

DRAINAGE INFORMATION SHEET

PROJECT TITLE: Plat of Lands of Irene Blea ZONE ATLAS/DRNG. FILE #: K-12-Z 916
 LEGAL DESCRIPTION: Tracts 23B1, 23B2, 80C, # 22
 CITY ADDRESS: 418 ATRISCO DR SW,
 ENGINEERING FIRM: Gardner, Mason & Assoc CONTACT: Richard Mason
 ADDRESS: 2127 Menaul Blvd PHONE: 881-3846
 OWNER: Irene Blea CONTACT: Fred Sanchez
 ADDRESS: see below PHONE: 884-2036
 ARCHITECT: ↓ CONTACT: _____
 ADDRESS: _____ PHONE: _____
submitted for Fred Sanchez
 SURVEYOR: Albuquerque Surveying Company, Inc CONTACT: Fred Sanchez
 ADDRESS: 2119 Menaul Blvd PHONE: 884-2036
 CONTRACTOR: n/a CONTACT: _____
 ADDRESS: _____ PHONE: _____

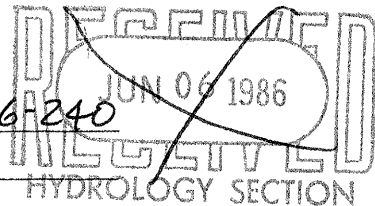
PRE-DESIGN MEETING:

☐ YES
☐ NO
☐ COPY OF CONFERENCE RECAP
 SHEET PROVIDED

DRB NO. 86-240

EPC NO. _____

PROJ. NO. _____

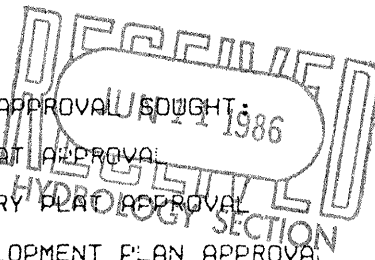


TYPE OF SUBMITTAL:

☒ DRAINAGE REPORT
☐ 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 _____ (SPECIFY)

DATE SUBMITTED: June 11, 1986BY: Dorothy Chavez-Dolan

DRAINAGE REPORT

FOR

LANDS OF IRENE BLEA

DRAINAGE DATA

Basin Area No.II, located South of Gonzales Road S.W. is the only off-site basin which contribute storm runoff to the site during intense storms. Otherwise, contributing flows from this area are insignificant. North of Gonzales Road S.W., storm water either accumulates into ponding areas or drain along paved streets and empties into shallow paved drainage swales on either side of Atrisco Road S.W., which intercepts and conveys run-off further downstream from the site. Please see Exhibit "A".

Presently on-site land is heavily covered with vegetation growth and debris. The site is relatively flat with general drainage in Southwesterly direction.

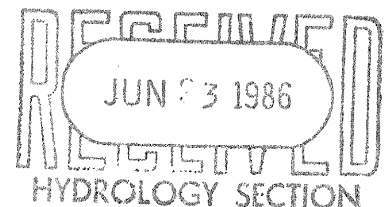
Since the terrain is very flat having hardly any slopes to properly drain the site and there are no existing drainage facilities to adequately serve the additional run-off flows, an on-site retention ponding for anticipated 100 year storms are recommended as each lot is developed.

SEE ATTACHED EXHIBITS "A" FOR DRAWING

1. OFF-SITE SHEET FLOWS FROM BASIN NO.II

Area (A)	=	4.5 Acres
Watershed Length (L)	=	700'
Elevation Difference	=	2.5'
Slope (s)	=	0.004 ft/ft
Time of Concentration (Tc)	=	$0.0078 \frac{L^{0.77}}{S^{0.385}} = 10 \text{ minutes}$
Factor (C)	=	0.45
Rainfall	=	2.2" (plate 22.2 D-1)
Rainfall Intensity (I)	=	4.65 (plate 22.2 D-2)

Flows: $Q = CIA$
 $Q_{100} = .45(4.65)(4.5) = \underline{9.42 \text{ cfs}}$
 $Q_{10} = \underline{6.19 \text{ cfs}}$



2. ON SITE - FLOWS FROM BASIN NO.1

UNDEVELOPED CONDITIONS:

