

CITY OF ALBUQUERQUE



December 7, 2015

Richard J. Berry, Mayor

Dennis A. Lorenz, P.E.
Lorenz Design & Consulting, LLC
2501 Rio Grande Blvd NW, Suite A
Albuquerque, NM, 87104

**RE: Rio Grande Housing – 3010 Rio Grande Blvd
Conceptual Grading Plan and Drainage Report
Engineer's Stamp Date 10-29-2015 (File: G13D030)**

Dear Mr. Lorenz:

Based upon the information provided in your submittal received 10-29-2015, the above referenced Conceptual Grading and Drainage plan cannot be approved for Site Plan for Subdivision or Site Plan for Building Permit until the following items are addressed:

- A Storm Water Pollution Prevention Plan (SWPPP) will be required because the disturbance is larger than 1-acre. The note on the plan (PROPOSED IMPROVEMENTS) needs to be corrected.
- If Lot 3 is to remain undisturbed, it appears that the elevation of Lot 4's SW corner will cause stormwater to spill onto the property to the South.

PO Box 1293

The following item will need to be addressed prior to Building Permit:

Albuquerque

New Mexico 87103

www.cabq.gov

- It is understood that the existing site is difficult to drain. However, some of the elevations along some flowpaths are shown exactly flat. It appears that nuisance ponding will be an issue if positive drainage is not called for, for example:
 - a. Around the 68.0 EL points that surround Lot 5.
 - b. The parking stall near the NE corner of Lot 4, and the two parking stalls across the lane.
 - c. The flow path along the west side and the carport of Lots 1 and 2.
 - d. Along the back of Lot 3.

Furthermore, we recommend utilizing landscaped areas to manage nuisance ponding where practicable. The average slope across the site appears to be close to 0.5%, which is typically difficult to achieve with asphalt and soft surfaces.

If you have any questions, you can contact me at 924-3986.

Sincerely,

Abiel Carrillo, P.E.
Principal Engineer, Planning Dept.
Development Review Services
Orig: Drainage file

CONCEPTUAL GRADING AND DRAINAGE PLAN

SCOPE

Pursuant to the City of Albuquerque Drainage Ordinance and the Development Process Manual, Volume 2, Section 22.2, the Conceptual Grading and Drainage Plan shown hereon outlines the drainage management criteria for controlling developed runoff from the project site. The project consists of the construction of an 11 unit residential development, located at 3010 Rio Grande Boulevard NW, Albuquerque, New Mexico.

This plan is presented in support of a Site Plan for Subdivision and Site Plan for Building Permit.

EXISTING CONDITIONS

The project is presently fully developed. Existing site improvements consist of an existing residence, garage, carport, landscaping and associated site improvements. The site is bounded on the west by Rio Grande Blvd NW, and on the north, south and east by developed residential properties. Site topography is extremely flat, with the site situated approximately 1-foot below Rio Grande Blvd. All excess site runoff remains on-site, ponding in very shallow depressions. No off-site drainage impacts the site. An existing 18" storm drain is located in Rio Grande Blvd, constructed mainly to drain nuisance flows from the right of way.

As shown by the attached FIRM Panel, the site lies within the 500-year Zone "X" Flood Zone.

PROPOSED IMPROVEMENTS

As shown by the Plan, the project consists of the construction of an 12 unit residential development. The existing residence and site improvements will remain as shown. Grading, drainage, utility and landscaping improvements will be provided to support the development. Since the site is situated lower than Rio Grande Blvd, and given the existing 18" public storm drain is shallow and has limited capacity, the site will implement a "Flat lands drainage concept". All stormwater runoff will be ponded on-site within a shallow retention pond located at the eastern portion of the property within Tract II. The pond is sized to retain the 100 year, 10 day volume. All buildings will be positioned to provide adequate freeboard above the water surface of the pond. Drainage easements will be granted for conveyance and storage of all runoff.

