PUBLIC WORKS/HYDROLOGY

E10/D2C

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E10/D2C

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FILE COPY

City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

Ken Schultz
Mayor

UTILITY DEVELOPMENT DIVISION
HYDROLOGY SECTION
(505) 768-2650

May 6, 1987

Jared Harvey
Resource Technology, Inc.
2120 Osuna Road, NE Suite 24
Albuquerque, New Mexico 87113

RE: REVISED GRADING & EROSION CONTROL PLAN OF SANTA FE VILLAGE UNIT II, TRACT 2C RECEIVED APRIL 24, 1987 FOR WORK ORDER APPROVAL (E-10/D2C)

Dear Jared:

The above referenced submittal dated April 22, 1987, is approved for Hydrology sign-off on the Work Order Construction drawings.

Please note that the previously approved infrastructure list does not include the private retaining wall or mountable curb and gutter. A revised listing should be processed prior to execution of the Subdivision Improvements Agreement.

If you should have any questions, call me at 768-2650.

Cordially,

Roger A. Green, PE

Roger A. Green, P.E.
C.E./Hydrology Section

RAG/bsj

PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

Walter Nickerson, P.E., City Engineer

Telephone (505) 768-2500

AN EQUAL OPPORTUNITY EMPLOYER

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Transmittal

Resource Technology, Inc.

From: JARED HARVEY 345-3115
2129 Osuna N. E. Suite 2A
Albuquerque, New Mexico 87113

To: DESIGN HYDROLOGY
CITY OF ALBUQUERQUE

Date: 24 APRIL 87'

Our Project No. 86-050

IF MATERIAL RECEIVED IS NOT AS LISTED, PLEASE NOTIFY US AT ONCE

Attn: ROGER GREEN

Re: SFU TRACT 2C (E10-D2C)

RECEIVED APR 24 1987 HYDROLOGY SECTION

WE ARE SENDING YOU

☑ ATTACHED ☐ UNDER SEPARATE COVER VIA

☐ SHOP DRAWINGS ☐ TRACINGS
☑ PRINTS ☐ CATALOGS
☑ DOCUMENTS ☐ COPY OF LETTER
☐ SPECIFICATIONS ☐ _____

COPIES	DATE	ITEM
1	4/24/87	BLUE-LINE OF REVISED GRADING PLAN
1	4/24/87	DRAINAGE INFO. SHEET
#2	4/24/87	PRE-DESIGN RE-CAP

REMARKS ROGER, AS PER OUR MEETING ON APRIL 20, 1987, THIS IS A RE-SUBMITTAL OF THE GRADING PORTION OF THE DRAINAGE PLAN FOR TRACT 2C. THE CHANGES ON THE PLAN ONLY AFFECT GRADING, AND ARE REQUIRED DUE TO VERY MINOR REVISIONS IN KIVA ST.'S VERTICAL DESIGN. I ALSO REDUCED THE SLAB ELEV.'S, AS THEY WERE TOO HIGH IN RELATION TO ℄ ELEVS. THE ORIGINAL GRADING

COPY TO _____

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AND DRAINAGE FOR TRACT 2L WAS APPROVED BY YOU IN MARCH 1986. THE ORIGINAL DRAINAGE REPORT (HYDROLOGY) FOR THIS PROJECT HAS NOT BEEN EFFECTED BY THESE GRADING CHANGES AND IS STILL APPLICABLE.

AS WE TALKED ABOUT, I PLACED THE GRADING & DRAINAGE PLAN ON A CITY STD. SHEET, SINCE THE PLAN DRAWINGS FOR THE GRADING & DRAINAGE PLAN, AND THE CONSTRUCTION SETS GRADING & EROSION CONTROL PLAN, ARE IDENTICAL.

IN ADDITION, THE PRELIMINARY PLAT, SITE DEVELOPMENT PLAN, AND THE INFRASTRUCTURE LIST FOR T2L HAS ALREADY BEEN APPROVED. THE CONSTRUCTION SET FOR T2L SHOULD BE SUBMITTED FOR THE FIRST TIME TO DRC IN ABOUT A MONTH.

I WOULD GREATLY APPRICATE IF YOU WOULD REVIEW & APPROVE THE GRADING CHANGES ON T2L.

IF YOU HAVE ANY PROBLEMS OR QUESTIONS, PLEASE DO NOT HESITATE TO CALL ME. (345-3115)

THANKS,

JARED HARVEY

25X

DRAINAGE INFORMATION SHEET

PROJECT TITLE: SANTA FE VILLAGE UNIT 2 TRACT 2C ZONE ATLAS/DRNG. FILE #: E-10

LEGAL DESCRIPTION: SFV ADDITION, UNIT 2, TRACT 2C, ALBUQ. N.M.

