CITY OF ALBUQUERQUE

Planning Department
David Campbell, Director

Mayor Timothy M. Keller

June 22, 2018

Jackie McDowell
McDowell Engineering, Inc.
7820 Beverly Hills Ave. NE
Albuquerque, NM 87122

RE: 4023 Silvery Minnow Place NW
Grading and Drainage Plan
Stamp Date: 06/11/18
Hydrology File: G11D014D6

Dear Ms. McDowell:

Based upon the information provided in your submittal received 06/19/2018, the Grading Plan is approved for Building Permit.

Once the grading is complete, a pad certification will be required prior to release of Building Permit. Please attach a copy of this approved plan in the construction sets for Building Permit processing.

Prior to approval in support of Permanent Release of Occupancy by Hydrology, Engineer Certification per the DPM checklist will be required and a formal Elevation Certificate needs to be submitted to Hydrology.

Please provide a Private Facility Drainage Covenant per Chapter 17 of the DPM for first flush pond prior to Permanent Release of Occupancy. Please submit this on the 4th floor of Plaza de Sol. A $25 fee will be required.

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

Sincerely,

Renée C. Brissette

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

PO Box1293
Albuquerque
NM 87103
www.cabq.gov

City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV 02/2013)

Project Title: CANDELARIA - ZENTALLA LOT 6-P-1 Building Permit #: _____ City Drainage #: _____

DRB#: _____ EPC#: _____ Work Order#: _____

Legal Description: LOT 6-P-1, PLAT OF OXBOW BLUFF SUBDIVISION

City Address: 4023 SILVERY MINNOW PL. NW, ALB., NM 87120

Engineering Firm: MCDOWELL ENGINEERING, INC. Contact: JACKIE MCDOWELL

Address: 7820 BEVERLY HILLS AVE. NE

Phone#: 505-828-2430 Fax#: 505-821-4857 E-mail: jackmcdowell@comcast.net

Owner: BUILDER: ADAN CANDELARIA, CANDELARIA HOMES Contact: ADAN CANDELARIA

Address: 1330 CRESTVIEW DR. NW, LOS LUNAS NM 870352

Phone#: 505-917-2099 Fax#: _____ E-mail: candelariahomes@gmail.co

Architect: RON MONTOYA DESIGNS Contact: RON MONTOYA

Address: 8724 ALAMEDA PARK NE #G

Phone#: 505-823-6474 Fax#: _____ E-mail: _____

Surveyor: _____ Contact: _____

Address: _____

Phone#: _____ Fax#: _____ E-mail: _____

Contractor: _____ Contact: _____

Address: _____

Phone#: _____ Fax#: _____ E-mail: _____

TYPE OF SUBMITTAL:

- ____ DRAINAGE REPORT
- X DRAINAGE PLAN 1st SUBMITTAL
- ____ DRAINAGE PLAN RESUBMITTAL
- ____ CONCEPTUAL G & D PLAN
- X GRADING PLAN
- ____ EROSION & SEDIMENT CONTROL PLAN (ESC)
- ____ ENGINEER'S CERT (HYDROLOGY)
- ____ CLOMR/LOMR
- ____ TRAFFIC CIRCULATION LAYOUT (TCL)
- ____ ENGINEER'S CERT (TCL)
- ____ ENGINEER'S CERT (DRB SITE PLAN)
- ____ ENGINEER'S CERT (ESC)
- ____ SO-19
- ____ OTHER (SPECIFY) PAD CERTIFCATION

CHECK TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

- ____ SIA/FINANCIAL GUARANTEE RELEASE
- ____ PRELIMINARY PLAT APPROVAL
- ____ S. DEV. PLAN FOR SUB'D APPROVAL
- ____ S. DEV. FOR BLDG. PERMIT APPROVAL
- ____ SECTOR PLAN APPROVAL
- ____ FINAL PLAT APPROVAL
- ____ CERTIFICATE OF OCCUPANCY (PERM)
- ____ CERTIFICATE OF OCCUPANCY (TCL TEMP)
- ____ FOUNDATION PERMIT APPROVAL
- X BUILDING PERMIT APPROVAL
- ____ GRADING PERMIT APPROVAL
- ____ PAVING PERMIT APPROVAL
- ____ WORK ORDER APPROVAL
- ____ GRADING CERTIFICATION
- ____ SO-19 APPROVAL
- ____ ESC PERMIT APPROVAL
- ____ ESC CERT. ACCEPTANCE
- ____ OTHER (SPECIFY) PAD CERTIFCATION

