CITY OF ALBUQUERQUE



February 23, 2018

David Aube, P.E. Design Group 120 Vassar SE, Suite 100 Albuquerque, NM 87106

RE: Zocalo Lofts

507 4th St SW

Grading Plan and Drainage Report Engineer's Stamp Date: 2/14/18 Hydrology File: K14D112

Dear Mr. Aube:

PO Box 1293

Based upon the information provided in your submittal received 2/15/18, the Grading Plan and Drainage Report are approved for Building Permit

Prior to Certificate of Occupancy:

Albuquerque

1. The Private Facility Drainage Covenant must be recorded with Bernalillo County and a copy included with the drainage certification.

NM 87103

2. Either a recorded SIA with financial guarantee or close-out of the public work order is required prior to issuing C.O.

www.cabq.gov

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 11/2016)

Project Title:	Building Pe	rmit #: Hydrology File #:
DRB#:	EPC#:	Work Order#:
Legal Description:		
City Address:		
Applicant:		Contact:
Address:		
		E-mail:
Other Contact:		Contact:
Address:		
		E-mail:
Check all that Apply:		
		TYPE OF APPROVAL/ACCEPTANCE SOUGHT:
DEPARTMENT: HYDROLOGY/ DRAINAGE	,	BUILDING PERMIT APPROVAL
TRAFFIC/ TRANSPORTAT		CERTIFICATE OF OCCUPANCY
TYPE OF SUBMITTAL:		PRELIMINARY PLAT APPROVAL
ENGINEER/ARCHITECT CE	ERTIFICATION	SITE PLAN FOR SUB'D APPROVAL
		SITE PLAN FOR BLDG. PERMIT APPROVAL
CONCEPTUAL G & D PLAN		FINAL PLAT APPROVAL
GRADING PLAN		
DRAINAGE MASTER PLAN		SIA/ RELEASE OF FINANCIAL GUARANTEE
DRAINAGE REPORT		FOUNDATION PERMIT APPROVAL
CLOMR/LOMR		GRADING PERMIT APPROVAL
		SO-19 APPROVAL
TRAFFIC CIRCULATION LA	AYOUT (TCL)	PAVING PERMIT APPROVAL
TRAFFIC IMPACT STUDY (TIS)		GRADING/ PAD CERTIFICATION
		WORK ORDER APPROVAL
OTHER (SPECIFY)		CLOMR/LOMR
PRE-DESIGN MEETING?		
IS THIS A RESUBMITTAL?:	Yes No	OTHER (SPECIFY)
DATE SUBMITTED:	By:	

FEE PAID:_

K14/D112

Zocalo Lofts Comment Responses

- Retention Volume = 0.26*0.71*0.9*43560/12 = 603 c.f. total. Pond C1 and C2 contain 150 c.f. and 140 c.f. respectively.
- 2. I think this is Basin C but calculations are provided
- Roof drains are pointed toward Coal. Depressed landscaping is for water conservation only and is not counted in the first flush requirement
- 4. Ponding required and provided are noted with a payment in lieu expected.
- 5. Noted, and corrected
- Contour to the west is labelled. No runoff from property to the west is currently entering site and all work will be confined to subject property
- 7. Note added
- Note added
- 9. Noted
- 10. Noted

