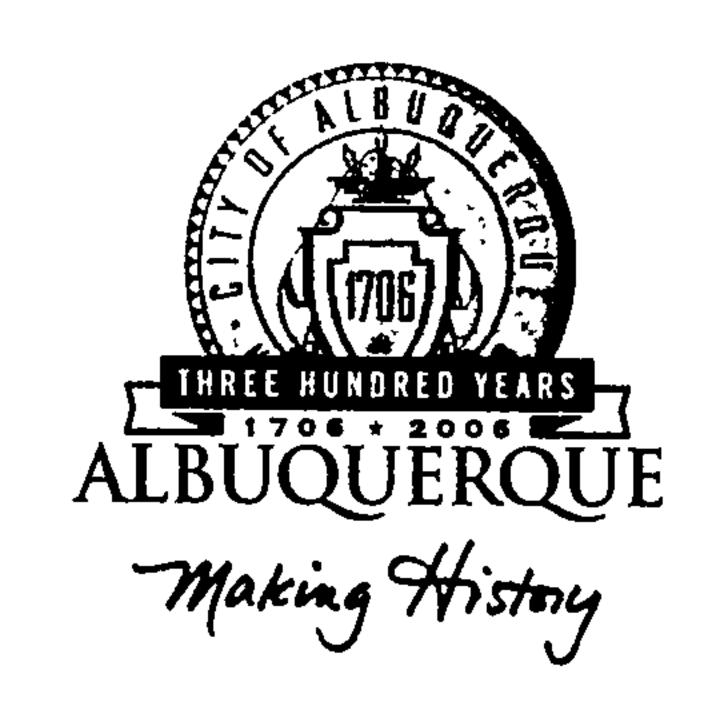
# CITY OF ALBUQUERQUE



August 15, 2005

Mr. Ron Bohannan, P.E.

TIERRA WEST, LLC

8509 Jefferson St. NE

Albuquerque, NM 87113

Re: HARRISON BUILDING ADDITION

1420 Mission Avenue NE

Approval of Temporary Certificate of Occupancy (C.O.)

APPROVED Engineer's Stamp dated 03/04/2005 (F-16/D20A)

SUBMITTED Engineer's Stamp dated 10/17/2001

Certification dated 08/15/2005

P.O. Box 1293

Dear Ron:

Based upon the information provided in your submittal received 08/15/2005, the above referenced certification is approved for release of 30-day Temporary Certificate of Occupancy by Hydrology.

Albuquerque

If you have any questions, you can contact me at 924-3982.

New Mexico 87103

<u>Please Note</u>: The Grading/Drainage Plan (G/D), submitted was not the <u>Approved Plan</u>. The Certification and as-built elevations should be made on a copy of the Approved Grading and Drainage Plan with the Engineer Stamp date of 03/04/2005. When submitting for Permanent C.O., please place Certification/As-built elevations on a copy of the Approved G/D plan. Thanks.

Sincerely,

www.cabq.gov

Orlene V. Portillo

Arlene V. Portillo

Plan Checker, Planning Dept. - Hydrology

Development and Building Services

Attachment: Copy of G/D Approval Letter

C: Phyllis Villanueva

File

Saralavy



# City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

December 26, 2002

Ronald R. Bohannan, P.E. Tierra West, LLC 8509 Jefferson NE Albuquerque, New Mexico 87113

RE: HARRISON BUILDING-

(F-16/D20A)

(1420 Mission NE) (Renaissance Center Tr. 3A-3-A-3)

ENGINEERS CERTIFICATION FOR CERTIFICATE OF OCCUPANCY

ENGINEERS STAMP DATED 10/17/2001

ENGINEERS CERTIFICATION DATED 12/23/2002

Dear Mr. Bohannan:

Based upon the information provided in your Engineers Certification submittal dated 12/24/2002, the above referenced site is approved for Permanent Certificate of Occupancy.

If I can be of further assistance, please contact me at 924-3981.

