

CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Director



Mayor Timothy M. Keller

December 24, 2025

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

**RE: Kairos Power Temp Road
Grading & Drainage Plan
Engineer's Stamp Date: 12/3/2025
Hydrology File: Q16DA5000E
Case #: HYDR-2025-00433**

Dear Mr. Bohannon:

Based upon the information provided in your submittal received 12/23/2025, the Grading & Drainage plan **is approved** for Building Permit.

PO Box 1293

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.

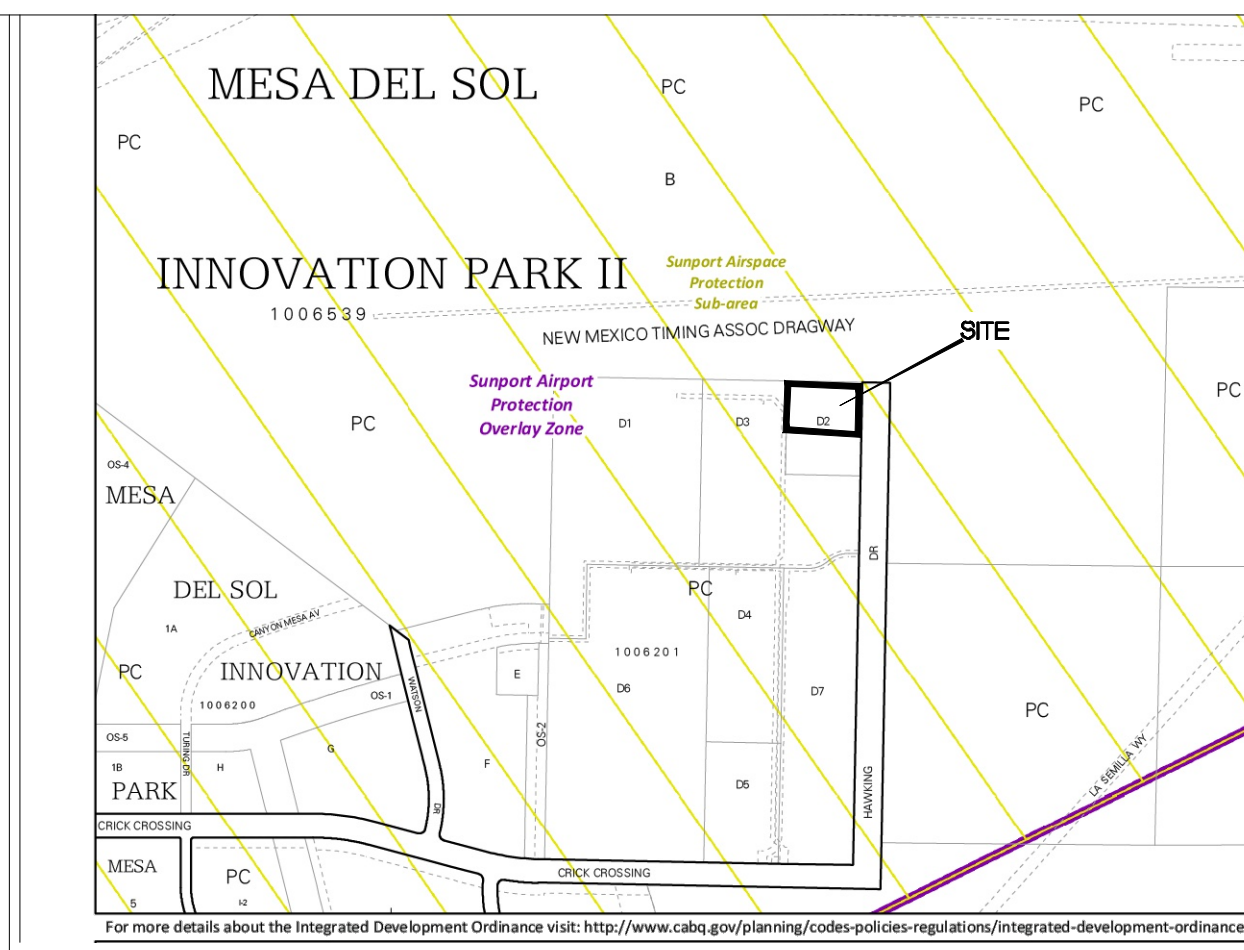
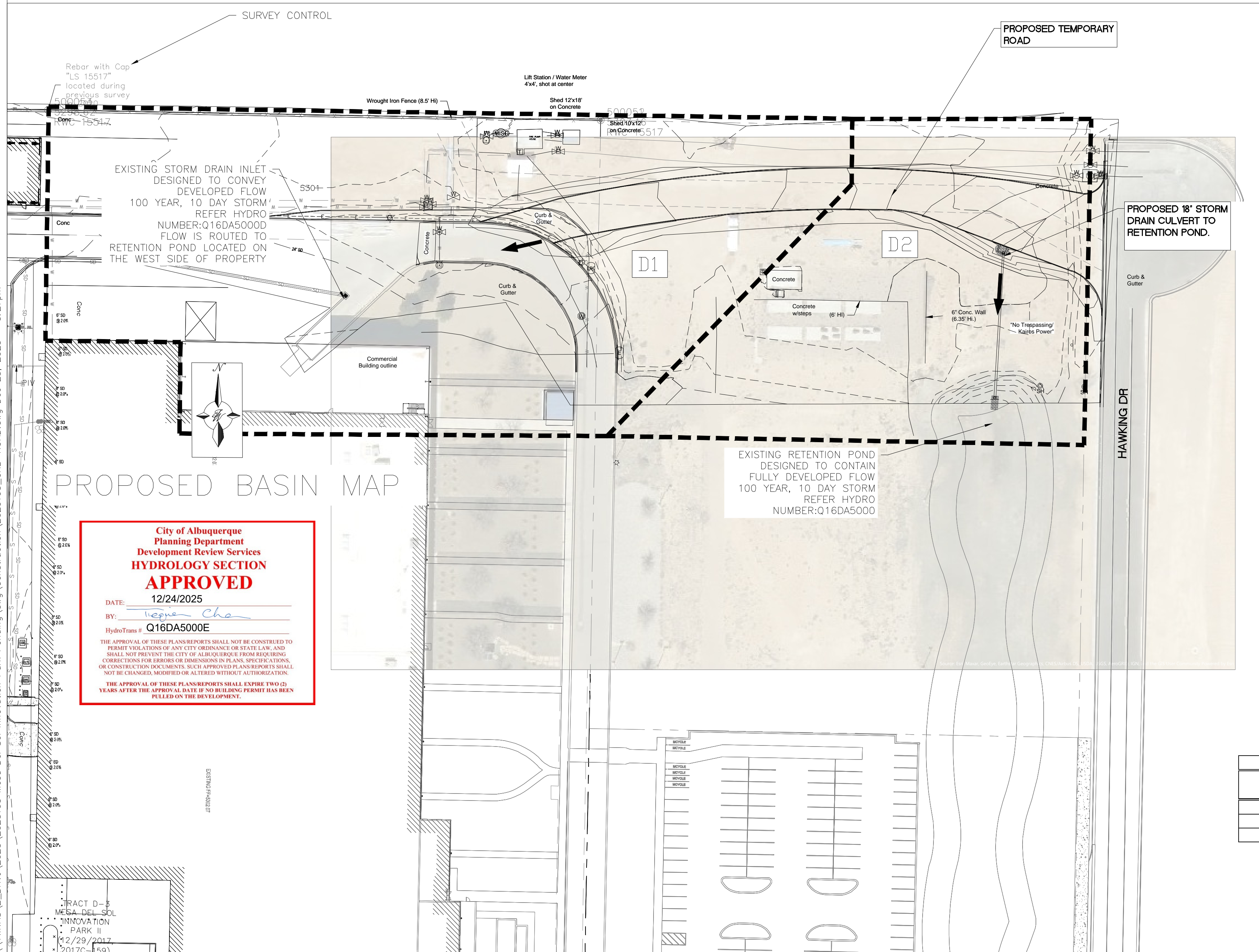
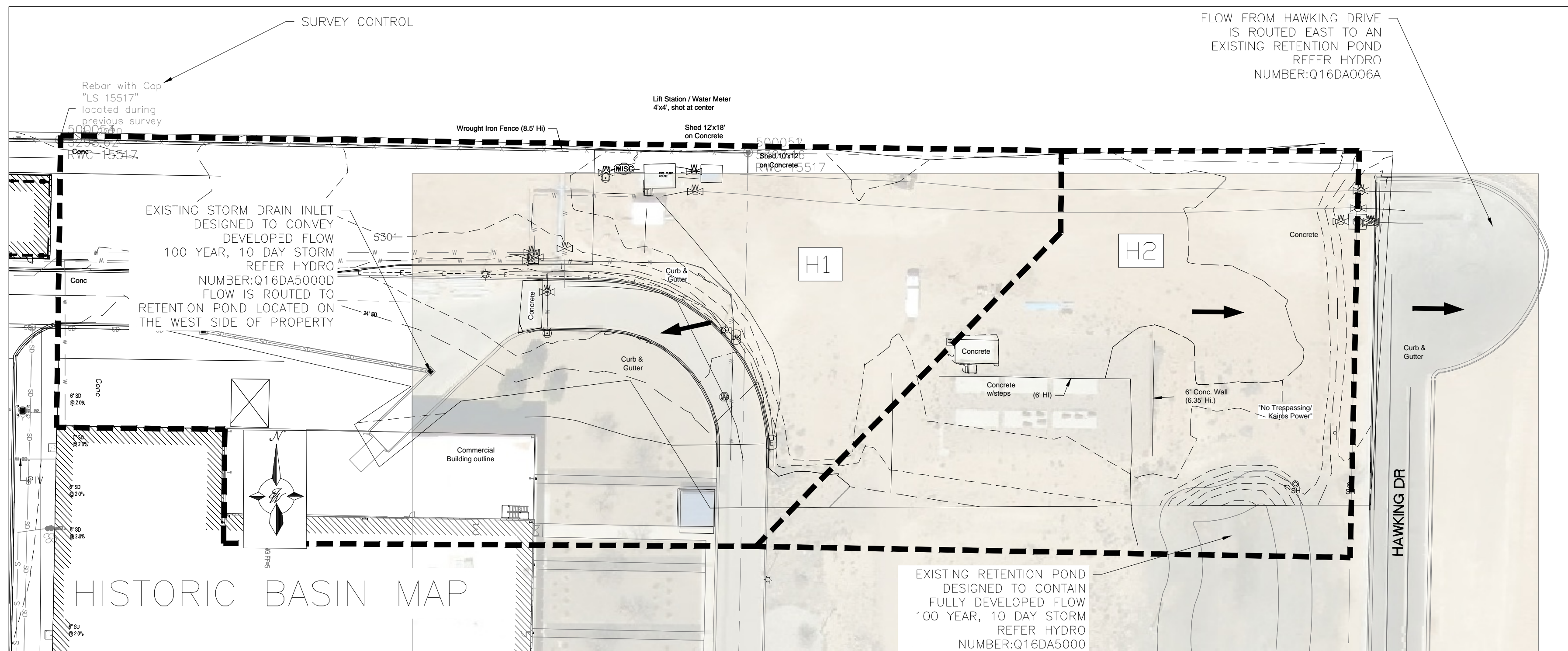
NM 87103

