

CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Director



Mayor Timothy M. Keller

September 15, 2023

Ronald Bohannon, P.E.
Tierra West, LLC
5571 Midway Park Place NE
Albuquerque, NM 87109

RE: IHOP - Unser
Grading and Drainage Plans
Engineer's Stamp Date: 09/05/23
Hydrology File: A11D018A

Dear Mr. Bohannon:

Based upon the information provided in your submittal received 09/05/2023, 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.

PO Box 1293

PRIOR TO CERTIFICATE OF OCCUPANCY:

Albuquerque

NM 87103

www.cabq.gov

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 (Doug 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

Project Title: IHOP Unser **Building Permit #** _____ **Hydrology File #** _____

DRB# _____ **EPC#** _____

Legal Description: TR 4 PLAT OF TRS 1, 2, 3 & 4 PARADISE **City Address OR Parcel** 101106638341510104
PLAZA CONT 1.8131 AC

Applicant/Agent: Tierra West LLC **Contact:** Luis Noriega

Address: 5571 Midway Park Pl, NE, ABQ, NM 87109 **Phone:** 505-858-3100

Email: lnoriega@tierrawestllc.com

Applicant/Owner: _____ **Contact:** _____

Address: _____ **Phone:** _____

Email: _____

TYPE OF DEVELOPMENT: ☐ PLAT (#of lots) ☐ RESIDENCE ☐ DRB SITE ☒ ADMIN SITE: _____

RE-SUBMITTAL: ☐ YES ☒ NO

DEPARTMENT: ☐ TRANSPORTATION ☒ HYDROLOGY/DRAINAGE

Check all that apply:

TYPE OF SUBMITTAL:

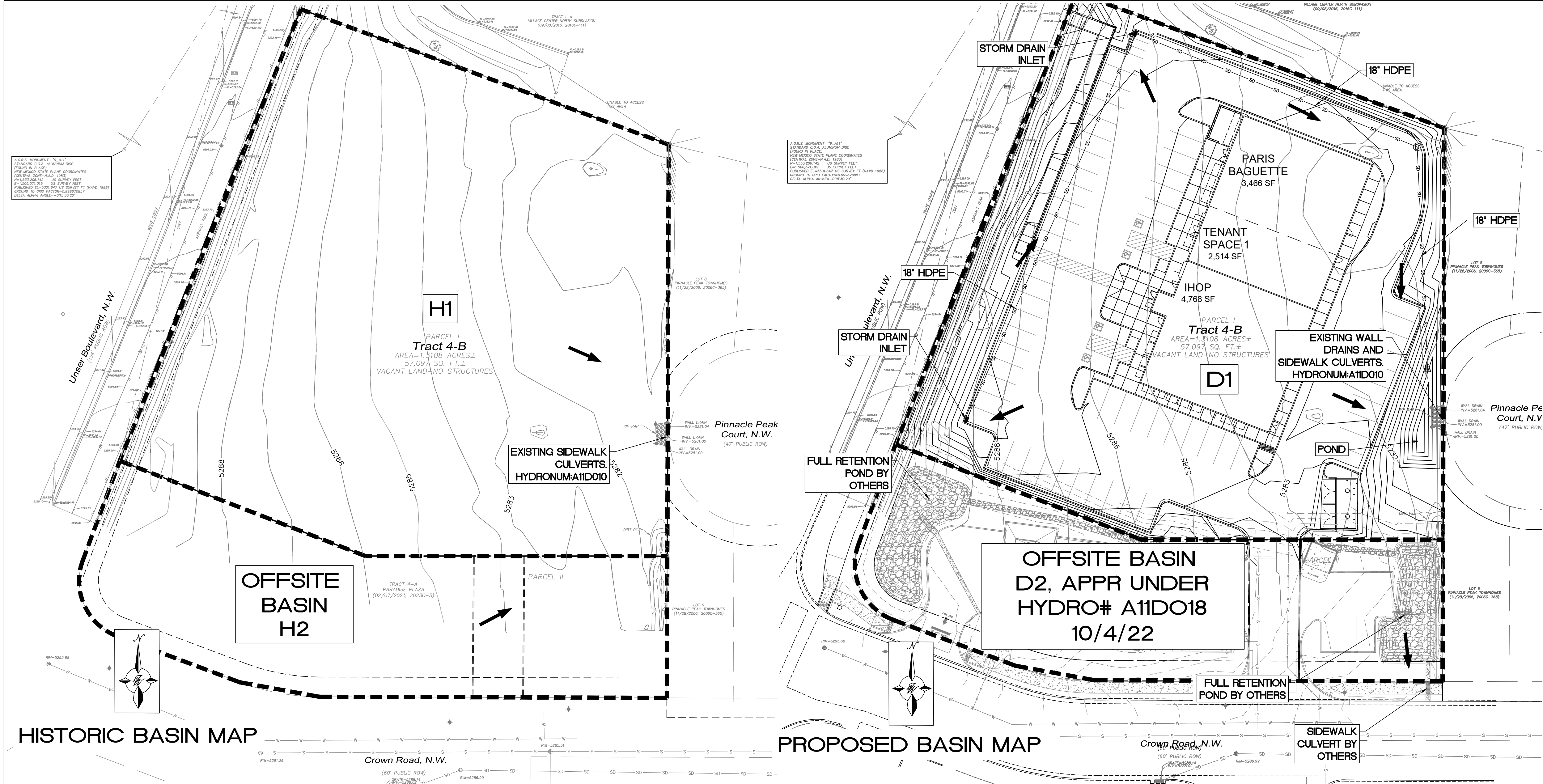
- ☐ ENGINEER/ARCHITECT CERTIFICATION
- ☐ PAD CERTIFICATION
- ☐ CONCEPTUAL G&D PLAN
- ☒ GRADING PLAN
- ☐ DRAINAGE REPORT
- ☐ DRAINAGE MASTER PLAN
- ☐ FLOOD PLAN DEVELOPMENT PERMIT APP.
- ☐ ELEVATION CERTIFICATE
- ☐ CLOMR/LOMR
- ☐ TRAFFIC CIRCULATION LAYOUT (TCL) ADMINISTRATIVE
- ☐ TRAFFIC CIRCULATION LAYOUT FOR DRB APPROVAL
- ☐ TRAFFIC IMPACT STUDY (TIS)
- ☐ STREET LIGHT LAYOUT
- ☐ OTHER (SPECIFY) _____
- ☐ PRE-DESIGN MEETING?

TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

- ☒ BUILDING PERMIT APPROVAL
- ☐ CERTIFICATE OF OCCUPANCY
- ☐ CONCEPTUAL TCL DRB APPROVAL
- ☐ 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
- ☐ FLOOD PLAN DEVELOPMENT PERMIT
- ☐ OTHER (SPECIFY) _____

DATE SUBMITTED: 09/05/23

\\TWNAS\Z_Drive\2023\2023042_IHOP_Unser\dwg\DRB\2023042_BASINS.dwg Sep 15, 2023 - 9:26am



DPM CH6 HYDROLOGY SECTION

Precipitation Zone 1

IHOP ON UNSER

NE Corner of Unser Blvd & Crown Rd, Albuquerque, NM.

TWLLC Date 9/1/2023

Equations:

Weighted E = Ea*Aa + Eb*Ab + Ec*Ac + Ed

Volume = Weighted E * Total Area

Flow = Qa*Aa + Qb*Ab + Qc*Ac + Qd*Ad

HYDROLOGY CALCULATION TABLES

Historic Conditions

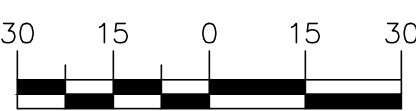
Basin Descriptions												100-Year, 6-Hour			
Basin ID	Tract	Area	Area	Area	Treatment A		Treatment B		Treatment C		Treatment D		Weighted E (in)	Volume (ac-ft)	Flow cfs
		(sf)	(acres)	(sq miles)	%	(acres)	%	(acres)	%	(acres)	%	(acres)			
H1	4-B	57,097	1.31	0.00205	100%	1.311	0%	0.000	0%	0.000	0%	0.000	0.550	0.060	2.02
H2	4-A	21,881	0.50	0.00078	100%	0.502	0%	0.000	0%	0.000	0%	0.000	0.550	0.023	0.77
Total		78,978	1.81	0.00283		1.813		0.000		0.000		0.000		0.083	2.792

