CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Director

Mayor Timothy M. Keller

September 6, 2023

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

RE: 98th & Central Development
Grading & Drainage Plan
Engineer's Stamp Date: 08/08/23
Hydrology File: K09D052A

Dear Mr. Thompson:

Based upon the information provided in your submittal received 08/10/2023, the Grading & Drainage Plan is 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.

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov

PRIOR TO CERTIFICATE OF OCCUPANCY:

1. Engineer's Certification, per the DPM Part 6-14 (F): *Engineer's Certification Checklist For Non-Subdivision* is required.
2. Please provide the executed paper Drainage Covenant (latest revision) printed on one-side only with Exhibit A and a check for **$25.00** made out to "**Bernalillo County**" for the stormwater quality pond per Article 6-15(C) of the DPM to Hydrology for review at Plaza de Sol.

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: 98th and Central Site Building Permit #: _____ Hydrology File #: K-9

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

Legal Description: Lots 6, 7, 8, 9, 10, and 10, Original Townsite of Westland

City Address: _____

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: 98 and Central Partners, LLC Contact: Alfredo Barrenechea

Address: 131 Madison Street NE, Suite 200, Albuqueque, NM 87108

Phone#: (505) 401-0135 Fax#: _____ E-mail: alfredo@g0-absolute.net

TYPE OF SUBMITTAL: ____ PLAT (___# OF LOTS) ____ RESIDENCE ____ DRB SITE X 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
- ____ 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
- 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: August 9, 2023 By: David B Thompson

COA STAFF: ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____

City of Albuquerque
Planning Department
Development Review Services
HYDROLOGY SECTION
APPROVED
DATE: 09/06/23
BY: Rene' C Brissette
HydroTrans # K09D052A

THE APPROVAL OF THESE PLANS/REPORT SHALL NOT BE CONSTRUED TO PERMIT VIOLATION OF ANY CITY ORDINANCE OR STATE LAW, AND SHALL NOT PREVENT THE CITY OF ALBUQUERQUE FROM REQUIRING CORRECTION OF ERRORS IN THE PLANS/REPORT, SPECIFICATIONS, OR CONSTRUCTION. SUCH APPROVED PLANS SHALL NOT BE CHANGED, MODIFIED OR ALTERED WITHOUT AUTHORIZATION.

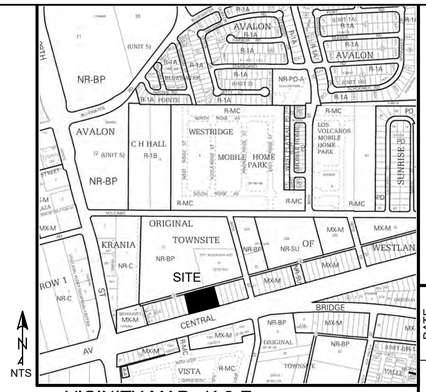
APPROVAL OF GRADING & DRAINAGE PLAN(S) SHALL EXPIRE TWO (2) YEARS AFTER THE APPROAL DATE BY THE CITY IF NO BUILDING PERMIT HAS BEEN PULLED ON THE DEVELOPMENT.

