

# CITY OF ALBUQUERQUE

Planning Department  
Alan Varela, Interim Director



Mayor Timothy M. Keller

October 1, 2021

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

**RE: Burger King – Carlisle Market Place  
2110 Carlisle Blvd. NE  
Grading and Drainage Plan  
Engineer's Stamp Date: 08/03/21  
Hydrology File: H17D097A**

Dear Mr. Soule:

PO Box 1293

Based upon the information provided in your submittal received 08/03/2021, the Grading & Drainage Plan is approved for Building Permit.

Albuquerque

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.

NM 87103

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.

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

[rbrissette@cabq.gov](mailto:rbrissette@cabq.gov) .

Sincerely,

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 6/2018)

**Project Title:** BURGER KING **Building Permit #:** \_\_\_\_\_ **Hydrology File #:** \_\_\_\_\_  
**DRB#:** \_\_\_\_\_ **EPC#:** \_\_\_\_\_ **Work Order#:** \_\_\_\_\_  
**Legal Description:** TRACT B-1 CARLISLE AND INDIAN SCHOOL SUBDIVISION  
**City Address:** 2110 CARLISLE NE

**Applicant:** TOM MCCULLUM **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 ☒ ADMIN SITE

Check all that Apply:

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

**TYPE OF SUBMITTAL:**  
\_\_\_\_\_ ENGINEER/ARCHITECT CERTIFICATION  
\_\_\_\_\_ PAD CERTIFICATION  
\_\_\_\_\_ CONCEPTUAL G & D PLAN  
☒ 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 ☒ No

**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:** \_\_\_\_\_

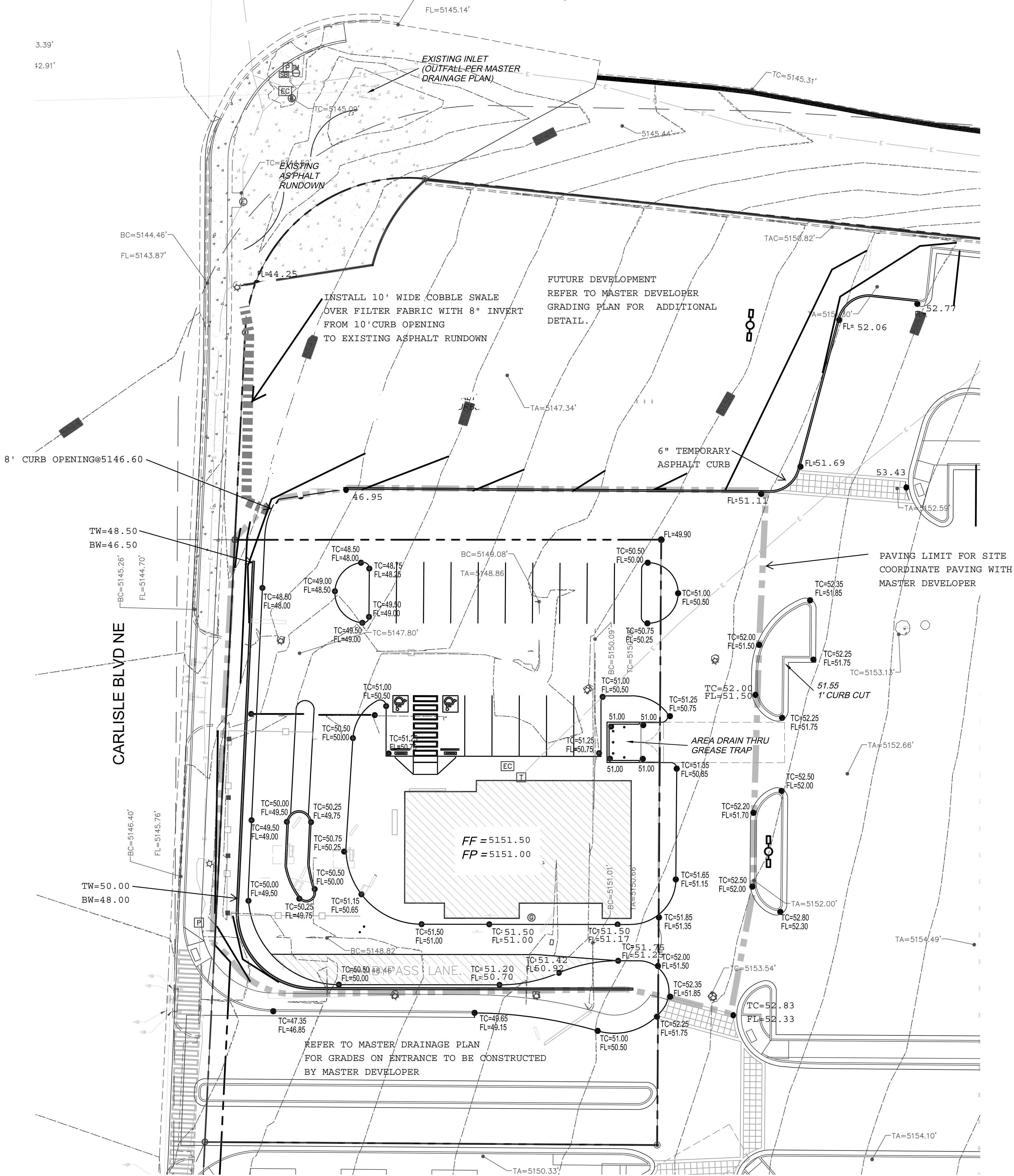
COA STAFF:

