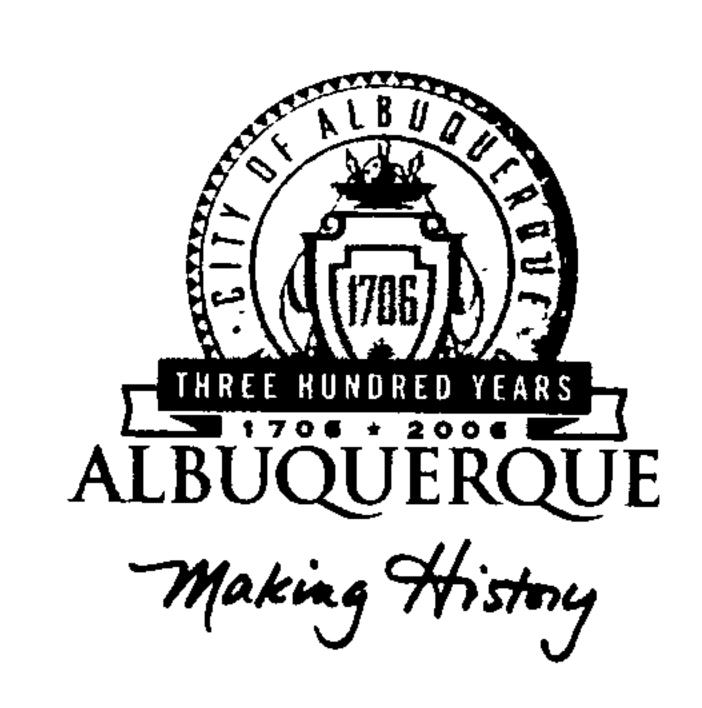
CITY OF ALBUQUERQUE



March 30, 2005

Mr. Ralph Montoya, P.E.

EMBERCORP CONSULTING ENGINEERS

10428 Crosscut Drive NW

Albuquerque, NM 87114

Re: NEUMARK IRRIGATION SUPPLIES ADDITION

811 Rankin Road NE

Approval of Certificate of Occupancy (C.O.)

Engineer's Stamp dated 12/15/2004 (G-15/D63)

Certification dated 03/29/2005

P.O. Box 1293 Dear Ralph:

Based upon the information provided in your submittal received 03/30/2005, the above referenced certification is approved for release of Permanent Certificate of Occupancy by Hydrology.

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

New Mexico 87103

www.cabq.gov

Albuquerque

Sincerely,

Arlene V. Portillo

Plan Checker, Planning Dept. - Hydrology

Development and Building Services

arlene V. Hortillo

C: Phyllis Villanueva File

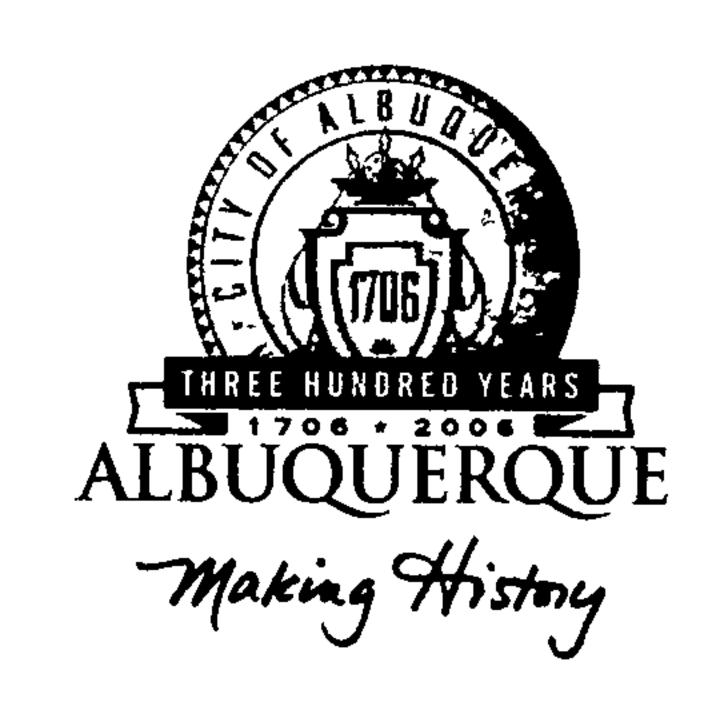
DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV. 1/28/2003rd)

PROJECT TITLE: Neumark Irrischer	ZONE MAP/DRG. FILE #: G-15/5/63 WORK ORDER#:
LEGAL DESCRIPTION: LUT 12 Block 1 CITY ADDRESS: 811 Rank in 121. Albusing	Comun Industrial District.
ENGINEERING FIRM: Embercarp ADDRESS: 10428 Crossonf Dr. NW CITY, STATE: HIDIGINGUS NIN 87114	CONTACT: Relph Muntage, P.E. C. PHONE: 739-7973
OWNER:	ZIP CODE:CONTACT:
ADDRESS:CITY, STATE:	PHONE: ZIP CODE:
ARCHITECT:ADDRESS:	CONTACT: PHONE:
CITY, STATE:	ZIP CODE: CONTACT:
ADDRESSCITY, STATE:	PHONE:
CONTRACTOR: Da Sul Construis for ADDRESS:	CONTACT: PHONE:
CITY, STATE:	ZIP CODE: CHECK TYPE OF APPROVAL SOUGHT:
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DATE SUBMITTED:BY:	Mr. OGY SI
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(5) acres. 3. Drainage Report : Required for subdivisions containing	

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

CITY OF ALBUQUERQUE



January 12, 2005

Ralph Montoya, P.E. Embercorp Consulting Engineers 10428 Crosscut Dr. NW Albuquerque, NM 87114

Re: Neumark Irrigation Supplies Building Addition, 811 Rankin Road NE, Grading and Drainage Plan

Engineer's Stamp dated 12-15-04 (G15-D63)

Dear Mr. Montoya,

P.O. Box 1293

Based upon the information provided in your submittal received 1-11-04, the above referenced plan is approved for Building Permit. Please attach a copy of this approved plan to the construction sets prior to sign-off by Hydrology. Prior to Certificate of Occupancy release, Engineer Certification per the DPM checklist will be required.

Albuquerque

If you have any questions, you can contact me at 924-3981.

