CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Director

Mayor Timothy M. Keller

March 11, 2024

Olin M. Brown, P.E., Vice President Community Development and Planning
Bohannan Huston, Inc.
7500 Jefferson St NE
Albuquerque, NM 87109

RE: Mesa del Sol Innovation Park Ill - Overall Drainage Management Plan
Drainage Management Plan Submittal for Bulk Land Plat
Drainage Management Plan Engineer's Stamp Date: 2/27/2024
Hydrology File: R16D097D

Dear Mr. Brown,

Based upon the information provided in your submittal received 3/4/2024, the Drainage Management Plan is preliminary approved for Bulk Land Plat action by the DHO.

For future grading & drainage plan submittals, the land treatment percentage values for DA 9 needs to be verified. It looks like they should be 0%, 10%, 10% & 80% for land treatment A, B, C & D respectively based on 9-A through 9-E land treatment percentages. Please also check the land treatment numbers for DA8 & DA10.

DA 9	498.50	0.0%	5.0%	5.0%	90.0%

If you have any questions, please contact me at 505-924-3695 or tchen@cabq.gov.

Sincerely,

Tiequan Chen, P.E.
Principal Engineer, Hydrology
Planning Department, Development Review Services

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City of Albuquerque

Planning Department
Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (DTIS)

Project Title: Mesa del Sol Innovation Park III - Overall Drainage Management Plan Hydrology File # _____
Legal Description: Tract 18 Artiste (soon to be Mesa del Sol Innovation Park III
City Address, UPC, OR Parcel: 99999 University Blvd

Applicant/Agent: Bohannan Huston Inc. Contact: Mike Balaskovits
Address: 7500 Jefferson St. NE, Albuquerque, NM 87109 Phone: 505-798-7891
Email: mbalaskovits@bhinc.com

Applicant/Owner: MDS Investment LLC Contact: Tom Schmidt
Address: 5700 University Blvd. Albuquerque, NM 87106 Phone: 505-238-0700
Email: tom@sc3development.com

(Please note that a DFT SITE is one that needs Site Plan Approval & ADMIN SITE is one that does not need it.)

TYPE OF DEVELOPMENT: ☑ PLAT (#of lots) 14 ☐ RESIDENCE ☐ DFT SITE ☐ ADMIN SITE

RE-SUBMITTAL: ☐ YES ☑ NO

DEPARTMENT: ☐ TRANSPORTATION ☑ HYDROLOGY/DRAINAGE

Check all that apply under Both the Type of Submittal and the Type of Approval Sought:

TYPE OF SUBMITTAL:

- ☐ ENGINEER/ARCHITECT CERTIFICATION
- ☐ PAD CERTIFICATION
- ☐ CONCEPTUAL G&D PLAN
- ☐ GRADING & DRAINAGE PLAN
- ☐ DRAINAGE REPORT
- ☑ DRAINAGE MASTER PLAN
- ☐ CLOMR/LOMR
- ☐ TRAFFIC CIRCULATION LAYOUT (TCL) ADMINISTRATIVE
- ☐ TRAFFIC CIRCULATION LAYOUT FOR DFT APPROVAL
- ☐ TRAFFIC IMPACT STUDY (TIS)
- ☐ STREET LIGHT LAYOUT
- ☐ OTHER (SPECIFY)_____

TYPE OF APPROVAL SOUGHT:

- ☐ BUILDING PERMIT APPROVAL
- ☐ CERTIFICATE OF OCCUPANCY
- ☐ CONCEPTUAL TCL DFT APPROVAL
- ☐ PRELIMINARY PLAT APPROVAL
- ☑ FINAL PLAT APPROVAL
- ☐ SITE PLAN FOR BLDG PERMIT DFT 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
- ☐ OTHER (SPECIFY)_____

