

# CITY OF ALBUQUERQUE



May 20, 2016

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

**Re: Western United Electric  
7311 La Morada Pl NW  
Request Permanent C.O. - Accepted  
Engineer's Stamp dated: 9-17-15 (H10D029)  
Certification dated: 4-18-16**

Dear Mr. Afaghpour,

PO Box 1293

Based on the Certification received 5/20/2016, 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.

New Mexico 87103 Sincerely,

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

Rita Harmon, P.E.  
Senior Engineer, Planning Dept.  
Development Review Services

TE/RH

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		

## GENERAL NOTES:

1. CONTOUR INTERVAL IS HALF (1.00) FOOT.
2. ELEVATIONS ARE BASED ON CITY OF ALBUQUERQUE CONTROL STATION 4+H9, HAVING AN ELEVATION OF 5209.315 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.

## Location

TRACT 6, LADERA BUSINESS PARK, UNIT 1 Tract 6, Ladera Business Park, unit 1 is located at 7311 La Morada Pl., NW, and contains +/- 2.0686 Acres. 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 new building and improvements with this tract of land.

## Existing Drainage Conditions

This site falls within Master Drainage Plan for the Ladera Business Park, Area 1 (H10/D06A) prepared by Mark Goodwin and Associates. Area 1, discharging directly into streets at various locations which eventually drains directly into existing storm drain system desing for this development. Offsite Basin 6A at 0.50 cfs drain through this site.

## Proposed Conditions and On-Site Drainage Management Plan

Since the Master Plan (File H10/D06A) is designed for complete discharge, we are proposing to pond the 90th Percentile/First Flush requirement which is 0.34 inches times the impervious area 77,390.18 (2,192.17 cf). Total retention volume provided (3,403.69 cf) far exceeds the ponding requirement for First Flush (2,192.17 cf). Offsite Basin 6A at 0.50 cfs will continue to drain through this site.

## 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.

## POND VOLUME REQUIRED

TOTAL PONDING VOLUME REQUIRED (90TH PERCENTILE/FIRST FLUSH) = 0.34 INCHES x IMPERVIOUS AREA = (0.34/12 x 77,390.18) = 2,192.17 CF

## POND CALCULATION

TOTAL POND AREA PROVIDED = POND A + B = 3,403.69 CF > 2,192.17 CF  
PONDING CALCULATIONS:

POND A: AREA @ 44.50 = 2,881.05, AREA @ 43.50 = 1,301.59

POND A VOLUME = (2,881.05 + 1,301.59)/2\*1.0 = 2,091.32

POND B: AREA @ 42.45 = 1,240.57, AREA @ 41.15 = 509.26

POND B VOLUME = (1,240.57 + 509.26)/2\*1.50 = 1,312.37

- \* ZONE 1
- \*

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

START TIME=0.0  
RAINFALL TYPE=1 RAIN QUARTER=0.0 IN  
RAIN ONE=1.87 IN RAIN SIX=2.20 IN  
RAIN DAY=2.66 IN DT=0.03333 HR  
COMPUTE NM HYD ID=1 HYD NO=103.1 AREA=0.003149 SQ MI  
PER A=0.00 PER B=13.00 PER C=47.00 PER D=40.00  
TP=0.13333 HR MASS RAINFALL=1

\*\*\*\*\* 100-YEAR, 6-HR STORM (OFFSITE BASIN 6A) \*\*\*\*\*

START TIME=0.0  
RAINFALL TYPE=1 RAIN QUARTER=0.0 IN  
RAIN ONE=1.87 IN RAIN SIX=2.20 IN  
RAIN DAY=2.66 IN DT=0.03333 HR  
COMPUTE NM HYD ID=1 HYD NO=103.1 AREA=0.000381 SQ MI  
PER A=0.00 PER B=100.00 PER C=0.00 PER D=0.00  
TP=0.13333 HR MASS RAINFALL=1

\* FINISH

AHYMO PROGRAM SUMMARY TABLE (AHYMO\_97) -  
INPUT FILE = MORADA.TXT

- VERSION: 1997.02d

RUN DATE (MON/DAY/YR) =09/16/2015  
USER NO.= AHYMO-I-9702c01000R31-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	103.10	-	1	.00315	6.78	.224	1.33348	1.500	3.363	TIME= .00 RAIN6= 2.200 PER IMP= 40.00
START										
RAINFALL	TYPE= 1									
COMPUTE NM HYD	103.10	-	1	.00038	.50	.014	.66738	1.533	2.056	TIME= .00 RAIN6= 2.200 PER IMP= .00
FINISH										

