

CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Director



Mayor Timothy M. Keller

March 17, 2023

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

RE: ABQ Studios Expansion WO #3 (CPN: 393587)
Drainage Management Plan
Engineer's Stamp Date: 3/8/2023
Hydrology File: R16DA2006

Dear Mr. Brown:

Based upon the information provided in your submittal received 3/8/2023, the Drainage Management Plan is approved for Grading Permit and Work Order.

PO Box 1293

Albuquerque

Please provide the executed paper Drainage Covenant (latest revision) printed on one-side only with Exhibit A and a check for \$25 made out to "Bernalillo County" for the regional retention pond (OS-6) per Article 6-15(C) of the DPM to Hydrology for review. Once the review is done, Hydrology will send back an email stating our approval / comments.

NM 87103

www.cabq.gov

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 505-924-3695 or tchen@cabq.gov.

Sincerely,

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



City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 10/2018)

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

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

Legal Description: _____

City Address: _____

Applicant: _____ **Contact:** _____

Address: _____

Phone#: _____ **Fax#:** _____ **E-mail:** _____

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: _____ TRAFFIC/TRANSPORTATION _____ HYDROLOGY/DRAINAGE

Check all that Apply:

TYPE OF SUBMITTAL:

- _____ ENGINEER/ARCHITECT CERTIFICATION
- _____ PAD CERTIFICATION
- _____ CONCEPTUAL G & D PLAN
- _____ GRADING PLAN
- _____ DRAINAGE MASTER PLAN
- _____ 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:

- _____ 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: _____ **By:** _____

COA STAFF:

ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____

March 8, 2023

Tiequan Chen
Principal Engineer, Hydrology Section
City of Albuquerque Planning Department
PO Box 1293
Albuquerque, NM 87103

Re: ABQ Studios Expansion WO #3
Drainage Report and Drainage Management Plan Comments
Engineer's Stamp Date: 1/27/2023
Hydrology File: R16DA2006

Dear Mr. Chen,

In support of the resubmitted CPN #393587 Public Work Order plans, below you will find our responses to the comments provided to us by your office dated March 1, 2023.

1. **Please add contour elevation labels.**
 - a. Elevation labels added throughout the plan to show elevation references for major contours.
2. **Provide the Benchmark information (location, description and elevation) for the survey contour information provided.**
 - a. Provided. These also correspond to the survey control sheet that was prepared with the CPN #393587 plan set.
3. **Was the drainage report included? I only found the drainage management plan from the file downloading weblink.**
 - a. A separate drainage report was not included, as BHI felt the drainage conditions and considerations were accurately and fully represented with the provided Drainage Management Plan.
4. **I couldn't find "Basin 4A1" in the "Existing Conditions", do you mean "basin 2A1"**
 - a. Yes, the updated narrative has been edited to reflect the reference to "Basin 2A1" that aligns with the tables and plan view.
5. **Provide the regional retention pond number located to the south in the "Existing Conditions". Provide drainage calculations showing that this pond have enough volume capacity to accommodate discharge from the Stryker Road.**
 - a. Pond MDS-OS7, CPN #775684, Hydrology File R16D097A. Calculations were not provided because no additional flows (compared to existing) are being discharged to the pond as a result of this Public Work Order improvements. The proposed changes to the northern curb line of Stryker Road actually decreases the amount of discharge reaching MDS-OS7. See CPN #775684, Hydrology File R16D097A for regional pond analysis.

Engineering ▲

Spatial Data ▲

Advanced Technologies ▲

March 8, 2023
Mr. Tiequan Chen
Page 2

6. It'd be easier to read if the Eastman Crossing and Stryker Road plans being placed on to two separate sheets.

- a. Understood, however as the improvements to Eastman, University, and Styker are all part of the same COA Public Work Order, we felt that it was most appropriate to have a single Drainage Management Plan that corresponds to the single Public Work Order plan set.

