

# CITY OF ALBUQUERQUE

Planning Department  
Alan Varela, Director



Mayor Timothy M. Keller

January 19, 2023

David Alter, P.E.  
Ensign  
45 W. 10000 S., Suite 500  
Sandy, UT 84070

**RE: Chick-Fil-A @ Coors Pavilion – Additional Parking Lot  
4001 Coors Blvd NW  
Revised Grading & Drainage Plan  
Engineer's Stamp Date: 08/25/22  
Hydrology File: G11D069C**

Dear Mr. Alter:

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov

Based upon the information provided in your submittal received 01/19/2023, the Revised Grading & Drainage Plan is approved for Grading Permit, Paving Permit and for action by the DRB on Site Plan for Building Permit. Once the grading and paving of the project is complete, please provide an as-built for the City's records since there is no CO attached to the project.

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 (Doug Hughes, PE, [jhughes@cabq.gov](mailto:jhughes@cabq.gov), 924-3420) 14 days prior to any earth disturbance.

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

Sincerely,

*Renée C. Brissette*

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



# City of Albuquerque

Planning Department

Development & Building Services Division

## DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 10/2018)

REVISION

Project Title: \_\_\_\_\_ Building Permit #: \_\_\_\_\_ Hydrology File #: \_\_\_\_\_

DRB#: \_\_\_\_\_ EPC#: \_\_\_\_\_ Work Order#: \_\_\_\_\_

Legal Description: \_\_\_\_\_

City Address: \_\_\_\_\_

Applicant: \_\_\_\_\_ Contact: \_\_\_\_\_

Address: \_\_\_\_\_

Phone#: \_\_\_\_\_ Fax#: \_\_\_\_\_ E-mail: \_\_\_\_\_

Other Contact: \_\_\_\_\_ Contact: \_\_\_\_\_

Address: \_\_\_\_\_

Phone#: \_\_\_\_\_ Fax#: \_\_\_\_\_ E-mail: \_\_\_\_\_

TYPE OF DEVELOPMENT: \_\_\_\_\_ PLAT (# of lots) \_\_\_\_\_ RESIDENCE \_\_\_\_\_ DRB SITE \_\_\_\_\_ ADMIN SITE

IS THIS A RESUBMITTAL? \_\_\_\_\_ Yes \_\_\_\_\_ No

REVISION TO THE STAMPED  
APPROVED G&D PLAN  
STAMPED 08/19/22

DEPARTMENT: \_\_\_\_\_ TRAFFIC/TRANSPORTATION \_\_\_\_\_ HYDROLOGY/DRAINAGE

Check all that Apply:

### TYPE OF SUBMITTAL:

- \_\_\_\_\_ ENGINEER/ARCHITECT CERTIFICATION
- \_\_\_\_\_ PAD CERTIFICATION
- \_\_\_\_\_ CONCEPTUAL G & D PLAN
- \_\_\_\_\_ GRADING PLAN
- \_\_\_\_\_ DRAINAGE MASTER PLAN
- \_\_\_\_\_ DRAINAGE REPORT
- \_\_\_\_\_ FLOODPLAIN DEVELOPMENT PERMIT APPLIC
- \_\_\_\_\_ ELEVATION CERTIFICATE
- \_\_\_\_\_ CLOMR/LOMR
- \_\_\_\_\_ TRAFFIC CIRCULATION LAYOUT (TCL)
- \_\_\_\_\_ TRAFFIC IMPACT STUDY (TIS)
- \_\_\_\_\_ OTHER (SPECIFY) \_\_\_\_\_
- \_\_\_\_\_ PRE-DESIGN MEETING?

### TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

- \_\_\_\_\_ 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
- \_\_\_\_\_ GRADING/ PAD CERTIFICATION
- \_\_\_\_\_ WORK ORDER APPROVAL
- \_\_\_\_\_ CLOMR/LOMR
- \_\_\_\_\_ FLOODPLAIN DEVELOPMENT PERMIT
- \_\_\_\_\_ OTHER (SPECIFY) \_\_\_\_\_