CITY OF ALBUQUERQUE



February 6, 2018 David Aube, P.E. Design Group 120 Vassar SE, Suite 100 Albuquerque, NM 87106 RE: Zocalo Lofts 507 4th St SW Grading Plan and Drainage Report Engineer's Stamp Date: 1/18/18 Hydrology File: K14D112 Based upon the information provided in your submittal received 1/29/18, the Grading Plan PO Box 1293 and Drainage Report cannot be approved until the following are corrected: Prior to Building Permit: 1. This site qualifies as redevelopment and is only required to retain runoff from the $80^{\rm th}$ percentile storm (Vol. = $0.26^{\rm th}$ Imp.Area). Consider only the private property. Quantify the first flush volume that will flow to each ponding area (Basin B). Demonstrate that each ponding area is sized for the area draining to it. NM 87103 3. First flush ponding in the public ROW cannot be used to satisfy the first flush www.cabo.gov requirement or to reduce the runoff from the site (Basin A). If this runoff cannot be ponded onsite, payment of Fee-in-Lieu will be required. 4. Payment of Fee-in-Lieu is required for areas that free discharge to the Public ROW antify this volume and state on plans. Alternately, provide appropriately sized first 5. Existing spot elevations are illegible; please correct. 6. Include existing grades on the adjoining lot to the west. Are there any walls proposed and will they be contained on the subject property? 7. Add note on the plan that "No work shall be performed in the public ROW without an approved Work Order." Albuquerque - Maki Pagit Ivof 2706-2006

CITY OF ALBUQUERQUE



 A Private Facility Drainage Covenant is required for the first flush ponds. The original notarized form, exhibit A (legible on 8.5x1 I paper), and recording fee (\$25, payable to City of Albuquerque) 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.

Prior to Certificate of Occupancy:

- The Private Facility Drainage Covenant must be recorded with Bernalillo County and a copy included with the drainage certification.
- Either a recorded SIA with financial guarantee or close-out of the public work order is required prior to issuing C.O.

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

PO Box 1293 Sincer

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Albuquerque

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

www.cabq.go

NM 87103

Orig: Drainage File

Albuquerque - Makillage 20f 2706-2006

DRAINAGE REPORT

Zocalo Lofts 4th and Coal SW February 12, 2018

Prepared by:

The Design Group

120 Vassar Dr. SE Suite 100

Albuquerque, New Mexico 87106

I certify that this report was prepared under my supervision, and I am a registered professional engineer in the State of New Mexico in good standing.



David A. Aube

PE NO. 14221

Introduction

The project entails the construction of a mixed use, multistory infill housing and commercial project on the southwest corner of 4th and Coal SW, specifically Lot 9-A-1, Block N of the Atlantic and Pacific Addition. It is a 0.71-acre parcel, currently vacant; however, there are patches of asphalt and concrete slabs on the site which indicate some kind of development existed there previously.

The new development will be known as Zocalo Lofts

Precipitation Zone

Per Figure A-1, the project site is located in zone 2.

Vicinity Map

The project is in K-11-Z (see Zone Atlas page).

Flood Zone

As shown on FIRM panel 35001C0334G, the site is not in flood hazard area. (see Firmette).

<u>Methodology</u>

Chapter 22 in the City of Albuquerque Development Process Manual will be utilized to determine peak runoff and volumes.

Land Treatments

Existing – 100% Type C

Proposed - Approximately 90% impervious (Type D) and 10% landscaping (Type B)

Existing Conditions

Site is currently vacant, but compacted by past development. It is very flat but does slope to the south to an adjacent unimproved alley. Per Table A-9, Runoff = $3.14 \text{ cfs/ac} \times 0.71 \text{ ac} = 2.23 \text{ cfs}$. No runoff from the adjoining properties enters the property as the property to the west drains south to the alley.

Proposed Conditions

Per discussions with CoA Hydrology staff, the site is allowed 2.75 cfs/acre, or $2.75 \times 0.71 = 1.96$ cfs. The alley will be improved; however, it will not count toward the limiting discharge since it is outside the development.

Basin A will discharge to a first flush landscaped area, and then to Coal by way of a 4" slot in the curb. Basin B will drain to Coal directly. Basin C will enter the landscape swale, and overflow through the sidewalk culvert into Basin D. Basin D and routed Basin C will drain south to the improved alley, and eventually to 4th Street. Basin E will drain directly to 4th Street, mostly through roof drains and sidewalk culverts.

