterate to the Owner/Contractor that a separate permit for a garden/retaining wall must be obtained, with the approved G&D plan dated 8/17/17.

Prior to Certificate of Occupancy release, Engineer Certification per the DPM checklist of this plan will be required.

If you have any questions, please contact me at 924-3986 or Rudy Rael at 924-3977.

Sincerely,

James D. Hughes, P.E.
Principal Engineer, Hydrology
Planning Department

RR/JDH
C: File

Drainage Report

Introduction

Lots 6-A shown hereon is a residential lot located on 6520 Jade Drive Albuquerque, NM. The drainage report has been prepared in accordance with the latest revision to Volume 2 Section 22.2 of the City of Albuquerque Process Manual.

Existing Conditions

The site is an undeveloped 0.31 acre lot. The site is bounded by Jade Drive to the southwest, Onyx Court to the northeast, and undeveloped residential lots to the northwest and southeast. The northwest boundary has a CMU block wall between the properties. The lot was graded when the lot was subdivided and has minimal vegetation. The runoff on this lot runs from the west corner to the east corner of the lot and continues to flow to the undeveloped lot to the southeast and eventually onto Onyx Court. The site is not located in a flood plain (see firm map #35001C01116 Revised March 25, 2010). No offsite runoff contributes to the lot.

Proposed Conditions

Improvements to Lot 6-A includes a new residence being built within a 3,690 square foot building envelope. The building entrance, driveway, and sidewalk have a total land treatment D area of 5525 square feet. The majority of on-site runoff will flow from north to south. The lot will have a series of small retention ponds as well as a new 100 block wall between the properties. The lot will be graded when the lot is subdivided and has minimal vegetation. The runoff on this lot runs from the west corner to the east corner of the lot and continues to flow to the undeveloped lot to the southeast and eventually onto Onyx Court. The site is not located in a flood plain (see firm map #35001C01116 Revised March 25, 2010). No offsite runoff contributes to the lot.

Calculations

The calculations shown below represent the flows for a 100-year 6-hour design event. The hydrology is per the "Section 22.2 of the Development Process Manual for the City of Albuquerque, New Mexico, latest revision.

Basin Data: COA Zone: 1
Precip. In: 2.2

Existing Conditions		A		B		C		D		Peak		Excess Precip.		Volume		Volume	
Basin	Area (A)	%	Ac	%	Ac	%	Ac	%	Ac	Discharge, Q	(Weighted)	(ft ³ , acre-ft)	(24-hr, acre-ft)	(10-yr, acre-ft)	(10-yr, acre-ft)	(10-yr, acre-ft)	(10-yr, acre-ft)
101	0.310	0	0	0	0	100	0.31	0	0.00	0.9	0.99	0.0256	0.0256	0.0256	0.0256	0.0256	0.0256

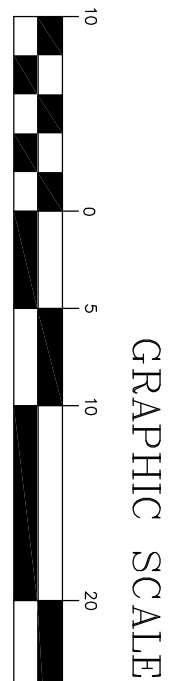
Proposed Conditions		A		B		C		D		Peak		Excess Precip.		Volume		Volume	
Basin	Area	%	Ac	%	Ac	%	Ac	%	Ac	Discharge, Q	(Weighted)	(ft ³ , acre-ft)	(24-hr, acre-ft)	(10-yr, acre-ft)	(10-yr, acre-ft)	(10-yr, acre-ft)	(10-yr, acre-ft)
201	0.179	0	0.00	0	0.00	72	0.13	28	0.05	0.6	1.26	0.0189	0.0208	0.0250	0.0250	0.0250	0.0250
202	0.133	0	0.00	0	0.00	45	0.06	55	0.07	0.5	1.53	0.0169	0.0198	0.0259	0.0259	0.0259	0.0259