New Mexico 87103

www.cabq.gov

15

Sincerely,

Kristal D. Metro

Engineering Associate, Planning Dept. Development and Building Services

C: File

Check this plan: should have a water harvesting pond and a pond overflow detail

Kr.4al metro

G-15/063

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV. 1/28/2003rd)

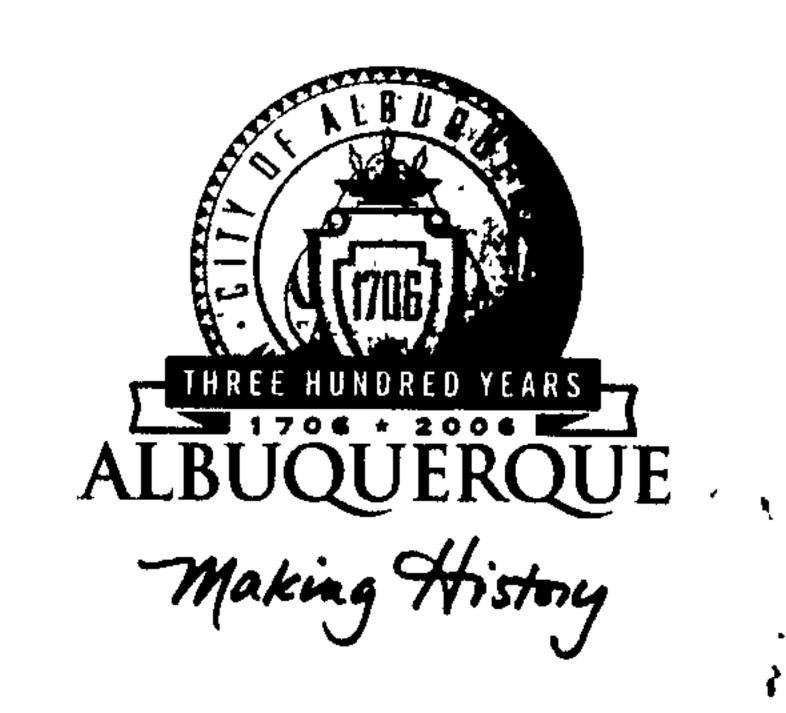
PROJECT TITLE: Neumak Irrigation Supplies EPC#:	ZONE MAP/DRG. FILE #: <u>らっ/5~2</u> WORK ORDER#:
LEGAL DESCRIPTION: Let 12, B/k / Coman CITY ADDRESS: 8/1 Rankin Rd NE, Albu	n Industrial Dist.
ENGINEERING FIRM: Embercorp, L.L.C. ADDRESS: 10428 Crosscut Dr. NW	CONTACT: 22/ph Montoga PHONE: 239-7973
OWNER: STATE: Albajanga, NM OWNER: Sose Batista ADDRESS: 811 Rankin Rd. NF	ZIP CODE: <u>87119</u> CONTACT: <u>345-7847</u> PHONE:
CITY, STATE: Alg. Non &	ZIP CODE: 87/07 CONTACT:
ADDRESS:CITY, STATE:	PHONE: ZIP CODE:
SURVEYOR: ADDRESS	CONTACT:PHONE:
CITY, STATE: CONTRACTOR: Da Sa / Construction ADDRESS: B15 Rankin Rd. NE CITY, STATE: Abar, Nm	ZIP CODE:
CHECK TYPE OF SUBMITTAL:	CHECK TYPE OF APPROVAL SOUGHT:
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#Resubmital	
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DATE SUBMITTED: /// 05 BY:	1/1/1/2/2/2/2/2/2/2/2/2/2/2/2/2/2/2/2/2
Requests for approvals of Site Development Plans and/or Sub submittal. The particular nature, location and scope of the propose One or more of the following levels of submittal may be required ba 1. Conceptual Grading and Drainage Plan: Required for (5) acres and Sector Plans.	ed development defines the degree of drainage detail. sed on the following:

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.

CITY OF ALBUQUERQUE



January 6, 2005

Ralph Montoya, P.E. Embercorp Consulting Engineers 10428 Crosscut Dr. NW Albuquerque, NM 87114

Re: Neumark Irrigation Supplies Building Addition, 811 Rankin Road NE, Grading and Drainage Plan

Engineer's Stamp dated 12-15-04 (G15-D63)

Dear Mr. Montoya,

Based upon the information provided in your submittal received 12-15-04, the above referenced plan cannot be approved for Building Permit until the following comments are addressed:

P.O. Box 1293

- 1. Direct all roof flows to the water harvesting pond.
- 2. Show which areas are paved and which are not.
- Albuquerque
- 3. Provide an overflow structure for the pond.
- 4. Show a detail of the pond overflow structure.

New Mexico 87103

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

www.cabq.gov

Bradley L. Bingham, PE

Sincerely,

Principal Engineer, Planning Dept.

