

CITY OF ALBUQUERQUE

Planning Department

Brennon Williams, Director



Mayor Richard J. Berry

December 18, 2019

James Lopez, P.E.
Wilson & Company
4900 Lang Ave NE
Rio Rancho, New Mexico 87109

RE: **SAD 227 lot 4 Block 11, Volcano Cliffs Unit 5**
6301 Casa Blanca Dr. NW
Grading and Drainage Plan
Engineers Stamp Date 12/10/19 (E10D070)

Mr. Lopez,

PO Box 1293

Based upon the information provided in your submittal received 12/10/19, this plan is approved for Grading Permit. Please attach a copy of this approved plan to the construction sets in the permitting process prior to sign-off by Hydrology.

Albuquerque

Make sure the contractor and owner know not to use dirt as a ramp to climb the street curb, either use lumber or crusher fines for this purpose.

NM 87103

Prior to building Permit approval a pad certification is required.

www.cabq.gov

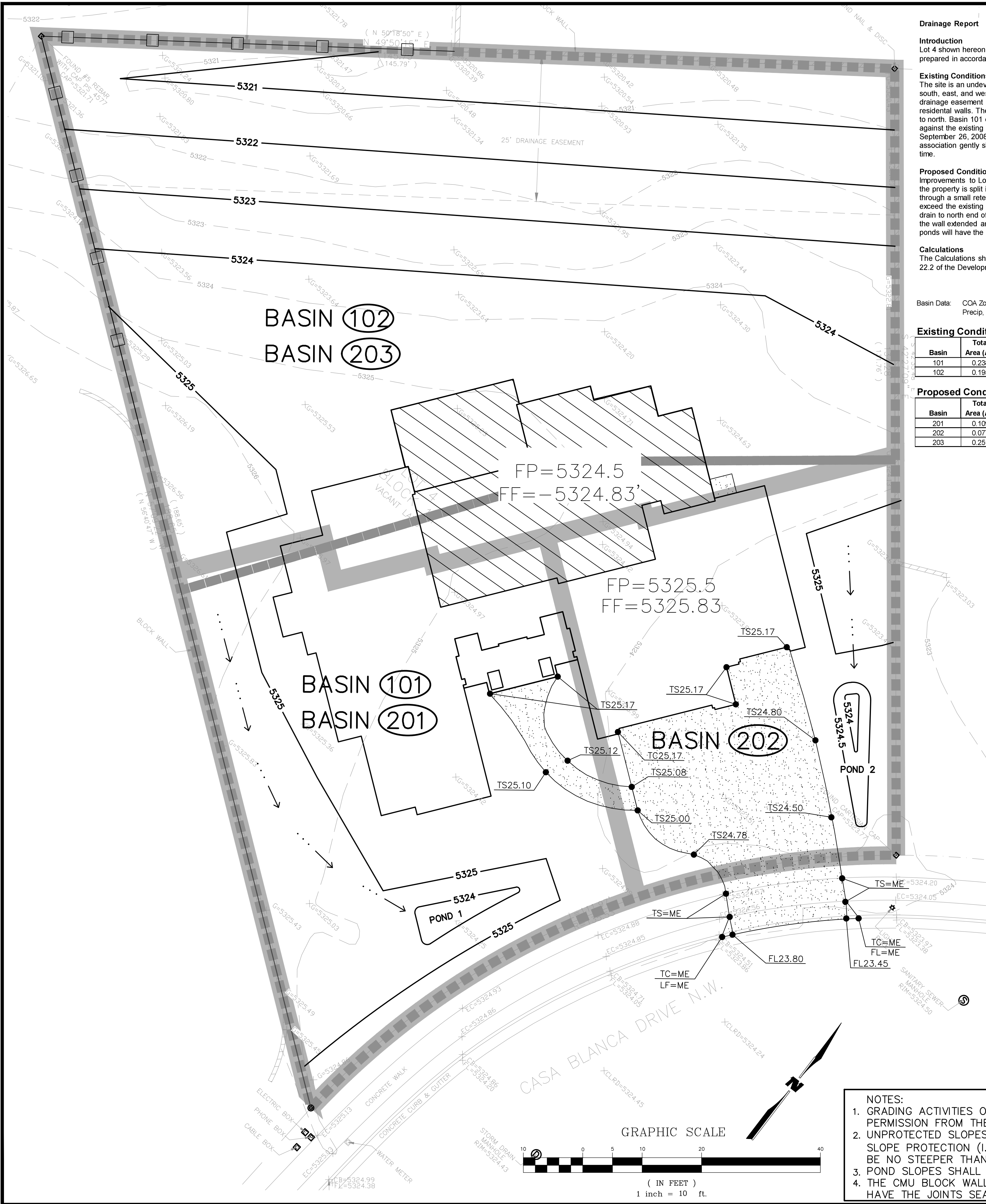
Prior to Certificate of Occupancy release, Engineer Certification per the DPM checklist will be required.