Proposed Conditions

Basin Descriptions												100-Year, 6-Hour			
Basin	Tract	Area	Area	Area	Treatment A	Treatment B		Treatment C		Treatment D		Weighted E	Volume	Flow	
ID		(sf)	(acres)	(sq miles)	%	(acres)	%	(acres)	%	(acres)	%	(in)	(ac-ft)	cfs	
D1	4-B	57,097	1.31	0.00205	0%	0.000	0%	0.000	20%	0.262	80%	1.049	1.982	0.368	5.07
NOTE BASIN D2 WAS APPROVED AS FULL RETENTION UNDER HYDRO FILE A11D018, 100-YEAR, 6-HOUR FLOW = 0 CFS															
Total		57,097	1.31	0.00205		0.000		0.000		0.262		1.049		0.368	5.073

Stormwater Quality Volume			
Total Impervious Area =		2Area in "Treatment D"	
Retainage depth = 0.42" Per DPM		0.4200	IN
Retention Volume =		0.42 x area D / 12	CF
Area D (1.049 AC-FT) =		45,694	SF
Volume Required =		1599	CF
Volume Provided =		1808	CF

GRAPHIC SCALE



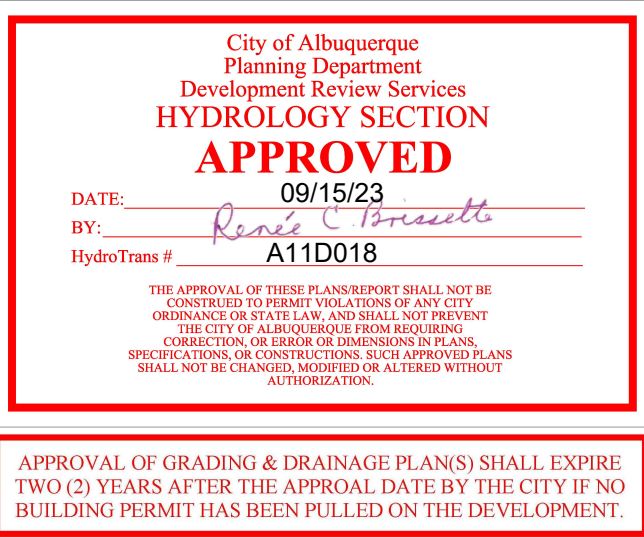
SCALE: 1"=30'

Pond Discharge-Weir Calculations

POND VOLUME CALCULATIONS			
ELEVATION (ft)	AREA (sf)	VOLUME (cf)	CUMULATIVE VOLUME (cf)
5277	64	0	0
5278	197	130.5	131
5279	400	298.5	429
5280	672	536	965
5281	1013	842.5	1808

POND STORAGE				
ACTUAL ELEV.	H (FT)	VOLUME (CF)	Q (CFS)	VOLUME (AC-FT)
5277	0.00	0	0.00	0.0000
5278	0.00	131	0.00	0.0030
5279	0.00	429	0.00	0.0098
5280	0.00	965	0.00	0.0222
5281	0.67	1808	8.88	0.0415