CITY ADDRESS: LOTS 14-25 BLOCK 1-A

ENGINEERING FIRM: RESOURCE TECHNOLOGY, INC CONTACT: JARED HARVEY

ADDRESS: 2129 OSUNA RD. N.E. SUITE 2A PHONE: 345-3115

OWNER: ROBERSON CONSTRUCTION COMPANY CONTACT: CODA ROBERSON

ADDRESS: 6001 ATRISCO RD. N.W. PHONE: 897-4996

ARCHITECT: W.D. COHUMEYER CONTACT: "

ADDRESS: PHONE: 242-8401

SURVEYOR: LYNN ENGINEERING & SURVEYING CONTACT: DENNIS LYNN

ADDRESS: 22 CHUGHOLE LANE, LOS LUNAS N.M. PHONE: 869-3548

CONTRACTOR: ROBERSON CONST. COMPANY. CONTACT: —

ADDRESS: -SEE ABOVE- PHONE: —

RECEIVED APR 24 1987 HYDROLOGY SECTION

PRE-DESIGN MEETING:

✓ YES

___ NO

✓ COPY OF CONFERENCE RECAP SHEET PROVIDED

DRB NO. 85-760

EPC NO. ___

PROJ. NO. ___

TYPE OF SUBMITTAL:

___ DRAINAGE REPORT

X DRAINAGE PLAN

___ CONCEPTUAL GRADING & DRAINAGE PLAN

___ GRADING PLAN

___ EROSION CONTROL PLAN

___ ENGINEER'S CERTIFICATION

CHECK TYPE OF APPROVAL SOUGHT:

___ SKETCH PLAT APPROVAL

___ PRELIMINARY PLAT APPROVAL

___ SITE DEVELOPMENT PLAN APPROVAL

___ FINAL PLAT APPROVAL

___ BUILDING PERMIT APPROVAL

___ FOUNDATION PERMIT APPROVAL

___ CERTIFICATE OF OCCUPANCY APPROVAL

___ ROUGH GRADING PERMIT APPROVAL

___ GRADING/PAVING PERMIT APPROVAL

✓ OTHER REVISION OF PREVIOUSLY APPROVED GRADING & DRAINAGE PLAN. (SPECIFY)

DATE SUBMITTED: 24 APRIL 87

BY: JARED HARVEY

25 X

City of Albuquerque
P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

DESIGN HYDROLOGY SECTION
123 Central NW, Albuquerque, NM 87102
(505) 766-7644

March 19, 1986

Elvidio Diniz, P.E.
Resource Technology, Inc.
2620 San Mateo NE, Suite B
Albuquerque, NM 87110

RE: GRADING AND DRAINAGE PLAN SUBMITTAL OF SANTA FE VILLAGE ADDITION, UNIT 2 TRACT 2C, RECEIVED 2/27/86 FOR PRELIMINARY PLAT APPROVAL (E10-D2C)

Dear Elvidio:

The above referenced submittal, drawings revised 2/27/86, is approved for platting purposes. An approved infrastructure listing will be required by the DRB and an executed Subdivision Improvements Agreement will be required before Final Plat sign-off by the City Engineer.

If you have any questions, call me at 766-7644.

Sincerely,

Roger A. Green, PE

Roger A. Green
Civil Engineer/Design Hydrology

RAG:mrk

cc: Roberson Construction Co., 6001 Atrisco Road NW 87114

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DRAINAGE INFORMATION SHEET

PROJECT TITLE: Tract 2C Santa Fe Village Unit 2 ZONE ATLAS/DRNG. FILE #: E-10/D2C

LEGAL DESCRIPTION: Santa Fe Village Addition, Unit 2, Tract 2C, Albuquerque NM

CITY ADDRESS: Lots 14-25 - Block 1-A

ENGINEERING FIRM: Resource Technology Inc. CONTACT: Elvidio Diniz

ADDRESS: 2620 San Mateo NE #B PHONE: 884-0020

OWNER: Robertson Construction Company CONTACT: Cada Robertson

ADDRESS: 6001 Atrisco Rd NW PHONE: 897-4996

ARCHITECT: Richard Elliott Architects CONTACT: Jo Cohnmeyer

ADDRESS: 1101 Cardenas NE Suite 201 PHONE: 265-5500

SURVEYOR: Lynn Engineering & Surveying CONTACT: Dennis Lynn

ADDRESS: 22 Chughole Lane Los Lunas PHONE: 869-3548

CONTRACTOR: Robertson Construction Co CONTACT: —

ADDRESS: see above PHONE: —

RECEIVED FEB 27 1986 HYDROLOGY SECTION

PRE-DESIGN MEETING:

X YES

___ NO

X COPY OF CONFERENCE RECAP SHEET PROVIDED

DRB NO. 85-760

EPC NO. ___

PROJ. NO. ___

TYPE OF SUBMITTAL:

___ DRAINAGE REPORT

X DRAINAGE PLAN

___ CONCEPTUAL GRADING & DRAINAGE PLAN

___ GRADING PLAN

___ EROSION CONTROL PLAN

___ ENGINEER'S CERTIFICATION

CHECK TYPE OF APPROVAL SOUGHT:

___ SKETCH PLAT APPROVAL

X PRELIMINARY PLAT APPROVAL

___ SITE DEVELOPMENT PLAN APPROVAL

___ FINAL PLAT APPROVAL

___ BUILDING PERMIT APPROVAL

___ FOUNDATION PERMIT APPROVAL

___ CERTIFICATE OF OCCUPANCY APPROVAL

___ ROUGH GRADING PERMIT APPROVAL

___ GRADING/PAVING PERMIT APPROVAL

___ OTHER ___ (SPECIFY)

DATE SUBMITTED: 27 February, 1986

BY: Elvidio Diniz

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Transmittal

RESOURCE TECHNOLOGY, INCORPORATED

From: Elvidio Diniz 884-0059.
2620 San Mateo NE, Suite B
Albuquerque, New Mexico 87110

To: City of Albuquerque
Hydrology

Date: February 1986

Our Project No.

