CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Director

Mayor Timothy M. Keller

October 26, 2022

Sheldon Greer, P.E.
Respec
5971 Jefferson St. NE
Albuquerque, NM 8710

RE: Tidal Wave Car Wash
Grading & Drainage Plans
Engineer's Stamp Date: 10/10/22
Hydrology File: A11D017C

Dear Mr. Greer:

Based upon the information provided in your submittal received 10/11/2022, 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

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 Drainage Covenant with Exhibit A for the underground stormwater quality system per Article 6-15(C) of the DPM prior to Permanent Release of Occupancy. Please submit the original copies along with the **$ 25.00** recording fee check made payable to Bernalillo County to Carrie Compton (cacompton@cabq.gov) on the 4th floor of 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

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov

City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 11/2018)

Approved Master Drainage Plan 2020

Project Title: Tidal Wave - Unser McMahone Building Permit #: _____ Hydrology File #: A11D017

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

Legal Description: LT 2 PLAT OF UNSER AND MCMAHON CENTER CONT 1.2510 AC

City Address: UPC: 101106625123310209

Applicant: RESPEC Contact: John Stapleton

Address: 7770 Jefferson Street NE, Suite #200, Albuquerque NM, 87109

Phone#: 505-545-9607 Fax#: _____ E-mail: John.Stapleton@respec.com

Owner: HOLLY PARTNERS LLC Contact: Tushar Patel

Address: 904 COPPERHEAD CT NE ALBUQUERQUE NM 87113-2299

Phone#: 505-275-8223 Fax#: _____ E-mail: tushar@tnjgroup.com

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
X DRAINAGE REPORT
____ FLOODPLAIN DEVELOPMENT PERMIT APPLIC
____ ELEVATION CERTIFICATE
____ CLOMR/LOMR
____ TRAFFIC CIRCULATION LAYOUT (TCL)
____ TRAFFIC IMPACT STUDY (TIS)
____ OTHER (SPECIFY) _____
____ PRE-DESIGN MEETING?

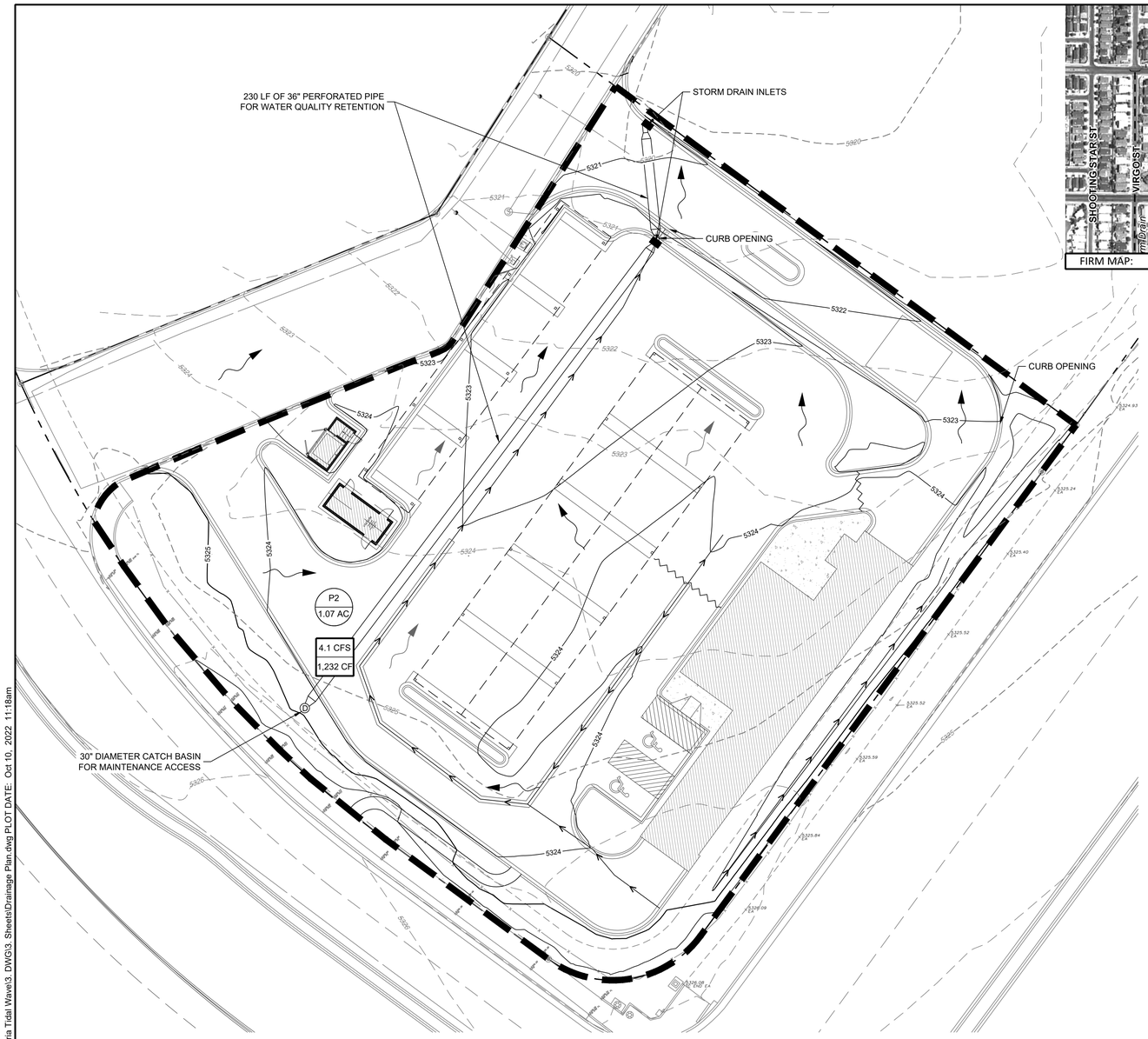
TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

