CITY OF ALBUQUERQUE

Planning Department
David Campbell, Director

Mayor Timothy M. Keller

March 29, 2019

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

RE: **Lomas Carwash Expansion**
9935 Lomas NE
Grading Plan Stamp Date: 3/27/19
Drainage Report Stamp Date: 3/27/19
Drainage File: J20D003

Dear Mr. Soule:

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov

Based on the submittal received on 3/28/19, the grading plan and drainage report are approved for Grading Permit and Building Permit.

Prior to Certificate of Occupancy (For Information):

1. Engineer's Certification, per the DPM Chapter 22.7: *Engineer's Certification Checklist For Non-Subdivision* is required.

2. A Bernalillo County Recorded Drainage Covenant (No Public Easement) is required for the stormwater control ponds. The original notarized form, exhibit A (legible on 8.5x11 paper), and recording fee ($25, payable to Bernalillo County) must be turned into DRC (4th, Plaza del Sol) for routing. Please contact Charlotte LaBadie (clabadie@cabq.gov, 924-3996) or Madeline Carruthers (mtafoya@cabq.gov, 924-3997) regarding the routing and recording process for covenants. The routing and recording process for covenants can take a month or longer; Hydrology recommends beginning this process as soon as possible as to not delay approval for certificate of occupancy.

If you have any questions, please contact me at 924-3695 or dpeterson@cabq.gov.

Sincerely,

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

City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 6/2018)

Project Title: LOMAS CAR WASH Building Permit #: _____ Hydrology File #: J20C003

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

Legal Description: LOT C1 LAND OF GREVEY

City Address: 9935 LOMAS

Applicant: LBJ ENTERPRISES 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

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?: X Yes ___ 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

X GRADING PERMIT APPROVAL

___ SO-19 APPROVAL

___ PAVING PERMIT APPROVAL

___ 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 Treasury
J-24 Deposit
Date: 3/22/2019 Office: ANNEX
Station ID Cashier: TRSRMS
Batch: 10166 Trans: 8
Fund: 305 Activity ID7547210
Account: 461615 Project ID24_MS4
Dept ID: Bus.Unit: PCDMD
Alloc Amt: $232.00
Trans Amt: $232.00
VISA Tendered : $232.00

TREASURY DIVISION DAILY DEPOSIT

Transmittals for:
PROJECTS Only

Payment In-Lieu for Storm Water Quality Volume Requirement

CASH COUNT	AMOUNT	ACCOUNT NUMBER	FUND NUMBER	BUSINESS UNIT	PROJECT ID	ACTIVITY ID	AMOUNT
TOTAL CHECKS	$ 232.00	461615	305	PCDMD	24_MS4	7547210	$ 232.00
TOTAL AMOUNT						TOTAL DEPOSIT	**$232.00**

Hydrology#: J20D003 Name: Lomas Carwash rebuild, 1322 sf imp
Payment In-Lieu For Storm Water Quality Volume Requirement

Address/Legal Description: 9935 Lomas NE
Lot C1, Land of Grevey

DEPARTMENT NAME: Planning Department/Development Review Services, Hydrology

PREPARED BY Dana Peterson PHONE 924-3695

BUSINESS DATE 12/4/18

DUAL VERIFICATION OF DEPOSIT _____
EMPLOYEE SIGNATURE

AND BY _____
EMPLOYEE SIGNATURE

REMITTER: _____
AMOUNT: _____
BANK: _____
CHECK #: _____ DATE ON CHECK: _____

The Payment-in-Lieu can be paid at the Plaza del Sol Treasury, 600 2nd St. NW. **Bring two copies of this invoice to the Treasury** and provide a copy of the receipt to Hydrology, Suite 201, 600 2nd St. NW, or e-mail with the Hydrology submittal to PLNDRS@cabq.gov.

David Soule

From: Peterson, Dana M. [dpeterson@cabq.gov]
Sent: Tuesday, March 26, 2019 4:17 PM
To: 'David Soule'
Subject: RE: LOMAS CAR WASH

Hi David-
I need a copy of the drainage report with this (.pdf). Also, look at the south end of the berm- it's still at 28.5' and doesn't tie-in to the 29' contour; please correct and resend an .pdf.
v/r,
Dana

From: David Soule [mailto:david@riograndeengineering.com]
Sent: Friday, March 22, 2019 3:31 PM
To: Peterson, Dana M.
Subject: RE: LOMAS CAR WASH

Thank you

From: Peterson, Dana M. [mailto:dpeterson@cabq.gov]
Sent: Friday, March 22, 2019 3:24 PM
To: 'David Soule'
Subject: RE: LOMAS CAR WASH

….nevermind, found it

From: Peterson, Dana M.
Sent: Friday, March 22, 2019 3:22 PM
To: 'David Soule'
Subject: RE: LOMAS CAR WASH

Got the hardcopy. Do you have a copy of the paid fee-in-lieu receipt?
-Dana

From: David Soule [mailto:david@riograndeengineering.com]
Sent: Friday, March 22, 2019 9:31 AM
To: Planning Development Review Services; Peterson, Dana M.
Subject: LOMAS CAR WASH

<<...>>
Dana, please find the resubmittal. I was waiting for the fee in lieu to be paid and this slipped off my active list. It came back as a Friday fire drill. I will be submitting the hard copy in the next hour or so as well as paying the fee.

The clients asked me to try to walk this thru, I said we don't do that but I would send email to the reviewer directly. The only change was raising the berm 1' and adding an overflow, the raising caused slope to exceed 3:1 so I added rock plating. Thank you

David

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This message has been analyzed by Deep Discovery Email Inspector.

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This message has been analyzed by Deep Discovery Email Inspector.

