

# CITY OF ALBUQUERQUE



Richard J. Berry, Mayor

April 6, 2017

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

**RE: Iron Duplex - Resubmittal  
Grading and Drainage Plan  
Original Stamp Date: 11/22/16  
Revision Stamp Date: 4/4/17  
Hydrology File: K13D074**

Dear Mr. Soule:

Based upon the information provided in your submittal received 4/5/2017, the Grading and Drainage Plan resubmittal **is not** approved for Building Permit. The following comments need to be addressed for approval of the above referenced project:

1. As a constructability issue, it is hard to tell what you are installing and what you are not. Please place a big "X" over the old ponds and driveway. Then place a new viewport showing what you are proposing to install. It will make it a lot easier for both the contractor and the building inspector to immediately see what is to be built.
2. It appears that the 6'x7'x48' trench is drawn 47'. Please check the length of the trench.
3. Please provide a detail for the trench. Again this will help both the contractor and the building inspector know what is to be built.
4. The proposed trench is to provide 520 CF of retention. The required retention is 530 CF. It appears that your new system is about 10 CF short.

# CITY OF ALBUQUERQUE



Richard J. Berry, Mayor

If you have any questions, please contact me at 924-3995 or [rbrissette@cabq.gov](mailto:rbrissette@cabq.gov).

Sincerely,

*Renee C. Brissette*

Reneé C. Brissette, P.E.  
Senior Engineer, Hydrology  
Planning Department

PO Box 1293

Albuquerque

New Mexico 87103

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



# 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 that are part of a larger common plan of development

April 5, 2017

**Principal Engineer - Hydrology**

**Planning Department**

City of Albuquerque

600 2<sup>nd</sup> Street NW

Albuquerque, NM 87102

The purpose of this letter is to accompany the enclosed grading plan. The plan has been revised to address the customers request to have more parking available. Our initial plan shows two ponds on the north side of the properties adjacent to the alley. The proposed change eliminates the pond and utilized an underground infiltration gallery to capture the required volume. The parking spaces will have a pervious pavement rather than asphalt. We have made the adjustments to the original plan and added new stamp date. No changes made to the drainage concept.

Sincerely

David Soule

Rio Grande Engineering

ponds are not being used, the volume is being retained by a 6x7x48' trench voids)=520 cubic feet

BUILD RENTENTION POND 1:1.5 SLOPE MAX. W/ROCK PLATTING SEE DETAIL THIS SHEET TOP=4955.00 BOTTOM=4954.00 PROPOSED VOLUME=162 CU. FT. EXCAVATE AN ADDITIONAL 3" AND FILL ADDITIONAL VOID VOLUME 30%=106 CU. FT. TOTAL PROPOSED VOLUME=268 CU. FT.

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6'x7'x48' trench with filter fabric on bottom and sides. Fill to 6" with 2-4" cobbles. Install filter fabric on top and cover with 1' of dirt, topped with crusher fines