Area (A)	=	3.7 Acres
Watershed Length(L)	=	1000'
Elevation Difference	=	2.5'
Slope(S)	=	0.003ft/ft
Time of Concentration	=	15 minutes
Factor (C)	=	0.45
Rainfall	=	2.2"
Rainfall Intensity (I)	=	3.78

Flows: $Q_{100} = .45 (3.78) (3.7) = \underline{6.30\text{cfs}}$
 $Q_{10} = \underline{4.14\text{cfs}}$

DEVELOPED CONDITIONS

A	=	3.7 Acres
Tc	=	15 minutes
Factor (C)	=	0.90
Rainfall Intensity(I)	=	3.78

Flows: $Q_{100} = (.90) (3.78) (3.7) = \underline{12.59\text{cfs}}$
 $Q_{10} = \underline{8.27\text{cfs}}$

NOTE: Minimum finished floors to be 2 feet above existing ground grades.

SEE ATTACHED EXHIBIT "B" FOR GRADING AND DRAINAGE PLAN

3. FINDINGS

- A. Offsite flows draining into the site are insignificant and contribute little run-off to the site. For sizing of the ponds assume that 60 percent enters the site. *WHY?*

$$\text{Volume} = \left(\frac{2.2 \text{ inch} \times 1 \text{ ft}}{12 \text{ in}} \right) \times \left(3.7 \text{ acres} \times \frac{43,560 \text{ sq.ft.}}{1 \text{ acre}} \right) \times 60\% = 21,562 \text{ C.F.}$$

- B. Onsite ponding requirements should consist of the volume generated by the 100 year storm.

$$\text{Volume} = \left(\frac{2.2 \text{ inch} \times 1 \text{ ft}}{12 \text{ in}} \right) \times \left(4.5 \text{ acres} \times \frac{43,560 \text{ sq.ft.}}{1 \text{ acre}} \right) \times 0.60 = 17,729 \text{ C.F.}$$

$$\text{Total ponding requirement} = 21,562 + 17,729 = 39,291 \text{ C.F.}$$


The ponding requirements for each lot would be as follows.

	Front Pond	Back Pond
Lot 1	No Pond	Presently developed
Lot 2	No Pond	18" x 70' x 25' = 2,625 C.F.
Lot 3	50' x 10' x 6" = 250'CF	12" x 50' x 50' = 2,550 C.F.
Lot 4 thru 15	50' x 10' x 6" = 250'CF	15" x 50' x 42' = 2,550 C.F.