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

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



I-40 EASTBOUND ON RAMP



**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.

**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.

**DRAINAGE NARRATIVE AND CALCULATIONS**

**Weighted E Method**

Basin	Area (sf)	Area (acres)	Treatment				Weighted E (ac-ft)	Volume (ac-ft)	Flow cfs	10-day Volume (ac-ft)
			A %	B %	C %	D %				
HISTORICAL	21400	0.491	0%	0%	0.000	0.000	100%	0.491	2.330	0.095
ALLOWED PER DMP	21400	0.491	0%	0%	6.0%	0.029	7.0%	0.034	87%	0.427
PROPOSED	21400	0.491	0%	0%	7.0%	0.034	7.0%	0.034	86%	0.422
COMPARISON										

**Equations:**

Weighted E = Ea\**A*a + Eb\**A*b + Ec\**A*c + Ed\**A*d / (Total Area)

Volume = Weighted D \* Total Area

Flow = Qa \* *A*a + Qb \* *A*b + Qc \* *A*c + Qd \* *A*d

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

Ea= 0.62	Qa= 1.71
Eb= 0.8	Qb= 2.36
Ec= 1.03	Qc= 3.05
Ed= 2.33	Qd= 4.34

**DRAINAGE NARRATIVE**  
THIS SITE IS A REDEVELOPMENT OF AN EXISTING SITE. THE OVERALL DEVELOPMENT (CARLISLE CROSSING) WAS ANALYZED BY RESPEC ENGINEERING PER H17D097. THIS SITE IS LOCATED IN EXISTING DRAINAGE BASIN A. THE HISTORICAL DISCHARGE (2.13 CFS) SHEET FLOWED TO THE NORTHWEST CORNER AND INTO CARLISLE. THIS SITE IS LOCATED WITHIN PROPOSED DRAINAGE BASIN 1. AS SHOWN IN THE DRAINAGE REPORT THIS SITE IS ALLOWED TO DISCHARGE 2.03 CFS TO THE NORTHWEST. THE SITE AS PROPOSED WILL DISCHARGE TO THE HISTORICAL OUTFALL AT A RATE OF 2.02 CFS, WHICH IS LESS THAN ALLOWED. THE FEE IN LIEU FOR THE ENTIRE SITE HAS BEEN PAID WITH THE OVERALL DRAINAGE APPROVAL. THIS PLAN CONFORMS TO THE DEVELOPED CONDITION ASSUMPTIONS OF THE APPROVED MASTER DRAINAGE PLAN AND THE CITY OF ALBUQUERQUE DRAINAGE ORDINANCE.