REVISED
DRAINAGE REPORT

For

Lomas Car Wash
Tract C1A Lands of Grevey

Albuquerque, New Mexico

Prepared by

Rio Grande Engineering
PO Box 67305
Albuquerque, New Mexico 87193

November 2018

3/27/19

David Soule P.E. No. 14522

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

Site Hydrology ..... A

Map Pocket
Site Grading and Drainage Plan

PURPOSE

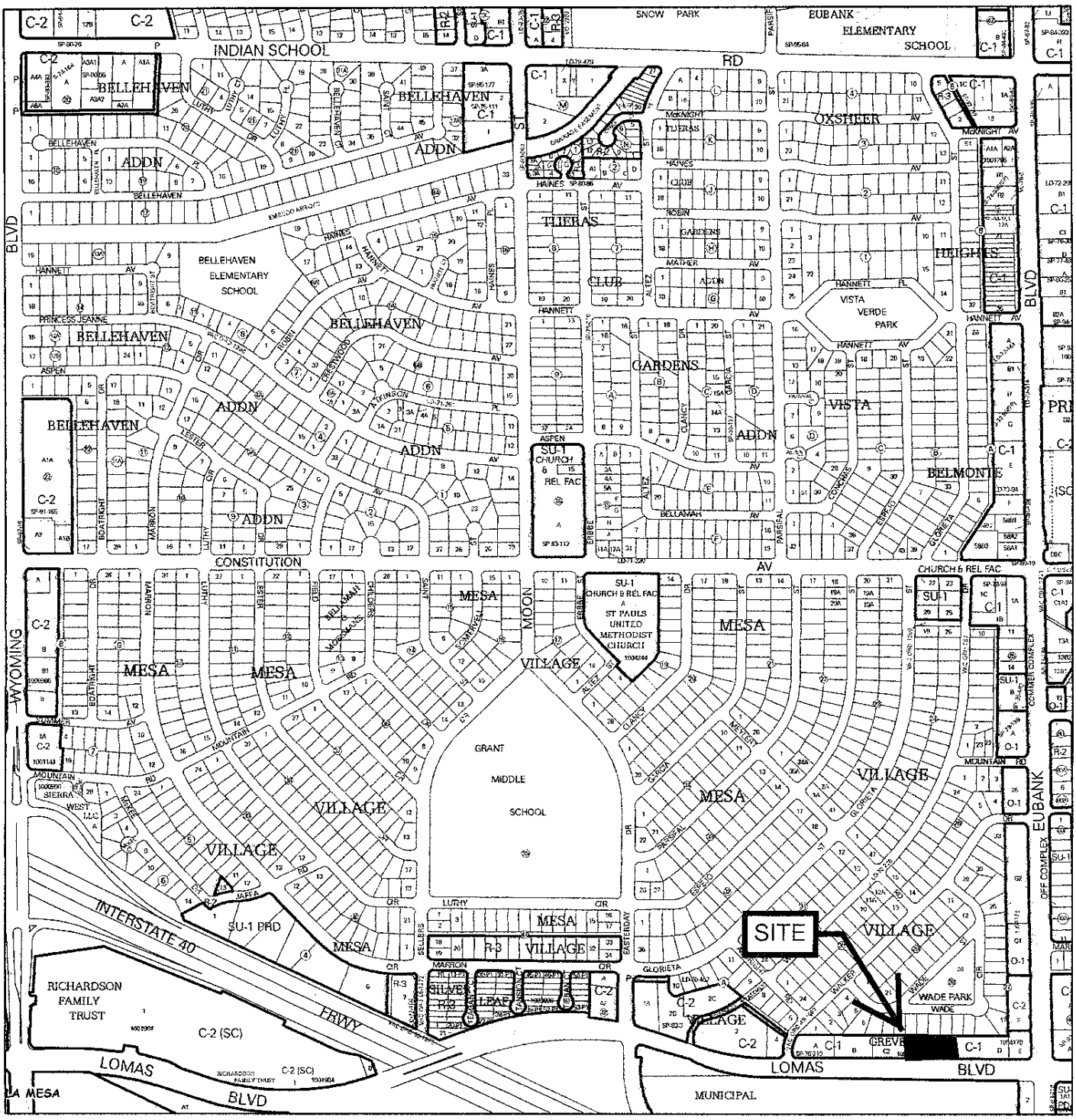
The purpose of this report is to provide the Drainage Management Plan for the upgrade of an existing 4,000 square foot full service car wash facility located on the north side of Lomas just west of Eubank. This plan was prepared in accordance with the City of Albuquerque design regulations, utilizing 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 1.2-acre parcel of land located on the north side of Lomas just west of Eubank in north east Albuquerque. The legal description of this site is tracts C1A, Lands of Grevey. As shown on FIRM map35013C0358F, the entire property is located within Flood Zone X. There is a AO (1') flood zone within Lomas. This site is surrounded by fully developed parcels. This site is and existing fully developed site within a full developed areas. Based on the site location and the adjacent drainage infrastructure this development must drain to Lomas and match existing conditions as closely as possible.

EXISTING CONDITIONS

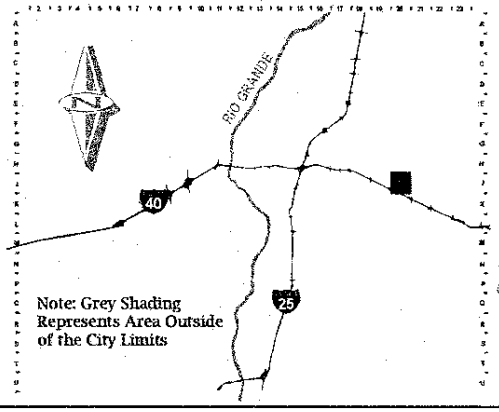
The site is currently developed. The site is not impacted by any offsite flows, and is surrounded by developed properties that free discharge to Lomas As shown in Appendix A, the existing site discharges at a peak rate of 3.41 cfs in a 100-year, 6-hour event. The discharge leaves the site as sheet flow directly to Lomas at the western driveway.



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

Albuquerque Geographic Information System

Map amended through: 2/4/2010



Zone Atlas Page:

J-20-Z

Selected Symbols

SECTOR PLANS
Design Overlay Zones
City Historic Zones
H-1 Buffer Zone
Petroglyph Mon.
Escarpment
2 Mile Airport Zone
Airport Noise Contours
Wall Overlay Zone

0 750 1,500 Feet

PROPOSED CONDITIONS

The proposed improvements consist of a 1,000 square foot addition to the existing full service car wash facility. The site will be graded to accommodate the new building while maintaining the existing drainage patterns. As shown in appendix A, the site will be graded to contain three basins. Basin A includes the building and the north east portion of this site. This basin will free discharge 1.71cfs to a detention/harvesting pond. This pond will discharge to the parking lot via a 3"pipe. The pond will harvest a portion of the discharge by shallow ponding and discharge a peak of .33 cfs. Basin B contains the east drive entrance that discharges .33 cfs as sheet flow to Lomas. Basin B contains the remaining portion of the site. This basin will free discharge 3.07 cfs to Lomas via the west drive entrance. The entire site will generate a peak flow rate of 3.40 cfs. This is 0.01 cfs less than the existing. The site will capture in excess of the total first flush volume, yet the development elects to not capture a portion of one basin and will pay the fee in lieu about of $232.00 for the 29 CF not treated.

SUMMARY AND RECOMMENDATIONS

This project is an infill project within a completely developed area of North Albuquerque. The project is a redevelopment of and existing site. The site currently discharges 3.41 cfs to Lomas via sheet flow. The proposed drainage plan will allow a portion to free discharge and route the remaining site through a harvesting detention pond. The developed conditions will discharge 3.40 cfs as sheet flow from the driveways to Lomas. The proposed decrease of 0.1 shall have no negative impact on existing drainage patterns. Since this site work area encompasses less than 1 acre, a NPDES permit may not be required prior to any construction activity. The site development will incur a $232 fee in lieu amount.

APPENDIX A

SITE HYDROLOGY

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.

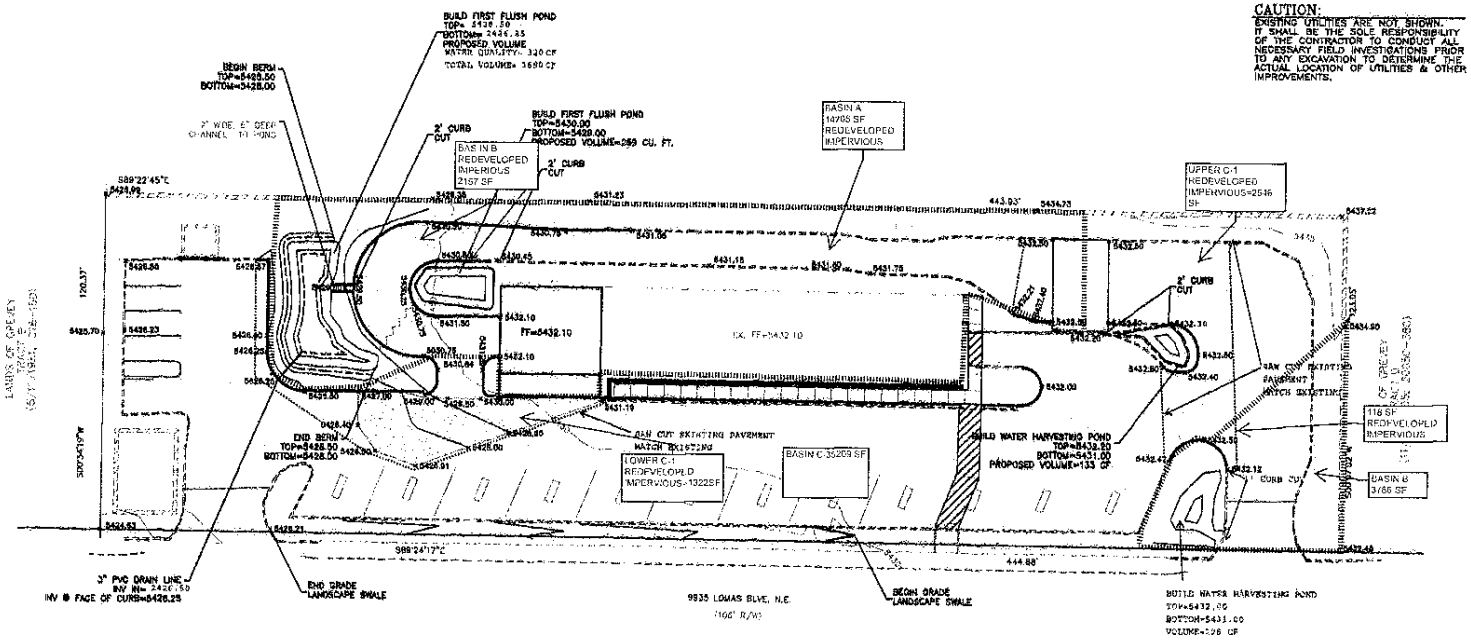
3. CONTRACTOR IS RESPONSIBLE FOR CLEANING ALL SEDIMENT THAT GETS INTO EXISTING RIGHT-OF-WAY.