Development and Building Services

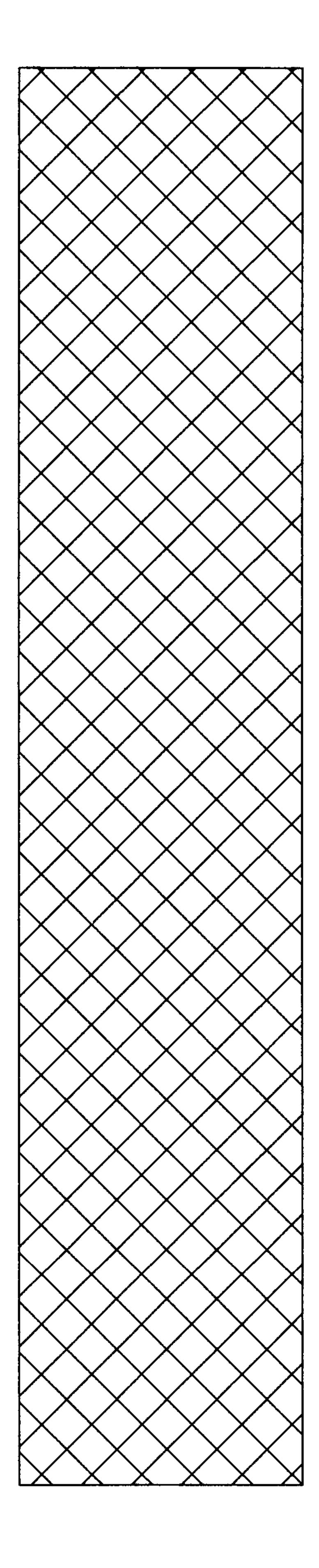
C: File

DRAINAGE AND TRANSPORTATION (REV. 1/28/200	ON INFORMATION SHEET G-15/D63
PROJECT TITLE: Neumark Grading & Drainge	- · · · ·
LEGAL DESCRIPTION: Lot 12, Block 1, Com CITY ADDRESS: 811 RUNKIN Rd. NE, Albugue	an Industrial District Tour, NM 87107
ENGINEERING FIRM: EMBERCORP, LLC ADDRESS: 1042B Crosscut Dr. NW CITY, STATE: Albugungu, NM	CONTACT: PAIPH Monton, P.E. PHONE: 505.239.7973 ZIP CODE: 87/14
OWNER: Jose Batista ADDRESS: 81/ Rankin Rd. NE CITY, STATE: Albuquen, NM	CONTACT: PHONE: ZIP CODE: 87/07
ARCHITECT: N/A ADDRESS:	CONTACT:PHONE:
CITY, STATE:	ZIP CODE: CONTACT: PHONE:
CITY, STATE: CONTRACTOR: Darsa Construction, Inc. ADDRESS: 815 Rankin Rd NB:	ZIP CODE:
CITY, STATE: Albuque, NM CHECK TYPE OF SUBMITTAL:	ZIP CODE: 8707 CHECK TYPE OF APPROVAL SOUGHT:
DRAINAGE REPORT DRAINAGE PLAN 1st SUBMITTAL, REQUIRES TCL or equal DRAINAGE PLAN RESUBMITTAL CONCEPTUAL GRADING & DRAINAGE PLAN GRADING PLAN EROSION CONTROL PLAN	SIA / FINANCIAL 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
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2. Drainage Plans : Required for building permits, grading (5) acres.	permits, paving permits and site plans less than five

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

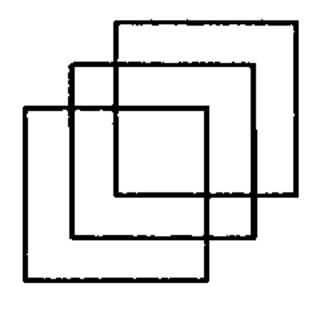
more.

Exists flows that run to adjunct lot draino directed to the pond A Exists Show area w/no pawing "Water Hawest Pond!" not retention pord) Swall runout from sond Show detait of pond overflow?



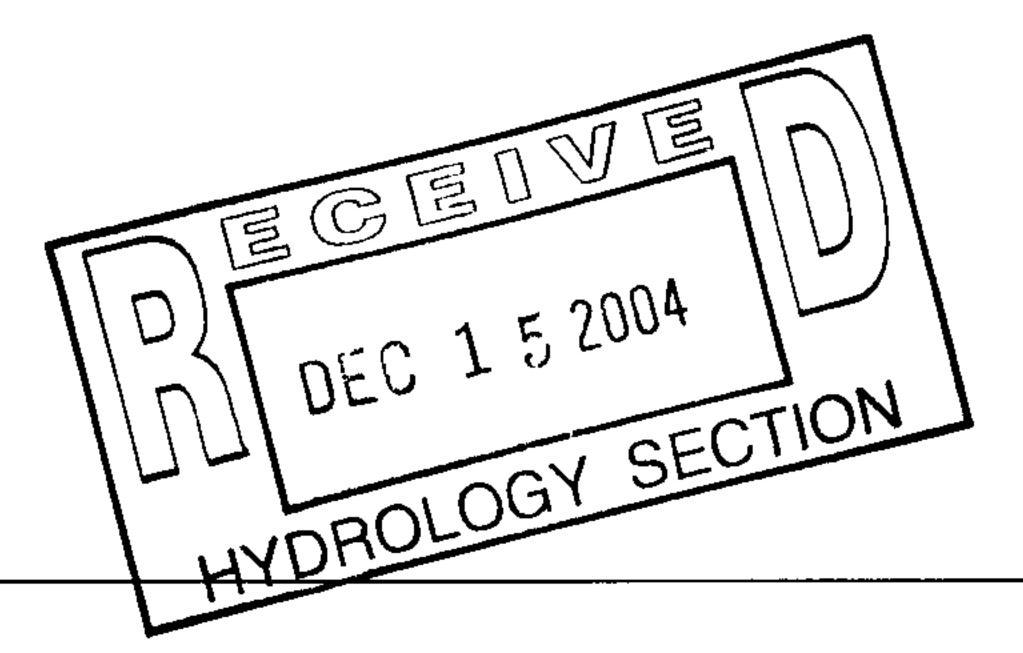
DRAINAGE ANALYSIS FOR NEUMARK IRRIGATION SUPPLIES BUILDING ADDITION

NOVEMBER 2004



EMBERCORP, L.L.C.

CONSULTING ENGINEERS
10428 Crosscut Drive NW
Albuquerque, New Mexico 87114
(505) 239-7973



DRAINAGE ANALYSIS FOR NEUMARK IRRIGATION SUPPLIES BUILDING ADDITION

November 2004

Prepared for:
Neumark Irrigation Supplies
811 Rankin Rd. NE
Albuquerque, NM 87107

DarSal Construction Co., Inc. 815 Rankin Rd. NE Albuquerque, NM 87107

Prepared by: EMBERCORP, L.L.C. 10428 Crosscut Dr. NW Albuquerque, NM 87114

DRAINAGE ANALYSIS **FOR** NEUMARK IRRIGATION SUPPLIES **BUILDING ADDITION**

November 2004

I, Ralph M. Montoya do hereby certify that this report was prepared by me or under my direction and that I am a duly registered Professional Engineer under the laws of the State of New Mexico.