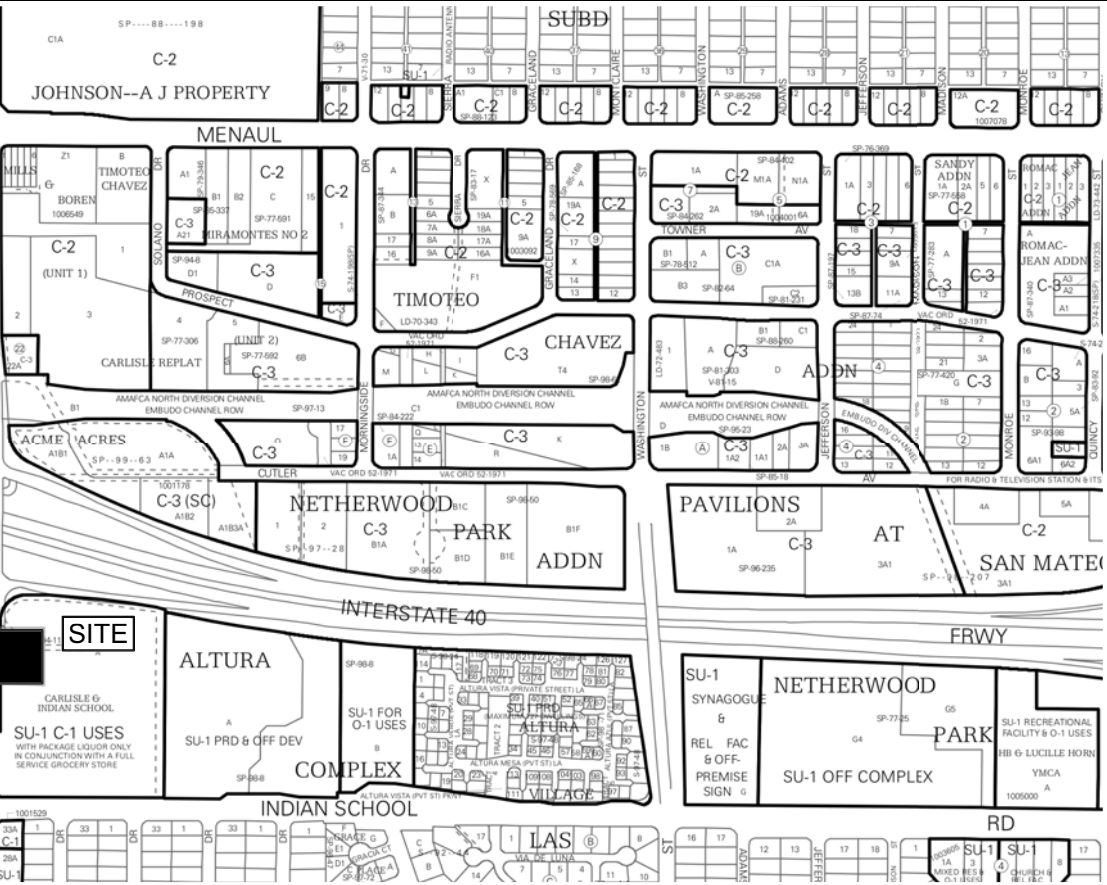
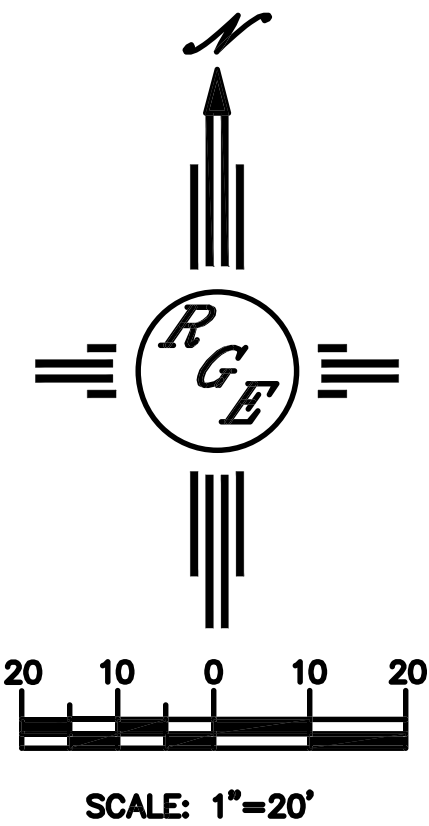
