

# CITY OF ALBUQUERQUE



June 10, 2015

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

**RE: Warehouse, 4455 Anaheim  
Grading and Drainage Plan  
Engineer's Stamp Date 5-13-2015 (File: C17-D123)**

Dear Mr. Soule:

Based upon the information provided in your submittal received 5-14-15, the above referenced plan cannot be approved for Building Permit until the following comments are addressed:

PO Box 1293

Albuquerque

New Mexico 87103

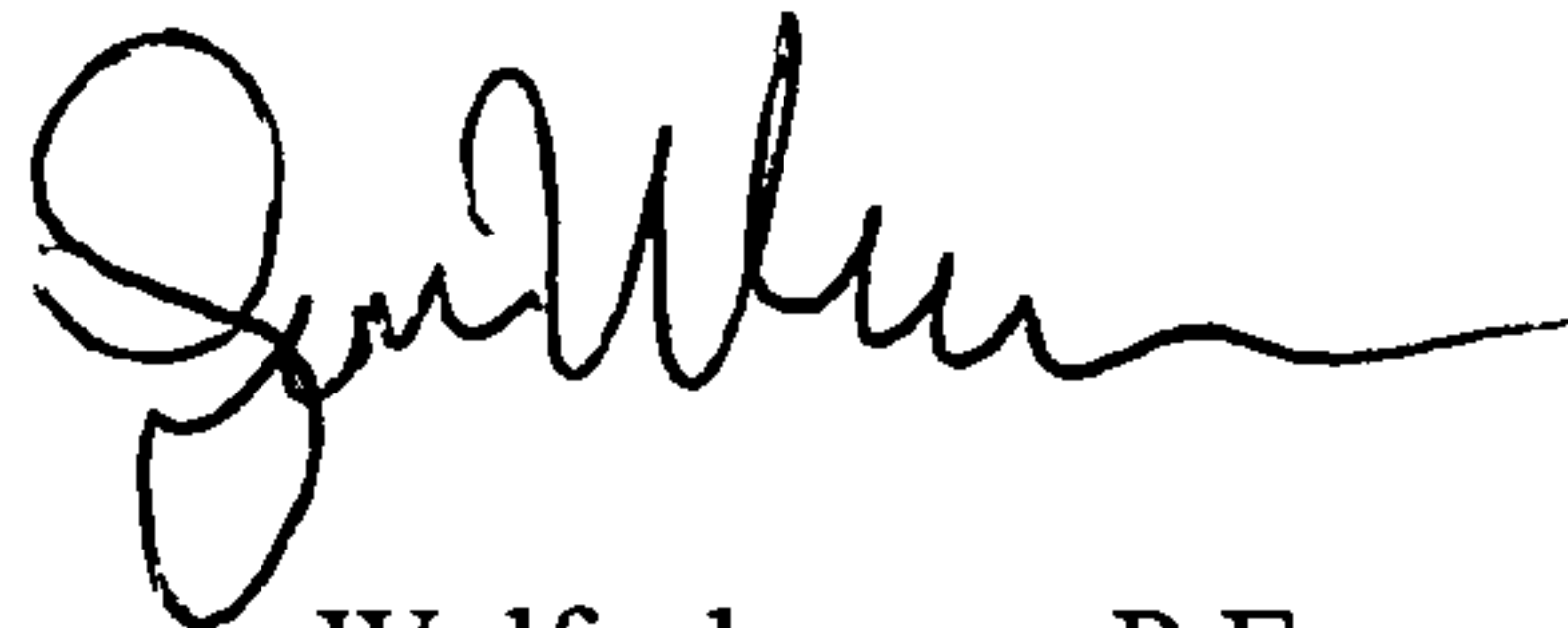
[www.cabq.gov](http://www.cabq.gov)

- 1) Provide new and existing curb linetypes and building boundary within legend. Label any gravel areas as "gravel" and paved areas as "paved", and count gravel lot areas as land treatment type "C". Label any new curb and curb height on the plan view as applicable.
- 2) Show roof drain locations.
- 3) Show existing spot elevations for curb on Corona Loop and on Anaheim Avenue. Label proposed contours, and additionally provide boundary lines around each of the pond areas that define the top and bottom elevations of the pond. For the three retention ponds, indicate that they are for the "first flush" if this is the case. If new spot elevations provided are at flowline of curb, provide general note stating this.
- 4) Correct minor discrepancy in the drainage report which shows a discharge of 2.93 cfs under "Proposed Conditions" discussion and 2.36 cfs under "Summary and Recommendations".

- 5) For existing conditions analysis, it is recommended to analyze the parking lot as "C" land treatment as a compacted lot. This results in less of a difference shown for proposed discharge of the site versus existing discharge.

If you have any questions, you can contact me at 924-3924.

Sincerely,

A handwritten signature in black ink, appearing to read 'Jeanne Wolfenbarger', with a stylized, flowing script.

