DRAINAGE REPORT

for

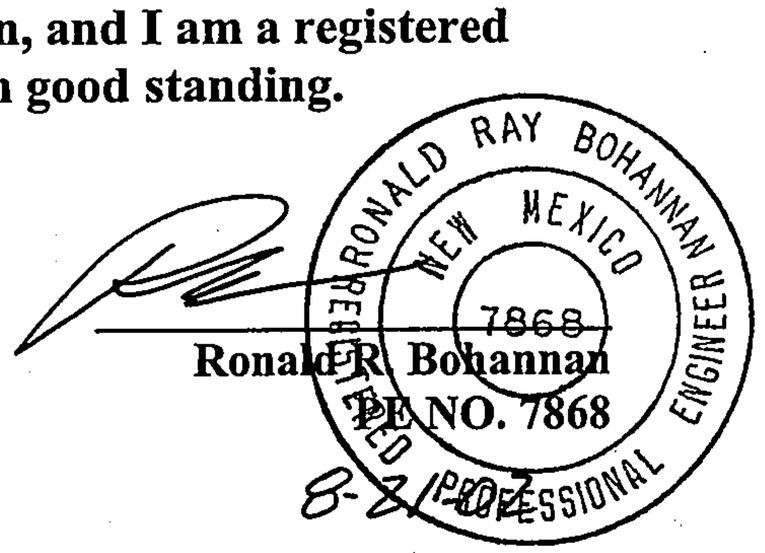
MIMI's CAFE
Tract J-1-B, The 25
4315 The 25 Way NE
Albuquerque, New Mexico

Prepared by:

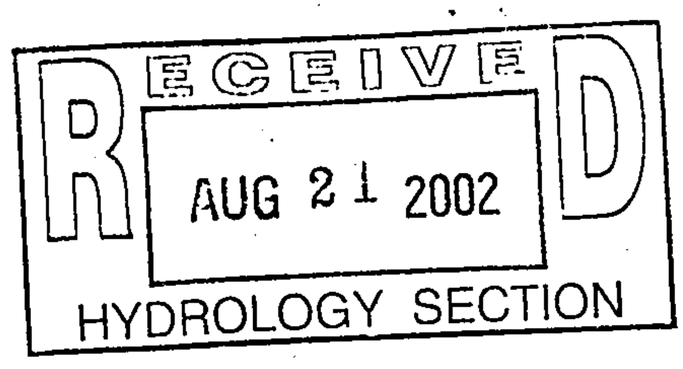
Tierra West, LLC
8509 Jefferson NE
Albuquerque, New Mexico 87113

Revised
August, 2002

I certify that this report was prepared under my supervision, and I am a registered Professional Engineer in the State of New Mexico in good standing.



Ronald R. Bohannan
PE NO. 7868



Job No 220041

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Appendix

Map Pockets

PURPOSE

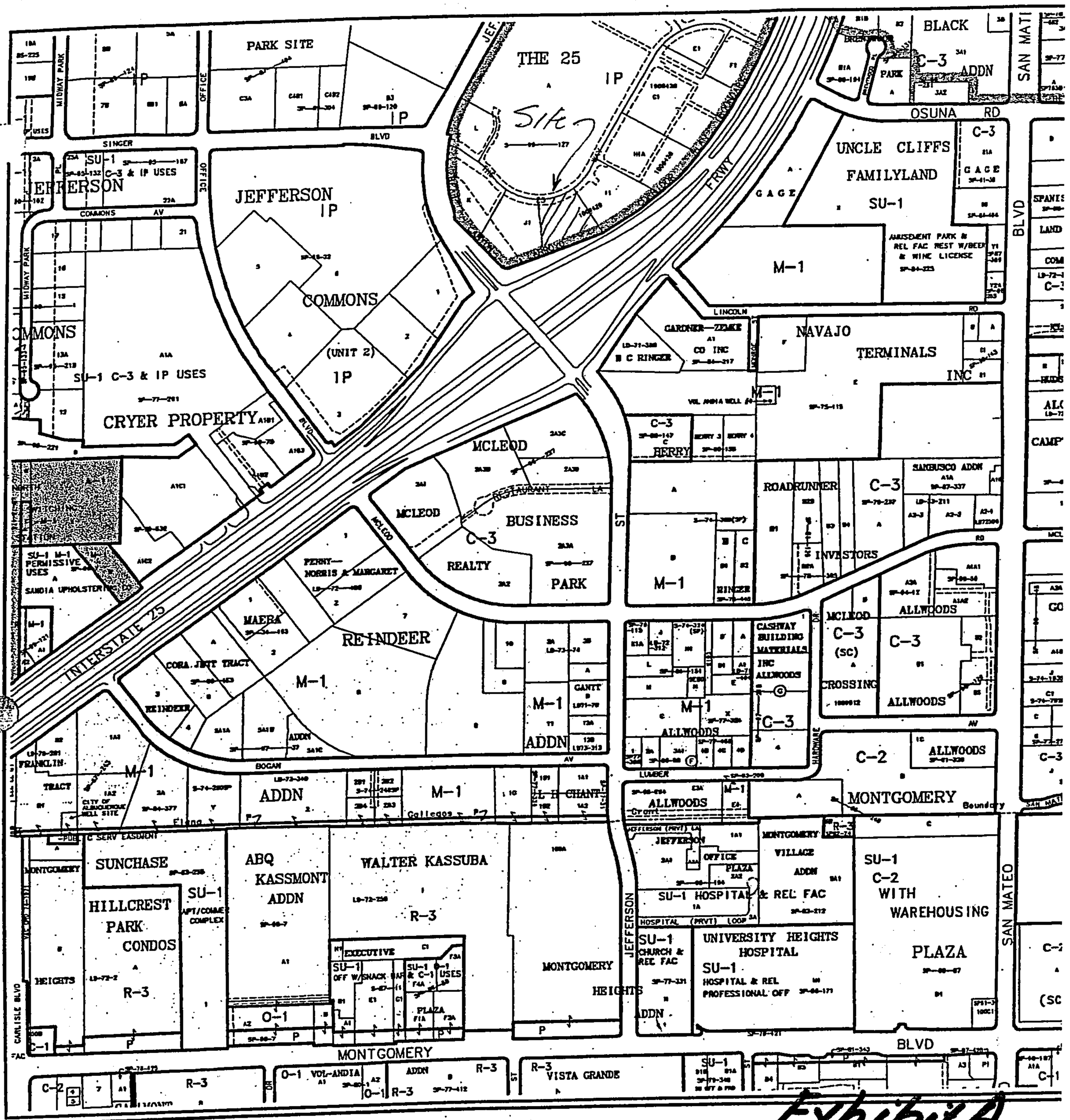
The purpose of this report is to provide the drainage management plan for the development of Tract J-1-B, of The 25 Development. This plan will be utilized for the development of the subject 1.4911-acre property, for the use as Mimi's Café. This plan is in accordance with the DPM Chapter 22. This report 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 1.4911-acre parcel of land located on the southeast corner of the I-25 Frontage Road, Jefferson and The 25 Way. The site is located on Zone Atlas page E-17. The site currently exists as a rough graded pad site within The 25 Development. The legal description of the property is Tract J-1-B of The 25 Development. As shown on FIRM map 35001C0138D, the site lies within flood zone X.

This site was analyzed within the Master Drainage Report and Grading Plan for The 25 Development (F17-D46D) previously submitted by Tierra West, LLC, with the stamp date of 5/5/99 and approved and shown in Appendix B. The City of Albuquerque Hydrology Section approved the Drainage Management Plan on 5/13/99. Based upon the approved Drainage Management Plan, this site is located entirely within Basin D of The 25 Development. The approved Master Drainage Plan indicates this parcel is allowed free discharge if the land treatments are equal to, or less than, 85% D and 15% B. Since our improvements are consistent with developed condition assumptions within The 25 Development Drainage Plan, the site should be allowed free discharge.

Minor offsite flows enter the site from the east from the adjacent I-25 Frontage Road. These flows will sheet flow onto the site and continue to pass through the site via surface flow within the sidewalk on the south side of the property as indicated on the Master Drainage Study.



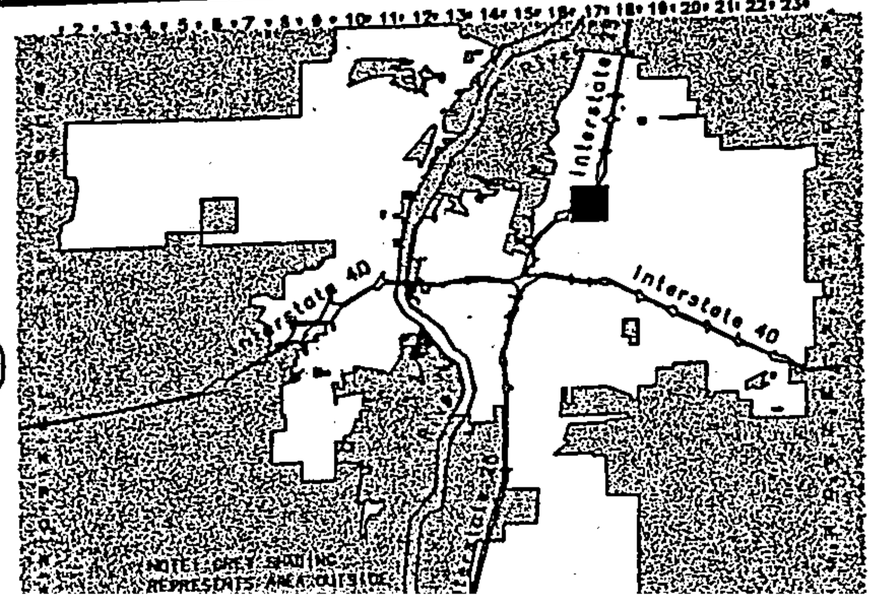


Exhibit A- Vicinity Map

Exhibit A

GRAPHIC SCALE IN FEET

250 0 750 1000

CITY OF Albuquerque

Albuquerque Geographic Information System

PLANNING DEPARTMENT

Zone Atlas Page

F-17-Z

Map Amended through July 19, 2001

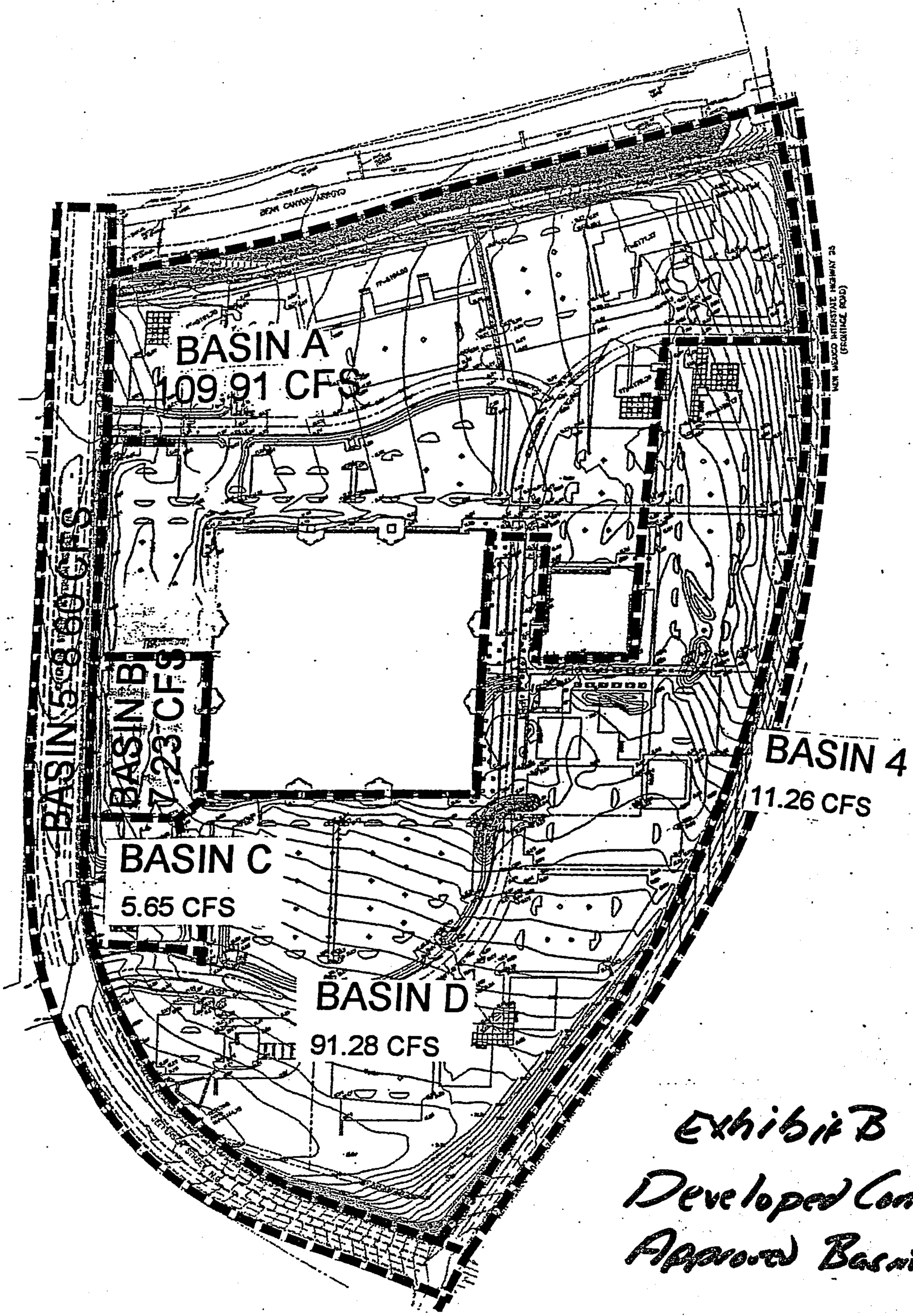


Exhibit B
Developed Conditions
Approved Basin Map

Exhibit B - Developed Conditions Approved Basin Map

@25 BASIN MAP

EXISTING CONDITIONS

The site slopes from east to west, with general grades between 1-3%. The site was rough graded with the construction of The 25 Development. The approved grading plan for The 25 Development is included in Map Pocket A. This site was analyzed within the Drainage Study for the entire 25 Development. This site is located entirely within Basin D, as described within the master drainage study, and shown in Exhibit B. As discussed within The 25 Development's drainage report, Basin D flows from the northeast to the southwest, where the flows enter an RCP that discharges to the back of an existing inlet located a the southeast quadrant of Singer and Jefferson. This storm drain discharges directly into the Vineyard Channel. A cross lot drainage easement was provided for the benefit of all the lots within the center. According to The 25 Development's Master Drainage Plan, the flows from Basin B and the flows generated in Jefferson Boulevard are the contributing basins for this storm drain system.

As shown in Appendix A, the upstream portion of Basin 4 discharges .87 CFS onto this site. This runoff enters the site along its eastern boundary and sheet flows across the site. Once the flow leaves the site, it continues to sheet flow to the southwest through The 25 Development and is ultimately captured by the previously mentioned public storm drain system.

PROPOSED CONDITIONS

The proposed improvements consist of the construction of a 6,444 square foot restaurant and its associated parking lot. As shown in Exhibit B, the entire site lies within Basin D as described within The 25 Development's Master Drainage Study. As shown in the calculations section, the proposed land treatments are consistent with the developed condition assumptions for this site within The 25 Development's Drainage Management Plan. The offsite flows that currently enter the site from the east will continue to be accepted and passed through the site. Mi-

nor runoff from the I-25 Frontage Road, it is anticipated 0.87 cfs will sheet flow into the water along the east property line.

As shown on the Basin Map exhibit in Map Pocket A, the site consists of two (2) onsite basins and one (1) offsite basin. Basin 1 contains the entire roof and the southeast portion of the site while Basin 2 contains the remaining portion of the site. As shown in Appendix A, Basin 1 generates 1.107 cfs and Basin 2 generates 3.7776 cfs during a predicted 100-year, 6-hour storm event. The proposed Grading Plan is included in Map Pocket B of this report. As shown on the Grading Plan and Basin Map, the entire site will discharge the combined onsite and offsite flow of 4.8848 cfs as a sheet flow at the southwest corner of the site. As described within the Master Drainage Study for The 25 Development, the flows leaving this site will be conveyed via surface flow to a set of existing inlets which discharge to the Vineyard Arroyo.

SUMMARY AND RECOMMENDATIONS

This site is an existing pad within The 25 Development, which is an existing commercial center. The City of Albuquerque Hydrology Section approved the drainage management plan for the entire center. The 25 Development's Master Drainage Plan assumed fully developed conditions for our site. The proposed improvements are consistent with the land treatment types used for the developed condition for this site within The 25 Development's drainage plan. The development of this site is consistent with the DPM, Chapter 22, Hydrology section. Since this site encompasses less than five (5) acres, a NPDES permit is not required prior to any construction activity. There are no improvements required 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 Building Permit.

CALCULATIONS

The Site is @ Zone 2

RUNOFF CALCULATIONS

LAND TREATMENT

Proposed	*Existing*
B = 20%	A = 100%
D = 80%	

DEPTH (INCHES) @ 100-YEAR STORM

P_{60} = 2.01

P_{360} = 2.35

P_{1440} = 2.75

DEPTH (INCHES) @ 10-YEAR STORM

P_{60} = 1.87 x 0.667 = 1.34

P_{360} = 2.20 x 0.67 = 1.57

Zone 2

Land Treatement

From Table A-8 Soil Treatment	A	B	C	D
Weighted E 100 yr.	0.53	0.78	1.13	2.12
Wieghted E 10 yr.	0.13	0.28	0.52	1.34

Peak Discharge

From Table A-9

	A	B	C	D
100 Yr	1.56	2.28	3.14	4.7
10 Yr	0.38	0.95	1.71	3.14

Volume Undeveloped

	Soil Treatment Type	Acreage	100 Yr	10 Yr	Vol 100	Vol 10
Basin A	A	0.2860	0.4400	0.0800	0.0105	0.0114
Basin B	A	0.8990	0.4400	0.0800	0.0330	0.0360

Volume Developed

	Total	Acre "A"	Acre "B"	Acre "C"	Acre "D"	Weigh E 100	E 10	V 100 Yr	V 10 Yr
Basin 1	0.286	0.0000	0.0960	0.0000	0.1890	1.6628	0.9795	0.0396	0.0233
Basin 2	0.899	0.0000	0.1850	0.0000	0.7140	1.8442	1.1219	0.1382	0.0840

Peak Discharge

	Total	Acre "A"	Acre "B"	Acre "C"	Acre "D"	Q 100 Yr	Q 10 Yr
Basin 1	0.286	0.0000	0.0960	0.0000	0.1890	1.1072	0.6847
Basin 2	0.899	0.0000	0.1850	0.0000	0.7140	3,7776	2.4177

MANNINGS EQUATION FROM KING & BRATER

$$Q = \frac{1.486\ a\ 5/3\ s\ 1/2}{np\ 2/3}$$

a = area
s = slope
n = roughness co efficient
p = hydraulic radius

Depth = 2.06 ft.

S = .01
Q = 42.2 cfs.
N = .017

BROADCREST WEIR

Q = CLH 3/2 KING & BRATER

Q = 3.777 cfs
L = Computed
C = 2.65 Constant
H = .5 curb height

$$L = \frac{Q}{CH\ 3/2} = \frac{3.777}{(2.65)(.5)\ 1.5}$$

L = 4.02 ft

APPENDIX

Master Plan Digital Site @ 25

DRAINAGE REPORT
FOR

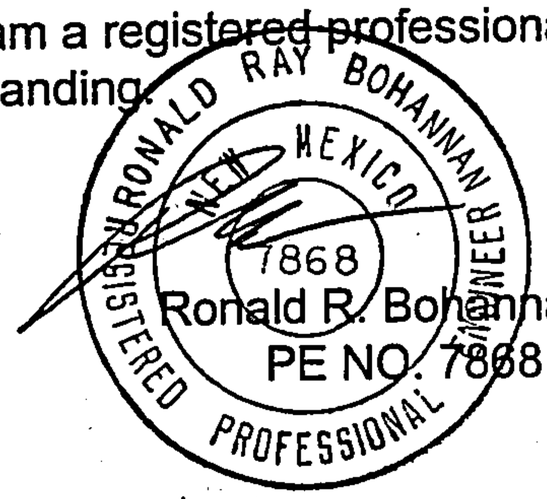
Digital @25

Prepared by:

Tierra West, LLC
4421 McLeod Rd., NE, Suite D
Albuquerque, New Mexico 87109

May, 1999

I certify that this report was prepared under my supervision, and I am a registered professional engineer in the state of New Mexico in good standing.



Ronald R. Bohannan
PE NO. 7868

Job No 980054

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Location

The proposed site, entitled @25, is the former Digital site located on Jefferson Street just west of Interstate 25. The site is developed with buildings, parking and landscaping and consists of ±49.4245 acres. The current owner, Provident Realty Advisors, proposes to build a multiple use development that will include a general office building, a variety of restaurants, banking facilities and specialty retail uses. They plan to utilize a portion of the existing facilities for the office use. We have highlighted the project's location on the enclosed zone atlas page.

Legal Description

The legal description for the referenced property is as follows: ~~Parcels 1 and 2~~ as shown on the "Plat of Survey for Parcels 1 and 2, Digital Properties, Albuquerque, Bernalillo County, New Mexico" filed for record in the office of the County Clerk Bernalillo County, New Mexico on August 15, 1991, in Volume 91C, Folio 169.

Zoning and Surrounding Development

The current zoning for the site is IP. The site is bordered on the north by the Bear Canyon Arroyo and the I-25 frontage road on the east. To the south is the I-25/Jefferson off-ramp and to the west (across Jefferson) are several commercial businesses and office parks and additional properties zoned IP.

Purpose

The purpose of this drainage report is to provide the drainage analysis and the management plan for the proposed ±49.4245 acre @25 development. We are requesting rough grading approval, Site Development Plan for Subdivision Approval, Preliminary Plat approval, and Building Permit Approval.

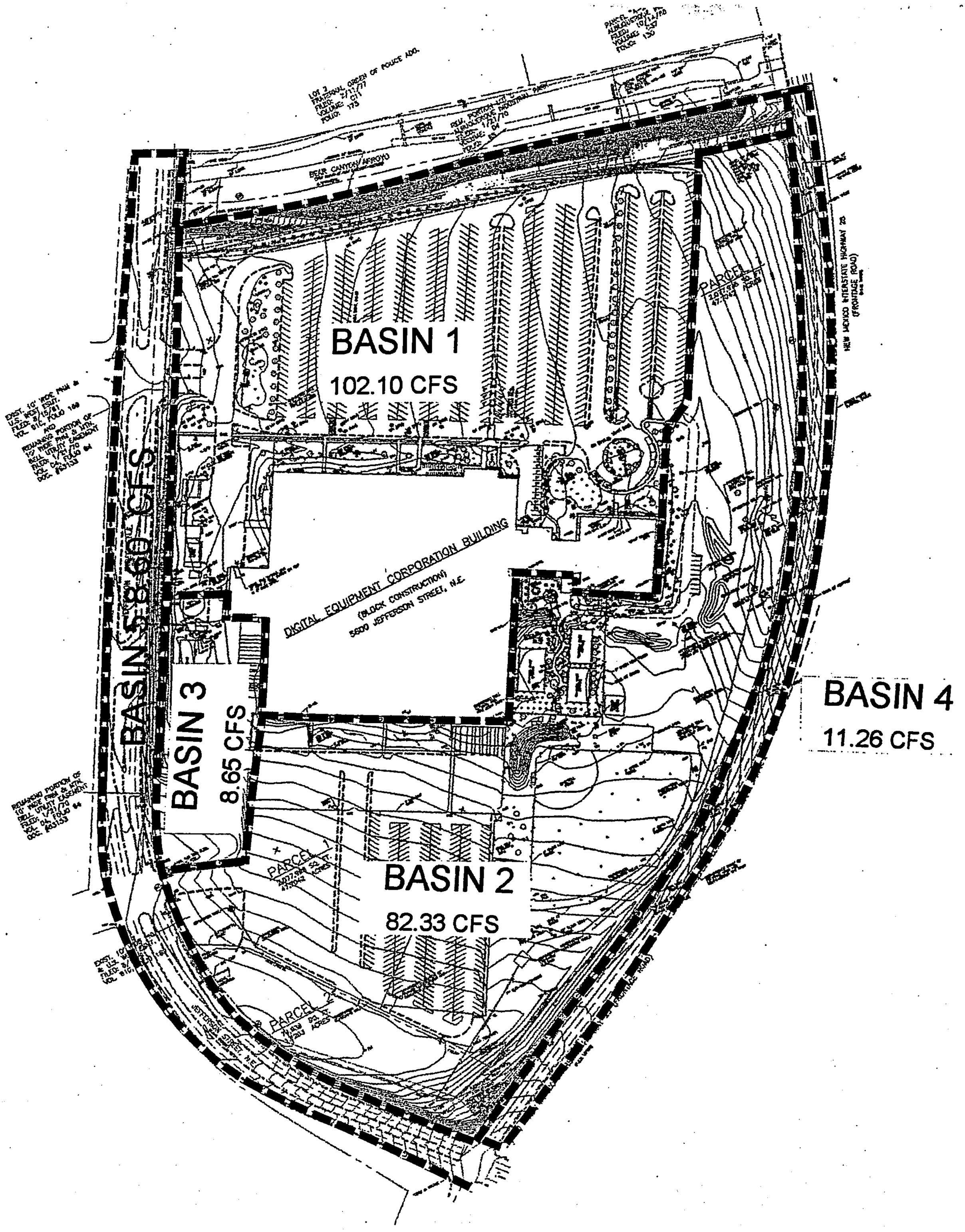
INDUSTRIAL
ACADEMY PARKWAY SOUTH
M-1
(UNIT 1)
TRACT
OSUNA
O-1
IP
RUST TRACTOR PROPERTY
INTERSTATE INDUS TRACT (UNIT 2) & GROUP
PARK
RD
(UNIT 1)
ACA
SU-1
INTERSTATE INDUSTRIAL TRACT (UNIT 2)
BEAR CANYON ARROYO
PLAN BOUNDARY
INTERSTATE INDUSTRIAL TRACT (UNIT 2)
GROUP NINE INDUSTRIAL PARK
ABQ INDUSTRIAL PARK
NORTH DIVERSION CHANNEL AND INLET CHANNELS PHASE 4
JEFFERSON PLAZA
BORDER MACHINERY
HB WOODWARD
MIDWAY
ALBUQUERQUE
GROUP NINE INDUSTRIAL PARK
SU-1 BOYS CLUB
FRATERNAL ORDER OF
ABQ INDUSTRIAL PARK
C-3
BLVD
BALLOON FIELD INDUSTRIAL PARK
TRIANGLE
MIDWAY BUSINESS PARK
INDUSTRIAL
PARK SITE
JEFFERSON
INTERSTATE 25
SAN MATEO
BLACK
SITE LOCATION
OSUNA RD
SINGER BLVD
DIGITAL PROPERTIES
UNCLE CLIFFS FAMILYLAND
SU-1
AMUSEMENT PARK & REL FAC REST W/BEER & WINE LICENSE
M-1
LINCOLN RD
GARDNER-ZINKE CO INC
B C RINGER
NAVAJO TERMINALS INC
BERRY
ROADRUNNER
INVESTORS
SANBUSCO ADDN
ALLWOODS
ALLWOODS FLAT OF CASHWAY BLDG
EMERSON
COMMONS
SU-1 C-3 & IP USES
CRYER PROPERTY
MCLEOD
BUSINESS
REALTY PARK
NORRIS & MARGARET PERRY
MAERA
CORA JETT TRACT
REINDEER
NORTH SWITCHING STATION
SANDIA UPHOLSTERING CO
ARDNER TRACT
INTERSTATE 25
25

Existing Drainage Conditions

The site is the former Digital site and consists of ±49.4245 acres. Presently, the site discharges 193.08 cfs of storm water. (See Runoff Calculations for Existing Conditions in Appendix A.) There is not an approved drainage plan for the Digital Site on file with the City of Albuquerque's Hydrology Department. The site, with a portion of Jefferson Street NE, was included in the Design Analysis Report for the Vineyard Channel West of I-25, prepared for AMAFCA by Greiner, Inc., October 1992. The Greiner report states that the total Digital Site and a portion of Jefferson Street NE discharges 225 cfs into the public storm sewer system along Jefferson Street NE. This storm sewer discharges into the Vineyard Channel. (See Figure 1 in Map Pocket.)