DATE SUBMITTED: \_\_\_\_\_ By: \_\_\_\_\_

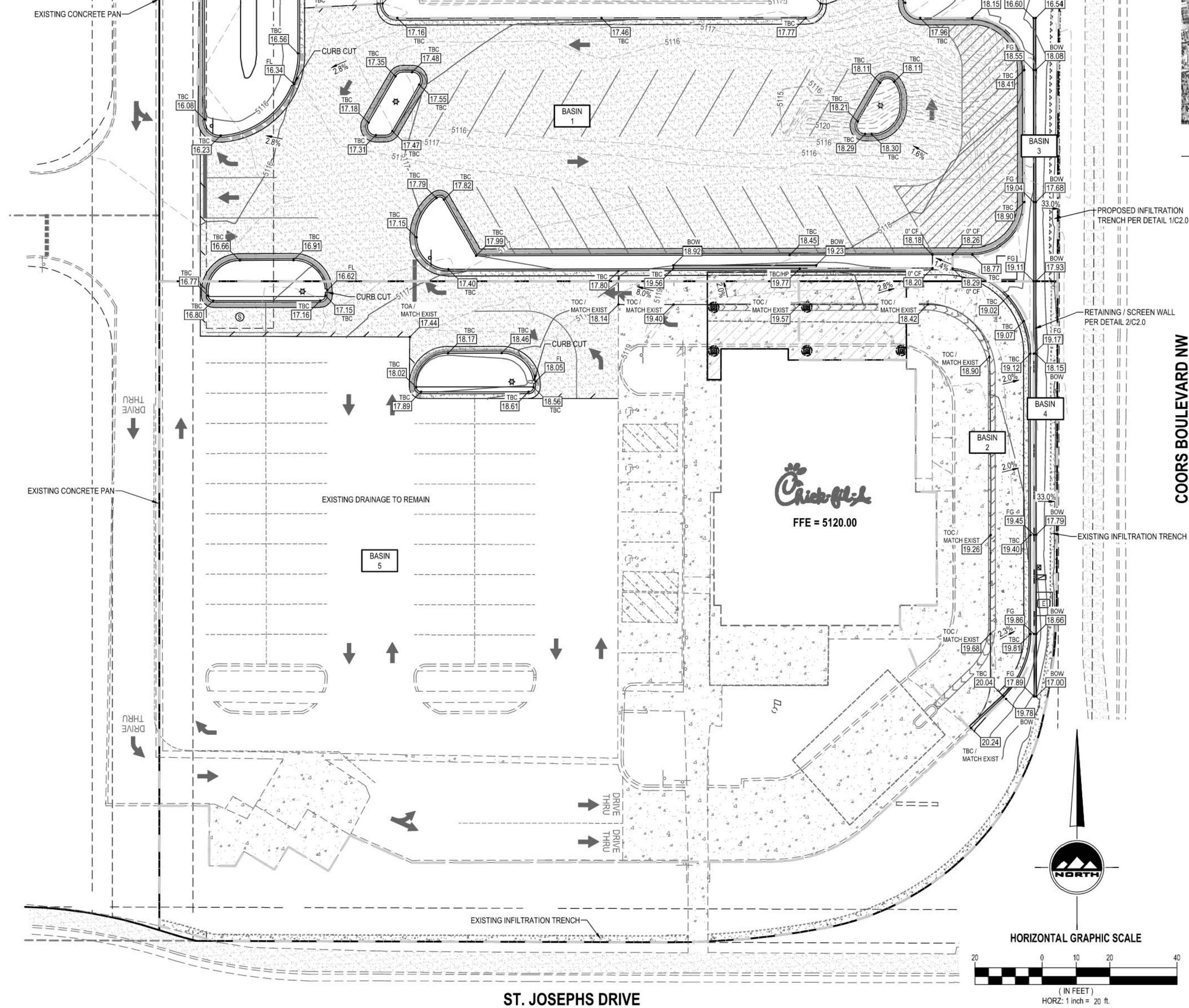
COA STAFF:

ELECTRONIC SUBMITTAL RECEIVED: \_\_\_\_\_

FEE PAID: \_\_\_\_\_



**811**  
CALL BLUESTAKES  
@ 811 AT LEAST 48 HOURS  
PRIOR TO THE  
COMMENCEMENT OF ANY  
CONSTRUCTION.  
Know what's below.  
Call before you dig.



