CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Director

Mayor Timothy M. Keller

February 6, 2023

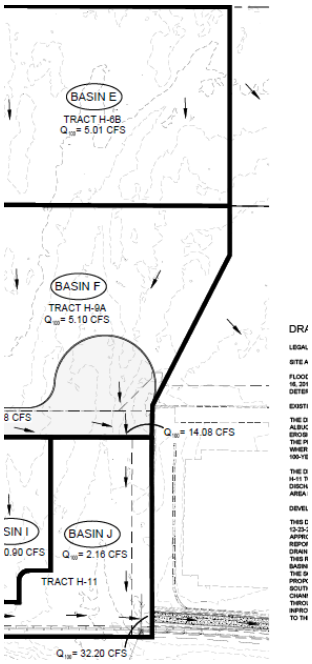
David Thompson, PE
Thompson Engineering Consultants, Inc.
PO Box 65760
Albuquerque, NM 87193

RE: Ventana Square – Tract H-6B-1
Grading and Drainage Plan
Engineer's Stamp Date: 09/23/22
Hydrology File: B10D003C3C

Dear Mr. Thompson:

Based upon the information provided in your submittal received 10/03/2022, the Grading & Drainage Plan **is not** approved for Building Permit and for action by the DRB on Site Plan for Building Permit and Preliminary Plat. The following comments need to be addressed for approval of the above referenced project:

1. According to the stamped approved Drainage Management Plan with engineer's stamp date 07/30/21, This project was to drain to the west and not be included within the designed 14.08 cfs that drains through an existing swale to the concrete channel which ultimately discharges into the temporary retention pond.



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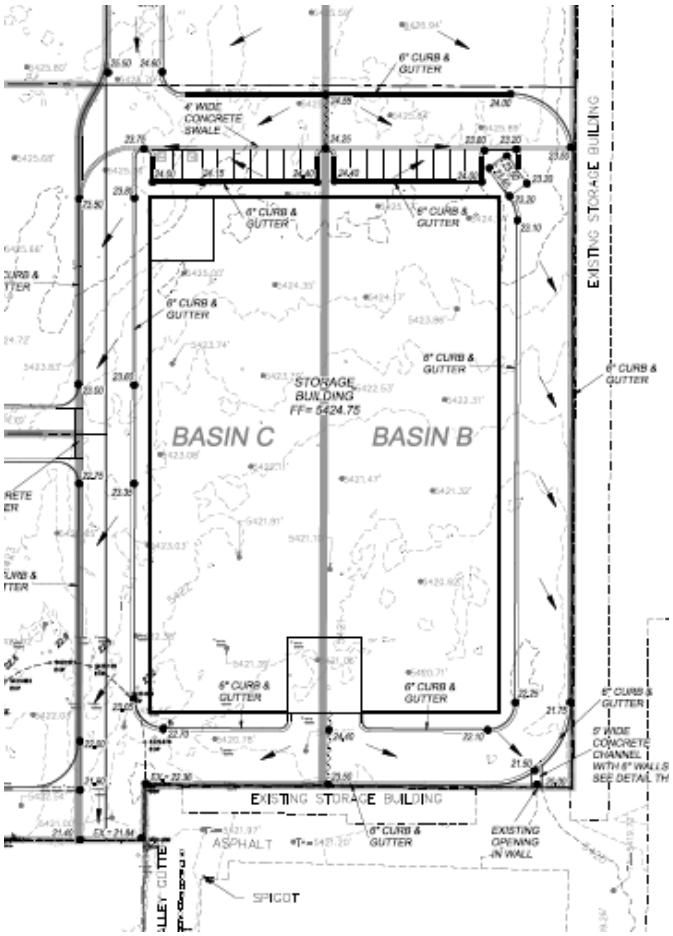
Please adjust Basin C's drainage pattern and drainage calculations for this site to reflect this.



