CITY OF ALBUQUERQUE

Planning Department Alan Varela, Director



Mayor Timothy M. Keller

June 22, 2023

John Stapleton, P.E. Respec 5971 Jefferson St. NE Albuquerque, NM 8710

RE: **Cheddars - Cottonwood Grading & Drainage Plans** Engineer's Stamp Date: 06/13/23 Hydrology File: B14D004G

Dear Mr. Stapleton:

PO Box 1293

NM 87103

Based upon the information provided in your submittal received 06/15/2023, the Grading & Drainage Plans are approved for Building Permit and Grading Permit. 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 CERTIFICATE OF OCCUPANCY:

Albuquerque 1. Engineer's Certification, per the DPM Part 6-14 (F): Engineer's Certification Checklist For Non-Subdivision is required.

2. Please pay the Payment-in-Lieu of \$ 6,304.00 by emailing the attached approved Waiver Application from Stormwater Quality Volume Management On-site to PLNDRS@cabg.gov. Once this is received, a receipt will then be produced and email back. Follow the instructions on the bottom of the form and pay it at the Treasury in Plaza de Sol. Once paid, please provide me proof of payment. www.cabq.gov

> 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.

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

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City of Albuquerque

Planning Department Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 6/2018)

Project Title: Cheddars Developm	nent Building P	ermit # <u>:</u>	Hydrology	y File #:
DRB#:	EPC#:		Work Ord	ler#:
Legal Description: TR B4A PLAT OF	TRACTS A-1-A, B-1-A-1, B-1	-B-1, B-2-A, B-3-A,B-4-A	& B-5-A-1 Sec Rev Plat C	Cottonwood Mall 11.6511AC
City Address: 1013065465394106	02			
Applicant:			Contact:	
Address:				
Phone#:	Fax#:		E-mail:	
Other Contact: RESPEC			Contact: Jo	ohn Stapleton
Address: 7770 Jefferson Street NI	E, Suite 200, Albuquerqu	ie NM 87109		
Phone#: 505.545.9607	Fax#:		E-mail: johr	n.stapleton@respec.com
TYPE OF DEVELOPMENT:	PLAT (# of lots)	RESIDENCE	X DRB SITE	ADMIN SITE
IS THIS A RESUBMITTAL?	Yes X No			
DEPARTMENT TRANSPOR	TATION X HY	DROLOGY/DRAIN.	AGE	
Check all that Apply: TYPE OF SUBMITTAL: PAD CERTIFICATION CONCEPTUAL G & D PLAN X GRADING PLAN X DRAINAGE REPORT DRAINAGE MASTER PLAN FLOODPLAIN DEVELOPMENT ELEVATION CERTIFICATE CLOMR/LOMR TRAFFIC CIRCULATION LAY TRAFFIC IMPACT STUDY (TI STREET LIGHT LAYOUT OTHER (SPECIFY) PRE-DESIGN MEETING?	TIFICATION T PERMIT APPLIC OUT (TCL) S)	TYPE OF API X BUILDIN CERTIFIC PRELIMI SITE PLA SITE PLA FINAL P SIA/ REL FOUNDA X GRADIN X SO-19 AI PAVING GRADIN WORK OF CLOMR/ FLOODP OTHER (PROVAL/ACCEPTA IG PERMIT APPROV CATE OF OCCUPAN NARY PLAT APPROV AN FOR SUB'D APP AN FOR BLDG. PER LAT APPROVAL LEASE OF FINANCL ATION PERMIT APPROV G PERMIT APPROVAL PERMIT APPROVAL PERMIT APPROVAL G/ PAD CERTIFICA RDER APPROVAL LOMR LAIN DEVELOPMEN	ANCE SOUGHT: YAL ICY OVAL PROVAL MIT APPROVAL AL GUARANTEE PROVAL YAL AL AL AL MIT PERMIT
DATE SUBMITTED: 06/14/2023	By:By	n Stapleton	h that Matter	<u> </u>
		/		
COA STAFF:	ELECTRONI	C SUBMITTAL RECEIVE	D:	
	FEE PAID:			

CITY OF ALBUQUERQUE PLANNING DEPARTMENT HYDROLOGY DEVELOPMENT SECTION

WAIVER APPLICATION FROM STORMWATER QUALITY VOLUME MANAGEMENT ON-SITE

DATE: 6/13/2023

GENERAL INFORMATION

APPLICANT: Cheddars DEVELOPMENT: Restaurant LOCATION: 10000 Coors Blvd

NW

STORMWATER QUALITY POND VOLUME

Per the DPM Article 6-12 - Stormwater Quality and Low-Impact Development, the calculated sizing for required Stormwater Quality Pond volume is equal to the impervious area draining to the BMP multiplied by 0.42 inches for new development sites and by 0.26 inches for redevelopment sites.