WAS A PRE-DESIGN CONFERENCE ATTENDED: ____ Yes X No ____ Copy Provided

DATE SUBMITTED: 6-18-18 By: Jackie McDowell

Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a drainage submittal. The particular nature, location, and scope to the proposed development defines the degree of drainage detail. One or more of the following levels of submittal may be required based on the followin

1. **Conceptual Grading and Drainage Plan**: Required for approval of Site Development Plans greater than five (5) acres and Sector Plans
2. **Drainage Plans**: Required for building permits, grading permits, paving permits and site plans less than five (5) acres
3. **Drainage Report**: Required for subdivision containing more than ten (10) lots or constituting five (5) acres or more
4. **Erosion and Sediment Control Plan:** Required for any new development and redevelopment site with 1-acre or more of land disturbing area, including project less than 1-acre than are part of a larger common plan of development

STANDARD GRADING NOTE: THE MAXIMUM GRADED SIDE SLOPE SHALL NOT EXCEED 3 FEET (HORIZONTALLY) TO 1 FOOT (VERTICALLY). AREAS DISTURBED BY GRADING WHICH WILL NOT BE TREATED WITH LANDSCAPING SHALL BE SEEDED.

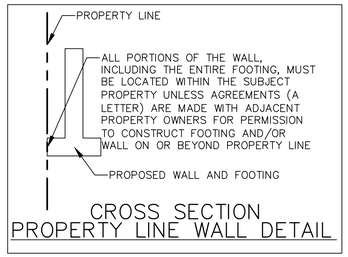
STANDARD WALL AND PAD CERTIFICATION NOTES:

ALL PERMITER GARDEN WALLS SHALL BE PERMITTED SEPARATELY.

A PAD CERTIFICATION IS REQUIRED BEFORE THE BUILDING PERMIT IS RELEASED.

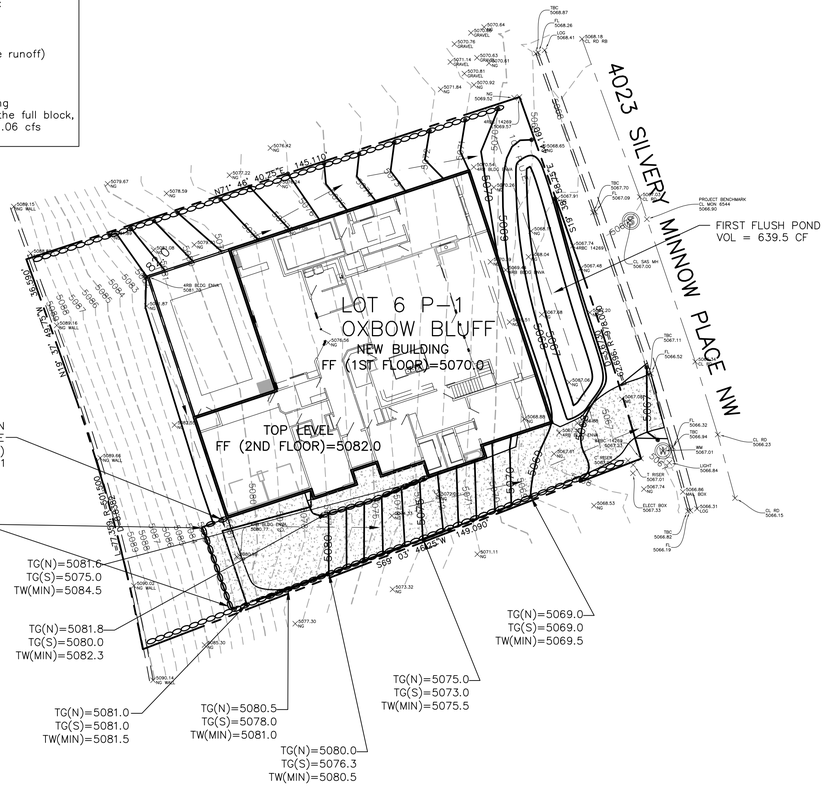
This is the plan to be used for any garden walls and any openings in the walls shall be placed 3" above final grade in the rear yard to allow for cross lot drainage from west to east (upstream to downstream).