Sincerely,

Trise A. Martin

Hydrology Plan Checker

Development & Bldg. Ser. Division

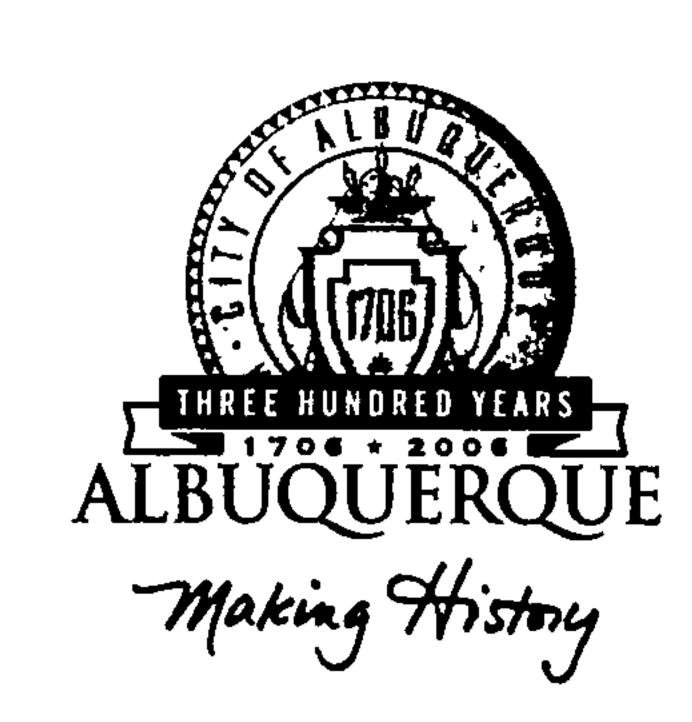
BUB

C: Certificate of Occupancy Clerk, COA

drainage file

approval file

# CITY OF ALBUQUERQUE



May 6, 2005

Ron Bohannan, PE Tierra West LLC 8509 Jefferson NE Albuquerque, NM 87113

Re: Harrison Building Addition Grading and Drainage Plan

Engineer's Stamp dated 3-4-05 (F16/D20A)

Dear Mr. Bohannan,

file

P.O. Box 1293

Based upon the information provided in your submittal dated 3-4-05, the above referenced site is approved for Building Permit and Grading Permit. Also, prior to Certificate of Occupancy release, Engineer Certification of the grading plan per the DPM checklist will be required.

Albuquerque

If you have any questions, you can contact me at 924-3986.

New Mexico 87103

Bradley L. Bingham, PE

Sincerely,

www.cabq.gov

Principal Engineer, Planning Dept.
Building and Development Services

Albuquerque - Making History 1706-2006

## REVISED DRAINAGE REPORT

for

### Harrison Building Tract 3A-3A-1, 2,3, Renaissance Center Albuquerque, New Mexico

#### Prepared by

Tierra West, LLC 8509 Jefferson Blvd NE Albuquerque, New Mexico 87113

> Prepared for Mr. James K Trump, Jr 1110 Pennsylvania NE, Ste Albuquerque NM 87110