100-YEAR HYDROLOGIC CALCULATIONS

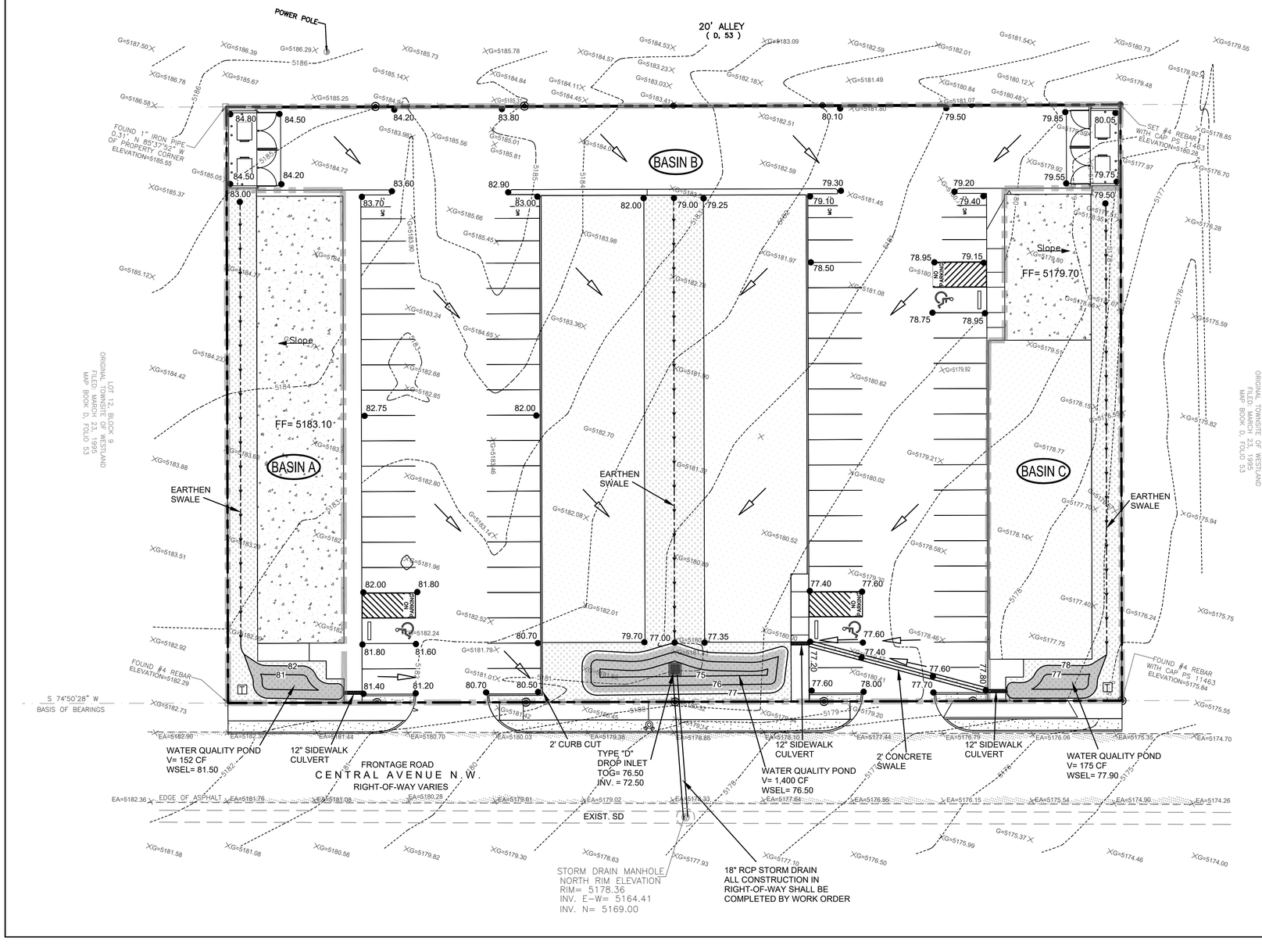
BASIN #	AREA (acre)	LAND TREATMENT A (%)	B (%)	C (%)	D (%)	WEIGHTED E (in)	100-YEAR PRECIPITATION V (6-hr) (acre-ft)	V (6-hr) (cu-ft)	V(24-hr) (acre-ft)	V(24-hr) (cu-ft)	Q (cfs)
EXISTING CONDITIONS											
A	0.1561	100.00	0.00	0.00	0.00	0.55	0.01	312	0.01	312	0.24
B	1.0515	100.00	0.00	0.00	0.00	0.55	0.05	2,099	0.05	2,099	1.62
C	0.1700	100.00	0.00	0.00	0.00	0.55	0.01	339	0.01	339	0.26
TOTAL RUNOFF	1.3776						0.06	2,750	0.06	2,750	2.12
DEVELOPED CONDITIONS											
A	0.1561	0.00	18.00	18.00	64.00	1.74	0.02	984	0.03	1,100	0.55
B	1.0515	0.00	6.50	6.50	87.00	2.06	0.18	7,855	0.20	8,918	4.11
C	0.1700	0.00	16.20	16.20	67.60	1.79	0.03	1,102	0.03	1,236	0.61
TOTAL RUNOFF	1.3776						0.23	9,941	0.26	11,254	5.28
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
$V_{100\text{DAY}}$ (acre-ft) = $V_{6\text{-HR}} + (A_C)(P_{100\text{DAY}} - P_{6\text{-HR}})/12$
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
$P_{100\text{DAY}}$ (in.) = 3.90



VICINITY MAP : K-9-Z



DRAINAGE PLAN:

LEGAL DESCRIPTION: LOTS 6, 7, 8, 9, 10 & 11, BLOCK 9, ORIGINAL TOWNSITE OF WESTLAND

SITE AREA: 1.3776 ACRES

FLOOD HAZARD STATEMENT: F.E.M.A. FLOODWAY BOUNDARY AND FLOODWAY MAP DATED NOVEMBER 4, 2016 (PANEL NO. 35001C0328J) INDICATES A FLOOD HAZARD ZONE X WHICH IS AN AREA DETERMINED TO BE OUTSIDE THE 500-YEAR FLOODPLAIN. THE TOWER PARK POND HAS A FLOOD HAZARD ZONE AH WITH A BASE ELEVATION OF 5089).