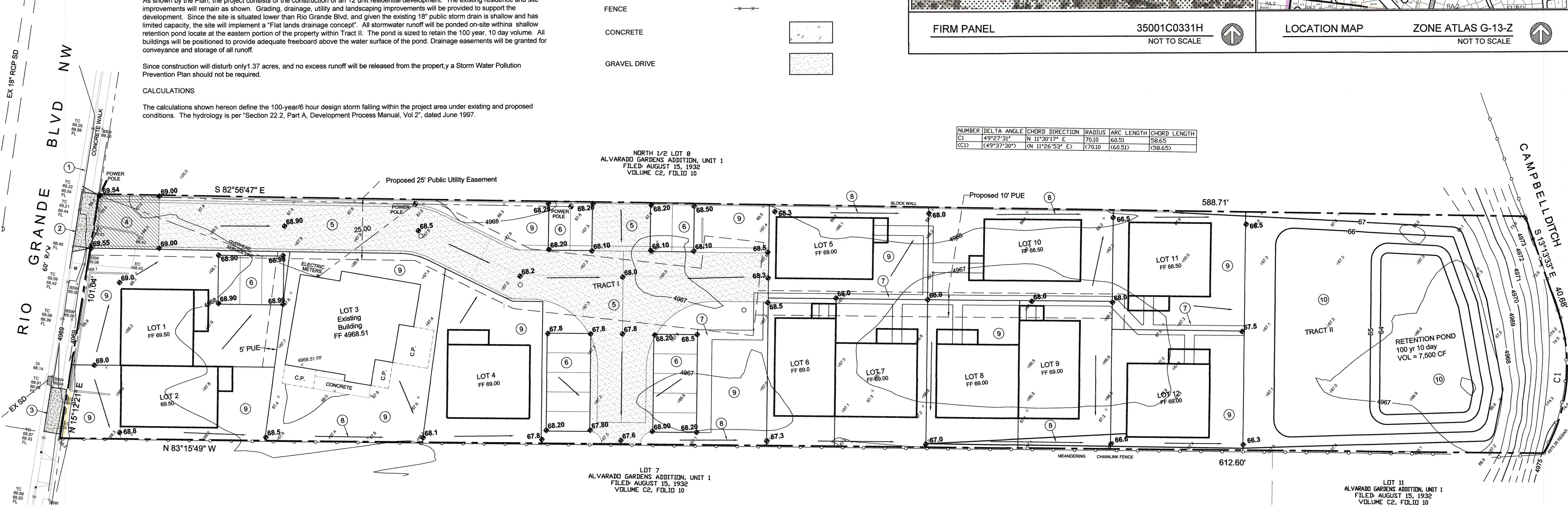
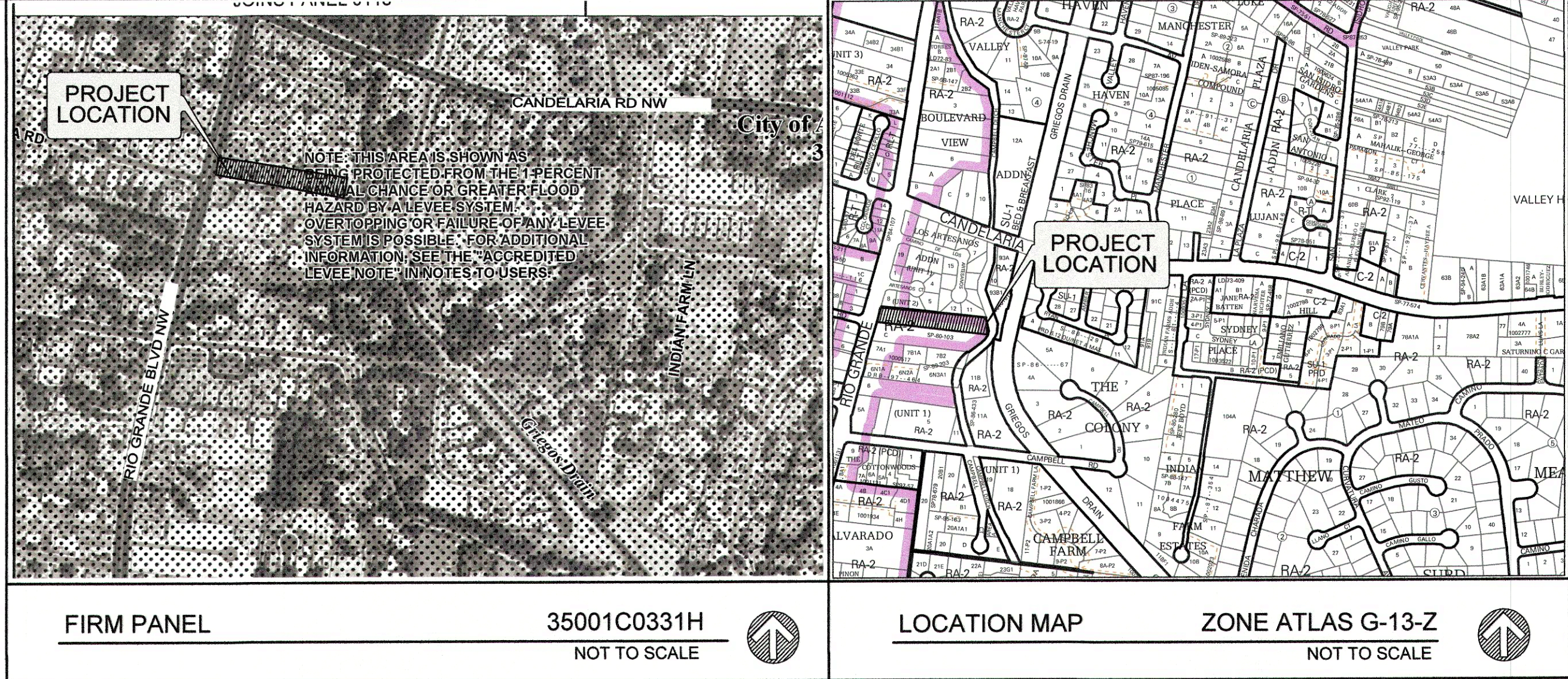
Since construction will disturb only 1.37 acres, and no excess runoff will be released from the property a Storm Water Pollution Prevention Plan should not be required.