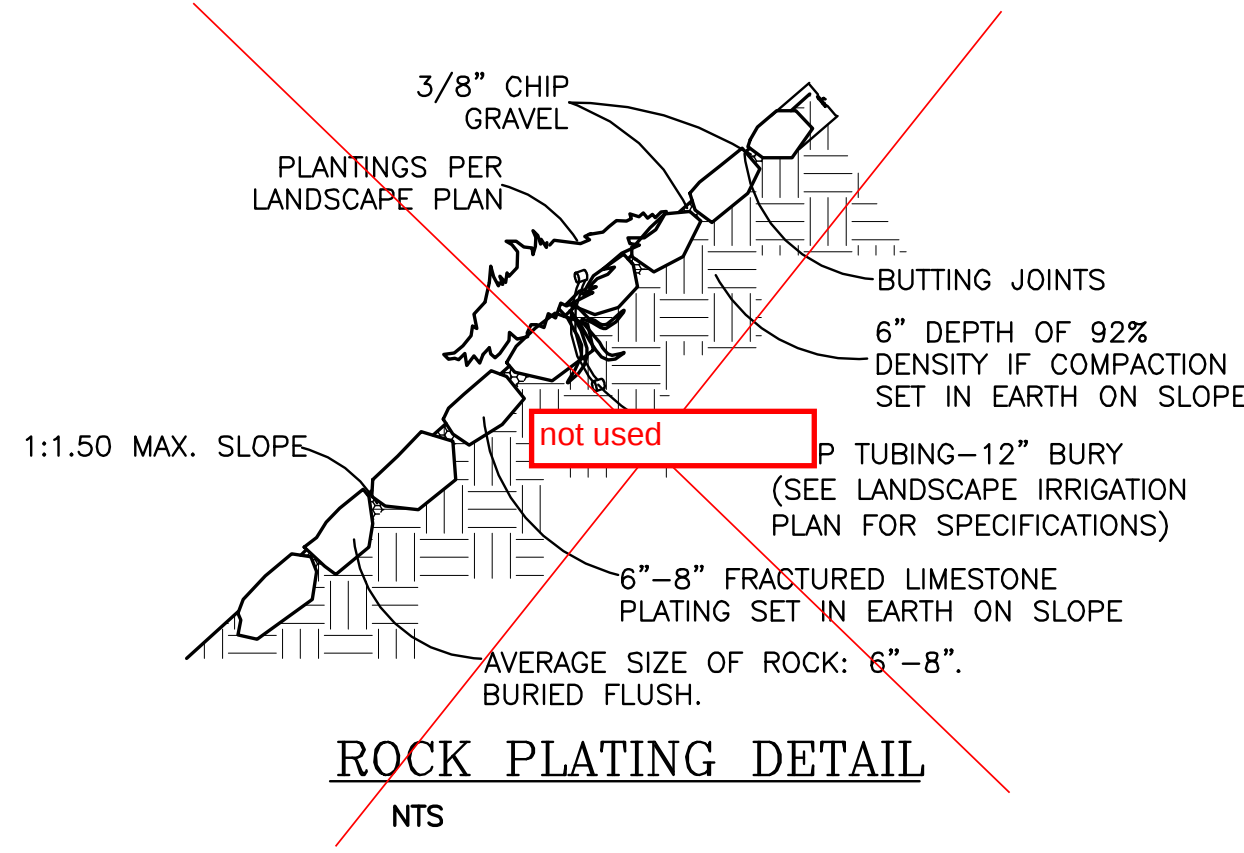
Install 6" perforated pipe 18" below top of gravel the length of the trench.

Extend 6" pipe from location as shown to the center of the trench.