IF MATERIAL RECEIVED IS NOT AS LISTED, PLEASE NOTIFY US AT ONCE

Attn: Bernie Montoya

Re: SFV Unit 2 Tract 2C

WE ARE SENDING YOU

☒ ATTACHED ☐ UNDER SEPARATE COVER VIA

☐ SHOP DRAWINGS ☐ TRACINGS

☐ PRINTS ☐ CATALOGS

☒ DOCUMENTS ☐ COPY OF LETTER

☐ SPECIFICATIONS ☐

RECEIVED FEB 27 1986 HYDROLOGY SECTION

COPIES	DATE	ITEM
		Revised Drainage Plan for Santa Fe Village
		Unit 2 Tract 2C - per your comments
		Information Sheet

REMARKS Comment #5 - Downstream infrastructures are under construction and completion date is March 1986 - This has been noted on Fig. 5

Please note: I have only included the revised plan and revised Figure 5 since nothing else in the report changed. Call me or Sheila if you need more information or have any questions.

COPY TO

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City of Albuquerque
P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

DESIGN HYDROLOGY SECTION
123 Central NW, Albuquerque, NM 87102
(505) 766-7644

January 31, 1986

Elvidio Diniz, P.E.
Resource Technology, Inc.
2620 San Mateo Blvd., NE #B
Albuquerque, New Mexico 87110

RE: DRAINAGE PLAN FOR SANTA FE VILLAGE UNIT 2, TRACT 2C
RECEIVED JANUARY 23, 1986 (E-10/D2C)

Dear Mr. Diniz:

A preliminary review of your submittal for Preliminary Plat approval has shown that the following information is lacking for this section to begin the review process.

INFORMATION NEEDED:

1. Detailed Grading Plan showing proposed elevations on each lot (For Preliminary Plat and Rough grading requests for Subdivisions).

PLAN DRAWING:

1. Please include within your Drainage Plan Benchmark - location, description, and elevation of the:

   A. Albuquerque Control Survey Vertical Datum.
   B. Temporary Benchmark on site.

2. Please show street elevations and grades for Kiva Street.

3. Delineation of retaining and garden walls. Both existing or proposed.

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4. Finished floor elevation with complete MSL designation.

5. Please address if all needed infrastructures are built downstream of your site to handle your developed flows.

Please provide this information so that we may process your request as expediently as possible.

Cordially,

Bernie J. Montoya

Bernie J. Montoya, C.E.
Engineering Assitant,
Design Hydrology

BJM/bsj

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DRAINAGE INFORMATION SHEET

PROJECT TITLE: Tract 2C Santa Fe Village Unit 2 ZONE ATLAS/DRNG. FILE #: E-10 D2C

LEGAL DESCRIPTION: Santa Fe Village Addition, Unit 2, Tract 2C, Albuquerque NM

CITY ADDRESS: Lots 14 - 25 - Block 1-A

ENGINEERING FIRM: Resource Technology Inc. CONTACT: Elvidio Diniz

ADDRESS: 2620 San Mateo NE #B PHONE: 884-0020

OWNER: Roberson Construction Company CONTACT: Coda Roberson

ADDRESS: 6001 Atrisco Rd NW PHONE: 897-4996

ARCHITECT: Richard Elliott Architects CONTACT: Jo Cohnmeyer

ADDRESS: 1101 Cardenas NE Suite 201 PHONE: 265-5500

SURVEYOR: Lynn Engineering & Surveying CONTACT: Dennis Lynn

ADDRESS: 22 Chughole Lane Los Lunas PHONE: 869-3548

CONTRACTOR: Roberson Construction Co CONTACT: —

ADDRESS: see above PHONE: —

PRE-DESIGN MEETING:

X YES

___ NO

X COPY OF CONFERENCE RECAP SHEET PROVIDED

DRB NO. 85-760 11/12/85

EPC NO. ~~786913~~ 1151

PROJ. NO. _____

RECEIVED JAN 24 1986 HYDROLOGY SECTION

TYPE OF SUBMITTAL:

___ DRAINAGE REPORT

X DRAINAGE PLAN

___ CONCEPTUAL GRADING & DRAINAGE PLAN

___ GRADING PLAN

___ EROSION CONTROL PLAN

___ ENGINEER'S CERTIFICATION

CHECK TYPE OF APPROVAL SOUGHT:

___ SKETCH PLAT APPROVAL

X PRELIMINARY PLAT APPROVAL

___ SITE DEVELOPMENT PLAN APPROVAL

___ FINAL PLAT APPROVAL

___ BUILDING PERMIT APPROVAL

___ FOUNDATION PERMIT APPROVAL

___ CERTIFICATE OF OCCUPANCY APPROVAL

___ ROUGH GRADING PERMIT APPROVAL

___ GRADING/PAVING PERMIT APPROVAL

___ OTHER _____ (SPECIFY)

DATE SUBMITTED: 23 January 1986

BY: Elvidio Diniz

25 x 10

Transmittal

E10/D2C

RESOURCE TECHNOLOGY, INCORPORATED

From: Elvidio Diniz 884-0059.
2620 San Mateo NE, Suite B
Albuquerque, New Mexico 87110

To: City of Albuquerque
Hydrology Dept.