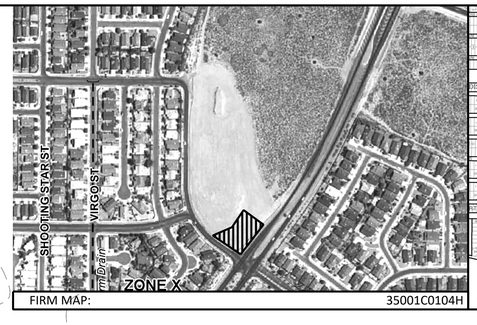
X BUILDING PERMIT APPROVAL
____ CERTIFICATE OF OCCUPANCY
____ PRELIMINARY PLAT APPROVAL
____ SITE PLAN FOR SUB'D APPROVAL
____ SITE PLAN FOR BLDG. PERMIT APPROVAL
____ FINAL PLAT APPROVAL
____ SIA/ RELEASE OF FINANCIAL GUARANTEE
____ FOUNDATION PERMIT APPROVAL
____ GRADING PERMIT APPROVAL
____ SO-19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

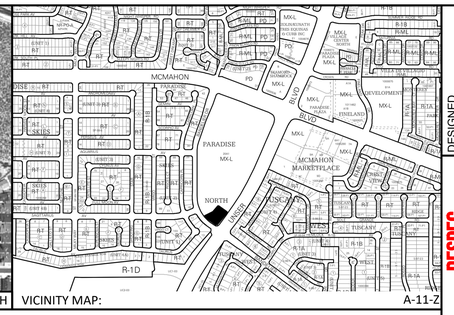
DATE SUBMITTED: 10/11/2022 By: John Stapleton

COA STAFF: ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____







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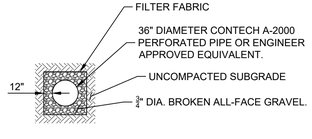
SCALE: 1" = 20'



PERFORATED PIPE DETAIL
NOT TO SCALE

ABBREVIATIONS

AC	ACRE
CF	CUBIC FOOT
ELEV	ELEVATION
FF	FINISHED FLOOR
INV	INVERT
LF	LINEAR FOOT
NMAPWA	NEW MEXICO AMERICAN PUBLIC WORKS ASSOCIATION
MAX	MAXIMUM
MIN	MINIMUM
PVC	POLYVINYL CHLORIDE
ROW	PUBLIC RIGHT OF WAY
RPBA	REDUCED PRESSURE BACKFLOW ASSEMBLY
SAS	SANITARY SEWER
SD	STORM DRAIN
STD DWG	STD DWG
VOL	VOLUME
WTR	WATER
WQ	WATER QUALITY
YR	YEAR
HR	HOUR
WSEL	WATER SURFACE ELEVATION

City of Albuquerque
Planning Department
Development Review Services
HYDROLOGY SECTION
APPROVED
DATE: 10/26/22
BY: Renee C. Brissette
HydroTrans # A11D017C

THE APPROVAL OF THESE PLANS/REPORT SHALL NOT BE CONSTRUED TO PERMIT VIOLATIONS OF ANY CITY ORDINANCE OR THE LAWS OF THE STATE OF NEW MEXICO. THE CITY OF ALBUQUERQUE IS FROM REQUIRING CORRECTION, OR ERROR OR OMISSION IN PLANS, SPECIFICATIONS OR CONSTRUCTION. APPROVED PLANS SHALL NOT BE CHANGED, MODIFIED OR ALTERED WITHOUT AUTHORIZATION.