Our review of the project revealed that an onsite storm water system exists on the northern portion of the site and that the system was rehabilitated, by Digital, in 1992. This onsite storm water system is shown in the Utility Rehabilitation drawings, prepared by Camp Dresser & McKee Inc., April 1992. These drawings show an onsite storm drain system which discharges 33.8 cfs directly into the Bear Canyon Arroyo. (The analysis was based using Manning's equation.) The storm water runoff (76.11 cfs) not captured within the onsite storm water system free discharges to Jefferson Street. The southern and western portion of the site discharges 91.0 cfs into the Jefferson Street public storm sewer system. In addition, this site accepts 11.26 cfs of offsite flow that enters the site from the I-25 west frontage road, along the eastern property line.

The existing site is divided into three onsite drainage basins 1, 2, and 3 and two offsite drainage basins 4 and 5. Basin 1 discharges 102 cfs and consists of the existing building, the existing storm sewer system, the north parking lot, and a portion of the west parking area. This basin discharges to the Bear Canyon Arroyo and to Jefferson Street. Basin 2, the southern portion of the site and the area east of the main building, discharges 82.33 cfs into the public



@25 BASIN MAP
EXISTING CONDITIONS

storm sewer in Jefferson Street. Basin 3 discharges 8.65 cfs and is the area west of the main building from the south entrance to the midpoint of the building. This basin free discharges to Jefferson Street. (See the enclosed Existing Conditions Drainage Basin Map.)

Basin 1, under existing conditions, develops 102.10 cfs of storm water runoff. This basin consists of the existing building, the existing storm sewer system, the north parking lot, a portion of the west parking area and the AMAFCA easement parallel to the Bear Canyon Arroyo. The existing buildings and the northern parking lot are connected to an onsite storm water system which discharges directly into the Bear Canyon Arroyo. The onsite storm water system consists of a series of pipes from the internal roof drain system that are connected to a main storm sewer pipe running east to west in the north parking lot. There are several curb and grate inlets within the parking lot. The main entrance has three inlets connected to the main storm sewer. The main storm sewer line, at this point, is a 30" reinforced concrete pipe which discharges 33.8 cfs directly into the Bear Canyon Arroyo. The storm water runoff not collected in the onsite storm water system sheet flows across the parking lot and free discharges into Jefferson Street through the main entrance at rate of 68.3 cfs. The storm water carried downstream in Jefferson Street is channeled to several inlets that are connected to the public storm drain system and that discharges into the Vineyard Channel. Flows upstream of our site are discharged into the Bear Canyon Arroyo.

Basin 2 discharges 82.33 cfs and is the southern and eastern portion of the site. Offsite flows enter this basin from the I-25 frontage road. Presently, the southern portion of the site is a parking area, a detention pond and land treatment "C". The eastern portion of the site is the existing ballfields and land treatment "C". This basin flows from the northeast to the southwest and the storm water runoff is channeled to a pond located near the southern property line. From the detention pond there is a 24' corrugated metal pipe which is connected to the public storm water system in Jefferson Street. The Jefferson Street public storm water system

discharges into the Vineyard Channel downstream. This basin discharges 82.33 cfs into the Jefferson Street public storm system.

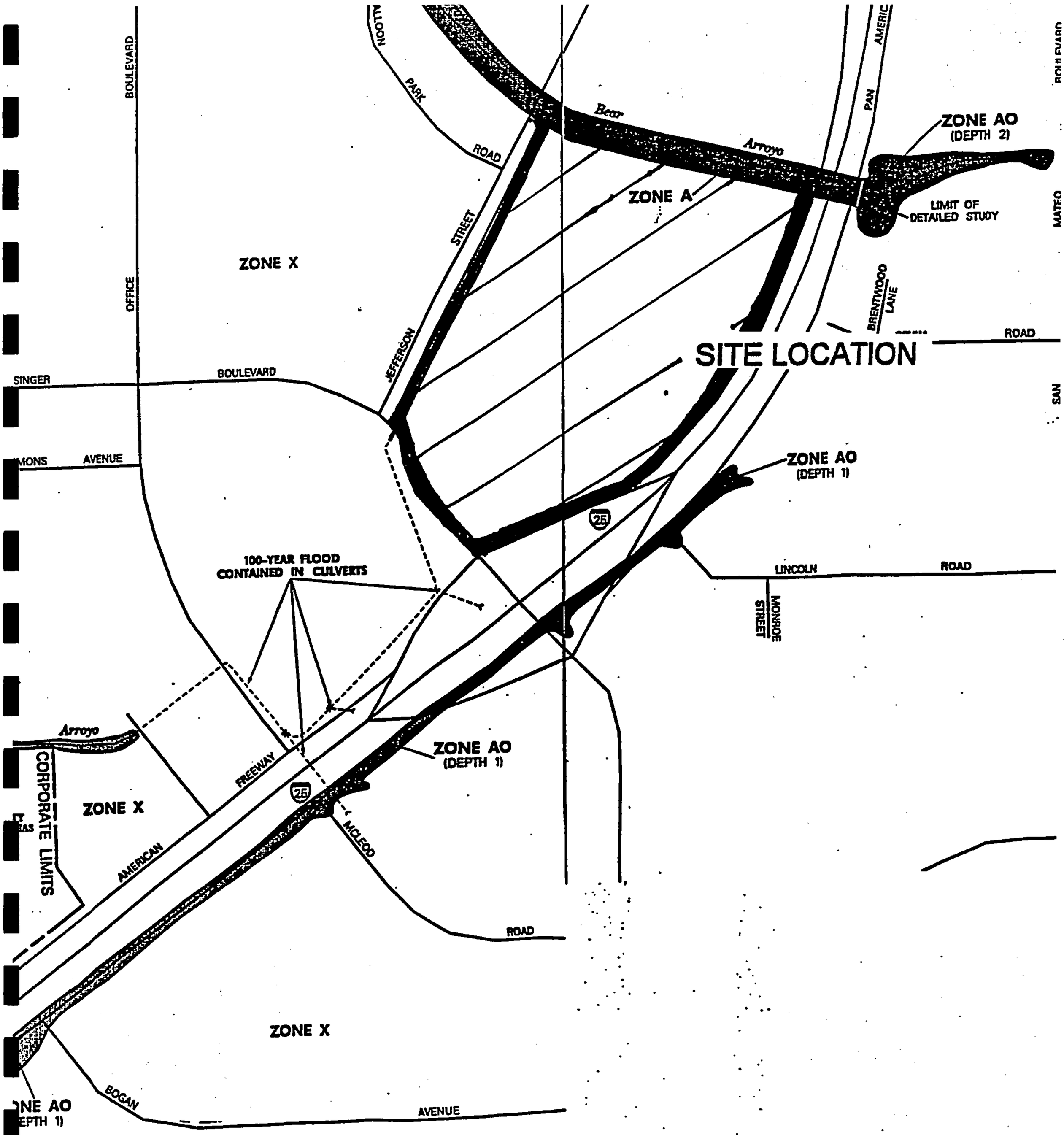
Basin 3 discharges 8.65 cfs directly into Jefferson Street and consists of the southern portion of the western parking lot and a portion of the landscaped area at the southern entrance to Digital. The parking lot runoff is channeled to an existing concrete rundown to the landscaped area. The runoff collected in the landscaped area appears to sheet flow across the site and over the existing curb into the existing inlet in Jefferson Street. The storm water collected in Jefferson Street is connected to the Vineyard Channel downstream.

Offsite flows enter this site from the southbound west frontage road of I-25, Basin 4. This offsite flow rate entering the site is 11.26 cfs. (See attached Existing Conditions Basin Map.) The offsite flows follow a swale along the eastern property line. The flows carried in the swale are discharged into an existing 24" corrugated metal pipe connected to the public storm sewer system in Jefferson Street.

We have designated the flows in Jefferson Street as basin 5. The flows in Jefferson include everything that falls in Jefferson Street from north of I-25 to the Bear Canyon Arroyo. Storm water does not enter Jefferson from the west right of way. Basin 5, Jefferson Street, contributes 8.60 cfs of storm water runoff to the public storm drain system. At this location Jefferson Street is two lanes in each direction separated by a median. The drive lanes are 24-feet from face of curb to face of curb. When the storm water enters Jefferson Street it flows into both the southbound and northbound driving lanes. For the design of the street capacity we used 24-feet from face of curb to face of curb and a flow height of 0.365 to keep one driving lane free of water. (See Appendix A for Jefferson Street Capacity Calculations.) The capacity of Jefferson Street at this location is 25.0 cfs for one half of the street.

Flood Plain and Soil Conditions

The project is not in a Flood Hazard Zone, as shown on Panel 138 and 139 of 825 of the



Flood Insurance Rate Maps

BERNALILLO COUNTY, AND PARTS OF SANDOVAL AND VALENCIA COUNTIES, NEW MEXICO — SHEET NUMBER 21

385 000 FEET

R. 3 E. R. 4 E.

(Joins sheet 11)

1 515 000 FEET

SITE LOCATION

ALBUQUERQUE

(Joins sheet 21)

(Joins sheet 20)

(Joins sheet 22)

1 500 000 FEET

10 N.T. 11 N.

Soils Map - Panel 21

@25

National Flood Insurance Program Flood Insurance Rate Maps, published by FEMA for the County of Bernalillo, New Mexico, and incorporated areas, dated September 20, 1996.

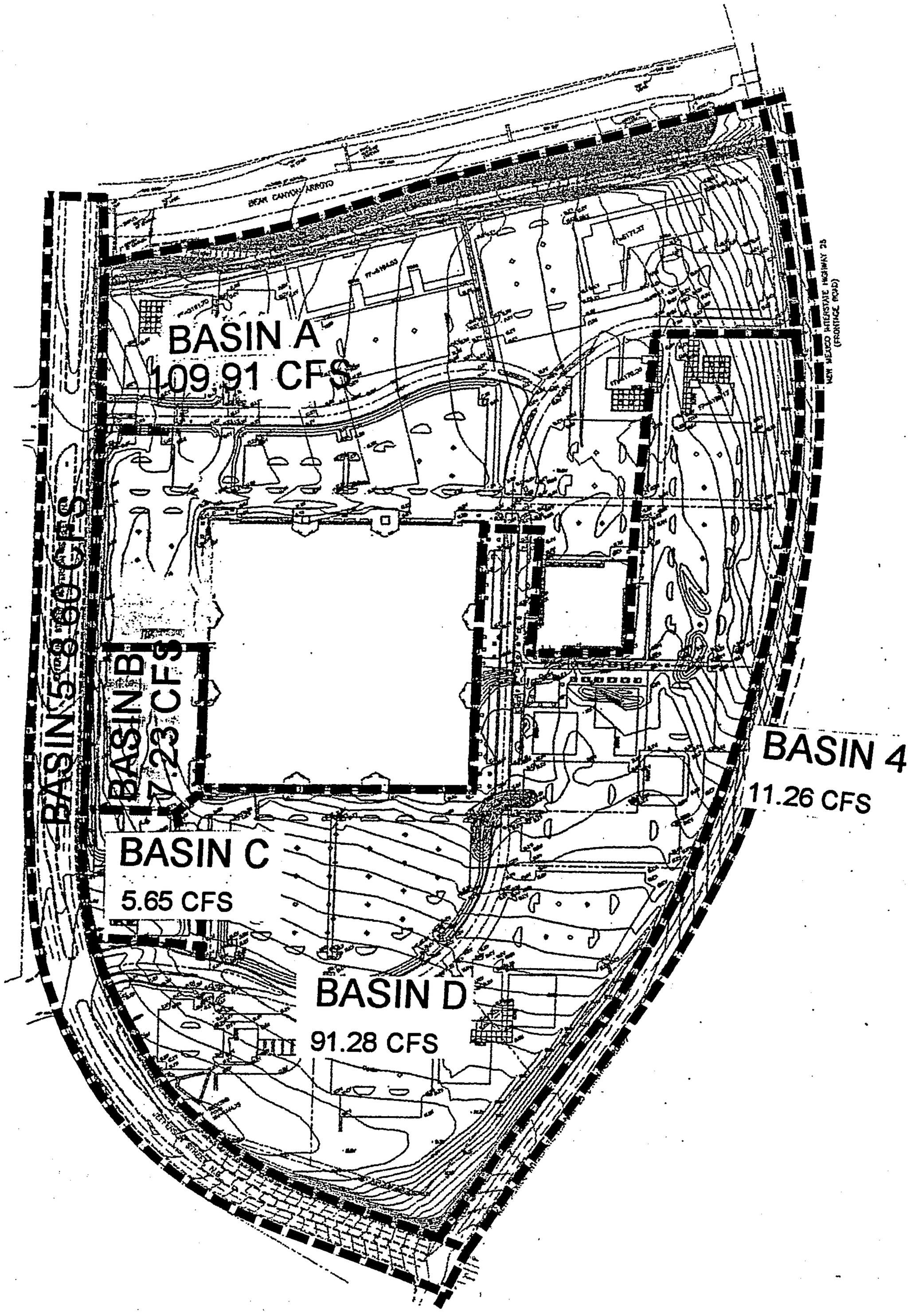
The site soil is Embudo gravelly fine sandy loam (EmB), as indicated on the Soil Map (Sheet 21) from the Soil Conservation Service Survey of Bernalillo County. Embudo gravelly fine sandy loam has a medium runoff, the hazard of water erosion is moderate and control of moisture is required for proper compaction.

Proposed Conditions and On-Site Drainage Management Plan

The proposed site will include the refurbished existing building and retails pad sites. The proposed site is divided into four basins A, B, C and D and discharges the following under developed conditions:

BASIN	AREA (AC)	Q100
A	25.46	109.82
B	1.70	7.24
C	1.29	5.7
D	20.97	91.3

Basin A includes the existing building, six future pad sites and a portion of service road. This basin discharges 109.82 cfs to the Bear Canyon Arroyo and Jefferson Street. Basin B is the proposed parking area between the existing building and the west property line. This basin discharges 7.24 cfs to the Jefferson Street public storm water system. Basin C is along the west property line, south of the existing building and adjacent to Jefferson Street NE. This basin includes one future pad site, landscaping and parking. This basin discharges 5.7 cfs directly into Jefferson Street. Basin D includes the southern portion of the site from the existing building to the Jefferson Street off ramp. The site includes six future pad sites, parking and a


BEAR CANYON ARROYO
NEW MEXICO INTERSTATE HIGHWAY 25
(FRONTAGE ROAD)
BASIN A
109.91 CFS
BASIN B
17.23 CFS
BASIN C
5.65 CFS
BASIN D
91.28 CFS
BASIN 4
11.26 CFS

@25 BASIN MAP

portion of the service road. This basin discharges 91.3 cfs into the public storm water system in Jefferson Street NE. (See attached Proposed Conditions Basin Map and Grading and Drainage Plan in map pocket.)

Offsite flows enter the site from the west frontage road of I-25. The proposed site will accept the offsite flows and direct the flows to the storm inlets on site and or the public storm system in Jefferson Street.

Basin A consists of 25.46 acres and includes the existing buildings, five future pad sites, and the associated parking and landscaping. The existing on site storm water system is functional and will be utilized with the exception of the existing inlets. The existing roof drains connected to the existing onsite storm water system will remain. The existing inlets at the main entrance will be replaced with two type "C" inlets. The inlets along the north property line will be removed when the future retail pad sites are developed. For the future pad sites the storm water is to be channeled from the roofs into the landscaped area. The runoff in the parking areas sheet flows across the parking lots and into the ring road. The runoff carried in the ring road will be intercepted by two new type "C" inlets at the main entrance to the Retail Site. These inlets are connected to the existing storm sewer system which discharges 32.91 cfs into the Bear Canyon Arroyo through a 30" reinforced concrete pipe. Rip rap is located at the outfall to dissipate the discharged energy and to control erosion. The existing 30" concrete reinforced pipe has a capacity of 33.8 cfs. The developed storm water that is channeled to the ring road and not captured in the inlets at the main entrance (which are connected to the existing onsite storm water system) will free discharge to Jefferson Street. Basin A has a developed runoff of 109.82 cfs, with 32.91 cfs discharging into the Bear Canyon Arroyo, and 76.91 cfs will free discharge into Jefferson Street. With the new development the capacity of Jefferson Street will remain the same. For the design of the street capacity we used 24-feet from face of curb to face of curb and a flow height of 0.365 (See Appendix A for Jefferson Street Capacity

Calculations.) The capacity of Jefferson Street at this location is 25.0 cfs. The storm water, carried downstream in Jefferson Street, is channeled to several inlets which are connected to the public storm drain system which discharges into the Vineyard Channel. The flows in basin A follows the historic pattern. (See attached Proposed Conditions Basin Map and Grading and Drainage Plan in Map Pocket.)

Basin B is the west parking lot for the existing building. This basin is 1.70 acres, slopes north to south and discharges 7.24 cfs. The storm water runoff is diverted to a concrete rundown which is connected to two-24" sidewalk culverts. The sidewalk culverts discharge the storm water into Jefferson Street. This follows the historic pattern for the storm water runoff for this portion of the site. (See Appendix A for sidewalk culvert calculations.) The capacity of Jefferson Street, flowing full, is 25 cfs. (See Street Capacity Calculations in the Appendix A.)

Basin C is located at the southern entrance to the site. It consists of one retail pad site and the associated parking and landscaping. The roof will be sloped to channel the storm water into roof drains that discharge into the landscaped areas. The parking is sloped to channel the storm water to a 2-foot curb opening connected to two-24" wide sidewalk culverts. This basin contains 1.29 acres and discharges 5.7 cfs into Jefferson Street which flows south along the gutter to a new type "D" inlet. Due to the widening of the south entrance into the site, the type "D" inlet is replacing the existing curb type inlet. This follows the historic drainage pattern. (See attached Proposed Conditions Basin Map and Grading and Drainage Plan in the map pocket.)

Basin D is the eastern and southern portion of the site. This basin accepts offsite flows of 11.26 cfs from the I-25 west frontage road. The basin consists of the seven retail pad sites, a portion of the ring road and the associated parking and landscaping. The storm water from the roofs is channeled to roof drains and discharged to the landscaped area. Storm water in the parking areas sheet flows to either concrete rundowns, sidewalk culverts or the ring road.

The runoff is then directed to the desilting pond located near the southern boundary. The desilting pond releases the runoff to the existing public storm water system in Jefferson Street, as previously stated under the existing conditions. The storm water carried in the ring road is also channeled to the desilting pond. The storm water collected in the desilting pond will be discharged into the existing 24" reinforced concrete located at the southern property line. This existing pipe is connected to the Jefferson Street public storm drain system that discharges into the Vineyard Channel. This basin discharges 91.3 cfs and 11.26 cfs of offsite flows into the public storm drain system. (See attached Proposed Conditions Basin Map and Grading and Drainage Plan in Map Pocket.)

Basin 5, Jefferson Street contributes 8.60 cfs to the public storm sewer system downstream.

Emergency Conditions

For emergency conditions the storm water will be carried in the service road and the parking lots to the public storm drain system in Jefferson Street or to the Bear Canyon Arroyo.

Summary

The developed site will discharge 32.91 cfs directly into the Bear Canyon Arroyo and 181.08 cfs into the public storm drain system in Jefferson. **Flowmaster** was used to analyze the existing storm water system with improvements. Using this software the allowable discharge into Bear Canyon Arroyo is 32.91 cfs to keep the hydraulic grade line in the ground. The public storm drain system is connected to the Vineyard Channel downstream. The site accepts 11.26 cfs of offsite flows that will discharge into the public storm sewer on Jefferson Street. The total amount of flows entering the public storm water system in Jefferson is 181.08 from @25, 11.26 cfs from I-25 offsite and 8.60 cfs in Jefferson for a total of 200.94 cfs. The

Vineyard Channel report has an allowable discharge of 225 cfs entering the public system from this site and a portion of Jefferson Street. This development is contributing 24 cfs less than the allowable reported in the Vineyard Channel Report developed by Greiner Inc.

RUNOFF SUMMARY TABLE -DEVELOPED CONDITIONS

BASIN	AREA (SF)	AREA (AC)	AREA (MI^2)
A	1109042	25.46	.03978
B	74052	1.70	.00226
C	56192	1.29	.00216
D	913456	20.97	.03278

BASIN	DEVELOPED Q100 (CFS)	DEVELOPED V100 (CF)
A	109.82	158606
B	7.24	11575
C	5.7	9100
D	91.3	13290

APPENDIX A

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RUNOFF CALCULATIONS

Date: Jan. 15, 1999 Project: Digital @25 Zone Atlas: E-17 & F-17

This procedure is in accordance with the City of Albuquerque Development Process Manual, Volume 2, Section 22.2, "Hydrology", peak discharge rate for small watersheds less than forty acres in size.

Precipitation Zone from Figure A-1: 2
Land treatment descriptions are in Table A-4.

1. RUNOFF RATE COMPUTATION

Use Equation A-10: $Q_P = Q_{PA} A_A + Q_{PB} A_B + Q_{PC} A_C + Q_{PD} A_D$
Values of Q_{pi} are from Table A-9, and are in CFS/acre. Area values are in acres.

BASIN	Q_{PA}	A_A	Q_{PB}	A_B	Q_{PC}	A_C	Q_{PD}	A_D	Q_P
EXISTING RATE OF RUNOFF (CFS)									
Basin 1	1.56	0.00	2.28	4.40	3.14	2.20	4.70	18.12	102.10
Basin 2	1.56	0.00	2.28	2.26	3.14	9.94	4.70	9.78	82.33
Basin 3	1.56	0.00	2.28	1.69	3.14	0.00	4.70	1.02	8.65
Total									193.08
OFF-SITE BASINS RATE OF RUNOFF (CFS)									
Basin 4	1.56	0.00	2.28	0.00	3.14	1.79	4.70	1.20	11.26
Basin 5	1.56	0.00	2.28	0.00	3.14	0.00	4.70	1.83	8.60

BASIN	Q_{PA}	A_A	Q_{PB}	A_B	Q_{PC}	A_C	Q_{PD}	A_D	Q
DEVELOPED RATE OF RUNOFF (CFS)									
Basin A	1.56	0.00	2.28	2.65	3.14	2.20	4.70	20.61	109.82
Basin B	1.56	0.00	2.28	0.31	3.14	0.00	4.70	1.39	7.24
Basin C	1.56	0.00	2.28	0.17	3.14	0.00	4.70	1.12	5.65
Basin D	1.56	0.00	2.28	2.99	3.14	0.00	4.70	17.97	91.28
Total									213.98
OFF-SITE DEVELOPED RATE OF RUNOFF (CFS)									
Basin 4	1.56	0.00	2.28	0.00	3.14	1.79	4.70	1.20	11.26
Basin 5	1.56	0.00	2.28	0.00	3.14	0.00	4.70	1.83	8.60

2. RUNOFF VOLUME COMPUTATION

Use Equation A-5 to compute weighted excess precipitation:

Weighted E = "E" = $(E_A A_A + E_B A_B + E_C A_C + E_D A_D)/(A_A + A_B + A_C + A_D)$

$(A_A + A_B + A_C + A_D) = \sum A_i$

Use Equation A-6 to compute the volume:

V_{360} = "E" x $(A_A + A_B + A_C + A_D)$ x 3630 feet^3/acre·inch

Values of E_i are from Table A-8, and are in inches. Area values are in acres.

BASIN	E_A	A_A	E_B	A_B	E_C	A_C	E_D	A_D	$\sum A_i$	"E"	V_{360}
EXISTING VOLUME OF RUNOFF (CUBIC FEET)											
Basin 1	0.53	0.00	0.78	4.40	1.13	2.20	2.12	18.12	24.73	1.79	160927
Basin 2	0.53	0.00	0.78	2.26	1.13	9.94	2.12	9.78	21.98	1.51	122435
Basin 3	0.53	0.00	0.78	1.69	1.13	0.00	2.12	1.02	2.71	1.51	12635
Total											295,996
OFF-SITE VOLUME OF RUNOFF (CUBIC FEET)											
Basin 4	0.53	0.00	0.78	0.00	1.13	1.79	2.12	1.20	2.99	1.53	16577
Basin 5	0.53	0.00	0.78	0.00	1.13	0.00	2.12	1.86	1.86	2.12	14314

BASIN	E_A	A_A	E_B	A_B	E_C	A_C	E_D	A_D	$\sum A_i$	"E"	V_{360}
DEVELOPED VOLUME OF RUNOFF (CUBIC FEET)											
Basin A	0.53	0.00	0.78	2.65	1.13	2.20	2.12	20.61	25.46	1.72	158606
Basin B	0.53	0.00	0.78	0.31	1.13	0.00	2.12	1.39	1.70	1.88	11575
Basin C	0.53	0.00	0.78	0.17	1.13	0.00	2.12	1.12	1.29	1.94	9100
Basin D	0.53	0.00	0.78	2.99	1.13	0.00	2.12	17.97	20.96	1.82	138290
Total											317,571
OFF-SITE DEVELOPED VOLUME OF RUNOFF (CUBIC FEET)											
Basin 4	0.53	0.00	0.78	0.00	1.13	1.79	2.12	1.20	2.99	1.46	16577
Basin 5	0.53	0.00	0.78	0.00	1.13	0.00	2.12	1.83	1.86	2.12	14314

Storm Inlets @ Entrance

- Overall area =

BASIN A. 102.58 CFS
+ 7.23 CFS

Inlet - Top of Grate = 57.53 = 57.72 = .20
INV = 53.00
= 53.27

Type "C" inlet

$Q = CA\sqrt{2gH}$

A = 4.36
H = .20
C = .60
g = 32.2

4.36

Q = 9.38 capacity

Pipe - h = 3' ft of pipe

24" ϕ

$Q = CA\sqrt{2gh}$ =

$= .6 * \frac{\pi d^2}{4} \sqrt{2g3}$

Q = 26.20

SIDEWALK CULVERT

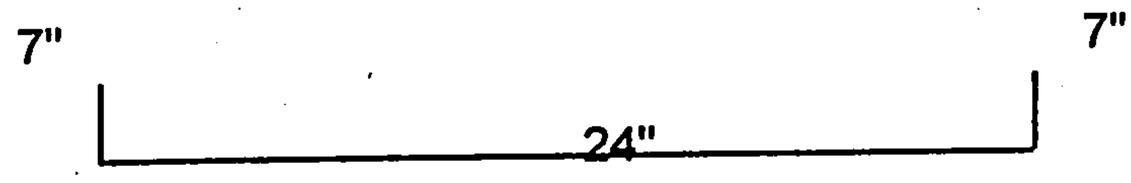
Orifice Equation:

$$Q = CA\sqrt{2gH}$$

Solve for Q
C = 0.6
A = 0.5833*2 = 1.167 ft²
g = 32.2
H = Height of water measured from center of orifice

$$Q = 0.6(1.167)\sqrt{2 * 32.2 * \frac{0.5833}{2}}$$

Q=3.04 cfs
Use a 24" sidewalk culvert
3.04 cfs > 1.59 cfs



BASIN B 2-24" SIDEWALK CULVERTS
BASIN C 2-24" SIDEWALK CULVERTS
BASIN D 5-24" SIDEWALK CULVERTS
2-24" SIDEWALK CULVERTS

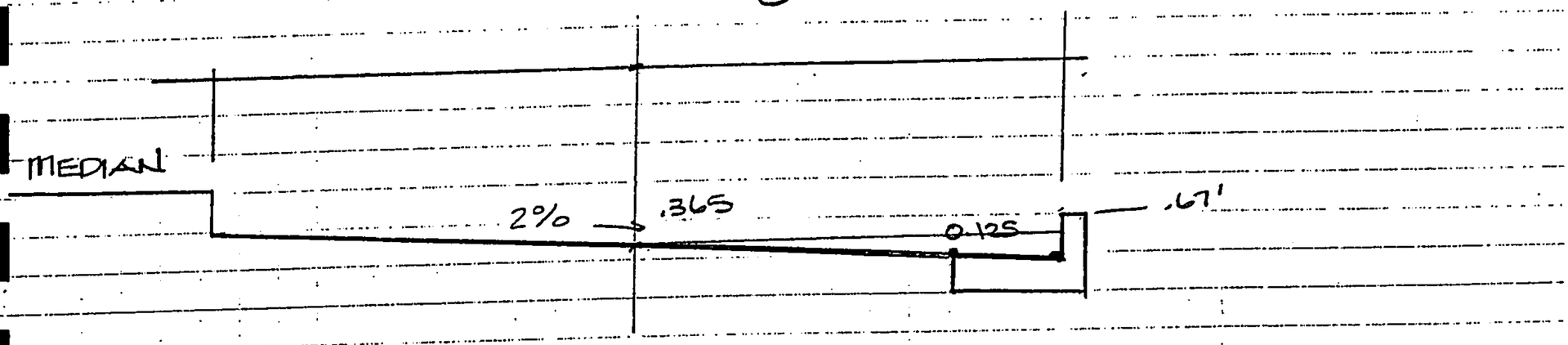
Street Capacity

Jefferson STREET.