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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

City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 11/2018)

Project Title: Ventana Square Subdivision Building Permit #: _____ Hydrology File #: B10D003C3

DRB#: _____ EPC#: _____ Work Order#: _____

Legal Description: Tracts H-5A, H-6B-1, H-6B-2, AND H-9A-1, VENTANA SQUARE AT VENTANA RANCH

City Address: 9500 Universe NW

Applicant: Thompson Engineering Consultants, Inc. Contact: David B. Thompson

Address: P.O. Box 65760, Albuquerque, NM 87193

Phone#: (505) 271-2199 Fax#: _____ E-mail: tecnm@yahoo.com

Owner: Diamond Tail Realty, LLC Contact: Tom Growney

Address: 20 Fall Pippin Lane, Suite 203, Asheville, NC 28803

Phone#: (505) 250-5049 Fax#: _____ E-mail: tgrowney@growney-inc.com

TYPE OF SUBMITTAL: X PLAT (___# OF LOTS) ____ RESIDENCE ____ DRB SITE ____ ADMIN SITE

IS THIS A RESUBMITTAL?: _____ Yes X No

DEPARTMENT: _____ TRAFFIC/ TRANSPORTATION X HYDROLOGY/ DRAINAGE

Check all that Apply:

TYPE OF SUBMITTAL:

____ ENGINEER/ARCHITECT CERTIFICATION
____ PAD CERTIFICATION
____ CONCEPTUAL G & D PLAN
X 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?

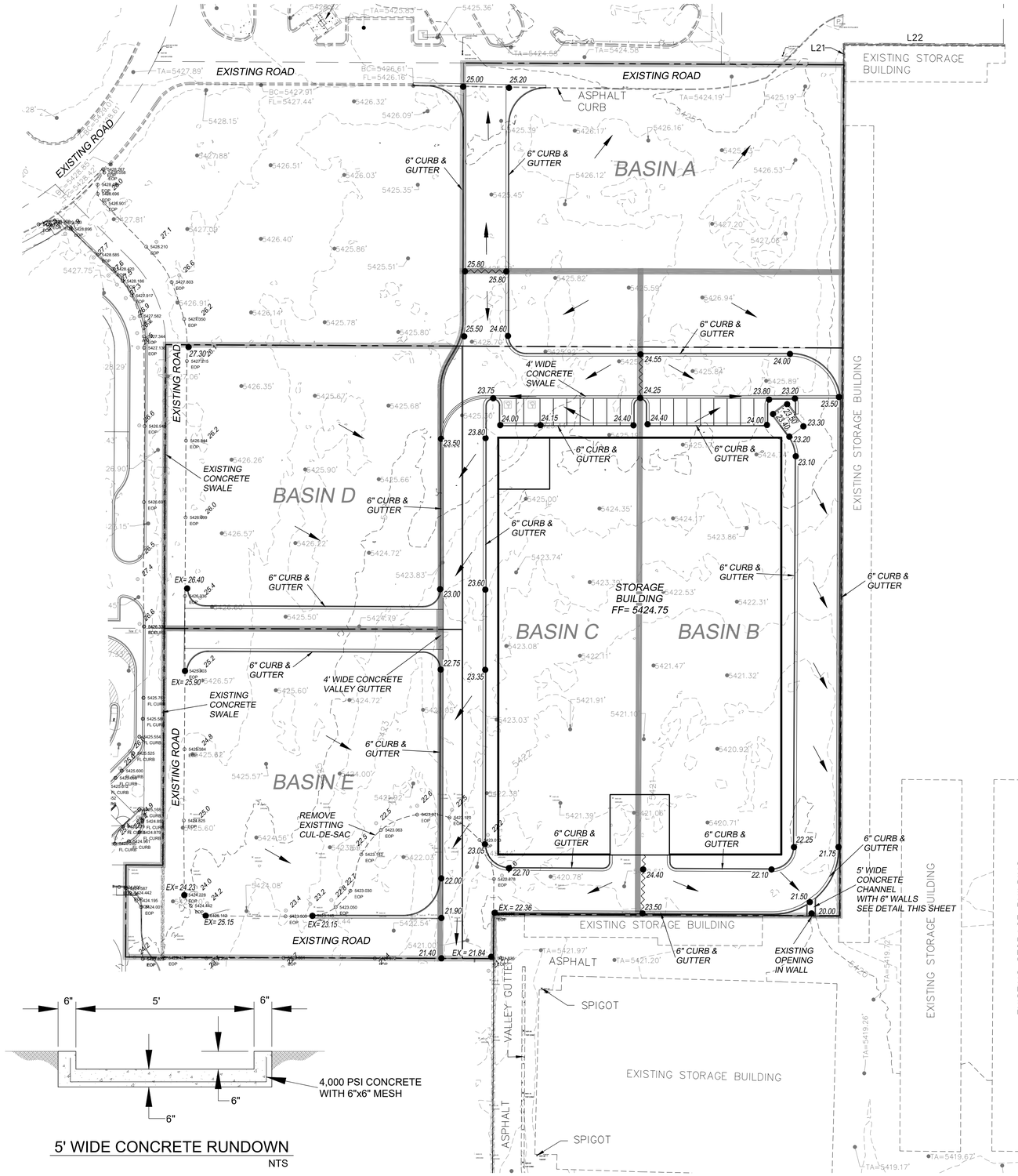
TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