> > March 2001



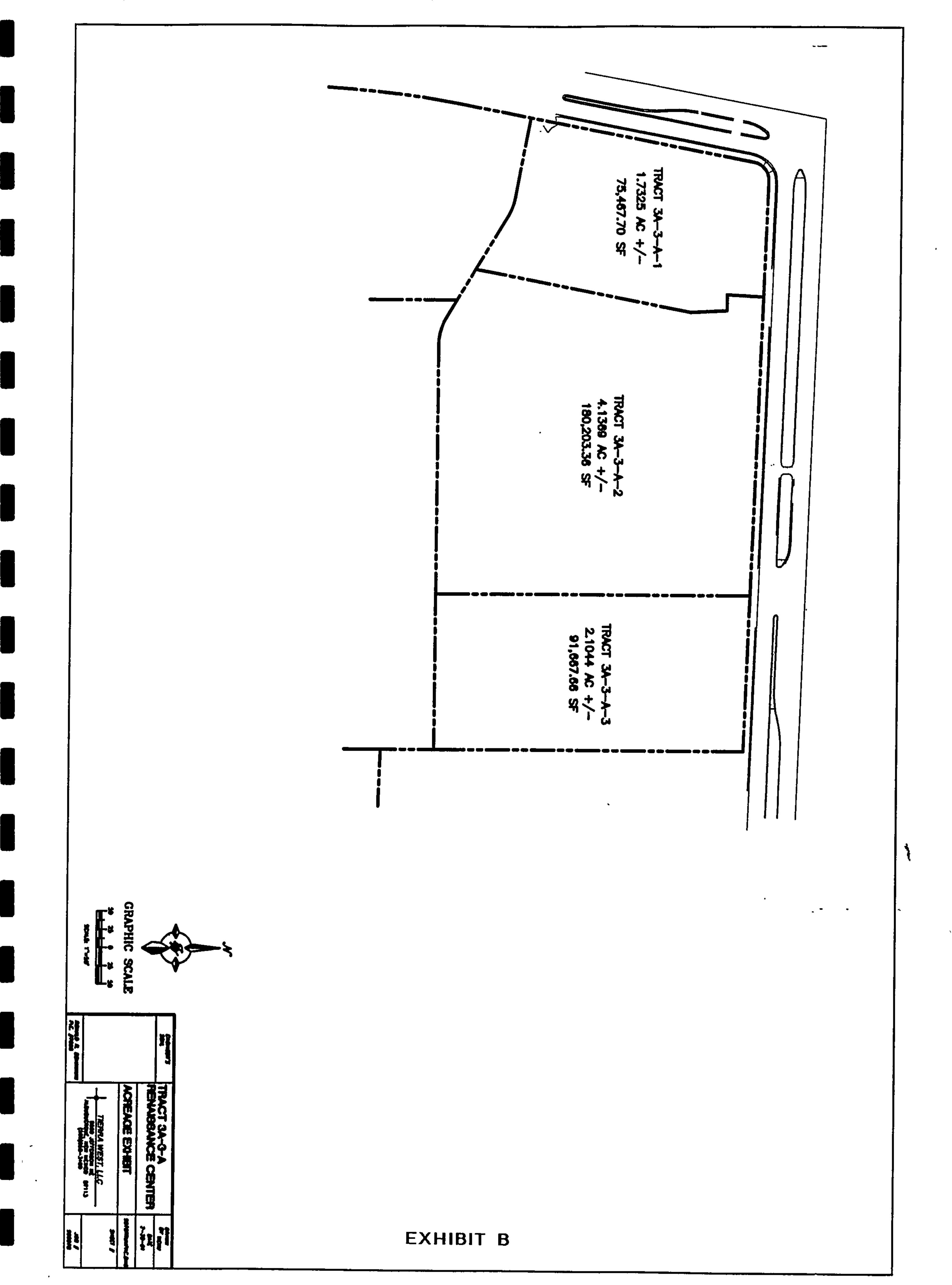
#### **PURPOSE**

The purpose of this report is to prove the development of the subject 7.96-acre property, for the use as offices and warehouse, is in accordance with the DPM Chapter 22. This report will demonstrate that the proposed improvements do not adversely effect the surrounding properties nor the upstream or downstream facilities.

#### INTRODUCTION

The subject of this report, as shown on the Exhibit A vicinity map, is a 7.96-acre parcel of land located on the southeast corner of Mission Boulevard and Alexander Boulevard. The site is located on Zone Atlas page F-16. The site currently exists as a rough graded parcel within the Renaissance Center. The proposed improvements consist of subdividing the parcel into three separate parcels. The proposed partitioning of the parcel is described on Exhibit B. The legal description of the existing property is Lot 3A-3A of the North Renaissance Center. As shown on FIRM map 35001C0138D, the site lies within flood zone x.

This entire site was analyzed within the Drainage Report and grading plan for Tract 3 of the Renaissance Center (F19-D20) previously submitted by Tierra West, LLC, with the stamp date of 7/4/98. The City of Albuquerque Hydrology Section approved the Drainage Management Plan on 5/11/98. A 6" PVC storm drain was stubbed into future tract 3A3A1 for the benefit of future development. A detention pond is located at the northwest corner of the existing Office Depot, and the General Technology Building to the east discharges their routed flow at the southeast corner of future Tract 3A3A3. Based upon the approved Drainage Management Plan, this site is allowed to discharge .1 CFS per acre in developed conditions. Since our improvements are consistent with developed condition assumptions within the Tract 3 Master Drainage Plan tracts 3A3A1, 3A3A2 and 3A3A3 the should be allowed to discharge 0.173CFS, 0.413 CFS, and 0.21 CFS respectively into the existing storm drain system.