TABLE OF CONTENTS

Introduction	Page 1
Scope	1, 2
Hydrology	2
Summary	3

LIST OF EXHIBITS

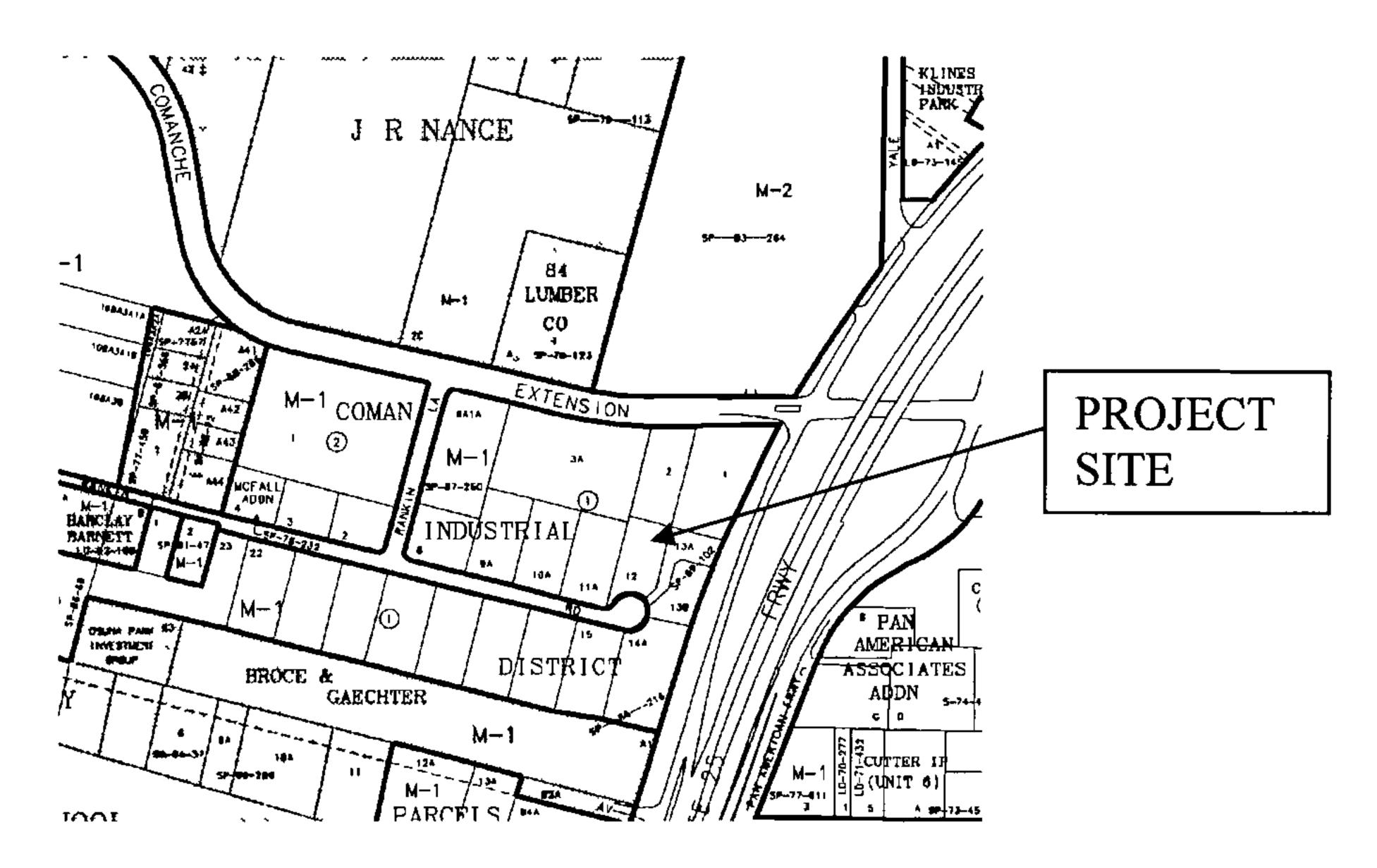
Exhibit 1 – FEMA Firmette (Map No. 35001C0332E)

Exhibit 2 – Grading and Drainage Plan

Exhibit 3 - Zone Atlas Page

INTRODUCTION

Neumark Irrigation Supplies (NIS) is seeking a building permit to expand their existing facility by approximately 3,000 square feet. This addition will serve as a storage area for pipe, valve boxes and miscellaneous supplies. NIS sits on a lot located within the limits of the City of Albuquerque, New Mexico. It lies west of Interstate 25 and south of Comanche Boulevard NE off Rankin Road NE as shown on the following map.



It is identified by legal description: Lot 12, Block 1, of Coman Industrial District. The lot is currently developed and is 0.86 acres in size. Some of the existing items on this lot include a metal building and various surface treatments consisting of asphalt, concrete sidewalks and gravel. Vegetation is limited to landscaped areas near the entrance of the property. The lot is extremely flat with slopes ranging from zero to 0.7 percent. This lot is not affected by offsite flows. However, a portion of the northwest quarter of the lot drains westerly to the adjacent lot (Lot 11, Block 1, of Coman Industrial District). This is the historic pattern and an existing drainage pond is in place to accept this flow. Please note that Lot 11 is currently being leased by NIS and is under contract to be purchased in the near future.

SCOPE

The purpose of this report is to determine the peak discharge generated by the lot as it sits today and the peak discharge generated by the lot following construction of the building addition. The report will then discuss how the difference in peak discharge will be managed.

Our research and coordination efforts with staff from the City of Albuquerque indicated that there was little history regarding this lot. Drainage master plans or relevant studies were not available for this area. Therefore, the methodology used in the following hydrology analysis assumed the existing conditions to be those that exist today.

At present, the site does not lie within or near a FEMA (Federal Emergency Management Agency) Floodplain. See Exhibit 1

HYDROLOGY

The onsite hydrologic analysis was completed using the methodology outlined in Section 22.2 of the City of Albuquerque Development Process Manual (DPM). As discussed earlier, it is assumed that the allowable discharge will be limited to the amount of discharge that currently exists. The tables below summarize the findings of the peak discharge rate and volumetric runoff for both the existing condition and the post-construction condition.

Table 1: Existing Condition:

Design Storm: 100-year, 6-hour

Precipitation Zone 2 – Between the Rio Grande and San Mateo Land Treatments (Acres): A (0); B (0.03); C (0.13); D (0.70) Peak Discharge (cfs/ac): A (1.56); B (2.28); C (3.14); D (4.70) Excess Precipitation, E (in): A (0.53); B (0.78); C (1.13); D (2.12)

Weighted E = 1.92 in

Time of concentration = 12 min

Peak Discharge Q = 0.03(2.28) + 0.13(3.14) + 0.70(4.70) = 3.77 cfs

Peak Volume V = (1.92 * 0.86) / 12 = 0.137 ac-ft

Table 2: Post-Construction Condition:

Design Storm: 100-year, 6-hour

Precipitation Zone 2 – Between the Rio Grande and San Mateo Land Treatments (Acres): A (0); B (0.03); C (0.09); D (0.74) Peak Discharge (cfs/ac): A (1.56); B (2.28); C (3.14); D (4.70) Excess Precipitation (in): A (0.53); B (0.78); C (1.13); D (2.12)