x BUILDING PERMIT APPROVAL
____ CERTIFICATE OF OCCUPANCY
X PRELIMINARY PLAT APPROVAL
____ SITE PLAN FOR SUB'D APPROVAL
x SITE PLAN FOR BLDG. PERMIT APPROVAL
____ FINAL PLAT APPROVAL
____ SIA/ RELEASE OF FINANCIAL GUARANTEE
____ FOUNDATION PERMIT APPROVAL
X GRADING PERMIT APPROVAL
____ SO-19 APPROVAL
____ PAVING PERMIT APPROVAL
____ GRADING/ PAD CERTIFICATION
____ WORK ORDER APPROVAL
____ CLOMR/LOMR
____ FLOODPLAIN DEVELOPMENT PERMIT
____ OTHER (SPECIFY) _____

DATE SUBMITTED: September 23, 2022 By: David B Thompson

COA STAFF: ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____



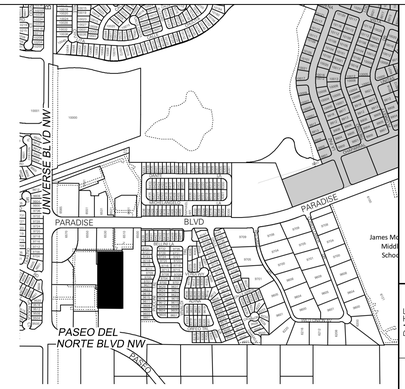
5' WIDE CONCRETE RUNDOWN

NTS

LEGEND

- 19.90 — PROPOSED SPOT ELEVATION
- —10— PROPOSED CONTOUR AND LABEL
- FLOW DIRECTION
- PROPOSED DRAINAGE BASIN

NOTE:
ALL ELEVATIONS ARE AT FLOWLINE UNLESS OTHERWISE NOTED.



VICINITY MAP B-10-Z

DRAINAGE PLAN:

LEGAL DESCRIPTION: TRACT H-6B-1, VENTANA SQUARE

SITE AREA: 2.2544 ACRES

FLOOD HAZARD STATEMENT: F.E.M.A. FLOODWAY BOUNDARY AND FLOODWAY MAP DATED AUGUST 16, 2012 (PANEL NO. 35001C0103H) 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. UNDER EXISTING CONDITIONS, THE PROPERTY IS PARTIALLY DEVELOPED WITH SOME PAVING AND BASE COURSE.

