

CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Interim Director



Mayor Timothy M. Keller

November 24, 2021

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

**RE: Top Golf Pond
1600 Desert Surf Circle NE
Grading and Drainage Plan
Engineer's Stamp Date: 10/19/21
Hydrology File: F16D003E1**

Dear Mr. Bohannon:

PO Box 1293

Based upon the information provided in your submittal received 10/19/2021, the Grading & Drainage Plan is approved for Grading Permit. Once the grading of the project is complete, please provide an as-built for Hydrology's records.

Albuquerque

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.

NM 87103

www.cabq.gov

If you have any questions, please contact me at 924-3995 or rbrissette@cabq.gov.

Sincerely,

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 6/2018)

Project Title: Top Golf (Pond Grading Plan) **Building Permit #:** _____ **Hydrology File #:** _____
DRB#: _____ **EPC#:** _____ **Work Order#:** _____
Legal Description: Parcel B-1 Plat of Parcels C-1, C-2, C-3, C-4 & B-1
City Address: 1600 Desert Surf Cir NE Albuquerque NM

Applicant: Tierra West, LLC **Contact:** Jonathan Niski
Address: 5571 Midway Park NE Albuquerque NM 87109
Phone#: 505-858-3100 **Fax#:** 505-858-1118 **E-mail:** jniski@tierrawestll.com

Other Contact: _____ **Contact:** _____
Address: _____
Phone#: _____ **Fax#:** _____ **E-mail:** _____

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

IS THIS A RESUBMITTAL? _____ 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
- ☐ FLOODPLAIN DEVELOPMENT PERMIT APPLIC
- ☐ ELEVATION CERTIFICATE
- ☐ CLOMR/LOMR
- ☐ TRAFFIC CIRCULATION LAYOUT (TCL)
- ☐ TRAFFIC IMPACT STUDY (TIS)
- ☐ STREET LIGHT LAYOUT
- ☐ OTHER (SPECIFY) _____
- ☐ PRE-DESIGN MEETING?

TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

- ☒ BUILDING PERMIT APPROVAL
- ☐ CERTIFICATE OF OCCUPANCY (Permanent)
- ☐ 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: 10/19/2021 **By:** Jonathan Niski

COA STAFF:

ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____



TIERRA WEST, LLC

August 19, 2021

Ms. Renee C. Brissette, P.E. CFM
Planning Department – Hydrology
PO BOX 1293
Albuquerque, NM 87103

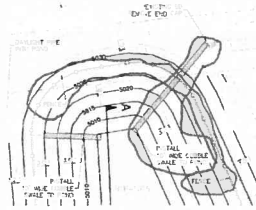
**RE: TOP GOLF POND
1600 DESERT SURF CIRCLE NE
GRADING AND DRAINAGE PLAN
HYDROLOGY FILE: F16D003E1**

Dear Ms. Brissette:

Per the correspondence dated August 16, 2021, please find the following responses addressing the comments listed below:

1. Per the DPM, the following must be on the Grading Plan.
 - a. Please provide a Vicinity Map
A Vicinity Map was added to the plan.
 - b. Please provide the Benchmark information (location, description and elevation) for the survey contour information provided.
A benchmark was added to the plan.
 - c. Please provide the FIRM Map and flood plain note with effective date.
A FRIM Map was added to the plan.
 - d. Please provide a legal Description of the property
A legal description was added to the plan
2. Please provide the retention pond calculations per the Development Process Manual (DPM) (signed 06/08/20) Chapter 6.
The retention pond calculations were added to the plan.
3. Please provide a section for the pond showing the top of pond elev., bottom of pond elev., the 100yr. WSE, stormwater quality WSE, and the elev., of the safety shelf.
A cross-section of the pond with the requested information was added to the plan.
4. Please add the street name for Montano Rd.
The street name was added to the plan.
5. It doesn't appear that the as-built elevations are correct but just taken from the designed Grading Plan dated 10/2018. Please ensure that these are the actual as-built survey. There are two items missing from this which also leads me to believe that this is not an as-built survey.
 - a. There is missing cobble swale from the existing 24-in storm drain (from the McDonalds development) to the bottom of the pond.
These items were an oversight and were added to the plan and called out as existing.
 - b. The fence around the pond along the safety shelf (reference image below)

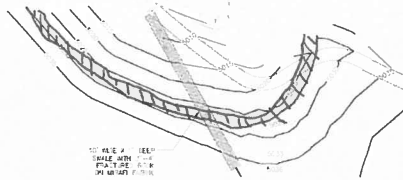
5571 Midway Park Place NE
Albuquerque, NM 87109
(505) 858-3100
Fax (505) 858-1118
tierrawestllc.com



Response:

6. Please relocate the note "Pond side slopes need to be stabilized with Native Grass Seed with Aggregate Mulch or equal (Must satisfy the "Final Stabilization Criteria" CGP 2.2.14.b.)" out of the pond area and more off the side to clean up the area.
The note was moved to the upper left corner of the plan.