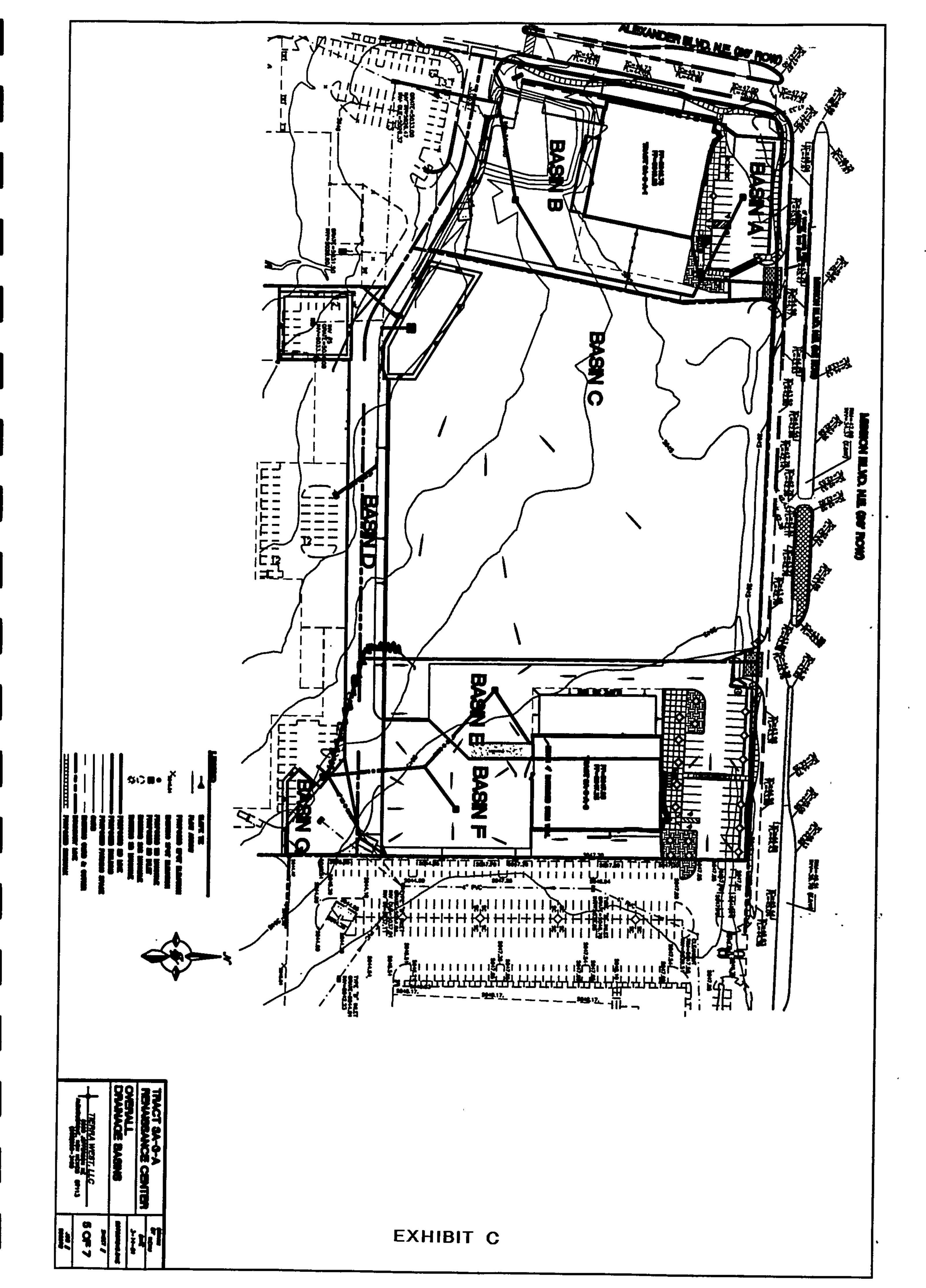
#### **EXISTING CONDITIONS**

The site slopes from north to south, with general grades between 3-4%. The site was rough graded with the construction of the Renaissance Center. During the development of Tract 3-B (Office Depot) a series of temporary detention ponds were constructed around the site. A 6" conduit and a temporary retention pond were constructed at the south edge of Tract 3A3A1. A retention pond was constructed at the northeast corner of Tract 3B to collect the undeveloped middle portions of this tract. Offsite flows enter this site from the adjacent Tract 3B1 (General Technologies) site to the east. The flows leaving the General Technology site are conveyed through this site by a 4" conduit. The conduit discharges to an earthen swale which carries the flow to a detention pond located at the east property line of Tract 3A1 (Office Depot). Map pocket A contains the grading plans for Tract 3A1 (Office Depot) and Tract 3B1 (General Technologies).

#### PROPOSED CONDITIONS

The proposed improvements consist of subdividing the entire tract into three separate tracts Tract 3A3A1 and Tract 3A3A3 will be developed into office and warehouse uses. The middle tract 3A3A2 will remain undeveloped. A permanent access roadway will be constructed along the south property line to service the dock areas of Tract 3A3A3. As shown on the Tract 3 basin map Tract 3A3A1 is located entirely in Basin 15. Tract 3A3A2 is located in basins 15, 12, and 16. Tract 3A3A3 is located entirely in basin 4. The access road is within basins 12, 11 and 10. As shown on the entire Tract 3 Basin Map Tract 3A3A1, the west portion of Tract 3A3A2 and the access road all drain to Basin 16. The entire Tract 3A3A3 and the eastern portion of Tract 3A3A2 and the offsite flow from the General Technologies site drain to Basin 9.