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 VACANT.
THE SITE IS LOCATED ON CENTRAL AVENUE NW BETWEEN 94TH STREET AND 98TH STREET. THE SITE MOSTLY DRAINS FROM NORTHWEST TO SOUTHEAST TO CENTRAL AVENUE. THE PEAK RUNOFF UNDER EXISTING CONDITIONS IS 2.12 CFS DURING A 100-YEAR, 6-HOUR STORM. THE PEAK RUNOFF VOLUME DURING A 100-YEAR, 24-HOUR STORM IS 2,750 CUBIC FEET. THERE ARE NO OFF-SITE FLOWS THAT REACH THE PROPERTY.

DEVELOPED DRAINAGE CONDITIONS:

THE SITE WILL BE DEVELOPED WITH BUILDINGS, PARKING AREAS, AND PARKING FOR FOOD TRUCKS. THERE IS AN EXISTING 42-INCH STORM DRAIN JUST SOUTH OF THE CENTRAL AVENUE FRONTAGE ROAD THAT IS ADJACENT TO THE SITE. THE 42-INCH STORM DRAIN WAS CONSTRUCTED AS PART OF THE AMOLE DEL NORTE- TIERRA BAYITA DRAINAGE PROJECT. DRAINAGE ANALYSIS FOR THIS SITE WAS INCLUDED IN THE FINAL DESIGN REPORT FOR THE AMOLE DEL NORTE STORM DRAINAGE FACILITIES, TIERRA BAYITA DRAINAGE FACILITIES, PHASE III, DATED MARCH 1998. THIS SITE IS INCLUDED IN BASIN 19D. ACCORDING TO THE REPORT THIS SITE CAN DISCHARGE 3.533 CFS PER ACRE. THEREFORE, THE SITE CAN DISCHARGE A TOTAL OF 4.87 CFS.

THE TOTAL SITE RUNOFF UNDER DEVELOPED CONDITIONS IS 5.28 CFS. SINCE, THE INITIAL 0.42 INCHES OF RAIN ARE RETAINED ONSITE IN THE STORM WATER QUALITY PONDS, THE TOTAL SITE RUNOFF WILL BE LESS THAN THE 4.87 CFS ALLOWED. THE SITE HAS THREE DRAINAGE BASINS. BASIN A INCLUDES THE BUILDING ON THE WESTERN SIDE OF THE SITE AND LANDSCAPED AREA. BASIN B INCLUDES THE MIDDLE PORTION OF THE SITE. AND BASIN C INCLUDES THE BUILDING AND FOOD TRUCK PARKING ALONG THE EASTERN SIDE OF THE SITE. EACH BASIN WILL DRAIN TO A STORM WATER QUALITY POND ALONG THE SOUTH PROPERTY LINE. THE SOTEM WATER QUALITY PONDS IN BASINS A AND C WILL DISCHARGE TO THE PARKING AREAS IN BASIN B AND CONTINUE TO A STORM WATER QUALITY POND IN BASIN B. SIDEWALK CULVERTS AND CURB CUTS WILL BE USED TO DISCHARGE THE RUNOFF TO THE BASIN B POND. THE BASIN B STORWATER QUALITY POND WILL DISCHARGE THROUGH A TYPE D STORM INLET TO AN 18-INCH RCP STORM DRAIN TO AN EXISTING MANHOLE IN THE 42-INCH STORM DRAIN SOUTH OF THE CENTRAL AVENUE FRONTAGE ROAD. THIS CONSTRUCTION WILL BE ACCOMPLISHED WITH AN SO-19 PERMIT.

BASIN A STORM WATER QUALITY VOLUME = (0.42IN/12IN/FT) x ((0.1561 x 0.640)) x 43,560SF/AC) = 152 CF.

BASIN B STORM WATER QUALITY VOLUME = (0.42IN/12IN/FT) x ((1.0515 x 0.870)) x 43,560SF/AC) = 1,395 CF.

BASIN C STORM WATER QUALITY VOLUME = (0.42IN/12IN/FT) x ((0.1700 x 0.676)) x 43,560SF/AC) = 175 CF.

LEGEND

XG=5174.00	EXISTING SPOT ELEVATION
	EXISTING CONTOUR
79.60	PROPOSED SPOT ELEVATION
	FLOW DIRECTION
	TYPE "D" DROP INLET
	18" RCP STORM DRAIN

BAR SCALE
0 10 20 40
SCALE: 1"=20'

Thompson Engineering Consultants, Inc.
tecnm@yahoo.com
P.O. BOX 65760 ALBUQUERQUE, NM 87193
PHONE: (505) 271-2199
FAX: (505) 830-9248

NO. | REVISION | BY | DATE
PROJECT:
DATE:
DRAWN BY: DEM
CHECKED BY:
APPROVED BY:
HORIZ. SCALE:
VERT. SCALE:
FILE:

NEW MEXICO 9677 REGISTERED PROFESSIONAL ENGINEER 8-8-23

LOTS, 6, 7, 8, 9, 10 & 11, BLOCK 9
OHGINAZ TOWNSITE OF WESTLAND

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