Date: 23 January 1986

Our Project No.

IF MATERIAL RECEIVED IS NOT AS LISTED, PLEASE NOTIFY US AT ONCE

Attn:

Re: Tract 2C - SFV Unit 2

WE ARE SENDING YOU

☒ ATTACHED ☐ UNDER SEPARATE COVER VIA

☐ SHOP DRAWINGS ☐ TRACINGS

☐ PRINTS ☐ CATALOGS

☒ DOCUMENTS ☐ COPY OF LETTER

☐ SPECIFICATIONS ☐

RECEIVED JAN 24 1986 HYDROLOGY SECTION

COPIES	DATE	ITEM
1	23 Jan 86	Drainage Plan + Information Sheet - Tract 2C SFV - Unit 2

REMARKS

COPY TO

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FOLLOWING DOCUMENT(S)

PRINTED ON COLORED

PAPER STOCK DO NOT

ALWAYS REPRODUCE WELL.

THIS RESULTS IN

A POOR FILM IMAGE.

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CITY OF ALBUQUERQUE
MUNICIPAL DEVELOPMENT DEPARTMENT
ENGINEERING DIVISION/DESIGN HYDROLOGY SECTION

CONFERENCE RECAP

DRAINAGE FILE/ZONE ATLAS PAGE NO.: 510 DATE: 10/24/85 @ 10:00

PLANNING DIVISION NOS: EPC: _____ DRB: _____

SUBJECT: _____

STREET ADDRESS (IF KNOWN): _____

SUBDIVISION NAME: Sola Fe Village Unit II, Tract 2

APPROVAL REQUESTED:

X PRELIMINARY PLAT
X SITE DEVELOPMENT PLAN
_____ OTHER

_____ FINAL PLAT
_____ BUILDING PERMIT
_____ ROUGH GRADING

ATTENDANCE:	WHO	REPRESENTING
	Scott Pell	Lewis T.R. Inc
	Billy Goolsby	
	Elvidio Diniz	

FINDINGS:

① An updated drainage report is required for the purpose of designing the north side street, utilizing a reasonable development scheme for the area to the north.

② For Preliminary Plat approval an approved Drainage Report and infrastructure listing is required.

③ For the construction plan inclusion and sign-off by Hydrology, a detailed drainage plan will need to be provided with the report for approval.

The undersigned agrees that the above findings are summarized accurately and are only subject to change if further investigation reveals that they are not reasonable or that they are based on inaccurate information.

SIGNED: Billy G. Goolsby SIGNED: _____
TITLE: CE/Design Hydrology TITLE: _____
DATE: 10/24/85 DATE: _____

NOTE PLEASE PROVIDE A COPY OF THIS RECAP WITH THE DRAINAGE SUBMITTAL

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CITY OF ALBUQUERQUE
MUNICIPAL DEVELOPMENT DEPARTMENT
ENGINEERING DIVISION/DESIGN HYDROLOGY SECTION

CONFERENCE RECAP

DRAINAGE FILE/ZONE ATLAS PAGE NO.: [illegible] DATE: 10-24-85

PLANNING DIVISION NOS: EPC: _____ DRB: _____

SUBJECT: Santa Fe Village Unit II Tract 2C

STREET ADDRESS (IF KNOWN): _____

SUBDIVISION NAME: _____

APPROVAL REQUESTED:

X PRELIMINARY PLAT
_____ SITE DEVELOPMENT PLAN
_____ OTHER

_____ FINAL PLAT
_____ BUILDING PERMIT
_____ ROUGH GRADING

	WHO	REPRESENTING
ATTENDANCE:	Sheila Dell	Resource Tech
	Eluidio Diaz	
	Billy Goolsby	City

FINDINGS:

(4) For Final Plat an execute Subdivision Improvements Agreement is required

(5) An Erosion Control Plan for the period of construction is required to ensure that sediments remain on-site.

The undersigned agrees that the above findings are summarized accurately and are only subject to change if further investigation reveals that they are not reasonable or that they are based on inaccurate information.

SIGNED: Billy J. Goolsby SIGNED: _____

TITLE: C.E. Design Hydrology TITLE: _____

DATE: 10/24/85 DATE: _____

NOTE PLEASE PROVIDE A COPY OF THIS RECAP WITH THE DRAINAGE SUBMITTAL

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E10/D2C

D.R.B. Case No. 85-760
D.R.C. Project No. _____
Date Submitted 15 July 86

EXHIBIT "D"
to Subdivision Improvements Agreement

D.R.B. REQUIRED INFRASTRUCTURE LISTING
for TRACT 2C BLOCK 1A SANTA FE VILLAGE UNIT II

RECEIVED SEP 10 1986 RESOURCE TECHNOLOGY

Following is a summary of Public/Private Infrastructure required to be constructed or financially guaranteed to be constructed for the above development.

	Size	Type Improvement	Location	From	To
*	6"	PVC Water	Kiva Street	Creggs St.	Montaño Rd.
*	8"	PVC Sewer	Kiva Street	Montaño Rd	Lot 25 - Kiva St.
	32' (1)	Residential Paving	Kiva Street	exist. Creggs St.	Montaño Rd.
		w/ Std. Curb & gutter and median curb and gutter			
	4'	Sidewalk	South side Kiva St.	Creggs St	Montaño Rd.
	2-6"	Fire Hydrants	Kiva St. - per DPM requirements		
		Private Retaining Wall			
		Mountable Curb & gutter			

* Water and sanitary sewer improvements include all appurtenant construction items per DPM standards

(1) Flare to 40' F.L. to F.L. at Montaño.