Using a Mannings Open Channel calculator, the 6" sidewalk culvert will discharge a maximum of 0.5 cfs with a 0.25 feet depth and 4" dia. roof drains will only discharge 0.6 cfs maximum with 3 inches of stormwater (head). Weighted runoff uses Table A-9 or routing thru facility.

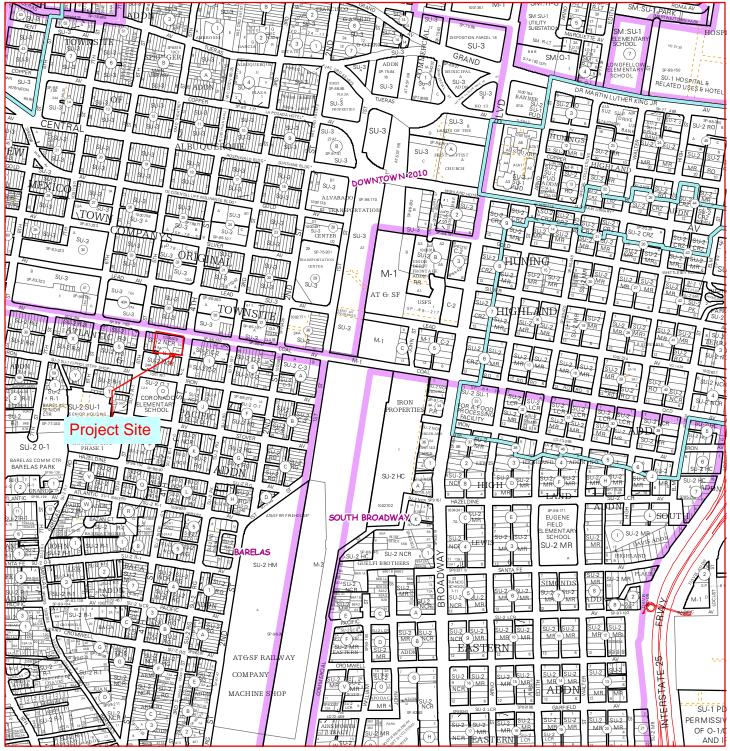
	Area (ac)	Weighted Runoff	Comment
		(cfs)	
Basin A	0.134	0.20	Routed thru curb opening
Basin B	0.044	0.21	Free discharge
Basin C1	0.070	0.12	Vol req'd (53x55x0.26/12)=64 cf,
			Vol. provide = 150 cf
Basin C2	0.223	0.38	Vol req'd (120x53x0.26)=137 cf Vol
			provided = 140 cf
Basin D	0.158	0.70	
Basin E	0.084	0.34	
Total	0.710	1.95	

First Flush Ponds

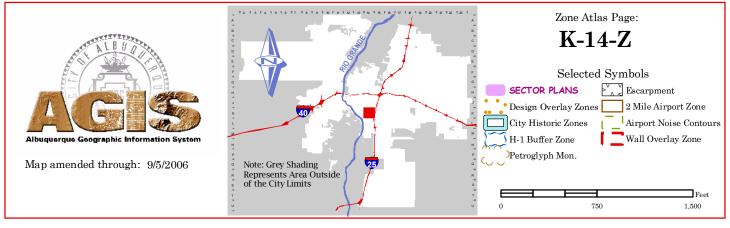
The volume required in the first flush pond is equal to the 0.26 "times impervious area. Retention Volume for entire site = 0.26*0.71*0.9*43560/12 = 603 c.f. total. Pond C1 and C2 contain 150 c.f. and 140 c.f. respectively. Overflow will route through sidewalk culvert. Remaining subbasins free discharge to public ROW. Approximately 48% of the required volume is provided and payment-in-lieu should be prorated accordingly.