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

Lot 4 shown hereon is a residential lot located on 6301 Casa Blanca Dr. 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 0.437 acre lot. The site is bounded by Casa Blanca drive to the south and residential lots to the south, east, and west. The lot is currently ungraded and has natural desert vegetation. The north side of the lot has a drainage easement 25' into the lot, this easement has been deemed as unrequired and is blocked by the surrounding residential walls. The runoff is currently divided and basin 101 drains from the north to south and basin 102 drains from south to north. Basin 101 discharges to Casa Blanca road. Basin 102 currently drains to the north side of the property and ponds against the existing residential cmu walls. The site is not located in a flood plain (see firm map #35001C0113G Revised September 26, 2008). No offsite runoff contributes to the lot. Based on NRCS soil survey data, the Maduroz-Vink association gently sloping soil at the site are deep and well-drained, which will increase infiltration and reduce ponding time.

Proposed Conditions

Improvements to Lot 4 include a new residence being built within a 3689 square foot building envelope. The south portion of the property is split into two basins 201 and 202 and will continue to drain from north to south. Basins 201 and 202 will drain through a small retention pond to remove any sediment before discharging to Casa Blanca Road. The proposed flow will not exceed the existing flows bwing discharged to the roadway. Basin 203 will continue to drain from south to north and will drain to north end of the property where it will be retained on the property. The north west portion of the property will have the wall extended and will not allow any runoff to discharge from the property. In accordance with the MS4 permitting the ponds will have the combined capacity to retain the first 0.44' of rainfall.

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

Basin	Total Area (Ac)	% A	% B	% C	% D	Peak Discharge, Q	Excess Precip. (Weighted)	Volume (6hr, acre-ft)	Volume (24hr, acre-ft)	Volume (10day, acre-ft)
101	0.238	0	0	0	100	0.24	0.00	0.0196	0.0196	0.0196
102	0.195	0	0	0	100	0.20	0.00	0.0161	0.0161	0.0161

Proposed Conditions

Basin	Total Area (Ac)	% A	% B	% C	% D	Peak Discharge, Q	Excess Precip. (Weighted)	Volume (6hr, acre-ft)	Volume (24hr, acre-ft)	Volume (10day, acre-ft)
201	0.109	0	0.00	0	0.00	0.86	0.07	0.04	0.13	0.017
202	0.077	0	0.00	0	0.00	0.37	0.03	0.05	0.16	0.016
203	0.251	0	0.00	0	0.00	0.86	0.22	0.04	0.13	0.028