Prepared by: Sheila K. Dell
Print Name Sheila K. Dell
Firm Resource Technology Inc.

Page 1 of 1

Development Review Board Member Approvals

Traffic — Date 9-16-86
HRD — Date 9/16/86
Parks & Rec. — Date 9-16-86
DRB Chairman — Date 9.16.86
City Engineer/AMAFCA — Date 9/16/86

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DRAINAGE PLAN FOR
SANTA FE VILLAGE UNIT II
TRACT 2C

submitted to

City of Albuquerque
P.O. Box 1293
Albuquerque, New Mexico 87110

by

Resource Technology, Incorporated
2620 San Mateo NE, Suite B
Albuquerque, New Mexico 87110

January 1986

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INTRODUCTION

This report analyzes the existing and future drainage conditions for Santa Fe Village Unit II, Tract 2C, a proposed development extension within Santa Fe Village Unit II, which is a new subdivision located in the City of Albuquerque, Bernalillo County, New Mexico. The site plan for this subdivision will provide for single family residential units.

Tract 2C is a 3.55 acre tract on the north side of Unit II as shown on the Location Map, Figure 1. This tract is proposed for subdivision into 12 lots with a minimum lot size of 106 ft. x 65 ft. A 32-foot wide street in a 50-ft. right-of-way (Kiva Street) will be constructed on the north side of the subdivision; a cedar fence is constructed along the south side with developed homes beyond, on the north side of Creggs Street. Existing streets at the east (Bogart Street) and west (Creggs Street) ends of the subdivision will be extended to intersect with Kiva Street, as shown in Figure 2.

The north side of Kiva Street is presently vacant, but assumed to be developed in the future as single family homes which are typical in this part of the subdivision. This vacant land grades down to the North Branch of San Antonio Arroyo; however, lot grading with future development may cause one row of lots along the north side of Kiva Street to also drain into the street. This assumption was included in the computations for this report.

The surveyor for this project is Dennis Lynn; the original plat for

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Santa Fe Village, Unit II was prepared by Adam, Hamlyn, Anderson.

The original drainage report for Unit II was prepared in 1981 by Leverton Engineering, Inc. In that report, Tract 2C was expected to drain north across Kiva Street and into the North Branch of San Antonio Arroyo. Figure 3 is a copy of Exhibit B of the Leverton report. Also, please note that the alignment of Creggs Street and the lot layout have changed since that report. The present plan is to drain the lots on both sides of Kiva Street into the street and route the flows east, down Montano Road to the North Branch of San Antonio Arroyo. Consequently, the net impact on the arroyo will be unchanged.

This report was developed in accordance with criteria in the City of Albuquerque Development Process Manual (DPM), and consultations with City Engineering Staff.

SITE LOCATION AND DESCRIPTION

Santa Fe Village Unit II Tract 2C is a new development phase of Santa Fe Village Unit II. All developed portions of Unit II are located south of Tract 2C. Currently no structures are located on the site; however, a power line is located along the north boundary of the tract, on the north side of Kiva Street. A 24-inch water trunk line is also located within the right-of-way for Kiva Street.

Figure 1 shows the location of the proposed Santa Fe Village Unit II Tract 2C Subdivision. It is bounded on the west by the volcanic escarpment, and on the south by the developed portions of Unit II.

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Atrisco Road NW (Unser Blvd. NW) is about 400 feet east.

Figure 4 which was taken from the Federal Emergency Management Agency's Flood Hazard Map No. 14 shows the 100-yr. flood plains in the general area as determined by FEMA. The proposed development is not located within any identified flood plain areas. Therefore, only site drainage with minor off-site flows are considered in this report.

The proposed subdivision which lies below the volcanic escarpment, has slopes ranging from 1 percent to 12 percent. Elevations within the subidvision area range from 5,210 feet to 5,176 feet.

SOILS

The escarpment area, west of the subdivision, falls in the Kokan series with rock outcropings. The Kokan series consists of gravelly sand. The Soil Survey of Bernalillo County and parts of Sandoval and Valencia Counties places this type of soil within Hydrologic Soil Group A but states that 40 percent of the area is covered with large (3-4 feet diameter) boulders. For this drainage report the Kokan type soil was considered as 40 percent impervious.

The soils in the subdivision area are in the Bluepoint Soil Grouping which consists of loamy sand. Bluepoint Soil falls within Hydrologic Soil Group A.

OFF-SITE FLOWS

Most of the drainage area above the escarpment to the west of the

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proposed subdivision (Tract 2C) drains directly to the North Branch of San Antonio Arroyo as shown in Figure 5. Below the escarpment, the center line of this arroyo is approximately 400 feet north of the northern boundary of Tract 2C. Because this subdivision lies on the southern slopes of the valley of the North Branch of San Antonio Arroyo, minimal off-site flows are expected. The area to the south is developed and all lot drainage is to Creggs Street. Minor off-site drainage enters the subdivision in the northwest corner and will be intercepted by an extension of Creggs Street. Drainage will flow north on Creggs Street to Kiva Street, then east to Montano Road to the North Branch of San Antonio Arroyo (Figure 5). Existing condition hydrology only was calculated for the off-site area because it is on the escarpment and will not be developed.