Weighted E = 1.97 in

Time of concentration = 12 min

Peak Discharge Q = 0.03(2.28) + 0.09(3.14) + 0.74(4.70) = 3.83 cfs

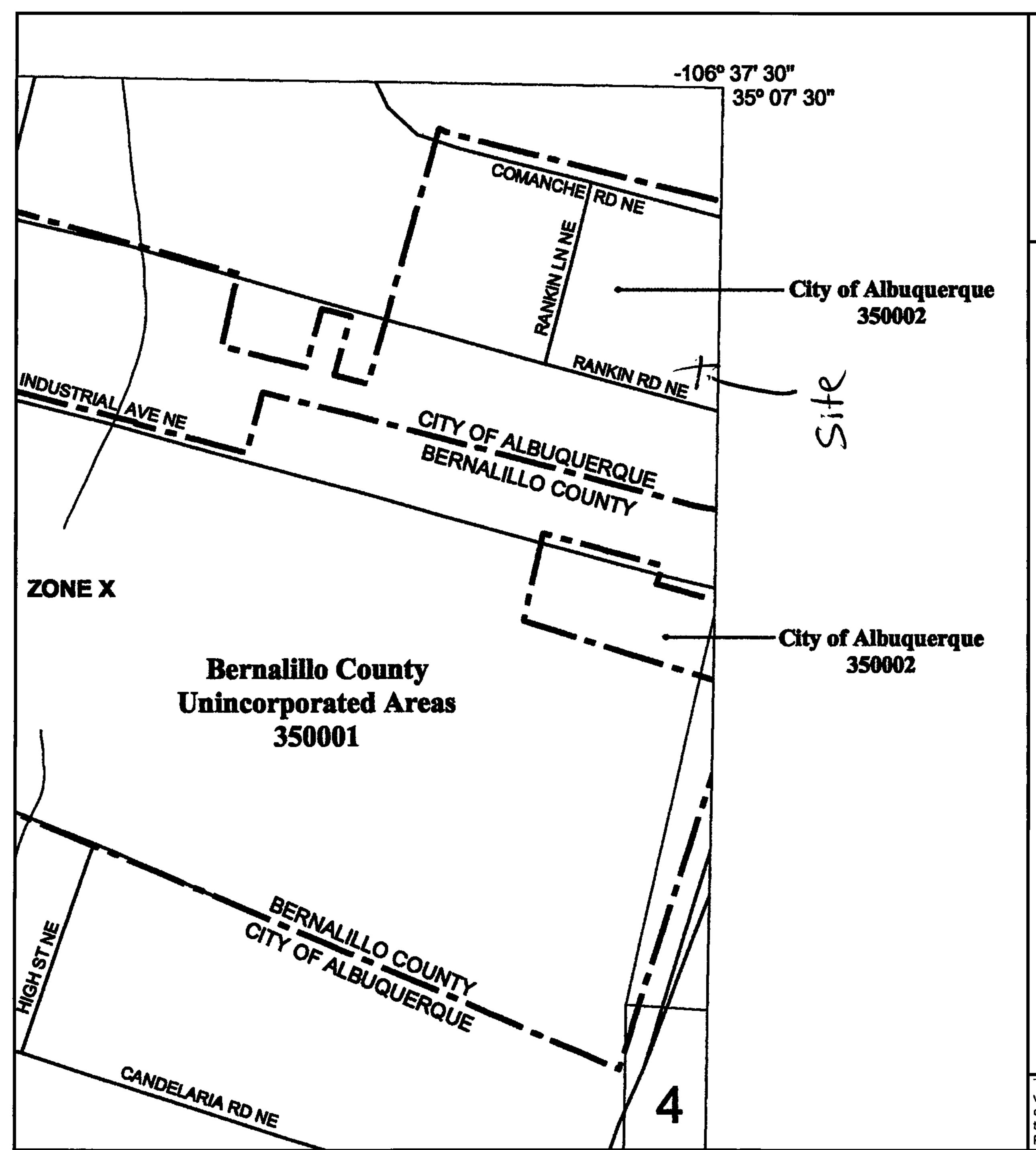
Peak Volume V = (1.97 * 0.86) / 12 = 0.141 ac-ft

The increase in peak discharge and peak volume due to construction is minimal. These values are 0.06 cfs and 0.004 ac-ft respectively. This increase will be mitigated by the use of a proposed retention pond. The pond will be sized to accommodate twice this volume amount (0.008 ac-ft or 349 cf) and placed just to the north of the proposed building addition. This mitigation scheme is illustrated in the grading and drainage plan. See Exhibit 2.

SUMMARY

The analysis indicates that the proposed improvements shown on the grading and drainage plan (Exhibit 2) are adequate to handle the peak discharge and peak volume generated by the post-construction condition.

EXHIBITS



MAP SCALE 1" = 500'

250 0 500 1000 FEET

PANEL 0332E

FIRM

FLOOD INSURANCE RATE MAP

BERNALILLO COUNTY,
NEW MEXICO
AND INCORPORATED AREAS

PANEL 332 OF 825

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY NUMBER PANEL SUFFIX
ALBUQUERQUE, CITY OF 350002 0332 E
BERNALILLO COUNTY 350001 0332 E

Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.