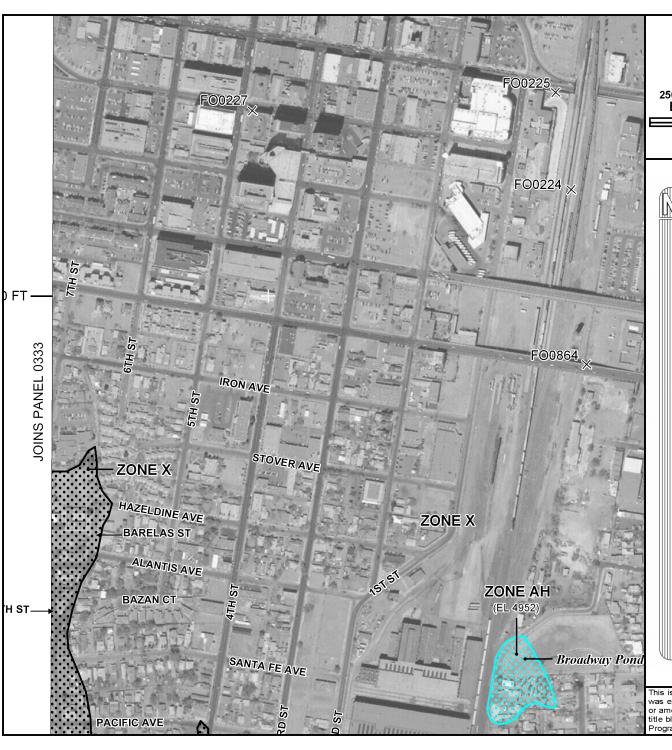
Conclusion

The site is designed to limit its discharge to 2.75 cfs per acre or 1.96 cfs. The site will discharge 1.95 cfs. Water quality best practices are included in the design with first flush ponds and depressed landscaping on site.

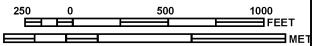


For more current information and more details visit: http://www.cabq.gov/gis





MAP SCALE 1" = 500'



FIRM

FLOOD INSURANCE RATE MAP

PANEL 0334G

BERNALILLO COUNTY, NEW MEXICO AND INCORPORATED AREAS

PANEL 334 OF 825

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY NUMBER ALBUQUERQUE, CITY OF 350002

OF 350002 0334 G

SUFFIX

Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.