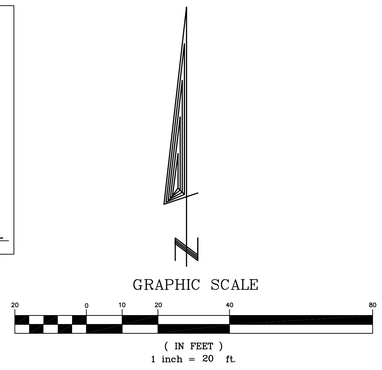
PROPERTY LINE WALLS AND GARDEN WALLS SHALL HAVE TURNED BLOCKS OR WEEP HOLES FOR DRAINAGE. ALL OPENINGS IN THE WALLS SHALL BE 3" ABOVE GRADE.



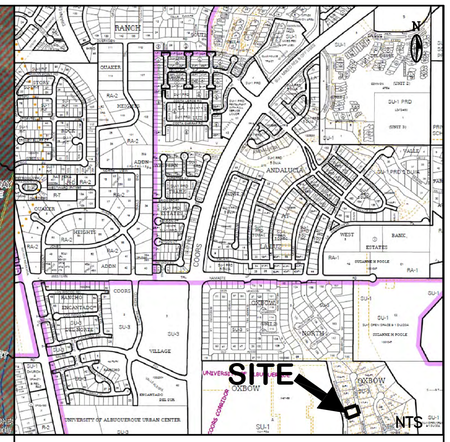
CROSS SECTION
PROPERTY LINE WALL DETAIL

WALL OPENING CALCULATIONS:
1 Turned Block
Weir Equation
$Q=CLH^{3/2}$
Q(max) = 1.04 cfs (total site runoff)
C=3
H=0.5 ft
L=0.5 ft
for 1/2 block, 6" x 6" opening
Q=0.53 cfs capacity, so for the full block, the total block capacity = 1.06 cfs





FEMA FLOODWAY MAP PANEL #114H



VICINITY MAP ZONE ATLAS F-11

DRAINAGE PLAN

SCOPE:

Pursuant to the latest City of Albuquerque and Bernalillo County Ordinances, the Drainage Plan shown hereon outlines the drainage management criteria for controlling developed runoff on and exiting the project site. A single family home is proposed for the site with associated parking, access, landscaping, and utility improvements.

EXISTING CONDITIONS:

Presently, the 0.40 acre site is undeveloped. The site is bounded on the north, west and south by private property, and on the east by Silvery Minnow Pl. NW. As shown on FEMA Panel #114H, the site is not located in a 100 year flood plain.

PROPOSED CONDITIONS:

The site is located within the Oxbow Bluff Drainage Master Plan G11/D14. The plan calls for free discharge based upon 42% impervious and 58% native. The allowable volume has been checked against the first flush volume and the higher of the two volumes is used for sizing the pond. Current COA Drainage Ordinance requires that ponds must be provided to handle the First Flush volume which has been calculated and is included on this plan. As shown by the plan, the building is located in the center of the lot. No off-site flows enter the site due to existing grades on adjacent lots. On site flows will drain around the structure, and flow to the east to the first flush retention pond located east of the structure. All roof drainage will discharge from the roof to the lot and be directed around the structure to the drainage paths and pond.

Supplemental calculations are shown as part of this Grading and Drainage plan.

CALCULATIONS:

The calculations shown hereon define the 100 year-6 hour design storm falling within the project area under existing and developed conditions. The Hydrology is per "Section 22.2, Hydrology of the Development Process Manual, Volume 2, Design Criteria, for the City of Albuquerque, New Mexico in cooperation with Bernalillo County, New Mexico and the Albuquerque Metropolitan Arroyo Flood Control Authority.

PROPERTY ADDRESS:

4023 Silvery Minnow Pl. NW

TOPOGRAPHY:

Topographic information provided by David Acosta, PS dated May, 2018.