DATE SUBMITTED: 02-27-2024

REV. 09/13/23

MESA DEL SOL - OVERALL DRAINAGE - ALT 1								
Basin Data Table								
This table is based on the DPM Part 6-2(A), Zone: 2								
Basin	Area	Land Treatment Percentages				Q(100yr)	Q(100yr-6hr)	V(100yr-10day)
ID	(AC.)	A	B	C	D	(cfs/ac.)	(CFS)	AC-FT
DA 3B	80.60	0.0%	5.0%	5.0%	90.0%	4.18	336.62	22.74
DA 8	193.14	0.0%	14.0%	14.0%	72.0%	3.88	732.50	44.08
8-A	73.24	0.0%	5.0%	5.0%	90.0%	4.18	305.90	20.66
8-B	5.80	0.0%	45.0%	45.0%	10.0%	2.87	16.64	0.58
8-C	24.99	0.0%	21.5%	21.5%	57.0%	3.64	90.87	5.16
8-D	2.32	0.0%	5.0%	5.0%	90.0%	4.18	9.70	0.66
8-E	4.25	0.0%	5.0%	5.0%	90.0%	4.18	17.77	1.20
8-F	32.61	0.0%	21.5%	21.5%	57.0%	3.64	118.59	6.74
8-G	3.91	5.0%	5.0%	5.0%	90.0%	4.26	16.67	1.11
8-H	6.61	0.0%	45.0%	45.0%	10.0%	2.87	18.96	0.66
8-I	17.87	0.0%	21.5%	21.5%	57.0%	3.64	64.98	3.69
8-J	8.14	0.0%	5.0%	5.0%	90.0%	4.18	34.01	2.30
8-K	13.39	0.0%	45.0%	45.0%	10.0%	2.87	38.42	1.33
FUTURE BASIN 1	81.29	0.0%	21.5%	21.5%	57.0%	3.64	295.66	16.80
DA 9	498.50	0.0%	5.0%	5.0%	90.0%	4.18	2000.47	129.24
9-A	40.76	0.0%	10.0%	10.0%	80.0%	4.01	163.56	10.57
9-B	32.12	0.0%	10.0%	10.0%	80.0%	4.01	128.89	8.33
9-C	55.32	0.0%	10.0%	10.0%	80.0%	4.01	221.99	14.34
9-D	134.27	0.0%	10.0%	10.0%	80.0%	4.01	538.82	34.81
9-E	236.03	0.0%	10.0%	10.0%	80.0%	4.01	947.21	61.19
DA 10	240.75	0.0%	14.0%	14.0%	72.0%	3.88	904.88	53.84
10-A	36.56	0.0%	21.5%	21.5%	57.0%	3.64	132.97	7.55
10-B	24.23	0.0%	5.0%	5.0%	90.0%	4.18	101.18	6.83
10-C	12.02	0.0%	10.0%	10.0%	80.0%	4.01	48.25	3.12
10-D	6.21	0.0%	5.0%	5.0%	90.0%	4.18	25.95	1.75
10-E	29.31	0.0%	10.0%	10.0%	80.0%	4.01	117.64	7.60
10-F	19.65	0.0%	10.0%	10.0%	80.0%	4.01	78.87	5.10
10-G	42.60	0.0%	21.5%	21.5%	57.0%	3.64	154.95	8.80
10-H	9.54	0.0%	35.0%	35.0%	30.0%	3.20	30.48	1.38
10-I	47.31	0.0%	21.5%	21.5%	57.0%	3.64	172.06	9.78
10-J	13.31	0.0%	35.0%	35.0%	30.0%	3.20	42.54	1.93
DA 11	172.40	0.0%	20.0%	23.0%	57.0%	3.65	628.80	35.67
DA 12	143.64	0.0%	29.0%	29.0%	42.0%	3.39	487.19	24.75
DA 13	83.98	0.0%	5.0%	5.0%	90.0%	4.18	350.76	23.69

