# CITY OF ALBUQUERQUE

Planning Department
Brennon Williams, Director



February 13, 2020

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

RE: 3308 4th Street Apartment Building

Permanent C.O. - Accepted

Engineer's Certification Date: 01/30/20

Engineer's Stamp Date: 10/22/18

Hydrology File: H14D109

Dear Mr. Biazar:

PO Box 1293 Based on the Certification received 02/12/20 and site visit on 02/13/20, this certification is

approved in support of Permanent Release of Occupancy by Hydrology.

Albuquerque If you have any questions, please contact me at 924-3995 or rbrissette@cabq.gov.

Sincerely,

NM 87103

www.cabq.gov

Renée C. Brissette, P.E. CFM

Renée C. Brissette

Senior Engineer, Hydrology

Planning Department



# City of Albuquerque

#### Planning Department

#### Development & Building Services Division

#### DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 6/2018)

Project Title: 3308 4th Street Apartments Building DRB#:	•	* **
Legal Description: LOT 1, BLOCK 2, CEN	ITURY ADDITION	
City Address: 3308 4th Street, NW		
Applicant: SBS CONSTRUCTION AND EN		Contact: SHAWN BIAZAR
Phone#: (505) 804-5013		E-mail: AECLLC@AOL.COM
Other Contact:		Contact:
Address:Phone#:		E-mail:
TYPE OF DEVELOPMENT:PLA		
IS THIS A RESUBMITTAL? X Yes <b>DEPARTMENT</b> TRANSPORTATION		SE
TYPE OF SUBMITTAL:  X ENGINEER/ARCHITECT CERTIFICATION PAD CERTIFICATION CONCEPTUAL G & D PLAN GRADING PLAN DRAINAGE REPORT DRAINAGE MASTER PLAN FLOODPLAIN DEVELOPMENT PERMITE ELEVATION CERTIFICATE CLOMR/LOMR TRAFFIC CIRCULATION LAYOUT (TO TRAFFIC IMPACT STUDY (TIS) STREET LIGHT LAYOUT OTHER (SPECIFY) PRE-DESIGN MEETING?	BUILDING CERTIFICA  PRELIMINA SITE PLAN SITE PLAN FINAL PLA  FAPPLIC SIA/ RELEA FOUNDATI GRADING SO-19 APPL PAVING PR X GRADING/ WORK ORD CLOMR/LO FLOODPLA	ASE OF FINANCIAL GUARANTEE ON PERMIT APPROVAL PERMIT APPROVAL ROVAL ERMIT APPROVAL PAD CERTIFICATION DER APPROVAL
DATE SUBMITTED: 1-30-2020	By: SHAWN BIAZAR	
COA STAFF:	ELECTRONIC SUBMITTAL RECEIVED:	

FEE PAID:\_\_\_\_\_

#### DRAINAGE MANAGEMENT PLAN

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 drainig into 4th., NW. No offiste 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 propsing a building with ground level and underground parking structure. This site will pond most of water and discharege 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 amonth of the ponding required will be 2,095.51 CF.

There are four proposed pond for this site. One is at the east side of the property and three smaller ponds along 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 drain into the ponds in the east and south. These ponds will be connected via 2-4" storm drain pipe. the water eventually will drain into 4th Street via concrete channel. The total volume ponding provided is 3,396.14 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=2.12B=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 =  $(0.34/12 \times 30,688) = 869.49$  CF THIS VOLUME IS PART OF THE PONDING PROVIDED.

# PONDING AREA PROVIDED

TOTAL POND AREA PROVIDED = PONDING CALCULATIONS:

POND A: AREA @ TOP = 327.27. WITH 3.00' DEPTH POND VOLUME = (327.27\*3.00') = 711.50 CF

POND B: AREA @ TOP = 323.95, WITH 1.75' DEPTH

POND VOLUME = (323.95\*1.75') = 566.91 CF

POND C: AREA @ TOP = 323.95, WITH 1.75' DEPTH POND VOLUME = (323.95\*1.75') = 566.91 CF

POND D: AREA @ TOP = 866.00, WITH 1.75' DEPTH

POND VOLUME = (866.00\*1.75') = 1,550.50 CF

TOTAL POND VOLUME PROVIDED = (711.50+566.91+566.91+1550.50)= 3,396.14 CF

#### SIDEWALK CULVERT/CONCRETE CHANNEL AND POND OPPENING CALCULATIONS

24" Sidewalk Culvert 8" High Calculation Using Weir Equation

Q=CLH^1.5 H = 0.67', C = 2.95, L=24" (2.00')