BACKGROUND

LOT 2, UNSER MCMAHON CENTER IS APPROXIMATELY 1.07 ACRES IN THE CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO. THE PROPERTY IS LOCATED ON THE NORTH CORNER OF THE INTERSECTION OF UNSER BOULEVARD AND BANDELIER DRIVE. THE SITE IS CURRENTLY UNDEVELOPED. LOT 2 IS SUBJECT TO THE APPROVED MASTER DRAINAGE PLAN FOR PARADISE NORTH - UNSER/MCMAHON (HYDROLOGY FILE: A11D017) COMPLETED BY TIERRA WEST IN 2020. THE PROPOSED PROJECT IS A TIDAL WAVE CAR WASH.

METHODOLOGY

HYDROLOGY CALCULATIONS FOR THE SITE ARE PERFORMED IN ACCORDANCE WITH THE ALBUQUERQUE DEVELOPMENT PROCESS MANUAL (DPM) ARTICLE 6.2 USING THE RATIONAL METHOD TO CALCULATE PEAK FLOW RATES TO ENSURE ALL FLOW PATHS ARE SUFFICIENT TO CARRY FLOWS. THE REQUIRED WATER QUALITY VOLUME WAS CALCULATED BY MULTIPLYING THE IMPERVIOUS AREA BY THE FIRST FLUSH RUNOFF VALUE OF 0.42". ALL HYDROLOGIC AND HYDRAULIC CALCULATIONS CAN BE FOUND ON THIS SHEET.

EXISTING CONDITIONS

IN 2020-2021, LOT 2 WAS MASS GRADED AS PART OF THE LARGER PARADISE NORTH MASS GRADING. INTERNAL ROADS, STORM DRAIN, AND UTILITY MAINS WERE ALSO INSTALLED AS PART OF THE CONSTRUCTION.

UNDER THE EXISTING CONDITIONS, LOT 2 SLOPES FROM SOUTH TO NORTH AT A SLOPE OF 2%-3%, THE STORMWATER RUNOFF GENERATED BY THE SITE DRAINS FROM SOUTH TO NORTH INTO THE INTERNAL FRONTAGE STREET. THE STORMWATER IS CONVEYED IN THE STREET TO AN EXISTING INLET AND AND STORM DRAIN SYSTEM THAT EVENTUALLY DISCHARGES INTO THE PUBLIC STORM DRAIN IN MCMAHON BOULEVARD.

DEVELOPED CONDITIONS

THE DEVELOPED DRAINAGE CONDITION CONFORMS TO THE DRAINAGE INTENT OF THE APPROVED MASTER DRAINAGE PLAN (TIERRA WEST, 2020).

BASIN P2 CONTAINS 1.07 ACRES AND CORRESPONDS TO BASIN P2 IN THE MASTER DRAINAGE PLAN (TIERRA WEST, 2020). PER THE MASTER DRAINAGE PLAN, BASIN P2 HAS AN ALLOWABLE DISCHARGE RATE OF 4.3 CFS. THE DEVELOPED DISCHARGE RATE IS 4.1 CFS WHICH IS BELOW THE ALLOWABLE RATE.

THE STORMWATER RUNOFF FROM P2 IS CONVEYED ACROSS THE PARKING LOT FROM SOUTH TO NORTH VIA SHEET FLOW. AT THE NORTH CORNER OF P2, THE WATER IS RECEIVED BY TWO CURB INLETS THAT CONNECT TO AN UNDERGROUND WATER QUALITY RETENTION SYSTEM FOR P2. STORMWATER VOLUME EXCEEDING THE CAPACITY OF THE UNDERGROUND RETENTION FLOWS OVER THE INLETS AND DISCHARGES DIRECTLY INTO THE INTERNAL STREET PER THE DRAINAGE INTENT OF THE MASTER DRAINAGE PLAN. RUNOFF FROM THE LANDSCAPING AREA ALONG THE SOUTH EDGE OF THE BUILDING IS CONVEYED INTO THE DRIVE AISLE VIA A SWALE AND CURB OPENING. RUNOFF FROM THE ROOF OF THE BUILDING DISCHARGES DIRECTLY INTO THE PARKING LOT.