ON-SITE FLOWS

Kiva Street is designed to carry runoff from Tract 2C on the south side of the street and a single row of 100-foot deep R-1 lots on the north side of the street as well as flow from the off-site escarpment area. The resulting hydrologic and hydraulic computations are shown in Tables 1 and 2, respectively. Curbs will be mountable where the flow rate permits, however, along the east end of Kiva Street standard curbs and gutters will be necessary.

As shown in the Drainage Plan, Figure 6, all drainage from Kiva Street will combine with flow down Montano Road and enter the North Branch of San Antonio Arroyo at the Montano Road crossing. The

25×10

treatment of those flows was included by AHA/DMJM in their design of the Montano Road crossing of the North Branch of San Antonio Arroyo dated April 1985.

EROSION CONTROL PLAN

The proposed Erosion Control Plan is also shown on Figure 6. During the development of Tract 2C, it is expected that the north side of Kiva Street will remain undeveloped. Therefore, a 1.5 foot high berm will be constructed along the north edge of Tract 2C. All runoff will be retained in a pond with maximum depth of two feet at the east end of Kiva Street. Sediment will be removed out of the pond as soon as possible after every runoff event so that the pond capacity of approximately 2,250 cubic feet is maintained.

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TABLE 1

TRACT 2C HYDROLOGY

	OFF-SITE*	ON-SITE UNDEVELOPED	ON-SITE DEVELOPED PLUS POSSIBLE FUTURE DEVELOPMENT
Area	2.32 ac.	3.55 ac.	5.87 ac.
Time of Concentration			
Flow Length	580 ft.	980 ft.	930 ft.
Slope	19.8 %	3 % adjusted	3 %
Time of Concentration	1.9 min.	15.6 min.	3.4 min.
Adopted Tc	10.0 min.	15.6 min.	10.0 min.
6-Hour Rainfall Depth			
10-yr.	1.45 in.	1.45 in.	1.45 in.
100-yr.	2.20 in.	2.20 in.	2.20 in.
Rainfall Intensity			
10-yr.	3.15 in./hr.	2.52 in./hr.	3.15 in./hr.
100-yr.	4.77 in./hr.	3.83 in./hr.	4.77 in./hr.
Runoff Coeficients "C"	0.36	0.165	0.61
Runoff Rates			
10-yr.	2.6 cfs	1.5 cfs	11.3 cfs
100-yr.	4.0 cfs	2.2 cfs	17.1 cfs
Runoff Volume			
10-yr.	4,400 cu. ft.	3,083 cu. ft.	18,841 cu. ft.
100-yr.	6,676 cu. ft.	4,678 cu. ft.	28,586 cu. ft.

* Off-site area is on escarpment and will not be developed.

Tc = 0.0078 L^0.77 / S^0.385

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TABLE 2

KIVA STREET HYDRAULICS

Required Capacity for Street

Off-site - Q peak	=	4.0 cfs
On-site - Q peak	=	17.1 cfs
Total	=	21.1 cfs

Street Capacity - from Mannings Equation - 32-foot wide street with mountable type curb and 4-inch crown

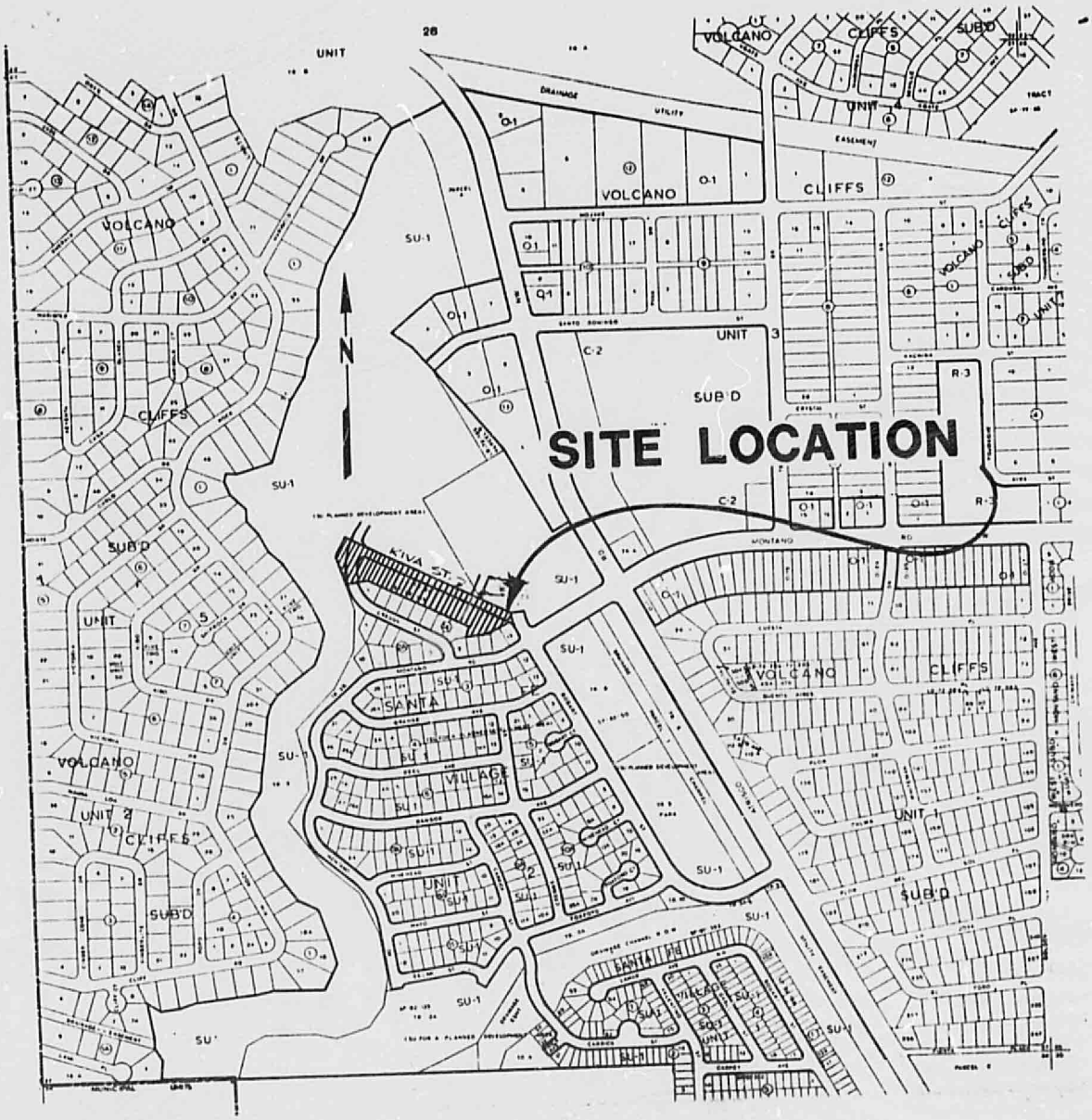
1/2 Street
Depth = 0.33 ft.
Slope = 3 %
n = 0.017
Max. Q = 11.9 cfs
Total Street Capacity = 23.8 cfs