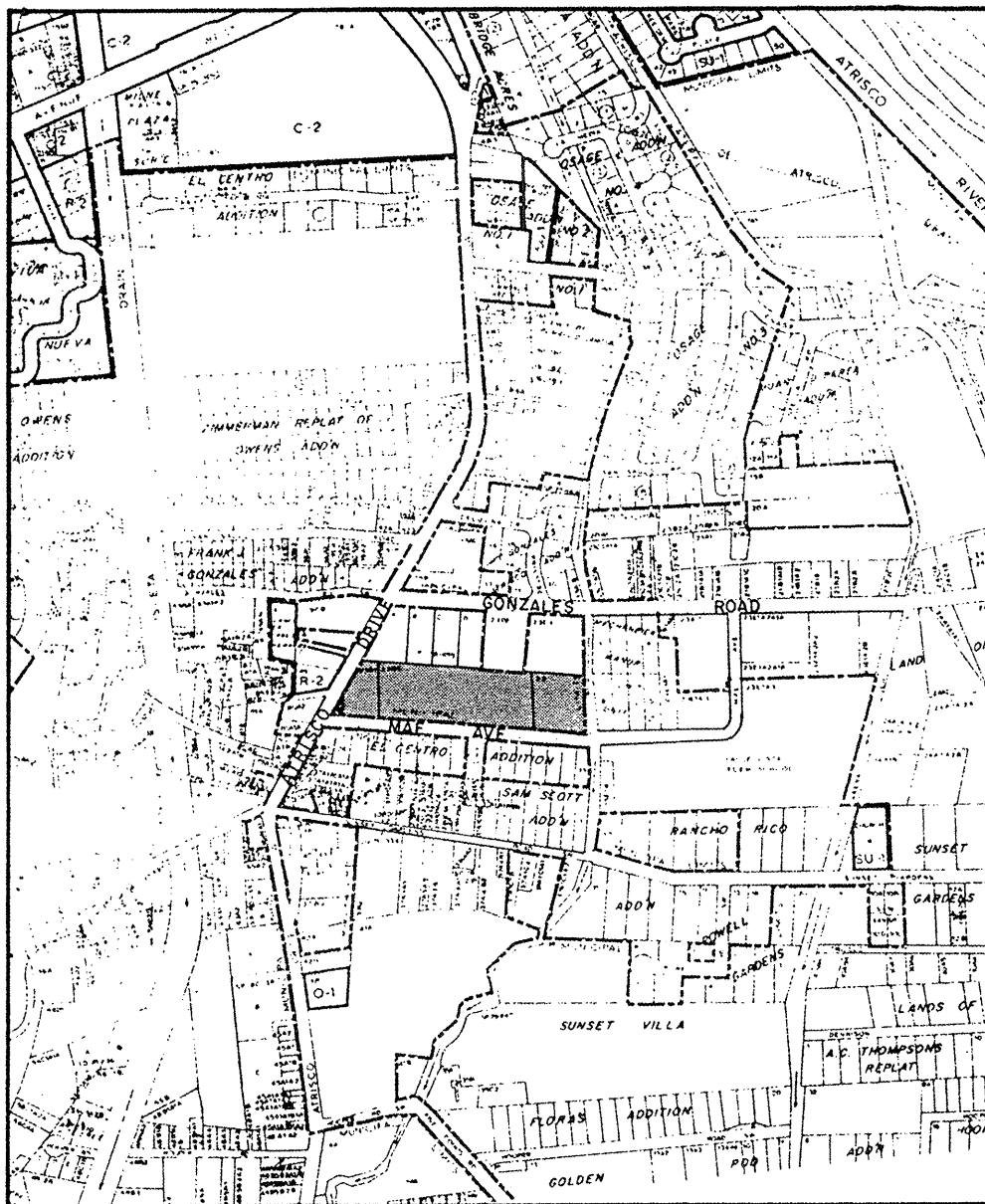
- C. Flood proofing requirements - Finished floors should be at least 2 feet above existing ground. Flood elevation estimated be 5045.00 ft.

- D. All finish floors to be at elevation 5046 ft. or higher.

- E. All pond are to be at least 15 feet from building footings. Footings should be flood proofed.


Richard Mason, P.E.

6/23/86
Date



VICINITY MAP
(CITY ZONE ATLAS K-12-Z)