install 6" area drain grate=4955.15 invert=4953.60

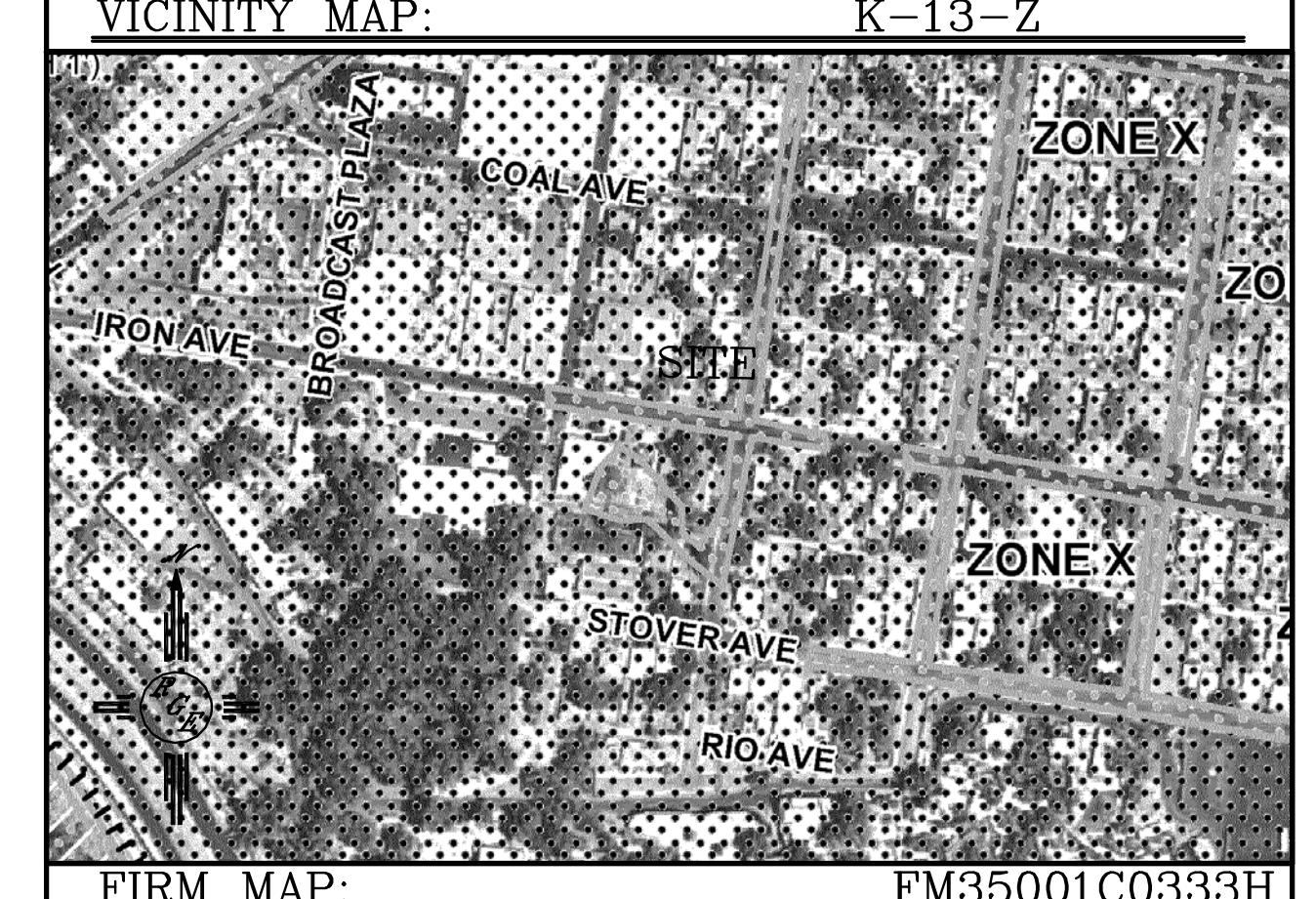
INSTALL 6" AREA DRAIN BEGIN 6" HDPE GRATE=4955.50 INV=4954.50

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### 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 PERMITTED 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.



### LEGAL DESCRIPTION:

LOTS 2-D AND 2-E, BLOCK 2-A, CHELWOOD PARK

### NOTES:

1. ALL SPOT ELEVATIONS REPRESENT FLOWLINE ELEVATION UNLESS OTHERWISE NOTED.
2. ALL CURBS TO BE 6" HEADER.
3. THE CONTRACTOR WILL BE REQUIRED TO SAWCUT AND REPAIR THOSE PORTIONS OF THE CONCRETE ALLEY THAT ARE DEGRADED BY THE CONSTRUCTION OF THE IMPROVEMENTS.
4. DOWN SPOUTS SHOWN SHALL CONNECT TO A 4" WIDE SIDEWALK TRENCH DRAIN TO ALLOW ROOF DRAINAGE TO DRAIN UNDER SIDEWALKS.

### LEGEND

- EXISTING CONTOUR
- EXISTING INDEX CONTOUR
- PROPOSED CONTOUR
- PROPOSED INDEX CONTOUR
- SLOPE TIE
- EXISTING SPOT ELEVATION
- PROPOSED SPOT ELEVATION
- BOUNDARY
- CENTERLINE
- RIGHT-OF-WAY
- PROPOSED CURB AND GUTTER
- EXISTING CURB AND GUTTER
- PROPOSED SIDEWALK
- PROPOSED SETBACK
- PROPOSED LOT LINE
- PROPOSED SCREEN WALL
- PROPOSED RETAINING WALL DESIGN BY OTHERS

### 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

### Weighted E Method

IRON

| Existing Developed Basins |              |              |             |         |             |         |             |         |             |         |                                    |
|---------------------------|--------------|--------------|-------------|---------|-------------|---------|-------------|---------|-------------|---------|------------------------------------|
| Basin                     | Area (sq ft) | Area (acres) | Treatment A |         | Treatment B |         | Treatment C |         | Treatment D |         | 100-Year, 6-hr. Weighted E (ac-ft) |
|                           |              |              | %           | (acres) | %           | (acres) | %           | (acres) | %           | (acres) |                                    |
| EXISTING                  | 7100         | 0.163        | 0%          | 0       | 100.0%      | 0.163   | 0.0%        | 0       | 0%          | 0.000   | 0.780                              |
| PROPOSED                  | 7100         | 0.163        | 0%          | 0       | 13.0%       | 0.021   | 15.0%       | 0.02445 | 72%         | 0.117   | 1.797                              |
| TO IRON                   | 3050         | 0.070        | 0%          | 0       | 13.0%       | 0.009   | 15.0%       | 0.0105  | 72%         | 0.050   | 1.797                              |
| TO ALLEY                  | 4050         | 0.093        | 0%          | 0       | 13.0%       | 0.012   | 15.0%       | 0.01395 | 72%         | 0.067   | 1.797                              |
| ALLOWABLE DISCHARGE       |              |              |             |         |             |         |             |         |             |         | 0.45                               |