Minor Arterial

Maximum Street Depth for 10 yr. storm

- one lane free driving



Driving Lane Free

open channel

$$Q = \frac{1.49}{.017} \cdot A \cdot R^{2/3} \cdot S^{1/2}$$

$$A = \frac{.365 \times 12}{2} = 2.19$$

$P = 12.365$

$S = .0072$

$R = 0.177$

$Q = 25.32$

Street Capacity Calculations

Loop Roads - 1/2 Street Section
32' F-F Street Section with 6" curb
Slope= 0.0091

For water depths less than 0.125 feet

Y= Water depth
Area = 6*Y^2
P= SQRT(257*Y^2) + Y
n= 0.017

Depth (ft)	Area (ft^2)	P (ft)	R (A/P)	Q (cfs)	2Q (cfs)	Vel (ft/s)	D*V	Fr	D2 (ft)
0.01	0.0006	0.170312	0.003523	0.000116	0.000232	0.193061	0.001931	0.340225	0.001939
0.02	0.0024	0.340624	0.007046	0.000736	0.001471	0.306465	0.006129	0.38189	0.00472
0.04	0.0096	0.681249	0.014092	0.00467	0.00934	0.486483	0.019459	0.428657	0.011432
0.06	0.0216	1.021873	0.021138	0.013769	0.027539	0.637473	0.038248	0.458625	0.019137
0.08	0.0384	1.362498	0.028184	0.029654	0.059308	0.772243	0.061779	0.481151	0.027552
0.1	0.06	1.703122	0.035229	0.053767	0.107533	0.896109	0.089611	0.499382	0.036531
0.12	0.0864	2.043746	0.042275	0.08743	0.174861	1.011925	0.121431	0.51479	0.045982
0.125	0.09375	2.128902	0.044037	0.097485	0.19497	1.039843	0.12998	0.518304	0.048411

For water depths greater than 0.125 ft but less than 0.365 ft

Y1= Y-0.125
A2= A1 + 2*Y1 + 25*Y1^2
P2= P1 + SQRT(2501*Y1^2)+Y1

Depth (ft)	Area (ft^2)	P (ft)	R (A/P)	Q (cfs)	2Q (cfs)	Vel (ft/s)	D*V	Fr	D2 (ft)
0.13	0.104375	2.383952	0.043782	0.108115	0.21623	1.035833	0.134658	0.506279	0.048528
0.16	0.194375	3.914252	0.049658	0.218974	0.437947	1.126553	0.180248	0.496322	0.057885
0.2	0.384375	5.954652	0.06455	0.515757	1.031513	1.341806	0.268361	0.528746	0.079905
0.24	0.654375	7.995052	0.081847	1.028618	2.057236	1.571909	0.377258	0.56545	0.106348
0.28	1.004375	10.03545	0.100083	1.80534	3.610681	1.797476	0.503293	0.598627	0.1353
0.32	1.434375	12.07585	0.11878	2.890125	5.780249	2.014902	0.644769	0.627698	0.166025
0.36	1.944375	14.11625	0.13774	4.324252	8.648505	2.223981	0.800633	0.653208	0.198148
0.365	2.01375	14.3713	0.140123	4.530044	9.060088	2.249556	0.821088	0.656179	0.202249

For water depths greater than 0.365 ft but less than 0.667 ft

Y2= Y - 0.365
A3= A2 + Y2*14
P3= P2 + Y2

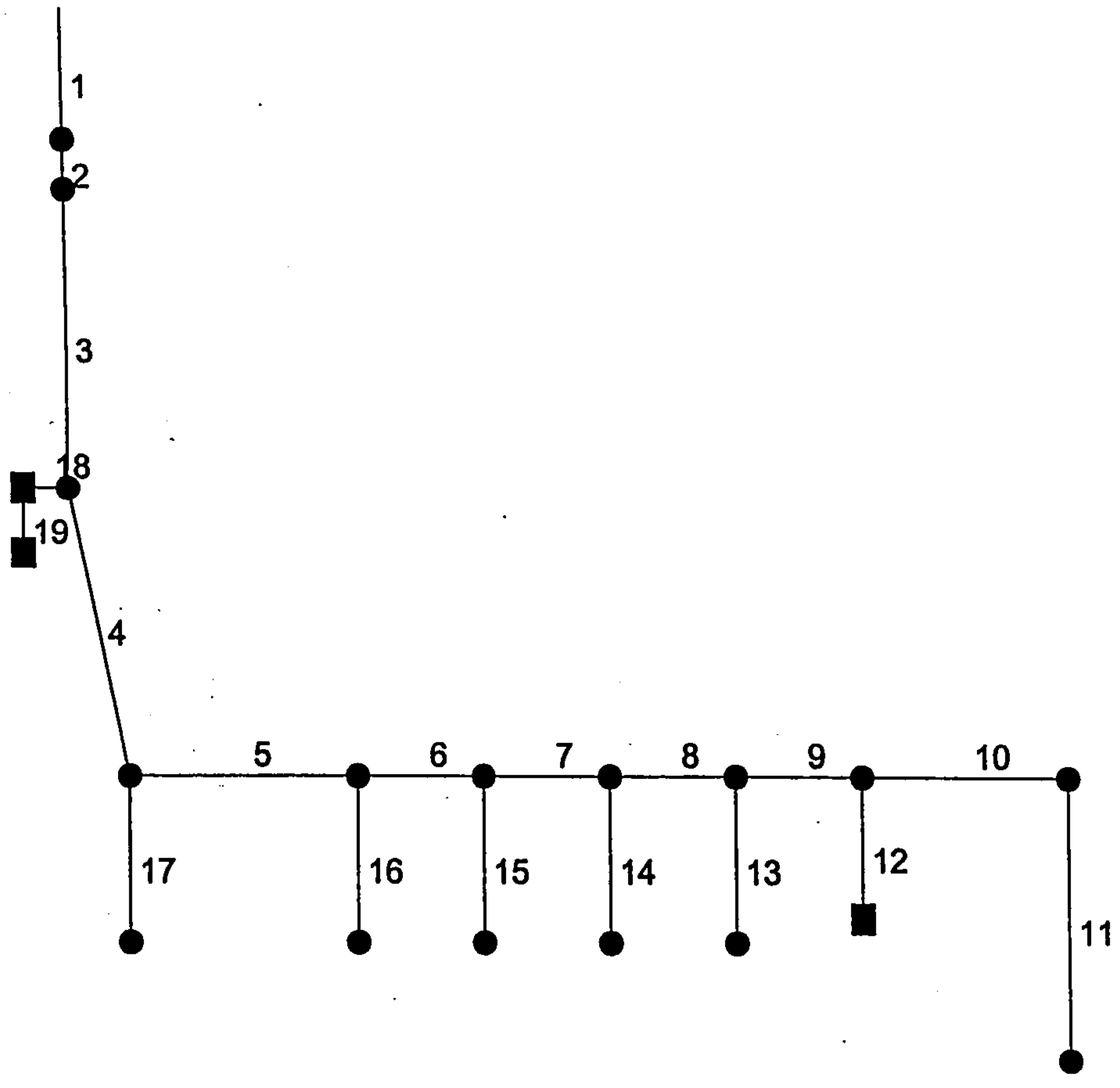
Depth (ft)	Area (ft^2)	P (ft)	R (A/P)	Q (cfs)	2Q (cfs)	Vel (ft/s)	D*V	Fr	D2 (ft)
0.37	2.08375	14.3763	0.144943	4.79441	9.588819	2.300856	0.851317	0.666593	0.209825
0.41	2.64375	14.4163	0.183386	7.115771	14.23154	2.691545	1.103533	0.740767	0.270931
0.45	3.20375	14.4563	0.221616	9.783257	19.56651	3.053689	1.37416	0.802215	0.332909
0.49	3.76375	14.4963	0.259635	12.77283	25.54565	3.393644	1.662886	0.854359	0.395782
0.54	4.46375	14.5463	0.306865	16.93383	33.86767	3.793634	2.048562	0.909768	0.475387
0.59	5.16375	14.5963	0.353771	21.53793	43.07587	4.170987	2.460882	0.95694	0.556211
0.63	5.72375	14.6363	0.391065	25.52334	51.04667	4.459198	2.809295	0.990053	0.621649
0.667	6.24175	14.6733	0.425381	29.43852	58.87704	4.716389	3.145831	1.017698	0.682754

For water depths greater than 0.667 ft but less than 0.847 ft

Y3= Y - 0.667
A4= A3 + 14 * Y3 + 25 * Y3^2
P4= P3 + SQRT(2501 * Y3^2)

Depth (ft)	Area (ft^2)	P (ft)	R (A/P)	Q (cfs)	2Q (cfs)	Vel (ft/s)	D*V	Fr	D2 (ft)
0.7	6.730975	16.32363	0.412345	31.09396	62.18792	4.619533	3.233673	0.973018	0.674856
0.72	7.053975	17.32383	0.407183	32.31353	64.62707	4.580897	3.298246	0.951385	0.673461
0.74	7.396975	18.32403	0.403676	33.68993	67.37986	4.554555	3.370371	0.933044	0.674198
0.76	7.759975	19.32423	0.401567	35.22002	70.44004	4.538677	3.449395	0.917476	0.676789
0.78	8.142975	20.32443	0.40065	36.90202	73.80404	4.531761	3.534774	0.904257	0.681006
0.8	8.545975	21.32463	0.400756	38.73518	77.47036	4.532564	3.626051	0.89304	0.686659
0.847	9.57175	23.6751	0.404296	43.63968	87.27937	4.559217	3.861657	0.873013	0.704729

Plan View



Proj. file: 9854-2.STM	IDF file: ZONE254.IDF	No. Lines: 19	05-04-1999

Storm Sewer Summary Report

Line No.	Line ID	Flow rate (cfs)	Line size (in)	Line length (ft)	Invert EL Dn (ft)	Invert EL Up (ft)	Line slope (%)	HGL down (ft)	HGL up (ft)	Minor loss (ft)	Dns line No.
1	1	32.91	30 c	80.0	50.00	51.28	1.600	52.50	53.20	1.03	End
2	2	32.91	30 c	30.0	51.28	51.54	0.867	54.23*	54.42*	0.70	1
3	3	32.91	30 c	180.0	51.54	52.73	0.661	55.12*	56.28*	0.70	2
4	4	14.91	27 c	180.0	52.73	53.92	0.661	56.98*	57.39*	0.22	3
5	5	13.20	27 c	180.0	53.92	54.80	0.489	57.61*	57.94*	0.17	4
6	6	11.49	24 c	100.0	54.80	55.64	0.840	58.11*	58.37*	0.21	5
7	7	9.78	21 c	100.0	55.64	57.31	1.670	58.58	58.91	0.28	6
8	8	8.07	18 c	100.0	57.31	59.22	1.910	59.19	60.30	0.54	7
9	9	6.36	18 c	100.0	59.22	61.00	1.780	60.84	61.96	0.44	8
10	10	4.65	15 c	162.0	61.00	63.50	1.543	62.40	64.36	0.41	9
11	11	1.71	10 c	170.0	63.50	65.20	1.000	64.77	65.83	0.23	10
12		1.71	10 c	85.0	61.00	64.00	3.529	62.40	64.58	0.28	9
13		1.71	8 c	100.0	59.22	61.22	2.000	60.84*	62.85*	0.37	8
14		1.71	8 c	100.0	57.31	59.31	2.000	59.19*	61.20*	0.37	7
15		1.71	8 c	100.0	55.64	57.64	2.000	58.58*	60.58*	0.37	6
16		1.71	8 c	100.0	54.80	56.80	2.000	58.11*	60.12*	0.37	5
17		1.71	8 c	100.0	53.92	55.92	2.000	57.61*	59.62*	0.37	4
18		18.00	24 c	35.0	52.73	53.00	0.771	56.98*	57.20*	0.51	3
19		9.00	24 c	40.0	53.00	53.27	0.675	57.71*	57.77*	0.13	18

PROJECT FILE: 9854-2.STM | I-D-F FILE: ZONE254.IDF | TOTAL NO. LINES: 19 | RUN DATE: 05-04-1999

NOTES: c = circular; e = elliptical; b = box; Return period = 100 Yrs.; * Indicates surcharge condition.

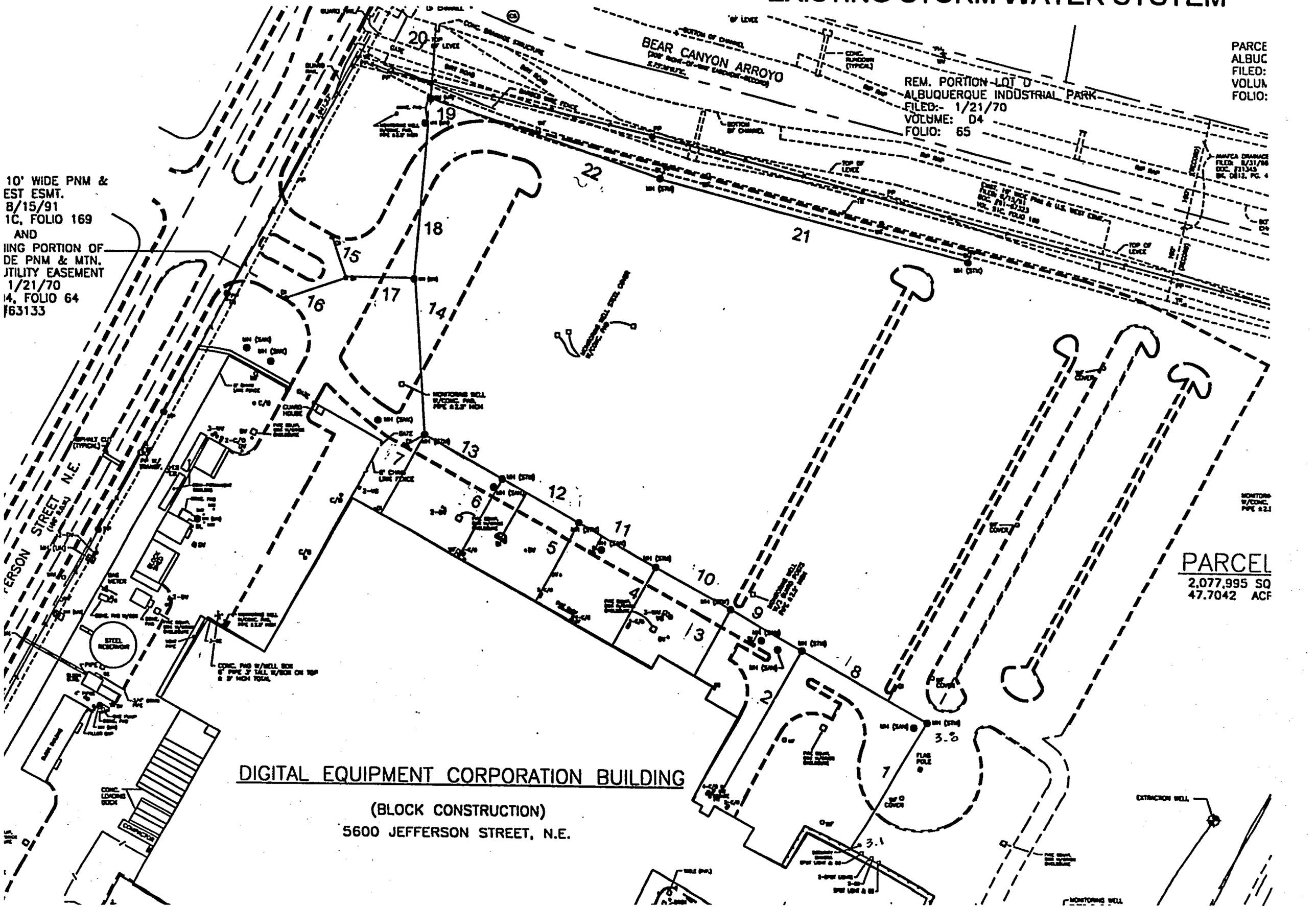
Storm Sewer Inventory Report

Line #	Line ID	DnStr line #	Defl angle (deg)	Line length (ft)	Line size (in)	Line type	Line slope (%)	Drng area (ac)	Runoff coeff (C)	Inlet time (min)	Known Q (cfs)	Invert El dn (ft)	Invert El up (ft)	N value	Junction type	J-Loss coeff (JLC)	Natural grnd (ft)	Dns line #
1	1	0	90	80	30	Circular	1.60	0.00	.00	0	0.0	50.00	51.28	.013	MH	1.0	60.00	Off
2	2	1	0	30	30	Circular	0.87	0.00	.00	0	0.0	51.28	51.54	.013	MH	1.0	60.00	1
3	3	2	0	180	30	Circular	0.66	0.00	.00	0	0.0	51.54	52.73	.013	MH	1.0	59.00	2
4	4	3	-15	180	27	Circular	0.66	0.00	.00	0	0.0	52.73	53.92	.013	MH	1.0	60.00	3
5	5	4	-75	180	27	Circular	0.49	0.00	.00	0	0.0	53.92	54.80	.013	MH	1.0	60.50	4
6	6	5	0	100	24	Circular	0.84	0.00	.00	0	0.0	54.80	55.64	.013	MH	1.0	61.50	5
7	7	6	0	100	21	Circular	1.67	0.00	.00	0	0.0	55.64	57.31	.013	MH	1.0	62.50	6
8	8	7	0	100	18	Circular	1.91	0.00	.00	0	0.0	57.31	59.22	.013	MH	1.0	63.50	7
9	9	8	0	100	18	Circular	1.78	0.00	.00	0	0.0	59.22	61.00	.013	MH	1.0	64.50	8
10	10	9	0	162	15	Circular	1.54	0.00	.00	0	2.9	61.00	63.50	.013	MH	1.0	65.50	9
11	11	10	90	170	10	Circular	1.00	0.00	.00	0	1.7	63.50	65.20	.013	MH	1.0	66.30	10
12		9	90	85	10	Circular	3.53	0.00	.00	0	1.7	61.00	64.00	.013	Grate	1.0	67.00	9
13		8	90	100	8	Circular	2.00	0.00	.00	0	1.7	59.22	61.22	.013	MH	1.0	63.50	8
14		7	90	100	8	Circular	2.00	0.00	.00	0	1.7	57.31	59.31	.013	MH	1.0	62.50	7
15		6	90	100	8	Circular	2.00	0.00	.00	0	1.7	55.64	57.64	.013	MH	1.0	61.00	6
16		5	90	100	8	Circular	2.00	0.00	.00	0	1.7	54.80	56.80	.013	MH	1.0	60.50	5
17		4	15	100	8	Circular	2.00	0.00	.00	0	1.7	53.92	55.92	.013	MH	1.0	60.00	4
18		3	90	35	24	Circular	0.77	0.00	.00	0	9.0	52.73	53.00	.013	Curb	1.0	57.00	3
19		18	-90	40	24	Circular	0.68	0.00	.00	0	9.0	53.00	53.27	.013	Curb	1.0	57.50	18

PROJECT FILE: 9854-2.STM | I-D-F FILE: ZONE254.IDF | TOTAL NUMBER OF LINES: 19 | RUN DATE: 05-04-1999

DESIGN CODES: Min. Pipe Size = 12 in; Max. Pipe Size = 60 in; Min. Slope = .2 %; Min. Cover = 4 ft; Inlet N-Values = .013 ; Average Inlet Throat Height = 8 in

EXISTING STORM WATER SYSTEM



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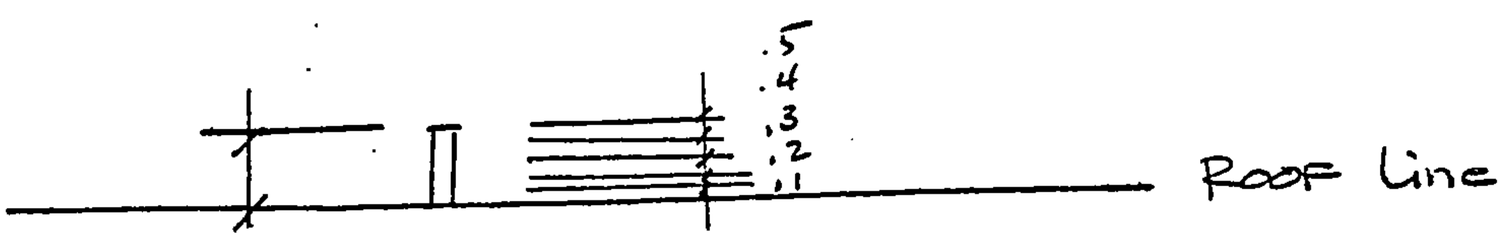
ROOF PIPING CAPACITY

ORIFICE EQUATION

$$Q = CA\sqrt{2gH}$$

H = water depth measured to Center of Plate.



C = .6

$A = \frac{\pi d^2}{4} = \pi \cdot \frac{0.17^2}{4}$ $d = 2" = 0.022\ FT^2$

H = 0.1 => 0.5

$Q_1 = .6 * 0.022\sqrt{2*32.2*.1} = 0.03$ CFS ①

$Q_2 = .6 * 0.022\sqrt{2g*.2} = 0.047$ CFS

$Q_3 = .6 * .022\sqrt{2g*.3} = 0.058$ CFS

$Q_4 = .6 * .022\sqrt{2g*.4} = 0.066$ CFS

$Q_5 = .6 * .022\sqrt{2g*.5} = 0.074$ CFS

d = 4", C = .6

$Q = .6 * .0873\sqrt{2g \cdot .1} = 0.133$ CFS

$Q_2 = .6 * .0873\sqrt{2g \cdot .2} = 0.188$ CFS

$Q_3 = .6 * 0.0873 * \sqrt{2g*.3} = 0.230$ CFS

$Q_4 = .6 * 0.0873 * \sqrt{2g*.4} = 0.266$ CFS

$Q_5 = .6 * 0.0873 * \sqrt{2g \cdot .5} = 0.297$ CFS

MANNING'S EQUATION Q=1.49/n *A*R2/3*S1/2
n = 0.013

PIPE NO.,	A	P	R	S	Q	V
1 - 8"	0.352387	2.09124	0.16851	0.02	1.732246	4.915755
2 - 10"	0.544703	2.61876	0.20800	0.02	3.083333	5.660578
3 - 8"	0.352387	2.09124	0.16851	0.02	1.732246	4.915755
4 - 8"	0.352387	2.09124	0.16851	0.02	1.732246	4.915755
5 - 8"	0.352387	2.09124	0.16851	0.02	1.732246	4.915755
6 - 8""	0.352387	2.09124	0.16851	0.02	1.732246	4.915755
7 - 8"	0.352387	2.09124	0.16851	0.02	1.732246	4.915755
8 - 15"	1.226563	3.925	0.31250	0.015	7.898193	6.439291
9 - 18"	1.76625	4.71	0.37500	0.02	14.83922	8.401539
10 - 18"	1.76625	4.71	0.37500	0.021	15.20567	8.609016
11 - 21"	2.404063	5.495	0.43750	0.0157	19.84238	8.253688
12 - 24"	3.14	6.28	0.50000	0.0085	20.85412	6.64144
13 - 24"	3.14	6.28	0.50000	0.0088	21.21895	6.757626
14 - 27"	3.974063	7.065	0.56250	0.0066	25.16701	6.332818
15 -12"	0.785	3.14	0.25000	0.0147	4.309144	5.489356
16 - 12"	0.785	3.14	0.25000	0.0196	4.975771	6.338562
17 - 15"	1.226563	3.925	0.31250	0.0183	8.723839	7.11243
18 - 30"	4.90625	7.85	0.62500	0.0068	33.84439	6.898219
19 - 30"	4.90625	7.85	0.62500	0.0068	33.84439	6.898219
20 - 30"	4.90625	7.85	0.62500	0.0068	33.84439	6.898219
21 - 10"	0.544703	2.61876	0.20800	0.02	3.083333	5.660578
22 - 10"	0.544703	2.61876	0.20800	0.02	3.083333	5.660578

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
DEVELOPMENT SERVICE / HYDROLOGY SECTION

CONFERENCE RECAP

DRAINAGE FILE/ZONE ATLAS PAGE NO. F17-D46 **DATE:** 12/10/98
PLANNING DIVISION NO'S: EPC: **ZONING:**IP **DRB:**
SUBJECT: Digital
STREET ADDRESS (IF KNOWN):
SUBDIVISION NAME: Digital Properties, lot 1

APPROVAL REQUESTED: Site Plan and Preliminary Plat and Building Permit

ATTENDANCE: Fred J. Aguirre-City Hydrologist
Chris Ehrsam, Tierra Engineering

FINDINGS:
An approved drainage report is required for preliminary plat/site plan approval. This report will need to address downstream capacity for this development. The hydraulic capacity analysis for the Bear Canyon Arroyo is not required for this project. Include in your report the design capacity information for the recently constructed Vineyard Storm Drain System (See Greiner Design Analysis Report). Include a copy of the proposed platting and infrastructure list with your drainage submittal. Please forward a copy of the report to AMAFCA for their review and approval.