## SIDEWALK CULVERT CALCULATIONS

2-24" Sidewalk Culvert Flow Capacity Calculation Using Weir Equation  
Weir Equation: Q=CLH\*(3/2)

H = 0.67'  
L = 4.0'  
C = 3.10

Q = 3.10 x 1.0 x 0.67\*(3/2) = 6.80 cfs

6.78 cfs = Runoff generated from the site

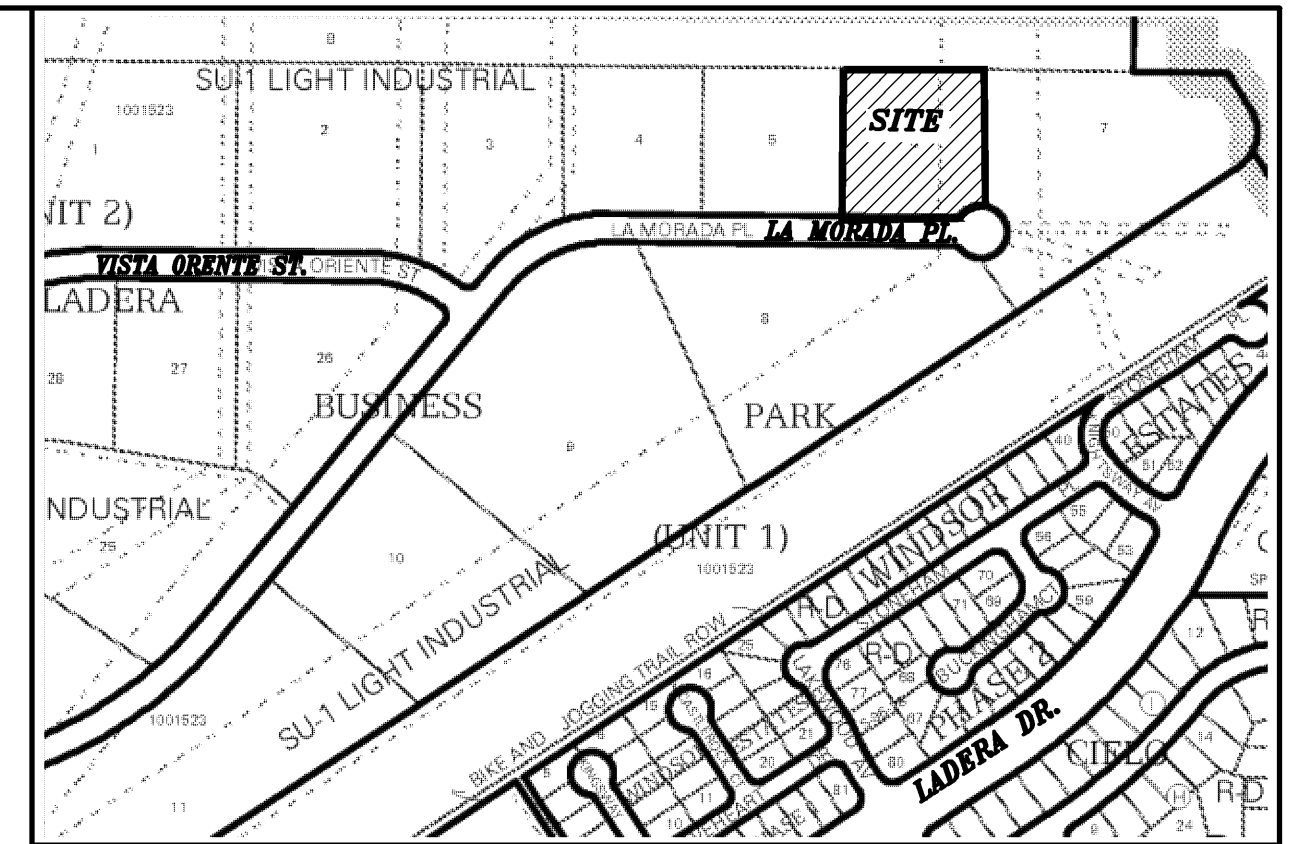
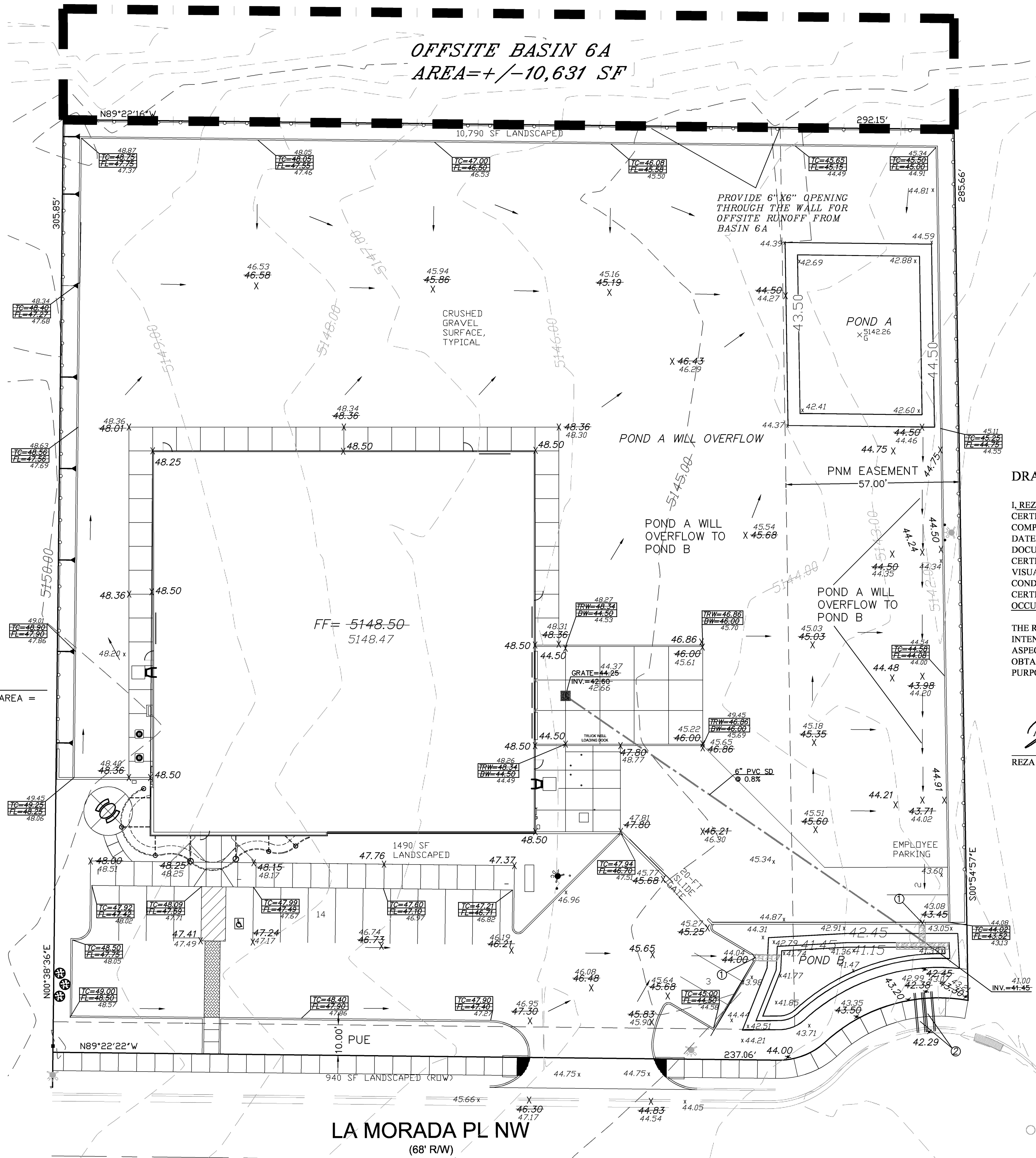
## WALL OPENING CALCULATIONS FOR OFFSITE BASIN 6A

