

CITY OF ALBUQUERQUE

Planning Department
David Campbell, Director



Mayor Timothy M. Keller

December 24, 2018

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

RE: **Townhome for Jason Buchanan**
1106 Griegos NW
Grading and Drainage Plan
Engineer's Stamp Date: 12/20/18
Hydrology File: F14D058A

Dear Mr. Biazar:

Based on the submittal received on 12/21/18, the Grading and Drainage Plan is approved for Building Permit and SO-19.

PO Box 1293

Prior to Certificate of Occupancy (For Information):

Albuquerque

1. Engineer's Certification, per the DPM Chapter 22.7: *Engineer's Certification Checklist For Non-Subdivision* is required.
2. The sidewalk culverts must be inspected and approved by storm drain maintenance (Jason Rodriguez, jtrodriguez@cabq.gov or 857-8607).
3. A Bernalillo County Recorded [Drainage Covenant \(No Public Easement\)](#) is required for the stormwater control pond. The original notarized form, exhibit A (legible on 8.5x11 paper), and recording fee (\$25, payable to Bernalillo County) must be turned into DRC (4th, Plaza del Sol) for routing. Please contact Charlotte LaBadie (clabadie@cabq.gov, 924-3996) or Madeline Carruthers (mtafoya@cabq.gov, 924-3997) regarding the routing and recording process for covenants. The routing and recording process for covenants can take a month or longer; Hydrology recommends beginning this process as soon as possible as to not delay approval for certificate of occupancy.

NM 87103

www.cabq.gov

If you have any questions, please contact me at 924-3695 or dpeterson@cabq.gov.

Sincerely,

Dana Peterson, P.E.
Senior Engineer, Planning Dept.
Development Review Services



City of Albuquerque

Planning Department
Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 6/2018)

Project Title: TOWNHOME FOR JASON BUCHANAN Building Permit #: 2018-45632 Hydrology File #: F14D058A
DRB#: _____ EPC#: _____ Work Order#: _____
Legal Description: LOT 43-A ROSITTER ADDITION
City Address: 1106 GRIEGOS RD., NW

Applicant: SBS CONSTRUCTION AND ENGINEERING, LLC Contact: SHAWN BIAZAR
Address: 10209 SNOWFLAKE CT., NW, ALBUQUERQUE, NM 87114
Phone#: (505) 804-5013 Fax#: (505) 897-4996 E-mail: AECLLC@AOL.COM

Other Contact: _____ Contact: _____
Address: _____
Phone#: _____ Fax#: _____ E-mail: _____

TYPE OF DEVELOPMENT: _____ PLAT (# of lots) _____ RESIDENCE _____ DRB SITE _____ ADMIN SITE

IS THIS A RESUBMITTAL? Yes _____ No

DEPARTMENT _____ TRANSPORTATION HYDROLOGY/DRAINAGE

Check all that Apply:

TYPE OF SUBMITTAL:

- ENGINEER/ARCHITECT CERTIFICATION
- PAD CERTIFICATION
- CONCEPTUAL G & D PLAN
- GRADING PLAN
- DRAINAGE REPORT
- DRAINAGE MASTER PLAN
- FLOODPLAIN DEVELOPMENT PERMIT APPLIC
- ELEVATION CERTIFICATE
- CLOMR/LOMR
- TRAFFIC CIRCULATION LAYOUT (TCL)
- TRAFFIC IMPACT STUDY (TIS)
- STREET LIGHT LAYOUT
- OTHER (SPECIFY) _____
- PRE-DESIGN MEETING?

TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

- BUILDING PERMIT APPROVAL
- CERTIFICATE OF OCCUPANCY
- PRELIMINARY PLAT APPROVAL
- SITE PLAN FOR SUB'D APPROVAL
- SITE PLAN FOR BLDG. PERMIT APPROVAL
- FINAL PLAT APPROVAL
- SIA/ RELEASE OF FINANCIAL GUARANTEE
- FOUNDATION PERMIT APPROVAL
- GRADING PERMIT APPROVAL
- SO-19 APPROVAL
- PAVING PERMIT APPROVAL
- GRADING/ PAD CERTIFICATION
- WORK ORDER APPROVAL
- CLOMR/LOMR
- FLOODPLAIN DEVELOPMENT PERMIT
- OTHER (SPECIFY) _____

