



Timothy M. Keller, Mayor

May 10, 2018

Shawn Biazar  
SBS Construction and Engineering, LLC  
10209 Snowflake Ct. NW  
Albuquerque, NM, 87114

**RE: 3308 4<sup>th</sup> Street Apartment Building**  
**Grading and Drainage Plan**  
**Engineer's Stamp Date: 04/30/18**  
**Hydrology File: H14D109**

Dear Mr. Biazar:

PO Box 1293

Based upon the information provided in your submittal received 05/04/18, the Grading and Drainage Plan **is not** approved for Building Permit, Grading Permit, and SO-19 Permit. The following comments need to be addressed for approval of the above referenced project:

Albuquerque

1. Please provide the weir calculations for the sidewalk culverts and 18" opening in Pond A.

NM 87103

2. Please provide calculations for the 18" concrete channel.

3. Please provide invert elevations for the 18" opening in Pond A, 18" concrete channel, and both side walk culverts.

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4. Please provide a section for both Pond A & B depicting the first flush volume elevation, 100 detention WSE, and the required freeboard.

5. How is Pond B outfalling? It appears to have no outfall, therefore it is a retention pond. As such, please provide the 100 year – 10 day calculations.

Please provide a Drainage Covenant per Chapter 17 of the DPM for detention ponds prior to Certificate of Occupancy. Please submit this on the 4th floor of Plaza de Sol. A \$25 fee will be required.

# CITY OF ALBUQUERQUE



Timothy M. Keller, Mayor

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

Sincerely,

*Renée C. Brissette*

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

PO Box 1293

Albuquerque

NM 87103

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

DRAINAGE MANAGEMENT PLAN

**Location**  
LOT 1, BLOCK 2, CENTURY ADDITION is located at 3308 4th Street, NW, just south of Alameda drain. This site contains 0.7090 acre. See attached portion of Vicinity Map G-14-Z for exact location.

**Purpose**  
The purpose of this drainage report is to present a conceptual grading and drainage solution for the proposed commercial buildings. We are requesting site plan for building permit approval.

**Existing Site/Drainage Conditions**  
This site contained of existing buildings, concrete pads, asphalt and some gravel. All the existing structures and asphalt and concrete pads have been removed. this site is fairly flat. Most of the site was draining into 4th., NW. No offsite runoff impacts this site.

**Proposed Conditions and On-Site Drainage Management Plan**  
This site is located within zone 2 and in the north valley. We are proposing a building with ground level and underground parking structure. This site will pond most of water and discharge at a control rate. According to grading plan file #G14-D086, the north valley rate of discharge is 2.75 CFS per acre. This site contains 0.7090 acre (30,886 sf). Therefore our rate of discharge will be at 1.95 CFS (0.7090 \* 2.75). This site will generate 3.22 CFS and the difference between the developed flow (3.22 CFS) and allowable discharge (1.95 CFS) will be 1.27 CFS (3.22-1.95). therefore the amonh of the ponding required will be 2,095.51 CF.

There are two proposed pond for this site. one is at the east side of the property and a smaller pond ant the south property line, see grading plan for location. All the water except the some of the proposed driveway which will be draining directly into 4th street, will be drain into the pond in the east. this pond will be connected to the smaller pond along the sount property line via and 8" storm drain pipe. the water eventually will drain into 4th Street via concrete channel. The total volume ponding provided is 3,195.51 CF which is greater than required 2,095.51 CF.

PONDING VOLUME REQUIRED

TOTAL AREA = 30,688 SF = 0.7090 ACRE  
ZONE 2 LAND TREATMENT TABLE A-8: B=0.78 AND D=2.12  
B=2,000 SF/0.0459 AC D=28,388 SF/0.6631 AC  
VOL (100-yr/6hr ) = (2000\*0.78)/12 + 28388\*2.12/12 = 5,233.19 CF  
Q (100-yr/6 hr) (USING TABLE A-9, ZONE 2)=(2.28\*0.0459)+(4.7\*0.6631)=3.22 CFS  
ALLOWABLE RUNOFF = 2.75/AC \* 0.7090 AC = 1.95 CFS  
ADDITIONAL RUNOFF = 3.22-1.95 =1.27 CFS  
PONDING VOLUME REQUIRED = 5,233.19/3.22 \* 1.27 = 2,095.51 CF