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

Sincerely,

www.cabq.gov

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

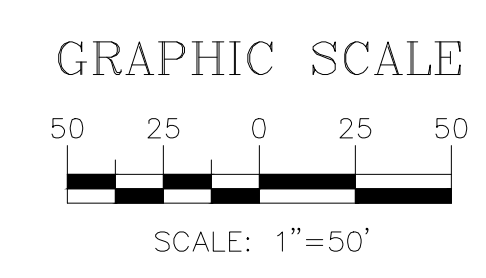


VICINITY MAP: Q-16-Z FIRM MAP: 35001C0363G

LEGAL DESCRIPTION: TR D-2 PLAT OF TRACTS D-1 THRU D-7 MESA DEL SOL INNOVATIONPARK II (A SUBDIVISION OF TRACT D MESA DEL SOL INNOVATIONPARK II) CONT 3.7660 AC

LEGEND

- CURB & GUTTER x 5048.25
- BOUNDARY LINE x 5048.25
- EASEMENT
- BUILDING
- SIDEWALK/CONCRETE
- STORM DRAIN
- 5010--- CONTOUR MAJOR
- 5011--- CONTOUR MINOR
- PROPOSED SPOT ELEVATION
- EXISTING SPOT ELEVATION
- FLOW ARROW
- EXISTING CONCRETE STORM DRAIN PIPE
- EXISTING PVC STORM DRAIN PIPE
- EXISTING CONTOUR MAJOR
- EXISTING CONTOUR MINOR
- EXISTING FENCE
- DRAINAGE BASIN BOUNDARY



HYDROLOGY NOTES

THE PROJECT SITE IS LOCATED ON THE EAST SIDE OF ALBUQUERQUE WITHIN THE MESA DEL SOL INNOVATION PARK. IT LIES WITHIN A LARGER DRAINAGE BASIN AND IS INCLUDED IN THE KAIROS POWER FULLY DEVELOPED POND PROJECT (HYDRO NO. Q16DA50000 AND Q16DA5000). THE SITE IS CURRENTLY UNDEVELOPED. A PORTION OF THE PROJECT SITE DRAINS WEST AND IS MANAGED BY THE KAIROS POWER OVERALL DEVELOPMENT DRAINAGE PLAN. THE OTHER PORTION IS CURRENTLY DRAINING EAST TOWARDS HAWKING DRIVE.

THE PROPOSED PROJECT INCLUDES CONSTRUCTION OF A TEMPORARY ROAD FOR LARGE DELEVRIES. THE EXISTING RETENTION PONDS, AS CALCULATED IN THE KAIROS POWER FULLY DEVELOPED POND PROJECT (HYDRO NO. Q16DA50000 AND Q16DA5000), HAS SUFFICIENT CAPACITY TO ACCOMMODATE THE ADDITIONAL PROPOSED STORMWATER FLOWS.

DPM Weighted E Method

Precipitation Zone 2
 Area Vicinity
 Site Name and Address: Mesa Del Sol Kairos Temp Road
 TWLCC Date 12/3/2025

Equations:
 Weighted E = Ea*Aa + Eb*Ab + Ec*Ac + Ed
 Volume = Weighted E * Total Area
 Flow = Qa*Aa + Qb*Ab + Qc*Ac + Qd*Ad

EXISTING CONDITIONS

Basin ID	Area (sf)	Area (acres)	Area (sq miles)	Basin Descriptions				100-Year, 10-Day							
				Treatment A %	Treatment B %	Treatment C %	Treatment D %	Weighted E (in)	Volume (ac-ft)	Flow cfs	Volume (cf)				
H1	118,940	2.73	0.00427	0%	0.000	0%	0.000	60%	1.638	40%	1.092	1.550	0.474	9.74	20636
H2	59,397	1.36	0.00213	0%	0.000	0%	0.000	96%	1.309	4%	0.055	1.082	0.129	4.23	5619
Total	178,337.00	4.094	0.00640	0.000	0.000	0.000	2.947	1.147				0.603	13.97	26255	

PROPOSED CONDITIONS

Basin ID	Area (sf)	Area (acres)	Area (sq miles)	Basin Descriptions				100-Year, 10-Day				Net Increase (cf)			
				Treatment A %	Treatment B %	Treatment C %	Treatment D %	Weighted E (in)	Volume (ac-ft)	Flow cfs	Volume (cf)				
D1	118,940	2.73	0.00427	0%	0.000	0%	0.000	53%	1.447	47%	1.283	1.641	0.516	9.98	22461
D2	59,397	1.36	0.00213	0%	0.000	0%	0.000	82%	1.118	18%	0.245	1.264	0.171	4.48	7441
Total	178,337.00	4.094	0.00640	0.000	0.000	0.000	2.565	1.529				0.686	14.46	29902.21	3647

OVERALL BASIN(S) EXISTING CONDITIONS

Basin ID	Area (sf)	Area (acres)	Area (sq miles)	Basin Descriptions				100-Year, 10-Day							
				Treatment A %	Treatment B %	Treatment C %	Treatment D %	Weighted E (in)	Volume (ac-ft)	Flow cfs	Volume (cf)				
BASIN 1	783,028	17.98	0.02809	0%	0.000	0%	0.000	25%	4.494	75%	13.482	2.005	4.498	72.22	195920
BASIN 6	445,280	10.22	0.01597	0%	0.000	0%	0.000	50%	5.111	50%	5.111	1.680	1.998	37.77	87015
Total	1,228,308.00	28.198	0.04406	0.000	0.000	0.000	9.605	18.593				6.495	109.99	282935	