DATE SUBMITTED: 12-20-2018 By: SHAWN BIAZAR

COA STAFF: _____

ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____

SBS CONSTRUCTION AND ENGINEERING, LLC

December 20, 2018

Mr. Dana Peterson, PE
Senior Engineer, Planning Dept.
Development Review Services
City of Albuquerque Planning Department
PO Box 1293, 600 Second Street, NW
Albuquerque, NM 87103

RE: Townhome for Jason Buchanan, 1106 Griegos Road, NW, Grading Plan
Hydrology File #F14D058A

Dear Mr. Peterson;

Below is the response to your comments regarding the 1106 Griegos Rd., NW, Grading Plan comments:

- 1) The grading plan is showing ponding the developed flow under proposed condition minus the historic discharge (for the NW corner of the site only which drains into Griegos, +/-4000 sf).
- 2)The 2.75 cfs/acre discharge is removed from calculations and the onsite ponding of 100-yr, 6hr storm minus historic discharge is shown.
- 3) The reference to AHYMO is removed . It was a wrong sentence under calculations.
- 4) The existing spot elevations are shown on the grading plan.
- 5) The flowline and top of curb elevations are included along Griegos at sidewalk culverts. The 0.87' high water block is shown at the entrance. Some more spot elevation was added to ensure impervious runoff stay on site and will go to the ponds.
- 6) Please see #4 and 5 Under NOTES. These two were added to show existing and proposed walls. Note 4 shows the existing walls and Note 5 shows the proposed.
- 7) The duplicate notice to contractor was deleted from the drawing. I have included the SO-19 notes. I downloaded this from the City website under SO-19. I hope it is the correct note.

I hope we have addressed all of your comments regarding the grading plan. If you require additional information regarding this project, please do not hesitate to contact me at (505) 804-5013.

Sincerely,

Shawn Biazar, Managing Member

DRAINAGE MANAGEMENT PLAN

Location
 Lot 43-A, Rossiter Addition, contains +/- 1.4792 acres and is located at southeast corner of 12th Street and Griegos Rd. N.W. However, a portion of this lot (74%, 47,533.16 SF) was developed in 2015, File# F14D058. The remaining portion which is included in this grading plan is 16,901.28 sf (0.3880 Acre) and is located at SW corner of Griegos Rd., N.W. and 11th Street, NW, see 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 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
 This will include the remaining 0.3880 acre undeveloped portion of the lot. The runoff generated from this site minus existing condition will be fully retained on-site. Three ponds (A, B and C) are designed to hold 1,829.59 cf. When the ponds exceed their capacity the runoff will overflow into Griegos public street via the two sidewalk culverts. This site is located within Zone 2. This site contains 0.3880 acre (16,901.28 SF) and will generate 1.50 CFS. The difference between the developed flow (1.50 CFS) and existing condition (0.43 CFS) is 1.07 CFS (1.50-0.43). Therefore, the amount of the ponding required will be 1,630.55 CF (2290.87/1.50*1.13).

The 90th Percentile/First Flush ponding requirement is 0.34 inches times the impervious area (478.91 cf). Total retention volume provided (1,829.59 cf) exceeds the ponding requirement in the of (1,630.55 cf) and First Flush (478.91 cf).

Calculations
 City of Albuquerque, Development Process Manual, Section 22.2, Hydrology Section, was used for runoff calculations.

PONDING VOLUME REQUIRED

TOTAL AREA = 16,902.68 SF = 0.3880 ACRE

ZONE 2 LAND TREATMENT TABLE A-8:

B=0.78 AND B=2,630.00 SF/0.0604 AC

C=1.13 AND C=4,867.68 SF/0.1117 AC

D=2.12 AND D=9,405.00 SF/0.2159 AC

VOL (100-yr/6hr) = (2630*0.78)/12 + (4867.68*1.13)/12 + 9405*2.12/12 = 2,290.87 CF

Q (100-yr/6 hr) (USING TABLE A-9, ZONE 2)=(2.28*0.0604)+(3.14*0.1117)+(4.7*0.2159)=1.50 CFS

EXISTING CONDITION THAT DRAINS INTO GRIEGOS:

D=2.12 AND D=4,000.00 SF/0.0918 AC, (4.7*0.0918)=0.43 CF

ADDITIONAL RUNOFF = 1.50-0.43 =1.07 CFS

PONDING VOLUME REQUIRED = 2,290.87/1.50 * 1.07 = 1,630.55 CF

POND VOLUME REQUIRED FOR FIRST FLUSH

0.34 INCHES x IMPERVIOUS AREA = (0.34/12 x 16,903) = 478.91 CF THIS VOLUME IS PART OF THE PONDING PROVIDED.

PONDING AREA PROVIDED

TOTAL POND AREA PROVIDED = PONDING CALCULATIONS:

POND A: AREA @ TOP = 1026.95, AREA @ BOT. = 439.09, DEPTH 1.00'
 POND VOLUME = (1026.95+439.09)/2 = (733.02*1.00)' = 733.02 CF

POND B: AREA @ TOP = 757.80, AREA @ BOT. = 448.75, DEPTH 1.00'
 POND VOLUME = (757.80+448.75)/2 = (603.28*1.00)' = 603.28 CF

POND C: AREA @ TOP = 635.75, AREA @ BOT. = 332.83, DEPTH 1.00'
 POND VOLUME = (635.75+332.83)/2 = (493.29*1.00)' = 493.29 CF