#### Equations:

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

Volume = Weighted E \* Total Area

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

Where for 100-year, 6-hour storm (zone 2)

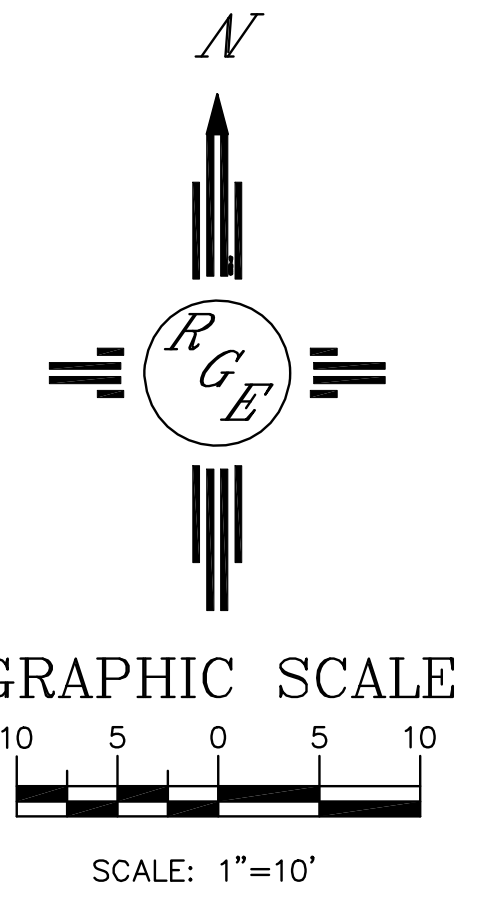
Ea= 0.53  
Eb= 0.78  
Ec= 1.13  
Ed= 2.12

Qa= 1.57  
Qb= 2.28  
Qc= 3.14  
Qd= 4.7

FIRST FLUSH VOLUME= 145 CF

RETAIN ALL ALLEY FLOW 530 CF

NARRATIVE  
THIS IS A REDEVELOPMENT OF AN INFILL LOT. THIS LOT WAS FULLY DEVELOPED IN THE PAST DUE TO THE LIMITED SITE AREA. WE ARE PROPOSING TO POND THE ENTIRE 100-YEAR VOLUME DISCHARGING TO THE ALLEY AND ALLOWING THE FREE FLOW OF THE IRON BASIN. IN A 6-HOUR EVENT THE SITE WILL DISCHARGE 29 CFS WHEREAS IT IS ALLOWED TO DISCHARGE 45 CFS. IN A LONGER STORM EVENT THE POND MAY NOT BE COMPLETELY DRAINED THE POND WILL DISCHARGE AND THE SITE MAY DISCHARGE UP TO 23 CFS IN EXCESS OF ALLOWED. IF THE SITE BEING INFILL AND THE POTENTIAL FOR INFILTRATION AND ATTENUATION DO TO PONDING, THE EFFECTIVE DISCHARGE RATE SHALL BE LESS THAN THE .66 CFS CALCULATED



|                                                                                 |                           |                       |
|---------------------------------------------------------------------------------|---------------------------|-----------------------|
| ENGINEER'S SEAL<br><br>4/4/17<br>11/22/16<br>DAVID SOULE<br>P.E. #14522         | 1203 IRON DUPLEX          | DRAWN BY WCVJ         |
|                                                                                 | GRADING AND DRAINAGE PLAN | DATE 11-02-16         |
| <br>1606 CENTRAL AVENUE<br>SUITE 201<br>ALBUQUERQUE, NM 87106<br>(505) 872-0999 |                           | 21637-LAYOUT-11-02-16 |
|                                                                                 |                           | SHEET #               |
|                                                                                 |                           | JOB # 21637           |