THE UNDERSIGNED AGREES THAT THE ABOVE FINDINGS ARE SUMMARIZED ACCURATELY AND ARE SUBJECT TO CHANGE IF FURTHER INVESTIGATION REVEALS THAT THEY ARE NOT REASONABLE OR THAT THEY ARE BASED ON INACCURATE INFORMATION.

SIGNED: Fred J. Aguirre
TITLE : City Hydrologist

SIGNED: Chris G. Ehrsam
TITLE : Staff Engineer

NOTE PLEASE PROVIDE A COPY OF THIS RECAP WITH YOUR DRAINAGE SUBMITTAL.

City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

May 13, 1999

Ron Bohannan, PE
Tierra West, LLC
4421 McLeod Rd NE Suite D
Albuquerque, NM 87109

RE: DRAINAGE REPORT FOR DIGITAL @ 25 (F-17/D46)
RECEIVED MAY 5, 1999 FOR SITE DEV PLAN & BLDG PERMIT
ENGINEER'S STAMP DATED 5-5-99

Dear Mr. Bohannan:

Based on the information included in the submittal referenced above, City Hydrology accepts the Drainage Report for Site Development Plan and Building Permit.

Include a copy of the approved Grading & Drainage Plan, dated 5/5/99, in each set of construction documents that will be submitted to Code Administration for the Building Permit. Any work involving the Bear Arroyo must be approved by AMAFCA. If the Work Order Plans modify the existing storm drain system in Jefferson, the integrity of the system must be maintained.

Engineer's Certification of grading & drainage, per DPM checklist, must be accepted by City Hydrology before any Certificate of Occupancy will be released. Also, the rough grading must be accepted before the Financial Guaranty will be released.

If I can be of further assistance, You may contact me at 768-2727.

Sincerely,

John P. Curtin

John P. Curtin, P.E.
Project Manager, PWD/Hyd

c: Andrew Garcia

MAP POCKET A

APPROVED SITE GRADING AND DRAINAGE MASTER PLAN

City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

September 5, 2002

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

Re: Mimi's Café Drainage Report
Engineer's Stamp dated 8-21-02 (F17/D83)

Dear Mr. Bohannan,

Based upon the information provided in your submittal dated 8-21-02, the above referenced report is approved Building Permit. Please attach a copy of this approved plan to the construction sets prior to sign-off by Hydrology.

Also, prior to Certificate of Occupancy release, Engineer Certification per the DPM checklist will be required.

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

Sincerely,

Bradley L. Bingham

Bradley L. Bingham, PE
Sr. Engineer, Planning Dept.
Development and Building Services

C: file

DRAINAGE INFORMATION SHEET

(REV. 11/01/2001)

PROJECT TITLE: MIMI'S CAFÉ
ZONE ATLAS/DRG. FILE #: F-17/D83
DRB #: _____ EPC #: _____
WORK ORDER #: _____

LEGAL DESCRIPTION: Tract J-1-B, 4315 The 25 Way
CITY ADDRESS: Southeast corner of the I-25 Frontage Road and Jefferson, on The 25 Way

ENGINEERING FIRM:	**TIERRA WEST, LLC**	CONTACT:	**RONALD R. BOHANNAN**
ADDRESS:	**8509 JEFFERSON NE**	PHONE:	**(505) 858-3100**
CITY, STATE:	**ALBUQUERQUE, NM**	ZIP CODE:	**87113**
OWNER:	**Provident Realty Advisors**	CONTACT:	**Brain Parks**
ADDRESS:	**16775 Addison Rd.**	PHONE:	**(972) 733-3399**
CITY, STATE:	**Dallas TX**	ZIP CODE:	**75287**
ARCHITECT:	**LEE & SAKAHARA ARCHITECTS, AIA**	CONTACT:	**Jeff Elmore**
ADDRESS:	**16842 Von Karman Avenue, Suite 300**	PHONE:	**(949) 261-1100**
CITY, STATE:	**Irvine, CA**	ZIP CODE:	**92606-4927**
SURVEYOR:	**Precision Surveys**	CONTACT:	**Larry Medrano**
ADDRESS:	**8414-D Jefferson Street, NE**	PHONE:	**(505) 856-5700**
CITY, STATE:	**ALBUQUERQUE, NM**	ZIP CODE:	**87113**
CONTRACTOR:	_____	CONTACT:	_____
ADDRESS:	_____	PHONE:	_____
CITY, STATE:	_____	ZIP CODE:	_____

CHECK TYPE OF SUBMITTAL:

- ___ DRAINAGE REPORT
- ___ DRAINAGE PLAN
- ___ CONCEPTUAL GRADING & DRAINAGE PLAN
- X GRADING PLAN
- ___ EROSION CONTROL PLAN
- ___ ENGINEER'S CERTIFICATION (HYDROLOGY)
- ___ CLOMR/LOMR
- X TRAFFIC CIRCULATION LAYOUT (TCL)
- ___ ENGINEERS CERTIFICATION (TCL)
- ___ ENGINEERS CERTIFICATION (DRB APPR. SITE PLAN)
- ___ OTHER

CHECK TYPE OF APPROVAL SOUGHT:

- ___ SIA / FINANACIAL GUARANTEE RELEASE
- ___ PRELIMINARY PLAT APPROVAL
- ___ S. DEV. PLAN FOR SUB'D. APPROVAL
- X S. DEV. PLAN FOR BLDG. PERMIT APPROVAL
- ___ SECTOR PLAN APPROVAL
- ___ FINAL PLAT APPROVAL
- ___ FOUNDATION PERMIT APPROVAL
- X BUILDING PERMIT APPROVAL
- ___ CERTIFICATE OF OCCUPANCY (PERM.)
- ___ CERTIFICATE OF OCCUPANCY (TEMP.)
- X GRADING PERMIT APPROVAL
- ___ PAVING PERMIT APPROVAL
- ___ WORK ORDER APPROVAL
- X OTHER (SPECIFY) - SO # 19 Permit

WAS A PRE-DESIGN CONFERENCE ATTENDED:

- X YES
- ___ NO
- X COPY PROVIDED

RECEIVED
AUG 21 2002
HYDROLOGY SECTION

DATE SUBMITTED: 8/21/2002 BY: Ronald R. Bohannan, PE

Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a dranage submittal. The particular nature, location and scope of the proposed development defines the degree of drainage detail. One or more of the following levels of sumbittal may be required based on the following:

1. **Conceptual Grading and Drainage Plans**: Required for approval of Site Development Plans greater than five (5) acres and Sector
2. **Drainage Plans**: Required for building permits, grading permits, paving permits and site plans less than five (5) acres.
3. **Drainage Report**: Required for subdivisions containing more than ten (10) lots or constituting five (5) acres or more.

TIERRA WEST, LLC

8509 Jefferson NE
Albuquerque, NM 87113

(505) 858-3100
fax (505) 858-1118

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

August 19, 2002

Ms. Nancy Musinski, P.E.
Hydrology/Utility Development
City of Albuquerque Public Works
P.O. Box 1293
Albuquerque, NM 87103

RE: Responses to Hydrology comments for Mimi's Café@25 - Grading & Drainage Plan. (F17/D83)

Dear Ms. Musinski:

Tierra West, LLC on behalf of Mimi's Café is resubmitting the drainage report and grading plan in reference to your comments dated 08/14/02 with the following responses:

1. The Site Treatment Table on the plan uses 20% type B and 80% type D for proposed conditions, which complies with the approved Master Drainage Plan. However, your report uses 40% type B and 60% type D for calculating runoff. Please correct this discrepancy and adjust the design as needed to accommodate the increase in discharge.
   The calculations in the table used the correct figures. We have changed the percentage in the B & D to reflect what is shown in the table and actually calcu lated.

2. Identify the maintenance responsibilities for the private riprap channel.
   The easement will be maintained by the individual property owners and is shown on the review plan.

3. On the plan, the note next to the private riprap channel calls out a 20-ft. swale. Detail A-A calls out a 16-ft. cobble swale. Please correct this discrepancy. Also, rewrite the note calling out "Provide 5' Opening…." It does not make sense after the first line.
   We have corrected the grading plan and added these notes and dimension changes.

4. Address the roof drainage.
   The roof drainage has been shown on the grading plan.

5. Remove the word "conceptual" from the title.
   This has been removed.

5. Add a build note for the wheel chair ramps.
   This has been added to the grading plan.

6. Project does not need SO-19 permit since no new drainage facilities are being built right-of way.
   We removed the SO-19 permit data.

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

Sincerely,

Ronald R. Bohannan, P.E.

Enclosure/s

cc: Dave Kendall

JN: 220041
RRB/dg

220041nm08152002

MAP POCKET B

SITE GRADING AND DRAINAGE PLAN, MIMI'S CAFE

MAP POCKET C

TRAFFIC CONTROL LAYOUT

City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

August 14, 2002

Ronald R. Bohannon, P.E.
Tierra West, LLC
8509 Jefferson NE
Albuquerque, NM 87109

Re: Mimi's Café @25 - Conceptual Grading & Drainage Plan, with Engineer's stamp dated 7/29/02 (F17/D83)

Dear Mr. Bohannon,

Based on the information contained in your submittal dated July 30, 2002, Hydrology approves the above referenced plan for **Site Plan for Building Permit** action by DRB, and **Rough Grading** permit. Kindly bring the mylar to our office at your earliest convenience so Hydrology can provide Rough Grading signature. Remember to obtain your Topsoil Disturbance Permit from Environmental Health before any onsite grading.

Hydrology cannot issue the Building Permit approval until you address the following comments:

1. The Site Treatment Table on the plan uses 20% type B and 80% type D for proposed conditions, which complies with the approved Master Drainage Plan. However, your report uses 40% type B and 60% type D for calculating runoff. Please correct this discrepancy and adjust the design as needed to accommodate the increase in discharge.
2. Identify the maintenance responsibilities for the private riprap channel.
3. On the plan, the note next to the private riprap channel calls out a 20-ft. swale. Detail A-A calls out a 16-ft cobble swale. Please correct this discrepancy. Also, rewrite the note calling out "Provide 5' Opening . . ." It does not make sense after the first line.
4. Address the roof drainage.
5. Remove the word "conceptual" from the title.
6. Add a build note for the wheel chair ramps.
7. Project does not need SO-19 permit since no new drainage facilities are being built in right-of-way.

If you have any questions, please call me at 924-3988.

Sincerely,

Nancy Musinski, P.E.
Hydrology/Utility Development
City of Albuquerque Public Works

cc: file

F-17/D83

DRAINAGE INFORMATION SHEET

(REV. 11/01/2001)

PROJECT TITLE: MIMI'S CAFÉ
ZONE ATLAS/DRG. FILE #: F-17
DRB #: _____ EPC #: _____
WORK ORDER #: _____

LEGAL DESCRIPTION: Tract J-1-B, THE 25
CITY ADDRESS: Southeast corner of the I-25 Frontage Road and Jefferson, on The 25 Way

ENGINEERING FIRM:	TIERRA WEST, LLC	CONTACT:	RONALD R. BOHANNAN
ADDRESS:	8509 JEFFERSON NE	PHONE:	(505) 858-3100
CITY, STATE:	ALBUQUERQUE, NM	ZIP CODE:	87113
OWNER:	Provident Realty Advisors	CONTACT:	Brain Parks
ADDRESS:	16775 Addison Rd.	PHONE:	(972) 733-3399
CITY, STATE:	Dallas TX	ZIP CODE:	75287
ARCHITECT:	LEE & SAKAHARA ARCHITECTS, AIA	CONTACT:	Jeff Elmore
ADDRESS:	16842 Von Karman Avenue, Suite 300	PHONE:	(949) 261-1100
CITY, STATE:	Irvine, CA	ZIP CODE:	92606-4927
SURVEYOR:	Precision Surveys	CONTACT:	Larry Medrano
ADDRESS:	8414-D Jefferson Street, NE	PHONE:	(505) 856-5700
CITY, STATE:	ALBUQUERQUE, NM	ZIP CODE:	87113
CONTRACTOR:		CONTACT:	
ADDRESS:		PHONE:	
CITY, STATE:		ZIP CODE:	

CHECK TYPE OF SUBMITTAL:

- X DRAINAGE REPORT
- ___ DRAINAGE PLAN
- ___ CONCEPTUAL GRADING & DRAINAGE PLAN
- X GRADING PLAN
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- ___ ENGINEER'S CERTIFICATION (HYDROLOGY)
- ___ CLOMR/LOMR
- X TRAFFIC CIRCULATION LAYOUT (TCL)
- ___ ENGINEERS CERTIFICATION (TCL)
- ___ ENGINEERS CERTIFICATION (DRB APPR. SITE PLAN)
- ___ OTHER

CHECK TYPE OF APPROVAL SOUGHT:

- ___ SIA / FINANACIAL GUARANTEE RELEASE
- ___ PRELIMINARY PLAT APPROVAL
- ___ S. DEV. PLAN FOR SUB'D. APPROVAL
- X S. DEV. PLAN FOR BLDG. PERMIT APPROVAL
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- X BUILDING PERMIT APPROVAL
- ___ CERTIFICATE OF OCCUPANCY (PERM.)
- ___ CERTIFICATE OF OCCUPANCY (TEMP.)
- X GRADING PERMIT APPROVAL
- ___ PAVING PERMIT APPROVAL
- ___ WORK ORDER APPROVAL
- X OTHER (SPECIFY) - ~~SO # 19 Permit~~

WAS A PRE-DESIGN CONFERENCE ATTENDED:

- X YES
- ___ NO
- X COPY PROVIDED

RECEIVED
JUL 30 2002
HYDROLOGY SECTION

DATE SUBMITTED: 7/30/02 BY: Ronald R. Bohannan, PE

Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a dranage submittal. The particular nature, location and scope of the proposed development defines the degree of drainage detail. One or more of the following levels of sumbittal may be required based on the following:

1. **Conceptual Grading and Drainage Plans**: Required for approval of Site Development Plans greater than five (5) acres and Sector Plans.
2. **Drainage Plans**: Required for building permits, grading permits, paving permits and site plans less than five (5) acres.
3. **Drainage Report**: Required for subdivisions containing more than ten (10) lots or constituting five (5) acres or more.

DRAINAGE REPORT

for

MIMI's CAFE
Tract J-1-B, The 25
Albuquerque, New Mexico

Prepared by:

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

July, 2002

I certify that this report was prepared under my supervision, and I am a registered professional engineer in the State of New Mexico in good standing.

RONALD RAY BOHANNAN NEW MEXICO 7868 REGISTERED PROFESSIONAL ENGINEER 7/29/02

Ronald R. Bohannan
PE NO. 7868

RECEIVED
JUL 30 2002
HYDROLOGY SECTION

Job No 220041

TABLE OF CONTENTS

Appendix

Map Pockets

PURPOSE

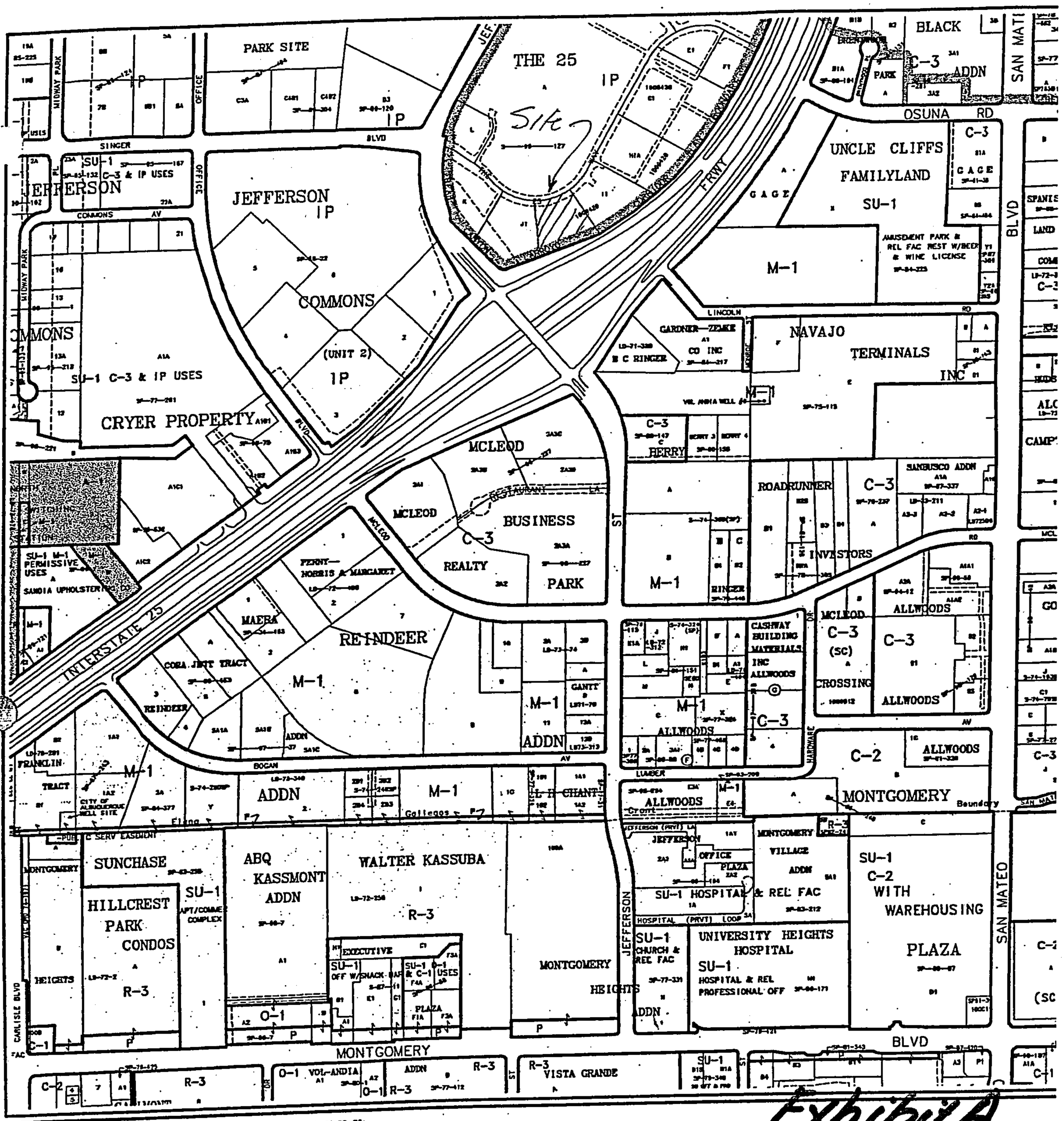
The purpose of this report is to provide the drainage management plan for the development of Tract J-1-B, of The 25 Development. This plan will be utilized for the development of the subject 1.4911-acre property, for the use as Mimi's Café. This plan is in accordance with the DPM Chapter 22. This report 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 1.4911-acre parcel of land located on the southeast corner of the I-25 Frontage Road, Jefferson and The 25 Way. The site is located on Zone Atlas page E-17. The site currently exists as a rough graded pad site within The 25 Development. The legal description of the property is Tract J-1-B of The 25 Development. As shown on FIRM map 35001C0138D, the site lies within flood zone X.

This site was analyzed within the Master Drainage Report and Grading Plan for The 25 Development (F17-D46D) previously submitted by Tierra West, LLC, with the stamp date of 5/5/99 and approved and shown in Appendix B. The City of Albuquerque Hydrology Section approved the Drainage Management Plan on 5/13/99. Based upon the approved Drainage Management Plan, this site is located entirely within Basin D of The 25 Development. The approved Master Drainage Plan indicates this parcel is allowed free discharge if the land treatments are equal to, or less than, 85% D and 15% B. Since our improvements are consistent with developed condition assumptions within The 25 Development Drainage Plan, the site should be allowed free discharge.

Minor offsite flows enter the site from the east from the adjacent I-25 Frontage Road. These flows will sheet flow onto the site and continue to pass through the site via surface flow within the sidewalk on the south side of the property as indicated on the Master Drainage Study.



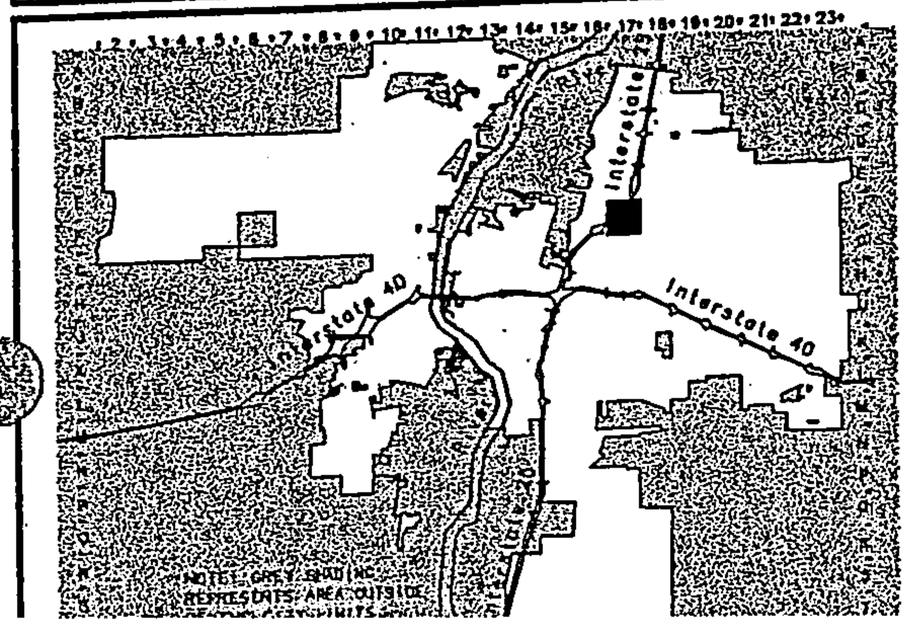


Exhibit A- Vicinity Map

Exhibit A

GRAPHIC SCALE IN FEET

250 0 750 1000

CITY OF Albuquerque

Albuquerque Geographic Information System

PLANNING DEPARTMENT

Zone Atlas Page

F-17-Z

Map Amended through July 19, 2001

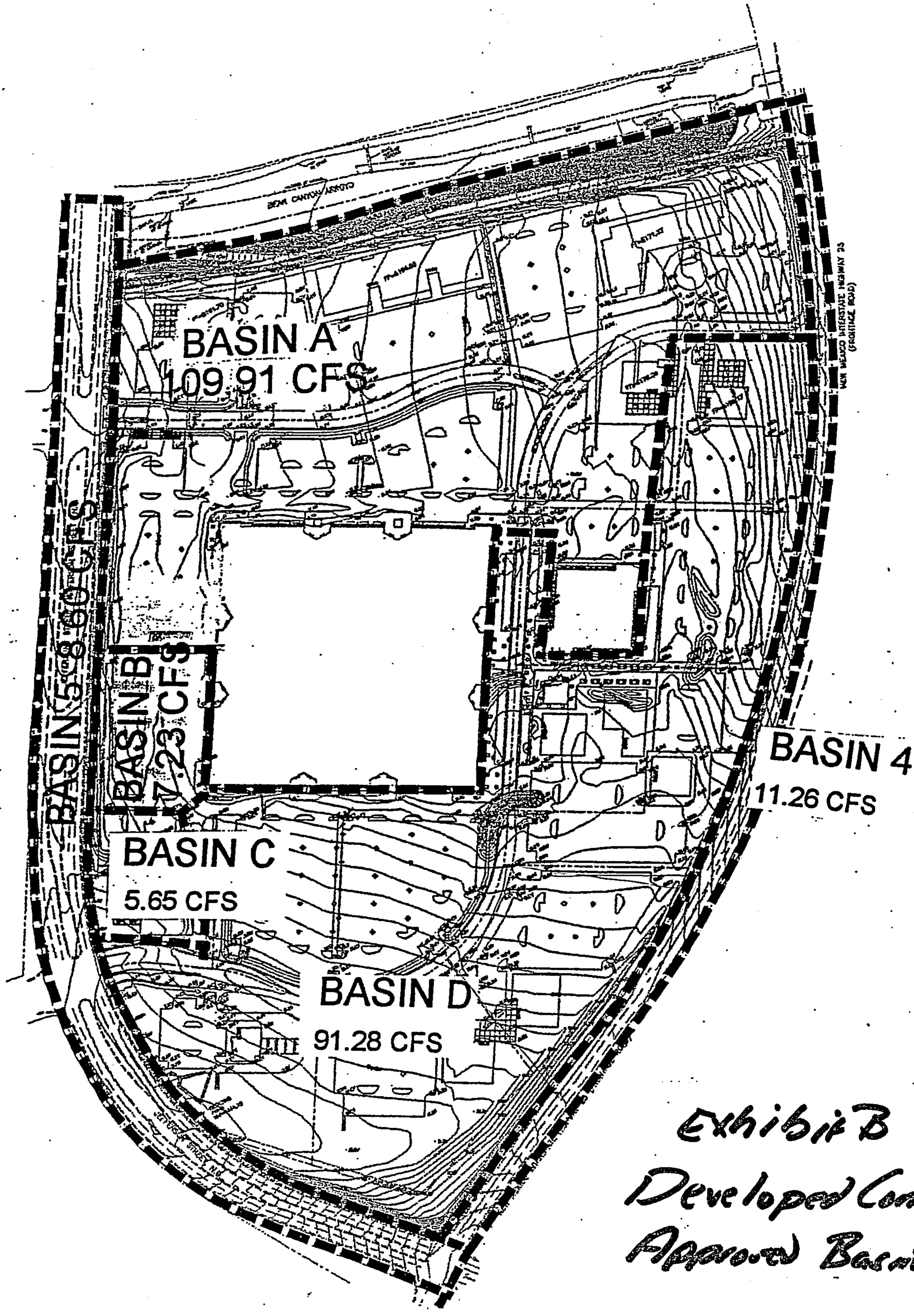


Exhibit B
Developed Conditions
Approved Basin Map

Exhibit B - Developed Conditions Approved Basin Map

@25 BASIN MAP

EXISTING CONDITIONS

Cross-lot drainage easement created by plat for benefit of all lots in the 25 development.

The site slopes from east to west, with general grades between 1-3%. The site was rough graded with the construction of The 25 Development. The approved grading plan for The 25 Development is included in Map Pocket A. This site was analyzed within the Drainage Study for the entire 25 Development. This site is located entirely within Basin D, as described within the master drainage study, and shown in Exhibit B. As discussed within The 25 Development's drainage report, Basin D flows from the northeast to the southwest, where the flows enter an RCP that discharges to the back of an existing inlet located a the southeast quadrant of Singer and Jefferson. This storm drain discharges directly into the Vineyard Channel. A cross lot drainage easement was provided for the benefit of all the lots within the center. According to The 25 Development's Master Drainage Plan, the flows from Basin B and the flows generated in Jefferson Boulevard are the contributing basins for this storm drain system.

As shown in Appendix A, the upstream portion of Basin 4 discharges .87 CFS onto this site. This runoff enters the site along its eastern boundary and sheet flows across the site. Once the flow leaves the site, it continues to sheet flow to the southwest through The 25 Development and is ultimately captured by the previously mentioned public storm drain system.