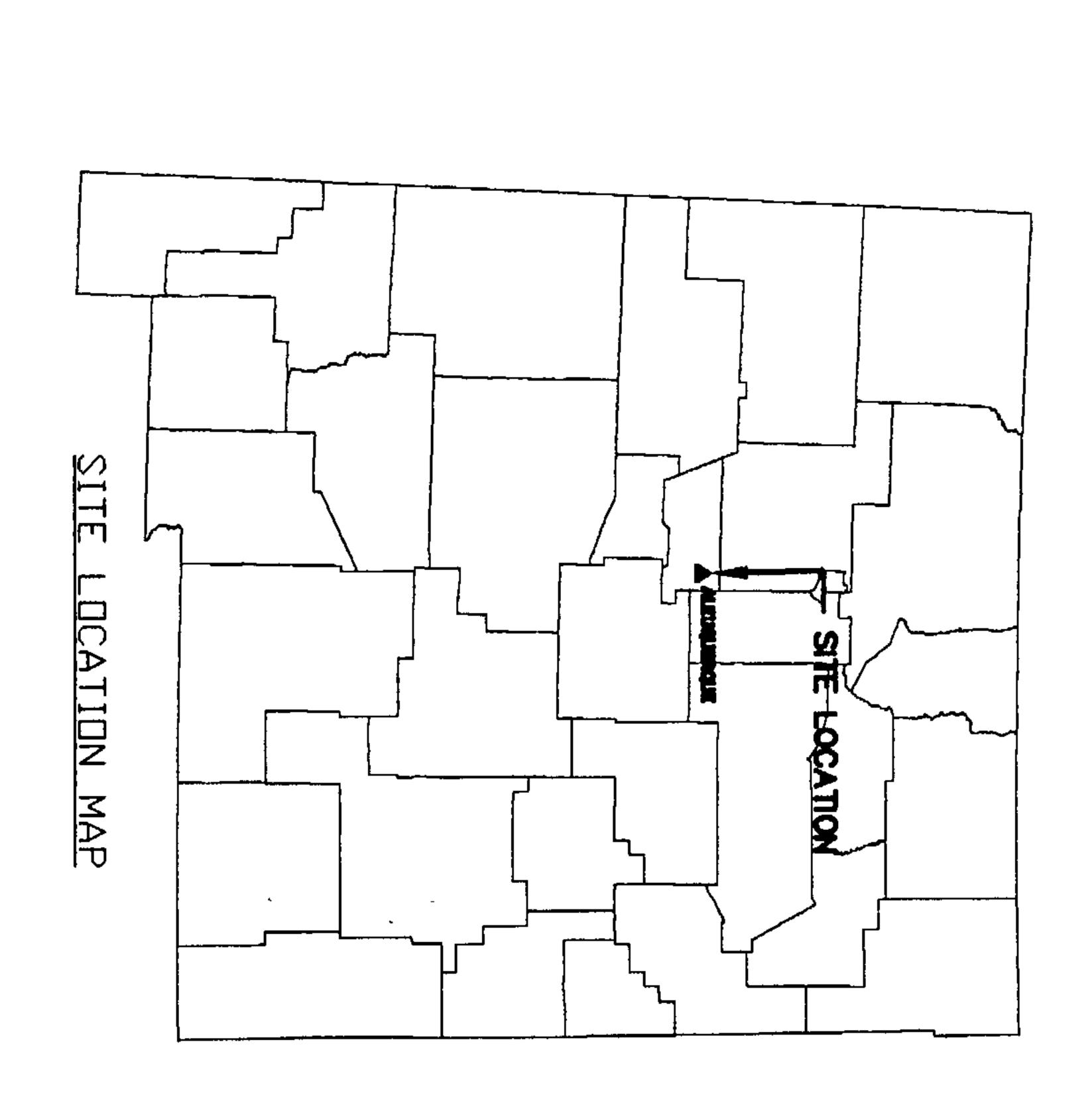


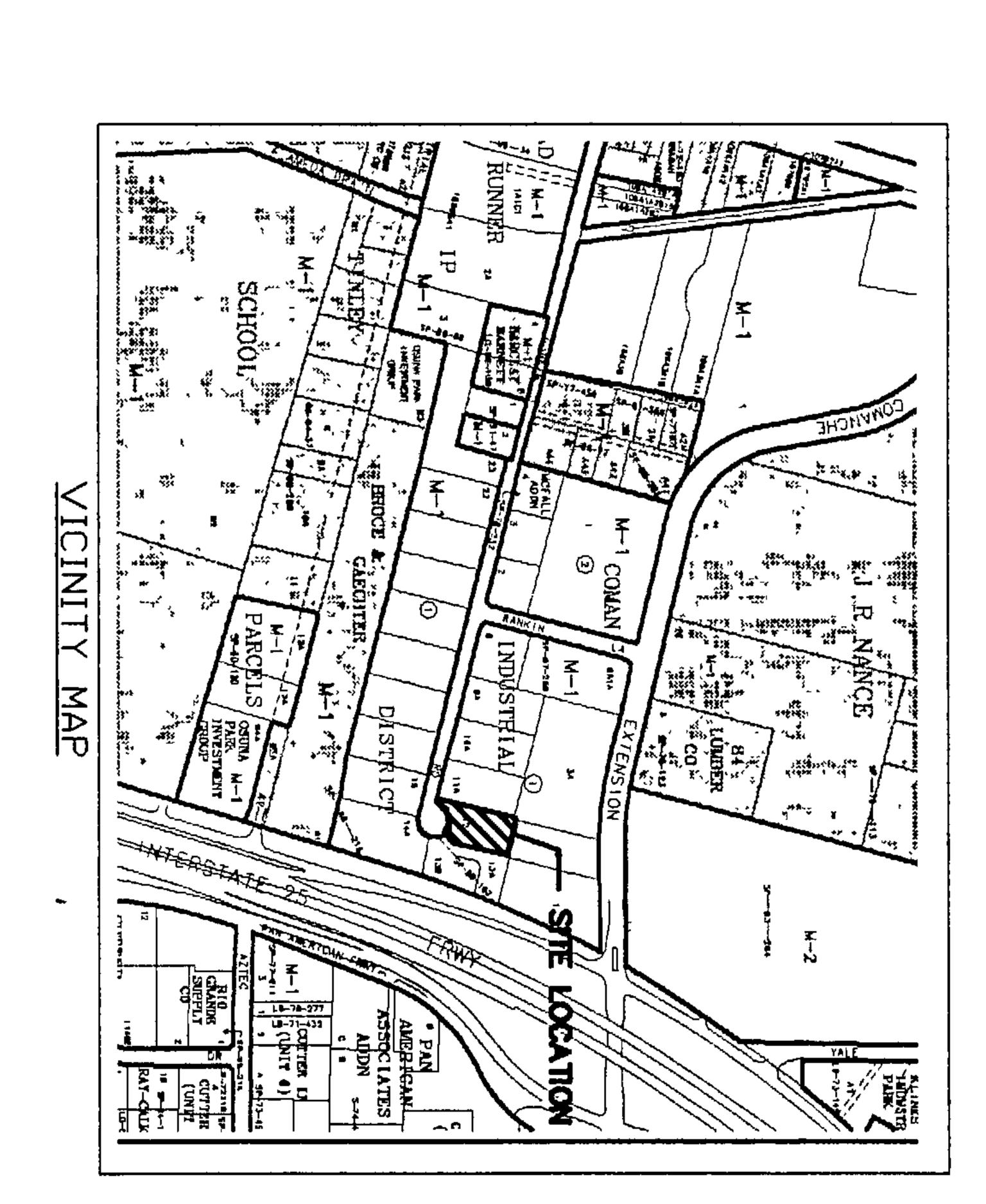
MAP NUMBER 35001C0332E MAP REVISED NOVEMBER 19, 2003

Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov

GRADING AND DRATE





Neumark Irrigation Supplies — Bldg. Addition Albuquerque, New Mexico 04-001

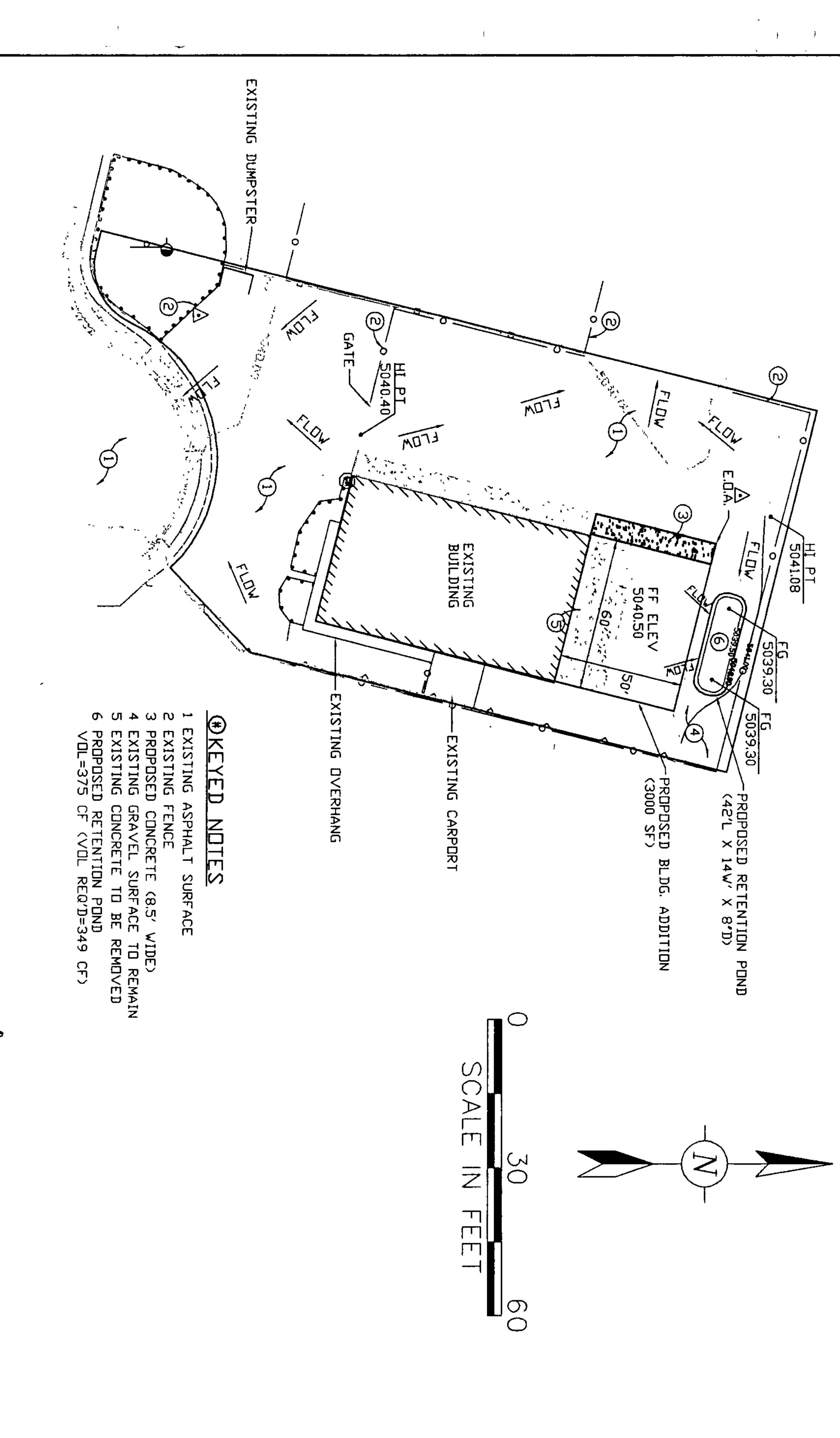
DRAMING NO.: COVER SHEET

<u>EMBERCORP</u> CONSULTING ENGINEERS
10428 Crosscut Drive NW
Albuquerque, New Mexico 87114
(505) 239-7973

DESIGNED BY: RMM DRAWN BY: RMM

APPROVED BY: RMM DATE: 05-08-03

REV. DATE DRWN CHKD REMARKS REVISIONS



NOTES

A) EUNTRACTUR 505-239-7973) U DISCOVERED IN T JR SHALL PROMPTLY NO OF ANY CONFLICTS NOTIFY ENGINEER (AT

IN SECTI

MPLETED USI 2.2 OF THE C SUMMARIZE

B) THE IMPROVEMENTS AS SHOWN ON THESE PLANS
SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE NEW
MEXICO STANDARD SPECIFICATIONS FOR PUBLIC WORKS,
1987 EDITION, AS PREPARED BY THE NEW MEXICO
CHAPTER, AMERICAN PUBLIC WORKS ASSOCIATION.

Jakara II/UI/OI

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DISCLAIMER/NOTES

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B) SLOPES GREATER THAN 3:1.

C) EROSION CONTROL FOR NON-VEGETATED
STABILIZED SLOPES.

D) STORM RUNOFF OR EROSION RESULTING
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DISPOSAL SITE FOR ALL EXCESS EXCAVATION MATERIAL, UNSUITABLE MATERIAL AND ITEMS DESIGNATED FORE REMOVAL WITHOUT SALVAGE SHALL BE OBTAINED BY THE CONTRACTOR IN COMPLIANCE WITH APPLICABLE ENVIRONMENTAL REGULATIONS AND APPROVED BY THE CONSTRUCTION OBSERVER. ALL COSTS INCURRED IN OBTAINING A DISPOSAL SITE AND HAUL THERETO SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT AND NO SEPERATE MEASUREMENT OR PAYMENT SHALL BE MADE. BURIAL OF DEBRIS SHALL NOT BE ALLOWED WITHIN PROJECT LIMITS.

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PROPERTY

MONUMENTS

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HAZARD AREA.
NOVEMBER 19, GNATED FLOOD
REVISED:

Neumark Irrigation Supplies — Bldg. Addition Albuquerque, New Mexico

DESIGNED BY RMM

EMBERCORP CONSULTING ENGINEERS 10428 Crosscut Drive NW Albuquerque, New Mexico 87114 (505) 239-7973