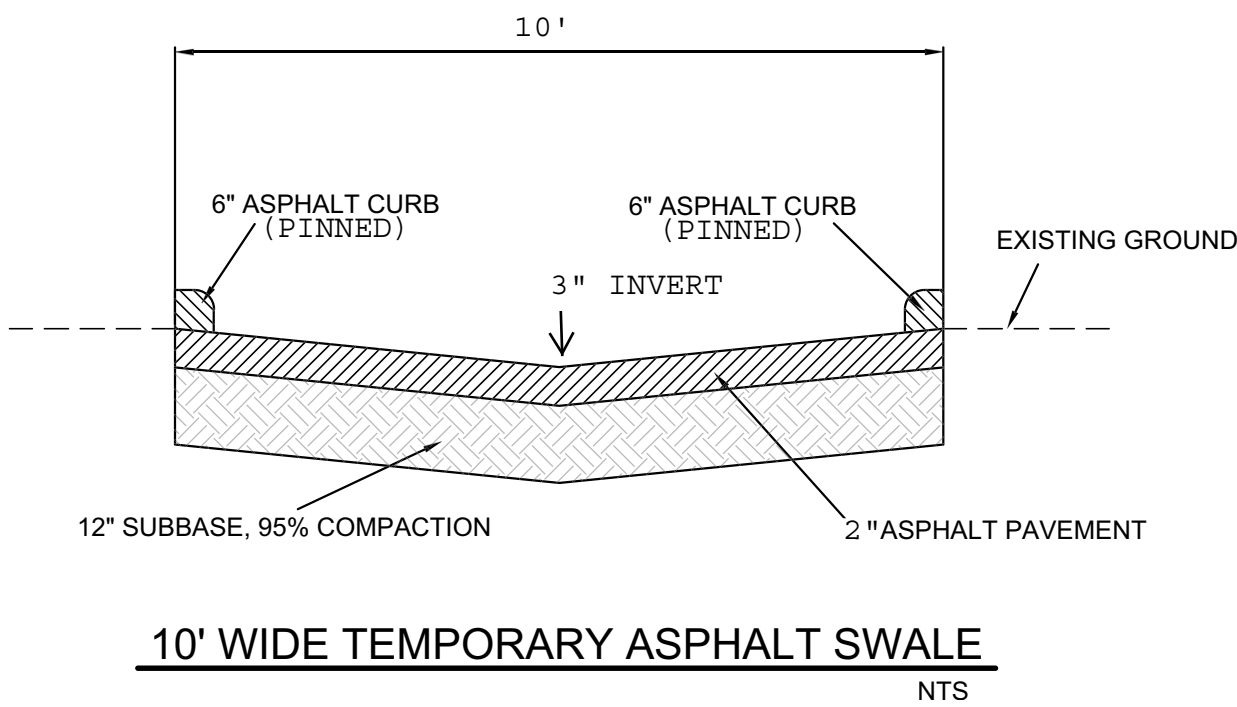
**10' RUNDOWN**