7. Please add the safety shelf so that it connects the two existing areas. (reference image below)



This is more of a maintenance road along the fence. We updated the plan to have it connect to the new ramp and upper level.

8. Please add the new proposed fence along the safety shelf and the gate at the maintenance road.
The new fence location is now shown on the plan and it reconnects to the existing fence.
9. Please provide the slopes along the maintenance road.
Slopes were added to the ramps as requested.
10. How do the vehicles get from the public road (Desert Surf Circle) to the maintenance road of the pond? There needs to be a drive pad for the vehicles at Desert Surf Circle.
There are two existing driveways from Desert Surf Circle to the property which are now shown on the plan.
11. Information about 40 feet from property line can be eliminated to the information needed on the plan.
The extra information was cut back to allow for all of the new items requested.

If you have any questions or need additional information regarding this matter, please do not hesitate to contact me.

Sincerely,



Ronald R. Bohannon, P.E.

POND SIDE SLOPES NEED TO BE STABILIZED WITH NATIVE GRASS SEED WITH AGGREGATE MULCH OR EQUAL (MUST SATISFY THE "FINAL STABILIZATION CRITERIA" CGP 2.2.14.B.)

MONTANO RD

Weighted E Method

Developed On-Site Basins

Basin	Area (sf)	Area (acres)	Treatment A		Treatment B		Treatment C		Treatment D		100-Year, 6-hr		10-Year, 6 hr		100-Year, 10 day	
			%	(acres)	%	(acres)	%	(acres)	%	(acres)	Weighted E	Volume (ac-ft)	Flow cfs	Weighted E	Volume (ac-ft)	Flow cfs
1	401,892	9.23	0%	0.00	50%	4.61	50%	4.61	0%	0.00	0.840	0.646	23.20	0.345	0.265	10.47
2	NOT USED															
3	106,762	2.45	0%	0.00	0%	0.00	65%	1.59	35%	0.86	1.402	0.286	8.11	0.780	0.159	4.53
4	231,637	5.32	0%	0.00	0%	0.00	0%	0.00	100%	5.32	2.240	0.993	21.91	1.430	0.834	13.67
5	61,650	1.42	0%	0.00	0%	0.00	100%	1.42	0%	0.00	0.950	0.112	4.06	0.430	0.051	2.07
6	37,190	0.85	0%	0.00	15%	0.13	80%	0.68	5%	0.04	0.082	0.070	2.41	0.455	0.032	1.21
7	180,355	4.14	0%	0.00	16%	0.66	0%	0.00	84%	3.48	1.998	0.690	15.76	1.243	0.429	9.47
8	16,694	0.38	0%	0.00	5%	0.02	85%	0.33	10%	0.04	1.068	0.034	1.13	0.522	0.017	0.59
Total	1,036,180	23.79							9.73		2.830	76.59		1.587	42.01	

Equations:

Weighted E = Ea*Aa + Eb*Ab + Ec*Ac + Ed*Ad / (Total Area)

Volume = Weighted D * Total Area

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

Excess Precipitation, E (inches)

Zone 1	100-Year	10-Year
Ea	0.55	0.11
Eb	0.73	0.26
Ec	0.95	0.43
Ed	2.24	1.43

Peak Discharge (cfs/acre)

Zone 1	100-Year	10-Year
Qa	1.54	0.3
Qb	2.16	0.81
Qc	2.87	1.46
Qd	4.12	2.57

BENCHMARK

A.G.R.S. MONUMENT "M_6"
STANDARD A.G.R.S. BRASS TABLET
(FOUND IN PLACE)
NEW MEXICO STATE PLANE COORDINATES
(CENTRAL ZONE-N.A.D. 1983)
N=1,503,215.185
E=1,533,745.194
PUBLISHED EL=5113.206 (NAVD 1988)
GROUND TO GRID FACTOR=0.999672339
DELTA ALPHA ANGLE=-0°12'19.10"

VOLUME CALCULATIONS POND

Ab - Bottom Of The Pond Surface Area
At - Top Of The Pond Surface Area
D - Water Depth
Dt - Total Pond Depth
C - Change In Surface Area / Water Depth