4. REPAIR OF DAMAGED FACILITIES AND CLEANUP OF SEDIMENT ACCUMULATIONS ON ADJACENT PROPERTIES AND IN PUBLIC FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR.

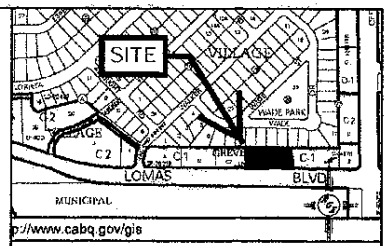
5. ALL EXPOSED EARTH SURFACES MUST BE PROTECTED FROM WIND AND WATER EROSION PRIOR TO FINAL ACCEPTANCE OF ANY PROJECT.

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.

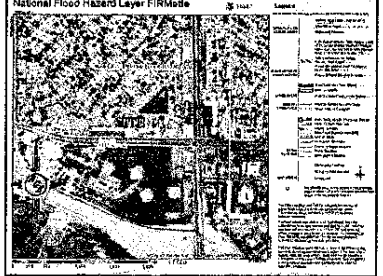


FIRST FLUSH NOTE
DEVELOPER ELECTS TO PAY FEE IN LIEU FOR A PORTION OF THE SITE UNTREATED VOLUME OF 25 CUBIC FEET GENERATES A FEE OF $232



p://www.cabq.gov/gis

VICINITY MAP: J-20-Z



FIRM MAP:

LEGAL DESCRIPTION:

PARCEL A-1, FINELAND DEVELOPMENT

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
- EXISTING INDEX CONTOUR
- PROPOSED CONTOUR
- PROPOSED INDEX CONTOUR
- SLOPE TIE
- EXISTING SPOT ELEVATION
- PROPOSED SPOT ELEVATION
- BOUNDARY
- CENTERLINE
- RIGHT-OF-WAY
- PROPOSED CURB
- EXISTING CURB AND GUTTER
- PROPOSED SIDEWALK
- EXISTING SIDEWALK
- PROPOSED 1'-4' RETAINING WALL-DESIGN BY OTHERS
- PROPOSED 3" AC PAVING

N

GRAPHIC SCALE
20 10 0 10 20
SCALE: 1"=20'

ENGINEER'S SEAL
DAVID SOULE
NEW MEXICO
14522
PROFESSIONAL ENGINEER
11/30/18
DAVID SOULE
P.E. #14522

LOMAS CARWASH

DRAINAGE BASIN MAP AND WORK SHEET

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

DRAWN BY: MCHJ
DATE: 10-03-18
SHEET #: —
JOB #: 218146

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)
ROOF SUB	2440.00	0.056	0%	0	0%	0.000	0%	0	100%	0.056	2.120	0.010	0.26	0.017
BASIN A	19890.00	0.457	0%	0	27%	0.123	19%	0.08676	54%	0.247	1.570	0.060	1.71	0.093
BASIN B	3706.00	0.085	0%	0	19%	0.016	20%	0.01702	61%	0.052	1.667	0.012	0.33	0.019
BASIN C	29395.00	0.675	0%	0	15%	0.101	18%	0.12147	67%	0.452	1.741	0.098	2.74	0.158
Total	52991.00	1.217		0									4.78	0.02

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 3.41 cfs

ROOF DISCHARGE TO PIPE .26 CFS

Developed Conditons

BASIN A Discharge to Pond = 1.71 cfs
BASIN A Discharge from Pond 0.33 cfs
Basin B+C discharge to Lomas (BASIN B-B1) 3.07 cfs
Total Discharge to Lomas 3.40 cfs

Change 0.01 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	

$232.00 TOTAL FEE IN LIEU

VOLUME CALCULATIONS

lomas

ACTUAL ELEV.	DEPTH (FT)	AREA SF	VOLUME PER UNIT	VOLUME CUMULATIVE	VOLUME AC-FT	Q (CFS)
26.25	0.00	188.00	0	0	0.000	0.00
26.50	0.00	324.00	320.00	320	0.007	0.00
27.00	0.50	446.00	481.25	481.25	0.011	0.17
28.00	1.50	939.00	692.50	1173.75	0.027	0.29
28.50	2.00	1129.00	517.00	1690.75	0.039	0.33

Orifice Equation

$Q = CA\ SQRT(2gH)$

C =	0.6
Diameter (in)	3
Area (ft^2)=	0.049087385
g =	32.2
H (Ft) =	Depth of water above center of orifice
Q (CFS)=	Flow

General Information
Precipitation Frequency
Probable Maximum Precipitation
Miscellaneous
Contact Us
USA.gov

NOAA ATLAS 14 POINT PRECIPITATION FREQUENCY ESTIMATES: NM

Data description

Data type: Precipitation depth ▾ **Units:** English ▾ **Time series type:** Partial duration ▾

Select location

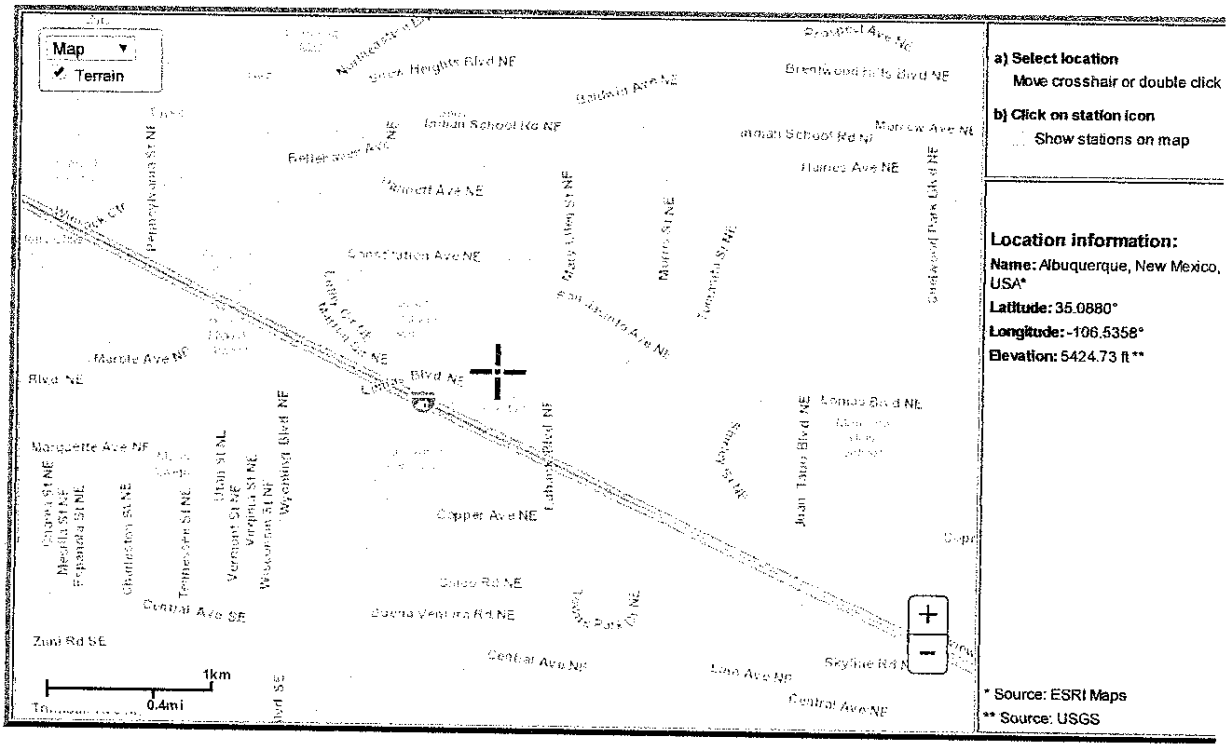
1) Manually:

a) By location (decimal degrees, use "-" for S and W): Latitude: Longitude: Submit

b) By station (list of NM stations): Select station ▾

c) By address Search

2) Use map (if ESRI interactive map is not loading, try adding the host: **https://js.arcgis.com/** to the firewall, or contact us at hdsc.questions@noaa.gov):



a) Select location
Move crosshair or double click

b) Click on station icon
Show stations on map

Location information:
Name: Albuquerque, New Mexico, USA*
Latitude: 35.0880°
Longitude: -106.5358°
Elevation: 5424.73 ft**

