CITY OF ALBUQUERQUE

Planning Department
Brennon Williams, Interim Director

Mayor Timothy M. Keller

August 26, 2019

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

RE: Chelwood Apartments
900 & 901 Chelwood NE
Grading and Drainage Plan & Drainage Report
Engineer's Stamp Date: 08/10/19
Hydrology File: J22D070

Dear Mr. Soule:

Based upon the information provided in your submittal received 08/12/2019, the Grading & Drainage Plan and Drainage Report are approved for Building Permit, Grading Permit, and Work Order.

Please attach a copy of this approved plan in the construction sets for Building Permit processing along with a copy of this letter. Prior to approval in support of Permanent Release of Occupancy by Hydrology, Engineer Certification per the DPM checklist will be required.

As a reminder, if the project total area of disturbance (including the staging area and any work within the adjacent Right-of-Way) is 1 acre or more, then an Erosion and Sediment Control (ESC) Plan and Owner's certified Notice of Intent (NOI) is required to be submitted to the Stormwater Quality Engineer (Dough Hughes, PE, jhughes@cabq.gov, 924-3420) 14 days prior to any earth disturbance.

Also as a reminder, please provide a Drainage Covenant for the stormwater quality ponds per Chapter 17 of the DPM prior to Permanent Release of Occupancy. Please submit this on the 4th floor of Plaza de Sol. A $25 fee will be required.

If you have any questions, please contact me at 924-3995 or rbrissette@cabq.gov .

Sincerely,

Renée C. Brissette

Renée C. Brissette, P.E. CFM
Senior Engineer, Hydrology
Planning Department

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov

City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 6/2018)

Project Title: chelwood apartments Building Permit #:_____ Hydrology File #: _____

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

Legal Description: lots 1A and 28A Block 11 Grandview Heights

City Address: 900,901 chelwood ne

Applicant: rob mckinley Contact: _____

Address: _____

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

Other Contact: RIO GRANDE ENGINEERING Contact: DAVID SOULE

Address: PO BOX 93924 ALB NM 87199

Phone#: 505.321.9099 Fax#: 505.872.0999 E-mail: david@riograndeengineering.com

TYPE OF DEVELOPMENT: ___ PLAT ___ RESIDENCE ___ DRB SITE X ADMIN SITE x2

Check all that Apply:

DEPARTMENT:

X HYDROLOGY/ DRAINAGE

___ TRAFFIC/ TRANSPORTATION

TYPE OF SUBMITTAL:

___ ENGINEER/ARCHITECT CERTIFICATION

___ PAD CERTIFICATION

___ CONCEPTUAL G & D PLAN

X GRADING PLAN

___ DRAINAGE REPORT

___ DRAINAGE MASTER PLAN

___ FLOODPLAIN DEVELOPMENT PERMIT APPLIC

___ ELEVATION CERTIFICATE

___ CLOMR/LOMR

___ TRAFFIC CIRCULATION LAYOUT (TCL)

___ TRAFFIC IMPACT STUDY (TIS)

___ STREET LIGHT LAYOUT

___ OTHER (SPECIFY) _____

___ PRE-DESIGN MEETING?

IS THIS A RESUBMITTAL?: ___ Yes X No

TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

X BUILDING PERMIT APPROVAL

___ CERTIFICATE OF OCCUPANCY

___ PRELIMINARY PLAT APPROVAL

___ SITE PLAN FOR SUB'D APPROVAL

___ SITE PLAN FOR BLDG. PERMIT APPROVAL

___ FINAL PLAT APPROVAL

___ SIA/ RELEASE OF FINANCIAL GUARANTEE

___ FOUNDATION PERMIT APPROVAL

___ GRADING PERMIT APPROVAL

___ SO-19 APPROVAL

___ PAVING PERMIT APPROVAL

X GRADING/ PAD CERTIFICATION

___ WORK ORDER APPROVAL

___ CLOMR/LOMR

___ FLOODPLAIN DEVELOPMENT PERMIT

___ OTHER (SPECIFY) _____

DATE SUBMITTED: _____ By: _____

COA STAFF: ELECTRONIC SUBMITTAL RECEIVED:_____

FEE PAID:_____

CITY OF ALBUQUERQUE

Planning Department
David Campbell, Director

Mayor Timothy M. Keller

February 26, 2019

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

RE: Chelwood Apartments
Grading and Drainage Plan & Drainage Report
Engineer's Stamp Date: 02/06/19
Hydrology File: J22D070