POND VOLUME CAPACITY TABLE

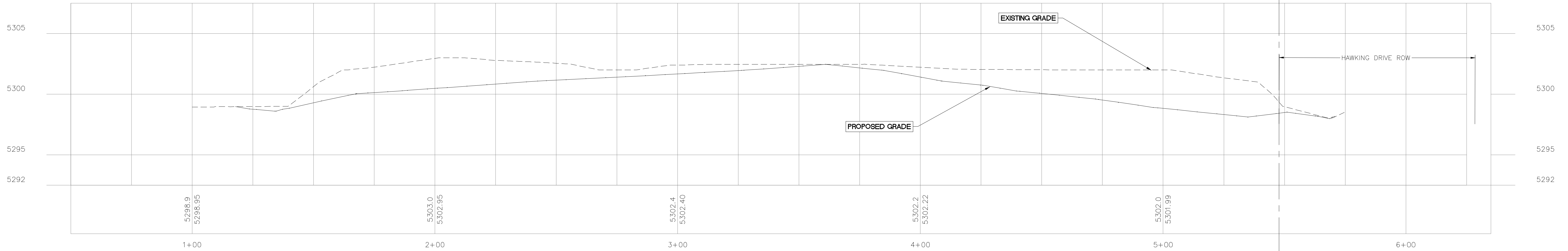
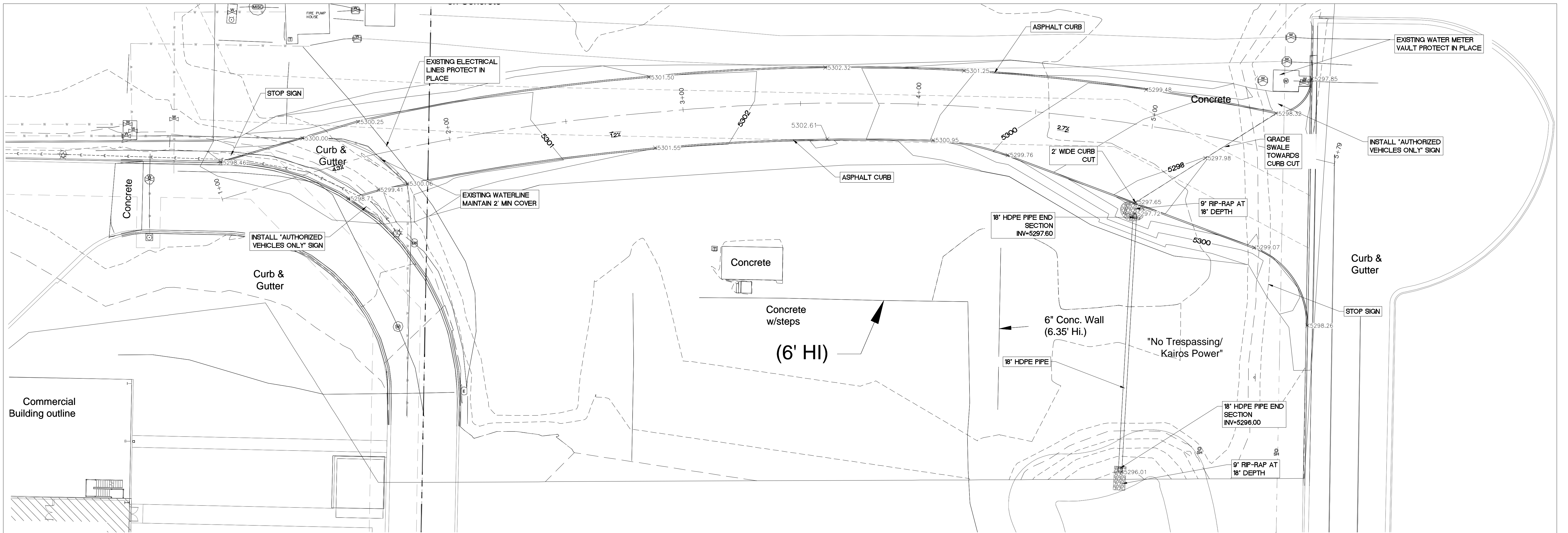
Basin	Existing Volume Req'd (CF)	Additional Volume Req'd (CF)	New Volume Req'd (CF)	Volume Provided (CF)
Basin 1	195920	1825.00	197745	231687
Basin 6	87015	1822.00	88837	187020

ENGINEER'S SEAL
 RONALD R. BOHANNAN
 NEW MEXICO
 7868
 PROFESSIONAL ENGINEER
 12/03/2025
 RONALD R. BOHANNAN
 P.C. #7868

KAIROS POWER TEMP ROAD
 ALBUQUERQUE, NM
DRAINAGE BASIN PLAN FOR INFORMATION ONLY
 TIERRA WEST, LLC
 5571 MIDWAY PARK PLACE NE
 ALBUQUERQUE, NM 87109
 (505) 858-3100
 www.tierrawestllc.com

DRAWN BY LN
 DATE 12/03/2025
 2023103_GRB-ROAD
 SHEET # **GR-1**
 JOB # 2023103

\\TWNAS\Z_Drive\2023\2023103 Mesa Del Sol Innovation Park_Pending\dwg\Construction\2023103_GRB-ROAD.dwg Dec 23, 2025 - 3:28pm