DRAINAGE MANAGEMENT PLAN

INTRODUCTION/PURPOSE

THIS SUBMITTAL DESCRIBES THE DRAINAGE MANAGEMENT SCHEME FOR MESA DEL SOL LEVEL B - SOUTH MASTER PLANNED AREAS, SPECIFICALLY WITHIN THE CITY CENTER AREA, SOUTH UNIVERSITY BLVD CORRIDOR, THE SPECIAL INDUSTRIAL USE AREA, AND THE RESIDENTIAL AREA WEST OF SOUTH UNIVERSITY BLVD. THIS DRAINAGE MANAGEMENT PLAN WILL SERVE AS A GUIDING DOCUMENT FOR FUTURE DEVELOPMENT WITHIN THESE AREAS--PROVIDING DRAINAGE CALCULATIONS AND ULTIMATE POND SIZING FOR THE RESPECTIVE GENERAL DRAINAGE AREAS (REFERRED TO HEREIN AS "DA's"). SPECIFICALLY, THIS DMP IS SUBMITTED IN SUPPOR OF COA HYDROLOGY APPROVAL FOR A BULK LAND PLAT THAT COVERS A LARGE PORTION OF THE ABOVE-DESCRIBED AREA(S). IN ADDITION, THIS PLAN WILL ALSO PROVIDE A FRAMEWORK FOR FUTURE DRAINAGE MANAGEMENT PLANS THAT FOCUS ON SMALLER DEVELOPMENTS WITHIN THIS OVERALL AREA.

EXISTING CONDITIONS

THE DRAINAGE AREAS SOUTH OF THE EXISTING APERTURE CENTER AND CURRENT EXTENTS OF MESA DEL SOL DEVELOPMENT ARE GENERALLY CHARACTERIZED BY UNDEVELOPED LANDS WITH MODERATE SLOPES (0.5%-2%) THAT DO NOT INCLUDE MAJOR ARROYOS OR DRAINAGEWAYS WITH INCISED CHANNELS. THE EXISTING VEGETATIVE LAND COVER IS PREDOMINANTLY DESERT SHRUB AND SCRUB ON GENTLE SLOPES THAT CONCENTRATE DRAINAGE ALONG THE EXISTING PLAYAS, WHICH ARE DISCUSSED IN MORE DETAIL WITHIN THE MESA DEL SOL LEVEL B MASTER PLAN. AT A HIGH LEVEL, THIS DMP MAINTAINS FIDELITY TO THE EXISTING DRAINAGE PATTERNS BY REPLICATING THE RETENTION STORAGE OF THE EXISTNG PLAYAS VIA CONSTRUCTED RETENTION PONDS THAT ALSO PROVIDE GREEN SPACE AND MULTI-USE RECREATION FACILITIES.

PROPOSED DRAINAGE MANAGEMENT PLAN

THIS DRAINAGE MANAGEMENT PLAN CONTINUES THE APPROACH TAKEN PREVIOUSLY AT MESA DEL SOL UNDER THE MESA DEL SOL DRAINAGE AREA ZERO DRAINAGE MANAGEMENT PLAN (R16/DA0, STAMP DATE 1/17/2008). THE NAMING CONVENTION CONTINUES IDENTIFYING DISCRETE DRAINAGE AREAS (STARTING AT DA8) FOR RESPECTIVE AREAS. A NUMBER OF THE AREAS ARE IDENTIFIED AS NON-CONTRIBUTING AREAS THAT ARE SELF-CONTAINED AND DO NOT CONTRIBUTE TO THE PROJECT AREA ALONG THE UNIVERSITY AND DEKOONING TRUNK PONDS AND ASSOCIATED STORM DRAINS. THESE ARE DA 3A (ABQ STUDIOS EXPANSION - R16DA3006AA), DA 11, DA 12, DA 13, DA 15, AND DA-15 (MONTAGE SUBDIVISIONS). DA 8 CONSISTS OF THE CITY CENTER DRANAGE AREA, DA 9 IS THE SPECIAL INDUSTRIAL USE AREA EAST OF UNVERSITY BOULEVARD, AND DA10 IS THE FUTURE RESIDENTIAL AND MIXED USE AREAS WEST OF UNIVERSITY BOULEVARD.

DA 9 (SPECIAL INDUSTRIAL USE AREA) IS PLANNED TO REQUIRE FULL RETENTION ON-SITE FOR EACH OF THE TRACTS WITHIN THIS AREA. THIS APPROACH IS APPROPRIATE FOR THE LAND USE AND IS CONSISTENT WITH THE EXISTING MESA DEL SOL EMPLOYMENT CENTER TO THE NORTH. ON-SITE PONDS WITHIN THE VARIOUS TRACTS WILL BE REQUIRED TO RETAIN THE 100-YEAR, 10-DAY STORM EVENT AND NO RUNOFF FROM THIS AREA WILL IMPACT THE PUBLIC STORM DRAINS AND PONDING FACILITIES (APART FROM DRAINAGE WITHIN THE PUBLIC RIGHT-OF-WAYS).