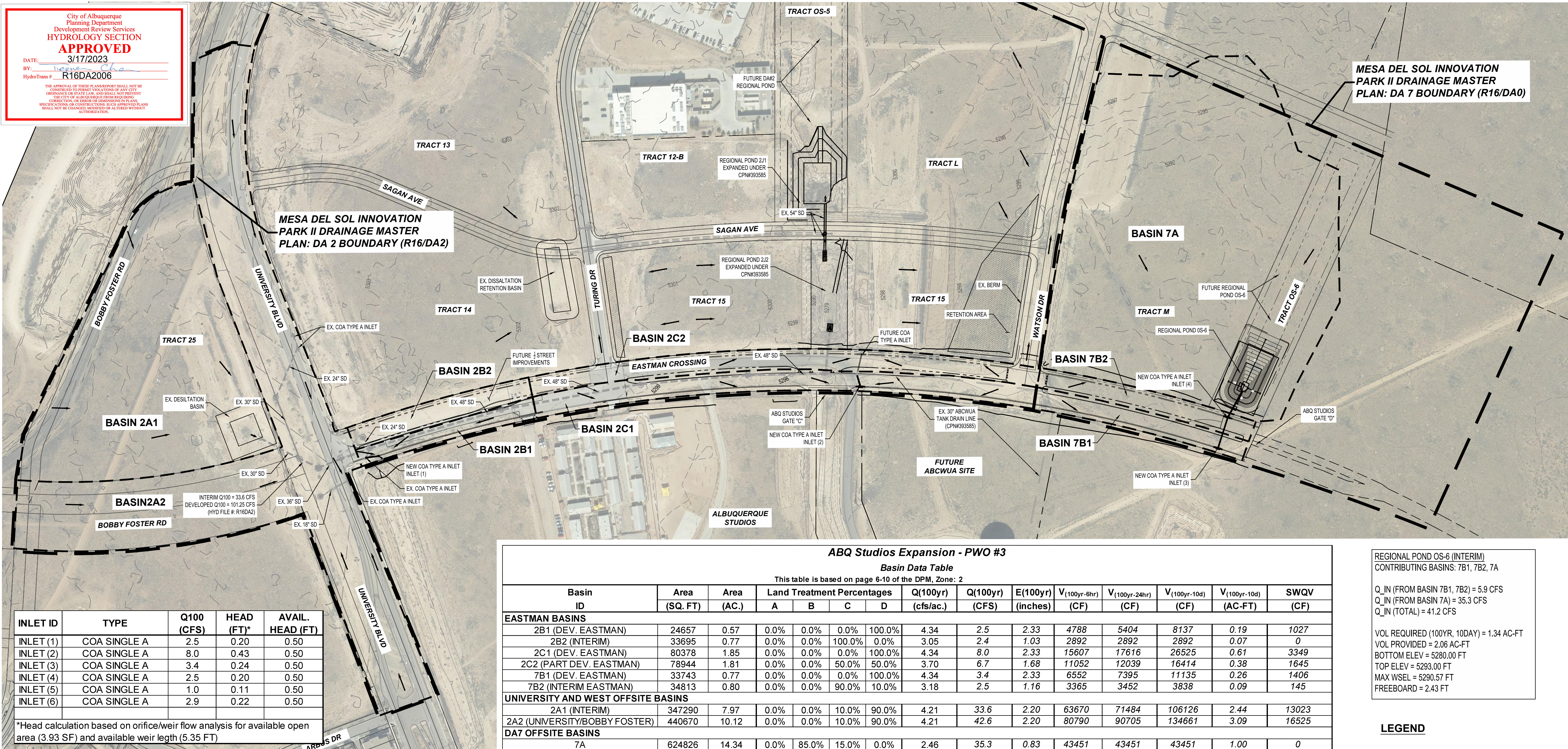
Sincerely,

A handwritten signature in blue ink, appearing to read "Olin Brown", followed by a horizontal line.