THE PROPERTY IS LOCATED WITHIN THE VENTANA SQUARE DEVELOPMENT NEAR THE INTERSECTION OF PARADISE BLVD. AND UNIVERSE BLVD. NW. CURRENTLY, PROPOSED TRACT H-6B-1 IS UNDEVELOPED. THE DEVELOPER OF TRACT H-6B-1 WILL DEVELOP TRACTS H-5A, H-6B-2, AND H-9A-1 IN THE NEAR FUTURE. THE EASTERN HALF OF TRACT H-6B-1 AND PART OF TRACT H-5A DRAINS TO THE SOUTHEAST CORNER AND CONTINUES SOUTH THROUGH AN OPENING IN THE WALL OF THE EXISTING STORAGE UNIT AND IS DISCHARGED TO A CONCRETE CHANNEL ALONG THE SOUTH PROPERTY LINE OF THE EXISTING STORAGE UNIT. THE CONCRETE CHANNEL DISCHARGES TO A RETENTION POND EAST OF THE VENTANA SQUARE DEVELOPMENT. THE WESTERN HALF OF TRACT H-6B-1 AND PART OF TRACT H-5A DRAINS TO THE SOUTH WEST CORNER AND ACROSS A PRIVATE ACCESS ROAD TO BE INTERCEPTED BY THE CONCRETE CHANNEL ALONG THE SOUTH PROPERTY LINE AND THEN INTO THE RETENTION POND. THE PEAK RUNOFF FOR ALL BASINS UNDER EXISTING CONDITIONS IS 11.75 CFS DURING A 100-YEAR, 6-HOUR STORM. THERE ARE NO OFF-SITE FLOWS THAT REACH THE PROPERTY.

DEVELOPED DRAINAGE CONDITIONS:

THIS FIRST PHASE OF DEVELOPMENT INCLUDES A STORAGE UNIT TO BE LOCATED ON TRACT H-6B-1 AND ACCESS ROADS ON THE OTHER 3 TRACTS. THIS TRACT IS INCLUDED IN THE APPROVED DRAINAGE MASTER PLAN FOR VENTANA SQUARE, DATED DECEMBER 23, 2020. THE DRAINAGE MASTER PLAN ALLOWS FREE DISCHARGE FROM THE TRACTS TO THE RETENTION POND SOUTHEAST OF VENTANA SQUARE.

HALF OF THE ROOF OF THE PROPOSED STORAGE BUILDING DRAINS EAST AND THE OTHER HALF DRAINS WEST. THE EASTERN HALF OF TRACT H-6B-1 AND PART OF TRACT H-5A, BASIN B, DRAINS TO THE SOUTHEAST CORNER AND IS COLLECTED IN A 5-FOOT-WIDE CONCRETE CHANNEL AND CONTINUES SOUTH THROUGH AN OPENING IN THE WALL OF THE EXISTING STORAGE UNIT AND IS DISCHARGED TO A CONCRETE CHANNEL ALONG THE SOUTH PROPERTY LINE OF THE EXISTING STORAGE UNIT. ITHE CONCRETE CHANNEL DISCHARGES TO A RETENTION POND EAST OF THE VENTANA SQUARE DEVELOPMENT. BASIN B RUNOFF IS 4.96 CFS. THE WESTERN HALF OF TRACT H-6B-1 AND PART OF TRACT H-5A, BASIN C, DRAINS TO THE SOUTHWEST CORNER AND ACROSS A PRIVATE ACCESS ROAD TO BE INTERCEPTED BY THE CONCRETE CHANNEL ALONG THE SOUTH PROPERTY LINE AND THEN INTO THE RETENTION POND.

RUNOFF FROM BASINS D AND E DRAINS TO THE SOUTH TO BE COLLECTED BY THE CONCRETE CHANNEL AND THEN DISCHARGED TO THE RETENTION POND. BASIN A DRAINS TO THE NORTHEAST CORNER TO THE ACCESS ROAD AND THEN INTO PARADISE BLVD. WHERE THE FLOWS ARE INTERCEPTED BY A STORM DRAIN SYSTEM THAT DISCHARGES TO THE AMAFCA MAINTAINED LAS VENTANAS DAM NORTH OF PARADISE BLVD. THE TOTAL RUNOFF DRAIN NORTH IS 2.12 CFS AND THE TOTAL RUNOFF DRAINAGE SOUTH IS 14.35 CFS.

THE WATER QUALITY VOLUME FROM THE DEVELOPEMNT WILL BE DISCHARGED TO THE RETENTION POND FOR THE DEVELOPMENT SO THERE WILL BE NO WATER QUALITY PONDS IN EACH OF THE DEVELOPED TRACTS.