PROPOSED CONDITIONS

The proposed improvements consist of the construction of a 6,444 square foot restaurant and its associated parking lot. As shown in Exhibit B, the entire site lies within Basin D as described within The 25 Development's Master Drainage Study. As shown in the calculations section, the proposed land treatments are consistent with the developed condition assumptions for this site within The 25 Development's Drainage Management Plan. The offsite flows that currently enter the site from the east will continue to be accepted and passed through the site. Mi-

nor runoff from the I-25 Frontage Road, it is anticipated 0.87 cfs will sheet flow into the water along the east property line.

As shown on the Basin Map exhibit in Map Pocket A, the site consists of two (2) onsite basins and one (1) offsite basin. Basin 1 contains the entire roof and the southeast portion of the site while Basin 2 contains the remaining portion of the site. As shown in Appendix A, Basin 1 generates 1.107 cfs and Basin 2 generates 3.7776 cfs during a predicted 100-year, 6-hour storm event. The proposed Grading Plan is included in Map Pocket B of this report. As shown on the Grading Plan and Basin Map, the entire site will discharge the combined onsite and offsite flow of 4.8848 cfs as a sheet flow at the southwest corner of the site. As described within the Master Drainage Study for The 25 Development, the flows leaving this site will be conveyed via surface flow to a set of existing inlets which discharge to the Vineyard Arroyo.

SUMMARY AND RECOMMENDATIONS

This site is an existing pad within The 25 Development, which is an existing commercial center. The City of Albuquerque Hydrology Section approved the drainage management plan for the entire center. The 25 Development's Master Drainage Plan assumed fully developed conditions for our site. The proposed improvements are consistent with the land treatment types used for the developed condition for this site within The 25 Development's drainage plan. The development of this site is consistent with the DPM, Chapter 22, Hydrology section. Since this site encompasses less than five (5) acres, a NPDES permit is not required prior to any construction activity. There are no improvements required 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 Building Permit.

CALCULATIONS

RUNOFF CALCULATIONS

The Site is @ Zone 2

LAND TREATMENT

Proposed	*Existing*
B = 40%	A = 100%
D = 60%	

DEPTH (INCHES) @ 100-YEAR STORM

P_{60} = 2.01
P_{360} = 2.35
P_{1440} = 2.75

DEPTH (INCHES) @ 10-YEAR STORM

P_{60} = 1.87 x 0.667 = 1.34
P_{360} = 2.20 x 0.67 = 1.57

Zone 2

Land Treatement

From Table A-8 Soil Treatment	A	B	C	D
Weighted E 100 yr.	0.53	0.78	1.13	2.12
Wieghted E 10 yr.	0.13	0.28	0.52	1.34

Peak Discharge

From Table A-9

	A	B	C	D
100 Yr	1.56	2.28	3.14	4.7
10 Yr	0.38	0.95	1.71	3.14

Volume Undeveloped

	Soil Treatment Type	Acreage	100 Yr	10 Yr	Vol 100	Vol 10
Basin A	A	0.2860	0.4400	0.0800	0.0105	0.0114
Basin B	A	0.8990	0.4400	0.0800	0.0330	0.0360

Volume Developed

	Total	Acre "A"	Acre "B"	Acre "C"	Acre "D"	Weigh E 100	E 10	V 100 Yr	V 10 Yr
Basin 1	0.286	0.0000	0.0960	0.0000	0.1890	1.6628	0.9795	0.0396	0.0233
Basin 2	0.899	0.0000	0.1850	0.0000	0.7140	1.8442	1.1219	0.1382	0.0840

Peak Discharge

	Total	Acre "A"	Acre "B"	Acre "C"	Acre "D"	Q 100 Yr	Q 10 Yr
Basin 1	0.286	0.0000	0.0960	0.0000	0.1890	1.1072	0.6847
Basin 2	0.899	0.0000	0.1850	0.0000	0.7140	3.7776	2.4177

MANNINGS EQUATION FROM KING & BRATER

$$Q = \frac{1.486\ a\ 5/3\ \ s\ 1/2}{np\ 2/3}$$

a = area
s = slope
n = roughness co efficient
p = hydraulic radius

Depth = 2.06 ft.

S = .01
Q = 42.2 cfs.
N = .017

BROADCREST WEIR

Q = CLH 3/2 KING & BRATER

Q = 3.777 cfs
L = Computed
C = 2.65 Constant
H = .5 curb height

$$L = \frac{Q}{CH\ 3/2} = \frac{3.777}{(2.65)(.5)\ 1.5}$$

L = 4.02 ft

APPENDIX

Master Plan Digital Site @ 25

DRAINAGE REPORT
FOR

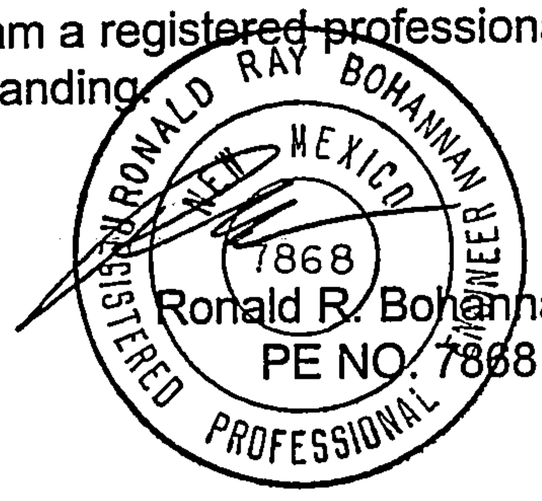
Digital @25

Prepared by:

Tierra West, LLC
4421 McLeod Rd., NE, Suite D
Albuquerque, New Mexico 87109

May, 1999

I certify that this report was prepared under my supervision, and I am a registered professional engineer in the state of New Mexico in good standing.



Ronald R. Bohannan
PE NO. 7868

Job No 980054

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Location

The proposed site, entitled @25, is the former Digital site located on Jefferson Street just west of Interstate 25. The site is developed with buildings, parking and landscaping and consists of ±49.4245 acres. The current owner, Provident Realty Advisors, proposes to build a multiple use development that will include a general office building, a variety of restaurants, banking facilities and specialty retail uses. They plan to utilize a portion of the existing facilities for the office use. We have highlighted the project's location on the enclosed zone atlas page.

Legal Description

The legal description for the referenced property is as follows: ~~Parcels 1 and 2~~ as shown on the "Plat of Survey for Parcels 1 and 2, Digital Properties, Albuquerque, Bernalillo County, New Mexico" filed for record in the office of the County Clerk Bernalillo County, New Mexico on August 15, 1991, in Volume 91C, Folio 169.

Zoning and Surrounding Development

The current zoning for the site is IP. The site is bordered on the north by the Bear Canyon Arroyo and the I-25 frontage road on the east. To the south is the I-25/Jefferson off-ramp and to the west (across Jefferson) are several commercial businesses and office parks and additional properties zoned IP.

Purpose

The purpose of this drainage report is to provide the drainage analysis and the management plan for the proposed ±49.4245 acre @25 development. We are requesting rough grading approval, Site Development Plan for Subdivision Approval, Preliminary Plat approval, and Building Permit Approval.

SITE LOCATION

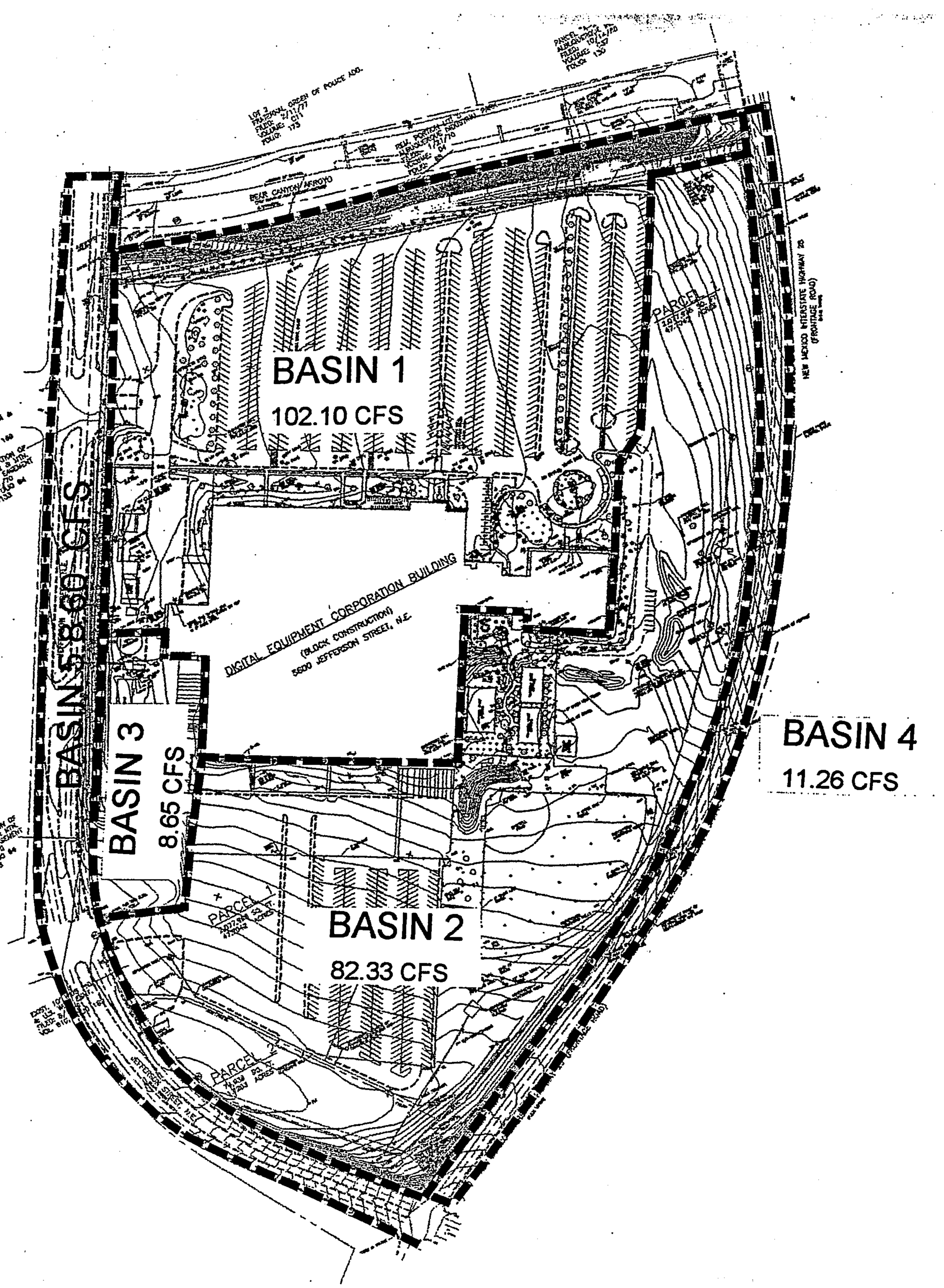
INDUSTRIAL
M-1
TRACT
(UNIT 1)
ACADEMY PARKWAY SOUTH
OSUNA
O-1
IP
RUST TRACTOR PROPERTY
INTERSTATE INDUSTRIAL TRACT (UNIT 2) & GROUP 9 IP
PARK
(UNIT 1)
RD
ST
INTERSTATE INDUSTRIAL TRACT (UNIT 2)
BEAR CANYON ARROYO
PLAN BOUNDARY
INTERSTATE INDUSTRIAL TRACT (UNIT 2)
GROUP NINE INDUSTRIAL PARK
ABQ INDUSTRIAL PARK
NORTH DIVERSION CHANNEL AND INLET CHANNELS PHASE 4
JEFFERSON PLAZA
BORDER MACHINERY
HB WOODWARD
SU-1
ACAI
MIDWAY BUSINESS PARK
ALBUQUERQUE INDUSTRIAL
BALLOON FIELD INDUSTRIAL PARK
GROUP NINE INDUSTRIAL PARK
SU-1 BOYS CLUB
FRATERNAL ORDER OF
ABQ INDUSTRIAL PARK
C-3
TRIANGLE
PARK SITE
JEFFERSON
INTERSTATE 25
BLACK
SAN MATEO
OSUNA RD
DIGITAL PROPERTIES
UNCLE CLIFFS FAMILYLAND
GAGE
SU-1
AMUSEMENT PARK & REL FAC REST W/BEER & WINE LICENSE
M-1
LINCOLN RD
COMMONS
SU-1 C-3 & IP USES
CRYER PROPERTY
DIGITAL PROPERTIES
MCLEOD
BUSINESS PARK
C-3
NORRIS & MARGARET PENNY
MAERA
CORA JETT TRACT
REINDEER
GARDNER—ZEMKE CO INC
B C RINGER
NAVAJO TERMINALS INC
BERRY
ROADRUNNER
SANDUSCO ADON
INVESTORS
ALLWOODS PLAT OF CASHWAY BLDG
ALLWOODS
NORTH SWITCHING STATION
SANDIA UPHOLSTERING CO
INTERSTATE 25
RINGER
M-1
C-3
IP
SU-1 C-3 & IP USES
SU-
EIERSON
COMMONS AV
MIDWAY PARK BLVD
OFFICE BLVD
SINGER BLVD
SAN MATEO BLVD
SPANIS
LAND
COM
CAMP
FAE
RUST
ACAI
SU-1
SU-
C-3
IP
M-1
A-1
P
SU-
C-3 & IP USES
@25

Existing Drainage Conditions

The site is the former Digital site and consists of ±49.4245 acres. Presently, the site discharges 193.08 cfs of storm water. (See Runoff Calculations for Existing Conditions in Appendix A.) There is not an approved drainage plan for the Digital Site on file with the City of Albuquerque's Hydrology Department. The site, with a portion of Jefferson Street NE, was included in the Design Analysis Report for the Vineyard Channel West of I-25, prepared for AMAFCA by Greiner, Inc., October 1992. The Greiner report states that the total Digital Site and a portion of Jefferson Street NE discharges 225 cfs into the public storm sewer system along Jefferson Street NE. This storm sewer discharges into the Vineyard Channel. (See Figure 1 in Map Pocket.)

Our review of the project revealed that an onsite storm water system exists on the northern portion of the site and that the system was rehabilitated, by Digital, in 1992. This onsite storm water system is shown in the Utility Rehabilitation drawings, prepared by Camp Dresser & McKee Inc., April 1992. These drawings show an onsite storm drain system which discharges 33.8 cfs directly into the Bear Canyon Arroyo. (The analysis was based using Manning's equation.) The storm water runoff (76.11 cfs) not captured within the onsite storm water system free discharges to Jefferson Street. The southern and western portion of the site discharges 91.0 cfs into the Jefferson Street public storm sewer system. In addition, this site accepts 11.26 cfs of offsite flow that enters the site from the I-25 west frontage road, along the eastern property line.

The existing site is divided into three onsite drainage basins 1, 2, and 3 and two offsite drainage basins 4 and 5. Basin 1 discharges 102 cfs and consists of the existing building, the existing storm sewer system, the north parking lot, and a portion of the west parking area. This basin discharges to the Bear Canyon Arroyo and to Jefferson Street. Basin 2, the southern portion of the site and the area east of the main building, discharges 82.33 cfs into the public


BASIN 1
102.10 CFS
BASIN 5
58.69 CFS
BASIN 3
8.65 CFS
BASIN 2
82.33 CFS
BASIN 4
11.26 CFS
BEAR CANYON ARROYO
DIGITAL EQUIPMENT CORPORATION BUILDING
(BLOCK CONSTRUCTION)
5600 JEFFERSON STREET, N.E.
PARCEL 1
PARCEL 2
PARCEL 3
LOT 3
FRANCHAL ORDER OF POLICE ADD.
FILED: 2/11/77
VOLUME: C11
FOLIO: 173
PARCEL "A"
ALBUQUERQUE
FILED: 10/14/80
VOLUME: C30
FOLIO: 130
REM. PORTION LOT "D"
ALBUQUERQUE INDUSTRIAL PARK
FILED: 1/21/70
VOLUME: D4
FOLIO: 84
EAST 10' RIGHT OF WAY
U.S. HIGHWAY 85
FILED: 8/15/61
VOL. 81C, FOLIO 149
AND
REMAINING PORTION OF
10' RIGHT OF WAY &
BELL UTILITY EASEMENT
FILED: 1/21/70
VOL. D4, FOLIO 84
DOC. #51133
REMAINING PORTION OF
10' RIGHT OF WAY &
BELL UTILITY EASEMENT
FILED: 1/21/70
VOL. D4, FOLIO 84
DOC. #51133
JEFFERSON STREET, N.E.
NEW MEXICO INTERSTATE HIGHWAY 25
(FRONTAGE ROAD)

@25 BASIN MAP

storm sewer in Jefferson Street. Basin 3 discharges 8.65 cfs and is the area west of the main building from the south entrance to the midpoint of the building. This basin free discharges to Jefferson Street. (See the enclosed Existing Conditions Drainage Basin Map.)

Basin 1, under existing conditions, develops 102.10 cfs of storm water runoff. This basin consists of the existing building, the existing storm sewer system, the north parking lot, a portion of the west parking area and the AMAFCA easement parallel to the Bear Canyon Arroyo. The existing buildings and the northern parking lot are connected to an onsite storm water system which discharges directly into the Bear Canyon Arroyo. The onsite storm water system consists of a series of pipes from the internal roof drain system that are connected to a main storm sewer pipe running east to west in the north parking lot. There are several curb and grate inlets within the parking lot. The main entrance has three inlets connected to the main storm sewer. The main storm sewer line, at this point, is a 30" reinforced concrete pipe which discharges 33.8 cfs directly into the Bear Canyon Arroyo. The storm water runoff not collected in the onsite storm water system sheet flows across the parking lot and free discharges into Jefferson Street through the main entrance at rate of 68.3 cfs. The storm water carried downstream in Jefferson Street is channeled to several inlets that are connected to the public storm drain system and that discharges into the Vineyard Channel. Flows upstream of our site are discharged into the Bear Canyon Arroyo.

Basin 2 discharges 82.33 cfs and is the southern and eastern portion of the site. Offsite flows enter this basin from the I-25 frontage road. Presently, the southern portion of the site is a parking area, a detention pond and land treatment “C”. The eastern portion of the site is the existing ballfields and land treatment “C”. This basin flows from the northeast to the southwest and the storm water runoff is channeled to a pond located near the southern property line. From the detention pond there is a 24' corrugated metal pipe which is connected to the public storm water system in Jefferson Street. The Jefferson Street public storm water system

discharges into the Vineyard Channel downstream. This basin discharges 82.33 cfs into the Jefferson Street public storm system.

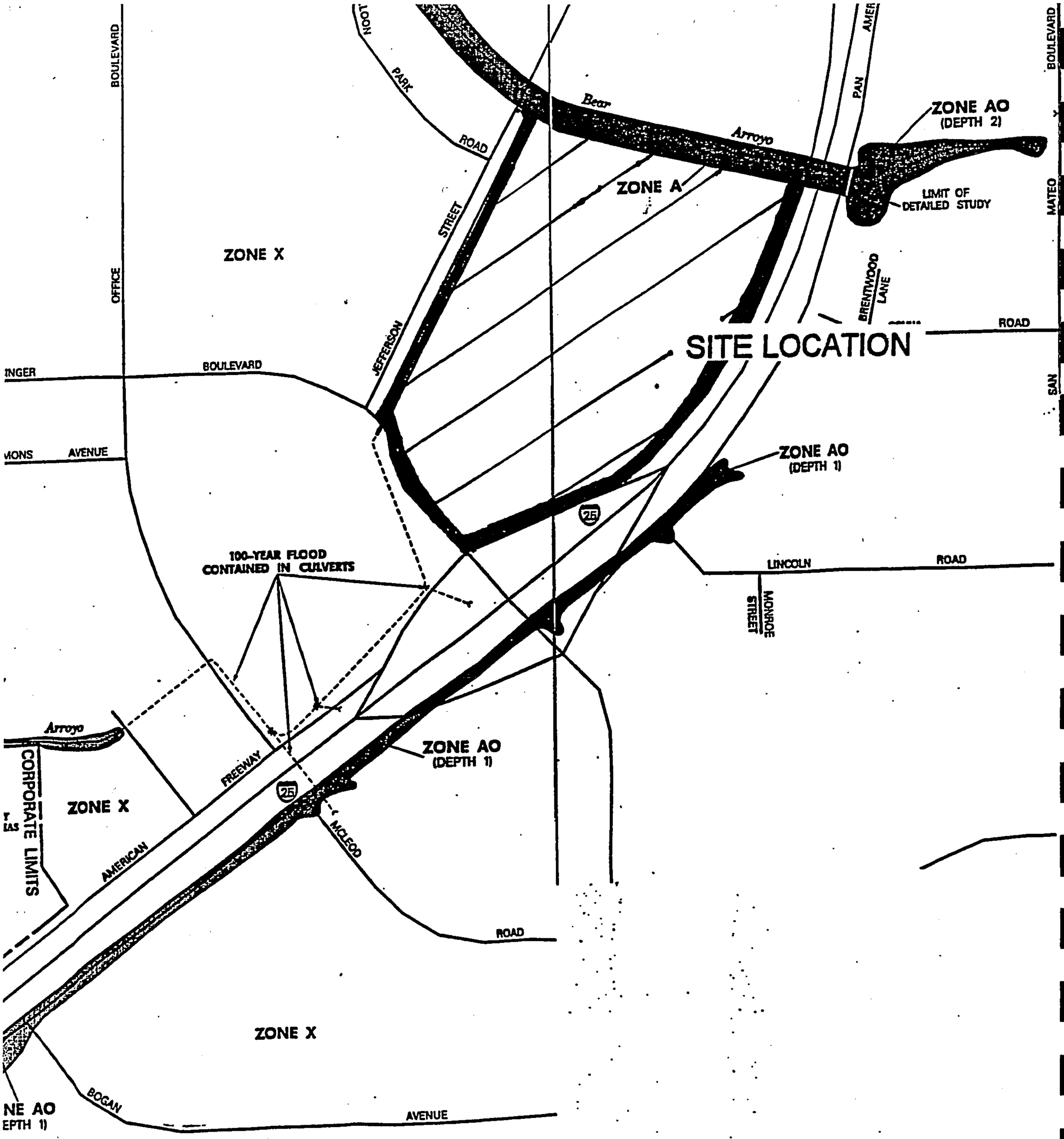
Basin 3 discharges 8.65 cfs directly into Jefferson Street and consists of the southern portion of the western parking lot and a portion of the landscaped area at the southern entrance to Digital. The parking lot runoff is channeled to an existing concrete rundown to the landscaped area. The runoff collected in the landscaped area appears to sheet flow across the site and over the existing curb into the existing inlet in Jefferson Street. The storm water collected in Jefferson Street is connected to the Vineyard Channel downstream.

Offsite flows enter this site from the southbound west frontage road of I-25, Basin 4. This offsite flow rate entering the site is 11.26 cfs. (See attached Existing Conditions Basin Map.) The offsite flows follow a swale along the eastern property line. The flows carried in the swale are discharged into an existing 24" corrugated metal pipe connected to the public storm sewer system in Jefferson Street.

We have designated the flows in Jefferson Street as basin 5. The flows in Jefferson include everything that falls in Jefferson Street from north of I-25 to the Bear Canyon Arroyo. Storm water does not enter Jefferson from the west right of way. Basin 5, Jefferson Street, contributes 8.60 cfs of storm water runoff to the public storm drain system. At this location Jefferson Street is two lanes in each direction separated by a median. The drive lanes are 24-feet from face of curb to face of curb. When the storm water enters Jefferson Street it flows into both the southbound and northbound driving lanes. For the design of the street capacity we used 24-feet from face of curb to face of curb and a flow height of 0.365 to keep one driving lane free of water. (See Appendix A for Jefferson Street Capacity Calculations.) The capacity of Jefferson Street at this location is 25.0 cfs for one half of the street.

Flood Plain and Soil Conditions

The project is not in a Flood Hazard Zone, as shown on Panel 138 and 139 of 825 of the



Flood Insurance Rate Maps

BERNALILLO COUNTY, AND PARTS OF SANDOVAL AND VALENCIA COUNTIES, NEW MEXICO — SHEET NUMBER 21

385 000 FEET

1 515 000 FEET

R. 3 E. | R. 4 E.

(Joins sheet 11)

(Joins sheet 20)

(Joins sheet 21)

(Joins sheet 22)

SITE LOCATION

ALBUQUERQUE

1 500 000 FEET

10 N. | T. 11 N.

2 Miles

0 1000 2000 3000 4000

Soils Map - Panel 21

@25

National Flood Insurance Program Flood Insurance Rate Maps, published by FEMA for the County of Bernalillo, New Mexico, and incorporated areas, dated September 20, 1996.

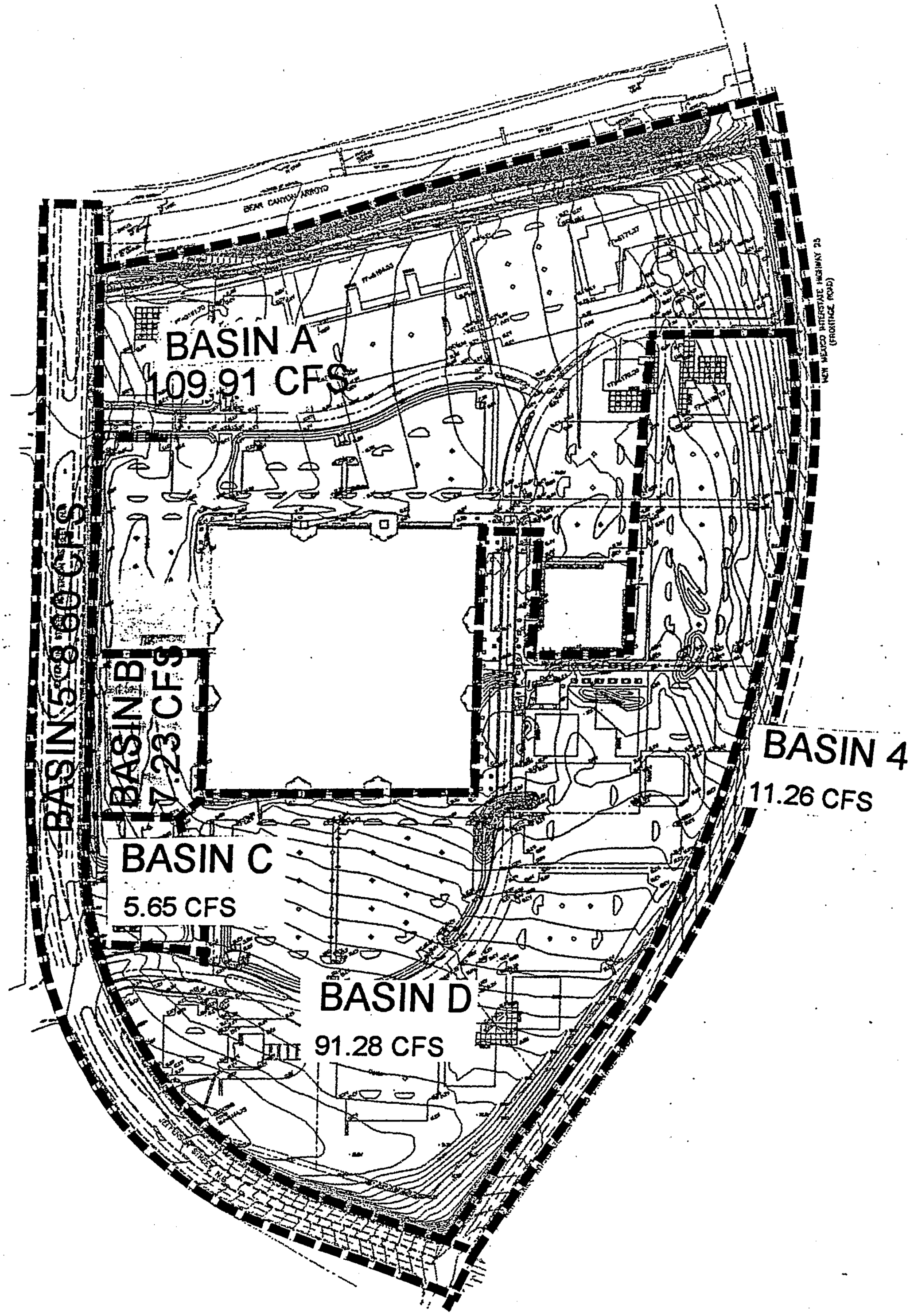
The site soil is Embudo gravelly fine sandy loam (EmB), as indicated on the Soil Map (Sheet 21) from the Soil Conservation Service Survey of Bernalillo County. Embudo gravelly fine sandy loam has a medium runoff, the hazard of water erosion is moderate and control of moisture is required for proper compaction.