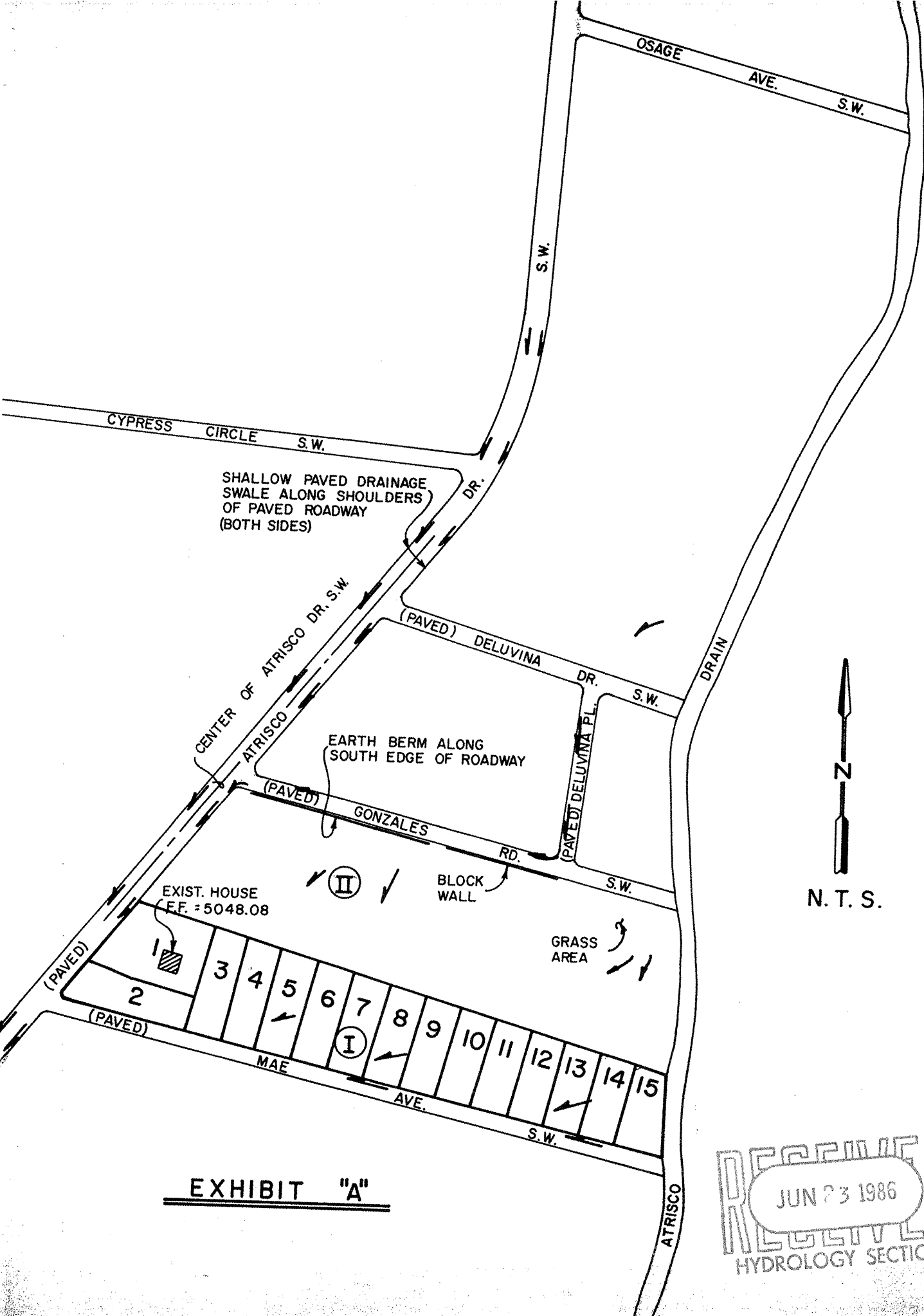


EXHIBIT "A"

RECEIVED
JUN 23 1986
HYDROLOGY SECTION



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

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

FILE COPY

June 23, 1986

Gil Gardner
Gardner, Mason & Associates
2127 Menaul Blvd., NE
Albuquerque, New Mexico 87107

RE: DRAINAGE PLAN FOR LANDS OF IRENE BLEA (K-12/D16)
RECEIVED JUNE 23, 1986

Dear Mr. Gardner:

The above referenced plan, dated June 23, 1986, is approved for Preliminary Plat.

The plat submitted April 10, 1986, to DRB does not show the public drainage easement north of Mae Avenue. Also, required would be the construction and maintenance responsibilities.

Please be advised that any improvements to Mae Avenue will require a resubmittal of the drainage plan.

It appears that the pond volumes are conservative. However, any changes in the volume will require a more detailed submittal of off-site flows and 100 year floodplain elevation.

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

Cordially,

Carlos A. Montoya, P.E.
City/County Floodplain Administrator

CAM/bsj

Gardner, Mason & Associates, Inc.

ENGINEERS & PLANNERS

2127 Menaul Blvd. NE
Albuquerque, N.M. 87107
(505) 881-3846

132 W. Las Cruces Av.
Las Cruces, N.M. 88001
(505) 525-8057

June 23, 1986

Hydrology Section, Public Works
The City of Albuquerque
P. O. Box 1293
Albuquerque, New Mexico 87103

Atten: Mr. Carlos Montoya

Ref: Plat of Land of Irene Blea, (DRB 86-240)

Dear Mr. Montoya:

Attached to this transmittal is the revised Drainage Report prepared by Gardner, Mason and Associates for the above referenced project.

As per our discussions, the additional calculations and findings were incorporated into the report and a drainage plan was prepared. Please do not hesitate in notifying us if you have any questions.

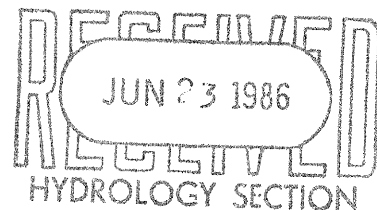
Thank you for your time and consideration in this matter.

Sincerely,

GARDNER, MASON AND ASSOCIATES, INC.


Gilbert D. Gardner, P.E.L.S.