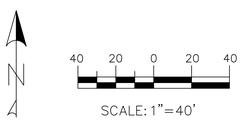
WATER QUALITY VOLUME = (0.42IN/12IN/FT) x ((0.232 x .8110) + (.768 x 1.323) + (.8240 x 1.198) + (.225 x .781) + (.301 x 1.01)) x 43,560SF/AC) = 4,072 CF REQUIRED.

100-YEAR HYDROLOGIC CALCULATIONS

BASIN #	AREA (acre)	LAND TREATMENT A (%)	B (%)	C (%)	D (%)	WEIGHTED E (in)	100-YEAR PRECIPITATION V (6-hr) (acre-ft)	V (6-hr) (cu-ft)	V(10-day) (acre-ft)	V(10-day) (cu-ft)	Q (cfs)
EXISTING CONDITIONS											
A	0.8110	0.00	100.00	0.00	0.00	0.73	0.05	2,149	0.05	2,149	1.75
B	1.3230	0.00	100.00	0.00	0.00	0.73	0.08	3,506	0.08	3,506	2.86
C	1.1980	0.00	95.00	0.00	5.00	0.81	0.08	3,503	0.09	3,879	2.71
D	0.7810	0.00	89.00	0.00	11.00	0.90	0.06	2,540	0.07	3,080	1.86
E	1.0100	0.00	80.00	0.00	20.00	1.03	0.09	3,784	0.12	5,052	2.58
TOTAL RUNOFF	5.12						0.36	15,482	0.41	17,666	11.75
INTERIM DEVELOPMENT CONDITIONS											
A	0.8110	0.00	76.80	0.00	23.20	1.08	0.07	3,180	0.10	4,362	2.12
B	1.3230	0.00	11.60	11.60	76.80	1.92	0.21	9,198	0.36	15,579	4.96
C	1.1980	0.00	8.80	8.80	82.40	1.99	0.20	8,670	0.34	14,869	4.60
D	0.7810	0.00	77.50	0.00	22.50	1.07	0.07	3,033	0.09	4,136	2.03
E	1.0100	0.00	69.10	0.00	30.10	1.18	0.10	4,321	0.14	6,231	2.76
TOTAL RUNOFF	5.12						0.65	28,402	1.04	45,176	16.47
EXCESS PRECIP.		0.55	0.73	0.95	2.24	E_I (in)					
PEAK DISCHARGE		1.54	2.16	2.87	4.12	Q_{PI} (cfs)					

WEIGHTED E (in) = (E_A)(%A) + (E_B)(%B) + (E_C)(%C) + (E_D)(%D)
$V_{6\text{-HR}}$ (acre-ft) = (WEIGHTED E)(AREA)/12
V_{10DAY} (acre-ft) = $V_{6\text{-HR}}$ + (A_D)(P_{10DAY} - $P_{6\text{-HR}}$)/12
Q (cfs) = (Q_{PA})(A_A) + (Q_{PB})(A_B) + (Q_{PC})(A_C) + (Q_{PD})(A_D)

ZONE = 1
$P_{6\text{-HR}}$ (in.) = 2.17
$P_{24\text{-HR}}$ (in.) = 2.49
P_{10DAY} (in.) = 3.90



SCALE: 1"=40'

Thompson Engineering Consultants, Inc.
tecnm@yahoo.com
PHONE: (505) 271-2199
FAX: (505) 830-9246
P.O. BOX 65760
ALBUQUERQUE, NM 87193

NO.	REVISION	BY	DATE

PROJECT: VENTANA SQUARE TRACT H-6B-1
DATE:
HORIZ. SCALE:
VERT. SCALE:
DRAWN BY: BLN
CHECKED BY:
APPROVED BY:
FILE:

NEW MEXICO 9677 REGISTERED PROFESSIONAL ENGINEER
6/23/22

GRADING & DRAINAGE PLAN

CITY/COUNTY REVIEW

DEPARTMENT	SIGN-OFF	DATE
WASTEWATER MGMT. DIV.		
WATER SERVICES		
SUBDIVISION ENG.		
STREETS		
TRAFFIC		

FOR CITY/COUNTY USE ONLY

SHEET No.
C-1