

CITY OF ALBUQUERQUE



June 23, 2016

Reza Afaghpour, PE
SBS Construction and Engineering, LLC
10209 Snowflake Ct NW
Albuquerque, NM 87114

**Re: Commercial Apartment Building Phase 1
1120 Griegos Rd NW
Request Permanent C.O. - Accepted
Engineer's Stamp dated: 7-8-15 (F14D058)
Certification dated: 6-9-16**

Dear Mr. Afaghpour,

PO Box 1293 Based on the Certification received 6/9/2016, the site is acceptable for release of Certificate
of Occupancy by Hydrology.

Albuquerque If you have any questions, you can contact me at 924-3686 or Totten Elliott at 924-3982.

Sincerely,

New Mexico 87103


Abiel Carrillo, P.E.

www.cabq.gov

Principal Engineer, Planning Department
Development and Review Services

TE/AC

C: email, Cordova, Camille C.; Miranda, Rachel; Sandoval, Darlene M.; Blocker,
Lois

- 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, 1985.
 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		

Location
Northerly Portion of Lots 40 and 41, entire lots 42, and 43, Rossiter Addition, contains +/- 1.4792 acres and is located at southeast corner of 12th Street and Griegos Rd. N.W. See attached portion of the Vicinity Map for exact location.

Purpose
The purpose of this drainage report is to present a grading and drainage solution for the proposed building shown on the grading plan.

Existing Drainage Conditions
There is undeveloped. This site is fairly flat, and it drains to Griegos Road and 12th Street N.W. No offsite runoff enters the site. Based on the FIRM Map 35001C0119G (revised September 26, 2008) the site does not fall within a 100-year floodplain.

Proposed Conditions and On-Site Drainage Management Plan
Only 74% of the proposed Lot will be developed at this time and remaining portion of the site to the east will remain at its current conditions. The runoff generated from this site will be partly retained on-site. Several Ponds (A through N) are designed to hold 4,748.24 cf. When the ponds exceed their capacity the runoff will overflow into the parking lot and then to Griegos public street via the entrance. The allowable discharge in the Valley is 2.75 cf/acre meaning a retention volume requirement of 0.50 inches times the area (4,748.50 cf). The 90th Percentile/First Flush ponding requirement is 0.34 inches times the impervious area (1,023.55 cf). Total retention volume provided (4,748.50 cf) far exceeds the ponding requirement in the Valley (1,980.55 cf) and First Flush (1,023.55 cf).

Calculations
City of Albuquerque, Development Process Manual, Section 22.2, Hydrology Section, was used for runoff calculations. See this plan for AHYMO input and Summary output files.

* ZONE 2

* 100-YEAR, 6-HR STORM (UNDER EXISTING CONDITIONS) *

START TIME=0.0
RAINFALL TYPE=1 RAIN QUARTER=0.0 IN
RAIN ONE=2.01 IN RAIN SIX=2.35 IN
RAIN DAY=2.75 IN DT=0.03333 HR

* ON-SITE
COMPUTE NM HYD ID=1 HYD NO=100.0 AREA=0.001705 SQ MI
PER A=0.00 PER B=30.00 PER C=30.00 PER D=40.00
TP=0.1333 HR MASS RAINFALL=-1

* 10-YEAR, 6-HR STORM (UNDER EXISTING CONDITIONS) *

START TIME=0.0
RAINFALL TYPE=1 RAIN QUARTER=0.0 IN
RAIN ONE=1.34 IN RAIN SIX=1.57 IN
RAIN DAY=1.83 IN DT=0.03333 HR

* ON-SITE
COMPUTE NM HYD ID=1 HYD NO=110.0 AREA=0.001705 SQ MI
PER A=0.00 PER B=30.00 PER C=30.00 PER D=40.00
TP=0.1333 HR MASS RAINFALL=-1

* 100-YEAR, 6-HR STORM (UNDER PROPOSED CONDITIONS) *

START TIME=0.0
RAINFALL TYPE=1 RAIN QUARTER=0.0 IN
RAIN ONE=2.01 IN RAIN SIX=2.35 IN
RAIN DAY=2.75 IN DT=0.03333 HR

* ON-SITE
COMPUTE NM HYD ID=1 HYD NO=100.1 AREA=0.001705 SQ MI
PER A=0.00 PER B=10.00 PER C=14.00 PER D=76.00
TP=0.1333 HR MASS RAINFALL=-1

* 10-YEAR, 6-HR STORM (UNDER PROPOSED CONDITIONS) *

START TIME=0.0
RAINFALL TYPE=1 RAIN QUARTER=0.0 IN
RAIN ONE=1.34 IN RAIN SIX=1.57 IN
RAIN DAY=1.83 IN DT=0.03333 HR

* ON-SITE
COMPUTE NM HYD ID=1 HYD NO=110.1 AREA=0.001705 SQ MI
PER A=0.00 PER B=10.00 PER C=14.00 PER D=76.00
TP=0.1333 HR MASS RAINFALL=-1