* Source: ESRI Maps
** Source: USGS

POINT PRECIPITATION FREQUENCY (PF) ESTIMATES

WITH 90% CONFIDENCE INTERVALS AND SUPPLEMENTARY INFORMATION
NOAA Atlas 14, Volume 1, Version 5

PF tabular

Print page

PDS-based precipitation frequency estimates with 90% confidence intervals (in inches)[1]

Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	**0.180** (0.153-0.211)	**0.233** (0.197-0.273)	**0.312** (0.265-0.366)	**0.373** (0.315-0.437)	**0.457** (0.384-0.535)	**0.521** (0.438-0.611)	**0.590** (0.491-0.690)	**0.662** (0.548-0.773)	**0.759** (0.623-0.888)	**0.837** (0.682-0.979)
10-min	**0.273** (0.233-0.321)	**0.354** (0.300-0.416)	**0.475** (0.403-0.558)	**0.568** (0.480-0.665)	**0.695** (0.585-0.813)	**0.794** (0.666-0.929)	**0.898** (0.748-1.05)	**1.01** (0.834-1.18)	**1.16** (0.947-1.35)	**1.27** (1.04-1.49)
15-min	**0.339** (0.289-0.398)	**0.439** (0.372-0.516)	**0.588** (0.499-0.691)	**0.704** (0.595-0.824)	**0.861** (0.725-1.01)	**0.984** (0.825-1.15)	**1.11** (0.927-1.30)	**1.25** (1.03-1.46)	**1.43** (1.17-1.68)	**1.58** (1.29-1.85)
30-min	**0.456** (0.389-0.536)	**0.591** (0.501-0.694)	**0.792** (0.672-0.930)	**0.948** (0.801-1.11)	**1.16** (0.977-1.36)	**1.33** (1.11-1.55)	**1.50** (1.25-1.75)	**1.68** (1.39-1.97)	**1.93** (1.58-2.26)	**2.13** (1.73-2.49)
60-min	**0.565** (0.481-0.663)	**0.731** (0.620-0.859)	**0.980** (0.832-1.15)	**1.17** (0.991-1.37)	**1.44** (1.21-1.68)	**1.64** (1.38-1.92)	**1.86** (1.55-2.17)	**2.08** (1.72-2.43)	**2.39** (1.96-2.79)	**2.63** (2.14-3.08)
2-hr	**0.666** (0.558-0.808)	**0.853** (0.716-1.04)	**1.13** (0.943-1.37)	**1.35** (1.12-1.63)	**1.65** (1.37-1.99)	**1.90** (1.56-2.28)	**2.16** (1.76-2.59)	**2.43** (1.97-2.91)	**2.81** (2.25-3.36)	**3.11** (2.48-3.73)

3-hr	0.710 (0.600-0.857)	0.902 (0.760-1.09)	1.18 (0.996-1.42)	1.40 (1.18-1.69)	1.71 (1.43-2.05)	1.96 (1.62-2.35)	2.22 (1.83-2.66)	2.50 (2.04-2.99)	2.89 (2.34-3.45)	3.20 (2.57-3.83)
6-hr	0.827 (0.704-0.992)	1.04 (0.888-1.25)	1.34 (1.14-1.61)	1.58 (1.34-1.88)	1.90 (1.60-2.27)	2.15 (1.80-2.56)	2.42 (2.02-2.88)	2.70 (2.23-3.20)	3.08 (2.53-3.65)	3.39 (2.76-4.02)
12-hr	0.922 (0.795-1.07)	1.16 (1.00-1.36)	1.47 (1.27-1.71)	1.72 (1.47-2.00)	2.05 (1.75-2.38)	2.31 (1.96-2.67)	2.57 (2.17-2.98)	2.85 (2.39-3.30)	3.22 (2.68-3.73)	3.52 (2.90-4.09)
24-hr	1.07 (0.937-1.23)	1.34 (1.17-1.54)	1.68 (1.47-1.92)	1.95 (1.70-2.23)	2.32 (2.01-2.65)	2.60 (2.25-2.97)	2.89 (2.50-3.30)	3.19 (2.74-3.64)	3.59 (3.07-4.10)	3.91 (3.32-4.47)
2-day	1.13 (0.998-1.29)	1.42 (1.25-1.62)	1.79 (1.57-2.03)	2.07 (1.82-2.35)	2.46 (2.15-2.80)	2.76 (2.41-3.14)	3.08 (2.67-3.49)	3.39 (2.93-3.86)	3.82 (3.28-4.35)	4.16 (3.55-4.74)
3-day	1.24 (1.12-1.38)	1.55 (1.39-1.73)	1.93 (1.73-2.14)	2.22 (1.99-2.47)	2.63 (2.34-2.92)	2.93 (2.61-3.26)	3.25 (2.89-3.61)	3.57 (3.16-3.98)	4.00 (3.52-4.46)	4.33 (3.79-4.84)
4-day	1.35 (1.23-1.47)	1.68 (1.53-1.83)	2.06 (1.89-2.26)	2.37 (2.17-2.59)	2.79 (2.54-3.04)	3.11 (2.82-3.39)	3.43 (3.10-3.74)	3.75 (3.38-4.09)	4.18 (3.75-4.57)	4.51 (4.03-4.93)
7-day	1.55 (1.42-1.69)	1.93 (1.77-2.10)	2.36 (2.16-2.57)	2.69 (2.47-2.93)	3.14 (2.87-3.41)	3.47 (3.17-3.77)	3.81 (3.47-4.14)	4.14 (3.76-4.50)	4.56 (4.14-4.98)	4.89 (4.41-5.34)
10-day	1.72 (1.59-1.87)	2.14 (1.97-2.33)	2.64 (2.42-2.86)	3.02 (2.78-3.27)	3.53 (3.24-3.83)	3.92 (3.58-4.24)	4.31 (3.93-4.67)	4.70 (4.27-5.09)	5.21 (4.71-5.65)	5.59 (5.04-6.08)
20-day	2.21 (2.03-2.40)	2.74 (2.52-2.99)	3.34 (3.07-3.63)	3.88 (3.49-4.12)	4.38 (4.01-4.75)	4.80 (4.39-5.21)	5.22 (4.76-5.65)	5.61 (5.11-6.08)	6.11 (5.55-6.63)	6.47 (5.86-7.04)
30-day	2.66 (2.44-2.88)	3.30 (3.03-3.57)	3.99 (3.66-4.32)	4.50 (4.13-4.86)	5.14 (4.71-5.55)	5.61 (5.13-6.05)	6.05 (5.53-6.53)	6.47 (5.90-6.98)	6.99 (6.35-7.55)	7.35 (6.67-7.95)
45-day	3.25 (2.99-3.51)	4.02 (3.72-4.35)	4.81 (4.44-5.19)	5.38 (4.96-5.80)	6.07 (5.60-6.55)	6.56 (6.04-7.08)	7.01 (6.45-7.56)	7.42 (6.81-8.01)	7.91 (7.25-8.54)	8.23 (7.54-8.90)
60-day	3.74 (3.45-4.04)	4.64 (4.28-5.01)	5.54 (5.12-5.99)	6.20 (5.73-6.70)	6.99 (6.45-7.56)	7.54 (6.95-8.15)	8.05 (7.42-8.71)	8.51 (7.84-9.22)	9.06 (8.34-9.83)	9.43 (8.68-10.2)

[1] Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).

Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.

Please refer to NOAA Atlas 14 document for more information.

Estimates from the table in CSV format: Precipitation frequency estimates ▼ Submit

```
*S      AHYMO -  DETENTION-LOMAS
*S             POND ROUTING

START                TIME=0.0  PUNCH CODE=0


RAINFALL             TYPE=2
                     QUARTER=0.0    ONE= 1.86 IN
                     SIX=2.42 IN   DAY= 2.89 IN   DT = 0.05 HR



COMPUTE NM HYD       ID=1  HYD NO=101  DA= .000714 SQ MI
                     PER A=0  PER B=27 PER C=19  PER D=54
                     TP=-.170  MASSRAIN=-1


PRINT HYD            ID=1  CODE=3


* ROUTE THE TOTAL FLOW THROUGH THE PROPOSED RESERVOIR
ROUTE RESERVOIR      ID=2   HYD NO=102   INFLOW=1   CODE=3
                     OUTFLOW(CFS)     STORAGE(AC-FT)     ELEV(FT)
                        0.00              0.008           26.50
                        0.17              0.012           27.00
                        0.29              0.029           28.00
                        0.33              0.043           28.50



FINISH
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```
      AHYMO PROGRAM (AHYMO-S4)                        - Version: S4.01a - Rel: 01a
           RUN DATE (MON/DAY/YR) = 11/30/2018
           START TIME (HR:MIN:SEC) = 17:28:03      USER NO.=
RioGrandeSingleA41963517
           INPUT FILE = ents and Settings\Owner\Desktop\2018 JOBS\19197-LOMAS
CARWASH\pondrout100518.txt

    *S      AHYMO -  DETENTION-LOMAS
    *S              POND ROUTING

    START               TIME=0.0  PUNCH CODE=0


    RAINFALL            TYPE=2
                        QUARTER=0.0    ONE= 1.86 IN
                        SIX=2.42 IN    DAY= 2.89 IN    DT = 0.05 HR



                  24-HOUR RAINFALL DIST. - BASED ON NOAA ATLAS 14 FOR CONVECTIVE
AREAS (NM & AZ) - D1
                  DT =   0.050000 HOURS        END TIME =    24.000002 HOURS
                    0.0000  0.0037  0.0076  0.0117  0.0161  0.0207  0.0259
                    0.0333  0.0449  0.0574  0.0704  0.0844  0.0987  0.1134
                    0.1285  0.1439  0.1609  0.1787  0.1978  0.2221  0.2490
                    0.2850  0.3259  0.3763  0.4436  0.5193  0.6501  0.8533
                    1.2015  1.4463  1.6393  1.7363  1.8213  1.8824  1.9310
                    1.9734  2.0044  2.0329  2.0564  2.0762  2.0942  2.1104
                    2.1256  2.1391  2.1519  2.1644  2.1765  2.1864  2.1919
                    2.1974  2.2028  2.2078  2.2128  2.2177  2.2224  2.2272
                    2.2316  2.2360  2.2404  2.2446  2.2489  2.2529  2.2568
                    2.2607  2.2646  2.2684  2.2720  2.2757  2.2792  2.2827
                    2.2862  2.2896  2.2930  2.2963  2.2996  2.3029  2.3061
                    2.3093  2.3125  2.3156  2.3186  2.3217  2.3247  2.3277
                    2.3306  2.3335  2.3364  2.3393  2.3421  2.3449  2.3476
                    2.3504  2.3531  2.3558  2.3584  2.3611  2.3637  2.3663
                    2.3688  2.3714  2.3739  2.3764  2.3789  2.3813  2.3837
                    2.3861  2.3885  2.3909  2.3932  2.3956  2.3979  2.4002
                    2.4024  2.4047  2.4069  2.4092  2.4114  2.4135  2.4157
                    2.4179  2.4200  2.4221  2.4243  2.4264  2.4285  2.4306
                    2.4327  2.4349  2.4370  2.4391  2.4412  2.4433  2.4453
                    2.4474  2.4495  2.4516  2.4536  2.4557  2.4578  2.4598
                    2.4619  2.4639  2.4660  2.4680  2.4700  2.4721  2.4741
                    2.4761  2.4781  2.4801  2.4821  2.4841  2.4861  2.4881
                    2.4901  2.4921  2.4941  2.4960  2.4980  2.5000  2.5019
                    2.5039  2.5058  2.5078  2.5097  2.5117  2.5136  2.5155
                    2.5175  2.5194  2.5213  2.5232  2.5251  2.5270  2.5289
                    2.5308  2.5327  2.5346  2.5364  2.5383  2.5402  2.5420
                    2.5439  2.5458  2.5476  2.5494  2.5513  2.5531  2.5550
                    2.5568  2.5586  2.5604  2.5622  2.5640  2.5658  2.5676
                    2.5694  2.5712  2.5730  2.5748  2.5766  2.5783  2.5801
                    2.5819  2.5836  2.5854  2.5871  2.5889  2.5906  2.5923
                    2.5941  2.5958  2.5975  2.5992  2.6009  2.6027  2.6044
                    2.6061  2.6077  2.6094  2.6111  2.6128  2.6145  2.6161
                    2.6178  2.6195  2.6211  2.6228  2.6244  2.6261  2.6277
                    2.6293  2.6310  2.6326  2.6342  2.6358  2.6374  2.6390
                    2.6406  2.6422  2.6438  2.6454  2.6470  2.6485  2.6501
                    2.6517  2.6532  2.6548  2.6564  2.6579  2.6595  2.6610
                    2.6625  2.6641  2.6656  2.6671  2.6686  2.6701  2.6716
                    2.6731  2.6746  2.6761  2.6776  2.6791  2.6806  2.6820
                    2.6835  2.6850  2.6864  2.6879  2.6893  2.6908  2.6922
                    2.6937  2.6951  2.6965  2.6980  2.6994  2.7008  2.7022
```

2.7036	2.7050	2.7064	2.7078	2.7092	2.7105	2.7119
2.7133	2.7147	2.7160	2.7174	2.7187	2.7201	2.7214
2.7228	2.7241	2.7254	2.7267	2.7281	2.7294	2.7307
2.7320	2.7333	2.7346	2.7359	2.7372	2.7385	2.7397
2.7410	2.7423	2.7435	2.7448	2.7460	2.7473	2.7485
2.7498	2.7510	2.7522	2.7535	2.7547	2.7559	2.7571
2.7583	2.7595	2.7607	2.7619	2.7631	2.7643	2.7655
2.7667	2.7678	2.7690	2.7701	2.7713	2.7725	2.7736
2.7747	2.7759	2.7770	2.7781	2.7793	2.7804	2.7815
2.7826	2.7837	2.7848	2.7859	2.7870	2.7881	2.7892
2.7902	2.7913	2.7924	2.7934	2.7945	2.7955	2.7966
2.7976	2.7987	2.7997	2.8007	2.8018	2.8028	2.8038
2.8048	2.8058	2.8068	2.8078	2.8088	2.8098	2.8108
2.8117	2.8127	2.8137	2.8146	2.8156	2.8166	2.8175
2.8184	2.8194	2.8203	2.8213	2.8222	2.8231	2.8240
2.8249	2.8258	2.8267	2.8276	2.8285	2.8294	2.8303
2.8312	2.8320	2.8329	2.8338	2.8346	2.8355	2.8363
2.8372	2.8380	2.8389	2.8397	2.8405	2.8413	2.8422
2.8430	2.8438	2.8446	2.8454	2.8462	2.8470	2.8478
2.8485	2.8493	2.8501	2.8508	2.8516	2.8524	2.8531
2.8539	2.8546	2.8553	2.8561	2.8568	2.8575	2.8582
2.8589	2.8597	2.8604	2.8611	2.8618	2.8624	2.8631
2.8638	2.8645	2.8652	2.8658	2.8665	2.8671	2.8678
2.8684	2.8691	2.8697	2.8704	2.8710	2.8716	2.8722
2.8728	2.8734	2.8741	2.8747	2.8752	2.8758	2.8764
2.8770	2.8776	2.8782	2.8787	2.8793	2.8798	2.8804
2.8809	2.8815	2.8820	2.8826	2.8831	2.8836	2.8841
2.8846	2.8852	2.8857	2.8862	2.8867	2.8871	2.8876
2.8881	2.8886	2.8891	2.8895	2.8900		

