## CITY OF ALBUQUERQUE

Planning Department Alan Varela, Director



December 22, 2022

David B. Thompson, P.E. Thomson Engineering Consultants P.O. Box 65760 Albuquerque, NM 87193

RE: Stripe Burritos Tract C-1-B, Albuquerque West 2781 57<sup>th</sup> Street NW, Albuquerque Grading Plan Engineer's Stamp Date: 11/8/2022

**Hydrology File: H11D073** 

Dear Mr. Thompson,

Based upon the information provided in your submittal received 12/22/2022, the Grading & Drainage Plan is approved for Grading Permit and Building Permit approval. Please attach a copy of this approved plan in the construction sets for Building Permit processing along with a copy of this letter.

PO Box 1293

#### 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.

NM 87103

2. Please pay the Payment-in-Lieu of \$ 632.00 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 produce and email back with instructions on how to pay online. Once paid, please email 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 (Doug Hughes, PE, jhughes@cabq.gov, 505-924-3420) 14 days prior to any earth disturbance.

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

Sincerely,

Tiequan Chen, P.E.

Principal Engineer, Hydrology

Planning Department, Development Review Services



# City of Albuquerque

# Planning Department Development & Building Services Division

#### DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 11/2018)

Project Title:	Building P	Permit #:	Hydrology File #: Work Order#:			
DRB#:	EPC#:					
Legal Description:						
City Address:						
Applicant:			Contact:			
Address:						
			E-mail:			
Owner:			Contact:			
Address:						
			E-mail:			
TYPE OF SUBMITTAL:PLA	Γ (# OF LOTS)	RESIDENCE	_ DRB SITE ADMIN SITE			
IS THIS A RESUBMITTAL?:	Yes	No				
DEPARTMENT: TRAFFIC/ T	RANSPORTATION _	HYDROLOG	Y/ DRAINAGE			
Check all that Apply:  TYPE OF SUBMITTAL:  ENGINEER/ARCHITECT CERTON  CONCEPTUAL G & D PLAN  GRADING PLAN  DRAINAGE MASTER PLAN  DRAINAGE REPORT  FLOODPLAIN DEVELOPMENTON  ELEVATION CERTIFICATE  CLOMR/LOMR  TRAFFIC CIRCULATION LAY  TRAFFIC IMPACT STUDY (TIEST)  OTHER (SPECIFY)  PRE-DESIGN MEETING?	PERMIT APPLIC OUT (TCL)	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 APPROVAI  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:

#### DRAINAGE PLAN:

LEGAL DESCRIPTION: TRACT C-1-B, ALBUQUERQUE WEST

SITE AREA: 0.6464 ACRES

BENCHMARK: ACS BM 19-H11, ELEV = 5107.965, NAVD 1988

FLOOD HAZARD STATEMENT: F.E.M.A. FLOODWAY BOUNDARY AND FLOODWAY MAP DATED NOVEMBER 4, 2016 (PANEL NO. 35001C0327J) INDICATES A FLOOD HAZARD ZONE X WHICH IS AN AREA DETERMINED TO BE OUTSIDE THE 500-YEAR FLOODPLAIN.

#### **EXISTING DRAINAGE CONDITIONS:**

THE DRAINAGE ANALYSIS FOR THIS SITE IS IN ACCORDANCE WITH CHAPTER 6, ARTICLE 6-2, SECTION 6-2(A), ENTITLED "PROCEDURE FOR 40-ACRE AND SMALLER BASINS." THE DESIGN STORM USED FOR BOTH UNDEVELOPED AND DEVELOPED CONDITIONS IS THE 100-YEAR, 6-HOUR STORM EVENT FOR RUNOFF. THE SITE IS LOCATED IN ZONE 1 SO THE 100-YEAR, 6-HOUR STORM EVENT IS 2.17 INCHES. THE SITE IS LOCATED JUST SOUTH OF THE INTERSECTION OF QUAIL AND 57TH STREET NW. CURRENTLY THE SITE DRAINS FROM WEST TO EAST TO 57TH STREET. THE EXISTING PEAK RUNOFF FROM THE SITE UNDER EXISTING CONDITIONS IS 1.88 CFS DURING A 100-YEAR, 6-HOUR STORM. THERE ARE NO OFF-SITE FLOWS THAT REACH THE PROPERTY.