DA 10 WILL ALLOW THE VARIOUS TRACTS WITHIN THIS DRAINAGE AREA TO FREELY DISCHARGE DEVELOPED FLOWS TO REGIONAL, PUBLIC PONDING FACILITIES (PONDS 10-1 AND POND-2). THIS INCLUDES EXTENSION OF PUBLIC STORM DRAINS FROM THE SOUTHERN-MOST PORTION OF THE MONTAGE 3B SUBDIVISION THAT CURRENTLY DRAINS TO A TEMPORARY RETENTION POND AT THE WESTERN MESA DEL SOL BOULEVARD COUPLET. THESE PONDS WILL ALSO PROVIDE A BUFFER BETWEEN THE RESIDENTIAL AREAS COMPRISING DA 10 FROM THE MIXED USE CORRIDOR IMMEDIATELY WEST OF UNIVERSITY BOULEVARD. BASED ON ASSUMED FUTURE LAND USE, DA 10 WILL PRODUCE 53.84 ACRE-FEET OF RUNOFF VOLUME IN THE 100-YEAR, 10-DAY STORM. PONDS 10-1 AND 10-2 PROVIDE 73.88 ACRE-FEET OF RETENTION TO ACCOMMODATE THIS RUNOFF.

DA 8 INCLUDES THE CITY CENTER AREA WITHIN MESA DEL SOL, AS WELL AS THE UNIVERSITY BOULEVARD CORRIDOR'S IMMEDIATELY ADJACENT TRACTS. THESE AREAS WILL FEATURE STORM DRAINS THAT CARRY FLOWS TO THE SOUTH, WHERE REGIONAL PONDS WILL BE LOCATED ALONG THE EAST SIDE OF UNIVERSITY BOULEVARD. BASED ON ASSUMED LAND USE, THESE DA-8 BASINS WILL PRODUCE 60.89 ACRE-FEET OF RUNOFF VOLUME DURING THE 100-YEAR, 10-DAY STORM EVENT. THIS RUNOFF WILL BE ACCOMMODATED IN PONDS 8-1, 8-2, AND 8-3 THAT WILL PROVIDE 135.23 ACRE-FEET OF RETENTION VOLUME.

THESE REGIONAL RETENTION PONDS WITHIN DA 10 AND DA 8 WILL BE SUBJECT TO FUTURE SITE PLANNING CONSIDERATIONS WHICH WILL INCORPORATE WATER QUALITY FACILITIES, ALONG WITH AESTHETICALLY PLEASING FEATURES SUCH AS A TRAIL SYSTEM, PEDESTRIAN AMENITIES, AND SEDIMENTATION BASIN FACILITIES. ADDITIONALLY, INFILTRATION BASINS WILL BE INSTALLED WITHIN THE BOTTOM OF THE RETENTION PONDS TO HELP MANAGE NUISANCE FLOWS AND ENCOURAGE INFILTRATION. HOWEVER, THESE INFILTRATION BASINS HAVE NOT BEEN INCLUDED INTO THE 100-YEAR, 10-DAY POND VOLUME CALCULATIONS.

FLOODPLAIN

THERE IS A ZONE AE FLOODPLAIN PARTIALLY LOCATED WITHIN DA 9 (MAP PANEL NUMBER 35001C0555H) DUE TO ONE OF THE EXISTING PLAYAS. DEVELOPMENT WITHIN DA 9 WILL BE REQUIRED TO DEVELOP A MITIGATION STRATEGY FOR THIS PARTICULAR FLOODPLAIN. AS THIS FLOODPLAIN IS A RESULTANT OF THE EXISTING PLAYA (LOW POINT), AS OPPOSED TO AN ACTIVE FLOODWAY, THIS APPROACH IS APPROPRIATE MITIGATION STRATEGY THAT IS SPECIFIC TO THE DEVELOPMENT OF THE AFFECTED TRACTS, AS OPPOSED TO THIS REGIONAL MANAGEMENT PLAN.