Jeanne Wolfenbarger, P.E.  
Senior Engineer, Planning Dept.  
Development Review Services

Orig: Drainage file  
c.pdf Addressee via Email



# City of Albuquerque

Planning Department

Development & Building Services Division

## DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV 02/2013)

Project Title: 4455 ANAHEIM Building Permit #: \_\_\_\_\_ City Drainage # C17D123  
DRB#: \_\_\_\_\_ EPC#: \_\_\_\_\_ Work Order#: \_\_\_\_\_  
Legal Description: lot 1, CLIFFOR INDUSTRIAL PARK  
City Address: 4455 ANAHEIM AVE NE

Engineering Firm: RIO GRANDE ENGINEERING Contact: DAVID SOULE  
Address: PO BOX 93924, ALBUQUERQUE, NM 87199  
Phone#: 505.321.9099 Fax#: 505.872.0999 E-mail: DAVID@RIOGRANDEENGINEERING.COM

Owner: JOHN MECHENBIER Contact: \_\_\_\_\_  
Address: 8500 WASHINGTON NE SUITE A05  
Phone#: \_\_\_\_\_ Fax#: \_\_\_\_\_ E-mail: \_\_\_\_\_

Architect: \_\_\_\_\_ Contact: \_\_\_\_\_  
Address: \_\_\_\_\_  
Phone#: \_\_\_\_\_ Fax#: \_\_\_\_\_ E-mail: \_\_\_\_\_

Surveyor: CONSTRUCTION SURVEY INCORPORATED Contact: JOHN GALLEGOS  
Address: \_\_\_\_\_  
Phone#: 917.8921 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:

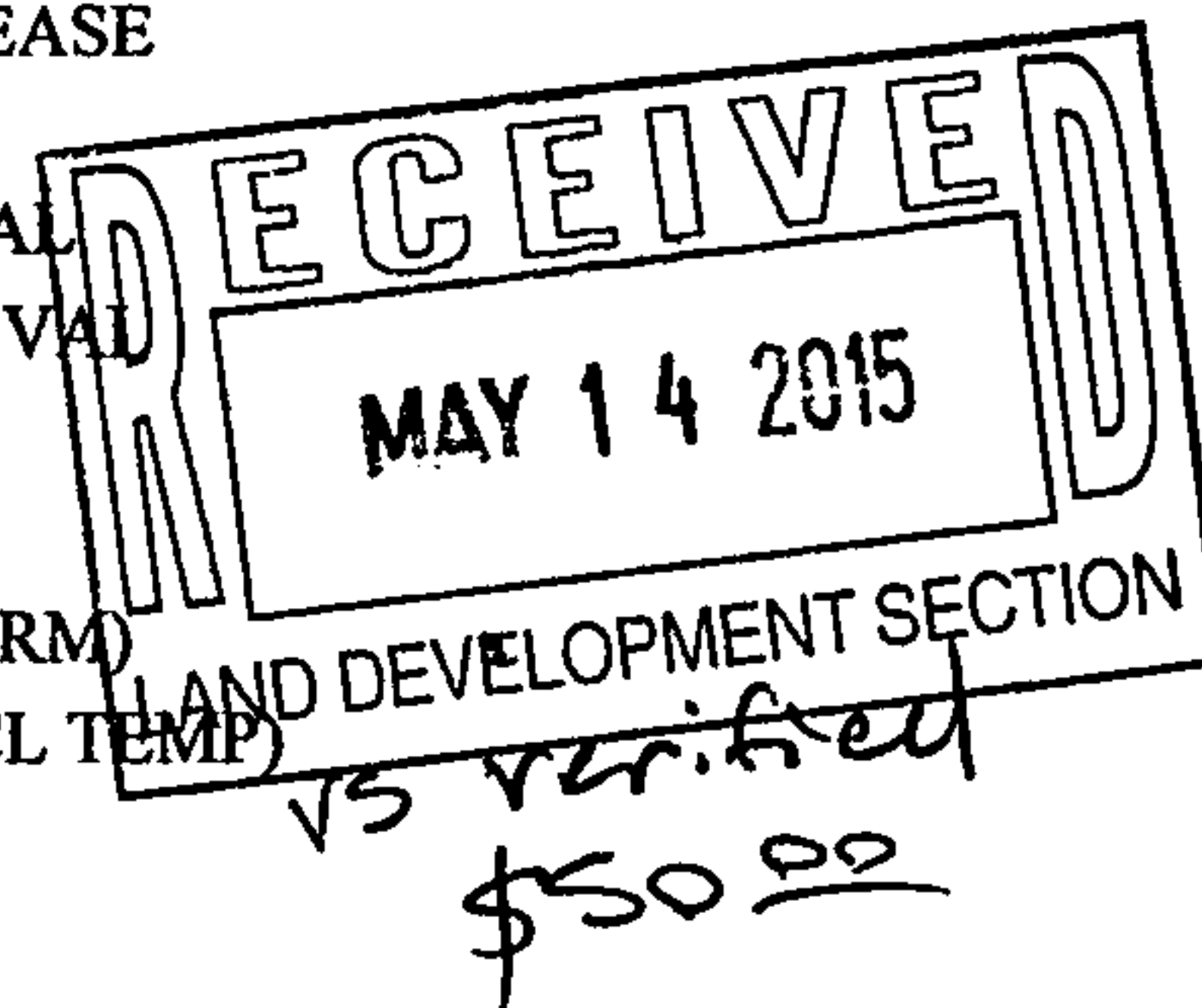
- ☐ SIA/FINANCIAL GUARANTEE RELEASE
- ☐ PRELIMINARY PLAT APPROVAL
- ☐ S. DEV. PLAN FOR SUB'D APPROVAL
- ☐ S. DEV. FOR BLDG. PERMIT APPROVAL
- ☐ SECTOR PLAN APPROVAL
- ☐ FINAL PLAT APPROVAL
- ☐ CERTIFICATE OF OCCUPANCY (PERM)
- ☐ CERTIFICATE OF OCCUPANCY (TCL TEMP)
- ☐ FOUNDATION PERMIT APPROVAL
- ☒ BUILDING 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: 5/14/15 By: \_\_\_\_\_