#### **DEVELOPED DRAINAGE CONDITIONS:**

THIS PROJECT INVOLVES THE CONSTRUCTION OF A STRIPES BURRITOS WITH PARKING AND LANDSCAPING. THE SITE HAS BEEN DIVIDED INTO FIVE DRAINAGE BASINS TO FOLLOW THE WATER QUALITY PONDS. BASIN A INCLUDES THE NORTHWEST PORTION OF THE SITE AND THE BUILDING. BASIN A DRAINS TO A WATER QUALITY POND IN THE LANDSCAPED AREA NORTH AND WEST OF THE BUILDING WITH A VOLUME OF 320 CF. BASIN B INCLUDES THE SOUTHWEST PART OF THE SITE. BASIN B DRAINS TO A WATER QUALITY POND WITH A VOLUME OF 106 CF. BASIN C INCLUDES THE SOUTHEST PART OF THE SITE. BASIN C DRAINS TO A WATER QUALITY POND WITH A VOLUME OF 363 CF. THE BASIN C WATER QUALITY POND DRAINS THROUGH A 24-INCH SIDEWALK CULVERT TO 57TH STREET. BASIN D INCLUDES THE AREA JUST EAST OF THE BUILDING. BASIN D DRAINS TO A WATER QUALITY POND WITH A VOLUME OF 30 CF. AND BASIN E INCLUDES THE NORTHEAST PART OF THE SITE. BASIN E DRAINS DIRECTLY TO 57TH STREET. THE WATER QUALITY POND IN BASIN A INCLUDES THE ADDITIONAL WATER QUALITY VOLUME OF 80 CF FROM BASIN E. BASINS A, B, C, AND D ALL DRAIN TO THE WATER QUALITY POND AT THE SOUTHEAST CORNER OF THE SITE AND TO 57TH STREET VIA A 24-INCH SIDEWALK CULVERT.

BASIN A WATER QUALITY VOLUME = (0.42IN/12IN/FT) x ((0.653 x .2401)) x 43,560SF/AC) = 240 CF REQUIRED, 320 CF PROVIDED

BASIN B WATER QUALITY VOLUME = (0.42IN/12IN/FT) x ((0.91 x .0762)) x 43,560SF/AC) = 106 CF REQUIRED, 106 CF PROVIDED

BASIN C WATER QUALITY VOLUME = (0.42IN/12IN/FT) x ((0.963 x .2474)) x 43,560SF/AC) = 363 CF REQUIRED, 363 CF PROVIDED

BASIN D WATER QUALITY VOLUME = (0.42IN/12IN/FT) x ((0.705 x .0267)) x 43,560SF/AC) = 29 CF REQUIRED, 30 CF PROVIDED

BASIN E WATER QUALITY VOLUME = (0.42IN/12IN/FT) x ((0.922 x .0560)) x 43,560SF/AC) = 79 CF REQUIRED, 0 CF PROVIDED. THE DEVELOPER WILL COMPLETE A WAIVER APPLICATION AND PROVIDE TO THE CITY A PAYMENT-IN-LIEU OF \$632.00, WHICH IS \$8 PER CF FOR THE FIRST FLUSH VOLUME OF 79 CF.

SIDEWALK CULVERT CAPACITY, WEIR EQUATION = (2.7) x (2FT) X (7IN/12IN/FT)^1.5 = 2.4 CFS

### REV. 01/22/21

## Private Drainage Facilities within City Right-of-Way

Notice to Contractor (Special Order 19 ~ "SO-19")

- 1. Build sidewalk culvert per COA STD DWG 2236. Work is permitted and inspected by DMD Construction Services Division.
- An excavation permit will be required before beginning any work within City Right-Of-Way.
- All work on this project shall be performed in accordance with applicable federal, state and local laws, rules
- and regulations concerning construction safety and health. 4. Prior to any excavation, the contractor must contact New Mexico One Call, dial "811" [or (505) 260-1990] for
- the location of existing utilities. Prior to construction, the contractor shall excavate and verify the locations of all obstructions. Should a conflict exist, the contractor shall notify the engineer so that the conflict can be resolved with a minimum amount of delay.
- Backfill compaction shall be 95%.
- Maintenance of the facility shall be the responsibility of the owner of the property being served.
- Work on arterial streets may be required on a 24-hour basis.
- 9. For excavation and barricading inspections, contact DMD Construction Services Division.