POND 1				POND 2			
Elevation (ft)	Depth (ft)	Area (sq ft)	ΔVolume (ac-ft)	Elevation (ft)	Depth (ft)	Area (sq ft)	ΔVolume (ac-ft)
5326	0	74	0.002	5326	0	50	0.001
5327	1	278	0.009	5327	1	247	0.006
5328	2	610	0.014	5328	2	534	0.012
5329	3	1423	0.033	5329	3	1145	0.026

POND 2			
Elevation (ft)	Depth (ft)	Area (sq ft)	ΔVolume (ac-ft)
5326	0	50	0.001
5327	1	247	0.006
5328	2	534	0.012
5329	3	1145	0.026

LEGEND

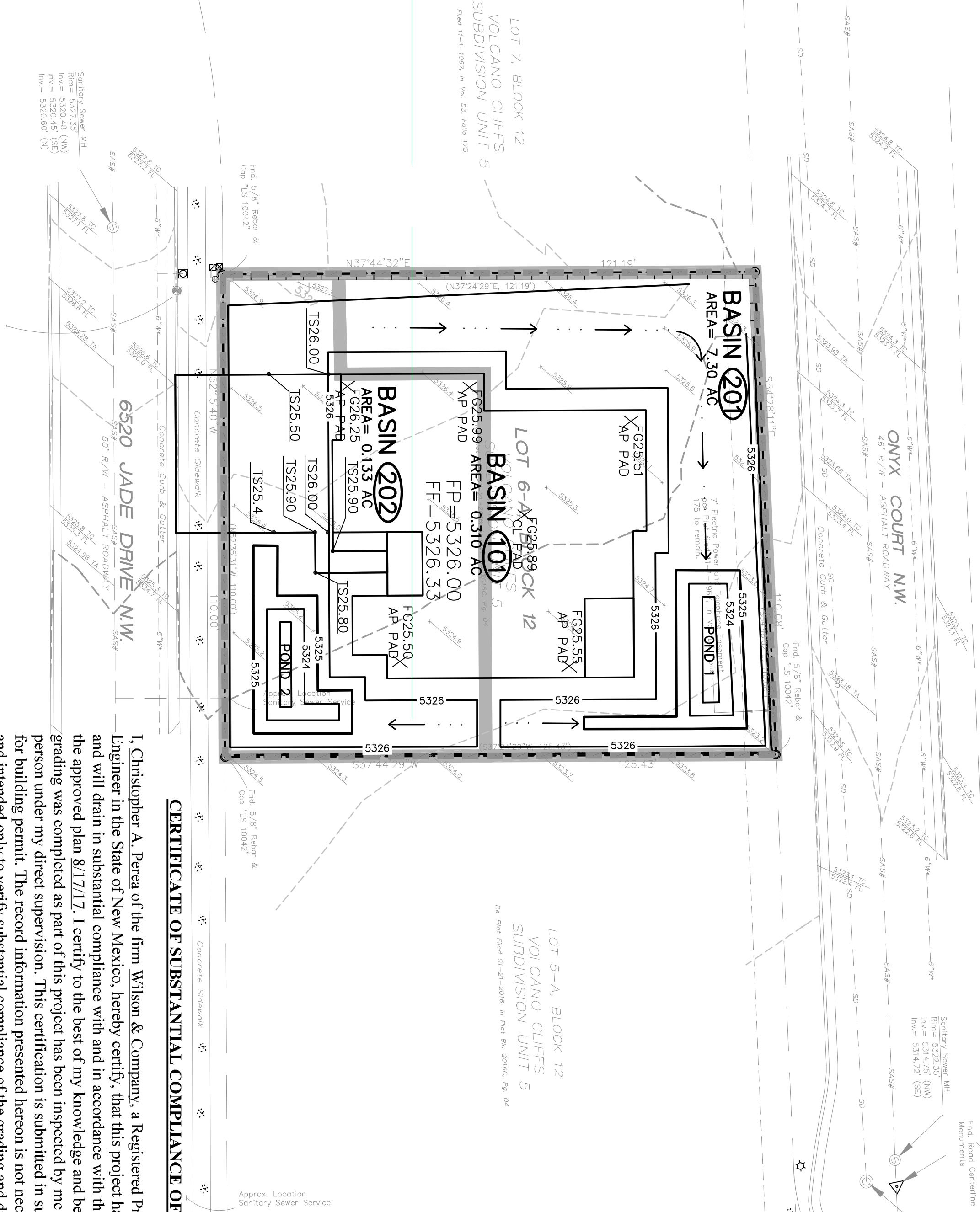
- 5450 PROPOSED INTERMEDIATE CONTOUR
- 5440 PROPOSED INDEX CONTOUR
- 5440 EXISTING INTERMEDIATE CONTOUR
- 5440 EXISTING INDEX CONTOUR
- 5440 EXISTING PROPERTY LINE
- 5440 FINISHED FLOOR
- 5440 FINISHED PAD
- 5440 TOP OF SIDEWALK
- 5440 EXISTING BASIN
- 5440 PROPOSED BASIN
- 5440 DIRECTION OF FLOW
- 5440 PROPOSED CMU BLOCK WALL