At the east end of Kiva Street, the slope flattens and standard curbs will be used.

Street Capacity - from DPM Plate 22.3, D-1 - 32-foot wide street with standard curb and 4-inch crown

1/2 Street
Depth = .67
Slope = 0.6 %
Q = 25 cfs
Total Street Capacity = 50 cfs

25×10



LOCATION MAP **FIGURE 1**

25×

0000 0000 M38

FLOOD PLAIN MAP **FIGURE 4**

25×10

0000 0000 1739

THIS MICROIMAGE IS THE BEST POSSIBLE REPRODUCTION DUE TO THE POOR QUALITY OF THE ORIGINAL DOCUMENT.

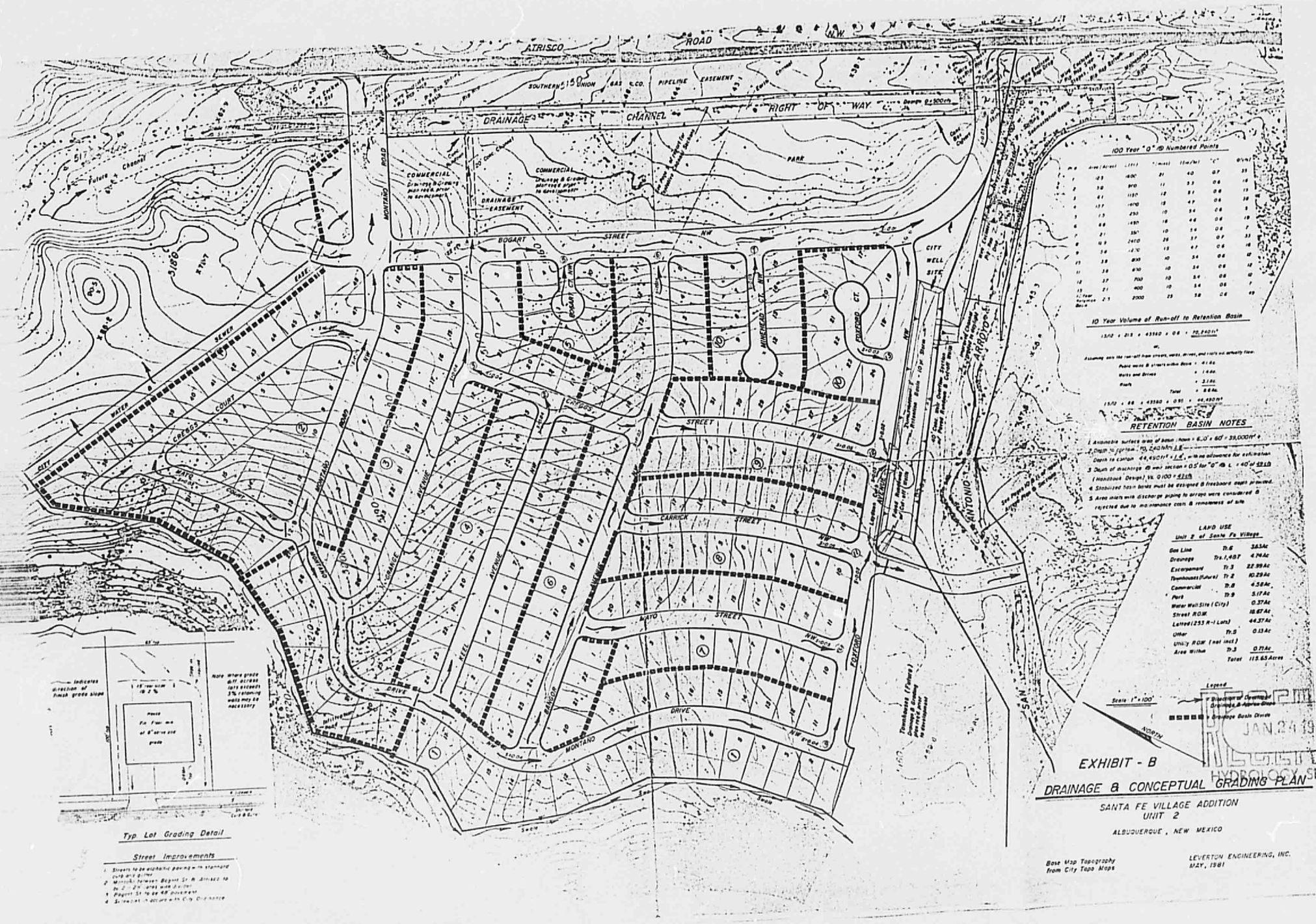
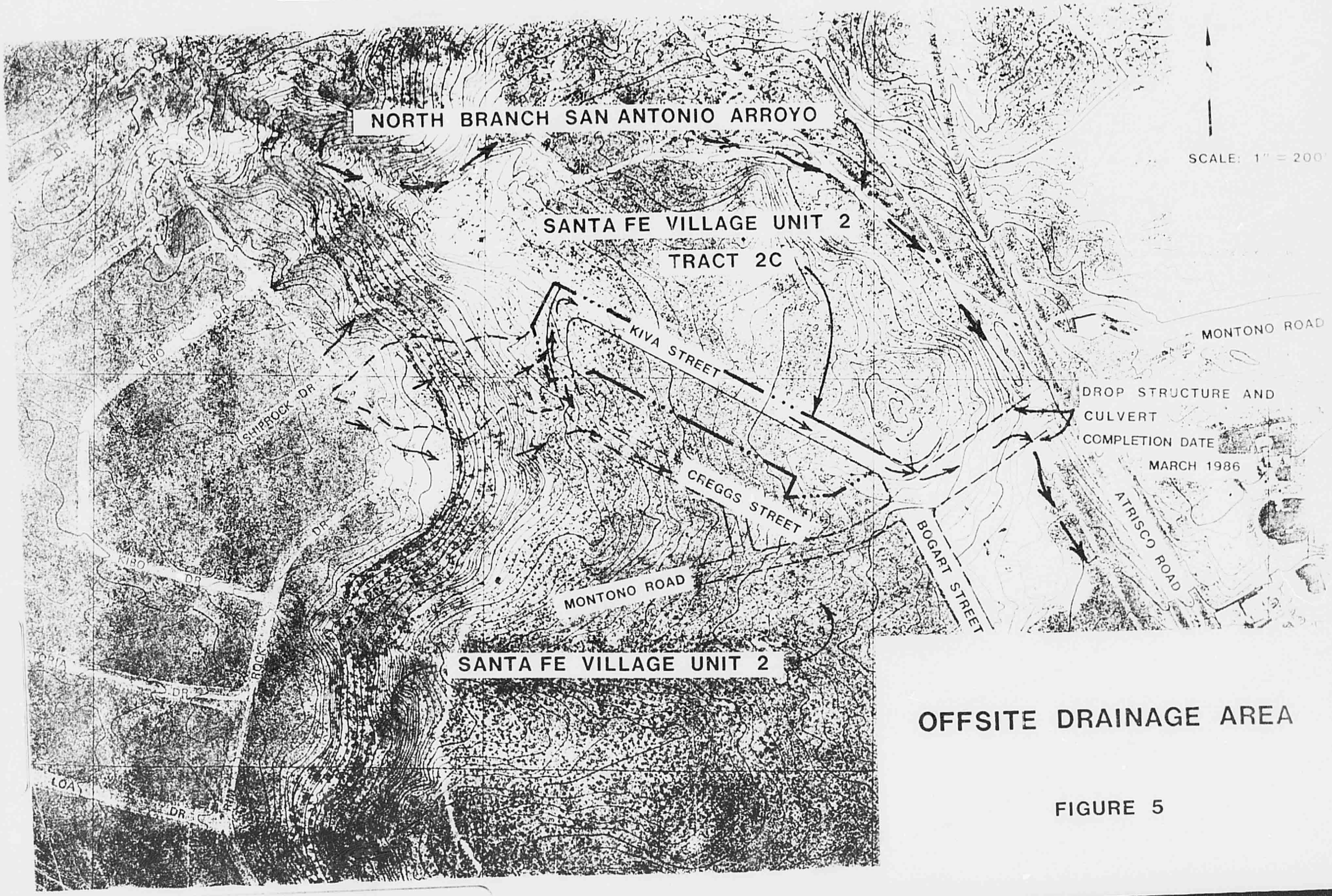


FIGURE 3

25×10 32×10 25×10

0000 0000 1740



OFFSITE DRAINAGE AREA

FIGURE 5

0000 0000 1191

PLANS/PLATS ON FILE

FILE DESC: E10/D2C

PLANS/PLATS 4

25×10

0000 0000 PAGE

25×10