Olin Brown, P.E.
Vice President
Community Development & Planning

OB/KH

Enclosures (1)



INLET ID	TYPE	Q100 (CFS)	HEAD (FT)*	AVAIL. HEAD (FT)
INLET (1)	COA SINGLE A	2.5	0.20	0.50
INLET (2)	COA SINGLE A	8.0	0.43	0.50
INLET (3)	COA SINGLE A	3.4	0.24	0.50
INLET (4)	COA SINGLE A	2.5	0.20	0.50
INLET (5)	COA SINGLE A	1.0	0.11	0.50
INLET (6)	COA SINGLE A	2.9	0.22	0.50

*Head calculation based on orifice/weir flow analysis for available open area (3.93 SF) and available weir length (5.35 FT)

EASTMAN CROSSING



STRYKER ROAD

DRAINAGE NARRATIVE
INTRODUCTION
THIS PUBLIC WORK ORDER (CPN 393587) INCLUDE PUBLIC INFRASTRUCTURE IMPROVEMENTS IN SUPPORT OF THE ON-GOING ALBUQUERQUE STUDIOS EXPANSION PROJECT, LOCATED WITHIN THE EMPLOYMENT DISTRICT OF THE MESA DEL SOL MASTER PLANNED COMMUNITY. THE PROJECT INCLUDES THE CONSTRUCTION OF HALF-STREET IMPROVEMENTS FOR EASTMAN CROSSING, EAST OF UNIVERSITY BOULEVARD, AND MODIFICATIONS TO THE NORTHERN CURB LINE OF STRYKER ROAD, EAST OF UNIVERSITY BOULEVARD. THE DRAINAGE IMPROVEMENTS ASSOCIATED WITH THESE ROADWAY MODIFICATIONS ARE CONSISTENT WITH THE DRAINAGE MASTER PLAN(S) PREVIOUSLY APPROVED FOR THESE AREAS AND MAINTAIN FIDELITY TO THE LEVEL B MASTER PLAN. THE MESA DEL SOL EMPLOYMENT CENTER WAS ORIGINALLY CONSIDERED UNDER A MASTER DRAINAGE MANAGEMENT PLAN (INNOVATION PARK II DRAINAGE MASTER PLAN, COA HYDRO FILE R16/D097, STAMP DATE 4-4-2008, WHICH IDENTIFIED 7) DISCRETE DRAINAGE AREAS (DA'S). THIS SPECIFIC PROJECT ENCOMPASSES IMPACTS TO TWO OF THOSE DA'S-DA 2 (BOUNDED BY UNIVERSITY BLVD/BOBBY FOSTER RD, FRITTS AVE, WATSON DR, AND EASTMAN CROSSING) AND DA (BOUNDED BY FRITTS AVE, WATSON AVE, EASTMAN CROSSING, AND HAWKING DR). THE DA 2 DMP (COA HYDRO FILE #R16/DA2, STAMP DATE 11-4-2008) WAS PROVIDED IN SUPPORT OF DEVELOPMENTS WITHIN THOSE BOUNDARIES. AS NO DEVELOPMENTS WERE PURSUED WITHIN DA7, NO DMP HAS BEEN PREPARED FOR THE DA 7 FULLY DEVELOPED CONDITIONS BEYOND THE OVERALL INNOVATION PARK II DMP, REFERENCED PREVIOUSLY.