SWQV - BASIN 4 (UPDATED)	
IMPERVIOUS AREA	34827
REQUIRED VOLUME	987
PROVIDED VOLUME (CU.FT.) IN DEVELOPMENT POND	1289

REQUIRED SWQV - BASIN 1 AND 3	
IMPERVIOUS AREA (SQ.FT.)	21402
REQUIRED VOLUME (CU.FT.)	749.07
PROVIDED VOLUME (CU.FT.) IN DEVELOPMENT POND	778

CURB OPENING / WEIR	
C	2.7
PROPOSED LENGTH (FT)	1
DEPTH (FT)	0.5
DISCHARGE, Q (CFS)	0.95

THE 1" LONG CURB CUT PROVIDES A LARGER DISCHARGE CAPACITY THAT WHAT IT IS NEEDED, THUS A 1" CURB CUT IS PROPOSED.

BASIN 2 - INFILTRATION TRENCH	
REQUIRED VOLUME (CU.FT.)	147
LENGTH (FT)	114
AREA (SQ.FT.)	4
VOID RATIO	0.4
VOLUME PROVIDED (CU.FT.)	182.4

$$ReqVolume = Impervious\ area * (0.44 - 0.10)/12$$

As calculated in original development

$$ReqVolume = (34827 * (0.44-0.10)/12) = 987$$

$$ReqVolume = Impervious\ area * (0.42)/12$$

Section 6-12

$$ReqVolume = (21402 * (0.42)/12) = 749$$

$$Q = CLH^{3/2}$$

Section 6-16(A), Equation 6.54

$$Q = 2.7 * 1 * .5^{3/2}$$

$$Weighted\ E = \frac{EaAa + EbAb + EcAc + EdAd}{Aa + Ab + Ac + Ad}$$

Section 6-2(A)(4), Equation 6.1

$$Weighted\ E = ((0.55*0.0)+(0.73*0.07)+(0.95*0.0)+(2.24*0.58))/0.65=2.08$$

$$V360 = Weighted\ E * (Aa + Ab + Ac + Ad)$$

Section 6-2(A)(4), Equation 6.2

$$V360 = (2.08 * .65)/12 = 0.11$$

$$Q = CiA$$

Section 6-2(A)(5), Equation 6.7

$$Q = ((0.34*0.36*0.0)+(0.47*0.36*0.07)+(0.63*0.36*0.0)+(0.90*0.36*0.58))=0.20$$

$$Q = QpA$$

Section 6-2(A)(5), Equation 6.6

$$Q = ((1.54*0.0)+(2.16*0.07)+(2.87*0.0)+(4.12*0.58))=2.53$$

## FIRM MAP NO 35001C0114H

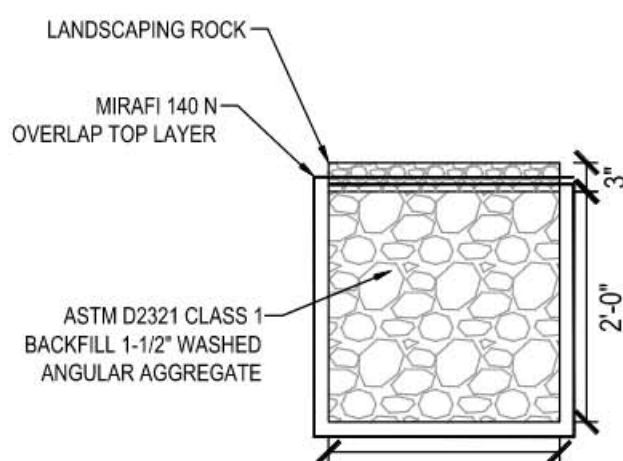


- GENERAL NOTES**
- ALL WORK TO COMPLY WITH THE GOVERNING AGENCY'S STANDARDS AND SPECIFICATIONS.
  - ALL IMPROVEMENTS MUST COMPLY WITH ADA STANDARDS AND RECOMMENDATIONS.
  - THE CONTRACTOR SHALL BECOME FAMILIAR WITH THE EXISTING SOIL CONDITIONS.
  - ELEVATIONS HAVE BEEN TRUNCATED FOR CLARITY. XX.XX REPRESENTS AN ELEVATION OF 51XX.XX ON THESE PLANS.
  - LANDSCAPED AREAS REQUIRE SUBGRADE TO BE MAINTAINED AT A SPECIFIC ELEVATION BELOW FINISHED GRADE AND REQUIRE SUBGRADE TO BE PROPERLY PREPARED AND SCARIFIED. SEE LANDSCAPE PLANS FOR ADDITIONAL INFORMATION.
  - ALL STORM DRAIN INFRASTRUCTURE TO BE INSTALLED PER GOVERNING AGENCY OR APWA STANDARD PLANS AND SPECIFICATIONS.
  - THE CONTRACTOR SHALL ADJUST TO GRADE ALL EXISTING UTILITIES AS NEEDED PER LOCAL GOVERNING AGENCY'S STANDARDS AND SPECIFICATIONS.
  - NOTIFY ENGINEER OF ANY DISCREPANCIES IN DESIGN OR STAKING BEFORE PLACING CONCRETE, ASPHALT, OR STORM DRAIN STRUCTURES OR PIPES.
  - THE CONTRACTOR IS TO PROTECT AND PRESERVE ALL EXISTING IMPROVEMENTS, UTILITIES, AND SIGNS, ETC. UNLESS OTHERWISE NOTED ON THESE PLANS.