SUB-BASIN P2 GENERATES 1,232 CF OF FIRST FLUSH RUNOFF WHICH IS RETAINED ONSITE IN A 36" DIAMETER PERFORATED PIPE LOCATED UNDER THE PARKING AREA. THE PIPE IS WRAPPED IN GRAVEL AND FILTER FABRIC, PER THE DETAIL ON THIS SHEET.

THE WATER QUALITY TABLE ON THIS SHEET UNDER "HYDROLOGY CALCULATIONS" SUMMARIZES THE REQUIRED AND PROVIDED WATER QUALITY VOLUMES FOR THE DEVELOPED CONDITION.

Hydrology Calculations

The following calculations are based on Albuquerque's Development Process Manual, Article 6-2

Runoff Rate:

Treatment Type Areas

Subbasin	Area$_A$ (ac)	Area$_B$ (ac)	Area$_C$ (ac)	Area$_D$ (ac)	Total (ac)
P2	0.00	0.00	0.26	0.81	1.07

100-yr Peak Discharge values based on Zone 1 from Table 6.2.14

Q_A = 1.54 cfs/ac Q_B = 2.16 cfs/ac Q_C = 2.87 cfs/ac Q_D = 4.12 cfs/ac

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

Subbasin	Discharge (cfs)
P2	4.1

Water Quality:

Required Water Quality volume for first flush of 0.42"

Subbasin	Req Volume (cu. ft.)	Provided Volume (cu.ft.)	Net Volume (cu. ft.)
P2	1,232	1,625	-393

DESIGNED
DRAWN
CHECKED
DATE 10.10.2022

RESPEC
COMMUNITY DESIGN SOLUTIONS
7770 JEFFERSON STREET SUITE 200
ALBUQUERQUE, NEW MEXICO 87109
WWW.RESPECCO.COM PHONE (505) 253-9718

REVISION

STAMP

SHELDON E. GREER
NEW MEXICO
17154
REGISTERED PROFESSIONAL ENGINEER
10/10/2022

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nm811 Know what's below. Call before you dig.