	Top Width (ft)	Bottom Width (ft)	Depth (ft)	Area (ft <sup>2</sup> )	WP (ft)	R	Slope (%)	Q Provided (cfs)	Q Required (cfs)	Velocity (ft/s)
top	10	10	1	10.00	12.00	0.83333333	2.8	110.39	9.24	0.92

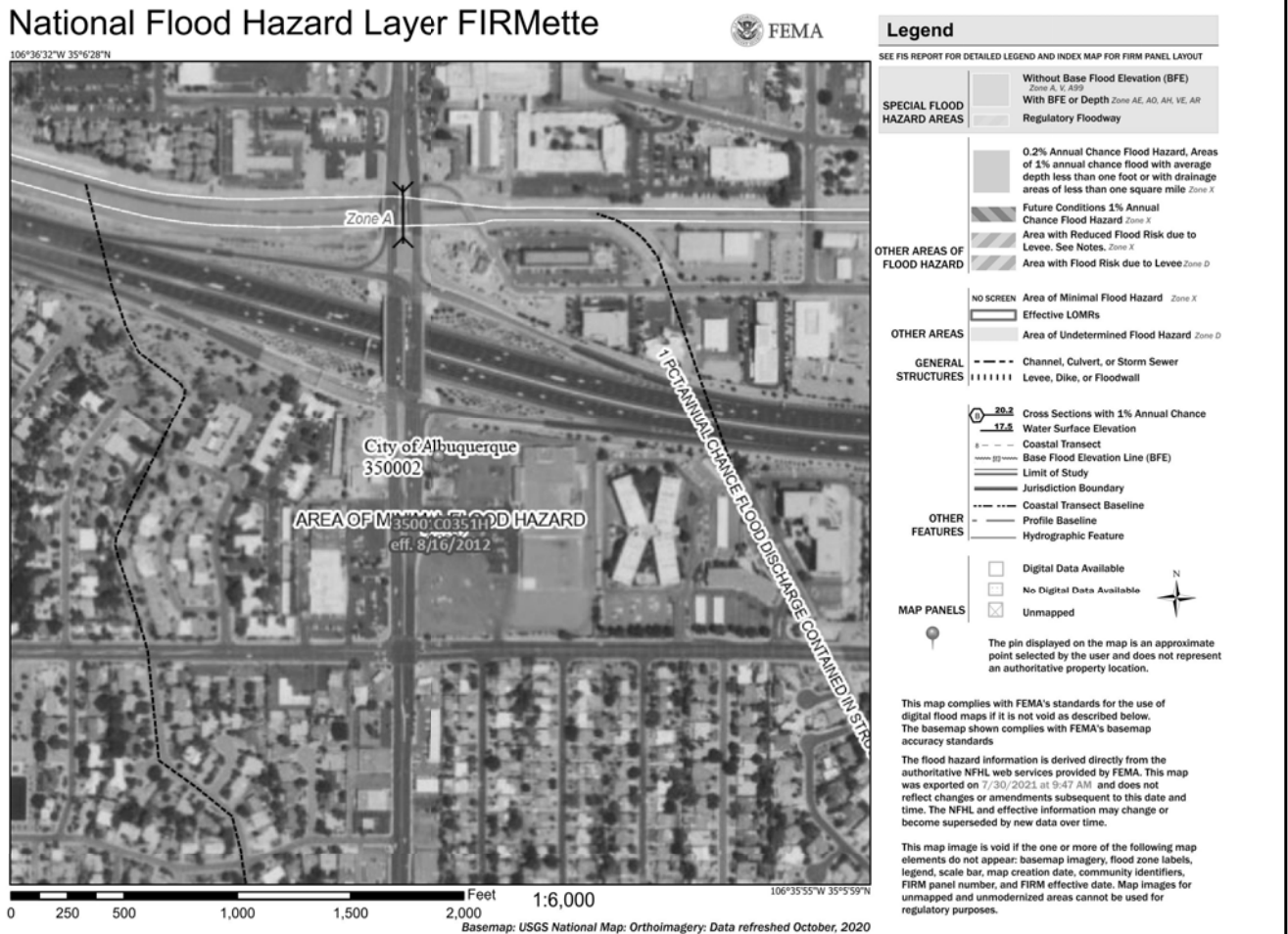
**Manning's Equation:**

$$Q = 1.49/n * A * R^{2/3} * S^{1/2}$$

A = Area  
R = D/4  
S = Slope  
n = 0.02



**VICINITY MAP: H-17-Z**



**FIRM MAP:**

**LEGAL DESCRIPTION:**

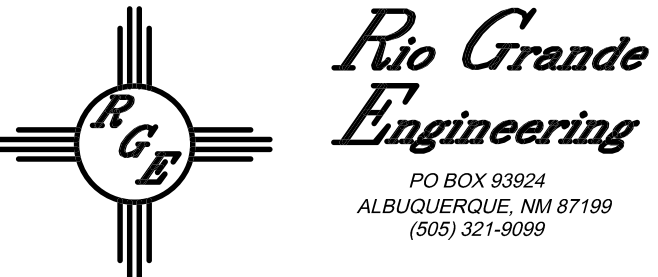
REMAINING PORTIONS OF TRACTS A AND B CARLISLE & INDIAN SCHOOL SUBDIVISION CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO

**NOTES:**

1. ALL SPOT ELEVATIONS REPRESENT FLOWLINE ELEVATION UNLESS OTHERWISE NOTED.
2. ALL SLOPES SHALL BE 3:1 MAX. AND GRAVEL OR NATIVE SEEDING PRIOR TO CO.
3. ANY PERIMETER WALLS MUST BE PERMITTED SEPARATELY ALL RETAINING WALL DESIGN SHALL BE BY OTHERS.
4. SURVEY INFORMATION PROVIDED BY COMMUNITY SCIENCES CORPORATION USING NAVD DATUM 1988.
5. A PAD ELEVATION CERTIFICATION SHALL BE REQUIRED PRIOR TO RELEASE OF BUILDING PERMIT.

**LEGEND**

-----XXXX-----	EXISTING CONTOUR
-----XXXX-----	EXISTING INDEX CONTOUR
-----XXXX-----	PROPOSED CONTOUR
-----XXXX-----	PROPOSED INDEX CONTOUR
+ XXXXX	EXISTING SPOT ELEVATION
● XXXX	PROPOSED SPOT ELEVATION
-----	BOUNDARY
-----	ADJACENT BOUNDARY
=====	EXISTING CURB AND GUTTER
-----<-----	PROPOSED EARTHEN SWALE
-----<-----	PROPOSED LIMITS OF NEW PAVEMENT
-----<-----	PROPOSED CONCRETE

ENGINEER'S SEAL	TRACT B-1 AND PORTIO OF A-1 CARLISLE AND INDIAN SCHOOL SUBD. BURGER KING-2110 CARLISLE	DRAWN BY DEM
DAVID SOULE NEW MEXICO REGISTERED PROFESSIONAL ENGINEER 14522		DATE 8-1-21
8/3/21	<b>DRAINAGE PLAN</b>	2100 Carlisle Blvd (Burger King).dwg
DAVID SOULE P.E. #14522		SHEET # <b>C1</b>
		JOB #