6" x 6" Wall Opening Capacity Calculation Using Weir Equation  
Weir Equation: Q=CLH\*(3/2)

H = 0.50'  
L = 0.50'  
C = 3.10

Q = 3.10 x 0.50 x 0.50\*(3/2) = 0.55 cfs  
There are 2 - 6"x6" openings Q=2 x 0.55 = 1.10 cfs

0.50 cfs = Runoff generated from Offsite Basin 6A



VICINITY MAP:

H-10-Z

## LEGAL DESCRIPTION:

TRACT 6, LADERA BUSINESS PARK, UNIT 1  
CONTAINING 87,790.00 S.F. (2.0613 ACRES)

## ADDRESS

7311 LA MORADA PL., NW, ALBUQUERQUE, NM 87120

## NOTES:

1. PROVIDE 12" CURB OPENING
2. 2'-24" SIDEWALK CULVERT PER CITY STD DWG 2236 (TACK WELD PLATE AT THE BOLT). EXTEND SIDEWALK CULVERT 2' BEYOND PROPERTY LINE.

## DRAINAGE CERTIFICATION

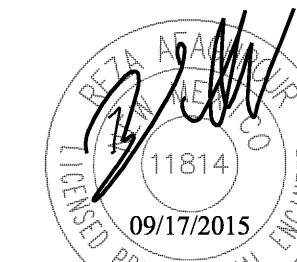
I, REZA AFAGHPOUR, NMPE 11814, OF SBS CONSTRUCTION AND ENGINEERING, LLC, HEREBY CERTIFY THAT THIS PROJECT HAS BEEN GRADED AND WILL DRAIN IN SUBSTANTIAL COMPLIANCE WITH AND IN ACCORDANCE WITH THE DESIGN INTENT OF THE APPROVED PLAN DATED 09-17-2015. THE RECORD INFORMATION EDITED ONTO THE ORIGINAL DESIGN DOCUMENT HAS BEEN OBTAINED BY NMPS 18374, OF CARTESIAN SURVEYS, INC. 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 AFAGHPOUR, NMPE 11814  
DATE 4/18/2016

## LEGEND

- 5030 EXISTING CONTOUR (MAJOR)
- 5029 EXISTING CONTOUR (MINOR)
- BOUNDARY LINE
- X 28.50 PROPOSED SPOT ELEVATION
- 5029.16 EXISTING GRADE
- X 5028.65 EXISTING FLOWLINE ELEVATION
- FL
- PROPOSED RETAINING WALL
- BC=89.08 BOTTOM OF CHANEL
- TRW=48.34 TOP OF RETAINING WALL
- BW=44.50 BOTTOM WALL
- HP HIGH POINT
- TC=47.92 TOP OF CURB
- FL=47.42 FLOW LINE
- SLOPE TIE
- AS-BUILT GRADES



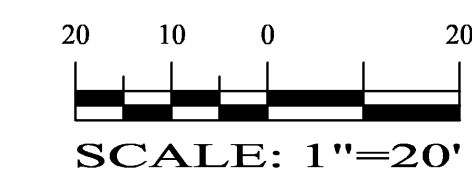
REZA AFAGHPOUR  
P.E. #11814

SBS CONSTRUCTION  
AND ENGINEERING, LLC

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

## WESTERN UNITED ELECTRIC CONCEPTUAL DRAINAGE PLAN

DRAWING:	DRAWN BY:	DATE:	SHEET #
201513-GD.DWG	SB	07-04-2015	4 OF 6



LAST REVISION: 04-18-16



# City of Albuquerque

Planning Department

Development & Building Services Division

## DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 10/2015)

**Project Title:** Commercial Apart. building ph I Building Permit #: \_\_\_\_\_ Hydrology File #: H10D029  
DRB#: \_\_\_\_\_ EPC#: \_\_\_\_\_ Work Order#: \_\_\_\_\_  
Legal Description: TRACT 6, LADERA BUSINESS PARK, UNIT 1  
City Address: 7311 LA MORADA PLACE, NW, ALB., NM 87120

**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: \_\_\_\_\_

Check all that Apply:

### DEPARTMENT:

☒ HYDROLOGY/ DRAINAGE  
☐ TRAFFIC/ TRANSPORTATION  
☐ MS4/ EROSION & SEDIMENT CONTROL

### TYPE OF SUBMITTAL:

☒ ENGINEER/ARCHITECT CERTIFICATION  
☐ CONCEPTUAL G & D PLAN  
☐ GRADING PLAN  
☐ DRAINAGE MASTER PLAN  
☐ DRAINAGE REPORT  
☐ CLOMR/LOMR  
☐ TRAFFIC CIRCULATION LAYOUT (TCL)  
☐ TRAFFIC IMPACT STUDY (TIS)  
☐ EROSION & SEDIMENT CONTROL PLAN (ESC)  
☐ OTHER (SPECIFY) \_\_\_\_\_

### 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

### PRE-DESIGN MEETING?

☐ OTHER (SPECIFY) \_\_\_\_\_

IS THIS A RESUBMITTAL?: ☒ Yes ☐ No

DATE SUBMITTED: 4-18-2016 By: SHAWN BIAZAR

COA STAFF: \_\_\_\_\_ ELECTRONIC SUBMITTAL RECEIVED: \_\_\_\_\_