As shown on the Overall Drainage Basin Map (Exhibit C) the site is broken into 7 drainage basins. Each basin drains to a type D single grate inlet. The peak discharge leaving each basin is controlled by the construction of orifice plate at the outfall of each inlet. The developed storm



discharge was calculated using AHYMO. The entire system was modeled using the routing command. The analysis of the pond geometry and function is included within Appendix B. The input and output files are locate in Appendix A. As shown in the AHYMO output file the peak discharge leaving Tract 3A3A1, Tract 3A3A2, and Tract 3A3A3 are .17 CFS, .39 CFS and .21 CFS respectively. The flow leaving Tract 3A3A1 discharges via the existing 6" pipe. The flow leaving Tract 3A3A2 leave the site through an 8" pipe connected to the existing storm drain system. The existing storm drain located at the northeast corner of the existing Office Depot captures the access roadway discharge. Tract 3A3A3 as well as the General technology site is discharged through a temporary pipe located near the southwest corner of Tract 3A1. This flow will drain across the undeveloped portion of Tract 3 until the site is developed. Once the remainder of Tract 3 develops the permanent outfall for Tract 3A3A3 and the General Technology. In a storm event greater than the predicted 100-year storm, all ponds will overflow and spill to the adjacent roadways.

#### SUMMARY AND RECOMMENDATIONS

This site is an existing parcel within the Renaissance Center. The City of Albuquerque Hydrology Section approved the drainage management plan for the entire Tract 3, which our site is a portion of. The master drainage plan allows for a peak discharge rate of 0.1 CFS per acre for the fully developed condition. The proposed improvements for each of the proposed new tracts generate a peak flow less than the allowed. The development of this site is consistent with the DPM, Chapter 22, Hydrology section. Since this site encompasses more than 5 acres, a NPDES permit is not required prior to any construction activity. No improvements are to occur within City right of way; therefore an infrastructure list is not required. It is recommended this development be approved for rough grading, and Site Plan for Subdivision and Site Plan for Building Permit.

### POND F (INLET8)

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 = 
$$Ab * D + 0.5 * C * D^2$$
  
 $C = (At - Ab) / Dt$   
 $Ab = 6.80$   
 $At = 9,607.00$   
 $Dt = 1.50$   
 $C = 6400.13$ 

ACTUAL	DEPTH	VOLUME	Q
ELEV.	(FT)	(AC-FT)	(CFS)
41.33	0	0	0.0000
43.50	2.5	0.0004	0.0848
43.75	2.75	0.0050	0.0890
43.95	2.95	0.0153	0.0923
44.15	3.15	0.0315	0.0954
44.35	3.35	0.0536	0.0984
44.55	3.55	0.0815	0.1014
44.75	3.75	0.1154	0.1042
45.00	4	0.1659	0.1077

## Orifice Equation Q = CA SQRT(2gH)

$$C = 0.6$$
Diameter (in 1.4375
Area (ft^2)= 0.01127
 $g = 32.2$ 

H (Ft) = Depth of water above center of orifice

Q(CFS)= Flow

#### POND A(INLET 2)

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 = 
$$Ab * D + 0.5 * C * D^2$$
  
 $C = (At - Ab) / Dt$   
 $Ab = 6.80$   
 $At = 7,257.00$   
 $Dt = 1.25$   
 $C = 5800.16$ 

ACTUAL	DEPTH	VOLUME	Q
ELEV.	(FT)	(AC-FT)	(CFS)
42.03	0	0	0.0000
45.00	2.97	0.0005	0.0701
45.20	3.17	0.0032	0.0725
45.40	3.37	0.0112	0.0747
45.60	3.57	0.0245	0.0770
45.80	3.77	0.0432	0.0791
46.00	3.97	0.0672	0.0812
46.25	4.22	0.1047	0.0838

## Orifice Equation Q = CA SQRT(2gH)

$$C = 0.6$$
Diameter (in 1.25
Area (ft^2)= 0.008522
 $g = 32.2$ 

H (Ft) = Depth of water above center of orifice

Q(CFS)= Flow

#### POND B(INLET 1)

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 = 
$$Ab * D + 0.5 * C * D^2$$
  