EXISTING CONDITIONS
EASTMAN CROSSING CURRENTLY FEATURES PORTIONS OF HALF STREET ROADWAY IMPROVEMENTS, AS WELL AS UNDERLYING UTILITIES, INCLUDING WATER, REUSE WATER, SANITARY SEWER, AND STORM DRAIN TRUNK LINE. THE STORM DRAIN TRUNKLINE WAS CONSTRUCTED AS PART OF CITY OF ALBUQUERQUE PROJECT 7754.82 (COA HYDRO FILE R16(DA3)) AND CURRENTLY SERVES INLETS ON UNIVERSITY BOULEVARD AND A SINGLE INLET (SINGLE TYPE A INLET IN A SUMP CONDITION) ON EASTMAN NEAR THE SOUTHEAST CORNER OF ITS INTERSECTION WITH UNIVERSITY BOULEVARD. THE STORM DRAIN ALSO SERVES THE OFFSITE BASIN NORTHWEST OF THE INTERSECTION (SEE BASIN 2A1). THIS STORM DRAIN WAS SIZED FOR FULLY DEVELOPED CONDITIONS (101.25 CFS, UPSTREAM OF THE EASTMAN/UNIVERSITY INTERSECTION). THE STORM DRAIN IS INTENDED TO ACCEPT THESE FLOWS, AS WELL AS THE FULLY DEVELOPED FLOWS WITHIN THE EASTMAN ROADWAY ITSELF. THE STORM DRAIN CARRIES STORMWATER EAST TO AN EXISTING MANHOLE THAT DISCHARGES TO THE NORTH INTO A REGIONAL RETENTION POND WITHIN THE DA2 LIMITS. THIS POND WAS RECENTLY EXPANDED AS PART OF CPN 393585 TO ACCOMMODATE THE RELOCATED ABCUWA ELEVATED TANK DRAINLINE, AS OUTLINED IN THE RESPECTIVE DRAINAGE AREA MASTER PLANS. THE OFFSITE AREAS ADJACENT TO THE ROADWAYS ARE NOT INTENDED TO DRAIN TO THE ROADWAY AND INSTEAD BE CONTAINED WITHIN THOSE TRACTS UNTIL THEY ARE DEVELOPED, AT WHICH POINT THE LOCAL DRAINAGE WITHIN THE TRACT WILL BE ROUTED TO THE ADJACENT REGIONAL POND SYSTEMS WHERE THEY WILL BE RETAINED.

THE EXISTING DRAINAGE INFRASTRUCTURE WITHIN STRYKER ROAD IS CURRENTLY SIZED FOR THE FULLY BUILT CONDITION AND DRAINAGE AREAS. THIS ROADWAY WAS STUDIED AS PART OF THE ORIGINAL UNIVERSITY BOULEVARD DRAINAGE ANALYSIS (COA HYDRO FILE #R16/D098). THE TRUNKLINE IS DESIGNED TO CARRY FULLY DEVELOPED FLOWS TO THE REGIONAL RETENTION POND LOCATED TO THE SOUTH, AS REVISED AS PART OF MDS 05-7. CPN #775684, HYDROLOGY FILE: R16D097A.

PROPOSED CONDITIONS

THE PROPOSED IMPROVEMENTS TO EASTMAN CROSSING WILL FEATURE THE HALF-STREET ROADWAY SECTION ALONG THE SOUTHERN HALF OF THE ROADWAY FROM UNIVERSITY BOULEVARD TO THE NEW ALBUQUERQUE STUDIOS EXPANSION'S GATE "D". LOCATED AT THE EASTERN TERMINUS OF EASTMAN CROSSING, DRAINAGE IMPROVEMENTS WITHIN THE ROADWAY IS LIMITED TO THE PLACEMENT OF (4) NEW STORM DRAIN INLETS AND LATERALS. THE WESTERMOST INLET (INLET 1) WILL CONNECT DIRECTLY TO THE EXISTING STORM DRAIN AT THE SAG VERTICAL CURVE, AS DEFINED BY THE NEW ROADWAY PROFILE. THE EXISTING INLET IS CURRENTLY AT THE LOW POINT, BUT ROADWAY AND INTERSECTION GEOMETRY REQUIRED A NEW INLET APPROXIMATELY 34 FEET TO THE EAST. THIS INLET WILL NOT CHANGE THE OVERALL FLOW TO THE TRUNKLINE, A NEW INLET (INLET 2) WILL BE LOCATED FURTHER EAST, NEAR THE NEW ALBUQUERQUE STUDIOS EXPANSION GATE "C", AT ANOTHER ROADWAY SAG VERTICAL CURVE. THIS INLET WILL DRAIN TO THE NEWLY CONSTRUCTED ABCUYA DRAIN LINE/STORM DRAIN AND CONNECT TO AN EXISTING STUB THAT WAS CONSTRUCTED WITH CPN #393558. A FUTURE LATERAL AND INLET WILL BE REQUIRED WHEN THE SECOND HALF-STREET IMPROVEMENTS ON THE NORTH IS CONSTRUCTED. FINALLY, TWO NEW INLETS WILL BE CONSTRUCTED AT A THIRD SAG VERTICAL CURVE WEST OF THE ALBUQUERQUE STUDIOS EXPANSION GATE "D". THIS ROADWAY LOW POINT WAS ALIGNED WITH THE FUTURE REGIONAL POND OS-6, LOCATED WITHIN DA7. AS NO IMPROVEMENTS TO DA7 HAVE BEEN MADE TO DATE, THESE INLETS REQUIRE THE FIRST PHASE OF CONSTRUCTION FOR THIS REGIONAL RETENTION FACILITY WITHIN TRACT OS-6. THE RETENTION POND IS SIZED TO ACCEPT FLOWS FROM THE ROADWAY IMPROVEMENTS, AS WELL AS THE UNDEVELOPED OFFSITE AREA (BASIN 7A) THAT IS CURRENTLY DRAINING TO THIS LOCATION.