PROJ. #: ####

PROJECT NAME: TIDAL WAVE

SHEET TITLE: DRAINAGE

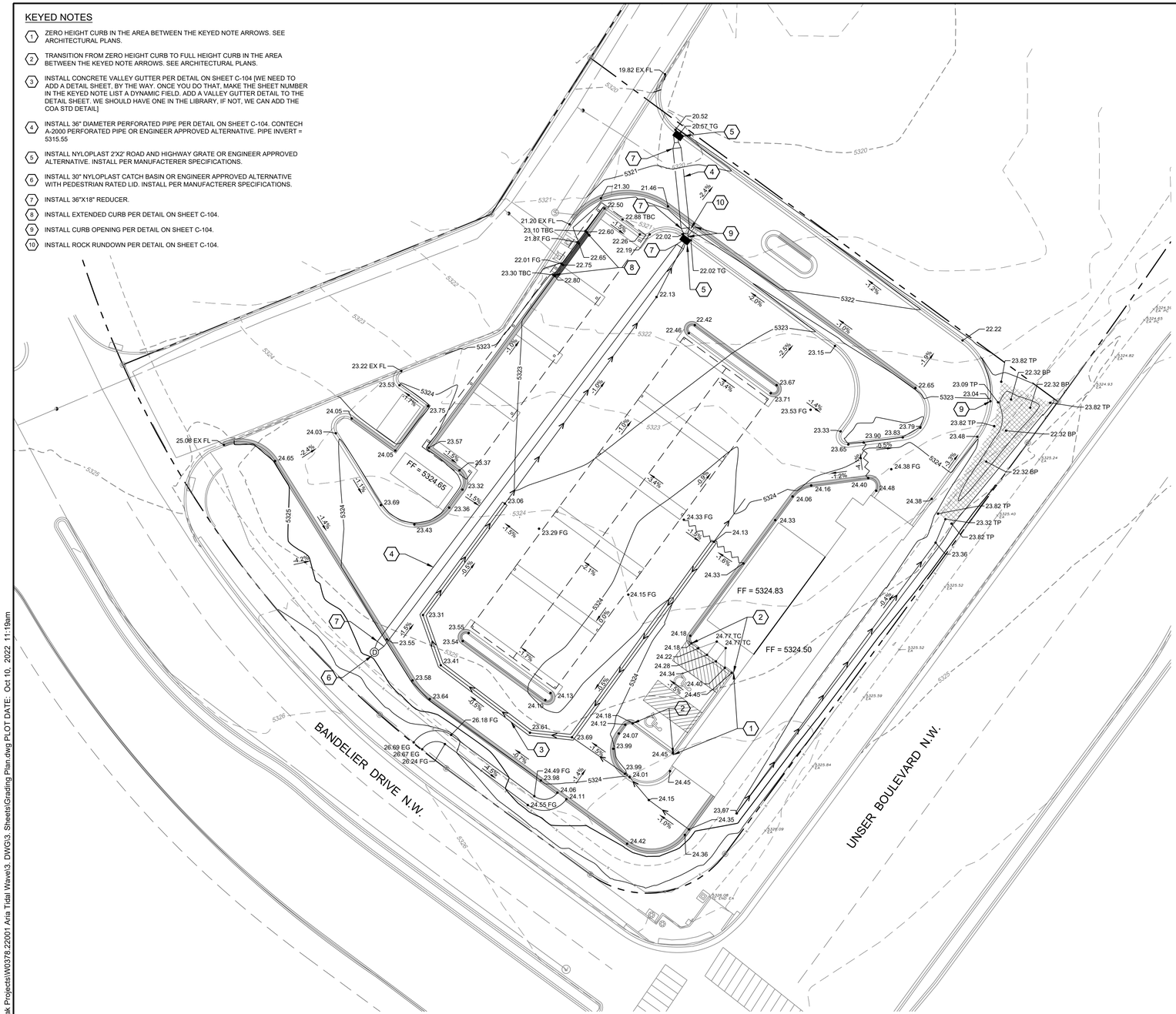
SUBMITTED FOR: BUILDING PERMIT

SHEET NUMBER: C-101

NAME: N:\Projects\W0378-Daniel Puzak Projects\W0378.22001 Aria Tidal Wave\3. DWG\3. Sheets\Drainage Plan.dwg PLOT DATE: Oct 10, 2022 11:18am

KEYED NOTES

1. ZERO HEIGHT CURB IN THE AREA BETWEEN THE KEYED NOTE ARROWS. SEE ARCHITECTURAL PLANS.
2. TRANSITION FROM ZERO HEIGHT CURB TO FULL HEIGHT CURB IN THE AREA BETWEEN THE KEYED NOTE ARROWS. SEE ARCHITECTURAL PLANS.
3. INSTALL CONCRETE VALLEY GUTTER PER DETAIL ON SHEET C-104 [WE NEED TO ADD A DETAIL SHEET, BY THE WAY. ONCE YOU DO THAT, MAKE THE SHEET NUMBER IN THE KEYED NOTE LIST A DYNAMIC FIELD. ADD A VALLEY GUTTER DETAIL TO THE DETAIL SHEET. WE SHOULD HAVE ONE IN THE LIBRARY, IF NOT, WE CAN ADD THE COA STD DETAIL]
4. INSTALL 36" DIAMETER PERFORATED PIPE PER DETAIL ON SHEET C-104. CONTECH A-2000 PERFORATED PIPE OR ENGINEER APPROVED ALTERNATIVE. PIPE INVERT = 5315.55
5. INSTALL NYLOPLAST 2'X2' ROAD AND HIGHWAY GRATE OR ENGINEER APPROVED ALTERNATIVE. INSTALL PER MANUFACTERER SPECIFICATIONS.
6. INSTALL 30" NYLOPLAST CATCH BASIN OR ENGINEER APPROVED ALTERNATIVE WITH PEDESTRIAN RATED LID. INSTALL PER MANUFACTERER SPECIFICATIONS.
7. INSTALL 36"X18" REDUCER.
8. INSTALL EXTENDED CURB PER DETAIL ON SHEET C-104.
9. INSTALL CURB OPENING PER DETAIL ON SHEET C-104.
10. INSTALL ROCK RUNDOWN PER DETAIL ON SHEET C-104.