Dear Mr. Soule:

PO Box 1293

Albuquerque

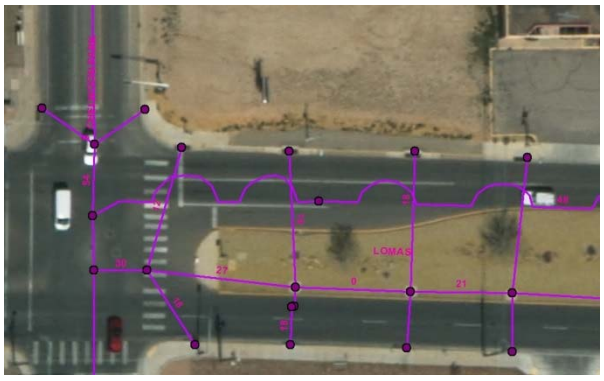
NM 87103

www.cabq.gov

Based upon the information provided in your submittal received 02/08/2019, the Grading & Drainage Plan and Drainage Report **is not** approved for Building Permit and Grading Permit. The following comments need to be addressed for approval of the above referenced project:

1. Since there are improvements within the two alleys associated with this development, these improvements will be required to be placed on an Infrastructure List. The Infrastructure List must be tied to a Site Plan for Building Permit and requires action by the DRB. Therefore this project is a DRB site which has a higher standard review fee. Because this was submitted as an Admin site, a deficit submittal fee of $300 is due.
   site is going administratively for approval with no infrastructure list
2. Please use the recorded plat which was approved in December 2018. Also show all easements. corrected

3. Please remove the storm sewer behind the curb along Lomas and the two MHs within the existing asphalt sidewalk. This storm pipe is not part of the GIS as-builts (see image) and the two MHs do not exist in the field. Please verify if they do exist. removed



4. Please label the proposed sidewalks and improvements within the two alleys to be built with a work order. added labels

5. Please check with Transportation if the existing asphalt sidewalk along Lomas needs to be replaces to City standards. we have identified this as to be constructed

6. Please add a typical section trough the ponds at Chelwood Park showing the R.O.W., existing road payment, proposed sidewalk, proposed retaining wall with the location of the footer (see comment #7), and the proposed building. section added

7. Per DPM Ch. 22.5.B, grading and construction of retaining walls at or near the property line must demonstrate that the adjacent property is not damaged or its use constrained. Any such encroachment by the wall within the City's R.O.W. must be accompanied by a licensing agreement. section and language regarding this comment has been added

8. Please show the alley gutter per City Drawing #2411 & 2415. Grading within the alleys must also follow these standard drawings. added notes

9. Please show the flowline elevations of the alley gutter at the ends where it will tie into existing grades and at the intersection of the two alley gutters. added spots

10. Are there emergency spillways for the overflow of the two ponds along Chelwood Park to enter into the street curbing through sidewalk culverts? Or is the piping into the existing inlets have sufficient capacity for the overflow? Please verify.
we understand emergency spillways are allowed to pass over sidewalks

11. Some of the callouts are in different text shading. Please ensure that all proposed callouts are the same. we have cleaned up the text shading differences

12. Drainage Report. Under Proposed Conditions please add within the wording for each Basin, "the required water quality volume is XX and the provided water quality volume is XX". we have correct the report

13. Drainage Report. Under Proposed Conditions please add a line stating, "the total site required water quality volume is XX and the total site provided water quality volume is XX". we have correct the report

14. Drainage Report. Under Proposed Conditions, please remove the last sentence since the total site provided water quality volume is greater than the total site required water quality volume. we have correct the report

15. Drainage Report. The last sentence in the summary may need to be revised based on Comment #16. Please verify. we have revised report

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16. As a reminder, if the project total area of disturbance (including the staging area and any work within the adjacent Right-of-Way) is 1 acre or more, then an Erosion and Sediment Control (ESC) Plan and Owner's certified Notice of Intent (NOI) is required to be submitted to the Stormwater Quality Engineer (Curtis Cherne, PE, ccherne@cabq.gov, 924-3420) 14 days prior to any earth disturbance.