 $C = (At - Ab) / Dt$   
 $Ab = 6.80$   
 $At = 9,411.00$   
 $Dt = 1.25$   
 $C = 7523.36$ 

ACTUAL	DEPTH	VOLUME	Q
ELEV.	(FT)_	(AC-FT)	(CFS)
34.37	0	0	0.0000
40.75	6.63	0.0010	0.1514
40.95	6.83	0.0045	0.1537
41.15	7.03	0.0149	0.1560
41.35	7.23	0.0322	0.1582
41.55	7.43	0.0564	0.1604
41.75	7.63	0.0875	0.1625
42.00	7.88	0.1362	0.1652
42.25	8.13	0.1956	0.1678

## Orifice Equation Q = CA SQRT(2gH)

$$C = 0.6$$
Diameter (in 1.5
Area (ft^2)= 0.012272
 $g = 32.2$ 

H (Ft) = Depth of water above center of orifice

Q(CFS) = Flow

### POND A(INLET 2)

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 = 
$$Ab * D + 0.5 * C * D^2$$
  
 $C = (At - Ab) / Dt$   
 $Ab = 6.80$   
 $At = 7,257.00$   
 $Dt = 1.25$   
 $C = 5800.16$ 

ACTUAL	DEPTH	VOLUME	Q
ELEV.	(FT)	(AC-FT)	(CFS)
42.03	0	0	0.0000
45.00	2.97	0.0005	0.0701
45.20	3.17	0.0032	0.0725
45.40	3.37	0.0112	0.0747
45.60	3.57	0.0245	0.0770
45.80	3.77	0.0432	0.0791
46.00	3.97	0.0672	0.0812
46.25	4.22	0.1047	0.0838

## Orifice Equation Q = CA SQRT(2gH)

$$C = 0.6$$
Diameter (in 1.25
Area (ft^2)= 0.008522
 $g = 32.2$ 

$$Q(CFS)=Flow$$

### POND C (INLET 4)

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 = 
$$Ab * D + 0.5 * C * D^2$$
  
 $C = (At - Ab) / Dt$   
 $Ab = 6.80$   
 $At = 7,526.00$   
 $Dt = 2.00$   
 $C = 3759.60$ 

ACTUAL	DEPTH	VOLUME	Q
ELEV.	(FT)	(AC-FT)	(CFS)
28.6	0	0	0.0000
38.00	9.4	0.0015	0.3619
38.25	9.65	0.0042	0.3667
38.45	9.85	0.0103	0.3705
38.65	10.05	0.0198	0.3743
38.85	10.25	0.0328	0.3780
39.05	10.45	0.0492	0.3817
39.30	10.7	0.0746	0.3863
39.50	10.9	0.0988	0.3899
39.75	11.15	0.1339	0.3944
40.00	11.4	0.1744	0.3988

Orifice Equation
Q = CA SQRT(2gH)

C = 0.6Diameter (in 2.125
Area (ft^2)= 0.024629

g = 32.2

H (Ft) = Depth of water above center of orifice

Q(CFS) = Flow

### POND D (INLET 5)

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 \* D<sup>2</sup>

$$C = (At - Ab) / Dt$$

$$Ab = 6.80$$

$$At = 5,526.00$$

$$Dt = 1.50$$

$$C = 3679.47$$

ACTUAL	DEPTH	VOLUME	Q
ELEV.	(FT)	(AC-FT)	(CFS)
33.5	0	0	0.0000
36.00	2.5	0.0004	0.1633
36.25	2.75	0.0031	0.1715
36.45	2.95	0.0090	0.1779
36.65	3.15	0.0183	0.1840
36.85	3.35	0.0310	0.1899
37.05	3.55	0.0471	0.1956
37.25	3.75	0.0666	0.2011
37.50	4	0.0957	0.2079

## Orifice Equation Q = CA SQRT(2gH)

$$C = 0.6$$
Diameter (in 2
Area (ft^2)= 0.021817
 $g = 32.2$ 

H (Ft) = Depth of water above center of orifice

Q(CFS)=Flow

### POND E (INLET 9)

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 = 
$$Ab * D + 0.5 * C * D^2$$
  
 $C = (At - Ab) / Dt$   
 $Ab = 6.80$   
 $At = 8,129.00$   
 $Dt = 1.83$   
 $C = 4438.36$ 

