CITY OF ALBUQUERQUE



January 20, 2017

Richard J. Berry, Mayor

David Soule, P.E. Rio Grande Engineering PO Box 93924 Albuquerque, NM, 87199

RE: La Madeleines 2110 Louisiana Blvd NE Grading Plan and Drainage Report Engineer's Stamp Date 12/12/2016 & 1/3/2017 (File: J19D071B)

Dear Mr. Soule:

Based upon the information provided in your submittal received 01/03/2017, the Grading Plan and Drainage Report are not approved for Building Permit. The following comments need to be addressed for approval of the above referenced project:

PO Box 1293

Albuquerque

New Mexico 87103

www.cabq.gov

- 1. First Flush Storm water quality standards do apply. Detention of the first flush volume, indicated as 133 cf, is required.
- 2. The inlet at the southwest corner is proposed to be removed and extended, but it's not defined where the new one will be placed. Extending the line towards Uptown Loop appears to put it in conflict with the existing sidewalk, the retaining wall and its footer, and any utilities that may be there. Another option may be to remove the inlet and storm drain back to the manhole, and replace with a new inlet and storm drain running south towards the intersection. This would avoid the retaining wall and slab all together.
- 3. Analysis of the private storm drain system showing capacity of the system due to changes in flow paths is required. Additionally, show flow directions from the roof and for the regraded site.
- 4. The drainage area for the dumpster will need to include a grease trap and be routed into the sanitary sewer system.
- 5. Are there any existing sidewalk or utility easements for this site?

Minor Corrections, not required for approval:

1. Center the viewports for the Vicinity Map and FIRM Map on the site and label the correct site location.

2. The Drainage Report needs to be reviewed for grammar and spelling.

The nominal increase in run-off (+0.14 cfs) is acceptable and no Erosion and Sediment Control Plan will be needed (0.47-Ac lot). Work within the City Right-of-Way to remove and replace the sidewalk will require a city work order. If you have any questions, please contact me at 924-3695 or dpeterson@cabq.gov.

Sincerely,

A

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

Orig: Drainage file



City of Albuquerque

Planning Department Development & Building Services Division DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 09/2015)

Project Title:	Building Permit #:	City Drainage #:					
DRB#: EPC#:		Work Order#:					
Legal Description:							
City Address:							
Engineering Firm:		Contact:					
Address:							
Phone#: Fax#:		E-mail:					
Owner:		Contact:					
Address:							
Phone#: Fax#:		_ E-mail:					
Architect:		Contact:					
Address:							
Phone#: Fax#:		E-mail:					
Other Contact:		Contact:					
Address:							
Phone#: Fax#:		E-mail:					
TRAFFIC/ TRANSPORTATION MS4/ EROSION & SEDIMENT CONTROL	CERTIFICAT	CERTIFICATE OF OCCUPANCY					
TVDE OF SURMITTAL .							
ENGINEER/ ARCHITECT CERTIFICATION	PRELIMINA	PRELIMINARY PLAT APPROVAL					
	SITE PLAN I	SITE PLAN FOR BLDG PERMIT APPROVAL					
CONCEPTUAL G & D PLAN	FINAL PLAT	FINAL PLAT APPROVAL					
GRADING PLAN	SIA/ RELEA	SIA/ RELEASE OF FINANCIAL GUARANTEE					
DRAINAGE MASTER PLAN	FOUNDATIO	FOUNDATION PERMIT APPROVAL					
DRAINAGE REPORT	GRADING P	GRADING PERMIT APPROVAL					
CLOMR/LOMR	SO-19 APPR	SO-19 APPROVAL					
TRAFFIC CIRCUITATION LAVOUT (TOL)	PAVING PEI	PAVING PERMIT APPROVAL					
TRAFFIC URCULATION LATOUT (ICL)	GRADING/ P	GRADING/ PAD CERTIFICATION					
EROSION & SEDIMENT CONTROL PLAN (ESC)	WORK ORDE	WUKK UKDEK APPRUVAL					
	CLOMR/LON	/IK					
OTHER (SPECIFY)	PRE-DESIGN	MEETING					
	OTHER (SPE	ECIFY)					
IS THIS A RESUBMITTAL?: Yes No							

COA STAFF: ELECTRONIC SUBMITTAL RECEIVED: ____

DRAINAGE REPORT

For

LAMADELEINES 2110 LOUISIANNA NE

Albuquerque, New Mexico

Prepared by

Rio Grande Engineering PO Box 93924 Albuquerque, New Mexico 87199

SEPTEMBER 2016



David Soule P.E. No. 14522

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TABLE OF CONTENTS

	.3
Introduction	.3
Existing Conditions.	.3
Exhibit A-Vicinity Map	.4
Proposed Conditions	.5
Summary	.5

<u>Appendix</u>

Site Hydrology	A
Excerpts from Target Drainage Plan	В

Map Site Grading and Drainage Plan



PURPOSE

The purpose of this report is to provide the Drainage Management Plan for the **development** of a 0.47 acre pad site development. This plan was prepared in accordance with the City of Albuquerque design regulations, utilizing the City of Albuquerque's Development Process Manual drainage guidelines. This report will demonstrate that the grading does not adversely affect the surrounding properties, nor the upstream or downstream facilities.