17. Also as a reminder, please provide a Drainage Covenant for the proposed stormwater quality ponds sewer per Chapter 17 of the DPM prior to Permanent Release of Occupancy. Please submit this on the 4th floor of Plaza de Sol. A $25 fee will be required.

18. Standard review fee of $300 will be required at the time of resubmittal plus the $300 fee from Comment #1 for a total of $600.

If you have any questions, please contact me at 924-3995 or rbrissette@cabq.gov .

Sincerely,

Renée C. Brissette

Renée C. Brissette, P.E. CFM
Senior Engineer, Hydrology
Planning Department

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov

REVISED
DRAINAGE REPORT

For

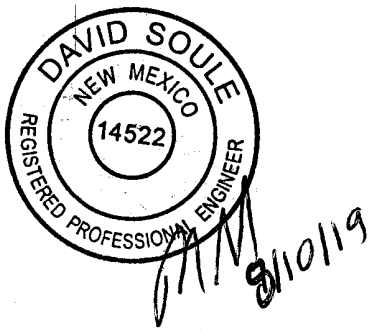
Chelwood Apartment

Albuquerque, New Mexico

Prepared by

Rio Grande Engineering
PO Box 93924
Albuquerque, New Mexico 87199

February 2019



David Soule P.E. No. 14522

TABLE OF CONTENTS

Appendix

Map Pocket

Site Grading and Drainage Plan

PURPOSE

PURPOSE

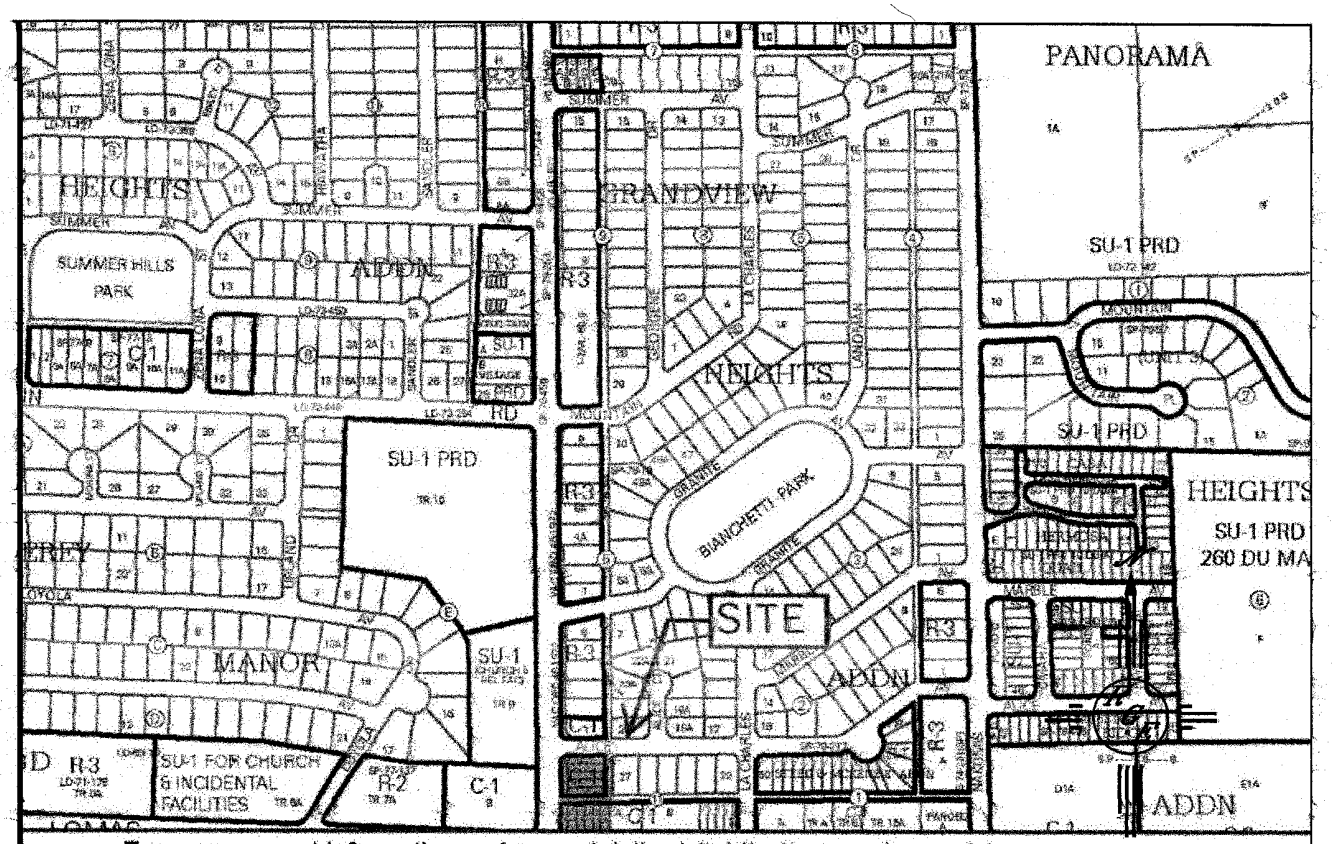
The purpose of this report is to provide the Drainage Management Plan for the infill development of a vacant lot on northeast corner of Chelwood and Lomas. This plan was prepared in accordance with the City of Albuquerque design regulations, utilizing the City of Albuquerque's Development Process Manual 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 .85-acre parcel of land located on the northeast corner of Chelwood and Lomas in north east Albuquerque. The legal description of this site is lot 1a and 28a Block 11 Grandview Heights. As shown on FIRM map35001C0359G, the entire property is located within Flood Zone X. This site is surrounded by fully developed parcels. This site is an existing un developed site within fully developed areas. Based on the site location and the adjacent drainage infrastructure this development must maintain existing drainage patterns and match existing conditions as closely as possible.