- NOTES:
- GRADING ACTIVITIES ON ADJACENT PROPERTIES OR RIGHT-OF-WAY WITHOUT WRITTEN PERMISSION FROM THE OWNER IS NOT PERMITTED.
 - UNPROTECTED SLOPES SHALL BE NO STEEPER THAN 4H:1V PER CORR CODE. IF THERE IS SUFFICIENT SLOPE PROTECTION (I.E. PLANTINGS, ROCK COVER, SHOTCRETE/CONCRETE) SLOPES MAY BE NO STEEPER THAN 3H:1V.
 - A SEPARATE WALL PERMIT MUST BE OBTAINED FROM CORR BUILDING DEPARTMENT.
 - POND SLOPES SHALL BE TREATED FOR SLOPE PROTECTION, USE XERISCAPE TREATMENT.

UNSER CLIFFS SUBDIVISION

Filed 8-12-2004, in Plat Book 2004C, Page 238

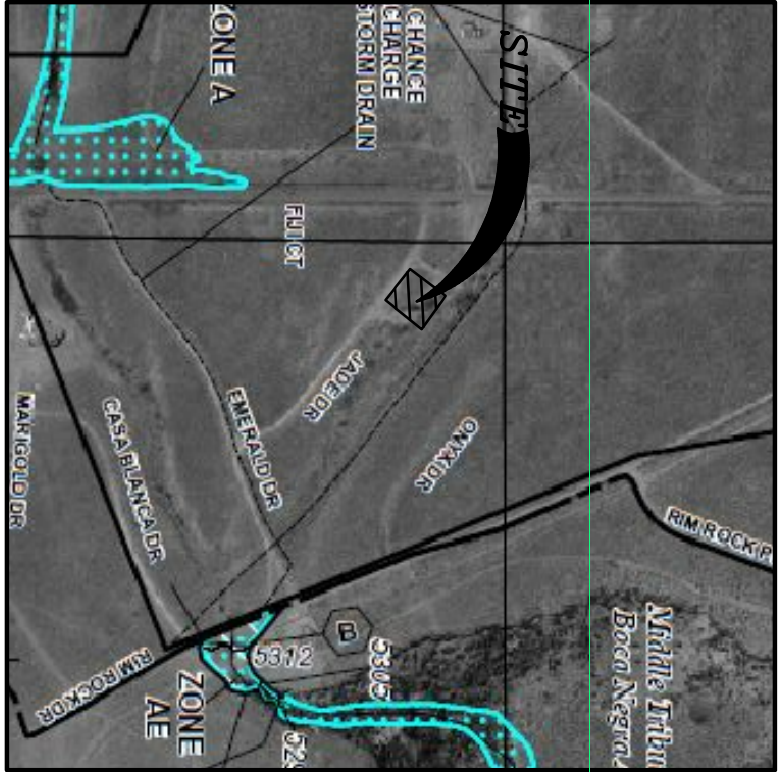
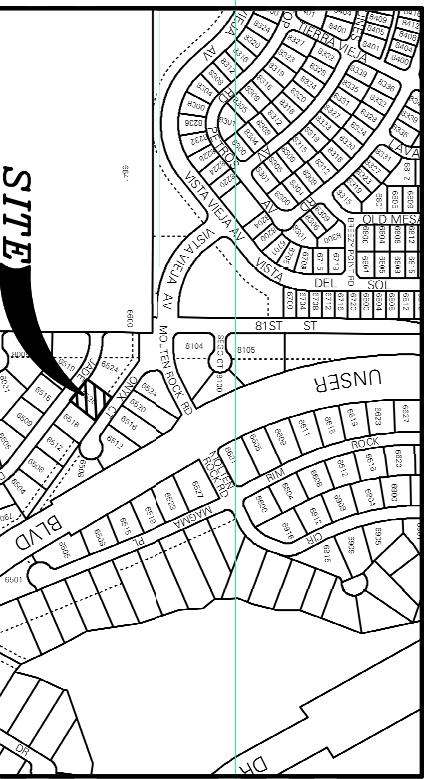