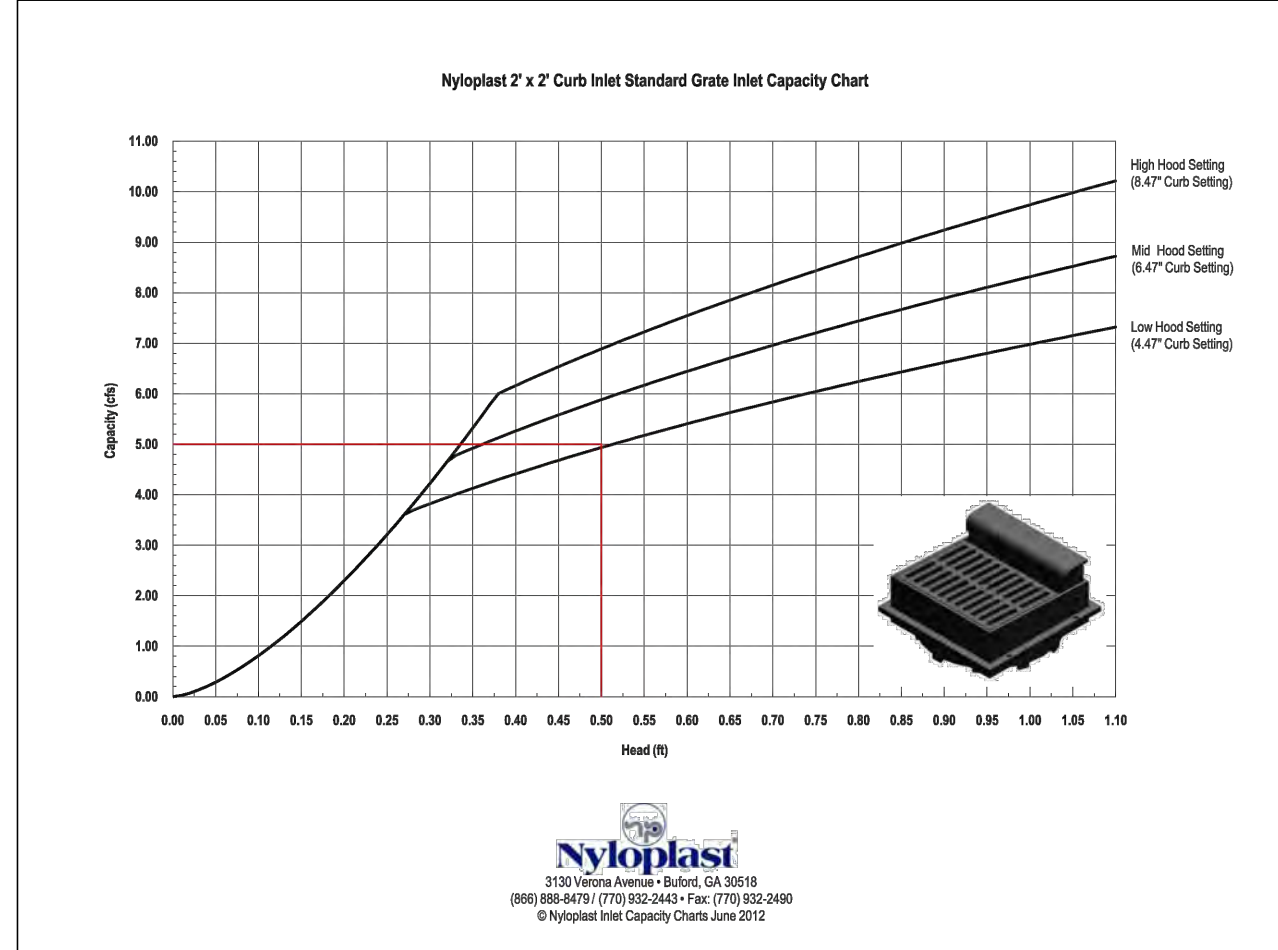
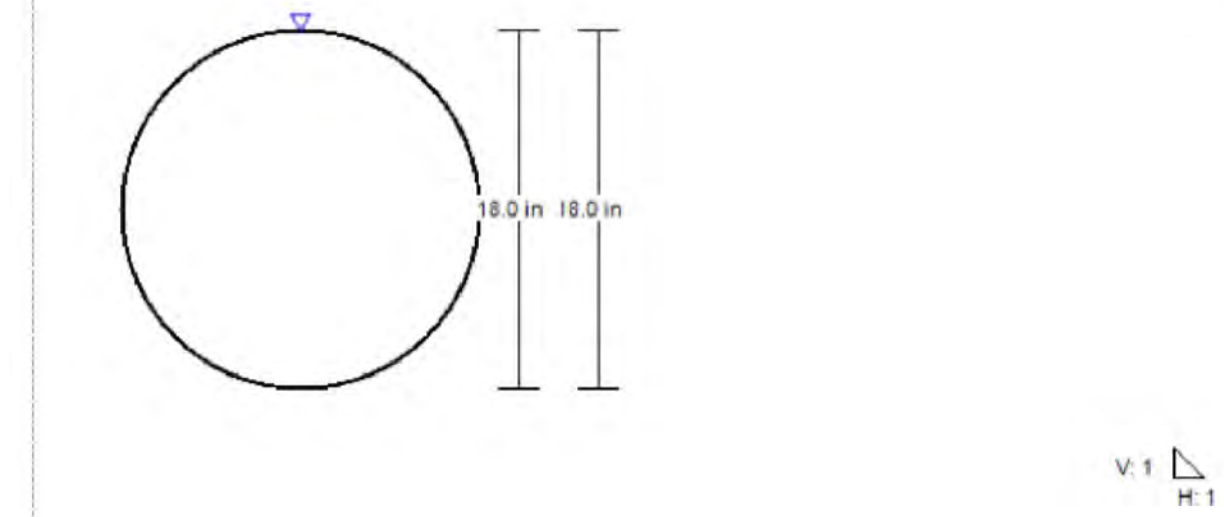
Sidewalk Culvert Weir Equation	
Q =	CLH^(3/2)
C =	2.7
L (FT) =	6
H (FT) =	0.67
Q (CFS) =	8.88