EXISTING CONDITIONS

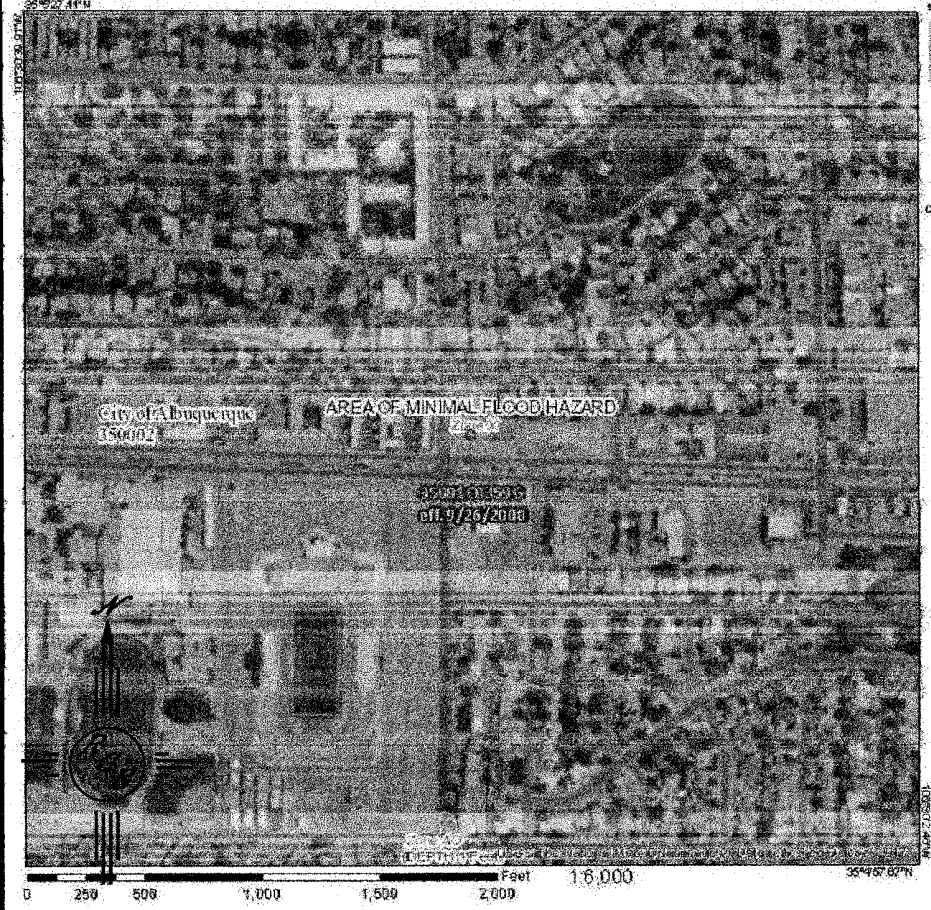
The site is currently undeveloped. The site appears to have significant pedestrian and vehicle traffic due to its proximity to the Manzano High school. The site is not in native condition. The site is impacted by 3.53cfs of offsite flows draining down the center alley, and is surrounded by developed properties. As shown in Appendix A, the existing site discharges at a peak rate of 2.24 cfs in a 100-year, 6-hour event. The discharge leaves the site thru a compacted gravel alley drive pad on Chelwood. The flow is captured by a publicly maintained storm drain with inlets adjacent to the site.