DATE: 11-04-04

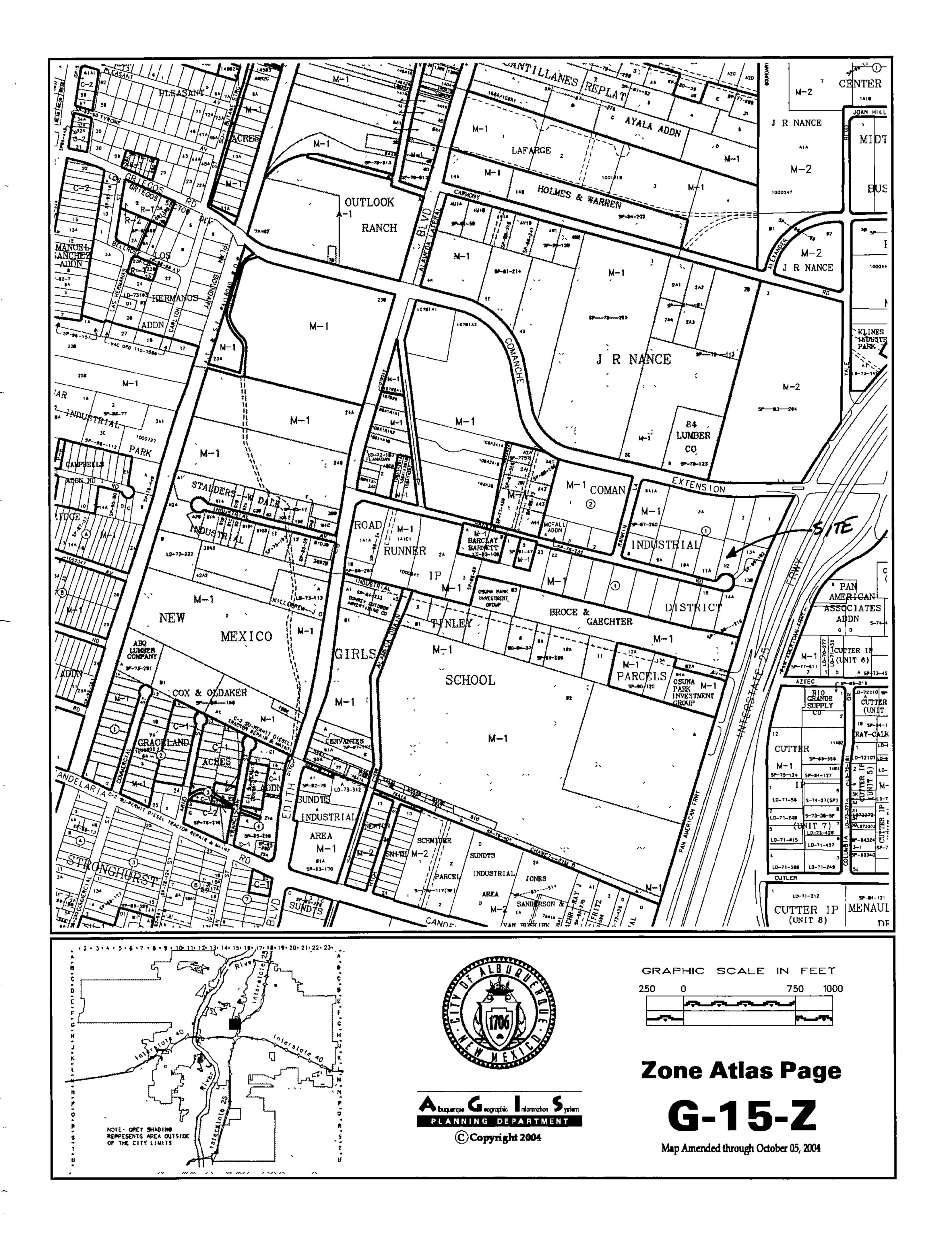
DRAWN BY. RMM

REMARKS REVISIONS

GRADING AND DRAINAGE PLAN

APPROVED BY. RMM

REV DATE DRWN CHKD



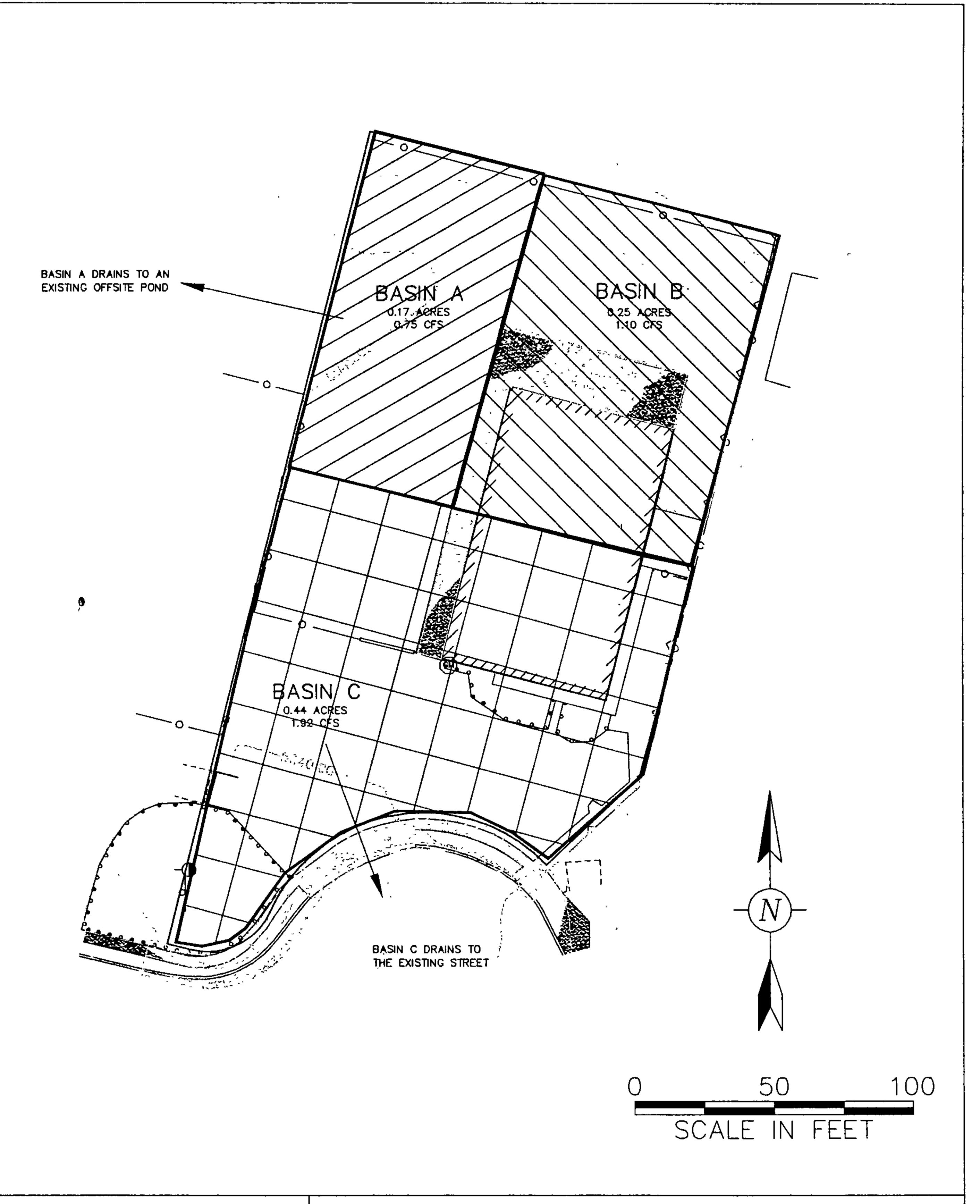
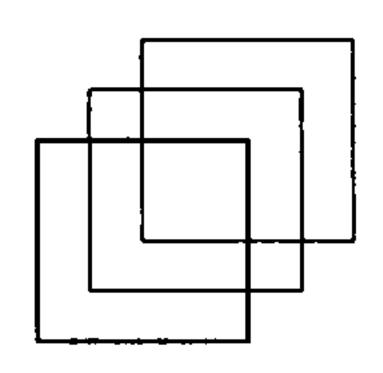


EXHIBIT 4

EXISTING BASINS



EMBERCORP

CONSULTING ENGINEERS
10428 Crosscut Drive NW
Albuquerque, New Mexico 87114
(505) 239-7973