FINISH

AHYMO PROGRAM SUMMARY TABLE (AHYMO_97) -
INPUT FILE = 12GR.TXT

- VERSION: 1997.02d

RUN DATE (MON/DAY/YR) = 04/22/2015
USER NO. = AHYMO-I-9702c0100R31-AH

COMMAND	HYDROGRAPH IDENTIFICATION	FROM ID NO.	TO ID NO.	AREA (SQ MI)	PEAK DISCHARGE (CFS)	RUNOFF VOLUME (AC-FT)	RUNOFF (INCHES)	TIME TO PEAK (HOURS)	CFS PER ACRE	PAGE = 1
START	RAINFALL TYPE= 1									
COMPUTE NM HYD		100.00	-	1	.00171	3.83	.128	1.40813	1.500	3.511 PER IMP= 40.00
START	RAINFALL TYPE= 1									
COMPUTE NM HYD		110.00	-	1	.00171	2.20	.069	.76370	1.500	2.017 PER IMP= 40.00
START	RAINFALL TYPE= 1									
COMPUTE NM HYD		100.10	-	1	.00171	4.64	.167	1.83949	1.500	4.250 PER IMP= 76.00
START	RAINFALL TYPE= 1									
COMPUTE NM HYD		110.10	-	1	.00171	2.94	.101	1.11276	1.500	2.692 PER IMP= 76.00

POND CALCULATION

TOTAL POND AREA PROVIDED = POND A + B + C + D + E + F + G + H + I + J + K + L + M + N = 4,748.24 CF
TOTAL PONDING VOLUME REQUIRED (VALLEY) = 0.5 INCHES x AREA = (0.5/12 x 47,533.16) = 1,980.55 CF
TOTAL PONDING VOLUME REQUIRED (90TH PERCENTILE/FIRST FLUSH) = 0.34 INCHES x IMPERVIOUS AREA = (0.34/12 x 36,125.2) = 1,023.55 CF



DRAINAGE CERTIFICATION

I, REZA AFAGHPUR, 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 DATED 07-08-2015. THE RECORD INFORMATION EDITED ONTO THE ORIGINAL DESIGN DOCUMENT HAS BEEN OBTAINED BY NMPS 9801, OF SBS CONSTRUCTION AND ENGINEERING, LLC. 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.

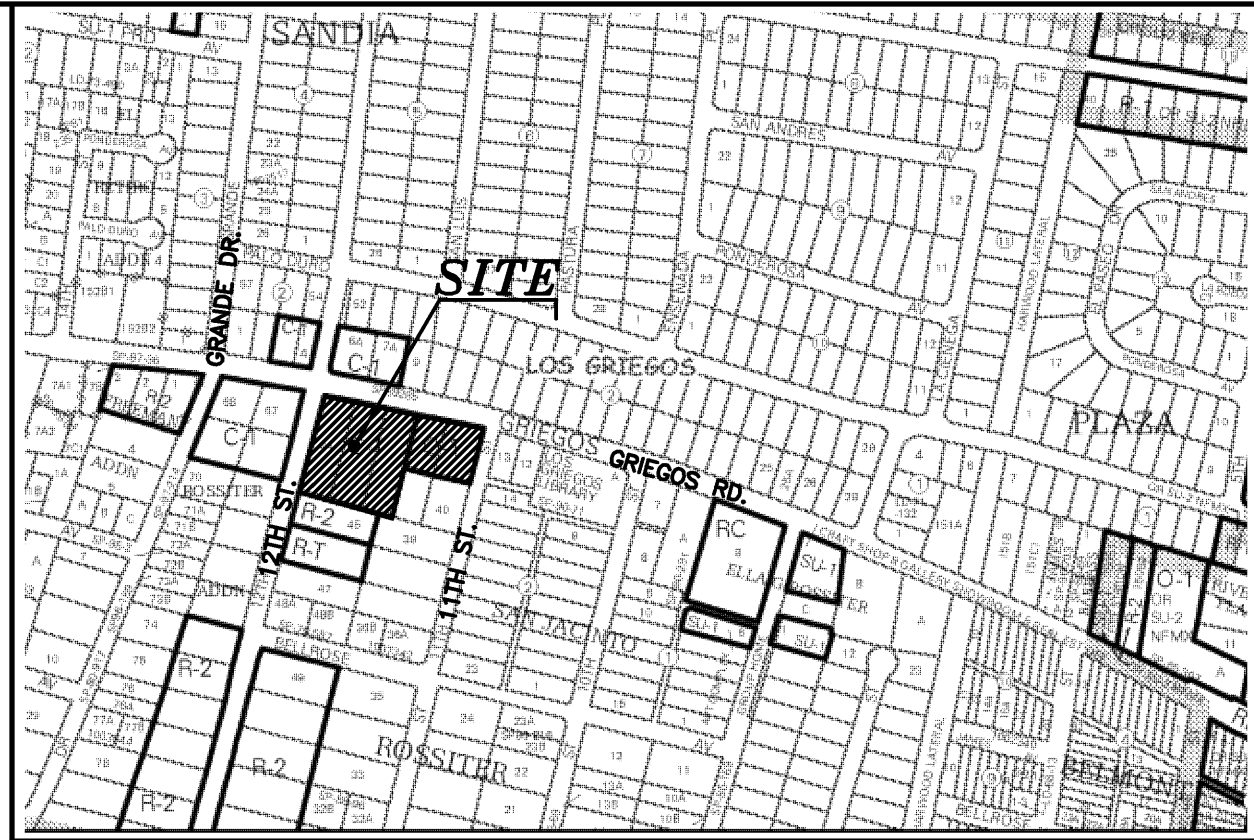
THE RECORD INFORMATION PRESENTED HEREON IS NOT NECESSARILY COMPLETE AND INTENDED ONLY TO VERIFY SUBSTANTIAL COMPLIANCE OF THE GRADING AND DRAINAGE ASPECTS OF THIS PROJECT. THOSE RELYING ON THIS RECORD DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE USING IT FOR ANY OTHER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