COMPUTE NM HYD ID=1 HYD NO=101 DA= .000714 SQ MI
PER A=0 PER B=27 PER C=19 PER D=54
TP=-.170 MASSRAIN=-1

K = 0.092650HR TP = 0.170000HR K/TP RATIO = 0.545000 SHAPE CONSTANT, N = 7.106428
UNIT PEAK = 1.1936 CFS UNIT VOLUME = 0.9900 B = 526.28 P60 = 1.8600
AREA = 0.000386 SQ MI IA = 0.10000 INCHES INF = 0.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.050000

K = 0.153894HR TP = 0.170000HR K/TP RATIO = 0.905258 SHAPE CONSTANT, N = 3.913434
UNIT PEAK = 0.67497 CFS UNIT VOLUME = 0.9809 B = 349.36 P60 = 1.8600
AREA = 0.000328 SQ MI IA = 0.43804 INCHES INF = 1.07652 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.050000

PRINT HYD ID=1 CODE=3

PARTIAL HYDROGRAPH 101.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
0.000	0.0	4.950	0.0	9.900	0.0
0.150	0.0	5.100	0.0	10.050	0.0
14.850	0.0	19.800	0.0		

15.000	0.0	19.950	0.0	5.250	0.0	10.200	0.0
15.150	0.0	20.100	0.0	5.400	0.0	10.350	0.0
15.300	0.0	20.250	0.0	5.550	0.0	10.500	0.0
15.450	0.0	20.400	0.0	5.700	0.0	10.650	0.0
15.600	0.0	20.550	0.0	5.850	0.0	10.800	0.0
15.750	0.0	20.700	0.0	6.000	0.0	10.950	0.0
15.900	0.0	20.850	0.0	6.150	0.0	11.100	0.0
16.050	0.0	21.000	0.0	6.300	0.0	11.250	0.0
16.200	0.0	21.150	0.0	6.450	0.0	11.400	0.0
16.350	0.0	21.300	0.0	6.600	0.0	11.550	0.0
16.500	0.0	21.450	0.0	6.750	0.0	11.700	0.0
16.650	0.0	21.600	0.0	6.900	0.0	11.850	0.0
16.800	0.0	21.750	0.0	7.050	0.0	12.000	0.0
16.950	0.0	21.900	0.0	7.200	0.0	12.150	0.0
17.100	0.0	22.050	0.0	7.350	0.0	12.300	0.0
17.250	0.0	22.200	0.0	7.500	0.0	12.450	0.0
17.400	0.0	22.350	0.0	7.650	0.0	12.600	0.0
17.550	0.0	22.500	0.0	7.800	0.0	12.750	0.0
17.700	0.0	22.650	0.0	7.950	0.0	12.900	0.0
17.850	0.0	22.800	0.0	8.100	0.0	13.050	0.0
18.000	0.0	22.950	0.0	8.250	0.0	13.200	0.0
18.150	0.0	23.100	0.0	8.400	0.0	13.350	0.0
18.300	0.0	23.250	0.0	8.550	0.0	13.500	0.0
18.450	0.0	23.400	0.0	8.700	0.0	13.650	0.0
18.600	0.0	23.550	0.0	8.850	0.0	13.800	0.0
18.750	0.0	23.700	0.0	9.000	0.0	13.950	0.0
18.900	0.0	23.850	0.0	9.150	0.0	14.100	0.0
19.050	0.0	24.000	0.0	9.300	0.0	14.250	0.0
19.200	0.0	24.150	0.0	9.450	0.0	14.400	0.0
19.350	0.0			9.600	0.0	14.550	0.0
19.500	0.0			9.750	0.0	14.700	0.0
19.650	0.0						

RUNOFF VOLUME = 1.86340 INCHES = 0.0710 ACRE-FEET
PEAK DISCHARGE RATE = 1.53 CFS AT 1.550 HOURS BASIN AREA =

0.0007 SQ. MI.

* ROUTE THE TOTAL FLOW THROUGH THE PROPOSED RESERVOIR

ROUTE RESERVOIR ID=2 HYD NO=102 INFLOW=1 CODE=3

OUTFLOW(CFS)	STORAGE(AC-FT)	ELEV(FT)	
0.00	0.008	26.50	
0.17	0.012	27.00	
0.29	0.029		28.00
0.33	0.043	28.50	

* * * * * * * * * * * * * * * * *

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
0.00	0.00	26.50	0.008	0.00
0.15	0.00	26.50	0.008	0.00
0.30	0.00	26.50	0.008	0.00
0.45	0.00	26.50	0.008	0.00
0.60	0.00	26.50	0.008	0.00
0.75	0.02	26.51	0.008	0.00
0.90	0.06	26.56	0.008	0.02
1.05	0.08	26.62	0.009	0.04
1.20	0.15	26.71	0.010	0.07
1.35	0.39	26.93	0.011	0.14
1.50	1.39	27.45	0.020	0.22
1.65	1.20	28.18	0.034	0.30
1.80	0.58	28.42	0.041	0.32
1.95	0.31	28.46	0.042	0.33
2.10	0.20	28.43	0.041	0.32
2.25	0.14	28.36	0.039	0.32
2.40	0.10	28.27	0.037	0.31
2.55	0.06	28.17	0.034	0.30
2.70	0.04	28.06	0.031	0.29
2.85	0.02	27.90	0.027	0.28
3.00	0.01	27.72	0.024	0.26
3.15	0.01	27.55	0.021	0.24
3.30	0.01	27.40	0.019	0.22
3.45	0.01	27.25	0.016	0.20
3.60	0.01	27.12	0.014	0.18
3.75	0.01	26.99	0.012	0.17
3.90	0.01	26.80	0.010	0.10
4.05	0.01	26.69	0.010	0.06
4.20	0.01	26.62	0.009	0.04
4.35	0.01	26.58	0.009	0.03
4.50	0.01	26.56	0.008	0.02
4.65	0.01	26.55	0.008	0.02
4.80	0.01	26.54	0.008	0.01
4.95	0.01	26.53	0.008	0.01
5.10	0.01	26.53	0.008	0.01
5.25	0.01	26.53	0.008	0.01
5.40	0.01	26.53	0.008	0.01
5.55	0.01	26.53	0.008	0.01
5.70	0.01	26.53	0.008	0.01

5.85	0.01	26.53	0.008	0.01
6.00	0.01	26.53	0.008	0.01
6.15	0.01	26.53	0.008	0.01
6.30	0.01	26.53	0.008	0.01
6.45	0.01	26.53	0.008	0.01
6.60	0.01	26.53	0.008	0.01
6.75	0.01	26.53	0.008	0.01
6.90	0.01	26.53	0.008	0.01
7.05	0.01	26.53	0.008	0.01
7.20	0.01	26.53	0.008	0.01
7.35	0.01	26.53	0.008	0.01
7.50	0.01	26.53	0.008	0.01
7.65	0.01	26.53	0.008	0.01
7.80	0.01	26.53	0.008	0.01
7.95	0.01	26.53	0.008	0.01
8.10	0.01	26.53	0.008	0.01
8.25	0.01	26.53	0.008	0.01