POND VOLUME REQUIRED FOR FIRST FLUSH

0.34 INCHES x IMPERVIOUS AREA = (0.34/12 x 30,688) = 869.49 CF  
THIS VOLUME IS PART OF THE PONDING PROVIDED.

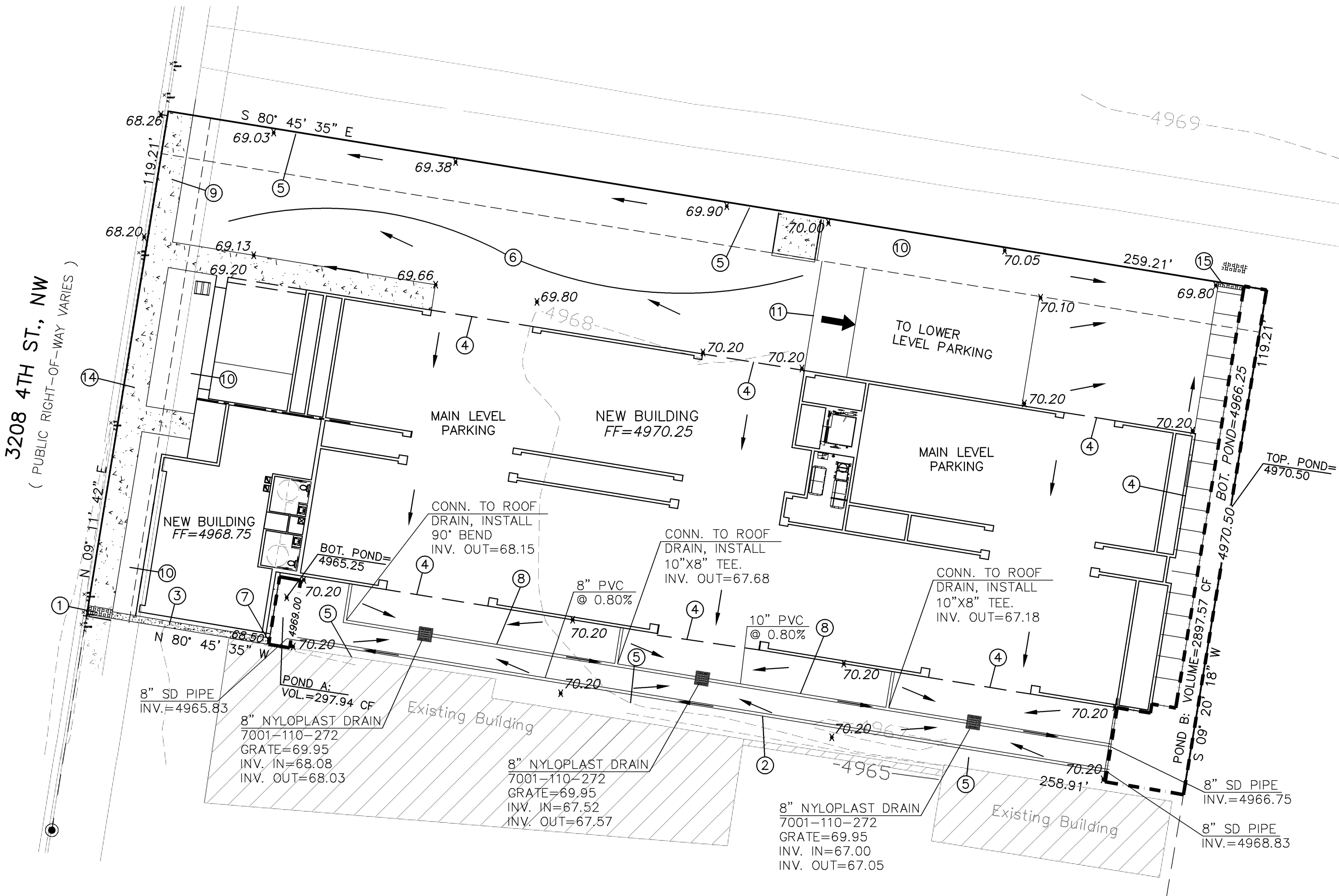
PONDING AREA PROVIDED

TOTAL POND AREA PROVIDED = PONDING CALCULATIONS:

POND A: AREA @ TOP = 79.45, WITH 3.75' DEPTH  
POND VOLUME = (79.45\*3.75') = 297.94 CF

POND B: AREA @ TOP = 867.78, WITH 4.25' DEPTH  
POND VOLUME = (867.78\*4.25') = 2,897.57 CF

TOTAL POND VOLUME PROVIDED = (2,897.57+297.94)= 3,195.51 CF



NOTES:

- 24" SIDEWALK CURLVET PER CITY STD DWG 2236 (TACK WELD PLATE AT THE BOLT).
- 8" STORM DRAIN PIPE, SDR 35, @ 0.8% SLOPE.
- 18" WIDE CONC. CHANNEL WITH 8" WALL.
- BUILDING ENVELOPE.
- INSTALL MEDIAN CURB & GUTTER.
- ASPHALT PAVING AREA.
- PROVIDE 18" OPENNING.
- 10" STORM DRAIN PIPE, SDR 35, @ 0.8% SLOPE.
- NEW DRIVE WAY.
- LANDSCAPING AREA.
- TO LOWER PARKING LEVEL.
- LANDSCAPING AREA.
- TO LOWER PARKING LEVEL.
- REMOVE AND REPLACE EXISTING SIDEWALK.
- 12" SIDEWALK CURLVET PER CITY STD DWG 2236 (TACK WELD PLATE AT THE BOLT).

NOTICE TO CONTRACTORS

- AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY.
- ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED, EXCEPT AS OTHERWISE STATED OR PROVIDED HEREON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH CITY OF ALBUQUERQUE INTERIM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1985.
- TWO WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL FOR LOCATING SERVICE, 260-1990 OR "811", FOR LOCATION OF EXISTING UTILITIES.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL CONSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
- BACKFILL COMPACTION SHALL BE ACCORDING TO TRAFFIC/STREET USE.
- MAINTENANCE OF THESE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY SERVED.
- WORK ON ARTERIAL STREETS SHALL BE PERFORMED ON A 24-HOUR BASIS.

APPROVALS	NAME	DATE
INSPECTOR		



VICINITY MAP:

G-14-Z

LEGAL DESCRIPTION:

LOT 1, BLOCK 2, CENTURY ADDITION  
CONTAINING: 30,883.00 SF ( 0.7090 ACRE )  
ZONING: SU-2 NFMX

GENERAL NOTES:

- CONTOUR INTERVAL IS HALF (1.00) FOOT.
- ELEVATIONS ARE BASED ON CITY OF ALBUQUERQUE CONTROL STATION SMW-, HAVING AN ELEVATION OF 4969.728 FEET ABOVE SEA LEVEL.
- UTILITIES SHOWN HEREON ARE IN THEIR APPROXIMATE LOCATION BASED ONLY ON ABOVE GROUND EVIDENCE FOUND IN THE FIELD AND AS-BUILT INFORMATION PROVIDED BY THE CLIENT. UTILITIES SHOWN HEREON, WHETHER INDICATED AS ABANDONED OR NOT, SHALL BE VERIFIED BY OTHERS FOR EXACT LOCATION AND/ OR DEPTH PRIOR TO EXCAVATION OR DESIGN CONSIDERATIONS.
- THIS IS NOT A BOUNDARY SURVEY, BEARINGS ARE ASSUMED, DISTANCES AND FOUND PROPERTY CORNERS ARE FOR INFORMATIONAL PURPOSES ONLY.
- SLOPES ARE AT 3:1 MAXIMUM.

LEGEND

- 5030--- EXISTING CONTOUR (MAJOR)
- 5029--- EXISTING CONTOUR (MINOR)
- BOUNDARY LINE
- x 28.50 PROPOSED SPOT ELEVATION
- x 5029.16 EXISTING GRADE
- x 5028.65 EXISTING FLOWLINE ELEVATION
- FL
- PROPOSED RETAINING WALL
- BC=89.08 BOTTOM OF CHANEL
- TC=28.50 TOP OF CURB
- TA=28.00 TOP OF ASPHALT
- HP HIGH POINT
- 86.65 AS-BUILT GRADES
- 85.47 AS-BUILT SPOT ELEVATIONS
- x 86.65



REZA AFAGHPOUR  
P.E. #11814

SBS CONSTRUCTION  
AND ENGINEERING, LLC

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ALBUQUERQUE, NEW MEXICO 87114  
(505)899-5570

GRAPHIC SCALE



3308 4th SREET NW  
GRADING AND DRAINAGE PLAN

DRAWING:	DRAWN BY:	DATE:	SHEET #
201618-GR.DWG	SH-B	09-14-207	C 101