GDG/bjh



DRAINAGE INFORMATION SHEET

PROJECT TITLE: Plat of Lands of Irene Blea ZONE ATLAS/DWG. FILE #: K-12-#D110

LEGAL DESCRIPTION: Tracts 23B1, 23B2, 80C, # 22

CITY ADDRESS: _____

ENGINEERING FIRM: Gardner, Mason & Assoc CONTACT: Richard Mason

ADDRESS: 2127 Menaul Blvd PHONE: 881-3846

OWNER: Irene Blea CONTACT: Fred Sanchez

ADDRESS: see below PHONE: 884-2036

ARCHITECT: ✓ CONTACT: _____

ADDRESS: _____ PHONE: _____

SURVEYOR: submitted for Fred Sanchez CONTACT: Fred Sanchez

ADDRESS: 2119 Menaul Blvd PHONE: 884-2036

CONTRACTOR: n/a CONTACT: _____

ADDRESS: _____ PHONE: _____

DESIGN MEETING: _____

YES _____

NO _____

COPY OF CONFERENCE RECAP SHEET PROVIDED _____

TYPE OF SUBMITTAL:

☒ DRAINAGE REPORT

☐ DRAINAGE PLAN

☐ CONCEPTUAL GRADING & DRAINAGE PLAN

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☐ FINAL PLAT APPROVAL

☐ BUILDING PERMIT APPROVAL

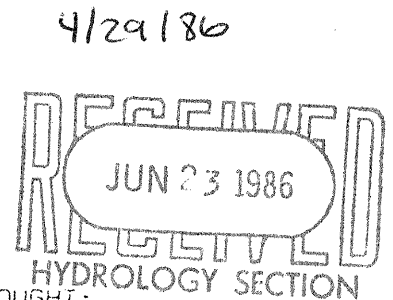
☐ FOUNDATION PERMIT APPROVAL

☐ CERTIFICATE OF OCCUPANCY APPROVAL

☐ ROUGH GRADING PERMIT APPROVAL

☐ GRADING/PAVING PERMIT APPROVAL

☐ OTHER _____ (SPECIFY)



DATE SUBMITTED: June 11, 1986

BY: Dorothy Chair-Dolan

Gardner, Mason & Associates, Inc.

ENGINEERS & PLANNERS

2127 Menaul Blvd. NE
Albuquerque, N.M. 87107
(505) 881-3846

132 W. Las Cruces Av.
Las Cruces, N.M. 88001
(505) 525-8057

June 11, 1986

Hydrology Section, Public Works
The City of Albuquerque
P. O. Box 1293
Albuquerque, New Mexico 87103

ATTEN: Mr. Fred Aquirre

REF: Plat of Land of Irene Blea, (DRB 86-240)

Dear Mr. Aquirre:

Attached to this transmittal is the revised Drainage Report prepared by Gardner, Mason and Associates for the above referenced project.

As per your discussion with Gil Gardner, the additional calculations and findings were incorporated into the report. Please do not hesitate in notifying us if you have any questions.

Thank you for your time and consideration in this matter.

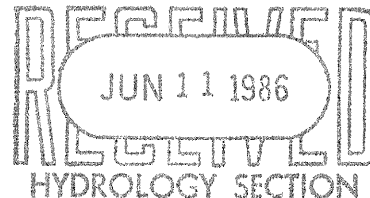
Sincerely,

GARDNER, MASON AND ASSOCIATES, INC.

Dorothy Chavez-Dolan

Dorothy Chavez-Dolan

DCD/bjh





City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

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

June 10, 1986

Richard Mason, PE
Gardner, Mason & Associates, Inc.
2127 Menaul Boulevard NE
Albuquerque, NM 87107

REF: DRAINAGE REPORT FOR LANDS OF IRENE BLEA (K12-D16) RECEIVED 6/5/86

Dear Mr. Mason:

A preliminary review of your submittal for Final Plat approval has shown that the following information is lacking for this Section to begin the review process:

Information Needed

1. Attached you will find a copy of the pre-design recap. These items listed on the recap must be addressed before Hydrology will sign-off for Final Plat approval.