For more current information and more details visit: http://www.cabq.gov/gis

VICINITY MAP: J-22-Z

National Flood Hazard Layer FIRMette



The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 10/1/2018 at 8:27:46 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodeled areas cannot be used for regulatory purposes.

FIRM MAP:

PROPOSED CONDITIONS

The proposed improvements consist of two townhouse apartment buildings and associated parking lots. The site will be graded to accommodate the new buildings while maintaining the existing drainage patterns. As shown in on the grading plan, the site will be graded to contain four basins. Basin A includes the Northern portion of the site. This basin generates 0.72 cfs and does not discharge. The flow drains to a retention pond. This pond captures the entire 100-year, 10-day volume and will spill over the sidewalk in an emergency. This basin has a required water quality volume of 101 cf and provides 1717 cf. Basin B contains the southern portion of the north building and associated parking. This basin discharges .80 cfs to the alley and then to Chelwood via the driveway. This basin has a required water quality volume of 189 cf and captures 56 cubic feet; leaving a deficit of 133 cf. Basin C contains the northern portion of the south buildings. This basin discharges 0.61 cfs to the alley and then to Chelwood via the driveway. This basin has a required water quality volume of 151 cf and captures 56 cubic feet; leaving a deficit of 95 cf. Basin D contains the southern portion of the buildings. This basin generates 0.76 cfs, which drains to Chelwood via a 2' sidewalk culvert. This basin has a required water quality volume of 130 cf and captures 313 cubic feet. The combined proposed peak flow leaving the site will be 2.17 cfs. Basins A and D retain in excess the required water quality volume. Basin B and C have a deficit of 228 cubic feet that the owner elects to pay a fee-in-lieu amount of $1,856.00.

SUMMARY AND RECOMMENDATIONS

This project is an infill project within a completely developed area of North Albuquerque. The site is currently undeveloped. The site currently discharges 2.24 cfs to Chelwood. The proposed drainage plan will maintain the existing drainage patterns and allow the upland flow of 3.53 cfs to pass through the site. The post development discharge will be 2.17 cfs, which is a reduction from

historical rates. The site retains the majority of the required first flush ponds and will pay a fee in lieu amount of $1,856.00 for the untreated flow. The development has emergency overflows to adjacent roadways. Since this site work area encompasses less than 1 acre, a NPDES permit and Erosion and Sediment Control Plan may not be required prior to any construction activity.

APPENDIX A

SITE HYDROLOGY

Weighted E Method

Proposed Developed Basins

Basin	Area (sf)	Area (acres)	Treatment A %	Treatment A (acres)	Treatment B %	Treatment B (acres)	Treatment C %	Treatment C (acres)	Treatment D %	Treatment D (acres)	100-Year, 6-hr. Weighted E (ac-ft)	100-Year, 6-hr. Volume (ac-ft)	100-Year, 6-hr. Flow cfs	10-day Volume (ac-ft)
EXISTING	31117.00	0.714	0%	0	0%	0.000	100%	0.71435	0%	0.000	1.130	0.067	2.24	0.067
BASIN A	8884.00	0.204	0%	0	26%	0.053	34%	0.06934	40%	0.082	1.435	0.024	0.72	0.035
BASIN B	7948.00	0.182	0%	0	6%	0.011	10%	0.01825	84%	0.153	1.941	0.030	0.80	0.050
BASIN C	5805.00	0.133	0%	0	0%	0.000	8%	0.01066	92%	0.123	2.041	0.023	0.61	0.039
BASIN D	8480.00	0.195	0%	0	10%	0.019	36%	0.07008	54%	0.105	1.630	0.026	0.76	0.040
Total	31117.00	0.520		0									2.89	0.05

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= 0.53	Qa= 1.56
Eb= 0.78	Qb= 2.28
Ec= 1.13	Qc= 3.14
Ed= 2.12	Qd= 4.7