LEGEND

	CURB & GUTTER	x 5048.25	PROPOSED SPOT ELEVATION
	BOUNDARY LINE	x 5048.25	EXISTING SPOT ELEVATION
	EASEMENT BUILDING		FLOW ARROW
	SIDEWALK/CONCRETE		EXISTING CONCRETE STORM DRAIN PIPE
	STORM DRAIN		EXISTING PVC STORM DRAIN PIPE
	CONTOUR MAJOR	-5010-	EXISTING CONTOUR MAJOR
	CONTOUR MINOR	-5011-	EXISTING CONTOUR MINOR
	EXISTING FENCE	x - x - x	EXISTING FENCE

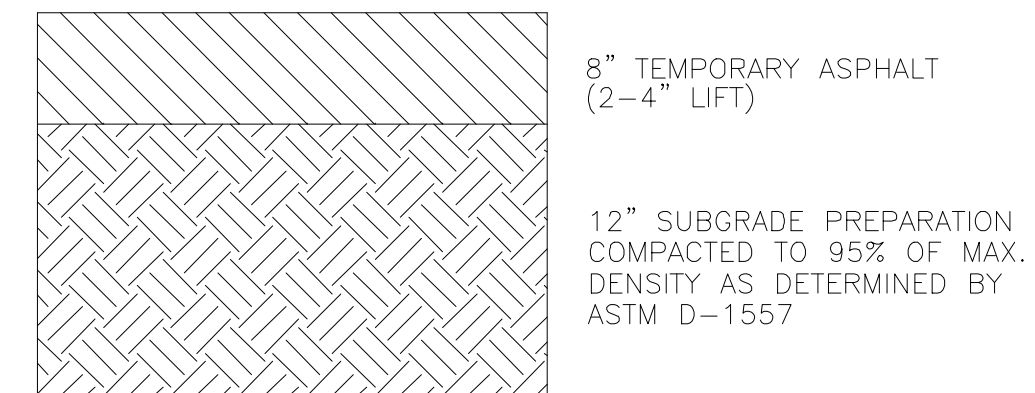
CAUTION
 ALL EXISTING UTILITIES/TOPOGRAPHY SHOWN WERE OBTAINED FROM RESEARCH, AS-BUILTS, SURVEYS OR INFORMATION PROVIDED BY OTHERS. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO CONDUCT ALL NECESSARY FIELD INVESTIGATIONS PRIOR TO AND INCLUDING ANY EXCAVATION, TO DETERMINE THE ACTUAL LOCATION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

EROSION CONTROL NOTES:

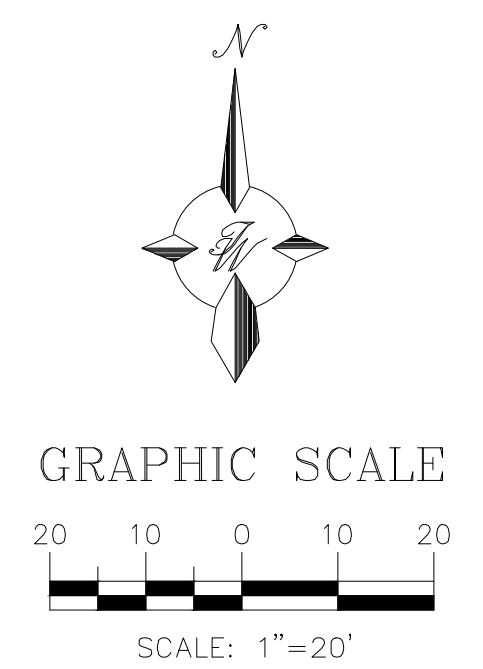
- CONTRACTOR IS RESPONSIBLE FOR MAINTAINING RUN-OFF ON SITE DURING CONSTRUCTION.
- CONTRACTOR IS RESPONSIBLE FOR CLEANING ALL SEDIMENT THAT GETS INTO EXISTING ROADWAY.
- REPAIR OF DAMAGED FACILITIES AND CLEANUP OF SEDIMENT ACCUMULATIONS ON ADJACENT PROPERTIES AND IN PUBLIC FACILITIES IS THE RESPONSIBILITY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

SPOT ELEVATION NOTE:

ALL PROPOSED SPOT ELEVATIONS ARE FLOWLINE UNLESS OTHERWISE NOTED.