ACTUAL	DEPTH	VOLUME	Q
ELEV.	(FT)	(AC-FT)	(CFS)
40.9	0	0	0.0000
42.25	1.75	0.0003	0.0768
42.50	2	0.0035	0.0822
42.70	2.2	0.0107	0.0864
42.90	2.4	0.0219	0.0903
43.10	2.6	0.0372	0.0941
43.35	2.85	0.0621	0.0987
43.60	3.1	0.0933	0.1030
43.83	3.33	0.1277	0.1068
44.08	3.58	0.1712	0.1108

#### Orifice Equation Q = CA SQRT(2gH)

$$C = 0.6$$
Diameter (in 1.5
Area (ft^2)= 0.012272
 $g = 32.2$ 

H(Ft) =Depth of water above center of orifice

Q(CFS)=Flow

#### POND F (INLET8)

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 = 
$$Ab * D + 0.5 * C * D^2$$
  
 $C = (At - Ab) / Dt$   
 $Ab = 6.80$   
 $At = 9,607.00$   
 $Dt = 1.50$   
 $C = 6400.13$ 

ACTUAL	DEPTH	VOLUME	Q
ELEV.	(FT)	(AC-FT)	(CFS)
41.33	0	0	0.0000
43.50	2.5	0.0004	0.0848
43.75	2.75	0.0050	0.0890
43.95	2.95	0.0153	0.0923
44.15	3.15	0.0315	0.0954
44.35	3.35	0.0536	0.0984
44.55	3.55	0.0815	0.1014
44.75	3.75	0.1154	0.1042
45.00	4	0.1659	0.1077

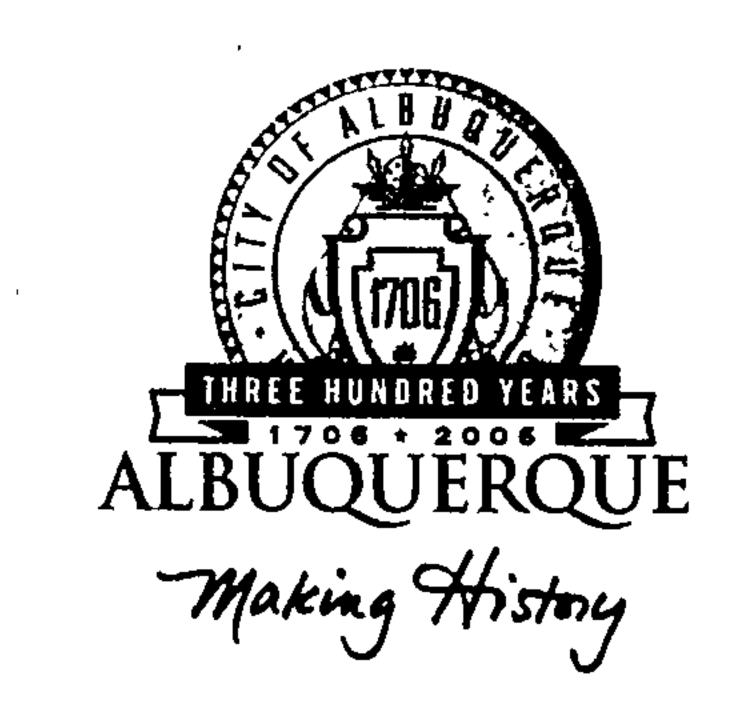
## Orifice Equation Q = CA SQRT(2gH)

C = 0.6  
Diameter (in 1.4375  
Area (ft^2)= 0.01127  
$$g = 32.2$$

H (Ft) = Depth of water above center of orifice

Q(CFS) = Flow

## CITY OF ALBUQUERQUE



### Planning Department Transportation Development Services Section

August 16, 2005

Ronald R. Bohannan, P.E. 8509 Jefferson NE Albuquerque, NM 87113

Re:

Certification Submittal for Final Building Certificate of Occupancy

For Harrison Building Addition, [F-16 / D20A]

1420 Mission Avenue

Engineer's Stamp Dated 08/15/05

Dear Mr. Bohannan:

P.O. Box 1293

The TCL / Letter of Certification submitted on August 15, 2005 is sufficient for acceptance by this office for final Certificate of Occupancy (C.O.). Notification has been made to the Building and Safety Section.

Albuquerque

Sincerely,

New Mexico 87103

www.cabq.gov

Nilo E. Salgado-Fernandez, P.E.