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 following:

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



DRAINAGE REPORT

For

**WAREHOUSE**

**4455 ANAHIEM  
Albuquerque, New Mexico**

Prepared by

Rio Grande Engineering  
PO Box 93924  
Albuquerque, New Mexico 87199



May 2015



5/13/14

David Soule P.E. No. 14522

TABLE OF CONTENTS

Purpose ..... 3

Introduction..... 3

Existing Conditions..... 3

Exhibit A-Vicinity Map ..... 4

Proposed Conditions ..... 5

Summary ..... 5

Appendix

Site Hydrology .....A

Infiltrator details .....B

Map Pocket

Site Grading and Drainage Plan



## **PURPOSE**

The purpose of this report is to provide the Drainage Management Plan for the development of a platted lot located at 455 Anaheim Northeast. 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 .65 acre parcel of land located on the North West corner of Anaheim and Corona Loop Northeast. The legal description of this site is tract1 Clifford Industrial Park. As shown on FIRM map35013C0136G, the entire site is located within Flood Zone X. The site is located within the drainage master plan for Clifford industrial park. The city files do not have this report, so free discharge assumptions are made based upon the development of the entire subdivision as well as the design assumption of the other lots in subdivision.

## **EXISTING CONDITIONS**

The site is currently a vacant parcel. It appears minor grading may have occurred in the past .The site is a compacted lot with very little vegetation. The site currently discharge 1.52 cfs from east to west discharging as sheet flow to the adjacent lot . The flow drains discharges to Anaheim and is accepted by a concrete and asphalt rundown that ultimately discharges to the North Diversion channel west of the site.







## PROPOSED CONDITIONS

The proposed improvements consist of a new building with paved and gravel parking areas. The proposed site development will contain one basin that will discharge out the driveway at Anaheim. The site will discharge at a peak rate of 2.93 cfs. The site will capture the first flush via shallow harvest ponds along the east and west property lines. The building roof drainage drains east to the harvest ponds.

## SUMMARY AND RECOMMENDATIONS

This project is a development of a parcel located within a master plan industrial park. The development of this site is in conformance to the master drainage study. The site will discharge 2.36 cfs. Due to the harvest ponds on the north the attenuated flow will be less than calculated. The site development does not have upland flow. The site development meets the water quality requirements. Since the affected area site encompasses an area less than 1 acre, a NPDES permit and erosion and sediment control plan should not be required prior to any construction activity. An Erosion Control Plan will also be required. ?



# Weighted E Method

4455 ANAHEIM

## 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	28986	0.665	0%	0	100.0%	0.665	0.0%	0	0%	0.000	0.780	0.043	1.52
PROPOSED	28986	0.665	0%	0	8.0%	0.053	7.0%	0.04658	85%	0.566	1.944	0.108	2.93
INCREAS	0	0.000	0%	0		-0.612		0.047	45%	0.566		0.065	1.409

## Equations:

Weighted E =  $E_a \cdot A_a + E_b \cdot A_b + E_c \cdot A_c + E_d \cdot A_d$  / (Total Area)

Volume = Weighted D \* Total Area

Flow =  $Q_a \cdot A_a + Q_b \cdot A_b + Q_c \cdot A_c + Q_d \cdot A_d$

Where for 100-year, 6-hour storm (zone 3)

$E_a = 0.53$

$E_b = 0.78$

$E_c = 1.13$

$E_d = 2.12$

$Q_a = 1.57$

$Q_b = 2.28$

$Q_c = 3.14$

$Q_d = 4.7$