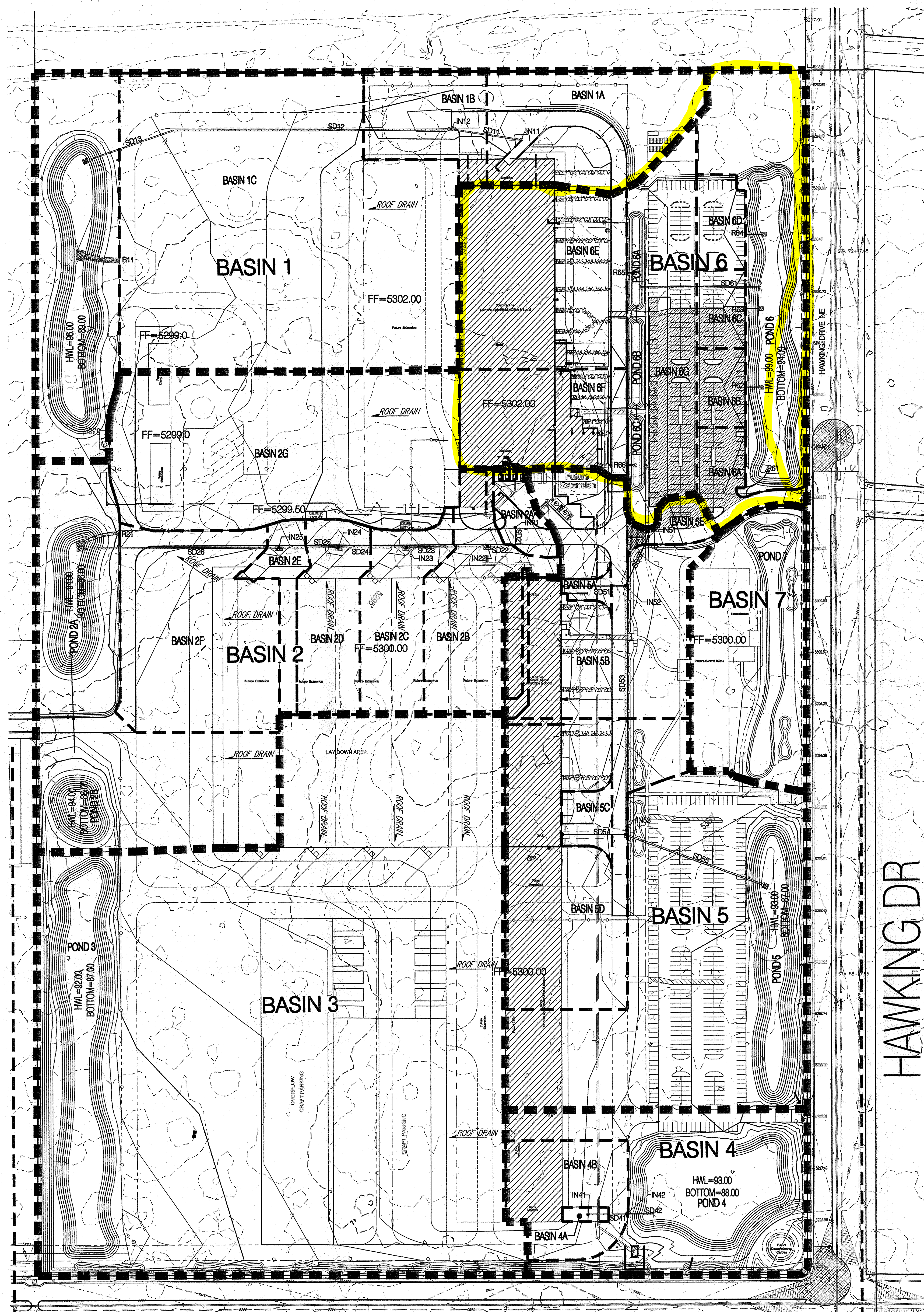


TEMPORARY PAVING SECTION
 NTS



ACS BENCHMARK
 A.G.R.S. MONUMENT "4-Q16"
 NEW MEXICO STATE PLANE COORDINATES
 (CENTRAL ZONE-N.A.D. 1983)
 PUBLISHED EL=5298.643 US SURVEY FT (NAVD 1988)

	KAIROS POWER TEMP ROAD ALBUQUERQUE, NM	DRAWN BY LN
	GRADING & DRAINAGE PLAN	DATE 12/03/2025
	5571 MIDWAY PARK PLACE NE ALBUQUERQUE, NM 87109 (505) 858-3100 www.tierrowestllc.com	2023103_GRB-ROAD
RONALD R. BOHANNAN P.E. #7868	SHEET # GR-2	JOB # 2023103



DRAINAGE MANAGEMENT PLAN

I. INTRODUCTION

The purpose of this submittal is to present a grading and drainage plan for the proposed Schott Solar development site. The site is located at the northern end of the Innovation Park within Mesa del Sol. There is vacant land surrounding the site with an existing drag strip to the north of the site. The entire site will be constructed in phases. The first phase will include 2 buildings along with parking and landscaped areas. Future phases will include additional building expansions, parking, and landscaping. This drainage management plan has been prepared for the full build out of the Schott Solar site.

II. EXISTING HYDROLOGIC CONDITIONS

The site is approximately 80 acres and is currently undeveloped. The land is relatively flat with a slope of ranging from 0.3% to 3% with a general trend sloping from the north to south. There is sparse vegetation cover. According to the FEMA Community Map Panel #35001C0363E, the site is not located within a floodplain.

