



# City of Albuquerque

Planning Department

Development & Building Services Division

## DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV 02/2013)

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: \_\_\_\_\_

**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, 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

**PARADISE VIEW UNIVERSAL APARTMENTS  
LOT 12A PARADISE HILLS INVESTMENT PROPERTIES  
UN ADDRESSED PROPERTY ON BUGLO NW  
ALBUQUERQUE, NEW MEXICO**

Prepared by

Rio Grande Engineering  
PO BOX 93924  
Albuquerque, New Mexico 87199



11/23/16

NOVEMBER 2016

David Soule P.E. No. 14522

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### **Appendix**

Site Hydrology .....	A
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### **Attachments**

Site Grading and Drainage Plan

## **PURPOSE**

The purpose of this report is to provide the Drainage Management Plan for the development of Lot 12 Paradise hills investments located on an unaddressed lot on Buglo Street NW at the intersection of Sierra Morrena Road NW. The proposed development will consist of an approximately 10,000 square multi family apartment project with its associated parking lot. This plan will identify the hydraulic constraints affecting the development of the subject property. This plan was prepared in accordance with city of Albuquerque's drainage ordinance using the Development Process Manual Drainage Criterion. This report will demonstrate that the proposed improvements do not adversely affect the surrounding properties, nor the upstream or downstream facilities.

## **INTRODUCTION**

The subject of this report, as shown on the Exhibit A vicinity map, is a 0.76-acre parcel of land located on the south side of Buglo. The site is currently undeveloped and contains stock piles of dirt from surrounding construction activities. The site does have native vegetation and some rock outcroppings. The entire site lies with flood zone x as described by FIRM map 35001C0104E. The site currently has a small portion of the site draining to Buglo, with the remainder draining to the adjacent tracts to the south.

The site is located adjacent to the Petroglyph national monument to the south. The site accepts minor flows from the adjacent tract to the west. The development of this site will be in accordance to the existing drainage patterns and rates. The increased flow generated by the proposed development must be handled in a manner to not negatively impact adjacent properties and must conform to the city first flush drainage policy. Any retained flow will be discharged completely within 24 hours.

## **Exhibit A- Vicinity Map**

## **EXISTING CONDITIONS**

The site is located out side of any recognized drainage master plans. It is located within the drainage basin of the middle branch of the Piedra Mercadas arroyo. The site currently discharges 1.26 cfs during the 100-year, 6-hour design storm event, to the adjacent properties to the south. The site slopes from north to south with average grade of 5%. The site is impacted by minor area on adjacent tract with negligible flow and is not impacted by upland flow due to the location on a ridge and curb and gutter within Buglo. There are down stream public conveyance facilities are in place within bugle, which convey surface flow to a down stream storm drain within Paradise Boulevard

## **PROPOSED CONDITIONS**

The proposed improvements consist of the construction of an approximately 10,000 square feet of apartments and its associated parking. The site is will drain to a detention pond that has been sized to capture the 100-year, 24 hour storm. The site will drain via a sump pump that will discharge to Buglo at a peak rate of 50 gpm (.1 cfs). The pump will be controlled via a float. The pump will be located in a 12" CMP with a rim several feet above the bottom of pond. The float is not activated until the water surface elevation reaches this grate elevation, therefore the .1 cfs will not leave the site until after the storm peak. The .1 cfs leaving the site via Buglo will not have any negative effects on the system due to the very low rate of discharge and the lag time created by the first flush storage volume. The peak flow generated by this site is 2.89 cfs. The 100-year, 24-hour storm water volume generated by the site is 7308 cubic feet. The pond will retain 2936 cubic feet which exceeds the water quality volume of 1930 cubic feet. The excess pond volume of 4372 cubic feet of water will completely discharge in 12 hours. The onsite area drain system has a minimum slope of 2% and each reach has the capacity to convey 4.38 cfs, which is greater than the total flow from the site. Each drainage basin has the capacity to collect 1.12 cfs, which is greater than the flow required at each of the inlets. In the event of

clogging or pump malfunction, the pond is into perched and will discharge to the historical outfall to the south/

## **SUMMARY AND RECOMMENDATIONS**

This site is an infill development within a developed upland basin with an undeveloped downstream basin. The drainage management for this site will capture the flow generated and discharge it to the developed basin at .1 cfs after the storm flow has peaked. The site will capture and retain the first flush water quality volume required. The onsite systems have been designed to convey the developed flow. In the event of failure of pump, the pond has an emergency outfall at the historic discharge outfall.. The grading plan and drainage report was prepared in conformance to the City of Albuquerque drainage criteria. Since the proposed improvements shown within this plan do not adversely affect the upstream or downstream facilities, we recommend approval of the site-grading plan.

**APPENDIX A**

**Hydraulic Calculations**



**MAP POCKET A**  
**GRADING AND DRAINAGE PLAN**





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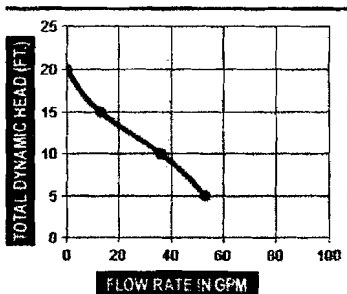
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### CBP33

1/3 HP Cast-Iron  
PEDESTAL SUMP PUMP

- 53 GPM @ 5'
- Adjustable Vertical Float Allows Homeowners to Change the Operating Cycle to Fit Their Application
- Reliable Cast-Iron Volute
- Corrosion-Resistant Steel Column and Stainless Steel Fasteners
- Heavy-Duty, Air-Cooled Motor is Thermally Protected to Prevent Overheating
- High Capacity 1-1/2" NPT Discharge
- Adjustable Vertical Float Switch
- Reinforced Thermoplastic Impeller
- 8' SJT Power Cord
- 10" or Wider Sump Basins
- Shipping Weight, 22.5 lbs



#### Product Downloads

HI-RES IMAGE MANUAL SPEC SHEET

#### PERFORMANCE

Discharge Head	5'	10'	15'	20'
Gallons/Minute	53	36	13	-



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**Rael, Rudy E.**

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**To:** David Soule (david@riograndeengineering.com)  
**Subject:** Paradise view Universal Apartments

Mr. Soule,

This email is being sent in lieu of an attached comment letter in order to expedite our comments. Response to comments should continue to be included in the resubmittal process. **A reply to these comments via email will not be considered a resubmittal.**

Based upon the information provided in your submittal received 11/23/16, the above referenced Grading and Drainage plan dated 11/22/16 cannot be approved for Grading Permit or Building Permit until the following comments are addressed:

- Provide erosion protection at the pipe opening in the pond.
- Provide labels for contour lines.
- Recommend that a turn block 3" above grade in the garden walls is placed for emergency overflow out of rear yards.
- Provide a sketch of the retaining wall or a statement stating the retaining walls are built by others.
- Provide a note stating the walls require a separate permit.
- Provide a 1' wide sidewalk culvert extending 1' passed the property line in lieu of the 2" pipe penetration in the curb.
- Provide SO-19 notes for the sidewalk culvert.
- Provide a note stating the owner is responsible for the maintenance and up keep of the pond and sump pump.
- What is the 3:1 slope tie referring to?

If you should have any questions feel free to contact me or Abiel Carrillo at 924-3986.

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