2.95\*2\*(.67)^1.50 = 2.958\*2\*0.548418636

# 18" Wide With 8" High Concrete Channel Using Weir Equation

Q=CLH^1.5 H = 0.67', C = 2.95, L=18'' (1.50') 2.95\*1.50(.67)^1.50 = 2.958\*1.50\*0.548418636

Q = 2.427 cfs

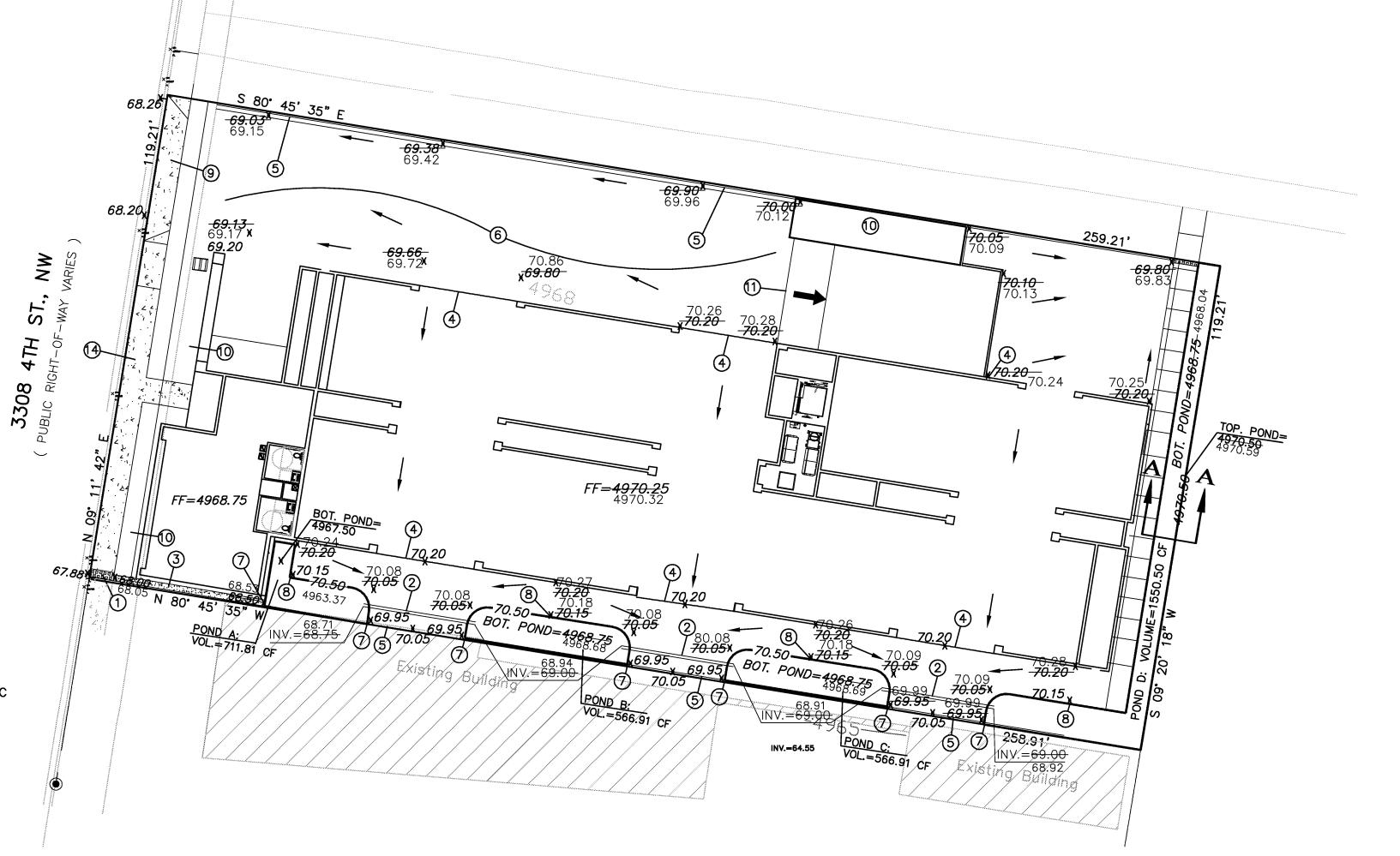
# DRAINAGE CERTIFICATION

I, REZA AFAGHPOUR , NMPE 11814, OF SBS CONSTRUCTION AND ENGINEERING, LLC , 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 . THE RECORD INFORMATION EDITED ONTO THE ORIGINAL

DESIGN DOCUMENT HAS BEEN OBTAINED BY NMPS 9801 LEONARD MARTINEZ, OF SBS CONSTRUCTION AND ENGINEERING . I FURTHER CERTIFY THAT I HAVE PERSONALLY VISITED THE PROJECT SITE ON AND HAVE DETERMINED BY VISUAL INSPECTION THAT THE SURVEY DATA PROVIDED IS REPRESENTATIVE OF ACTUAL SITE CONDITIONS AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. THIS CERTIFICATION IS SUBMITTED IN SUPPORT OF A REQUEST FOR \_FINAL CERTIFICATE OF OCCUPANCY .

THE RECORD INFORMATION PRESENTED HEREON IS NOT NECESSARILY COMPLETE AND INTENDED ONLY TO VERIFY SUBSTANTIAL COMPLIANCE OF THE GRADING AND DRAINAGE ASPECTS OF THIS PROJECT. THOSE RELYING ON THIS RECORD DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE USING IT FOR ANY OTHER PURPOSE.