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
8.40	0.01	26.53	0.008	0.01
8.55	0.01	26.53	0.008	0.01
8.70	0.01	26.53	0.008	0.01
8.85	0.01	26.53	0.008	0.01
9.00	0.01	26.53	0.008	0.01
9.15	0.01	26.53	0.008	0.01
9.30	0.01	26.53	0.008	0.01
9.45	0.01	26.53	0.008	0.01
9.60	0.01	26.53	0.008	0.01
9.75	0.01	26.53	0.008	0.01
9.90	0.01	26.53	0.008	0.01
10.05	0.01	26.53	0.008	0.01
10.20	0.01	26.53	0.008	0.01
10.35	0.01	26.53	0.008	0.01
10.50	0.01	26.53	0.008	0.01
10.65	0.01	26.53	0.008	0.01
10.80	0.01	26.53	0.008	0.01
10.95	0.01	26.53	0.008	0.01
11.10	0.01	26.53	0.008	0.01
11.25	0.01	26.52	0.008	0.01
11.40	0.01	26.52	0.008	0.01
11.55	0.01	26.52	0.008	0.01
11.70	0.01	26.52	0.008	0.01
11.85	0.01	26.52	0.008	0.01
12.00	0.01	26.52	0.008	0.01
12.15	0.01	26.52	0.008	0.01
12.30	0.01	26.52	0.008	0.01
12.45	0.01	26.52	0.008	0.01
12.60	0.01	26.52	0.008	0.01
12.75	0.01	26.52	0.008	0.01
12.90	0.01	26.52	0.008	0.01
13.05	0.01	26.52	0.008	0.01
13.20	0.01	26.52	0.008	0.01
13.35	0.01	26.52	0.008	0.01
13.50	0.01	26.52	0.008	0.01
13.65	0.01	26.52	0.008	0.01
13.80	0.01	26.52	0.008	0.01
13.95	0.01	26.52	0.008	0.01
14.10	0.01	26.52	0.008	0.01
14.25	0.01	26.52	0.008	0.01
14.40	0.01	26.52	0.008	0.01
14.55	0.01	26.52	0.008	0.01
14.70	0.01	26.52	0.008	0.01
14.85	0.01	26.52	0.008	0.01
15.00	0.01	26.52	0.008	0.01

15.15	0.01	26.52	0.008	0.01
15.30	0.01	26.52	0.008	0.01
15.45	0.01	26.52	0.008	0.01
15.60	0.01	26.52	0.008	0.01
15.75	0.01	26.52	0.008	0.01
15.90	0.01	26.52	0.008	0.01
16.05	0.01	26.52	0.008	0.01
16.20	0.01	26.52	0.008	0.01
16.35	0.01	26.52	0.008	0.01
16.50	0.01	26.52	0.008	0.01
16.65	0.01	26.52	0.008	0.01

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
16.80	0.01	26.52	0.008	0.01
16.95	0.01	26.52	0.008	0.01
17.10	0.01	26.52	0.008	0.01
17.25	0.01	26.52	0.008	0.01
17.40	0.01	26.52	0.008	0.01
17.55	0.01	26.52	0.008	0.01
17.70	0.01	26.52	0.008	0.01
17.85	0.01	26.52	0.008	0.01
18.00	0.01	26.52	0.008	0.01
18.15	0.01	26.52	0.008	0.01
18.30	0.01	26.52	0.008	0.01
18.45	0.00	26.52	0.008	0.01
18.60	0.00	26.51	0.008	0.01
18.75	0.00	26.51	0.008	0.00

PEAK DISCHARGE = 0.327 CFS - PEAK OCCURS AT HOUR 1.95
MAXIMUM WATER SURFACE ELEVATION = 28.465
MAXIMUM STORAGE = 0.0420 AC-FT INCREMENTAL TIME= 0.050000HRS

FINISH

NORMAL PROGRAM FINISH END TIME (HR:MIN:SEC) = 17:28:03

Pipe Capacity

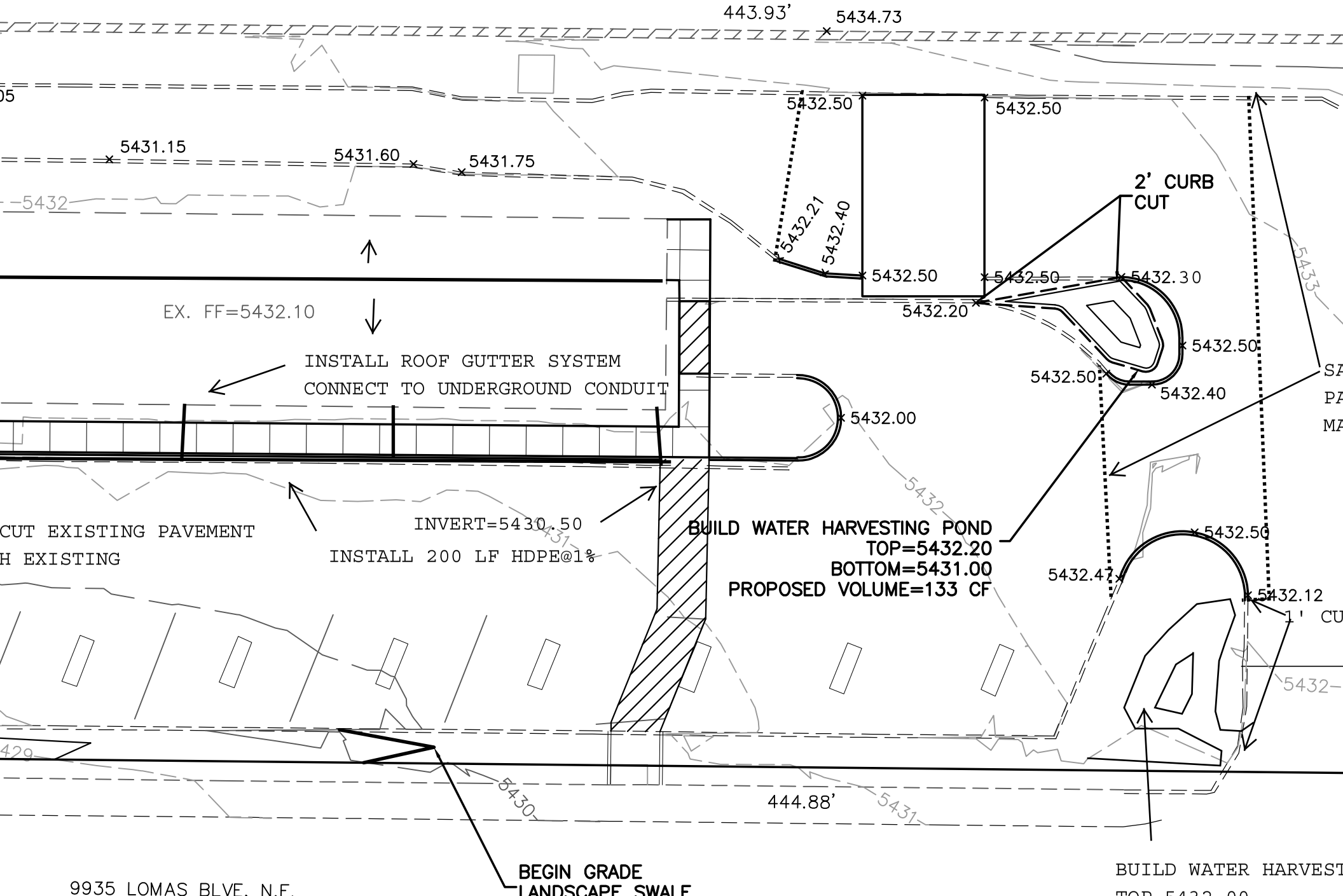
Pipe	D	Slope	Area	R	Q Provided	Q Required	Velocity
	(in)	(%)	(ft^2)		(cfs)	(cfs)	(ft/s)
WEST REACH	6	1	0.20	0.125	0.56	0.26	1.32

Manning's Equation:

Q = 1.49/n * A * R^(2/3) * S^(1/2)

A = Area
R = D/4
S = Slope
n = 0.013

FT.