Existing Condition

DISCHARGE TO LOMAS 2.24 cfs

Developed Conditons	GENERATION	DISCHARGE	FIRST FLUSH REQUIRED	FIRST FLUSH PROVIDED
BASIN A	0.72 cfs		100.685 cf	1717 cf
BASIN B	0.80 cfs	0.8 cfs	189.162 cf	56 cf
BASIN C	0.61 cfs	0.61 cfs	151.317 cf	56 cf
BASIN D	0.76	0.76 cfs	129.744 cf	313 cf
Total Discharge to Lomas	2.89 cfs	2.17 cfs		

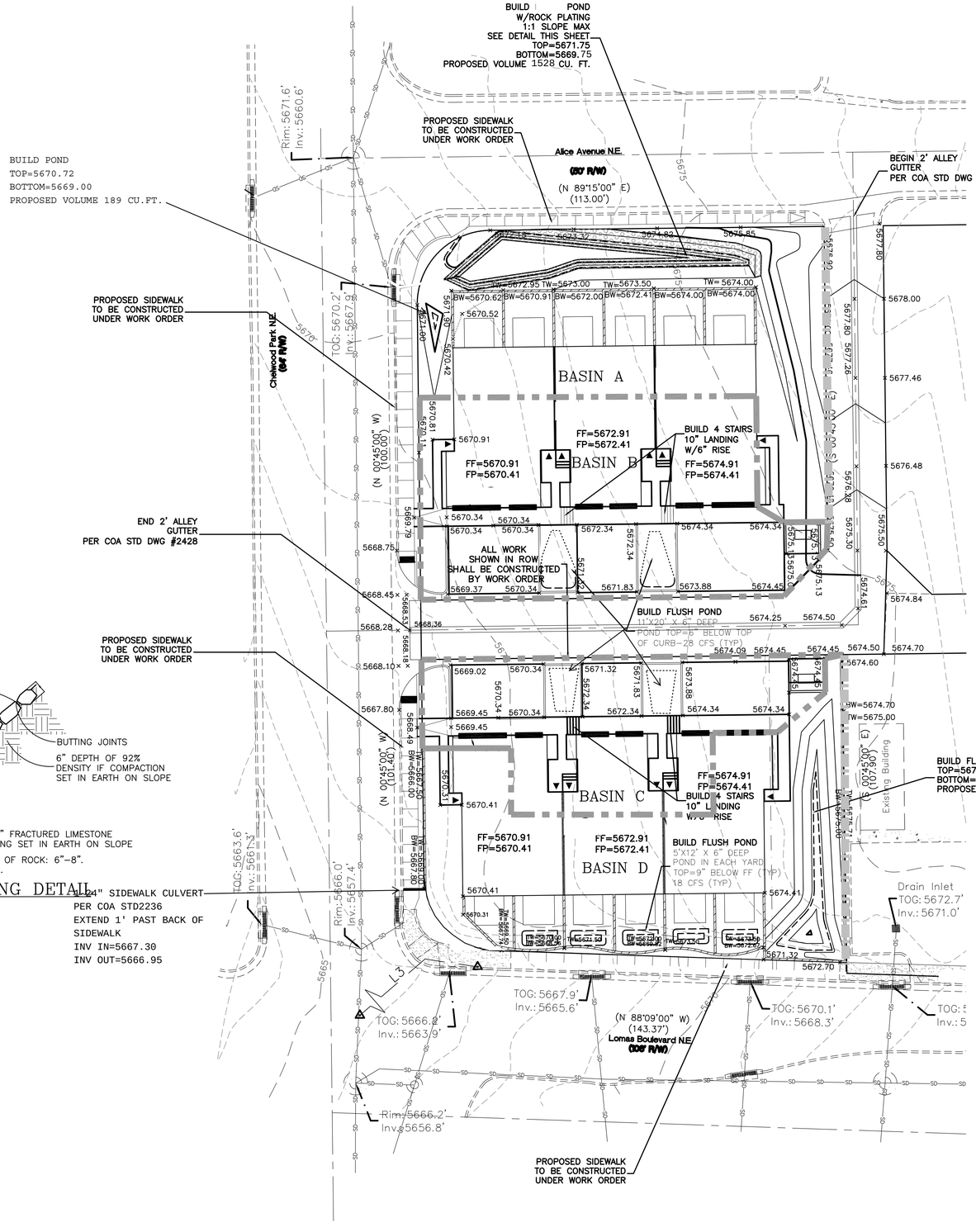
Change 0.07 cfs decrease

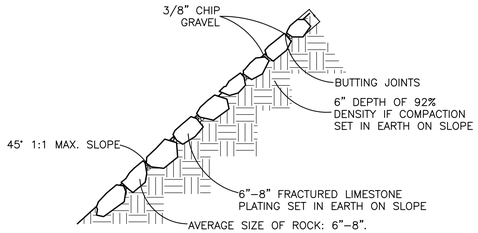
FIRST FLUSHcalculations

	BASINA	BASIN B	UPPERC	LOWERC		
REQUIRED	46	3	55	29	CF	
PROVIDED	579	128	133	0	CF	
FEE IN LIEU	0	0	0	232		####### TOTAL FEE IN LIEU

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.





ROCK PLATING DETAIL
NTS

EROSION CONTROL NOTES:

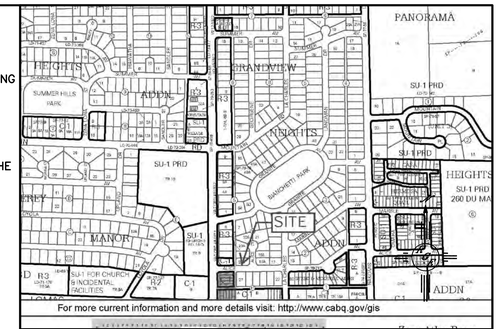
1. CONTRACTOR IS RESPONSIBLE FOR OBTAINING A TOPSOIL DISTURBANCE PERMIT PRIOR TO BEGINNING WORK.

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.



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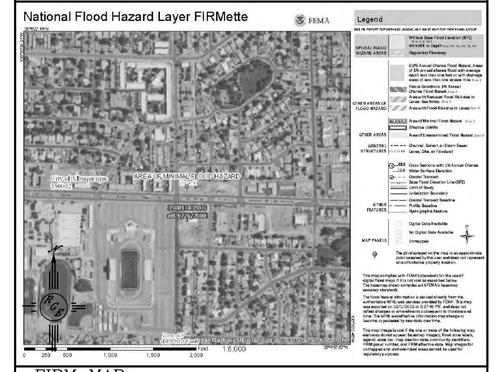
VICINITY MAP: J-22-Z

National Flood Hazard Layer FIRMette



FIRM MAP:

LEGAL DESCRIPTION:

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.

6. ALL SITE WORK SHALL CONFORM TO CITY OF ALBUQUERQUE STANDARDS FOR PUBLIC WORKS CONSTRUCTION EDITION 9

LEGEND

- EXISTING CONTOUR (5414)
- EXISTING INDEX CONTOUR (5415)
- PROPOSED CONTOUR (5414)
- PROPOSED INDEX CONTOUR (5415)
- SLOPE TIE
- EXISTING SPOT ELEVATION (× 4048.25)
- PROPOSED SPOT ELEVATION (× 4048.25)
- BOUNDARY
- CENTERLINE
- RIGHT-OF-WAY
- PROPOSED CURB
- EXISTING CURB AND GUTTER
- PROPOSED SIDEWALK-TO BE CONSTRUCTED UNDER WORK ORDER
- EXISTING SIDEWALK
- 3' ADA PATH-2% MAX SLOPE
- ROCK PLATING-SEE DETAIL THIS SHEET
- FLOOD WALL-DESIGN BY OTHERS
- RETAINING WALL INTERGAL W/FOUNDATION-DESIGN BY OTHERS
- STEM WALL-DESIGN BY OTHERS

N

GRAPHIC SCALE

20 10 0 10 20

SCALE: 1"=20'

ENGINEER'S SEAL

DAVID SOULE NEW MEXICO 14522 REGISTERED PROFESSIONAL ENGINEER

8/10/19

DAVID SOULE P.E. #14522

CHELWOOD APARTMENTS

GRADING AND DRAINAGE PLAN

Rio Grande Engineering
1606 CENTRAL AVENUE SE
SUITE 201
ALBUQUERQUE, NM 87106
(505) 872-0999

DRAWN BY WCWJ

DATE 6-18-19

218149-LAYOUT-6-18-19

SHEET # —

JOB # 218149