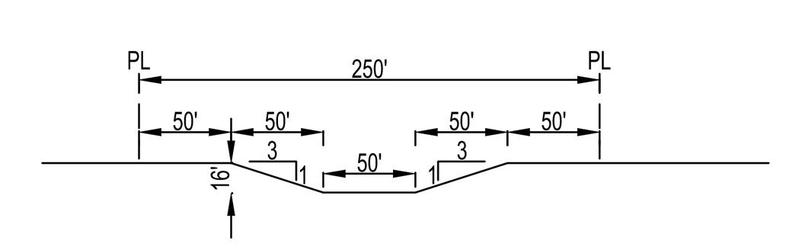
CONCLUSION

THIS DRAINAGE MANAGEMENT PLAN SUBMITTAL HAS BEEN PREPARED IN ACCORDANCE WITH CITY OF ALBUQUERQUE AND MESA DEL SOL LEVEL B MASTER PLAN REQUIREMENTS. THE PLAN DEMONSTRATES THE PROPOSED DRAINAGE MANAGEMENT CONCEPTS HAVE BEEN SIZED APPROPRIATE FOR THE DESIGN STORM EVENTS AND THE IMPLEMENTATION OF THESE IMPROVEMENTS WILL EFFECTIVELY MANAGE STORMWATER RUNOFF DURING THE 100-YEAR, 10-DAY STORM EVENT. INDIVIDUAL SITES WITHIN THE STUDY AREA WILL BE SUBJECT TO SEPARATE CITY OF ALBUQUERQUE HYDROLOGY REVIEW AND APPROVAL, IN CONJUNCTION WITH THE GUIDELINES SET FORTH IN THIS DRAINAGE MANAGEMENT PLAN. WITH THIS SUBMITTAL, WE REQUEST HYDROLOGY DEPARTMENT APPROVAL FOR THE BULK LAND PLAT ASSOCIATED WITH THIS SAME PROJECT AREA.

POND SUMMARY TABLE

Name	Contributing Basins	Top EL.	Bottom EL	Req. Vol. (AC-FT)	Prov. Vol. (AC-FT)
3B-1	DA 3B	5290	5270	22.74	23.37
8-1	DA 8 - 8-A, 8-B, 8-C, 8-D & 8-E	5290	5274	28.26	19.77
8-2	DA 8 - 8F, 8-G & 8-H	5284	5268	8.51	34.18
8-3	DA 8 - 8-I, 8-J, 8-K & Future Basin 1	5280	5264	24.12	81.28
10-1	DA 10 - 10-A-H	5298	5282	42.14	41.64
10-2	DA 10 - 10-I-J	5290	5274	11.70	32.24
				137.46	**232.47**

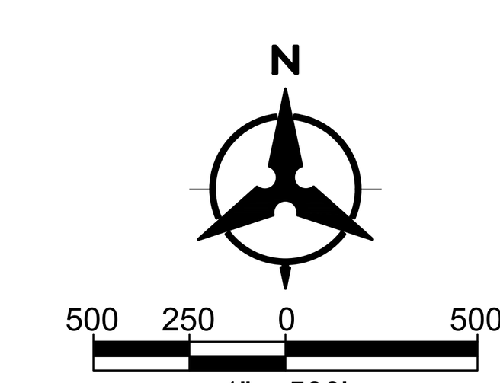
Excess Volume (AC-FT) **95.01**



POND TYPICAL SECTION
nts

LEGEND:

- MAJOR BASIN
- MINOR BASIN
- EX. STORM DRAIN PIPE
- PROP. STORM DRAIN PIPE
- PROP. DETENTION BASIN
- FLOW DIRECTION



OLIN MICHAEL BROWN
NEW MEXICO
23696
2/27/2024
PROFESSIONAL ENGINEER

MESA DEL SOL LEVEL B SOUTH DRAINAGE MANAGEMENT PLAN

DRAINAGE AREA MASTER PLAN

DRAWN BY: AO	DATE: 02/27/2024	
CHECKED BY: OB	BHI PROJECT NO. 20240195	SHEET NO. 1

Bohannan ▲ Huston
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