443.93'
5434.73
5432.50
5432.50
5431.15
5431.60
5431.75
5432.21
5432.40
2' CURB CUT
5432.50
5432.50
5432.30
5432.20
5432.50
5432.50
5432.40
EX. FF=5432.10
INSTALL ROOF GUTTER SYSTEM
CONNECT TO UNDERGROUND CONDUIT
5432.00
CUT EXISTING PAVEMENT
H EXISTING
INVERT=5430.50
INSTALL 200 LF HDPE@1%
BUILD WATER HARVESTING POND
TOP=5432.20
BOTTOM=5431.00
PROPOSED VOLUME=133 CF
5432.50
5432.47
5432.12
444.88'
BEGIN GRADE
LANDSCAPE SWALE
9935 LOMAS BLVE. N.E.
BUILD WATER HARVEST

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.

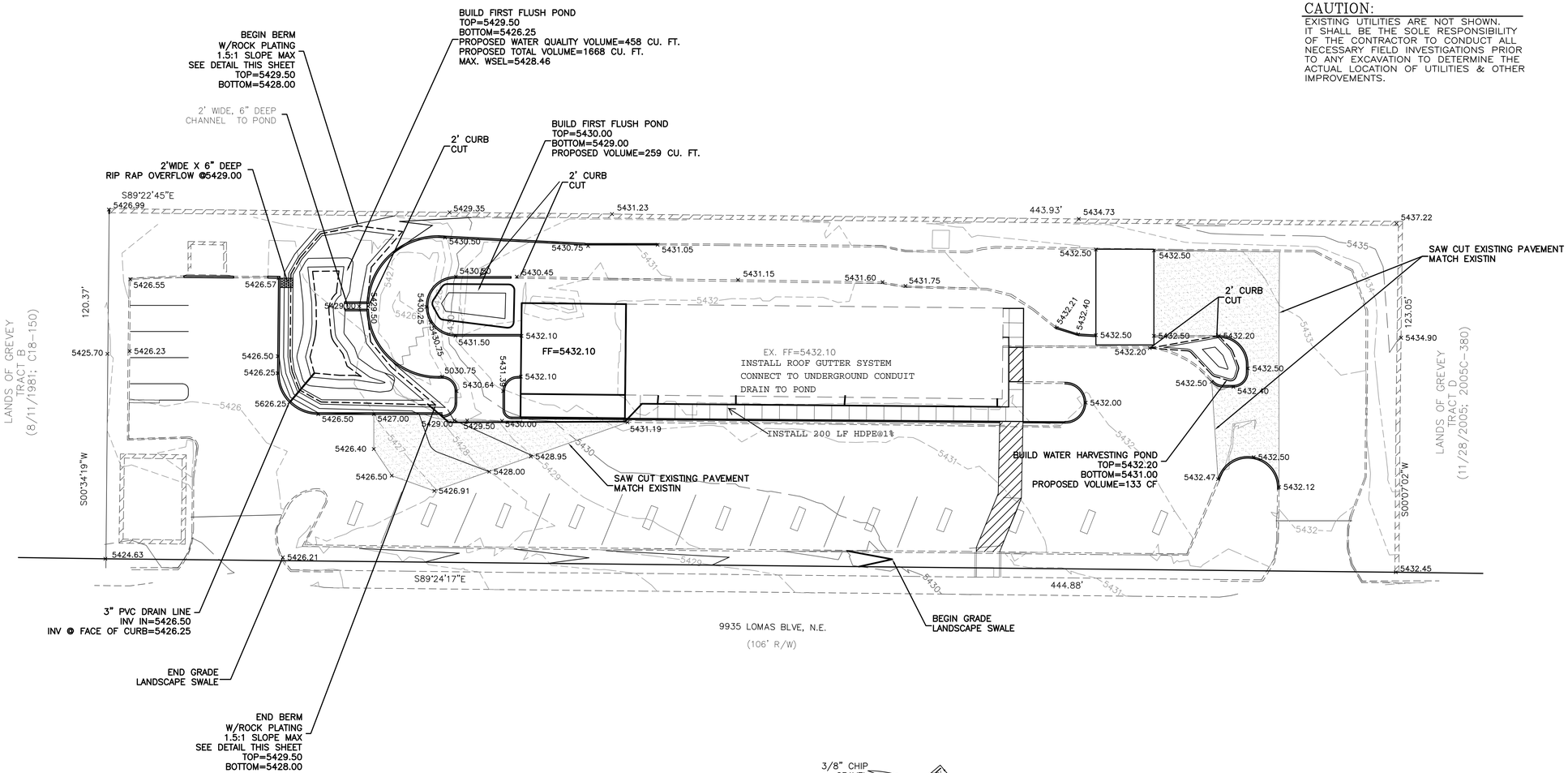
3. CONTRACTOR IS RESPONSIBLE FOR CLEANING ALL SEDIMENT THAT GETS INTO EXISTING RIGHT-OF-WAY.

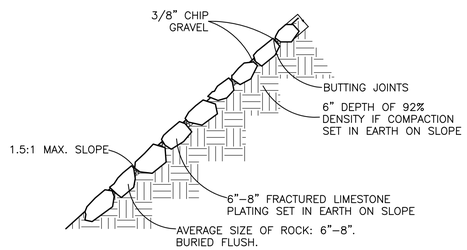
4. REPAIR OF DAMAGED FACILITIES AND CLEANUP OF SEDIMENT ACCUMULATIONS ON ADJACENT PROPERTIES AND IN PUBLIC FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR.

5. ALL EXPOSED EARTH SURFACES MUST BE PROTECTED FROM WIND AND WATER EROSION PRIOR TO FINAL ACCEPTANCE OF ANY PROJECT.

CAUTION:

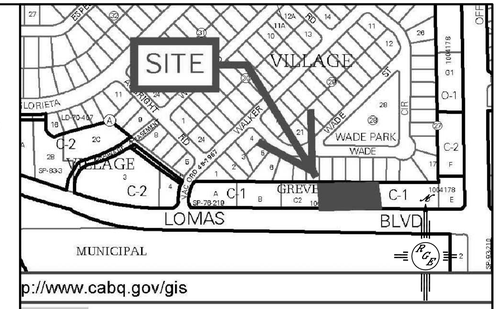
EXISTING UTILITIES ARE NOT SHOWN. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO CONDUCT ALL NECESSARY FIELD INVESTIGATIONS PRIOR TO ANY EXCAVATION TO DETERMINE THE ACTUAL LOCATION OF UTILITIES & OTHER IMPROVEMENTS.





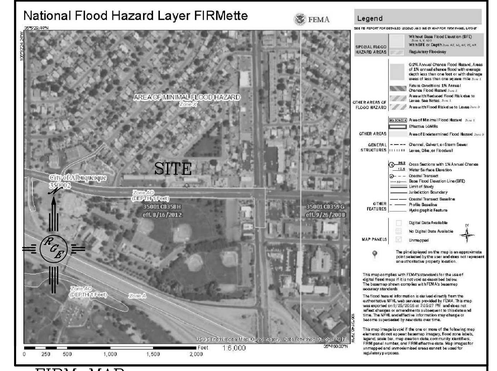
ROCK PLATING DETAIL

NTS



p://www.cabq.gov/gis

VICINITY MAP: J-20-Z



FIRM MAP:

LEGAL DESCRIPTION:

PARCEL A-1, FINELAND DEVELOPMENT

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 (1· × 4048.25)
- BOUNDARY
- CENTERLINE
- RIGHT-OF-WAY
- PROPOSED CURB
- EXISTING CURB AND GUTTER
- PROPOSED SIDEWALK
- EXISTING SIDEWALK
- PROPOSED 1'-4' RETAINING WALL-DESIGN BY OTHERS
- PROPOSED 3" AC PAVING

N

GRAPHIC SCALE

20 10 0 10 20

SCALE: 1"=20'

ENGINEER'S SEAL

DAVID SOULE NEW MEXICO 14522 REGISTERED PROFESSIONAL ENGINEER

3/27/19

DAVID SOULE P.E. #14522

LOMAS CARWASH

GRADING AND DRAINAGE PLAN

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

DRAWN BY WCWJ

DATE 3-26-19

218146-LAYOUT-10-03-18

SHEET # —

JOB # 218146