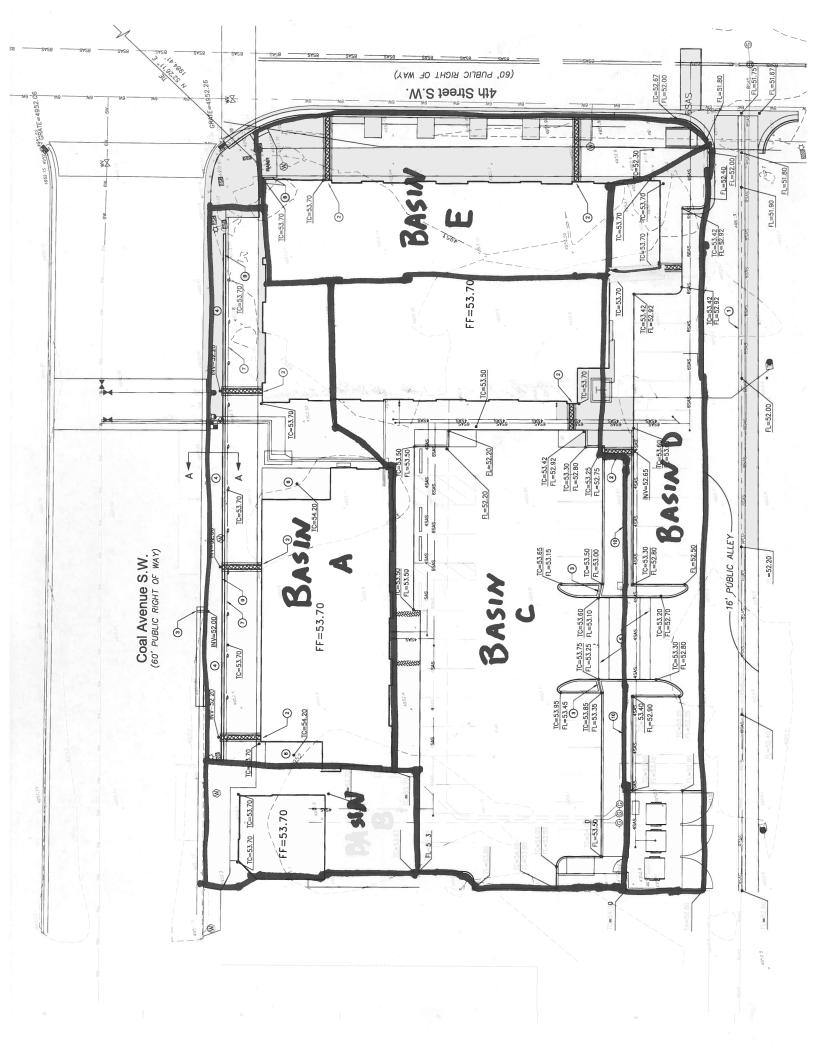


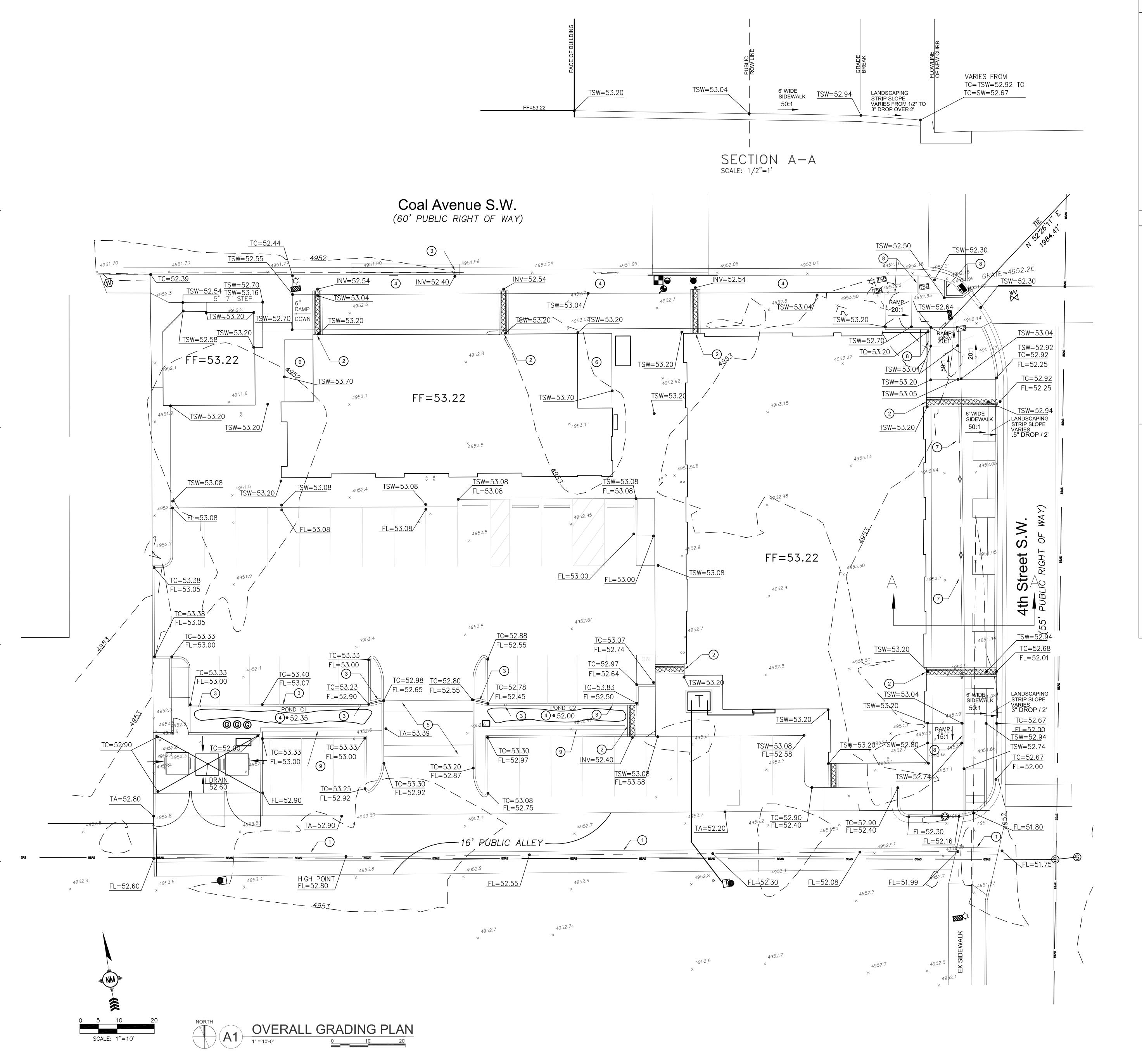
MAP NUMBER 35001C0334G

MAP REVISED SEPTEMBER 26, 2008

Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov





GENERAL SHEET NOTES:

- 1. NO WORK SHALL BE PERFORMED IN THE PUBLIC ROW WITHOUT A PUBLIC WORK ORDER
- WORK ORDER.
 VOLUME REQUIRED FOR FIRST FLUSH 0.71 ac x 43560 sf/ac x 0.9 x .26 x 1/12 = 603 cf. VOLUME PROVIDED (PONDS C1 AND C2)= 290 cf. POND C1= 150 cf POND C2 = 140 cf.
 POND ALONG COAL NOT COUNTED IN CALCULATION BUT IS REQUESTED FOR LANDSCAPING BENEFITS.
 PRIVATE FACILITY DRAINAGE COVENANT REQUIRED FOR MAINTENANCE



○ SHEET KEYED NOTES:

- 1) ALLEY GUTTER PER COA STD.
- 2 SIDEWALK CULVERT PER COA STD. SEE ARCHITECTURAL FOR ROOF DRAIN LOCATIONS.
- 3 4" SLOT OPENING IN CURB.
- 4 FIRST FLUSH RETENTION AREA
- 5) SPEED TABLE MATCH TOP OF ASPHALT TO TOP OF CURB.
- 6 STAIRWELL, SEE ARCHITECTURAL.
- (7) OPTIONAL 42" HANDRAIL, BY OTHERS.
- 8 6" RAMP CURB.