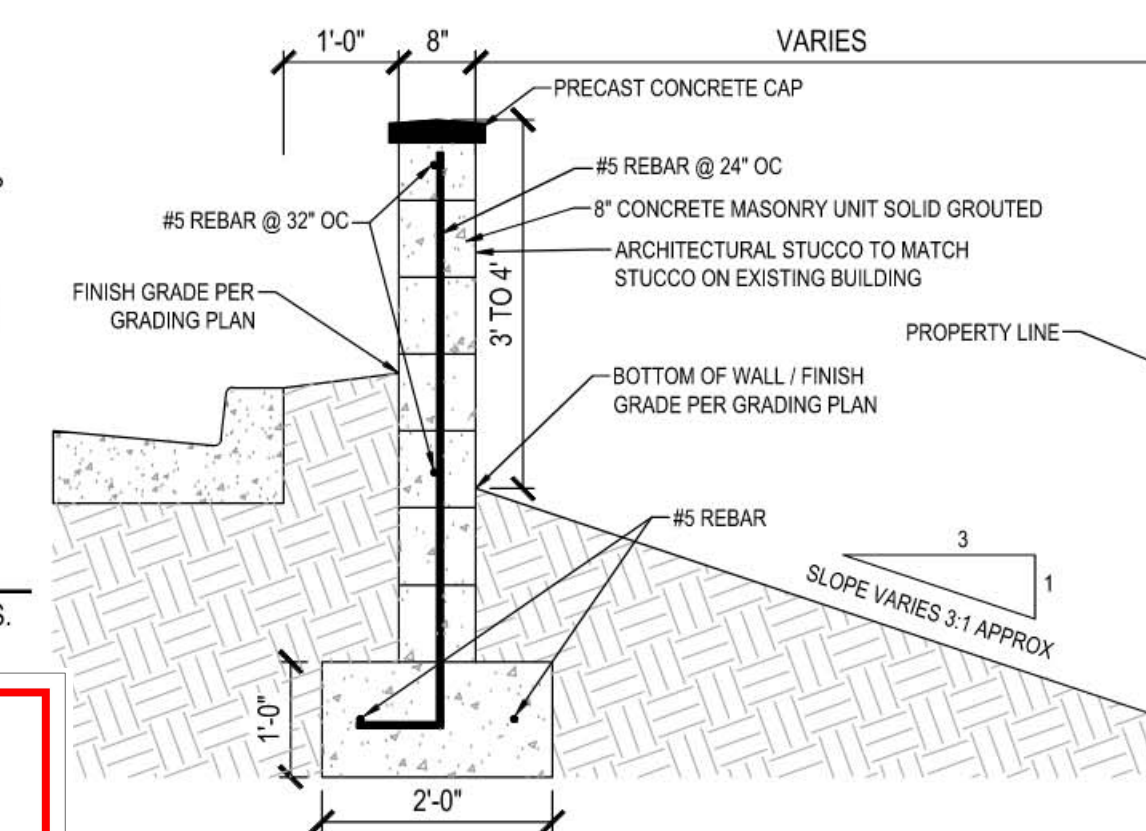
- EROSION CONTROL NOTES**
- CONTRACTOR IS RESPONSIBLE FOR OBTAINING A TOPSOIL DISTURBANCE PERMIT PRIOR TO BEGINNING WORK.
  - CONTRACTOR IS RESPONSIBLE FOR MAINTAINING RUN-OFF ON SITE DURING CONSTRUCTION.
  - CONTRACTOR IS RESPONSIBLE FOR CLEANING ALL SEDIMENT THAT GETS INTO EXISTING RIGHT-OF-WAY.
  - REPAIR OF DAMAGED FACILITIES AND CLEANUP OF SEDIMENT ACCUMULATION ON ADJACENT PROPERTIES AND IN PUBLIC FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR.
  - ALL EXPOSED EARTH SURFACES MUST BE PROTECTED FROM WIND AND WATER EROSION PRIOR TO FINAL (CITY) ACCEPTANCE OF ANY PROJECT.