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



18 HDPE STORM PIPE	
Project Description	
Friction Method	Manning Formula
Solve For	Discharge
Input Data	
Roughness Coefficient	0.013
Channel Slope	0.005 ft/ft
Normal Depth	18.0 in
Diameter	18.0 in
Discharge	7.43 cfs




ENGINEER'S SEAL RONALD R. BOHANNAN NEW MEXICO PROFESSIONAL ENGINEER 7868 09/05/23 RONALD R. BOHANNAN P.E. #7868	IHOP ON UNSER ALBUQUERQUE, NM	DRAWN BY RG
	GRADING AND DRAINAGE BASIN MAP	DATE 08/29/2023
	TERRA WEST, LLC 5571 MIDWAY PARK PLACE NE ALBUQUERQUE, NM 87109 (505) 858-3100 www.tierrawestllc.com	2023042_BASINS
		SHEET # GR-0
		JOB # 2023042

A.G.R.S. MONUMENT "9_A11"
STANDARD C.O.A. ALUMINUM DISC
(FOUND IN PLACE)
NEW MEXICO STATE PLANE COORDINATES
(CENTRAL ZONE--N.A.D. 1983)
N=1,533,206.142 US SURVEY FEET
E=1,506,571.019 US SURVEY FEET
PUBLISHED EL=5301.647 US SURVEY FT (NAVD 1988)
GROUND TO GRID FACTOR=0.999670857
DELTA ALPHA ANGLE=-0°15'30.20"

Unser Boulevard, N.W.
(156' PUBLIC ROW)

1:1 SLOPES SHALL BE
STABILIZED WITH
ROCK PLATING OR
OTHER DECORATIVE
LINING

	ENGINEER'S SEAL	IHOP ON UNSER ALBUQUERQUE, NM	DRAWN BY RG
	 09/05/23	GRADING & DRAINAGE PLAN	DATE 08/29/2023
			2023042_GRE
	SHEET # GR-1		
RONALD R. BOHANNAN P.E. #7868	JOB # 2023042		