INTRODUCTION

The subject of this report, as shown on the Exhibit A, is a 0.47-acre parcel of land located on the northeast corner of Louisiana and uptown loop. The legal description of this site is tract A-1-C, Hunt-Spectrum Development. As shown on FIRM map35001C0352E, the entire site is located within Flood Zone X. The adjacent roadway contains flood plain A0-1. The site is a completely developed pad site. The entire parking area is paved, the surrounding landscape is completed and the entire supporting drainage infrastructure is completed. Since this site is a pad only development, the grading plan must conform to the Target Center Grading plan. Due to the completed landscaping and parking area, there is no opportunity to capture the first flush.

EXISTING CONDITIONS

The site is currently developed pad site. The site is a small pad site located within the Target center development. The entire parking are has been completed. The entire site is captured by series of onsite storm drains. The site drains to an existing inlet located within the Louisiana right of way. As shown in appendix A, the location of improvements is basin 3.3 of the target center grading plan. All downstream improvements are in place and maintained by the city of Albuquerque.







PROPOSED CONDITIONS

The proposed improvements consist of a new 4900 square foot building on the pad site. Minor modifications to the dumpster and handicap isle are required. There are no modifications to the parking field, except to accommodate the modified dumpster and connection to proposed building. The building contains an interior roof drainage system. The roof drain will be connected to the existing junction box located adjacent to the building. The existing pad site area drain will be removed and replaced with the roof drain connection. Due to the site being only a pad, with completed landscaping and parking, there is no opportunity to capture the first flush. The site is being developed in accordance with the previously approved Target drainage plan. The Target drainage report anticipated .61 cfs to be generated from the pad site area. The same basin is predicted to generate.75 cfs. This basin is the new roof which will be a smooth plastic roof at 2% and will have a peak sooner than the parking area, therefore we feel the .14 cfs will pass before the basin peak is observed. The first flush volume of 133 cfs is negligible and not be reasonably captured. The surrounding landscaping is heavily regulated by the master plan and retaining adjacent to the building will not comply with the geotechnical requirements. Since this pad was designed prior to the first flush ordinance we feel not providing is consistent with the approved plan and will have no negative impact

SUMMARY AND RECOMMENDATIONS

This project is a development of building on an existing pad site. The fully developed conditions were anticipated with the master drainage plan for the entire Target development. The peak flow does exceed the anticipated flow by .14 cfs. Due the nature of the basin the time to peak will be less than the parking area, and will not have an adverse impacted. The developed nature of the site does not allow for reasonable retention of the first flush volume and the development of this pad site predates the first flush requirement. The development of this site will not negatively impact the upstream nor down stream facilities. Since this site does not exceed 1 acre, erosion and sediment Control Plan should not be required prior to any construction activity.



APPENDIX A

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SITE HYDROLOGY



Weighted E Method LOMAS APTS

Existing Developed Basins

									100-Year, 6-h	r		10-day		
Basin	Area	Area	Treatment	A	Treatment E	3	Treatm	ent C	Treatment	t D	Weighted E	Volume	Flow	Volume
	(sf)	(acres)	%	(acres)	%	(acres)	%	(acres)	%	(acres)	(ac-ft)	(a c-ft)	cfs	(ac-ft)
PAD AREA(BASIN 3.3)	7840	0.180	. 0%	0	18.0%	0.032	22.0%	0.0396	60.0%	0.108	1.865	0.028	0.75	0.042
PAD AREA (BASIN 3 3)	7840	0.180	40%	0.07199	5.0%	0.009	15.0%	0.027	40.0%	0.072	1.448	0.022	0.61	0.031
COMPARISON												*1783	0.14	

Equations;

PROPOSED ALLOWED

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

Volume = Weighted D * Total Area			PONDING PRO
Flow = Qa * Aa + Qb * Ab + Qc * Ac + Qd *	Ad		
Where for 100-year, 6-hour storm (zone 3)			
	Ea≠ 0.66	Qa= 1.87	
	Eb≠ 0.92	Qb= 2.6	
	Ec≠ 1.29	Qc= 3,45	
	Ed≉ 2.36	Qd= 5.02	