LEGEND

	EXISTING	PROPOSED
CONTOUR	6045	6045
PROPERTY LINE		
ROAD		
SETBACK		
RETAINING WALL/WALL		
SPOT ELEVATION	5068.53	XX.X

ZONE 1

Areas: (acres)	Allowed	Proposed
Treatment A	0.23	0.00
Treatment B	0.00	0.19
Treatment C	0.00	0.00
Treatment D	0.17	0.21
Total (acres) =	0.40	0.40

POND VOLUME PROVIDED:

ELEV.	AREA	VOL. (CF)
5068	865	
		639.5
5067	414	

Volume	100 year Allowed	100 year Proposed	10 year Allowed	10 year Proposed	2 year Allowed	2 year Proposed
Volume (acre-feet) =	0.036	0.045	0.019	0.025	0.010	0.013
Volume (cubic feet) =	1,583	1,964	832	1,097	444	556

REQUIRED VOLUME FROM PROPOSED LESS ALLOWED = 1964 - 1583 = 381 CF
FIRST FLUSH REQUIRED POND VOL = 0.34"/(12"/FT)*(0.40 AC * 43560 SF/AC) = 494 CF - USE 494 CF

Total Q(p), cfs:	100 year Allowed Q(p)*A	100 year Proposed Q(p)*A	10 year Allowed Q(p)*A	10 year Proposed Q(p)*A	2 year Allowed Q(p)*A	2 year Proposed Q(p)*A
Treatment A	0.30	0.00	0.06	0.00	0.00	0.00
Treatment B	0.00	0.39	0.00	0.14	0.00	0.01
Treatment C	0.00	0.00	0.00	0.00	0.00	0.00
Treatment D	0.74	0.92	0.49	0.61	0.29	0.35
Total Q (cfs) =	1.04	1.30	0.55	0.75	0.29	0.36

GENERAL DRAINAGE PLAN NOTES:

1. It is recommended that the Owner obtain a Geotechnical Evaluation of the on-site soils prior to foundation/structural design.

2. This plan recommends positive drainage away from all structures to prohibit ponding of runoff adjacent to the structure. Future alterations of the grades next to the structures are not recommended.

3. Irrigation within 10 feet of any proposed structure is not recommended. Irrigation water adjacent to the structures could cause settlement.

4. This plan establishes on-site drainage and assumes no responsibility for subsurface analysis, foundation or structural design, or utility design.

5. Local codes may require all footings to be placed in natural undisturbed soil. If the contractor plans to place footings on engineered fill, a certification by a registered Professional Engineer is recommended.

6. It is recommended that the Owner obtain the services of a Geotechnical Engineer to test and inspect all earthwork aspects of the project.

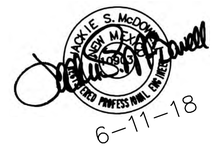
7. The property boundary shown on this plan is given for information only to describe the project limits. Property boundary information shown hereon does not constitute a boundary survey.

8. All work shall be constructed in accordance with the City of Albuquerque Standard Specifications for Public Works Construction with updates.

9. 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.

10. Contactor shall ensure that no site soils/sediment or silt enters the righ-of-ways during construction.

11. Areas disturbed due to construction shall be restored per City of Albuquerque Spec. 1012 native seed mix.



ENGINEER'S CERTIFICATION:

I, Jackie S. McDowell, hereby certify that I personally inspected the site shown on this plan on May 7, 2018 and as of that date it appeared that no filling, grading, or excavation had occurred thereon since completion of the topographic survey used to prepare this plan.

4023 SILVERY MINNOW PL. NW, ALBUQUERQUE, NM 87120

CITY OF ALBUQUERQUE, BERNALILLO COUNTY NEW MEXICO

LOT 6-P-1
PLAT OF OXBOW BLUFF SUBDIVISION

CANDELARIA - ZENTELLA- GRADING & DRAINAGE PLAN

McDowell Engineering, Inc.
7820 BEVERLY HILLS AVE. NE • ALBUQUERQUE, NM 87122
TELE: 505-828-2430 • FAX: 505-821-4857

Designed	Drawn	Checked	Sheet	of
JSM	STAFF	JSM	1	1
File CAN0118L	Date MAY,2018			

GRADING
5-14-18
1=20
CAN0118L