Volume = Ab * D + 0.5 * C * D²

C = (At - Ab) / Dt

Ab = 15,219.00

At = 34,269.00

Dt = 10.00

C = 1905.00

ACTUAL ELEV.	DEPTH (FT)	VOLUME (AC-FT)
5005.00	0.00	0.00
5005.79	0.79	0.2760
5007.00	2.00	0.7308
5008.00	3.00	1.1549
5010.00	5.00	2.1345
5012.00	7.00	3.2889
5013.14	8.14	4.0252
5014.00	9.00	4.6183
5015.00	10.00	5.3486

First Flush Elevation

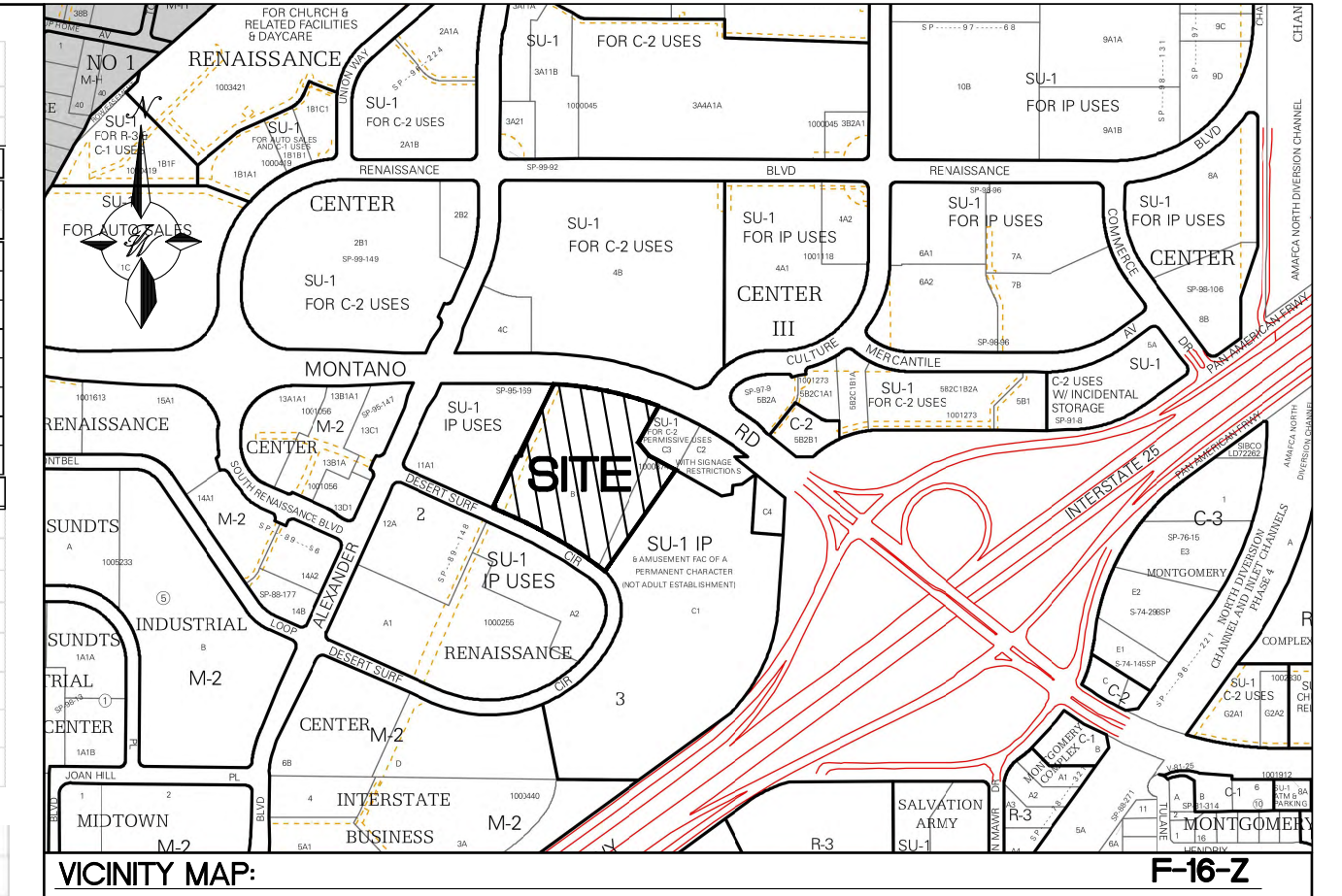
100-yr Volume

LEGEND

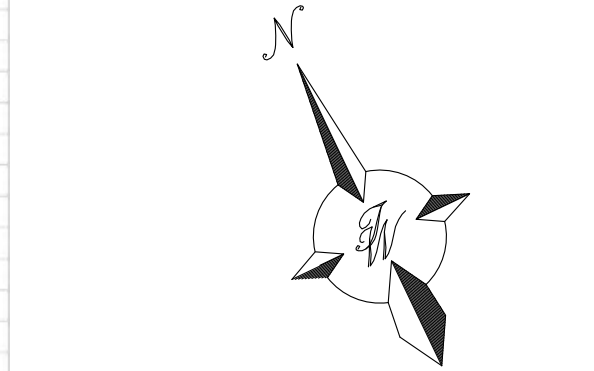
---	CURB & GUTTER
---	BOUNDARY LINE
---	EASEMENT
---	CENTERLINE
---	RIGHT-OF-WAY
---	BUILDING
---	SIDEWALK
---	SCREEN WALL
---	RETAINING WALL
---	CONTOUR MAJOR
---	CONTOUR MINOR
x 5048.25	SPOT ELEVATION
---	FLOW ARROW
---	EXISTING CURB & GUTTER
---	EXISTING BOUNDARY LINE
---	PROPOSED CONTOUR MAJOR
---	PROPOSED CONTOUR MINOR
---	EXISTING CONTOUR MAJOR
---	EXISTING CONTOUR MINOR
x 5048.25	EXISTING SPOT ELEVATION

100 Yr, Ch, WSE = 5013.14
FIRST FLUSH, WSE = 5005.79
BOTTOM OF POND = 5005.0

POND SECTION A-A NTS



LEGAL DESCRIPTION PARCEL B-1-A RENAISSANCE CENTER III



NOTICE TO CONTRACTORS

- TWO WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE, 765-1234, FOR LOCATION OF EXISTING UTILITIES.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL CONNECTIONS. 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 ACCORDING TO TRAFFIC/STREET USE.
- MAINTENANCE OF THESE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY SERVED.
- SOURCE OF TOPO IS ALTA/ACSM LAND TITLE SURVEY OF LOT 2 HARMS INDUSTRIAL PARK PREPARED BY PRECISION SURVEYS, INC DATED JANUARY 11, 2012.