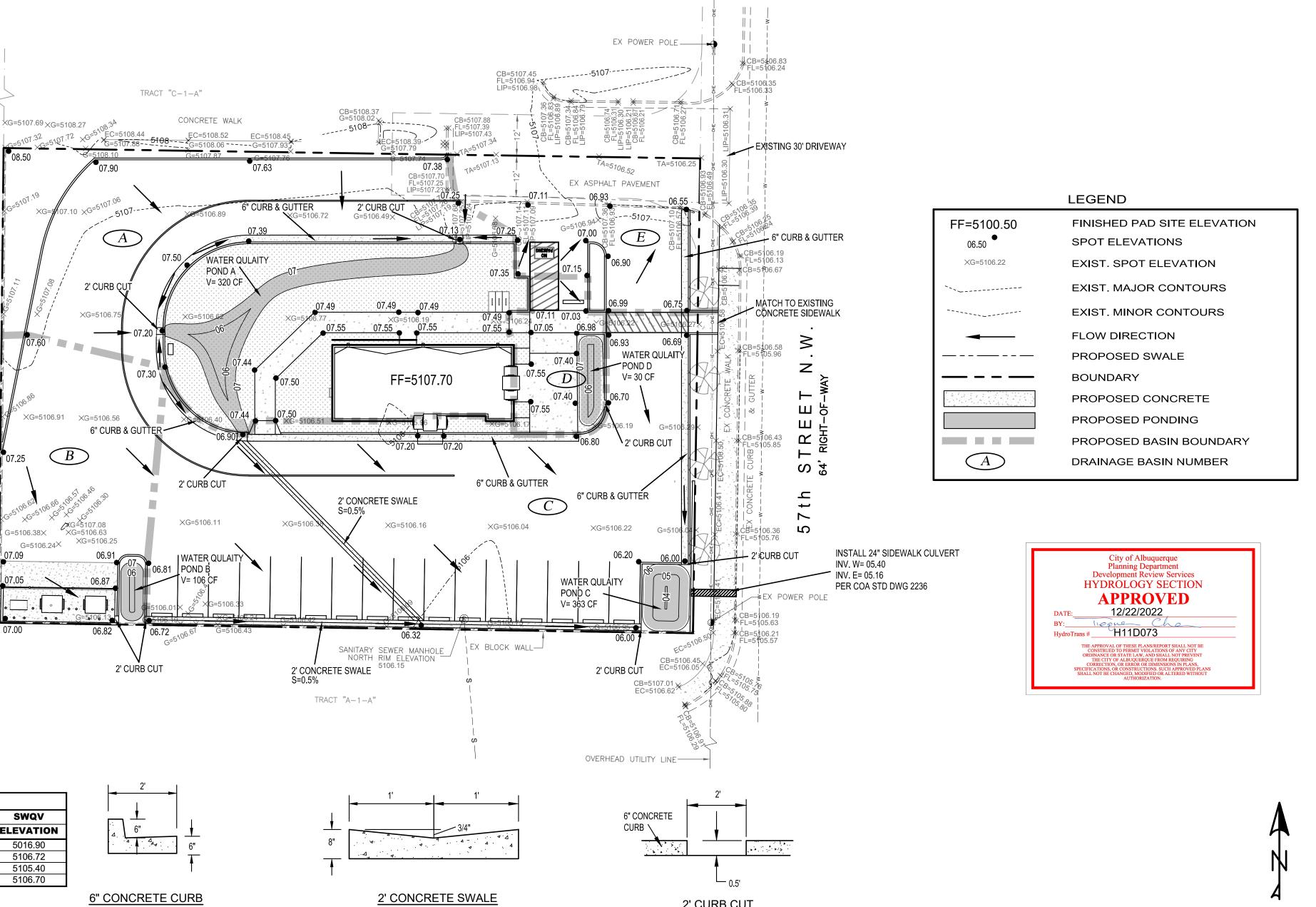
		LAND TREATMENT WEIGHTED 100-YEAR PRECIPITATION							TATION				
BASIN	AREA	Α	В	С	D	E	V (6-hr)	V (6-hr)	V(24-hr)	V(24-hr)	Q		
#	(acre)	(%)	(%)	(%)	(%)	(in)	(acre-ft)	(cu-ft)	(acre-ft)	(cu-ft)	(cfs)		
EXISTING CONDITIONS													
Α	0.2401	0.00	0.00	100.00	0.00	0.95	0.02	828	0.02	828	0.69		
В	0.0762	0.00	0.00	100.00	0.00	0.95	0.01	263	0.01	263	0.22		
С	0.2474	0.00	0.00	100.00	0.00	0.95	0.02	853	0.02	853	0.71		
D	0.0267	0.00	0.00	100.00	0.00	0.95	0.00	92	0.00	92	0.08		
E	0.0560	0.00	0.00	57.50	42.50	1.50	0.01	305	0.01	332	0.19		
TOTAL RUNOFF	0.6464						0.05	2,341	0.05	2,368	1.88		
			ll II	NTERIM I	DEVELO	PMENT CON	DITIONS						
Α	0.2401	0.00	17.30	17.40	65.30	1.75	0.04	1,529	0.04	1,711	0.86		
В	0.0762	0.00	4.50	4.50	91.00	2.11	0.01	585	0.02	665	0.30		
С	0.2474	0.00	1.80	1.90	96.30	2.19	0.05	1,965	0.05	2,242	1.00		
D	0.0267	0.00	14.70	14.80	70.50	1.83	0.00	177	0.00	199	0.10		
E	0.0560	0.00	3.90	3.90	92.20	2.13	0.01	433	0.01	493	0.22		
TOTAL RUNOFF	0.6464						0.11	4,689	0.12	5,310	2.48		
EXCESS PRECIP.		0.55	0.73	0.95	2.24	Ei (in)			l				
PEAK DISCHARGE		1.54	2.16	2.87	4.12	Q <sub>Pi</sub> (cfs)							
WEIGHTED E (in) = (E <sub>A</sub> )(%A) + (E <sub>B</sub> )(%B) + (E <sub>C</sub> )(%C) + (E <sub>D</sub> )(%D) V <sub>6-HR</sub> (acre-ft) = (WEIGHTED E)(AREA)/12 V₁0DAY (acre-ft) = V <sub>6-HR</sub> + (A <sub>D</sub> )(P₁0DAY - P <sub>6-HR</sub> )/12					, , ,	$ZONE = 1$ $P_{6-HR}$ (in.) = 2.17 $P_{24-HR}$ (in.) = 2.49 $P_{10DAY}$ (in.) = 3.90							