GRADING GENERAL NOTES

1. INSTALL PAVEMENT, HANDICAP RAMPS, CURB AND GUTTER, SIDEWALK AND ALL OTHER FEATURES WITHOUT DETAILS ON THIS SHEET PER ARCHITECTURAL PLANS.
2. 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
3. GRADES SHOWN ARE FINAL SURFACE GRADES AFTER COMPLETION OF SURFACE IMPROVEMENTS AND PLACEMENTS OF TOPSOIL.
4. GRADE ADJACENT AREAS AT SITE PERIMETER SHALL MATCH GRADE OF ADJACENT PARCELS.
5. 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.
6. REFER TO GEOTECHNICAL EVALUATIONS REPORT X BY XXXXX DATED XXXXX.
7. COMPOSITE SLOPE IN HANDICAP PARKING SHALL NOT EXCEED 2% IN ANY DIRECTION.
8. CROSS SLOPE ON ADA CROSSWALKS SHALL NOT EXCEED 2%. LONGITUDINAL SLOPE SHALL NOT EXCEED 5%.
9. LONGITUDINAL SLOPE ON CURB RAMP SHALL NOT EXCEED 8.33%. CROSS SLOPE SHALL NOT EXCEED 2%.
10. COMPOSITE SLOPE ON RAMP LANDINGS SHALL NOT EXCEED 2%.
11. CROSS SLOPES ON SIDEWALKS SHALL NOT EXCEED 2%. LONGITUDINAL SLOPES ON ONSITE SIDEWALKS SHALL NOT EXCEED 5%.
12. 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.
13. INSTALL PAVING PER PAVEMENT SECTION ON SHEET C-104.
14. FOR TUNNEL BUILDING ENTRANCE AND EXIT SLABS, SEE ARCHITECTURAL PLANS.

ABBREVIATIONS

AC	ACRE
BP	BOTTOM OF POND
CF	CUBIC FOOT
ELEV	ELEVATION
FF	FINISHED FLOOR
INV	INVERT
LF	LINEAR FOOT
NMAPWA	NEW MEXICO AMERICAN PUBLIC WORKS ASSOCIATION
MAX	MAXIMUM
MIN	MINIMUM
PVC	POLYVINYL CHLORIDE
ROW	PUBLIC RIGHT OF WAY
RPBA	REDUCED PRESSURE BACKFLOW ASSEMBLY
SAS	SANITARY SEWER
SD	STORM DRAIN
STD DWG	STANDARD DRAWING
VOL	VOLUME
TP	TOP OF POND
WTR	WATER

SITE CIVIL LEGEND:

- PROPERTY BOUNDARY
- 5272 — PROPOSED MAJOR CONTOUR
- 5272 — PROPOSED MINOR CONTOUR
- 5272 — EXISTING MAJOR CONTOUR
- 5272 — EXISTING MINOR CONTOUR
- LIMITS OF DISTURBANCE
- FLOWLINE
- GRADE BREAK / HIGH POINT
- 4"-6" DIAMETER BROKEN ROCK INSTALLED WITH 6" TYPICAL DEPTH.
- TOP OF POND
- DEPRESSED CURB & GUTTER
- EXTENDED CURB

SPOT ELEVATION SYMBOLS

20.00	FLOWLINE
20.00 EG	TOP OF EXISTING GROUND
20.00 FG	TOP OF FINISHED GROUND
20.00 TG	TOP OF GRATE
20.00 TC	TOP OF CONCRETE
20.00 EX FL	EXISTING FLOWLINE
20.00 TBC	TOP BACK OF CURB
20.00 TP	TOP OF POND
20.00 BP	BOTTOM OF POND

City of Albuquerque
Planning Department
Development Review Services
HYDROLOGY SECTION
APPROVED
10/26/22
DATE:
BY:
HydroTrans #: A11D017C

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SCALE: 1" = 20'

DESIGNED	
DRAWN	
CHECKED	
DATE	10.10.2022

REVISION

RESPEC
COMMUNITY DESIGN SOLUTIONS
7770 JEFFERSON STREET SUITE 200
ALBUQUERQUE, NEW MEXICO 87109
WWW.RESPECNM.COM PHONE (505) 293-3718

STAMP

SHELDON E. GREER NEW MEXICO 17154 LICENSED PROFESSIONAL ENGINEER 10/10/2022

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nm811 Know what's below. Call before you dig.

PROJ. #: ####

PROJECT NAME: TIDAL WAVE

SHEET TITLE: GRADING

SUBMITTED FOR: BUILDING PERMIT

SHEET NUMBER: C-102

NAME: N:\Projects\W0378-Daniel Puzak Projects\W0378.22001 Axia Tidal Wave\3. DWG\3. Sheets\Grading Plan.dwg PLOT DATE: Oct 10, 2022 11:19am