- STORM WATER RUNOFF WILL BE PASSIVELY HARVESTED ALONG THE WEST, SOUTH AND EAST PROPERTY LINES WITHIN LANDSCAPED AREAS IN COMPLIANCE WITH WATER CONSERVATION ORDINANCE REQUIREMENTS.

EROSION CONTROL NOTES:

- CONTRACTOR IS RESPONSIBLE FOR OBTAINING A TOPSOIL DISTURBANCE PERMIT PRIOR TO BEGINNING WORK.
- CONTRACTOR IS RESPONSIBLE FOR MAINTAINING RUN-OFF ON SITE DURING CONSTRUCTION.
- CONTRACTOR IS RESPONSIBLE FOR CLEANING ALL SEDIMENT THAT GETS INTO EXISTING RIGHT-OF-WAY.
- REPAIR OF DAMAGED FACILITIES AND CLEANUP OF SEDIMENT ACCUMULATIONS ON ADJACENT PROPERTIES AND IN PUBLIC FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR.
- ALL EXPOSED EARTH SURFACES MUST BE PROTECTED FROM WIND AND WATER EROSION PRIOR TO FINAL ACCEPTANCE OF ANY PROJECT.

CAUTION:

ALL EXISTING UTILITIES SHOWN WERE OBTAINED FROM RESEARCH, AS-BUILTS, SURVEYS OR INFORMATION PROVIDED BY OTHERS. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO CONDUCT ALL NECESSARY FIELD INVESTIGATIONS PRIOR TO AND INCLUDING ANY EXCAVATION, TO DETERMINE THE ACTUAL LOCATION OF UTILITIES AND OTHER IMPROVEMENTS, PRIOR TO STARTING THE WORK. ANY CHANGES FROM THIS PLAN SHALL BE COORDINATED WITH AND APPROVED BY THE ENGINEER.

ENGINEER'S SEAL RONALD R. BOHANNAN NEW MEXICO 7868 PROFESSIONAL ENGINEER 10/19/2021 RONALD R. BOHANNAN P.E. #7868	TOP GOLF POND FILL FACILITY, ALBUQUERQUE, NM	DRAWN BY AS DATE 07/15/21
	GRADING PLAN	2021063-BASE-GR SHEET # 1 OF 1 JOB # 2021063