III. PROPOSED HYDROLOGIC CONDITIONS

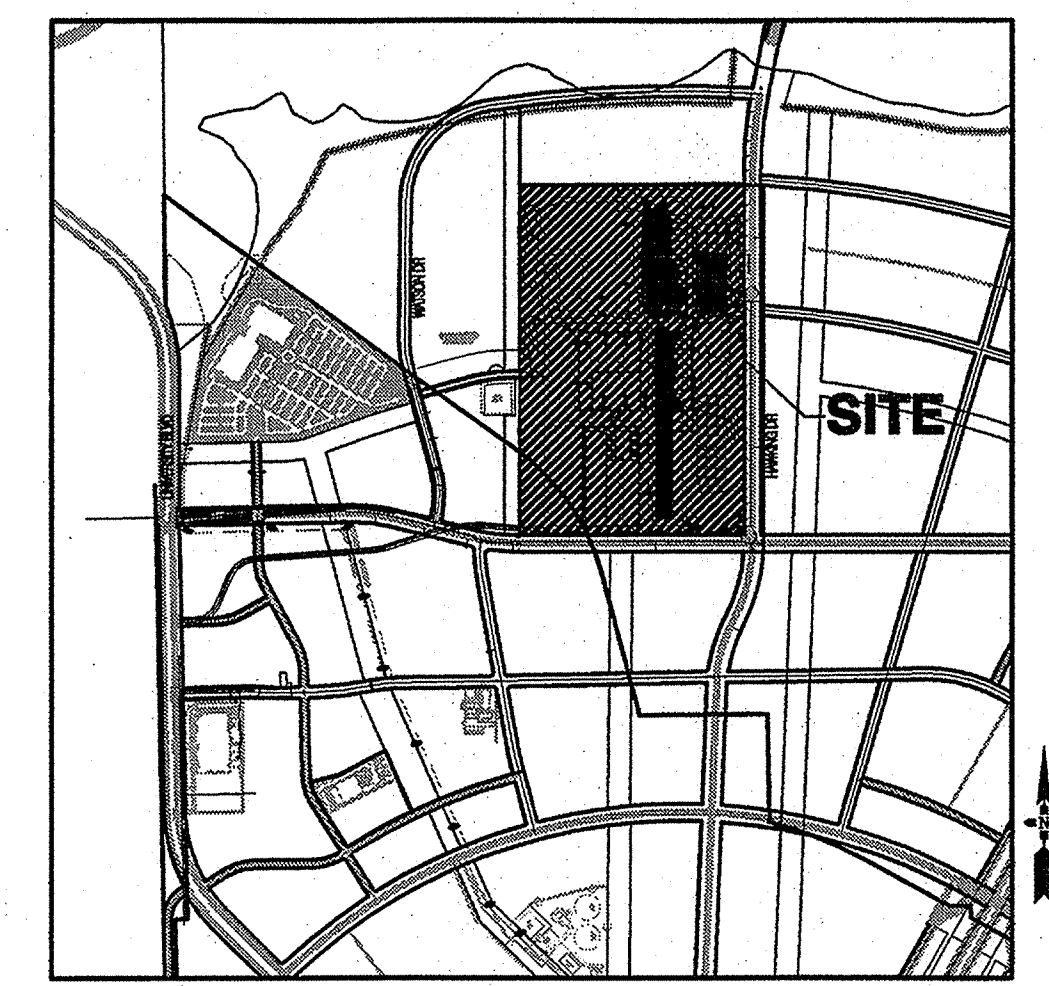
The 100 yr. 10 day developed flows from the entire 80 acre site are retained onsite within retention ponds located on site. The site was divided into multiple basins and drains both overland or through a system of storm drains to retention ponds. Each Basin has ponding which is designed to retain the volume of the 100 yr. 10 day storm. The two ponds in Basin 2 area hydraulically connected to function as one retention pond. Likewise, the ponds in Basin 6 are also hydraulically connected.

IV. OFFSITE FLOWS

Bordering the south and east of the site are proposed roadways which are not part of this project. The roadways will not contribute any offsite flows to the Schott Solar site and mitigate any offsite flows from entering the site. Bordering the west of the site is vacant land which does not contribute any offsite flows. The future development of the vacant land (not part of this project) is proposed drainage ponds which would border the Schott site at the western side. At the north of the Schott site, the existing drag strip slopes from east to west and does not contribute any offsite flows to the site.

V. CONCLUSION

The total flow generated on site will be retained on site. These flows were computed in accordance with section 22.2 of the Development Process Manual. This drainage management plan is capable of safely passing the 100 year storm and meets city requirements.



LOCATION MAP
ZONE ATLAS INDEX MAP Q-16



SCHOTT SOLAR
Proposed Conditions Basin Data Table

This table is based on the DPM Section 22.2, Zone 2

Basin ID	Area (SQ. FT)	Area (AC)	Land Treatment Percentages				Q(100) (cfs/ac)	Q(100) (CFS)	WTE (inches)	V(100-sthr) (CF)	V(100-10day) CF
			A	B	C	D					
BSN 1	783028	17.98	0.0%	10.0%	0.0%	90.0%	4.46	80.14	1.99	129591	223554
BSN 2	481534	11.05	0.0%	10.0%	0.0%	90.0%	4.46	49.28	1.99	79694	137478
BSN 3	896901	20.59	0.0%	10.0%	0.0%	90.0%	4.46	91.79	1.99	148437	256065
BSN 4	183005	4.20	0.0%	10.0%	0.0%	90.0%	4.46	18.73	1.99	30287	52248
BSN 5	582677	13.38	0.0%	10.0%	0.0%	90.0%	4.46	59.63	1.99	96433	166354
BSN 6	445280	10.22	0.0%	10.0%	0.0%	90.0%	4.46	45.57	1.99	73694	127127
BSN 7	112188	2.58	0.0%	10.0%	0.0%	90.0%	4.46	11.48	1.99	18567	32030

Basin	Pond	Volume Req'd (CF)	Volume Provided (CF)
BSN 1	Pond 1	223,554	242,380
BSN 2	Ponds 2A+2B	137,478	167,394
BSN 3	Pond 3	256,065	266,705
BSN 4	Pond 4	52,248	216,939
BSN 5	Pond 5	166,354	168,867
BSN 6	Ponds 6+6A+6B+6C	127,127	187,020
BSN 7	Pond 7	32,030	35,613

STORM DRAIN PIPE TABLE

PIPE #	Basin/SD	Contributing Basin Area (SF)	Size in.	Slope	Capacity* cfs	ACTUAL FLOW cfs
BASIN 1						
SD11	1A	85239	24	0.50%	16.00	8.73
SD12	1B	43139	24	0.50%	16.00	13.14
SD13	SD12	128378	24	0.50%	16.00	13.14
BASIN 2						
SD21	2A	14562	12	0.77%	3.13	1.49
SD22	SD21	14562	18	0.75%	9.10	1.49
SD23	2B	64998	18	0.75%	9.10	8.14
SD24	2C	47432	24	0.75%	19.59	13.00
SD25	2D	46249	24	0.75%	19.72	17.74
SD26	2E	19324	24	0.77%	19.85	19.72
BASIN 4						
SD41	4A	2520	18	2.60%	16.94	0.27
SD42	4B	48975	30	2.60%	66.14	4.81
BASIN 5						
SD51	5A	4400	12	1.00%	3.56	0.47
SD52	5E	11251	12	0.50%	2.52	1.15
SD53	5B	135187	24	0.50%	16.00	15.47
SD54	5C	11050	12	0.50%	2.52	1.19
SD55	5D	137634	30	0.60%	31.77	30.75
BASIN 6						
SD61	6E,6F,6G	271164	18	0.92%	9.7	9.68