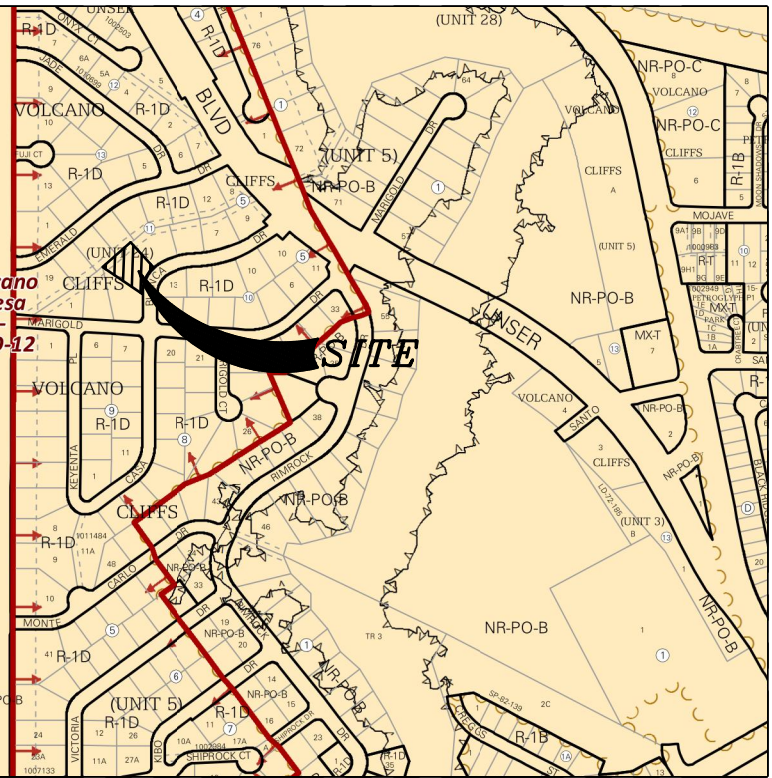
POND 201					
Elevation (ft)	Depth (ft)	Area (sq ft)	Area (ac)	ΔVolume (ac-ft)	Total Volume (ac-ft)
5323.5	0	88	0.002	0	0.000
5324.5	1	328	0.008	0.005	0.005

POND 202					
Elevation (ft)	Depth (ft)	Area (sq ft)	Area (ac)	ΔVolume (ac-ft)	Total Volume (ac-ft)
5324	0	15	0.000	0	0.000
5324.5	0.5	105	0.002	0.001	0.001