Proposed Conditions and On-Site Drainage Management Plan

The proposed site will include the refurbished existing building and retails pad sites. The proposed site is divided into four basins A, B, C and D and discharges the following under developed conditions:

BASIN	AREA (AC)	Q100
A	25.46	109.82
B	1.70	7.24
C	1.29	5.7
D	20.97	91.3

Basin A includes the existing building, six future pad sites and a portion of service road. This basin discharges 109.82 cfs to the Bear Canyon Arroyo and Jefferson Street. Basin B is the proposed parking area between the existing building and the west property line. This basin discharges 7.24 cfs to the Jefferson Street public storm water system. Basin C is along the west property line, south of the existing building and adjacent to Jefferson Street NE. This basin includes one future pad site, landscaping and parking. This basin discharges 5.7 cfs directly into Jefferson Street. Basin D includes the southern portion of the site from the existing building to the Jefferson Street off ramp. The site includes six future pad sites, parking and a


BEAR CANYON ARROYO
NEW MEXICO INTERSTATE HIGHWAY 25
(FRONTAGE ROAD)
BASIN A
109.91 CFS
BASIN B
17.23 CFS
BASIN 5
38.90 CFS
BASIN C
5.65 CFS
BASIN D
91.28 CFS
BASIN 4
11.26 CFS
JEFFERSON STREET N.E.

@25 BASIN MAP

portion of the service road. This basin discharges 91.3 cfs into the public storm water system in Jefferson Street NE. (See attached Proposed Conditions Basin Map and Grading and Drainage Plan in map pocket.)

Offsite flows enter the site from the west frontage road of I-25. The proposed site will accept the offsite flows and direct the flows to the storm inlets on site and or the public storm system in Jefferson Street.

Basin A consists of 25.46 acres and includes the existing buildings, five future pad sites, and the associated parking and landscaping. The existing on site storm water system is functional and will be utilized with the exception of the existing inlets. The existing roof drains connected to the existing onsite storm water system will remain. The existing inlets at the main entrance will be replaced with two type "C" inlets. The inlets along the north property line will be removed when the future retail pad sites are developed. For the future pad sites the storm water is to be channeled from the roofs into the landscaped area. The runoff in the parking areas sheet flows across the parking lots and into the ring road. The runoff carried in the ring road will be intercepted by two new type "C" inlets at the main entrance to the Retail Site. These inlets are connected to the existing storm sewer system which discharges 32.91 cfs into the Bear Canyon Arroyo through a 30" reinforced concrete pipe. Rip rap is located at the outfall to dissipate the discharged energy and to control erosion. The existing 30" concrete reinforced pipe has a capacity of 33.8 cfs. The developed storm water that is channeled to the ring road and not captured in the inlets at the main entrance (which are connected to the existing onsite storm water system) will free discharge to Jefferson Street. Basin A has a developed runoff of 109.82 cfs, with 32.91 cfs discharging into the Bear Canyon Arroyo, and 76.91 cfs will free discharge into Jefferson Street. With the new development the capacity of Jefferson Street will remain the same. For the design of the street capacity we used 24-feet from face of curb to face of curb and a flow height of 0.365 (See Appendix A for Jefferson Street Capacity

Calculations.) The capacity of Jefferson Street at this location is 25.0 cfs. The storm water, carried downstream in Jefferson Street, is channeled to several inlets which are connected to the public storm drain system which discharges into the Vineyard Channel. The flows in basin A follows the historic pattern. (See attached Proposed Conditions Basin Map and Grading and Drainage Plan in Map Pocket.)

Basin B is the west parking lot for the existing building. This basin is 1.70 acres, slopes north to south and discharges 7.24 cfs. The storm water runoff is diverted to a concrete rundown which is connected to two-24" sidewalk culverts. The sidewalk culverts discharge the storm water into Jefferson Street. This follows the historic pattern for the storm water runoff for this portion of the site. (See Appendix A for sidewalk culvert calculations.) The capacity of Jefferson Street, flowing full, is 25 cfs. (See Street Capacity Calculations in the Appendix A.)

Basin C is located at the southern entrance to the site. It consists of one retail pad site and the associated parking and landscaping. The roof will be sloped to channel the storm water into roof drains that discharge into the landscaped areas. The parking is sloped to channel the storm water to a 2-foot curb opening connected to two-24" wide sidewalk culverts. This basin contains 1.29 acres and discharges 5.7 cfs into Jefferson Street which flows south along the gutter to a new type "D" inlet. Due to the widening of the south entrance into the site, the type "D" inlet is replacing the existing curb type inlet. This follows the historic drainage pattern. (See attached Proposed Conditions Basin Map and Grading and Drainage Plan in the map pocket.)

Basin D is the eastern and southern portion of the site. This basin accepts offsite flows of 11.26 cfs from the I-25 west frontage road. The basin consists of the seven retail pad sites, a portion of the ring road and the associated parking and landscaping. The storm water from the roofs is channeled to roof drains and discharged to the landscaped area. Storm water in the parking areas sheet flows to either concrete rundowns, sidewalk culverts or the ring road.

The runoff is then directed to the desilting pond located near the southern boundary. The desilting pond releases the runoff to the existing public storm water system in Jefferson Street, as previously stated under the existing conditions. The storm water carried in the ring road is also channeled to the desilting pond. The storm water collected in the desilting pond will be discharged into the existing 24" reinforced concrete located at the southern property line. This existing pipe is connected to the Jefferson Street public storm drain system that discharges into the Vineyard Channel. This basin discharges 91.3 cfs and 11.26 cfs of offsite flows into the public storm drain system. (See attached Proposed Conditions Basin Map and Grading and Drainage Plan in Map Pocket.)

Basin 5, Jefferson Street contributes 8.60 cfs to the public storm sewer system downstream.

Emergency Conditions

For emergency conditions the storm water will be carried in the service road and the parking lots to the public storm drain system in Jefferson Street or to the Bear Canyon Arroyo.

Summary

The developed site will discharge 32.91 cfs directly into the Bear Canyon Arroyo and 181.08 cfs into the public storm drain system in Jefferson. **Flowmaster** was used to analyze the existing storm water system with improvements. Using this software the allowable discharge into Bear Canyon Arroyo is 32.91 cfs to keep the hydraulic grade line in the ground. The public storm drain system is connected to the Vineyard Channel downstream. The site accepts 11.26 cfs of offsite flows that will discharge into the public storm sewer on Jefferson Street. The total amount of flows entering the public storm water system in Jefferson is 181.08 from @25, 11.26 cfs from I-25 offsite and 8.60 cfs in Jefferson for a total of 200.94 cfs. The

Vineyard Channel report has an allowable discharge of 225 cfs entering the public system from this site and a portion of Jefferson Street. This development is contributing 24 cfs less than the allowable reported in the Vineyard Channel Report developed by Greiner Inc.

RUNOFF SUMMARY TABLE -DEVELOPED CONDITIONS

BASIN	AREA (SF)	AREA (AC)	AREA (MI^2)
A	1109042	25.46	.03978
B	74052	1.70	.00226
C	56192	1.29	.00216
D	913456	20.97	.03278

BASIN	DEVELOPED Q100 (CFS)	DEVELOPED V100 (CF)
A	109.82	158606
B	7.24	11575
C	5.7	9100
D	91.3	13290

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TIERRA WEST LLC
4421 McLeod Road NE, Suite D, Albuquerque, NM 87109 Phone (505) 883-7592 - Fax (505) 883-7034

RUNOFF CALCULATIONS

Date: Jan. 15, 1999 Project: Digital @25 Zone Atlas: E-17 & F-17

This procedure is in accordance with the City of Albuquerque Development Process Manual, Volume 2, Section 22.2, "Hydrology", peak discharge rate for small watersheds less than forty acres in size.

Precipitation Zone from Figure A-1: 2
Land treatment descriptions are in Table A-4.

1. RUNOFF RATE COMPUTATION

Use Equation A-10: $Q_P = Q_{PA} A_A + Q_{PB} A_B + Q_{PC} A_C + Q_{PD} A_D$
Values of Q_{pi} are from Table A-9, and are in CFS/acre. Area values are in acres.

BASIN	Q_{PA}	A_A	Q_{PB}	A_B	Q_{PC}	A_C	Q_{PD}	A_D	Q_P
EXISTING RATE OF RUNOFF (CFS)									
Basin 1	1.56	0.00	2.28	4.40	3.14	2.20	4.70	18.12	102.10
Basin 2	1.56	0.00	2.28	2.26	3.14	9.94	4.70	9.78	82.33
Basin 3	1.56	0.00	2.28	1.69	3.14	0.00	4.70	1.02	8.65
Total									193.08
OFF-SITE BASINS RATE OF RUNOFF (CFS)									
Basin 4	1.56	0.00	2.28	0.00	3.14	1.79	4.70	1.20	11.26
Basin 5	1.56	0.00	2.28	0.00	3.14	0.00	4.70	1.83	8.60

BASIN	Q_{PA}	A_A	Q_{PB}	A_B	Q_{PC}	A_C	Q_{PD}	A_D	Q
DEVELOPED RATE OF RUNOFF (CFS)									
Basin A	1.56	0.00	2.28	2.65	3.14	2.20	4.70	20.61	109.82
Basin B	1.56	0.00	2.28	0.31	3.14	0.00	4.70	1.39	7.24
Basin C	1.56	0.00	2.28	0.17	3.14	0.00	4.70	1.12	5.65
Basin D	1.56	0.00	2.28	2.99	3.14	0.00	4.70	17.97	91.28
Total									213.98
OFF-SITE DEVELOPED RATE OF RUNOFF (CFS)									
Basin 4	1.56	0.00	2.28	0.00	3.14	1.79	4.70	1.20	11.26
Basin 5	1.56	0.00	2.28	0.00	3.14	0.00	4.70	1.83	8.60

2. RUNOFF VOLUME COMPUTATION

Use Equation A-5 to compute weighted excess precipitation:

Weighted E = "E" = $(E_A A_A + E_B A_B + E_C A_C + E_D A_D)/(A_A + A_B + A_C + A_D)$

$(A_A + A_B + A_C + A_D) = \sum A_i$

Use Equation A-6 to compute the volume:

V_{360} = "E" x $(A_A + A_B + A_C + A_D)$ x 3630 feet^3/acre·inch

Values of E_i are from Table A-8, and are in inches. Area values are in acres.

BASIN	E_A	A_A	E_B	A_B	E_C	A_C	E_D	A_D	$\sum A_i$	"E"	V_{360}
EXISTING VOLUME OF RUNOFF (CUBIC FEET)											
Basin 1	0.53	0.00	0.78	4.40	1.13	2.20	2.12	18.12	24.73	1.79	160927
Basin 2	0.53	0.00	0.78	2.26	1.13	9.94	2.12	9.78	21.98	1.51	122435
Basin 3	0.53	0.00	0.78	1.69	1.13	0.00	2.12	1.02	2.71	1.51	12635
Total											295,996
OFF-SITE VOLUME OF RUNOFF (CUBIC FEET)											
Basin 4	0.53	0.00	0.78	0.00	1.13	1.79	2.12	1.20	2.99	1.53	16577
Basin 5	0.53	0.00	0.78	0.00	1.13	0.00	2.12	1.86	1.86	2.12	14314

BASIN	E_A	A_A	E_B	A_B	E_C	A_C	E_D	A_D	$\sum A_i$	"E"	V_{360}
DEVELOPED VOLUME OF RUNOFF (CUBIC FEET)											
Basin A	0.53	0.00	0.78	2.65	1.13	2.20	2.12	20.61	25.46	1.72	158606
Basin B	0.53	0.00	0.78	0.31	1.13	0.00	2.12	1.39	1.70	1.88	11575
Basin C	0.53	0.00	0.78	0.17	1.13	0.00	2.12	1.12	1.29	1.94	9100
Basin D	0.53	0.00	0.78	2.99	1.13	0.00	2.12	17.97	20.96	1.82	138290
Total											317,571
OFF-SITE DEVELOPED VOLUME OF RUNOFF (CUBIC FEET)											
Basin 4	0.53	0.00	0.78	0.00	1.13	1.79	2.12	1.20	2.99	1.46	16577
Basin 5	0.53	0.00	0.78	0.00	1.13	0.00	2.12	1.83	1.86	2.12	14314

Storm Inlets @ Entrance

- Overall area =

BASIN A. 102.58 CFS
+ 7.23 CFS

Inlet - Top of Grate = 57.53 = 57.72 = .20
INV = 53.00
= 53.27

Type "C" inlet — should use wier, not orifice

$Q = CA\sqrt{2gH}$

A = 4.36 (4.36)
H = .20
C = .60
g = 32.2

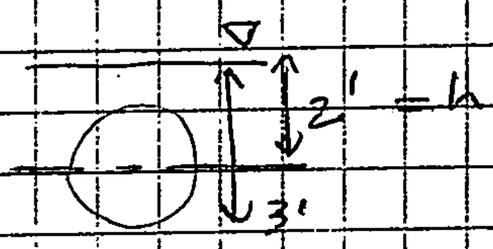
Q = 9.38 capacity

Pipe = h = 3' ℄ of pipe — 24" ϕ

$Q = CA\sqrt{2gh} =$

$= .6 * \frac{\pi d^2}{4} \sqrt{2g3}$

Q = 26.20



SIDEWALK CULVERT

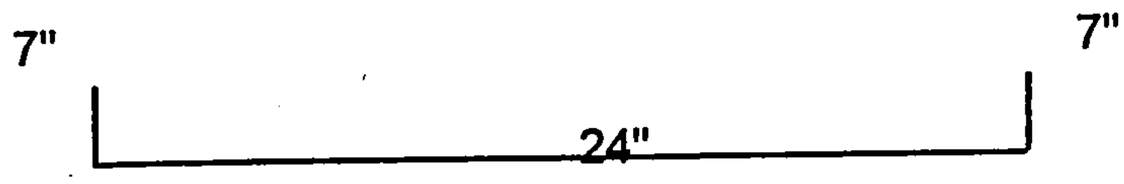
Orifice Equation:

$$Q=CA\sqrt{2gH}$$

Solve for Q
C = 0.6
A = 0.5833*2 = 1.167 ft^2
g = 32.2
H = Height of water measured from center of orifice

$$Q=0.6(1.167)\sqrt{2*32.2*\frac{0.5833}{2}}$$

Q=3.04 cfs
Use a 24" sidewalk culvert
3.04 cfs > 1.59 cfs



BASIN B 2-24" SIDEWALK CULVERTS
BASIN C 2-24" SIDEWALK CULVERTS
BASIN D 5-24" SIDEWALK CULVERTS
2-24" SIDEWALK CULVERTS

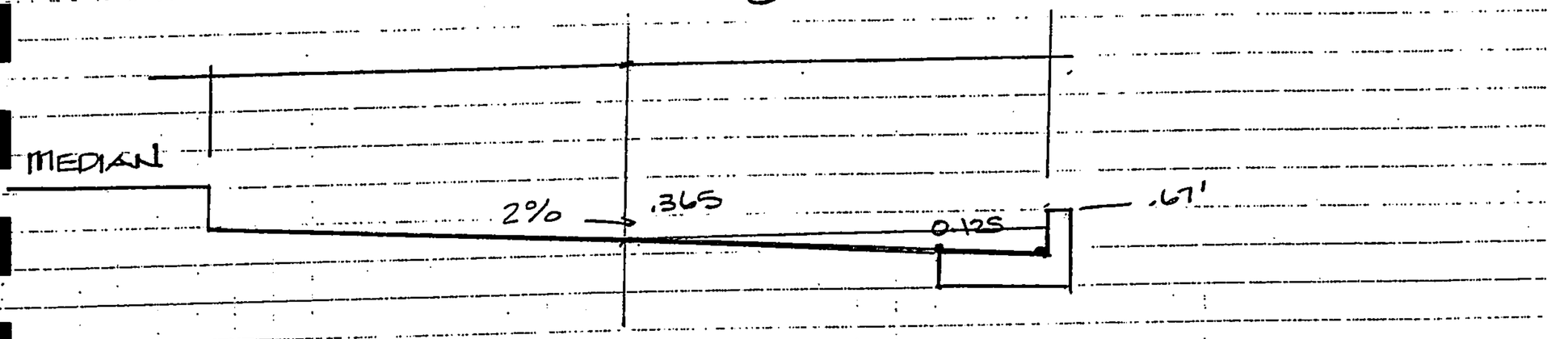
Street Capacity

Jefferson STREET.

Minor Arterial

Maximum Street Depth for 10 yr. storm

- one lane free driving



Driving Lane Free

open channel

$$Q = \frac{1.49}{.017} \cdot A \cdot R^{2/3} \cdot S^{1/2}$$

$$A = \frac{.365 \times 12}{2} = 2.19$$

$$P = 12.365$$

$$S = .0072$$

$$R = 0.177$$

$$Q = 25.32$$

Street Capacity Calculations

Loop Roads - 1/2 Street Section
32' F-F Street Section with 6" curb
Slope= 0.0091

For water depths less than 0.125 feet

Y= Water depth
Area = 6*Y^2
P= SQRT(257*Y^2) + Y
n= 0.017

Depth (ft)	Area (ft^2)	P (ft)	R (A/P)	Q (cfs)	2Q (cfs)	Vel (ft/s)	D*V	Fr	D2 (ft)
0.01	0.0006	0.170312	0.003523	0.000116	0.000232	0.193061	0.001931	0.340225	0.001939
0.02	0.0024	0.340624	0.007046	0.000736	0.001471	0.306465	0.006129	0.38189	0.00472
0.04	0.0096	0.681249	0.014092	0.00467	0.00934	0.486483	0.019459	0.428657	0.011432
0.06	0.0216	1.021873	0.021138	0.013769	0.027539	0.637473	0.038248	0.458625	0.019137
0.08	0.0384	1.362498	0.028184	0.029654	0.059308	0.772243	0.061779	0.481151	0.027552
0.1	0.06	1.703122	0.035229	0.053767	0.107533	0.896109	0.089611	0.499382	0.036531
0.12	0.0864	2.043746	0.042275	0.08743	0.174861	1.011925	0.121431	0.51479	0.045982
0.125	0.09375	2.128902	0.044037	0.097485	0.19497	1.039843	0.12998	0.518304	0.048411

For water depths greater than 0.125 ft but less than 0.365 ft

Y1= Y-0.125
A2= A1 + 2*Y1 + 25*Y1^2
P2= P1 + SQRT(2501*Y1^2)+Y1

Depth (ft)	Area (ft^2)	P (ft)	R (A/P)	Q (cfs)	2Q (cfs)	Vel (ft/s)	D*V	Fr	D2 (ft)
0.13	0.104375	2.383952	0.043782	0.108115	0.21623	1.035833	0.134658	0.506279	0.048528
0.16	0.194375	3.914252	0.049658	0.218974	0.437947	1.126553	0.180248	0.496322	0.057885
0.2	0.384375	5.954652	0.06455	0.515757	1.031513	1.341806	0.268361	0.528746	0.079905
0.24	0.654375	7.995052	0.081847	1.028618	2.057236	1.571909	0.377258	0.56545	0.106348
0.28	1.004375	10.03545	0.100083	1.80534	3.610681	1.797476	0.503293	0.598627	0.1353
0.32	1.434375	12.07585	0.11878	2.890125	5.780249	2.014902	0.644769	0.627698	0.166025
0.36	1.944375	14.11625	0.13774	4.324252	8.648505	2.223981	0.800633	0.653208	0.198148
0.365	2.01375	14.3713	0.140123	4.530044	9.060088	2.249556	0.821088	0.656179	0.202249

For water depths greater than 0.365 ft but less than 0.667 ft

Y2= Y - 0.365
A3= A2 + Y2*14
P3= P2 + Y2

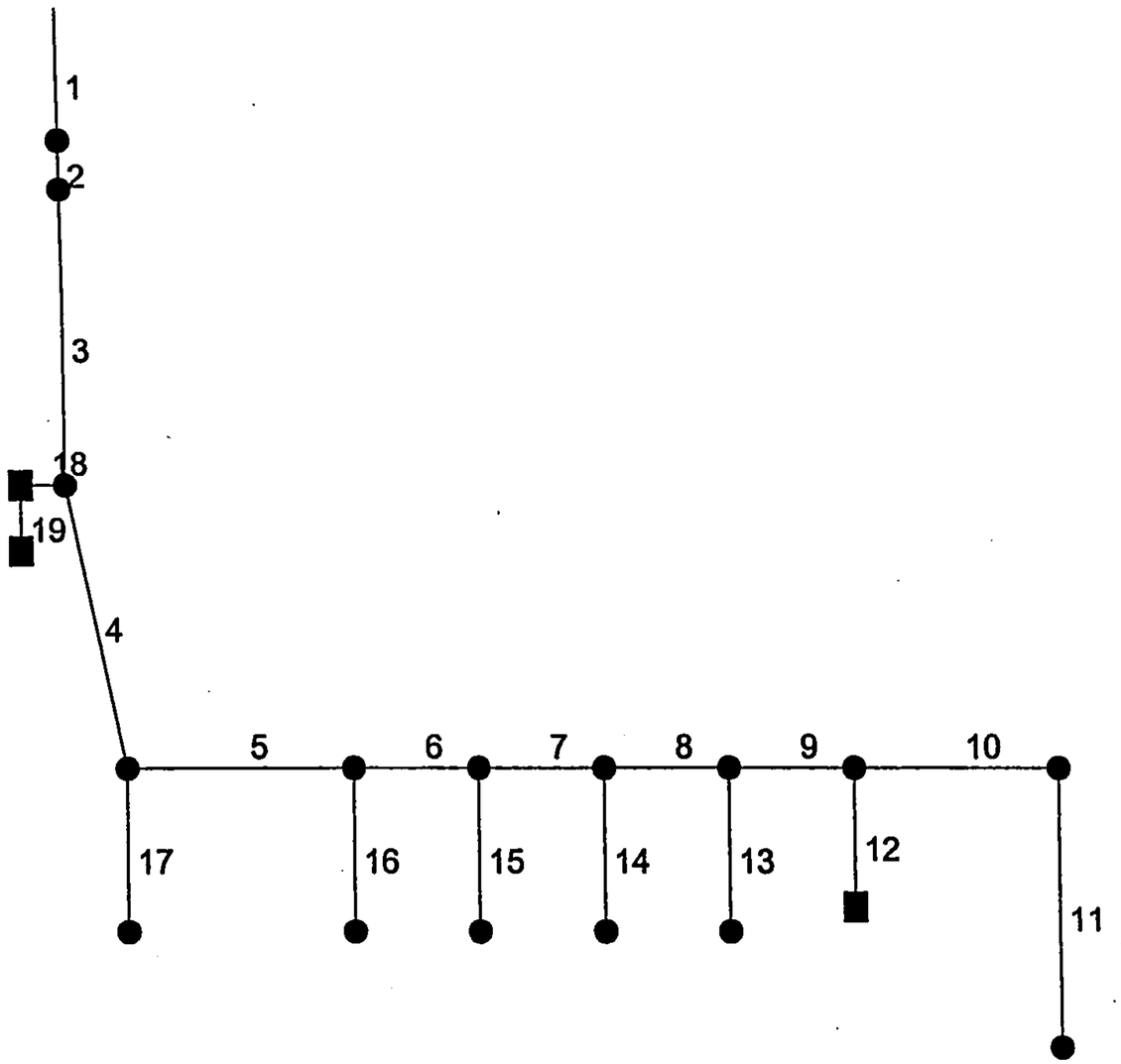
Depth (ft)	Area (ft^2)	P (ft)	R (A/P)	Q (cfs)	2Q (cfs)	Vel (ft/s)	D*V	Fr	D2 (ft)
0.37	2.08375	14.3763	0.144943	4.79441	9.588819	2.300856	0.851317	0.666593	0.209825
0.41	2.64375	14.4163	0.183386	7.115771	14.23154	2.691545	1.103533	0.740767	0.270931
0.45	3.20375	14.4563	0.221616	9.783257	19.56651	3.053689	1.37416	0.802215	0.332909
0.49	3.76375	14.4963	0.259635	12.77283	25.54565	3.393644	1.662886	0.854359	0.395782
0.54	4.46375	14.5463	0.306865	16.93383	33.86767	3.793634	2.048562	0.909768	0.475387
0.59	5.16375	14.5963	0.353771	21.53793	43.07587	4.170987	2.460882	0.95694	0.556211
0.63	5.72375	14.6363	0.391065	25.52334	51.04667	4.459198	2.809295	0.990053	0.621649
0.667	6.24175	14.6733	0.425381	29.43852	58.87704	4.716389	3.145831	1.017698	0.682754

For water depths greater than 0.667 ft but less than 0.847 ft

Y3= Y - 0.667
A4= A3 + 14 * Y3 + 25 * Y3^2
P4= P3 + SQRT(2501 * Y3^2)

Depth (ft)	Area (ft^2)	P (ft)	R (A/P)	Q (cfs)	2Q (cfs)	Vel (ft/s)	D*V	Fr	D2 (ft)
0.7	6.730975	16.32363	0.412345	31.09396	62.18792	4.619533	3.233673	0.973018	0.674856
0.72	7.053975	17.32383	0.407183	32.31353	64.62707	4.580897	3.298246	0.951385	0.673461
0.74	7.396975	18.32403	0.403676	33.68993	67.37986	4.554555	3.370371	0.933044	0.674198
0.76	7.759975	19.32423	0.401567	35.22002	70.44004	4.538677	3.449395	0.917476	0.676789
0.78	8.142975	20.32443	0.40065	36.90202	73.80404	4.531761	3.534774	0.904257	0.681006
0.8	8.545975	21.32463	0.400756	38.73518	77.47036	4.532564	3.626051	0.89304	0.686659
0.847	9.57175	23.6751	0.404296	43.63968	87.27937	4.559217	3.861657	0.873013	0.704729

Plan View



Proj. file: 9854-2.STM	IDF file: ZONE254.IDF	No. Lines: 19	05-04-1999

Storm Sewer Summary Report

Line No.	Line ID	Flow rate (cfs)	Line size (in)	Line length (ft)	Invert EL Dn (ft)	Invert EL Up (ft)	Line slope (%)	HGL down (ft)	HGL up (ft)	Minor loss (ft)	Dns line No.
1	1	32.91	30 c	80.0	50.00	51.28	1.600	52.50	53.20	1.03	End
2	2	32.91	30 c	30.0	51.28	51.54	0.867	54.23*	54.42*	0.70	1
3	3	32.91	30 c	180.0	51.54	52.73	0.661	55.12*	56.28*	0.70	2
4	4	14.91	27 c	180.0	52.73	53.92	0.661	56.98*	57.39*	0.22	3
5	5	13.20	27 c	180.0	53.92	54.80	0.489	57.61*	57.94*	0.17	4
6	6	11.49	24 c	100.0	54.80	55.64	0.840	58.11*	58.37*	0.21	5
7	7	9.78	21 c	100.0	55.64	57.31	1.670	58.58	58.91	0.28	6
8	8	8.07	18 c	100.0	57.31	59.22	1.910	59.19	60.30	0.54	7
9	9	6.36	18 c	100.0	59.22	61.00	1.780	60.84	61.96	0.44	8
10	10	4.65	15 c	162.0	61.00	63.50	1.543	62.40	64.36	0.41	9
11	11	1.71	10 c	170.0	63.50	65.20	1.000	64.77	65.83	0.23	10
12		1.71	10 c	85.0	61.00	64.00	3.529	62.40	64.58	0.28	9
13		1.71	8 c	100.0	59.22	61.22	2.000	60.84*	62.85*	0.37	8
14		1.71	8 c	100.0	57.31	59.31	2.000	59.19*	61.20*	0.37	7
15		1.71	8 c	100.0	55.64	57.64	2.000	58.58*	60.58*	0.37	6
16		1.71	8 c	100.0	54.80	56.80	2.000	58.11*	60.12*	0.37	5
17		1.71	8 c	100.0	53.92	55.92	2.000	57.61*	59.62*	0.37	4
18		18.00	24 c	35.0	52.73	53.00	0.771	56.98*	57.20*	0.51	3
19		9.00	24 c	40.0	53.00	53.27	0.675	57.71*	57.77*	0.13	18

PROJECT FILE: 9854-2.STM	I-D-F FILE: ZONE254.IDF	TOTAL NO. LINES: 19	RUN DATE: 05-04-1999

NOTES: c = circular; e = elliptical; b = box; Return period = 100 Yrs.; * Indicates surcharge condition.