The required volume is	788	cubic feet
The provided volume is	0	cubic feet
The deficient volume is	788	cubic feet

WAIVER JUSTIFICATION

Per the DPM Article 6-12(C), private off-site mitigation and payment-in-lieu may only be considered if management on-site is waived in accordance with the following criteria and procedures.

1. Management on-site shall be waived by the City Engineer if the following conditions are met:

- a. Stormwater quality can be effectively controlled through private off-site mitigation or through an arrangement (approved by the City) to use a cooperator's existing regional stormwater management infrastructure or facilities that are available to control stormwater quality.
- b. Any of the following conditions apply:
 - i. The lot is too small to accommodate management on site while also accommodating the full plan of development.
 - ii. The soil is not stable as demonstrated by a geotechnical report certified by a professional engineer licensed in the State of New Mexico.
 - iii. The site use is inconsistent with the capture and reuse of stormwater.
 - iv. Other physical conditions exist where compliance with on-site stormwater quality control leaves insufficient area.
 - v. Public or private off-site facilities provide an opportunity to effectively accomplish the mitigation requirements of the Drainage Ordinance (Part 14-5-2 ROA 1994) as demonstrated on as-built construction drawings and an approved drainage report.
 - vi. The developer constructs a project to replenish regional groundwater supplies at an off-site location.
 - vii. A waiver to State water law or acquisition of water rights would be required in order to implement management on site.
- 2. The basis for requesting payment-in-lieu or private off-site mitigation is to be clearly demonstrated on the drainage plan.

This project's justification: Highlighted above. Also see Attached.



Sheldon Greer, P.E. NMPE No. 17154

6/13/2023

Date

PAYMENT-IN-LIEU

Per the DPM Article 6-12(C)(1), the amount of payment-in-lieu is deficient volume (cubic feet) times \$6 per cubic feet for detached single-family residential projects or \$8 per cubic feet for all other projects.

AMOUNT OF PAYMENT-IN-LIEU = 6,304

THIS SECTION IS FOR CITY USE ONLY

X Waiver is approved. The amount of payment-in-lieu from above must be paid prior to Certificate of Occupancy.



Waiver is DENIED.

Renée C. Brissette

06/22/23

City of Albuquerque Hydrology Section



EXISTING CATCH BASIN - RIM: 5063.00' 18" RCP SE INV: 5058.15'



SUBBASIN BOUNDARY EXISTING FLOW ARROW PROPOSED FLOW ARROW



SCALE: NTS

DRAINAGE SUMMARY

Background Tract B-4-A-2 contains approximately 0.9 acres. The site is located within the parking lot west of Cottonwood Mall and east of Coors Blvd Bypass NW. The site does not receive any offsite runoff from developed areas and, in general, surface drains towards the northeast and southeast. The existing site is an asphalt parking lot serving Cottonwood Mall. An 6,646 SF commercial building is proposed to be installed with asphalt paved parking lot and increased landscape area. The site is proposed to match existing drainage characteristics while reducing discharge flow rates due to the decrease in impervious areas.

Methodology

The development assumptions and criteria including land treatment types and impervious areas, as well as the hydrologic analyses for the site were performed in accordance with the City of Albuquerque Development Process Manual (DPM). Calculations were performed per article 6-2 of the DPM to develop peak flow rates for the 100-year 24-hour design storm.

Existing Conditions

The site is currently a parking lot with asphalt surfacing serving the Cottonwood Mall. It contains approximately 0.86 ac impervious area. The site has mild slopes ranging from 1% to 5%. It is divided into two portions by an east-west high point near the center of the site. The northern portion of the site sheet flows towards the northeast to an existing offsite inlet within the Cottonwood Mall Parking lot. The southern portion also sheet flows towards the southeast to an existing offsite to an existing of the cottonwood Mall area drains to a storm drain system that ultimately discharges to the Calabacillas Arroyo.

Proposed Conditions

The proposed site development will consist of an 6,646 SF commercial building with asphalt paved parking surface and landscape areas. The intent of the proposed conditions is to maintain the existing drainage characteristics to minimize any potential impacts on the downstream stormwater conveyance system. The site's current high point will remain and stormwater runoff will be conveyed via surface sheet flow and swales towards the northeast and southeast inlets. The site is divided into three subbasins. Below are the hydrologic characteristics of each subbasin.

Subbasin PROP 1 is 0.43 acres and generates 4.1 cfs/ac. This subbasin consists of the northern portion of the site including proposed building, and parts of the landscaping, and asphalt parking lot. The site drainage will include surface sheet flow and discharge stormwater to the northeast, matching existing conditions with eventual discharge into the storm drain system via an offsite inlet.