Senior Traffic Engineer

Development and Building Services

Planning Department

C:

Engineer
Hydrology file
CO Clerk

8509 Jefferson NE Albuquerque, NM 87113 (505) 858-3100 fax (505) 858-1118

twllc@tierrawestllc.com 1-800-245-3102

August 15, 2005

Mr. Nilo Salgado-Fernandez, PE Development and Building Services Public Works Department PO Box 1293 Albuquerque, NM 87103

RE: DRB Approved Site Plan Certification for Permanent Certificate of Occupancy

Russ Harrison's Contractors Yard

1420 Mission Avenue, NE

Dear Mr. Salgado-Fernandez:

Tierra West, LLC, requests a Permanent Certification of the DRB approved Site Plan for Building Permit for the Russ Harrision's Contractors Yard Building Expansion. The site is located at 1420 Mission Avenue in the North Renaissance Center. Enclosed, please find the information sheet, the As-Built Amended Site Plan for Building Permit, the DRB approved Site Plan for Building Permit and the DRB approved Site Plan for Subdivision. All site paving is complete; handicap ramps, signage and striping are in place; parking space striping is complete; and the landscaping is completed. Field verification of the site was completed by our office and is in substantial compliance with the approved plan. Therefore, we are requesting Certification of the Site Plan for Building Permit for a Permanent Certificate of Occupancy.

If you have any questions or need additional information regarding this matter, please do

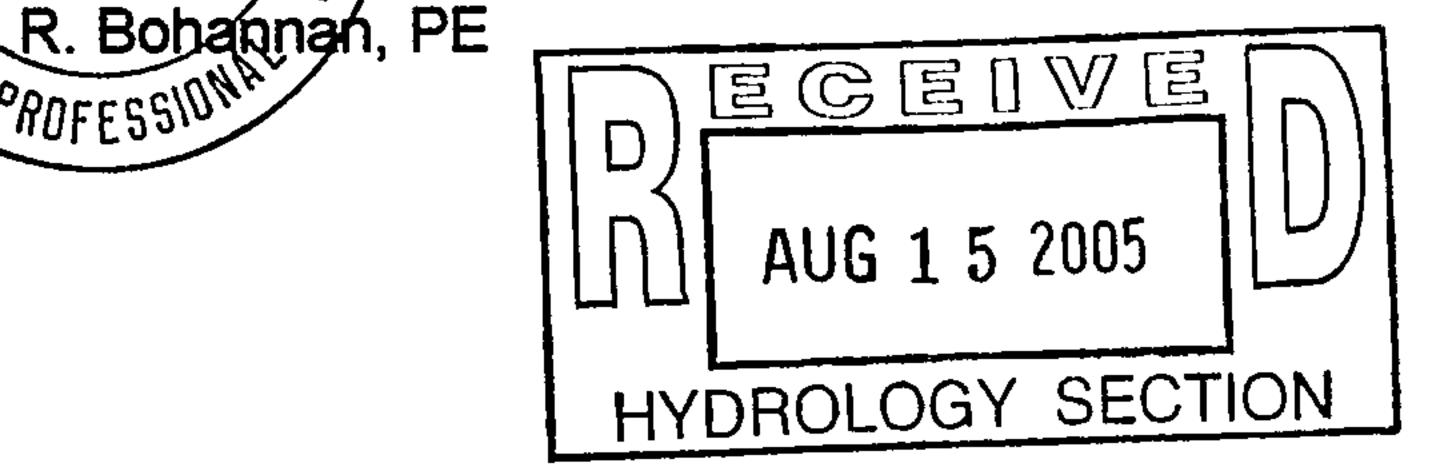
B3B R

not hesitate to contact me.

Enclosure/s

cc: Tony Thomas

JN: 99078 RRB/rw



99078 8-15-05 harrisons Perm TCL Cert



# City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

December 26, 2002

Ronald R. Bohannan, P.E. Tierra West, LLC 8509 Jefferson NE Albuquerque, New Mexico 87113

RE: HARRISON BUILDING-

(F-16/D20A)

(1420 Mission NE) (Renaissance Center Tr. 3A-3-A-3)

ENGINEERS CERTIFICATION FOR CERTIFICATE OF OCCUPANCY

ENGINEERS STAMP DATED 10/17/2001

ENGINEERS CERTIFICATION DATED 12/23/2002

Dear Mr. Bohannan:

Based upon the information provided in your Engineers Certification submittal dated 12/24/2002, the above referenced site is approved for Permanent Certificate of Occupancy.

If I can be of further assistance, please contact me at 924-3981.

Sincerely,

Trise A. Martin

Hydrology Plan Checker

Development & Bldg. Ser. Division

BUB

C: Certificate of Occupancy Clerk, COA

drainage file approval file