CERTIFICATE OF SUBSTANTIAL COMPLIANCE OF PLANS

I, Christopher A. Perea of the firm Wilson & Company, a Registered Professional Engineer in the State of New Mexico, 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 8/17/17. I certify to the best of my knowledge and belief, that the site grading was completed as part of this project has been inspected by me or by a qualified person under my direct supervision. This certification is submitted in support of a request for building permit. The record information presented herein is not necessarily complete and intended only to verify substantial compliance of the grading and drainage aspects of this project.

Christopher A. Perea, P.E., NM 13686

Date 9/08/17



CITY OF ALBUQUERQUE
MUNICIPAL DEVELOPMENT DEPARTMENT
ENGINEERING DEVELOPMENT DIVISION
1620 JADE DRIVE NW
GRADING & DRAINAGE PLAN

TITLE:

Design Review Committee City Engineer Approval

Ms./Day/Yr. Ms./Day/Yr.

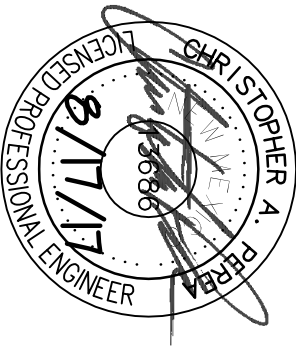
City Project No. Zone Map No. Sheet 1 of 1

AS BUILT INFORMATION	
CONTRACTOR	DATE
WORK STAKED BY	DATE
INSPECTOR'S ACCEPTANCE BY	DATE
FIELD VERIFICATION BY	DATE
DRAWINGS CORRECTED BY	DATE
MICRO-FILM INFORMATION	
RECORDED BY	DATE
No.	

BENCH MARKS

SURVEY INFORMATION	
FIELD NOTES	
NO.	BY

ENGINEER'S SEAL



REMARKS	
NO.	DATE

DESIGNED BY: JEL
DRAWN BY: JEL
CHECKED BY: CAP

BENCH MARK
LOT 6-A, BLOCK 12
PK NAIL WITH ALUMINUM DISK
STAMPED "SURV-TEK-CONTROL"
Y=1513575.28, X=1497832.75,
ELEV=5327.25

LEGAL DESCRIPTION

LOT NUMBERED SIX-A (6-A) IN BLOCK NUMBERED TWELVE (12), VOLCANO CLIFFS UNIT 5, A SUBDIVISION OF A TRACT OF LAND SITUATE IN SECTION 27, TOWNSHIP 11 NORTH, RANGE 2 EAST, N.M.P.M., BERNALILLO COUNTY, NEW MEXICO, AS THE SAME ARE SHOWN AND DESIGNATED ON THE PLAT THEREOF, FILED IN THE OFFICE OF THE COUNTY CLERK OF BERNALILLO COUNTY, NEW MEXICO ON NOVEMBER 1, 1967, IN VOLUME D3, FOLIO 175.