Subbasin PROP 2 is 0.30 acres and generates 3.9 cfs/ac. This siubbasin consists of the portion of the site including part of the landscaping, and asphalt parking lot. This subbasin will surface sheet flow and discharge stormwater to the proposed inlet. The proposed inlet is located in the south side parking lot which connects to the existing storm drain manhole via 12in storm drain pipe.

Subbasin PROP 3 is 0.17 acres and generates 4.1 cfs/ac. This subbasin consists of the southern portion of the site including part of the landscaping, and asphalt parking lot. The site drainage will include surface sheet flow and discharge stormwater to the southeast, matching existing conditions with eventual discharge into the storm drain system via an offsite inlet.

HYDROLOGY CALCULATIONS

The following calculations are based on Albuquergue's Development Process Manual (DPM), Article 6-2.

Runoff Rate:

Treatment Type Areas					
Subbasin	Total Acea (ac)	Area _A (ac)	Area _B (ac)	Area _c (ac)	Area _D (ac)
EX	0.90	0.00	0.00	0.04	0.86
PROP 1	0.43	0.00	0.00	0.02	0.41
PROP 2	0.30	0.00	0.00	0.04	0.26
PROP 3	0.17	0.00	0.00	0.004	0.171
100-yr Peak Discharge values based on Zone 1 from Table 6.2.14					

 $Q_A = 1.54 \text{ cfs/ac}$ $Q_B = 2.16 \text{ cfs/ac}$ $Q_C = 2.87 \text{ cfs/ac}$ $Q_D = 4.12 \text{ cfs/ac}$

Peak Discharge calculation for a 100-yr, 24-hour storm event from equation 6.6

Subbasin	Discharge (cfs)	Discharge (cfs/acre)
EX1	3.7	4.1
PROP 1	1.7	4.1
PROP 2	1.2	3.9
PROP 3	0.7	4.1

WATER QUALITY PONDING					
	lmp. Area (ac)	WQ Depth (in)	Required WQ Vol (cu ft)	Provided WQ Vol (cu ft)	Net WQ Vol (cu ft)
ſ	0.835	0.26	788	0	-788





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LOCATION MAP ZONE ATLAS MAP B-13-Z

FEMA FIRM NUMBER 35001C0108G







RESPEC



	PROPERTY BOUNDARY
5272	PROPOSED MAJOR CONTOUR
5272	PROPOSED MINOR CONTOUR
5272	EXISTING MAJOR CONTOUR
— — 5272 — —	EXISTING MINOR CONTOUR
	LIMITS OF DISTURBANCE
$\rightarrow \rightarrow$	FLOWLINE
$\sim \sim \sim \sim \sim$	GRADE BREAK / HIGH POINT
	EXTENDED CURB

20.00	FLOWLINE
- 20.00 TA	TOP OF ASPHALT
20.00 TG	TOP OF GRATE
-20.00 SW	SIDEWALK
-20.00 EX	EXISTING
-20.00 TC	TOP OF CONCRE

GRADES GREATER THAN 5% CONSULT WITH ENGINEER PRIOR TO CONSTRUCTION.

EVERY 32" ON CENTER AND ----AT ALL CORNERS

KEYED NOTES

- 1 INSTALL AREA DRAIN ZURN Z507 OR EQUAL. WARP CONCRETE TO DRAIN TO AREA DRAIN AT SLOPES BETWEEN $\frac{1}{8}$ " PER FT AND $\frac{1}{4}$ " PER FT
- 2 SAWCUT AND MATCH GRADE AT EXISTING ASPHALT
- (3) INSTALL 1' WIDE CURB OPENING. SEE DETAILS ON THIS SHEET
- 4 INSTALL 3"-4" DIAMETER BROKEN ROCK 6" DEEP.
- 5 TIE TO EXISTING CURB
- 6 INSTALL EXTENDED CURB PER DETAIL ON THIS SHEET.
- (7) INSTALL NYLOPLAST 2'X2' ROAD AND HIGHWAY GRATE ON A 24" DIAMETER CATCH BASIN OR ENGINEER APPROVED EQUIVALENT. INSTALL PER MANUFACTURER SPECIFICATIONS. INLET INVERT = 5061.33
- 8 INSTALL 49 LF OF 12 NCH DIAMETER HDPE STORM DRAIN PIPE @ 1% MIN. SLOPE
- 9 TIE TO EXISTING MANHOLE. PROPOSED INV ELEV @ EX MH= 5060.84
- $\langle 10 \rangle$ WARP CONCRETE TO DRAIN ALONG THE BACK OF THE EXTENDED CURB INTO THE LANDSCAPE.
- (11) INSTALL 20 LF OF 4" DIAMETER PVC PIPE (1% MIN. SLOPE)
- SLOPE DUMPSTER ENCLOSURE PADS TO DRAIN TO AREA DRAINS. SEE ARCHITECTURAL PLANS FOR DUMPSTER ENCLOSURE DETAILS.
- EXISTING DRY UTILITIES SHALL BE PROTECTED INPLACE. CONTRATOR SHALL ENSURE ADEQUATE COVER REMAINS OVER THE EXISTING UTILITIES PER UTILITY PROVIDER SPECIFICATIONS.