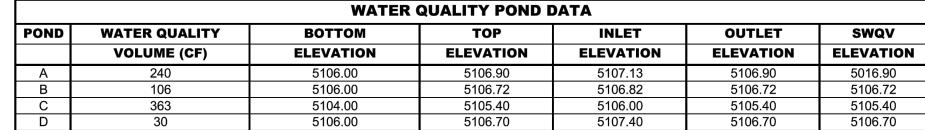
 $Q (cfs) = (Q_{PA})(A_A) + (Q_{PB})(A_B) + (Q_{PC})(A_C) + (Q_{PD})(A_D)$ 

EX BLOCK WALL-

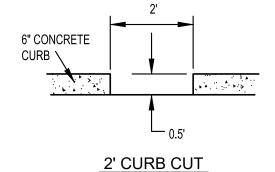
**100-YEAR HYDROLOGIC CALCULATIONS** 

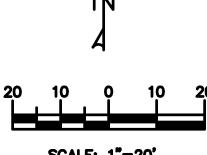
**CAUTION:** EXISTING UTILITIES ARE NOT SHOWN. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO CONDUCT ALL NECESSARY FIELD INVESTIGATIONS PRIOR TO ANY EXCAVATION TO DETERMINE THE ACTUAL LOCATION OF UTILITIES & OTHER IMPROVEMENTS. BLUFF CENTER **ZONE ATLAS: H-11-Z** 

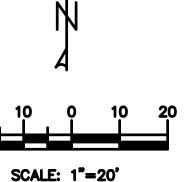












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SHEET No.

STRIPES BUR 57th Street NW New Mexico 8