REZA AFAGHPUR, NMPE 11814
DATE 6/22/2016

NOTES:

1. PROVIDE 12" CURB OPENING
2. 12" SIDEWALK CULRVET PER CITY STD DWG 2236 (TACK WELD PLATE AT THE BOLT), 2' PAST PL.
3. 6" WALL OPENING (OR TURN TWO BLOCKS) AT EACH WALL. BUILD #4 REBAR AT 3" ON CENTER, TYPICAL, 3" ABOVE GROUND.

GRAPHIC SCALE



VICINITY MAP:

F-14-Z

LEGAL DESCRIPTION:

LOT 43-A, ROSSITER ADDITION
CONTAINING 64.435.84 S.F. (1.4792 ACRE)
ZONING: C-1 AND O-1 USES

GENERAL NOTES:

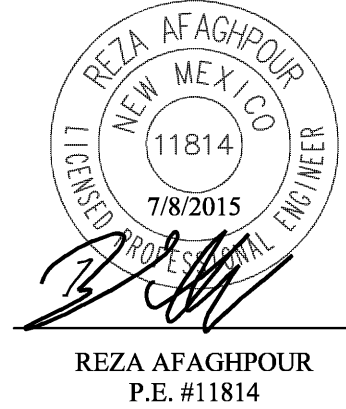
- 1: CONTOUR INTERVAL IS HALF (0.50) FOOT.
- 2: ELEVATIONS ARE BASED ON CITY OF ALBUQUERQUE CONTROL STATION LSS_206, HAVING AN ELEVATION OF 4976.652 FEET ABOVE SEA LEVEL.
- 3: UTILITIES SHOWN HEREON ARE IN THEIR APPROXIMATE LOCATION BASED ONLY ON ABOVE GROUND EVIDENCE FOUND IN THE FIELD AND AS-BUILT 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.
- 4: THIS IS NOT A BOUNDARY SURVEY, BEARINGS ARE ASSUMED, DISTANCES AND FOUND PROPERTY CORNERS ARE FOR INFORMATIONAL PURPOSES ONLY.
- 5: SLOPES ARE AT 3:1 MAXIMUM.

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, 1985.
3. TWO WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE, 765-1234, 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.

LEGEND

- 5100 EXISTING CONTOUR (MAJOR)
- 5102 EXISTING CONTOUR (MINOR)
- BOUNDARY LINE
- 85.46 PROPOSED SPOT ELEVATION
- 5265.16 EXISTING GRADE
- 5284.43 EXISTING FLOWLINE ELEVATION
- PROPOSED RETAINING WALL
- BC=89.08 BOTTOM OF CHANEL
- TRW=91.50 TOP OF RETAINING WALL
- TF=88.00 TOP OF FOOTING
- HP HIGH POINT
- 72.75 AS-BUILT GRADES
- 72.75 (GROUND)
- 72.75 (POND)
- 72.75 (CONC./ASPH.)



SBS CONSTRUCTION AND ENGINEERING, LLC

10209 SNOWFLAKE CT. NW
ALBUQUERQUE, NEW MEXICO 87114
(505)899-3570

17 UNIT TOWNHOUSE DEVELOPMENT GRADING AND DRAINAGE PLAN

DRAWING:	DRAWN BY:	DATE:	SHEET #
201418-GR.DWG	SH-B	07-27-2014	C102