CALCULATIONS

The calculations shown hereon define the 100-year/6 hour design storm falling within the project area under existing and proposed conditions. The hydrology is per "Section 22.2, Part A, Development Process Manual, Vol 2", dated June 1997.

LEGEND

ITEM	EXISTING	PROPOSED
UTILITY POLE	pp○	
PROPERTY LINE	—	
SPOT ELEVATION	× 75.5	01.5 ◆
CONTOUR W/ ELEVATION	—5800—	—5800—
BLOCK WALL	=====	
CHAIN LINK FENCE	—	
STORM DRAIN		=====
DIRECTION OF FLOW		←
DRAINAGE SWALE		—
DRAINAGE BASIN DIVIDE		—
FENCE	×××	
CONCRETE		■
GRAVEL DRIVE		■



NUMBER	DELTA ANGLE	CHORD DIRECTION	RADIUS	ARC LENGTH	CHORD LENGTH
C1	49°27'31"	N 11°30'17" E	70.10	60.51	58.65
(C1)	(49°37'30")	(N 11°26'53" E)	(70.10)	(60.51)	(58.65)

KEYED NOTES

- EXISTING PUBLIC CURB, GUTTER AND SIDEWALK.
- REMOVE EXISTING DRIVEPAD. CONSTRUCT NEW DRIVEPAD.
- REMOVE EXISTING DRIVEPAD. REPLACE WITH CURB, GUTTER & SIDEWALK.
- CONSTRUCT 25' X 25' ASPHALT SURFACE PER DETAIL THIS SHEET.
- CONSTRUCT AGGREGATE SURFACING PER DETAIL THIS SHEET.
- COVERED PARKING.
- CONSTRUCT 4' CONCRETE SIDEWALK.
- CONSTRUCT LANDSCAPED DRAINAGE SWALE.
- LANDSCAPING. SEE LANDSCAPE PLAN.
- COMMUNITY GARDEN AND STORM WATER RETENTION POND.

PROJECT DATA

PROPERTY ADDRESS:
3010 RIO GRANDE ALBUQUERQUE, NEW MEXICO

LEGAL DESCRIPTION:
SOUTH HALF OF LOT 8, UNIT 1, ALVARADO GARDENS ADDITION, FILED IN THE OFFICE OF THE COUNTY CLERK OF BERNALILLO COUNTY, NEW MEXICO ON AUGUST 15, 1932, IN VOL. C-2, FOLIO 10.

SITE MAPPING:
TOPOGRAPHIC AND IMPROVEMENT MAPPING
BY HARRIS SURVEYING OCTOBER 2015

PROJECT BENCHMARK:
ACS MONUMENT "3-G12"
ELEVATION 4965.945 FEET 1988 NAVD
THE MONUMENT IS LOCATED 0.9 MILES NORTH OF THE INTERSECTION OF RIO GRANDE BLVD. AND INTERSTATE 40.

PROJECT HYDROLOGY									
AHYMO									
ZONE:		2							
P _{6HOUR}		2.35							
P _{10 DAY}		3.95							
Rio Grande Housing									
EXISTING CONDITION									
BASIN	AREA (ac)	A (ac)	B (ac)	C (ac)	D (ac)	E	Q (cfs)	VOL (ac ft)	VOL 10day (ac ft)
SITE	1.37	0.00	0.65	0.65	0.07	1.01	3.85	0.116	0.1252
PROPOSED CONDITION									
BASIN	AREA (ac)	A (ac)	B (ac)	C (ac)	D (ac)	E	Q (cfs)	VOL (ac ft)	VOL 10day (ac ft)
SITE	1.37	0.00	0.83	0.23	0.31	1.14	4.07	0.130	0.1717

ASPHALT PAVEMENT SECTION

NTS

A
3

GRAVEL PAVEMENT SECTION

NTS

B
3