CITY OF ALBUQUERQUE

July 23, 2014

Mr. Jarod Likar
Huitt-Zollars
Suite 550
6501 Americas Parkway NE
Albuquerque, NM 87110-5372

Re: Hedges Residence
Grading and Drainage Plan
Engineer's Stamp Date 4-22-14 (E22D007F7A)

Dear Mr. Likar,

Based upon the information provided in your submittal received June 25, 2014, the above referenced plan cannot be approved for Building Permit until the following comments are addressed:

1. Provide a fully completed Drainage and Transportation Information Sheet.
2. Provide calculations for existing and proposed flows that are in accordance with the approved Master Drainage Plan for the Sauvignon Phase II Subdivision by Bohannan Huston, Inc. Provide excerpts (plans and calculations) from the MDP that pertain to this property. Indicate how the grading design of the property is in accordance with the MDP. Indicate all your existing and proposed design assumptions including ones for land treatments and hydrology and provide all calculations with full explanation.
3. Provide a Grading and Drainage Plan with the following:
    - Existing and proposed contours and spot elevations on-site and to 20 feet off-site. Fully show that existing grades along the perimeter are being met with the proposed design.
    - Show all aspects of the plan to scale.
    - Provide a vicinity map and FIRM map.
    - Include the legal description and benchmark.
4. What are flow line elevations in Zinfandel? Does the driveway create a water block to prevent street flows from entering the property?
5. Wherever there are top of wall elevations, provide top of grade elevations in the same location.
6. A 12 foot wall is on the south side. Is the top of wall actually the top of wall or top of the retaining wall? A garden wall on top of that is advisable since a twelve foot drop is there. If a garden wall is on top of that, how will the wall drain out? Provide calculations for the opening and erosion protection. What protection will be at the bottom of the wall to prevent erosion?

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New Mexico 87103
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7. Along the sides of the property, swales with erosion protection should be provided so the water does not enter the adjoining side properties or erode soil along walls.
8. On the east side of the residence, steep grades are dropping from the home. This seems impractical if someone needs to walk around the perimeter of the residence.
9. What are the elevations around the pool? No drainage should be entering the pool. A double dashed line is shown on the south side of the property but not described in the legend. What does that represent?
10. Retain the first flush. Per the City Drainage ordinance, the 90th Percentile Storm Event, which is 44 inches, is to be managed. Reduce 0.44 inch by the 0.1 inch for the initial impervious abstraction in Table A-6 of Section 22 of the DPM. Multiply the remaining 0.34 inch by your impervious area. This is the portion to retain.
11. Provide an electronic pdf of all calculations and drawings with stamps and signatures.

If you have any questions, you can contact me at 924-3994.

Sincerely,

Amy L. D. Niese, P.E.
Senior Engineer, Hydrology
Planning Department

PO Box 1293

Albuquerque

New Mexico 87103

www.cabq.gov

C: e-mail

City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV 02/2013)

Project Title: Hedges Residence Building Permit #: _____ City Drainage #: E22D057F7A

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

Legal Description: LOT 13 UNIT 1 SAUVIGNON SUB

City Address: 11524 Zinfandel Ln NE ABQ, NM 87111

Engineering Firm: Hunter Eng. LLC HUITT-ZOLLARS Contact: JARED LUCAR

Address: _____

Phone#: 892-5141 Fax#: _____ E-mail: jlucar@huitt-zollars.com

Owner: Paul Hodges Contact: _____

Address: _____

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

Architect: _____ Contact: _____

Address: _____

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

Surveyor: _____ Contact: _____

Address: _____

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

Contractor: _____ Contact: _____

Address: _____

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

TYPE OF SUBMITTAL:

____ DRAINAGE REPORT
____ DRAINAGE PLAN 1st SUBMITTAL
__✓__ DRAINAGE PLAN RESUBMITTAL
____ CONCEPTUAL G & D PLAN
____ 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)

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
__✓__ 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)

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

DATE SUBMITTED: _____ By: _____

Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a drainage submittal. The particular nature, location, anc 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

REC 6-30-14

CITY OF ALBUQUERQUE

PLANNING DEPARTMENT – Development & Building Services

June 5, 2012

David Soule, P.E.
Rio Grande Engineering
1616 Central SE, Suite 201
Albuquerque, New Mexico 87106

RE: Lot 13, Sauvignon Subdivision – Grading & Drainage Plan for Building Permit
11524 Zinfandel N.E. P.E. Stamp: 6/7/12 (**E22-D007F7.1**)

Dear Mr. Soule,

Based upon the information provided in your submittal received June 7, 2012, on the above referenced plan we have the following comments:

1. Since sidewalk will be required along Zinfandel, grades within the R/W must sloe toward the street. Not the 5871 contour is missing near the driveway.
2. Clarify the grades and existing wall type along the east property line. Show that the proposed grades will not be too low (or high) for the existing structure.
3. The 5875 contour near center east side appears to be the 5870 contour, but mislabeled.
4. What is the heavy dashed line along the east and south property line?
5. The cobble swale sketched along the west property line appears to channelize flows from the front yard and driveway through a narrow path against the west "Screen Wall", which also appears to retain nearly 2' of fill at the narrowest point.
   - Check grades for wall design (max. 18" retainage).
   - Provide a detail/section for the swale to keep flows away from the screen wall.
6. Grading at the NW corner of the lot is different form that shown on Lot 12, recently approved through your office. It also proposes 1'-2' cut at the location of an existing electric transformer (not shown).
7. The is drainage shown directed toward the back side of the retaining wall, near the middle of the east side of the lot. Is the wall adequately designed for this condition?