### LEGEND

- EXISTING BOLLARD
- PROPOSED BOLLARD
- EXISTING SIGN
- PROPOSED SIGN
- EXISTING FLAG POLE
- PROPOSED EDGE OF ASPHALT
- EXISTING STRIPING
- PROPOSED STRIPING
- EXISTING WALL
- PROPOSED WALL
- EXISTING CONTOURS
- PROPOSED CONTOURS
- PROPOSED ASPHALT
- EXISTING CURB AND GUTTER
- PROPOSED CURB AND GUTTER
- PROPOSED REVERSE PAN CURB AND GUTTER
- TRANSITION TO REVERSE PAN CURB
- EXISTING CONCRETE
- PROPOSED CONCRETE
- EXISTING BUILDING
- EXISTING MONUMENT SIGN
- CATCHMENTS / BASINS



1 INFILTRATION TRENCH N.T.S.



2 RETAINING / LANDSCAPE SCREEN WALL SCALE: NONE

100 YR									
LAND TREATMENT COEFFICIENT C		A	B	C	D	100 YR, 6 HR INTENSITY (IN/HR)= 0.36			
PEAK DISCHARGE (CFS/AC)		0.34	0.47	0.63	0.90				
6-HR EXCESS PRECIPITATION, E (IN)		1.54	2.16	2.87	4.12				
BASIN		0.55	0.73	0.95	2.24				
		LAND TREATMENT AREA (AC)				TOTAL AREA (AC)	Q (CFS), RATIONAL METHOD	Q (CFS), PEAK DISCHARGE	WEIGHTED E (IN)
1	0.00	0.07	0.00	0.58	0.65	0.20	2.53	2.08	0.1119
2	0.00	0.06	0.00	0.00	0.06	0.01	0.12	0.73	0.0034
3	0.00	0.00	0.00	0.11	0.11	0.04	0.47	2.22	0.0211
4	0.00	0.18	0.00	0.00	0.18	0.03	0.39	0.73	0.0110
5	0.00	0.07	0.00	0.80	0.87	0.27	3.44	2.12	0.1535
10 YR									
LAND TREATMENT COEFFICIENT C		A	B	C	D	10 YR, 6 HR INTENSITY (IN/HR)= 0.23			
PEAK DISCHARGE (CFS/AC)		0.11	0.28	0.51	0.90				
6-HR EXCESS PRECIPITATION, E (IN)		0.30	0.81	1.46	2.57				
BASIN		0.11	0.26	0.43	1.43				
		LAND TREATMENT AREA (AC)				TOTAL AREA (AC)	Q (CFS), RATIONAL METHOD	Q (CFS), PEAK DISCHARGE	WEIGHTED E (IN)
1	0.00	0.07	0.00	0.58	0.65	0.12	1.54	1.30	0.0702
2	0.00	0.06	0.00	0.00	0.06	0.00	0.04	0.26	0.0012
3	0.00	0.00	0.00	0.11	0.11	0.02	0.29	1.42	0.0134
4	0.00	0.18	0.00	0.00	0.18	0.01	0.15	0.26	0.0039
5	0.00	0.07	0.00	0.80	0.87	0.17	2.11	1.34	0.0968
2 YR									
LAND TREATMENT COEFFICIENT C		A	B	C	D	2 YR, 6 HR INTENSITY (IN/HR)= 0.15			
PEAK DISCHARGE (CFS/AC)		0.00	0.01	0.28	0.89				
6-HR EXCESS PRECIPITATION, E (IN)		0.00	0.02	0.50	1.56				
BASIN		0.00	0.01	0.13	0.92				
		LAND TREATMENT AREA (AC)				TOTAL AREA (AC)	Q (CFS), RATIONAL METHOD	Q (CFS), PEAK DISCHARGE	WEIGHTED E (IN)
1	0.00	0.07	0.00	0.58	0.65	0.08	0.90	0.82	0.0443
2	0.00	0.06	0.00	0.00	0.06	0.00	0.00	0.01	0.0000
3	0.00	0.00	0.00	0.11	0.11	0.02	0.18	0.91	0.0086
4	0.00	0.18	0.00	0.00	0.18	0.00	0.00	0.01	0.0002
5	0.00	0.07	0.00	0.80	0.87	0.11	1.25	0.85	0.0614