ANTICIPATEĎ PROPOSED 0.61 CFS 0.75 CFS

FLOW SUMMARY

DRAINAGE NARRATIVE THE SITE IS A DEVELOPED PAD SITE WITHIN THE TARGET PARKING LOT. ALL OF THE SURROUNDING IMPROVEMENT HAVE BEEN CONSTRUCTED. THE SURROUNDING IMFRASTRUCTURE ANTICIPATED .01 CFS TO BE DISCHARGED FROM THIS SITE. THE PAD DEVELOPMENT WILL DISCHARGE .75 CFS, WHICH IS .14 CFS GREATER THAN ANTICIPATED. DUE TO THE FACT THE FLOW GENERATED FROM THIS SITE WILL BE ON A SMOOTH PLAS ROOF MEMBRAIN TO A DOWN SPOUT AND THE REMAING BASIN WILL BE GENERATED FROM A PARKING FIELD. THE INCREASE OF 14 CFS WILL ENTER THE SYSTEM PRIOR TO THE PARKING AREA PEAK, WHICH WILL MAKE INCREASE NEGLIGABLE. DUE TO THE EXISTING LANDSCAPING AND COMPLETED PARKING AREA, RETENTION OF THE 133 CUBIC FEET IS NOT ABLE TO BE CAPTURED.

OVIDED REQUIREMENT

133.3 CF

APPENDIX B

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EXCERPTS FROM TARGET

MASTER DRAINAGE PLAN







BHERT FLOW TO DODILE D MET BHERT FLOW TO 12 THE MAR DODN SHEET FLOW TO 12 THE MAR DODN	SHEET FLOW TO TRENCH DRAWN SHEET FLOW TO TRENCH DRAWN	IANA BLVD. N.E 5.22 OF SHEET FLOW TO DOUBLE D INLET	SHEET FLOW TO 24"X24" AREA DRAIN SHEET FLOW TO 18"X18" AREA DRAIN	SHEET FLOW TO LOUISIANA BOULEVARD N.E. SHEET FLOW TO LOUISIANA BOULEVARD N.E.	SIANA BLVD. N.E.= J.17 cfs SHEET FLOW TO 187418" AREA DRIV	SHEET FLOW TO 12 X12" CONTE MET
		Sino			IN LOCK	
4.30 10.0 0.41	0.20	NLET IN I	1.65 0.61	0.10 0.16	NUET IN	
8.16 8.16	6.38 6.38	NINN N	5.38 5.38	6.38 8.38	/ DRWN	
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0.00 0.00 0.00	0.04	10H TE E)	0.13	10°0)		
1222	5-4	11	392			











EROSION CONTROL NOTES: 1. CONTRACTOR IS RESPONSIBLE FOR OBTAINING A TOPSOIL DISTURBANCE PERMIT PRIOR TO BEGINNING WORK. 2. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING RUN-OFF ON SITE DURING CONSTRUCTION. 3. CONTRACTOR IS RESPONSIBLE FOR CLEANING ALL SEDIMENT THAT GETS INTO EXISTING RIGHT-OF-WAY.

4. REPAIR OF DAMAGED FACILITIES AND CLEANUP OF SEDIMENT ACCUMULATIONS ON ADJACENT PROPERTIES AND IN PUBLIC FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR. 5. ALL EXPOSED EARTH SURFACES MUST BE PROTECTED FROM WIND AND WATER EROSION PRIOR TO FINAL ACCEPTANCE OF ANY PROJECT.



MAINTAIN EX. INVERTS REMOVE EX. SD LINE FROM EAST

INV=5275.00

CAUTION:

EXISTING UTILITIES ARE NOT SHOWN. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO CONDUCT ALL NECESSARY FIELD INVESTIGATIONS PRIOR TO ANY EXCAVATION TO DETERMINE THE ACTUAL LOCATION OF UTILITIES & OTHER IMPROVEMENTS.

DRAINAGE NARRATIVE

_BEGIN 2' RETAINING WALL REFER TO STRUCTURAL









NOTES

1. ALL SPOT ELEVATIONS REPRESENT FLOWLINE ELEVATION UNLESS OTHERWISE NOTED.

2. ALL CURB AND GUTTER TO 6" HEADER UNLESS OTHERWISE NOTED.

3. ALL RETAINING WALL DESIGN SHALL BE BY OTHERS. 4. ALL NEW PAVING SHALL BE 6" PCC OVER 8" SUBGRADE PREPARATION IN CONFORMANCE TO ACI 330R-08. UNLESS OTHERWISE NOTED. 5. ANY CURBS OR PAVEMENT NEGATIVELY IMPACTED BY CONSTRUCTION ACTIVITY SHALL BE REPLACED TO MATCH EXISTING CONDITIONS.

7. ALL EARTHWORK SHALL CONFORM TO PROJECT GEOTECHNICAL REPORT PREPARED BY GEO-TEST, INC DATED 12/5/16. 8. ALL SITE WORK SHALL CONFORM TO CITY OF ALBUQUERQUE STANDARDS FOR

PUBLIC WORKS CONSTRUCTION EDITION 9