GRADING GENERAL NOTES

- 1. CONTRACTOR SHALL FIELD VERIFY SIZE'S AND LOCATION AND ELEVATION OF ALL EXISTING DRY AND WET UTILITIES PRIOR TO ANY CONSTRUCTION AND NOTIFY ENGINEER OF ANY ISSUES. UTILITY RELOCATION MAY BE REQUIRED
- 2. GRADES SHOWN ARE FINAL SURFACE GRADES AFTER COMPLETION OF SURFACE IMPROVEMENTS AND PLACEMENTS OF TOPSOIL.
- 3. GRADE ADJACENT AREAS AT SITE PERIMETER SHALL MATCH GRADE OF ADJACENT PARCELS.
- 4. PROVIDE TEMPORARY GRADING FEATURES SUCH AS BERMS, SWALES, SUMPS, AND BASINS TO MANAGE INTERIM STORM WATER RUNOFF DURING CONSTRUCTION PROCESS. STORM WATER RUNOFF LEAVING THE SITE SHALL MEET ALL FEDERAL, STATE AND LOCAL QUALITY REQUIREMENTS.
- 5. REFER TO GEOTECHNICAL ENGINEERING SERVICES REPORT NO. A19-800 BY EARTHWORKS ENGINEERING GROUP DATED JANUARY 20, 2020.
- 6. COMPOSITE SLOPE IN HANDICAP PARKING SHALL NOT EXCEED 2% IN ANY DIRECTION. 7. CROSS SLOPE ON ADA CROSSWALKS SHALL NOT EXCEED 2%. LONGITUDINAL SLOPE
- SHALL NOT EXCEED 5%. 8. LONGITUDINAL SLOPE ON CURB RAMP SHALL NOT EXCEED 8.33%. CROSS SLOPE SHALL
- NOT EXCEED 2%. 9. COMPOSITE SLOPE ON RAMP LANDINGS SHALL NOT EXCEED 2%.
- 10. CROSS SLOPES ON SIDEWALKS SHALL NOT EXCEED 2%. LONGITUDINAL SLOPES ON
- ONSITE SIDEWALKS SHALL NOT EXCEED 5%. 11. SLOPE LABELS SHOW APPROXIMATE SLOPES ONLY. WHERE SLOPE LABELS AND SPOT
- ELEVATION LABELS CONFLICT, SPOT ELEVATION LABELS SHALL GOVERN AND THE SURVEYOR RESPONSIBLE FOR CONSTRUCTION STAKING SHALL CONTACT THE ENGINEER.
- 12. INSTALL PAVING PER PAVEMENT SECTION RECOMMENDED BY THE SITE GEOTECHNICAL REPORT.
- 13. NOT IN USE.
- 14. LONGITUDINAL SLOPES ON SIDEWALKS ADJACENT TO PUBLIC ROADS SHALL NOT EXCEED THE SLOPE OF THE PUBLIC ROAD.
- 15. WHERE THIS PLAN IS SILENT REGARDING SURFACE TREATMENT, REFER TO THE
- LANDSCAPING PLAN. DISTURBED AREAS WITHOUT SURFACE IMPROVEMENTS SPECIFIED IN THE LANDSCAPING OR GRADING PLAN SHALL BE RESEEDED WITH A NATIVE SEEDING MIX. IF THE LANDSCAPING AND GRADING PLAN CONFLICT REGARDING SURFACE TREATMENTS, THE GRADING PLAN SHALL GOVERN.

- EXTENDED CURB GENERAL NOTES
- CURB, GUTTER AND CUT-OFF WALL SHALL BE CONSTRUCTED OF PORTLAND CEMENT CONCRETE (PCC), 3000 PSI MINIMUM STRENGTH.
- PROVIDE VERTICAL EXPANSION JOINTS IN WALL AND CURB AT 16' MAXIMUM SPACING, AT ALL CORNERS, AND AT
- BEGINNING AND END OF EXTENDED CURB. 3. ALL REBAR SHALL BE GRADE 60. 4. 18" MINIMUM REBAR LAP LENGTH

RESPEC

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