- 9) GATE FOOTING, SEE ARCHITECTURAL.

STAMP



PERMIT SET PROJECT NAME ZOCALO LOFTS

507 4TH ST. SW ALBUQUERQUE, NM 87102

QUATRO Y CARBON

REVISIONS NO. DATE DESCRIPTION Copyright: Design Group

SHEET TITLE

OVERALL GRADING PLAN

SHEET NUMBER



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	\$ 3,216.00	461615	305	PCDMD	24_MS4	7547210	\$ 3,216.00
TOTAL AMOUNT						TOTAL DEPOSIT	\$3,216.00

Hydrology#: _		Name:	Zocalo Lofts
	Payment In-Lieu For Storm Water Quality Volume Requirement		
Address/Legal	Description: 507 4 th St SW		
DEPARTMEN	IT NAME: Planning Department/Developme	nt Review	Services, Hydrology
PREPARED E	BY Dana Peterson	PHONE _	924-3695
BUSINESS D	ATE		
DUAL VERIFI	CATION OF DEPOSITEMPLOYEE SIGNATION	JRE	
AND BY			<u> </u>
E	MPLOYEE SIGNATURE		
REMITTER:			<u></u>
AMOUNT:			<u></u>
BANK:	Date on Curous		

The Payment-in-Lieu can be paid at the Plaza del Sol Treasury, 600 2nd St. NW. **Bring three 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.