Storm Sewer Inventory Report

Line #	Line ID	DnStr line #	Defl angle (deg)	Line length (ft)	Line size (in)	Line type	Line slope (%)	Drng area (ac)	Runoff coeff (C)	Inlet time (min)	Known Q (cfs)	Invert El dn (ft)	Invert El up (ft)	N value	Junction type	J-Loss coeff (JLC)	Natural grnd (ft)	Dns line #
1	1	0	90	80	30	Circular	1.60	0.00	.00	0	0.0	50.00	51.28	.013	MH	1.0	60.00	Off
2	2	1	0	30	30	Circular	0.87	0.00	.00	0	0.0	51.28	51.54	.013	MH	1.0	60.00	1
3	3	2	0	180	30	Circular	0.66	0.00	.00	0	0.0	51.54	52.73	.013	MH	1.0	59.00	2
4	4	3	-15	180	27	Circular	0.66	0.00	.00	0	0.0	52.73	53.92	.013	MH	1.0	60.00	3
5	5	4	-75	180	27	Circular	0.49	0.00	.00	0	0.0	53.92	54.80	.013	MH	1.0	60.50	4
6	6	5	0	100	24	Circular	0.84	0.00	.00	0	0.0	54.80	55.64	.013	MH	1.0	61.50	5
7	7	6	0	100	21	Circular	1.67	0.00	.00	0	0.0	55.64	57.31	.013	MH	1.0	62.50	6
8	8	7	0	100	18	Circular	1.91	0.00	.00	0	0.0	57.31	59.22	.013	MH	1.0	63.50	7
9	9	8	0	100	18	Circular	1.78	0.00	.00	0	0.0	59.22	61.00	.013	MH	1.0	64.50	8
10	10	9	0	162	15	Circular	1.54	0.00	.00	0	2.9	61.00	63.50	.013	MH	1.0	65.50	9
11	11	10	90	170	10	Circular	1.00	0.00	.00	0	1.7	63.50	65.20	.013	MH	1.0	66.30	10
12		9	90	85	10	Circular	3.53	0.00	.00	0	1.7	61.00	64.00	.013	Grate	1.0	67.00	9
13		8	90	100	8	Circular	2.00	0.00	.00	0	1.7	59.22	61.22	.013	MH	1.0	63.50	8
14		7	90	100	8	Circular	2.00	0.00	.00	0	1.7	57.31	59.31	.013	MH	1.0	62.50	7
15		6	90	100	8	Circular	2.00	0.00	.00	0	1.7	55.64	57.64	.013	MH	1.0	61.00	6
16		5	90	100	8	Circular	2.00	0.00	.00	0	1.7	54.80	56.80	.013	MH	1.0	60.50	5
17		4	15	100	8	Circular	2.00	0.00	.00	0	1.7	53.92	55.92	.013	MH	1.0	60.00	4
18		3	90	35	24	Circular	0.77	0.00	.00	0	9.0	52.73	53.00	.013	Curb	1.0	57.00	3
19		18	-90	40	24	Circular	0.68	0.00	.00	0	9.0	53.00	53.27	.013	Curb	1.0	57.50	18

PROJECT FILE: 9854-2.STM | I-D-F FILE: ZONE254.IDF | TOTAL NUMBER OF LINES: 19 | RUN DATE: 05-04-1999

DESIGN CODES: Min. Pipe Size = 12 in; Max. Pipe Size = 60 in; Min. Slope = .2 %; Min. Cover = 4 ft; Inlet N-Values = .013 ; Average Inlet Throat Height = 8 in

EXISTING STORM WATER SYSTEM

BEAR CANYON ARROYO

REM. PORTION LOT D
ALBUQUERQUE INDUSTRIAL PARK
FILED:- 1/21/70
VOLUME: D4
FOLIO: 65

PARCE
ALBUC
FILED:
VOLUM
FOLIO:

10' WIDE PNM &
EST ESMT.
B/15/91
IC, FOLIO 169
AND
ING PORTION OF
DE PNM & MTN.
TILITY EASEMENT
1/21/70
4, FOLIO 64
63133

JEFFERSON STREET N.E.

DIGITAL EQUIPMENT CORPORATION BUILDING

(BLOCK CONSTRUCTION)

5600 JEFFERSON STREET, N.E.

PARCEL
2,077,995 SQ
47.7042 ACF

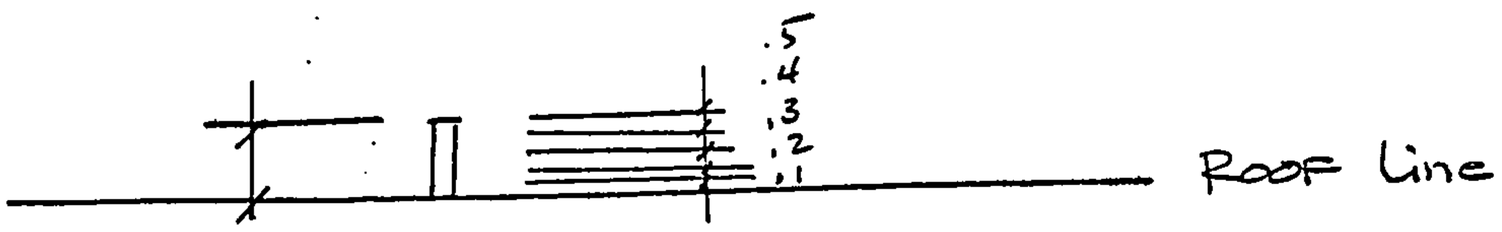
9800554 DIGITAL @ 25. 1.19.99

ROOF PIPING CAPACITY

ORIFICE EQUATION

$$Q = CA\sqrt{2gH}$$

H = water depth measured to Center of Plate.



C = .6

$A = \frac{\pi d^2}{4} = \pi \cdot \frac{0.17^2}{4}$ $d = 2" = 0.022\ FT^2$

H = 0.1 => 0.5

$Q_1 = .6 * 0.022\sqrt{2*32.2*.1} = 0.03$ CFS ①

$Q_2 = .6 * 0.022\sqrt{2g*.2} = 0.047$ CFS

$Q_3 = .6 * .022\sqrt{2g*.3} = 0.058$ CFS

$Q_4 = .6 * .022\sqrt{2g*.4} = 0.066$ CFS

$Q_5 = .6 * .022\sqrt{2g*.5} = 0.074$ CFS

d = 4", C = .6

$Q = .6 * .0873\sqrt{2g \cdot .1} = 0.133$ CFS

$Q_2 = .6 \times .0873\sqrt{2g \cdot .2} = 0.188$ CFS

$Q_3 = .6 * 0.0873 * \sqrt{2g*.3} = 0.230$ CFS

$Q_4 = .6 * 0.0873 * \sqrt{2g*.4} = 0.266$ CFS

$Q_5 = .6 * 0.0873 * \sqrt{2g \cdot .5} = 0.297$ CFS

MANNING'S EQUATION Q=1.49/n *A*R2/3*S1/2
n = 0.013

PIPE NO.,	A	P	R	S	Q	V
1 - 8"	0.352387	2.09124	0.16851	0.02	1.732246	4.915755
2 - 10"	0.544703	2.61876	0.20800	0.02	3.083333	5.660578
3 - 8"	0.352387	2.09124	0.16851	0.02	1.732246	4.915755
4 - 8"	0.352387	2.09124	0.16851	0.02	1.732246	4.915755
5 - 8"	0.352387	2.09124	0.16851	0.02	1.732246	4.915755
6 - 8""	0.352387	2.09124	0.16851	0.02	1.732246	4.915755
7 - 8"	0.352387	2.09124	0.16851	0.02	,1.732246	4.915755
8 - 15"	1.226563	3.925	0.31250	0.015	7.898193	6.439291
9 - 18"	1.76625	4.71	0.37500	0.02	14.83922	8.401539
10 - 18"	1.76625	4.71	0.37500	0.021	15.20567	8.609016
11 - 21"	2.404063	5.495	0.43750	0.0157	19.84238	8.253688
12 - 24"	3.14	6.28	0.50000	0.0085	20.85412	6.64144
13 - 24"	3.14	6.28	0.50000	0.0088	21.21895	6.757626
14 - 27"	3.974063	7.065	0.56250	0.0066	25.16701	6.332818
15 -12"	0.785	3.14	0.25000	0.0147	4.309144	5.489356
16 - 12"	0.785	3.14	0.25000	0.0196	4.975771	6.338562
17 - 15"	1.226563	3.925	0.31250	0.0183	8.723839	7.11243
18 - 30"	4.90625	7.85	0.62500	0.0068	33.84439	6.898219
19 - 30"	4.90625	7.85	0.62500	0.0068	33.84439	6.898219
20 - 30"	4.90625	7.85	0.62500	0.0068	33.84439	6.898219
21 - 10"	0.544703	2.61876	0.20800	0.02	3.083333	5.660578
22 - 10"	0.544703	2.61876	0.20800	0.02	3.083333	5.660578

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
DEVELOPMENT SERVICE / HYDROLOGY SECTION

CONFERENCE RECAP

DRAINAGE FILE/ZONE ATLAS PAGE NO. F17-D46 **DATE:** 12/10/98
PLANNING DIVISION NO'S: EPC: **ZONING:**IP **DRB:**
SUBJECT: Digital
STREET ADDRESS (IF KNOWN):
SUBDIVISION NAME: Digital Properties, lot 1

APPROVAL REQUESTED: Site Plan and Preliminary Plat and Building Permit

ATTENDANCE: Fred J. Aguirre-City Hydrologist
Chris Ehrsam, Tierra Engineering

FINDINGS:
An approved drainage report is required for preliminary plat/site plan approval. This report will need to address downstream capacity for this development. The hydraulic capacity analysis for the Bear Canyon Arroyo is not required for this project. Include in your report the design capacity information for the recently constructed Vineyard Storm Drain System (See Greiner Design Analysis Report). Include a copy of the proposed platting and infrastructure list with your drainage submittal. Please forward a copy of the report to AMAFCA for their review and approval.

THE UNDERSIGNED AGREES THAT THE ABOVE FINDINGS ARE SUMMARIZED ACCURATELY AND ARE SUBJECT TO CHANGE IF FURTHER INVESTIGATION REVEALS THAT THEY ARE NOT REASONABLE OR THAT THEY ARE BASED ON INACCURATE INFORMATION.

SIGNED: Fred J. Aguirre
TITLE : City Hydrologist

SIGNED: Chris G. Ehrsam
TITLE : Staff Engineer

NOTE PLEASE PROVIDE A COPY OF THIS RECAP WITH YOUR DRAINAGE SUBMITTAL.

City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

May 13, 1999

Ron Bohannan, PE
Tierra West, LLC
4421 McLeod Rd NE Suite D
Albuquerque, NM 87109

RE: DRAINAGE REPORT FOR DIGITAL @ 25 (F-17/D46)
RECEIVED MAY 5, 1999 FOR SITE DEV PLAN & BLDG PERMIT
ENGINEER'S STAMP DATED 5-5-99

Dear Mr. Bohannan:

Based on the information included in the submittal referenced above, City Hydrology accepts the Drainage Report for Site Development Plan and Building Permit.

Include a copy of the approved Grading & Drainage Plan, dated 5/5/99, in each set of construction documents that will be submitted to Code Administration for the Building Permit. Any work involving the Bear Arroyo must be approved by AMAFCA. If the Work Order Plans modify the existing storm drain system in Jefferson, the integrity of the system must be maintained.

Engineer's Certification of grading & drainage, per DPM checklist, must be accepted by City Hydrology before any Certificate of Occupancy will be released. Also, the rough grading must be accepted before the Financial Guaranty will be released.

If I can be of further assistance, You may contact me at 768-2727.

Sincerely,

John P. Curtin

John P. Curtin, P.E.
Project Manager, PWD/Hyd

c: Andrew Garcia

MAP POCKET A

APPROVED SITE GRADING AND DRAINAGE MASTER PLAN

MAP POCKET B

SITE GRADING AND DRAINAGE PLAN, MIMI'S CAFE

MAP POCKET C

TRAFFIC CONTROL LAYOUT

City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

Public Works Department
Transportation Development Services Section

August 26, 2002

Ronald R. Bohannon, P.E.
Tierra West LLC
8509 Jefferson N.E.
Albuquerque, NM 87113

Re: TCL Submittal for Building Permit Approval for Mimi's Cafe
Tract J-1B, XXXX The 25 Way N.E.; [F-17 / D083]
Engineer's Stamp Dated 07/29/02

Dear Mr. Bohannon:

The location referenced above, dated August 14, 2002, is not acceptable and requires modification to the Traffic Circulation Layout (TCL) prior to Building Permit release as stated on the attached *PRELIMINARY* TCL checklist, and red-lined TCL markup with comments.

Please resubmit revised TCL after addressing typed and marked up comments. Submit plan along with checklist and all current and past red-lined, mark-up copies.

Sincerely,

Mike Zamora, Commercial Plan Checker
Development and Building Services
Planning Department

c: Hydrology file
Mike Zamora

TRAFFIC CIRCULATION LAYOUT SITE PLAN CHECKLIST
REVISED DRAFT 9/18/01

The City Zoning Code requires the design of access and circulation for parking areas and drive through facilities to be satisfactory to the Traffic Engineer. The design of these parking areas is a melding of a number of objectives of a development including safety, efficiency, aesthetics, etc. From a vehicular transportation point of view, one of the most critical areas of concern is the location and manner of access from the adjacent street. The interface of the development adjacent to these areas also plays a major role in how safely and efficiently they operate. These guidelines for the layout of the parking areas represent engineering design standards that will result in good operational and safety characteristics. However, with the many variables in design and unique characteristics that can be encountered, the designer may need to investigate other means of satisfying desirable operational and safety characteristics. Prior to embarking on a design for these unusual conditions, the designer should contact the Traffic Engineer to reach agreement on the modifications to these guidelines. Traffic Circulation Layout (TCL) Site Plans are required for commercial and institutional buildings, multi-family residential buildings and commercial additions of 500 square feet or more.

NOTE: The following checklist is intended to be used as a guide for preparing your Traffic Circulation Layout Plan to meet any or all of the traffic requirements. It is only a guide. Some items may not be applicable to your particular project; some items may require more detail.
D.P.M. - DEVELOPMENT PROCESS MANUAL

I. General Information:

- ~~A.~~ ✓ Completed Drainage/TCL Information Sheet-(DPM Volume 1, Chapter 17)
- ~~B.~~ Planning History-Relationship to approved site plans, masterplans, and/or sector plans site
- C. Description:
  - ~~4.~~ ✓ Vicinity map (zone atlas map) showing location of the development in relation to well-known landmarks, municipal boundaries and zone atlas map index number
  - (2.) Street Address and ~~legal description~~ or copy of current plat
  - 3. All requests for variances from policies, ordinances or resolutions which are necessary to implement this plan must be specifically identified
  - ~~4.~~ ✓ Type of development (restaurants, banks, convenience markets, service station, super markets, auto car wash, etc.)
  - ~~5.~~ Size of development
  - ~~6.~~ ✓ Parking spaces required by Zoning Code or prior EPC approved Site Development Plan
  - (7.) Executive Summary-Provide a brief yet comprehensive discussion of the following:
    - ~~a.~~ General project location
    - ~~b.~~ Development concept for the site
    - (c.) Traffic circulation concept for the site-including largest truck (Design Vehicle) at applicable locations.
    - ~~d.~~ Impact on the adjacent sites
    - ~~e.~~ Reference any applicable Traffic Impact Studies (TIS) or previously approved plans
    - ~~f.~~ Variance required to accommodate unusual site constraints

✓ - ITEM IS ACCEPTABLE
(2) - ITEM NEEDS COMPLETION
~~3.~~ - N/A
4. - ITEM IN THE SUBSECTION NEEDS COMPLETION OR DESIGNER MIGHT CONSIDER THE ITEM ONCE MORE.

II. **Plan Drawings:**

A. Professional Architect's/Engineer's stamp with signature and date

B. Drafting standards: (Reference City Standards, DPM Volume 2, Chapter 27)

1. North Arrow
2. Scales-recommended engineer scales:
   a. 1" = 20' for sites less than 5 acres
   b. 1" = 50' for sites 5 acres or more
3. Legend-see DPM manual, Volume 2, Tables 27.3a-27.3d for recommended standard symbols
4. Plan drawings size: 24" x 36"
5. Notes defining property line, rights of-way, ~~signs, street lights, fire hydrants, medians, water meter boxes,~~ pavement limits and ~~types, sidewalks,~~ landscape areas, ~~project limits,~~ and all other areas whose definition would increase clarity

C. Existing Conditions:

1. On-site
   a. Identification of all ~~existing~~ buildings, doors, structures, sidewalks, curbs, drivepads, walls, etc., and anything that influences parking and circulation of the site
   ~~b.~~ Indication of all access existing easements and rights-of-way on or adjacent to the site with dimensions and purpose shown
2. Off-site
   a. Identification of the right-of-way width, medians, curb cuts, street widths, etc. (both sides of street)

D. [redacted] Conditions: [redacted] conditions should generally be superimposed on the drawings showing existing on-site and off-site conditions. Separate sheets may be used for on-site and off-site areas depending upon circumstances.

1. On-site
   a. Indication of all proposed access easements and rights-of-way on or adjacent to the site with dimensions and purpose shown
   ~~b.~~ Slopes
      (1) Parking areas 1% min to 8% max
      (2) Parking areas adjacent to major circulation aisles or adjacent to major entrances 1% min to 6% max
      ~~(3) Handicap parking 1% min to 2% max~~
      (4) Handicap ramps ~~with slope of 12:1~~ must be provided in ~~where~~ the sidewalk area where curbs intersect the pedestrian access to the building
   ~~c.~~ Clearly delineate project phasing. A key map is recommended.
   d. Parking stall sizes: (Reference City Standards, DPM, Figure 23.7.1)

e. Circulation:

~~(1)~~ General layout dimensions: Figure 23.7.1 provides the layout relationships between parking stalls and aisle widths for both large and small car parking areas

~~(2)~~ Treatment of access points-Discuss how the curb cuts and/or drivepads comply with Chapter 23, Section 6

~~(3)~~ Internal aisle connection:

~~(a)~~ Parking lots with parking spaces, spaces greater than or equal to 100 must have landscaped islands at the ends of each row of parking

~~(b)~~ Landscape island radius for passenger car is 15 feet (see DPM Figure 23.7.2)

~~(c)~~ Landscape island radius for delivery trucks, fire trucks, etc. is 25 feet or larger (see DPM figure 23.7.2)

~~(4)~~ Maximum aisle lengths: Aisle lengths required: 300-400 feet without internal circulation between aisles

(5) Sidewalk connections:

~~(a)~~ ~~Provide a 4' sidewalk from the public sidewalk to the buildings within the development.~~

(b) Provide a min 5' wide sidewalk when the stall will overhang the sidewalk

~~(c)~~ Clear pedestrian route accessible should be provided when the parking space may overhang the sidewalk

(6) Curbing: Provide a min 6" or max 8" high concrete barrier curb between landscaping and parking areas and/or drive aisles

(7) Fire and emergency access: Provision for access by fire and emergency vehicles needs to be in accordance with the Albuquerque Fire Plan Checking Division

(8) Service Areas:

(a) Circulation:

1) Design vehicle route needs to be shown

~~2)~~ No truck ramps, ~~refuse~~/compactors or similar facilities permitted within circulation aisle

~~(b)~~ No backing into or from public street allowed

(c) Service vehicle and/or refuse vehicle maneuvering must be contained on-site

(d) Aisle width required:

1) Two-way traffic is 30'

2) One-way traffic is 20'

F-17/D83

DRAINAGE INFORMATION SHEET

(REV. 11/01/2001)

PROJECT TITLE: MIMI'S CAFÉ
DRB #: _____ EPC #: _____
ZONE ATLAS/DRG. FILE #: F-17
WORK ORDER #: _____

LEGAL DESCRIPTION: Tract J-1-B, THE 25
CITY ADDRESS: Southeast corner of the I-25 Frontage Road and Jefferson, on The 25 Way

ENGINEERING FIRM:	TIERRA WEST, LLC	CONTACT:	RONALD R. BOHANNAN - 7/29/02
ADDRESS:	8509 JEFFERSON NE	PHONE:	(505) 858-3100
CITY, STATE:	ALBUQUERQUE, NM	ZIP CODE:	87113
OWNER:	Provident Realty Advisors	CONTACT:	Brain Parks
ADDRESS:	16775 Addison Rd.	PHONE:	(972) 733-3399
CITY, STATE:	Dallas TX	ZIP CODE:	75287
ARCHITECT:	LEE & SAKAHARA ARCHITECTS, AIA	CONTACT:	Jeff Elmore
ADDRESS:	16842 Von Karman Avenue, Suite 300	PHONE:	(949) 261-1100
CITY, STATE:	Irvine, CA	ZIP CODE:	92606-4927
SURVEYOR:	Precision Surveys	CONTACT:	Larry Medrano
ADDRESS:	8414-D Jefferson Street, NE	PHONE:	(505) 856-5700
CITY, STATE:	ALBUQUERQUE, NM	ZIP CODE:	87113
CONTRACTOR:		CONTACT:	
ADDRESS:		PHONE:	
CITY, STATE:		ZIP CODE:	

CHECK TYPE OF SUBMITTAL:

- ____ DRAINAGE REPORT
- ____ DRAINAGE PLAN
- ____ CONCEPTUAL GRADING & DRAINAGE PLAN
- ____ GRADING PLAN
- ____ EROSION CONTROL PLAN
- ____ ENGINEER'S CERTIFICATION (HYDROLOGY)
- ____ CLOMR/LOMR
- X TRAFFIC CIRCULATION LAYOUT (TCL)
- ____ ~~ENGINEERS CERTIFICATION (TCL)~~
- ____ ENGINEERS CERTIFICATION (DRB APPR. SITE PLAN)
- ____ OTHER

CHECK TYPE OF APPROVAL SOUGHT:

- ____ SIA / FINANACIAL GUARANTEE RELEASE
- ____ PRELIMINARY PLAT APPROVAL
- ____ S. DEV. PLAN FOR SUB'D. APPROVAL
- X S. DEV. PLAN FOR BLDG. PERMIT APPROVAL
- ____ SECTOR PLAN APPROVAL
- ____ FINAL PLAT APPROVAL
- ____ FOUNDATION PERMIT APPROVAL
- X BUILDING PERMIT APPROVAL
- ____ CERTIFICATE OF OCCUPANCY (PERM.)
- ____ CERTIFICATE OF OCCUPANCY (TEMP.)
- ____ GRADING PERMIT APPROVAL
- ____ PAVING PERMIT APPROVAL
- ____ WORK ORDER APPROVAL
- X OTHER (SPECIFY) - ~~SO # 19~~ Permit

WAS A PRE-DESIGN CONFERENCE ATTENDED:

- X YES
- ____ NO
- X COPY PROVIDED

RECEIVED
8/14/02
AUG 16 2002
HYDROLOGY SECTION

DATE SUBMITTED: 7/30/02 BY: Ronald R. Bohannan, PE

Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a dranage submittal. The particular nature, location and scope of the proposed development defines the degree of drainage detail. One or more of the following levels of sumbittal may be required based on the following:

1. **Conceptual Grading and Drainage Plans:** Required for approval of Site Development Plans greater than five (5) acres and Sector Plans.
2. **Drainage Plans:** Required for building permits, grading permits, paving permits and site plans less than five (5) acres.
3. **Drainage Report:** Required for subdivisions containing more than ten (10) lots or constituting five (5) acres or more.

8/26/02 - TCL Rej'd, C'd Ltr ltr incl. - L.M.M. ____ - Copy of

City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

October 30, 2002

Ronald R. Bohannon, P.E.
Tierra West, LLC
8509 Jefferson NE
Albuquerque, NM 87109

Re: Mimi's Café @25 - Grading & Drainage Plan with Engineer's stamp dated 10/01/02 **(F17/D83)**

Dear Mr. Bohannon,

You submitted the above referenced plan with recent revisions for wheelchair ramp and ADA requirements. Based on the information contained in your submittal dated October 2, 2002, Hydrology approves the above referenced plan for Building Permit.

Please attach a copy of this approved plan to the construction sets before sign-off by Hydrology. Before release of the Certificate of Occupancy, an Engineer Certification per the DPM checklist will be required.

If you have any questions, please call me at 924-3988.

Sincerely,

Nancy Musinski, P.E.
Hydrology/Utility Development
City of Albuquerque Public Works

cc: file

TW

Tierra West, LLC.