THE PROPOSED DRAINAGE IMPROVEMENTS FOR STRYKER ROAD WILL BE LIMITED TO RELOCATING THE EXISTING INLETS (RELOCATED INLETS WILL BE NEWLY CONSTRUCTED) TO THE RE-ALIGNED NORTHERN CURBLINE ON STRYKER. THESE INLETS WILL CONTINUE TO SERVE THE SAME DRAINAGE AREAS AND WILL NOT CHANGE THE OVERALL FLOW IN THIS STORM DRAIN THAT DISCHARGES TO REGIONAL POND LOCATED TO THE SOUTHEAST.

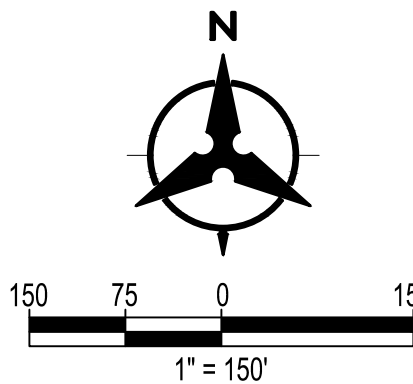
REGIONAL POND OS-6 (INTERIM)
CONTRIBUTING BASINS: 7B1, 7B2, 7A

Q_IN (FROM BASIN 7B1, 7B2) = 5.9 CFS
Q_IN (FROM BASIN 7A) = 35.3 CFS
Q_IN (TOTAL) = 41.2 CFS

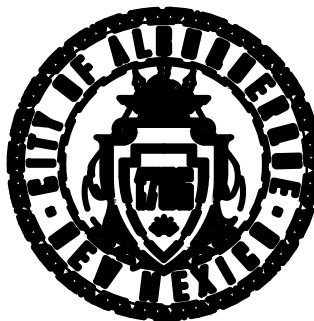
VOL REQUIRED (100YR, 10DAY) = 1.34 AC-FT
VOL PROVIDED = 2.06 AC-FT
BOTTOM ELEV = 5280.00 FT
TOP ELEV = 5293.00 FT
MAX WSEL = 5290.57 FT
FREEBOARD = 2.43 FT

LEGEND

	DRAINAGE AREA BOUNDARY
	DRAINAGE BASIN BOUNDARY
	FLOW DIRECTION



CALL NM ONE-CALL SYSTEM
SEVEN (7) DAYS PRIOR TO
ANY EXCAVATION



CITY OF ALBUQUERQUE
DEPARTMENT OF MUNICIPAL DEVELOPMENT
ENGINEERING DIVISION

**ABQ STUDIOS EXPANSION
WORK ORDER PACKAGE 3**

DRAINAGE MANAGEMENT PLAN

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	ZONE MAP NO. R-16-Z
		CITY PROJECT NO. 393587
		SHEET NO. 1 OF 2

CONSULTANTS

BENCH MARKS				
1_R16	5291.45	1453939.35	1533242.66	ALUMINUM CAP
5_R15	5306.67	1452649.49	1529579.45	ALUMINUM CAP



SEAL

DESIGNED BY:	AO
DRAWN BY:	KH
CHECKED BY:	OB
DATE	1/10

**Bohannon
▲ Huston**
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800.877.5332