## VICINITY MAP



**LOCATION AND DESCRIPTION**  
THE PROPOSED SITE IS LOT 5 OF COORS PAVILION AND IS 0.7 ACRES LOCATED ON THE NORTH SIDE OF ST. JOSEPHS BLVD. AND THE WEST SIDE OF COORS BLVD. THE PROPOSED DEVELOPMENT WILL BE A PARKING LOT TO EXPAND THE EXISTING PARKING LOT.

**FLOODPLAIN STATUS**  
THE PROJECT, AS SHOWN ON FEMA'S FLOOD INSURANCE RATE MAP 35001C011H, DATED AUGUST 16, 2012 IS NOT WITHIN A DESIGNATED 100-YEAR FLOODPLAIN. AN EXHIBIT WITH THE SITE SHOWN ON THE FIRM PANEL IS INCLUDED ON THIS SHEET.

**METHODOLOGY**  
THE HYDROLOGY FOR THIS PROJECT WAS ANALYZED USING THE RATIONAL METHOD.

**PRECIPITATION**  
THE 100-YR 6-HR DURATION STORM WAS USED AS THE DESIGN STORM FOR THIS ANALYSIS. THIS SITE IS WITHIN ZONE 1 AS IDENTIFIED IN THE CITY OF ALBUQUERQUE DEVELOPMENT MANUAL, SECTION 22.2

**EXISTING DRAINAGE**  
THE SITE IS WITHIN THE AREA OF THE COORS PAVILION DRAINAGE MASTER PLAN DATED FEBRUARY 22, 2017. THE EXISTING DRAINAGE FLOWS TO THE NORTHWEST TO A PROPOSED POND FOR SHARED USE BY LOTS INCLUDED IN THE MASTER DRAINAGE PLAN.

**DEVELOPED CONDITION**  
THE SITE WILL BE DEVELOPED WITH SITE FLOWS FROM LOT 5 AND PART OF LOT 6 DIRECTED INTO A CONCRETE PAN IN THE MIDDLE OF THE PRIVATE DRIVE ON THE WEST SIDE OF THE SITE VIA A COMBINATION OF CURB AND GUTTER AND OVERLAND FLOW. THE PAN WILL ULTIMATELY DIRECT THE FLOW INTO THE FIRST FLUSH POND PROVIDED BY THE DEVELOPMENT. THE 100 YEAR PEAK RUNOFF FROM THIS DEVELOPMENT IS IN ACCORDANCE WITH THE MASTER DRAINAGE REPORT. RUNOFF ADJACENT TO COORS BLVD AND ST. JOSEPHS DR WILL BE CAPTURED BY AN EXISTING AND A PROPOSED INFILTRATION TRENCH AT THE REAR OF THE EXISTING SIDEWALK, ALLOWING NO RUNOFF FROM THIS SITE TO ENTER EITHER ROADWAY RIGHT-OF-WAY.

**SITE HYDROLOGY**  
HYDROLOGY RESULTS AND SAMPLE CALCULATIONS ARE SHOWN BELOW



**Chick-fil-A**

5200 Buffington Rd.  
Atlanta Georgia,  
30349-2998

Revisions:

Mark Date By

△

Mark Date By

△

Mark Date By

△

Seal



**SALT LAKE CITY**  
45 W. 10000 S., Suite 500  
Sandy, UT 84070  
Phone: 801.255.0529  
Fax: 801.255.4449

WWW.ENSIGNENG.COM

STORE  
CHICK-FIL-A  
FSU #04107  
COORS BLVD.

COORS BLVD NW & ST.  
JOSEPHS DR NW  
ALBUQUERQUE, NM  
87120

SHEET TITLE  
GRADING AND  
DRAINAGE PLAN

VERSION:  
ISSUE DATE:

Job No. : 11274  
Store : 04107  
Date : 8/24/22

Drawn By : MM  
Checked By : DJ

Sheet

**C-2.0**