(505) 858-3100

8509 Jefferson NE, Albuquerque, NM 87113

LETTER OF TRANSMITTAL

DATE:	10/1/2002	JOB NO:	220041
ATTENTION:			
RE:	Mimi's @25		
	Grading Plan Revision		
	F17/D83		

TO Hydrology Section
City of Albuquerque Public Works Department
Plaza Del Sol
Albuquerque, NM 87103

WE ARE SENDING YOU ☐ Attached ☐ Under Separate cover via _____ thefollowing items:

☐ Shop drawings ☐ Prints ☐ Plans ☐ Samples ☐ Specifications

☐ Copy of letter ☐ Change order ☐ _____

COPIES	DATED	NO.	DESCRIPTION
2			Revised Grading Plan

THESE ARE TRANSMITTED as checked below:

☒ For approval ☐ Approved as submitted ☐ **FOR SIGNATURE(S)**

☐ For your use ☐ Approved as noted ☐ _____

☐ As requested ☐ Returned for corrections

☐ For review and comments ☐ _____

☐ FOR BIDS DUE _____ 19 ____ ☐ PRINTS RETURNED AFTER LOAN TO US

RECEIVED
OCT 03 2002
HYDROLOGY SECTION

REMARKS The grading plan was revised to provide ADA grading around the building as well as the reducing parking lot grades. We feel the modifications are minor and the drainage report criteria have been maintained therefo no resubmittal of the drainage report is warranted. Feel free to contact me should you have any questions. Thanks

COPY TO _____

RECEIVED BY _____ SIGNED David Soule

FAX (505) 858-1118 If enclosures are not as noted, kindly notify us at once Email: twdms@aol.com

F-17/D83

DRAINAGE INFORMATION SHEET

(REV. 11/01/2001)

PROJECT TITLE: MIMI'S CAFÉ
ZONE ATLAS/DRG. FILE #: ~~F-17/D83~~
DRB #:
EPC #:
WORK ORDER #:

LEGAL DESCRIPTION: Tract J-1-B, 4315 The 25 Way
CITY ADDRESS: Southeast corner of the I-25 Frontage Road and Jefferson, on The 25 Way

ENGINEERING FIRM:	**TIERRA WEST, LLC**	CONTACT:	**RONALD R. BOHANNAN**
ADDRESS:	**8509 JEFFERSON NE**	PHONE:	**(505) 858-3100**
CITY, STATE:	**ALBUQUERQUE, NM**	ZIP CODE:	**87113**
OWNER:	**Provident Realty Advisors**	CONTACT:	**Brain Parks**
ADDRESS:	**16775 Addison Rd.**	PHONE:	**(972) 733-3399**
CITY, STATE:	**Dallas TX**	ZIP CODE:	**75287**
ARCHITECT:	**LEE & SAKAHARA ARCHITECTS, AIA**	CONTACT:	**Jeff Elmore**
ADDRESS:	**16842 Von Karman Avenue, Suite 300**	PHONE:	**(949) 261-1100**
CITY, STATE:	**Irvine, CA**	ZIP CODE:	**92606-4927**
SURVEYOR:	**Precision Surveys**	CONTACT:	**Larry Medrano**
ADDRESS:	**8414-D Jefferson Street, NE**	PHONE:	**(505) 856-5700**
CITY, STATE:	**ALBUQUERQUE, NM**	ZIP CODE:	**87113**
CONTRACTOR:		CONTACT:	
ADDRESS:		PHONE:	
CITY, STATE:		ZIP CODE:	

CHECK TYPE OF SUBMITTAL:

- ___ DRAINAGE REPORT
- ___ DRAINAGE PLAN
- ___ CONCEPTUAL GRADING & DRAINAGE PLAN
- X GRADING PLAN
- ___ EROSION CONTROL PLAN
- ___ ENGINEER'S CERTIFICATION (HYDROLOGY)
- ___ CLOMR/LOMR
- ___ TRAFFIC CIRCULATION LAYOUT (TCL)
- ___ ENGINEERS CERTIFICATION (TCL)
- ___ ENGINEERS CERTIFICATION (DRB APPR. SITE PLAN)
- ___ OTHER

CHECK TYPE OF APPROVAL SOUGHT:

- ___ SIA / FINANACIAL GUARANTEE RELEASE
- ___ PRELIMINARY PLAT APPROVAL
- ___ S. DEV. PLAN FOR SUB'D. APPROVAL
- X S. DEV. PLAN FOR BLDG. PERMIT APPROVAL
- ___ SECTOR PLAN APPROVAL
- ___ FINAL PLAT APPROVAL
- ___ FOUNDATION PERMIT APPROVAL
- X BUILDING PERMIT APPROVAL
- ___ CERTIFICATE OF OCCUPANCY (PERM.)
- ___ CERTIFICATE OF OCCUPANCY (TEMP.)
- X GRADING PERMIT APPROVAL
- ___ PAVING PERMIT APPROVAL
- ___ WORK ORDER APPROVAL
- ___ OTHER (SPECIFY) - SO # 19 Permit

WAS A PRE-DESIGN CONFERENCE ATTENDED:

- ___ YES
- ___ NO
- ___ COPY PROVIDED

RECEIVED
OCT 02 2002
HYDROLOGY SECTION

DATE SUBMITTED: 10/1/2002 BY: David Soule, PE

Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a dranage submittal. The particular nature, location and scope of the proposed development defines the degree of drainage detail. One or more of the following levels of sumbittal may be required based on the following:

1. **Conceptual Grading and Drainage Plans:** Required for approval of Site Development Plans greater than five (5) acres and Sector

City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

Public Works Department
Transportation Development Services Section

April 7, 2003

Ronald Bohannan, PE
Tierra West
8509 Jefferson, NE
Albuquerque, NM 87113

Re: Approval of Temporary Certificate of Occupancy (C.O.) for
Mimi's Cafe, [F17/D83]
4316 The 25 Way
Engineer's Stamp Dated 4-04-03

Dear Mr. Bohannan,

Based on the information provided on your submittal dated April 4, 2003, the above referenced project is approved for a 30 day Temporary C.O.

When the outstanding issues have been fully completed and the site is in substantial compliance and a final Certification for Transportation has been resubmitted to the City's Hydrology office for approval, a permanent C.O. will be issued.

The Certification package for Final C.O. must include an copy of the approved TCL, or signed off D.R.B. Site Plan. The package also must include a letter of certification on designer's letterhead-stamped with his seal, signed, and dated. Submit package along with fully completed Drainage Information Sheet to front counter personnel for log in and evaluation by Transportation.

If you have any questions, please call me at 924-3990.

Sincerely,

Richard Dourte, PE
Traffic Engineer
Development and Building Services
Public Works Department

c: File
Hydrology file

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV. 01/28/2003rd)

PROJECT TITLE: ***MIMI'S CAFÉ*** ZONE MAP/DRG. FILE #: F-17/D83

DRB #: ***NA*** EPC #: ***NA*** WORK ORDE ***NA***

LEGAL DESCRIPTION: **TRACT J-1-B**

CITY ADDRESS: **4316 The 25 Way**

ENGINEERING FIRM:	TIERRA WEST, LLC	CONTACT:	Ronald R. Bohannan
ADDRESS:	8509 JEFFERSON NE	PHONE:	(505) 858-3100
CITY, STATE:	ALBUQUERQUE, NM	ZIP CODE:	87113
OWNER:	***MIMI'S CAFÉ***	CONTACT:	TOM SIMMS
ADDRESS:	***17852 E. 17TH ST. SUITE 108***	PHONE:	505 343 8500
CITY, STATE:	***TUSTIN CA***	ZIP CODE:	92780
ARCHITECT:	LEE & SAKAHARA ARCHITECTS, AIA	CONTACT:	JEFF ELMORE
ADDRESS:	16842 VON KARMAN AVE. SUITE 300	PHONE:	949 261 1100
CITY, STATE:	IRVINE, CA	ZIP CODE:	92606=4927
SURVEYOR:	Precision surveys	CONTACT:	LARRY MEDRANO
ADDRESS:	8414 d jefferson st ne	PHONE:	505-856-5700
CITY, STATE:	Albuquerque NM	ZIP CODE:	87113
CONTRACTOR:	***WICKS CONSTRUCTION***	CONTACT:	PAUL HEALY
ADDRESS:	*11614 STERLING AV.*	PHONE:	909-351-8303
CITY, STATE:	RIVERSIDE CA	ZIP CODE:	92503

CHECK TYPE OF SUBMITTAL:

- ____ DRAINAGE REPORT
- ____ DRAINAGE PLAN 1st SUBMITTAL, ***REQUIRES TCL or equal***
- ____ DRAINAGE PLAN RESUBMITTAL
- ____ CONCEPTUAL GRADING & DRAINAGE PLAN
- ____ GRADING PLAN
- ____ EROSION CONTROL PLAN
- ____ ENGINEER'S CERTIFICATION (HYDROLOGY)
- ____ CLOMR/LOMR
- ____ TRAFFIC CIRCULATION LAYOUT (TCL)
- X ENGINEERS CERTIFICATION (TCL)
- ____ ENGINEERS CERTIFICATION (DRB APPR. SITE PLAN)
- ____ OTHER

CHECK TYPE OF APPROVAL SOUGHT:

- ____ SIA / FINANACIAL GUARANTEE RELEASE
- ____ PRELIMINARY PLAT APPROVAL
- ____ S. DEV. PLAN FOR SUB'D. APPROVAL
- ____ S. DEV. PLAN FOR BLDG. PERMIT APPROVAL
- ____ SECTOR PLAN APPROVAL
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- ____ FOUNDATION PERMIT APPROVAL
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- X CERTIFICATE OF OCCUPANCY (TEMP.)
- ____ GRADING PERMIT APPROVAL
- ____ PAVING PERMIT APPROVAL
- ____ WORK ORDER APPROVAL
- ____ OTHER (SPECIFY)

WAS A PRE-DESIGN CONFERENCE ATTENDED:

- ____ YES
- x NO
- ____ COPY PROVIDED

RECEIVED
APR 04 2003
HYDROLOGY SECTION

DATE SUBMITTED: 4/4/2003 BY: Ronnie DeMasters

Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a dranage submittal.

The particular nature, location and scope of the proposed development defines the degree of drainage detail.

One or more of the following levels of sumbittal may be required based on the following:

1. **Conceptual Grading and Drainage Plans**: Required for approval of Site Development Plans greater than five (5) acres and Sector Plans.
2. **Drainage Plans**: Required for building permits, grading permits, paving permits and site plans less than five (5) acres.
3. **Drainage Report**: Required for subdivisions containing more than ten (10) lots or constituting five (5) acres or more.

TIERRA WEST, LLC

8509 Jefferson NE
Albuquerque, NM 87113

(505) 858-3100
fax (505) 858-1118

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

April 4, 2003

Ms. Terry Martin
Public Works Department
City of Albuquerque
PO Box 1293
Albuquerque, NM 87103

RE: Temporary Certification of Transportation for Temporary Certificate of Occupancy Mimi's Cafe
4315 The 25 WAY NE

Dear Ms. Martin:

Enclosed please find one copy of the As-Built and Information Sheet for the Mimi's Cafe located in the @25 Development. Wicks Construction completed the on-site paving, curb and gutter, and sidewalks. All work is in substantial compliance with the approved plan. Striping and landscaping for the site are not complete. As-built information was field verified by our office. We are, therefore, requesting Temporary Certificate of Occupancy, for staff training. Punch list items will be corrected before a final Certificate of Occupancy is requested.

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

Sincerely,

RONALD RAY BOHANNAN REGISTERED PROFESSIONAL ENGINEER NEW MEXICO 7868

4/4/03

Ronald R. Bohannan, PE

Enclosure/s

cc: Stan Howard

JN: 220041
RRB/rd

2002:22041 -Temp CO04032003

RECEIVED
APR 04 2003
HYDROLOGY SECTION

City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

April 9, 2003

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

RE: MIMI'S CAFE @ 25 **(F-17/D83)**
(4316 The 25 Way NE)
CERTIFICATE OF OCCUPANCY APPROVAL-*Temporary*
ENGINEERS CERTIFICATION DATED 4/4/2003

Dear Mr. Bohannan:

Based on the information provided in your submittal dated 4/4/2003, the above referenced project is approved for a **TEMPORARY** Certificate of Occupancy.

A Temporary Certificate of Occupancy has been issued for 30 days, allowing the remaining drainage issues to be completed within this time scope.

After the outstanding drainage issues have been addressed, a final submittal of the Engineers Certification will be required for issuance of a Permanent Certificate of Occupancy.

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

Sincerely,

Teresa A. Martin
Hydrology Plan Checker
Development and Building Services Division
BLB

c: Certificate of Occupancy Clerk, COA
Drainage file
Approval file

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV. 01/28/2003rd)

PROJECT TITLE: ***MIMI'S CAFÉ*** ZONE MAP/DRG. FILE #: F-17/D83

DRB #: ***NA*** EPC #: ***NA*** WORK ORDE ***NA***

LEGAL DESCRIPTION: **TRACT J-1-B**

CITY ADDRESS: **4316 The 25 Way**

ENGINEERING FIRM:	TIERRA WEST, LLC	CONTACT:	Ronald R. Bohannan
ADDRESS:	8509 JEFFERSON NE	PHONE:	(505) 858-3100
CITY, STATE:	ALBUQUERQUE, NM	ZIP CODE:	87113
OWNER:	***MIMI'S CAFÉ***	CONTACT:	TOM SIMMS
ADDRESS:	***17852 E. 17TH ST. SUITE 108***	PHONE:	505 343 8500
CITY, STATE:	***TUSTIN CA***	ZIP CODE:	92780
ARCHITECT:	LEE & SAKAHARA ARCHITECTS, AIA	CONTACT:	JEFF ELMORE
ADDRESS:	16842 VON KARMAN AVE. SUITE 300	PHONE:	949 261 1100
CITY, STATE:	IRVINE, CA	ZIP CODE:	92606=4927
SURVEYOR:	Precision surveys	CONTACT:	LARRY MEDRANO
ADDRESS:	8414 d jefferson st ne	PHONE:	505-856-5700
CITY, STATE:	Albuquerque NM	ZIP CODE:	87113
CONTRACTOR:	***WICKS CONSTRUCTION***	CONTACT:	PAUL HEALY
ADDRESS:	*11614 STERLING AV.*	PHONE:	909-351-8303
CITY, STATE:	RIVERSIDE CA	ZIP CODE:	92503

CHECK TYPE OF SUBMITTAL:

- ____ DRAINAGE REPORT
- ____ DRAINAGE PLAN 1st SUBMITTAL, ***REQUIRES TCL or equal***
- ____ DRAINAGE PLAN RESUBMITTAL
- ____ CONCEPTUAL GRADING & DRAINAGE PLAN
- ____ GRADING PLAN
- ____ EROSION CONTROL PLAN
- X ENGINEER'S CERTIFICATION (HYDROLOGY)
- ____ CLOMR/LOMR
- ____ TRAFFIC CIRCULATION LAYOUT (TCL)
- ____ ENGINEERS CERTIFICATION (TCL)
- ____ ENGINEERS CERTIFICATION (DRB APPR. SITE PLAN)
- ____ OTHER

CHECK TYPE OF APPROVAL SOUGHT:

- ____ SIA / FINANACIAL GUARANTEE RELEASE
- ____ PRELIMINARY PLAT APPROVAL
- ____ S. DEV. PLAN FOR SUB'D. APPROVAL
- ____ S. DEV. PLAN FOR BLDG. PERMIT APPROVAL
- ____ SECTOR PLAN APPROVAL
- ____ FINAL PLAT APPROVAL
- ____ FOUNDATION PERMIT APPROVAL
- ____ BUILDING PERMIT APPROVAL
- ____ CERTIFICATE OF OCCUPANCY (PERM.)
- X CERTIFICATE OF OCCUPANCY (TEMP.)
- ____ GRADING PERMIT APPROVAL
- ____ PAVING PERMIT APPROVAL
- ____ WORK ORDER APPROVAL
- ____ OTHER (SPECIFY)

WAS A PRE-DESIGN CONFERENCE ATTENDED:

- ____ YES
- x NO
- ____ COPY PROVIDED

RECEIVED
APR 0 4 2003
HYDROLOGY SECTION

DATE SUBMITTED: 4/4/2003 BY: Ronnie DeMasters

Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a dranage submittal.

The particular nature, location and scope of the proposed development defines the degree of drainage detail.

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3. **Drainage Report:** Required for subdivisions containing more than ten (10) lots or constituting five (5) acres or more.

City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

April 22, 2003

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

RE: MIMI'S CAFE @ THE 25 DEVELOPMENT (F-17/D83)
(4316 The 25 Way NE)
ENGINEERS CERTIFICATION FOR CERTIFICATE OF OCCUPANCY
ENGINEERS STAMP DATED 10/1/2002
ENGINEERS CERTIFICATION DATED 4/21/2003

Dear Mr. Bohannan:

Based upon the information provided in your Engineers Certification dated 4/22/2003, the above referenced site is approved for a Permanent Certificate of Occupancy.

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

Sincerely,

Teresa A. Martin
Hydrology Plan Checker
Development & Bldg. Services Division
BLB

C: Certificate of Occupancy Clerk, COA
drainage file
approval file

DRAINAGE AND TRANSPORTATION SHEET

(REV. 1/28/2003rd)

PROJECT TITLE: MIMI'S CAFÉ
ZONE MAP/DRG. FILE #: F-17/D83
DRB NA
EPC #: NA
WORK ORDER #: *NA*

LEGAL DESCRIPTION: TRACT J-1-B
CITY ADDRESS: 4316 The 25 Way

ENGINEERING FIRM:	Tierra West, LLC	CONTACT:	RONALD R. BOHANNAN
ADDRESS:	8509 Jefferson NE	PHONE:	(505) 858-3100
CITY, STATE:	Albuquerque, NM	ZIP CODE:	87113
OWNER:	MIMI'S CAFÉ	CONTACT:	TOM SIMMS
ADDRESS:	17852 E. 17TH ST., SUITE 108	PHONE:	505-343-8500
CITY, STATE:	TUSTIN, CA	ZIP CODE:	92780
ARCHITECT:	LEE & SAKAHARA ARCHITECTS, AIA	CONTACT:	JEFF ELMORE
ADDRESS:	16842 VON KARMAN AVE., SUITE 300	PHONE:	949-261-1100
CITY, STATE:	IRVINE, CA	ZIP CODE:	92606-4927
SURVEYOR:	Precision Surveys	CONTACT:	Larry Medrano
ADDRESS:	8414-D Jefferson Street NE	PHONE:	505-856-5700
CITY, STATE:	Albuquerque, NM	ZIP CODE:	87113
CONTRACTOR:	WICKS CONSTRUCTION	CONTACT:	PAUL HEALY
ADDRESS:	11614 STERLING AVENUE	PHONE:	909-351-8303
CITY, STATE:	RIVERSIDE, CA	ZIP CODE:	92503

CHECK TYPE OF SUBMITTAL:

- ___ DRAINAGE REPORT
- ___ DRAINAGE PLAN 1st SUBMITTAL, ***REQUIRES TCL or equal***
- ___ DRAINAGE PLAN RESUBMITTAL
- ___ CONCEPTUAL GRADING & DRAINAGE PLAN
- ___ GRADING PLAN
- ___ EROSION CONTROL PLAN
- _X_ ENGINEER'S CERTIFICATION (HYDROLOGY)
- ___ CLOMR/LOMR
- ___ TRAFFIC CIRCULATION LAYOUT (TCL)
- ___ ENGINEERS CERTIFICATION (TCL)
- ___ ENGINEERS CERTIFICATION (DRB APPR. SITE PLAN)
- ___ OTHER

CHECK TYPE OF APPROVAL SOUGHT:

- ___ SIA / FINANACIAL GUARANTEE RELEASE
- ___ PRELIMINARY PLAT APPROVAL
- ___ S. DEV. PLAN FOR SUB'D. APPROVAL
- ___ S. DEV. PLAN FOR BLDG. PERMIT APPROVAL
- ___ SECTOR PLAN APPROVAL
- ___ FINAL PLAT APPROVAL
- ___ FOUNDATION PERMIT APPROVAL
- ___ BUILDING PERMIT APPROVAL
- X CERTIFICATE OF OCCUPANCY (PERM.)
- ___ CERTIFICATE OF OCCUPANCY (TEMP.)
- ___ GRADING PERMIT APPROVAL
- ___ PAVING PERMIT APPROVAL
- ___ WORK ORDER APPROVAL
- ___ OTHER (SPECIFY)

WAS A PRE-DESIGN CONFERENCE ATTENDED:

- ___ YES
- _X_ NO
- ___ COPY PROVIDED

RECEIVED
APR 22 2003
HYDROLOGY SECTION

DATE SUBMITTED: 4/21/2003
BY: Ronnie DeMasters

Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a drainage submittal. The particular nature, location and scope of the proposed development defines the degree of drainage detail. One or more of the following levels of sumbittal may be required based on the following:

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City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

Planning Department
Transportation Development Services Section

April 22, 2003

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

Re: Certification Submittal for Final Building Certificate of Occupancy for
Mimi's Cafe, [F-17 / D83]
4316 The 25 Way
Engineer's Stamp Dated 04/22/03

Dear Mr. Bohannan:

The TCL / Letter of Certification submitted on April 22, 2003 is sufficient for acceptance by this office for final Certificate of Occupancy (C.O.). Notification has been made to the Building and Safety Section.

Sincerely,

Nilo E. Salgado-Fernandez, P.E.
Senior Traffic Engineer
Development and Building Services
Planning Department

c: Engineer
Hydrology file
CO Clerk

DRAINAGE AND TRANSPORTATION SHEET

(REV. 1/28/2003rd)

PROJECT TITLE: MIMI'S CAFÉ
ZONE MAP/DRG. FILE #: F-17/D83
DRB NA EPC #: NA
WORK ORDER #: NA

LEGAL DESCRIPTION: TRACT J-1-B
CITY ADDRESS: 4316 The 25 Way

ENGINEERING FIRM: Tierra West, LLC
ADDRESS: 8509 Jefferson NE
CITY, STATE: Albuquerque, NM
CONTACT: RONALD R. BOHANNAN
PHONE: (505) 858-3100
ZIP CODE: 87113

OWNER: MIMI'S CAFÉ
ADDRESS: 17852 E. 17TH ST., SUITE 108
CITY, STATE: TUSTIN, CA
CONTACT: TOM SIMMS
PHONE: 505-343-8500
ZIP CODE: 92780

ARCHITECT: LEE & SAKAHARA ARCHITECTS, AIA
ADDRESS: 16842 VON KARMAN AVE., SUITE 300
CITY, STATE: IRVINE, CA
CONTACT: JEFF ELMORE
PHONE: 949-261-1100
ZIP CODE: 92606-4927

SURVEYOR: Precision Surveys
ADDRESS: 8414-D Jefferson Street NE
CITY, STATE: Albuquerque, NM
CONTACT: Larry Medrano
PHONE: 505-856-5700
ZIP CODE: 87113

CONTRACTOR: WICKS CONSTRUCTION
ADDRESS: 11614 STERLING AVENUE
CITY, STATE: RIVERSIDE, CA
CONTACT: PAUL HEALY
PHONE: 909-351-8303
ZIP CODE: 92503

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- ____ CLOMR/LOMR
- X TRAFFIC CIRCULATION LAYOUT (TCL)
- X ENGINEERS CERTIFICATION (TCL)
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- ____ OTHER

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- ____ FOUNDATION PERMIT APPROVAL
- ____ BUILDING PERMIT APPROVAL
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- ____ GRADING PERMIT APPROVAL
- ____ PAVING PERMIT APPROVAL
- ____ WORK ORDER APPROVAL
- ____ OTHER (SPECIFY)

WAS A PRE-DESIGN CONFERENCE ATTENDED:

- ____ YES
- X NO
- ____ COPY PROVIDED

RECEIVED
APR 22 2003
HYDROLOGY SECTION

DATE SUBMITTED: 4/21/2003 BY: Ronnie DeMasters

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TIERRA WEST, LLC

8509 Jefferson NE
Albuquerque, NM 87113

(505) 858-3100
fax (505) 858-1118

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

April 21, 2003

Ms. Terry Martin
Public Works Department
City of Albuquerque
PO Box 1293
Albuquerque, NM 87103

RE: Final Certification of Transportation for Final Certificate of Occupancy
Mimi's Cafe
4315 The 25 WAY NE

Dear Ms. Martin:

Enclosed please find one copy of the As-Built and Information Sheet for the Mimi's Cafe located in the @25 Development. Wicks Construction completed the on-site paving, curb and gutter, and sidewalks. All work is in substantial compliance with the approved plan. Striping and landscaping for the site is complete. As-built information was field verified by our office. We are, therefore, requesting Final Certificate of Occupancy. Punch list items were corrected, and a Final Certificate of Occupancy is requested.

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

Sincerely,

Ronald R. Bohannan, PE

RONALD RAY BOHANNAN REGISTERED PROFESSIONAL ENGINEER NEW MEXICO 7/8/03

Enclosure/s

cc: Stan Howard

JN: 220041
RRB/rd

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APR 22 2003
HYDROLOGY SECTION

2002:22041 -Final CO04212003

City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103
Planning Department
Transportation Development Services Section

October 9, 2002

Ronald R.Bohannon, Registered Architect
8509 Jefferson N.E.
Albuquerque, NM 87113

Re: Traffic Circulation Layout (TCL) Submittal for Building Permit Approval for
Mimi's Cafe, [F-17 / D083]
4315 The 25 Way N.E.
Engineer's Stamp Dated 08/28/02

Dear Mr. Bohannon:

The TCL submittal, dated August 28, 2002, is sufficient for acceptance by this office and is stamped and signed as such. Two copies are needed for attachment and submittal of building permit plans, one copy has been kept for this office and one is to be kept by you to be used for certification of the site for final C.O. for Hydrology/Transportation.

If there are any questions, please call 924-3620.

Sincerely,

Mike Zamora, Commercial Plan Checker
Development and Building Services
Planning Department

c: Hydrology file
Mike Zamora

DRAINAGE INFORMATION SHEET

(REV. 11/01/2001)

PROJECT TITLE: MIMI'S CAFÉ
ZONE ATLAS/DRG. FILE #: F17/D83
DRB #: *1000420* EPC #:
WORK ORDER #:

LEGAL DESCRIPTION: TRACT J-1-B, THE 25 WAY
CITY ADDRESS: 4315 THE 25 WAY NE

ENGINEERING FIRM: TIERRA WEST, LLC
CONTACT: RONALD R. BOHANNAN
ADDRESS: 8509 JEFFERSON NE
PHONE: (505) 858-3100
CITY, STATE: ALBUQUERQUE, NM
ZIP CODE: 87113

OWNER:
CONTACT:
ADDRESS:
PHONE:
CITY, STATE:
ZIP CODE:

ARCHITECT:
CONTACT:
ADDRESS:
PHONE:
CITY, STATE:
ZIP CODE:

SURVEYOR: Precision Surveys
CONTACT: Larry Medrano
ADDRESS: 8414-D Jefferson Street, NE
PHONE: (505) 856-5700
CITY, STATE: ALBUQUERQUE, NM
ZIP CODE: 87113

CONTRACTOR:
CONTACT:
ADDRESS:
PHONE:
CITY, STATE:
ZIP CODE:

CHECK TYPE OF SUBMITTAL:

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- ___ CLOMR/LOMR
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- ___ GRADING PERMIT APPROVAL
- ___ PAVING PERMIT APPROVAL
- ___ WORK ORDER APPROVAL
- ___ OTHER (SPECIFY) - SO # 19 Permit

WAS A PRE-DESIGN CONFERENCE ATTENDED:

- ___ YES
- X NO
- ___ COPY PROVIDED

RECEIVED
OCT 03 2002
HYDROLOGY SECTION

RECEIVED
AUG 28 2002
HYDROLOGY SECTION

10/2/02

DATE SUBMITTED: 8/27/2002 BY: KAREN KLINE

Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a dranage submittal. The particular nature, location and scope of the proposed development defines the degree of drainage detail. One or more of the following levels of sumbittal may be required based on the following:

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10/9/02 – TCL App'd; Letter incl.; ✓ – logged
One Copy to D.O.T. / to me.