Prior to Permanent Certificate of Occupancy approval, an Engineer's Certification of compliance with this revised Grading and Drainage plan is required per the DPM.

If you have any questions, you can contact me at 924-3695.

Sincerely,

Gregory R. Olson, P.E.
Senior Engineer

Orig: Drainage file E22/D007F7.1
c.pdf Addressee via Email david@riograndeengineering.com

PO Box 1293
Albuquerque
NM 87103
www.cabq.gov

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV. 01/28/2003rd)

PROJECT TITLE: ***Lot 13 Sauvignon Subdivision*** ZONE MAP/DRG. FILE #: E-22/D007F

DRB #: _____ EPC #: _____ WORK ORDER #: _____

LEGAL DESCRIPTION: ***lot 12 Sauvignon Subdivision***

CITY ADDRESS: ZINFANDEL AVE NE ALBUQUERQUE NM 87111

ENGINEERING FIRM:	Rio Grande Engineering	CONTACT:	David Soule, PE
ADDRESS:	PO BOX 93924	PHONE:	(505)321-9099
CITY, STATE:	Alb	ZIP CODE:	87199
	Ema.V —		
OWNER:	Paul McDonald	CONTACT:	
ADDRESS:		PHONE:	
CITY, STATE:		ZIP CODE:	
ARCHITECT:	***Pautl Mcdonald***	CONTACT:	
ADDRESS:		PHONE:	
CITY, STATE:		ZIP CODE:	
SURVEYOR:	GEOSURV CO	CONTACT:	David Vigil
ADDRESS:		PHONE:	
CITY, STATE:		ZIP CODE:	
CONTRACTOR:		CONTACT:	
ADDRESS:		PHONE:	
CITY, STATE:		ZIP CODE:	

CHECK TYPE OF SUBMITTAL:

- x DRAINAGE REPORT
- ___ DRAINAGE PLAN 1st SUBMITTAL, ***REQUIRES TCL or equal***
- ___ DRAINAGE PLAN RESUBMITTAL
- ___ CONCEPTUAL GRADING & DRAINAGE PLAN
- x GRADING PLAN
- ___ EROSION CONTROL PLAN
- ___ ENGINEER'S CERTIFICATION (HYDROLOGY)
- ___ CLOMR/LOMR
- ___ TRAFFIC CIRCULATION LAYOUT (TCL)
- ___ ENGINEERS CERTIFICATION (TCL)
- ___ ENGINEERS CERTIFICATION (DRB APPR. SITE PLAN)
- ___ OTHER

CHECK TYPE OF APPROVAL SOUGHT:

- ___ SIA / FINANACIAL GUARANTEE RELEASE
- ___ PRELIMINARY PLAT APPROVAL
- ___ S. DEV. PLAN FOR SUB'D. APPROVAL
- ___ S. DEV. PLAN FOR BLDG. PERMIT APPROVAL
- ___ SECTOR PLAN APPROVAL
- ___ FINAL PLAT APPROVAL
- ___ FOUNDATION PERMIT APPROVAL
- X BUILDING PERMIT APPROVAL
- ___ CERTIFICATE OF OCCUPANCY (PERM.)
- ___ CERTIFICATE OF OCCUPANCY (TEMP.)
- x GRADING PERMIT APPROVAL
- ___ PAVING PERMIT APPROVAL
- ___ WORK ORDER APPROVAL
- ___ OTHER (SPECIFY)

WAS A PRE-DESIGN CONFERENCE ATTENDED:

- ___ YES
- x NO
- ___ COPY PROVIDED

RECEIVED
JUN 7 2012

DATE SUBMITTED: 6/5/2012 BY: David Soule

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

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3. **Drainage Report**: Required for subdivisions containing more than ten (10) lots or constituting five (5) acres or more.

RIO GRANDE ENGINEERING OF NEW MEXICO, LLC

June 5, 2012

Mr. Curtis Cherne PE
Section Head
Hydrology
City of Albuquerque

RE: Grading and Drainage Plan
Lot 13- Sauvignon Subdivision

Dear Mr. Cherne:

The purpose of this letter is to introduce the enclosed grading plan. The plan has been prepared due to the significant change in grades required for the home construction. The Sauvignon subdivision has a master drainage plan that allows for free discharge of the lots. The attached plan modifies the pad to allow for single level home rather than a split level that was initially planned. The adjacent lot has recently been permitted by the same builder.

Should you have any questions regarding this submittal, please do not hesitate to call me.

Sincerely,

David Soule, PE
Rio Grande Engineering
PO Box 93924
Alb. NM 87199

Enclosures

Weighted E Method

Existing Developed Basins

											100-Year, 6-hr.		
Basin	Area (sf)	Area (acres)	Treatment A		Treatment B		Treatment C		Treatment D		Weighted E (ac-ft)	Volume (ac-ft)	Flow cfs
			%	(acres)	%	(acres)	%	(acres)	%	(acres)			
EXISTING	20426	0.469	0%	0	80.0%	0.375	20.0%	0.09378	0%	0.000	0.994	0.039	1.30
PROPSED	20426	0.469	0%	0	40.0%	0.188	18.0%	0.0844	42%	0.197	1.591	0.062	1.77
INCREASE												0.023	0.469

Equations:

Weighted E = Ea*Aa + Eb*Ab + Ec*Ac + Ed*Ad / (Total Area)

Volume = Weighted D * Total Area

Flow = Qa * Aa + Qb * Ab + Qc * Ac + Qd * Ad

Where for 100-year, 6-hour storm

Ea= 0.66
Eb= 0.92
Ec= 1.29
Ed= 2.36

Qa= 1.87
Qb= 2.6
Qc= 3.45
Qd= 5.02