TOTAL POND VOLUME PROVIDED = (733.02+603.28+493.29)= 1,829.59 CF

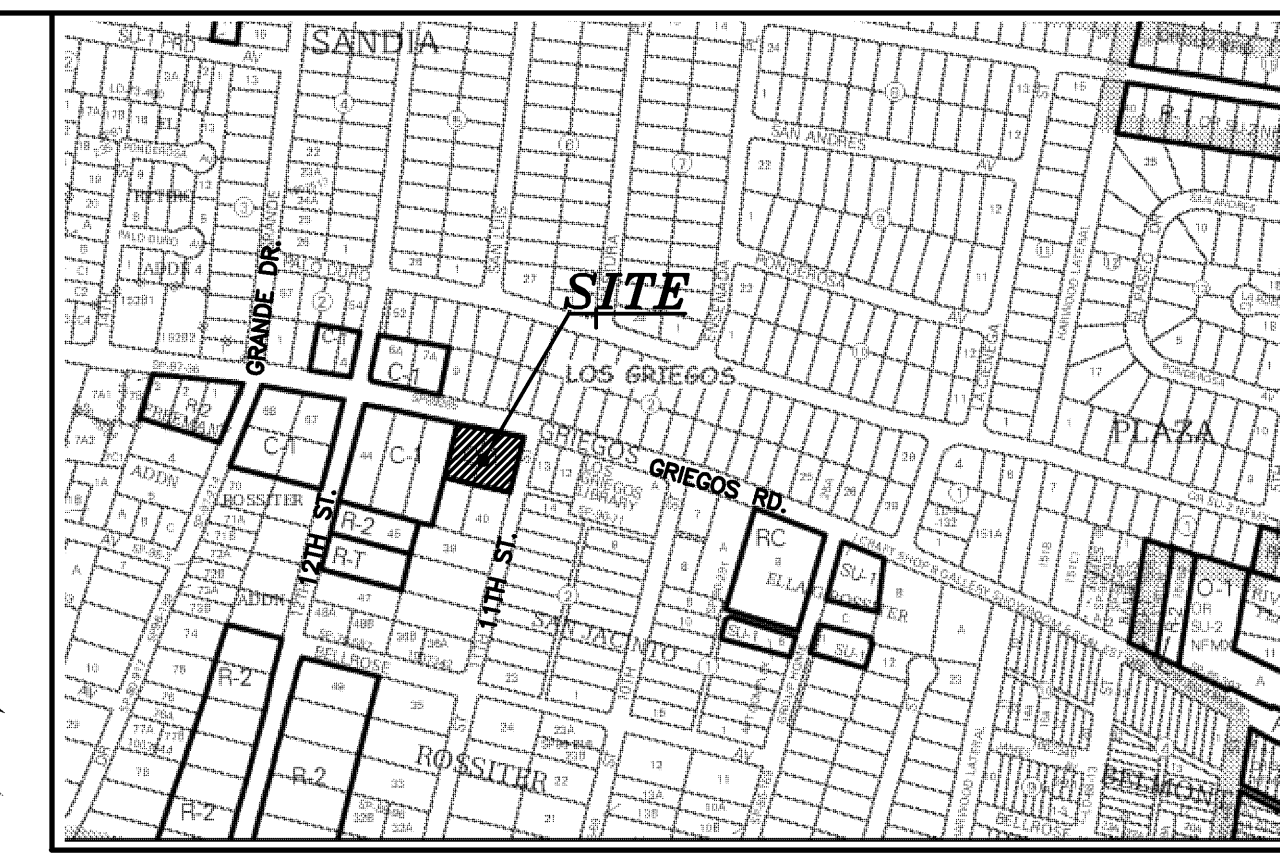
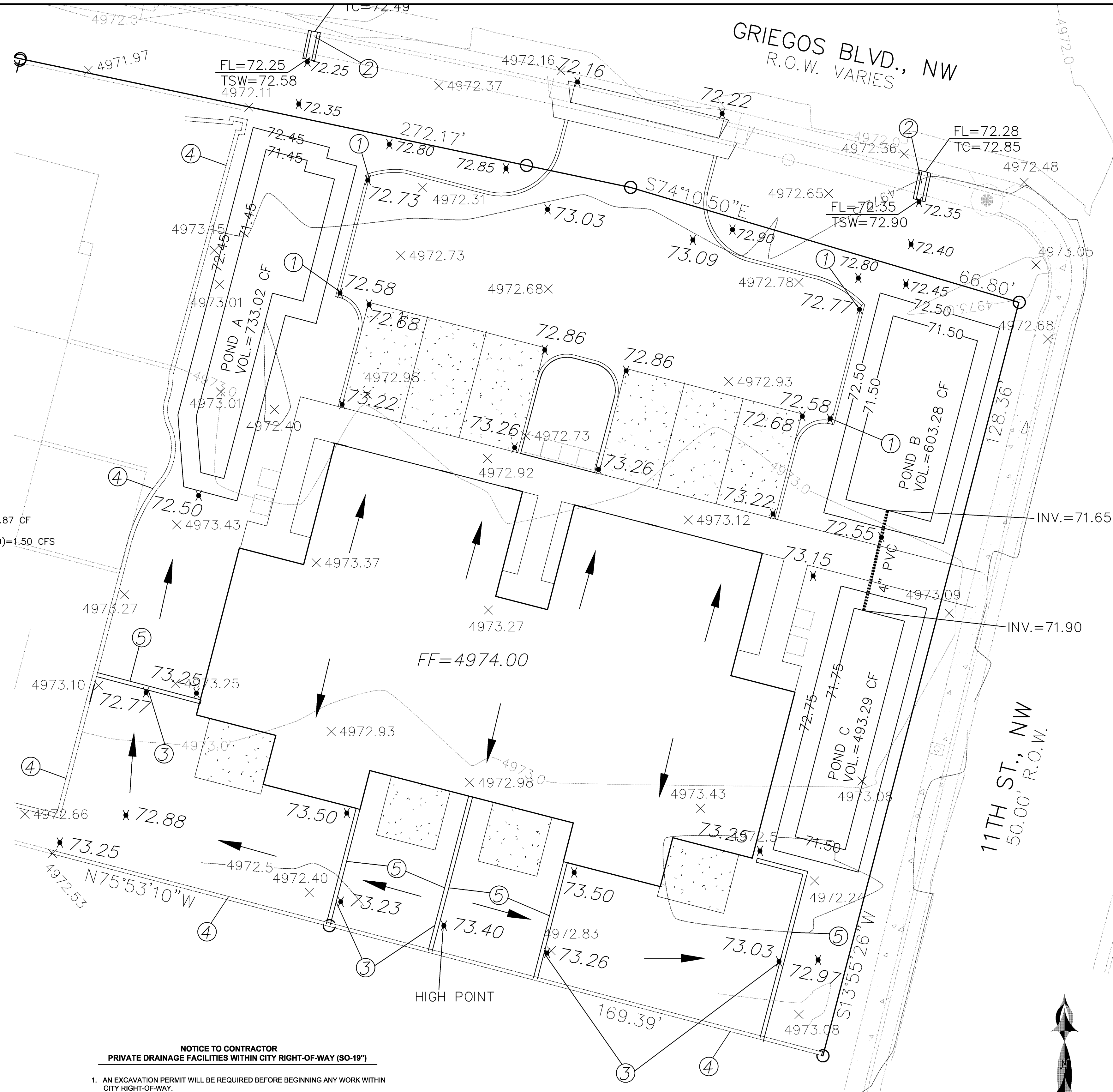
SIDEWALK CULVERT CALCULATIONS