INLET TABLE

Inlet #	Inlet Type	Actual Flow	Avail Head ft	Capacity CFS
BASIN 1				
IN11	1-SGL COA TYPE D*	8.73	0.75	13.89
IN12	1-SGL COA TYPE D*	4.42	0.75	13.89
BASIN 2				
IN21	1-SGL COA TYPE D*	1.49	0.50	7.96
IN22	1-SGL COA TYPE D*	6.65	0.50	7.96
IN23	1-SGL COA TYPE D*	4.85	0.50	7.96
IN24	1-SGL COA TYPE D*	4.74	0.50	7.96
IN25	1-SGL COA TYPE D*	1.98	0.50	7.96
BASIN 4				
IN41	1-SGL COA TYPE D*	0.27	0.50	7.96
IN42	1-SGL COA TYPE D*	4.81	0.50	7.96
BASIN 5				
IN51	1-SGL COA TYPE D*	1.15	0.50	7.96
IN52	1-SGL COA TYPE C*	13.84	0.83	15.50
IN53	1-SGL COA TYPE C*	14.09	0.83	15.50

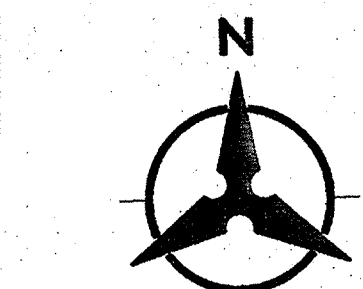
* - INLET IN SUMP CONDITION

CONCRETE RUNDOWN TABLE

Rundown #	Basin ID	Contributing	Rundown/Weir Type	Actual Flow	Min Weir** Length ft	Channel Width ft	Channel Height ft	Minimum Slope	Capacity* CFS
BASIN 1									
R11	1B	349958	Rectangular	35.83	15.00	13.00	0.50	0.75%	38.57
BASIN 2									
R21	2F & 2G	318134	Rectangular	32.57	14.00	5.00	0.50	4.47%	33.70
BASIN 6									
R61	6A	20504	Rectangular	2.21	1.00	1.00	0.50	2.52%	3.60
R62	6B	14459	Rectangular	1.56	1.00	1.00	0.50	8.73%	6.70
R63	6C	14459	Rectangular	1.56	1.00	1.00	0.50	6.83%	5.93
R64	6D	16840	Rectangular	1.82	1.00	1.00	0.50	5.96%	5.53
R65	6E	114356	Rectangular	12.34	5.00	2.00	0.50	6.83%	14.36
R66	6F	63597	Rectangular	6.86	3.00	2.00	0.50	5.95%	13.41

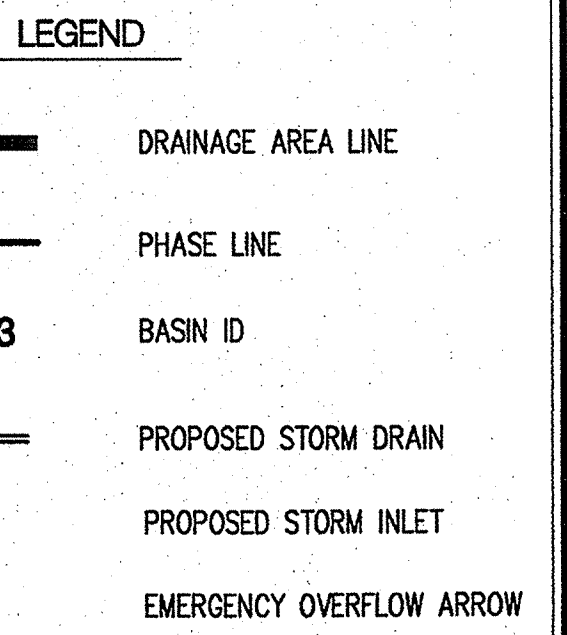
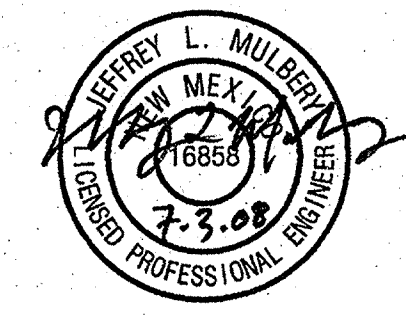
Weir Eq: $Q=3.3P(h^{1.5})$ ** Capacity Based on Manning's Eq w/ N=0.013 - -

HAWKING DR



1"=100'

NOTE: FINISHED FLOORS AND PROPOSED GRADING SHOWN IS CONCEPTUAL.



Bohannon & Huston
 Courtyard I 7500 Jefferson St. NE Albuquerque, NM 87109-4335
 ENGINEERING • SPATIAL DATA • ADVANCED TECHNOLOGIES

DESIGNED BY
 CHECKED BY
 WPR. BY

CH2MHILL
 Spartanburg, South Carolina

SHEET TITLE
DRAINAGE AREA SCHOTT
DRAINAGE MANAGEMENT PLAN

JOB NAME
SCHOTT solar
 SUN ReMo
 ALBUQUERQUE, NEW MEXICO

JUL 1 2013
 HYDROLOGY SECTION
 JOB NO. 366450
 FILENAME
 SCALE 1"=100'
 SHEET NO. DMP-OVERALL