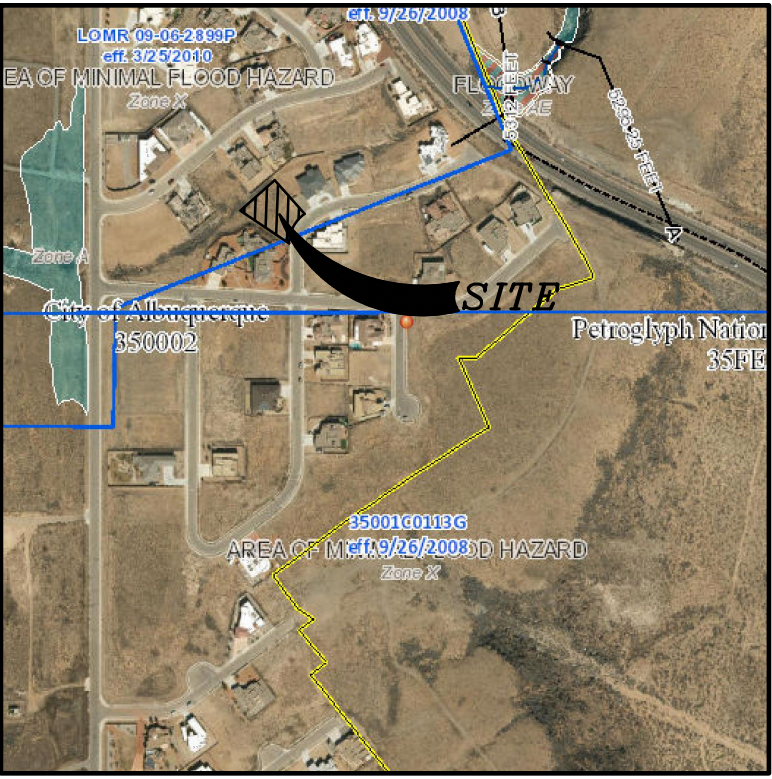
LEGEND

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

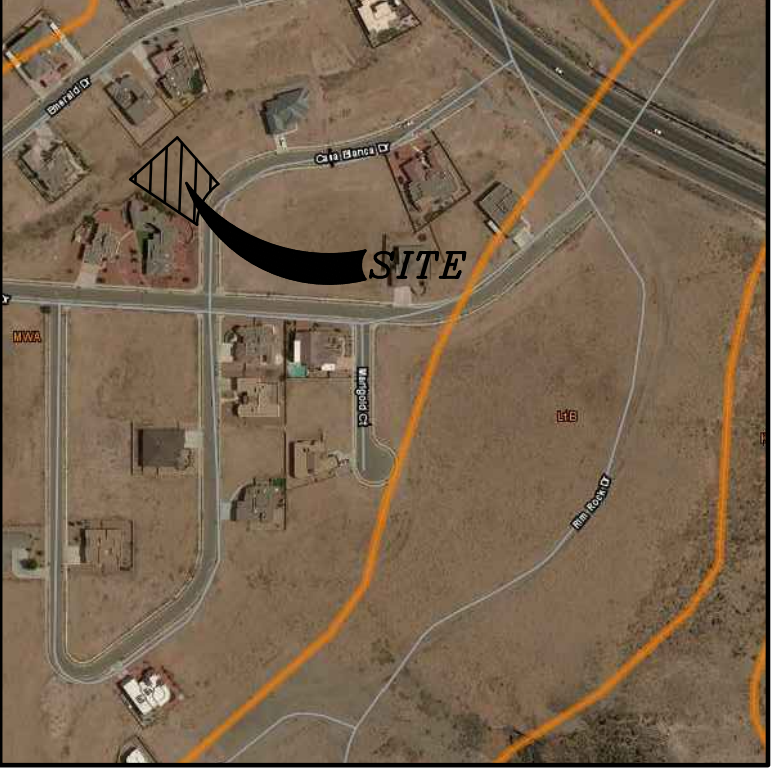
- NOTES:
1. GRADING ACTIVITIES ON ADJACENT PROPERTIES OR RIGHT-OF-WAY WITHOUT WRITTEN PERMISSION FROM THE OWNER IS NOT PERMITTED.
 2. UNPROTECTED SLOPES SHALL BE NO STEEPER THAN 4H:1V. IF THERE IS SUFFICIENT SLOPE PROTECTION (I.E. PLANTINGS, ROCK COVER, SHOTCRETE/CONCRETE) SLOPES MAY BE NO STEEPER THAN 3H:1V.
 3. POND SLOPES SHALL BE TREATED FOR SLOPE PROTECTION, USE XERISCAPE TREATMENT.
 4. THE CMU BLOCK WALLS ON THE NORTHWEST PORTIONS OF THE PROPERTY WILL NEED TO HAVE THE JOINTS SEALED ON THE LOWER 3 LAYERS.



VICINITY MAP
ZONE ATLAS MAP NO. E-10



FEMA FLOODPLAIN
FIRM #35001C0113G



SOILS MAP
NRCS WEB SOIL SURVEY, BERNALILLO COUNTY

LEGAL DESCRIPTION

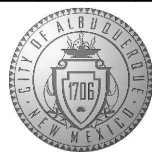
LOT NUMBERED FOUR (4), IN BLOCK NUMBERED ELEVEN (11), OF VOLCANO CLIFFS UNIT 5, A SUBDIVISION OF A TRACT OF LAND SITUATE IN SECTION 27, TOWNSHIP 11 NORTH, RANGE 2 EAST, N.M.P.M., BERNALILLO COUNTY, NEW MEXICO, AS THE SAME ARE SHOWN AND DESIGNATED ON THE PLAT THEREOF, FILED IN THE OFFICE OF THE COUNTY CLERK OF BERNALILLO COUNTY, NEW MEXICO ON NOVEMBER 1, 1967, IN VOLUME D3, FOLIO 175.

BENCH MARK

ELEVATIONS ARE BASED ON CITY OF ALBUQUERQUE STATION No. "CALB. LINE STA. "A", HAVING AN ELEVATION OF 5329.531, NAVD 1988



CITY OF ALBUQUERQUE
MUNICIPAL DEVELOPMENT DEPARTMENT
ENGINEERING DEVELOPMENT DIVISION



TITLE: 6301 CASA BLANCA NW
GRADING & DRAINAGE PLAN

Design Review Committee	City Engineer Approval	Mo./Day/Yr.	Mo./Day/Yr.
City Project No.	Zone Map No.	Sheet	Of
—	E10	1	1