O NOTES:

- 1. 24" SIDEWALK CULRVET PER CITY STD DWG 2236 (TACK WELD PLATE AT THE BOLT).
- 2. INSTALL 2-4" STORM DRAIN PIPE, SDR 35.
- 3. 18" WIDE CONC. CHANNEL WITH 8" WALL.
- 4. BUILDING ENVELOPE.
- 5. INSTALL MEDIAN CURB & GUTTER.
- 6. ASPHALT PAVING AREA. 7. PROVIDE 18" OPPENING.
- 8. PROVIDE 12" CURB OPPENING.
- 9. NEW DRIVE WAY.
- 10. LANDSCAPING AREA.
- 11. TO LOWER PARKING LEVEL. 12. LANDSCAPING AREA.

13. TO LOWER PARKING LEVEL. 14. REMOVE AND REPLACE EXISTING SIDEWALK.

TOP POND=4970.50 MAX. 100 YR WAT. SURF. ELEV.=4970.12 RET. WALL FIRST FLUSH ELEV.=4969.18 BOT. POND=4968.75 SECTION A-A, POND B,C,D

NOTICE TO CONTRACTORS

1. AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY.

2. 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,

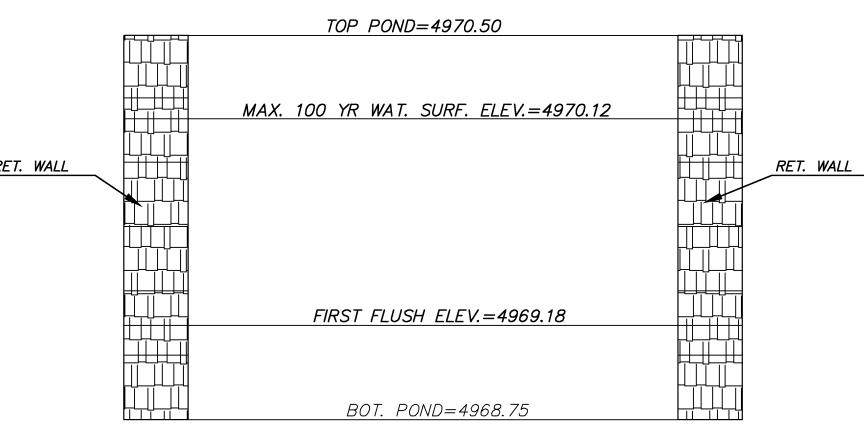
3. TWO WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL FOR LOCATING SERVICE, 260—1990 OR "811", FOR LOCATION OF EXISTING UTILITIES.

4. 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.

5. BACKFILL COMPACTION SHALL BE ACCORDING TO TRAFFIC/STREET USE. 6. MAINTENANCE OF THESE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY SERVED.

7. WORK ON ARTERIAL STREETS SHALL BE PERFORMED ON A 24-HOUR BASIS.

**APPROVALS** NAME DATE **INSPECTOR** 



----5030-----

LEGEND

VICINITY MAP:

LEGAL DESCRIPTION:

ZONING: SU-2 NFMX

**GENERAL NOTES:** 

LOT 1, BLOCK 2, CENTURY ADDITION

CONTAINING: 30,883.00 SF ( 0.7090 ACRE )

1: CONTOUR INTERVAL IS HALF (1.00) FOOT.

5: SLOPES ARE AT 3:1 MAXIMUM.

2: ELEVATIONS ARE BASED ON CITY OF ALBUQUERQUE CONTROL STATION

SMW-, HAVING AN ELEVATION OF 4969.728 FEET ABOVE SEA LEVEL.

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 CON-

4: THIS IS NOT A BOUNDARY SURVEY, BEARINGS ARE ASSUMED, DISTANCES

AND FOUND PROPERTY CORNERS ARE FOR INFORMATIONAL PURPOSES ONLY.

3: UTILITIES SHOWN HEREON ARE IN THEIR APPROXIMATE LOCATION BASED

EXISTING CONTOUR (MAJOR) EXISTING CONTOUR (MINOR) BOUNDARY LINE

G-14-Z

PROPOSED SPOT ELEVATION X 28.50

EXISTING GRADE 

X <sub>5028.65</sub> EXISTING FLOWLINE ELEVATION

BC = 89.08BOTTOM OF CHANEL

TC=28.50TOP OF CURB TA = 28.00

**REZA AFAGHPOUR** 

P.E. #11814

TOP OF ASPHALT HIGH POINT

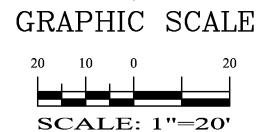
AS-BUILT GRADES

AS-BUILT SPOT ELEVATIONS

SBS CONSTRUCTION AND ENGINEERING, LLC

> 10209 SNOWFLAKE CT., NW ALBUQUERQUE, NEW MEXICO 87114 (505)899-5570

PROPOSED RETAINING WALL



# 3308 4th SREET NW GRADING AND DRAINAGE DLAN

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