12" Sidewalk Culvert Flow Capacity Calculation Using Orifice Equation

Orifice Equation: $Q = CA(2gh)$
 $h(\text{head}) = 0.67'$
 $A = 0.67 \text{ sf}$
 $g = 32.20$

$Q = 0.60 \times 0.67 \times (2 \times 32.2 \times 0.67)^{0.50}$
 $= 2.64 \text{ cfs}$

2.64 cfs >> 0.82 cfs (Entire runoff generated from site)



VICINITY MAP: F-14-Z

LEGAL DESCRIPTION:
 LOT 43-A, ROSSITER ADDITION
 CONTAINING 64,435.84 S.F. (1.4792 ACRE)
 ADDRESS: 1106 GRIEGOS RD., NW

- 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.

LEGEND

- 5100— EXISTING CONTOUR (MAJOR)
- 5102— EXISTING CONTOUR (MINOR)
- BOUNDARY LINE
- * 85.46 PROPOSED SPOT ELEVATION
- x 5265.16 EXISTING GRADE
- x 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
- x 72.75 (GROUND) AS-BUILT GRADES
- x 72.75 (POND)
- x 72.75 (CONC./ASPH.)

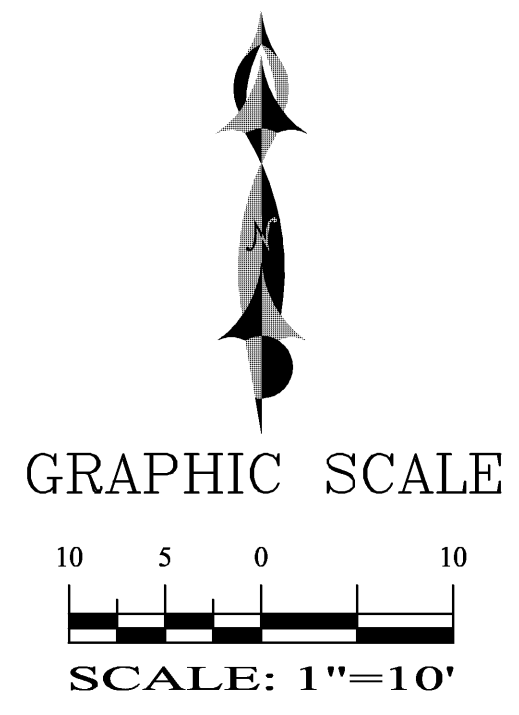
NOTICE TO CONTRACTOR PRIVATE DRAINAGE FACILITIES WITHIN CITY RIGHT-OF-WAY (SO-19")

1. AN EXCAVATION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY.
2. ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.
3. TWO WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL, DIAL "811" (OR (505) 260-1990) FOR THE LOCATION OF EXISTING UTILITIES.
4. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE LOCATIONS OF ALL OBSTRUCTIONS. 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 THE FACILITY SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY BEING SERVED.
7. WORK ON ARTERIAL STREETS MAY BE REQUIRED ON A 24 HOUR BASIS.
8. CONTRACTOR MUST CONTACT JASON RODRIGUEZ AT 235-8018 AND CONSTRUCTION COORDINATION AT 924-3416 TO SCHEDULE AN INSPECTION.

APPROVALS	NAME	DATE
INSPECTOR		

NOTES:

1. PROVIDE 12" CURB OPENING
2. 12" SIDEWALK CULVET 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.
4. EXISTING WALL.
5. PROPOSED NEW WALL.



REZA AFAQHPOUR
 P.E. #11814

SBS CONSTRUCTION AND ENGINEERING, LLC

10209 SNOWFLAKE CT., NW
 ALBUQUERQUE, NEW MEXICO 87114
 (505)804-5013

**TOWNHOME FOR JASON BUCHANAN
 1106 GRIEGOS RD., NW
 GRADING AND DRAINAGE PLAN**

DRAWING:	DRAWN BY:	DATE:	SHEET #
201843-GD.DWG	SH-B	12-06-2018	CIVIL 102