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

Sincerely,

Billy J. Goolsby
for Bernie J. Montoya
Engineering Assistant/Hydrology

BJM:mrk

cc: Fred Sanchez, Albuquerque Surveying Co. In, 2119 Menaul Blvd NE
87107

MUNICIPAL DEVELOPMENT DEPARTMENT

C. Dwayne Sheppard, P.E., City Engineer

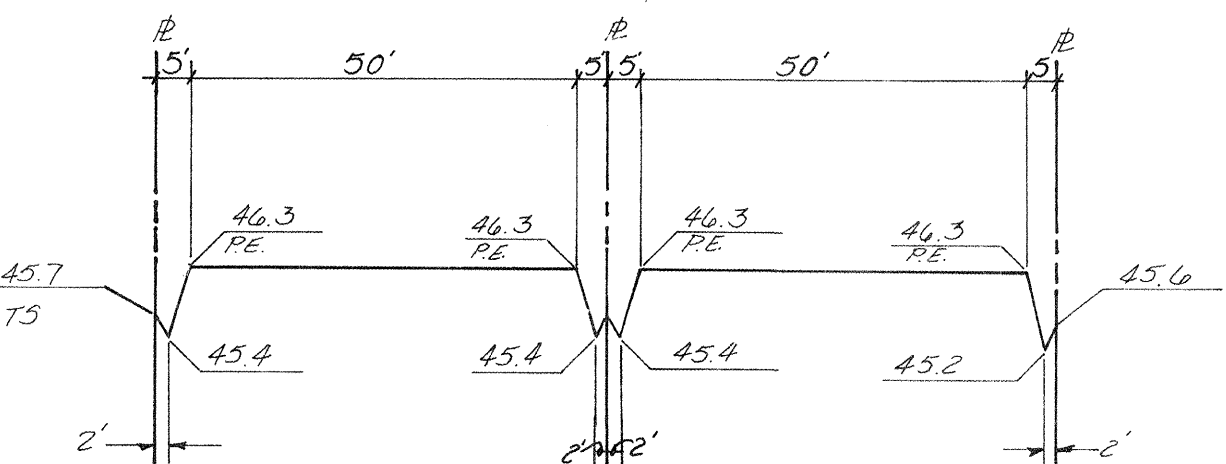
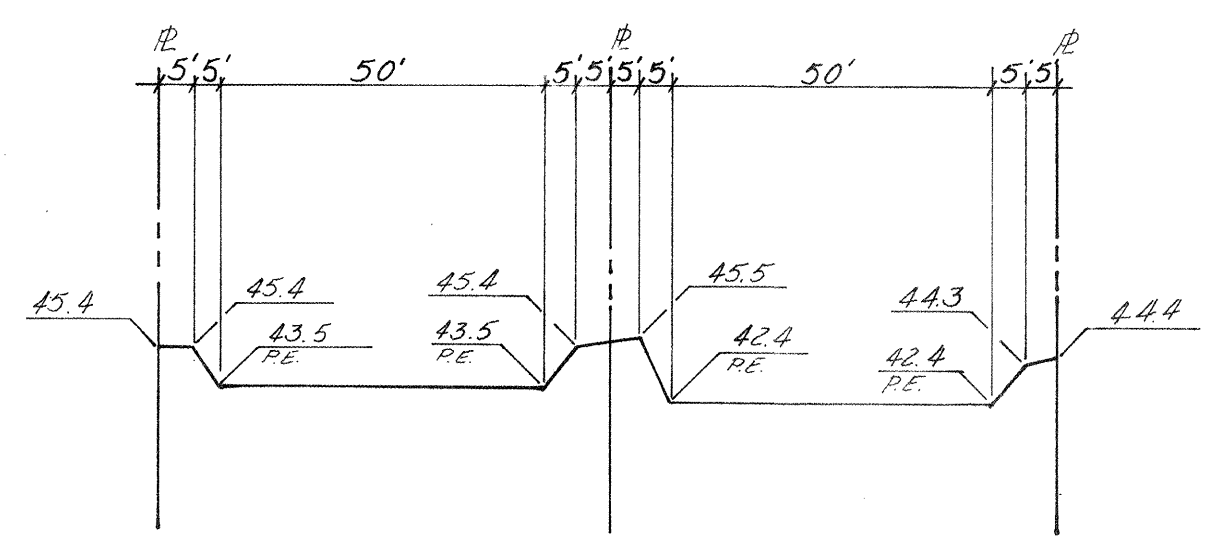
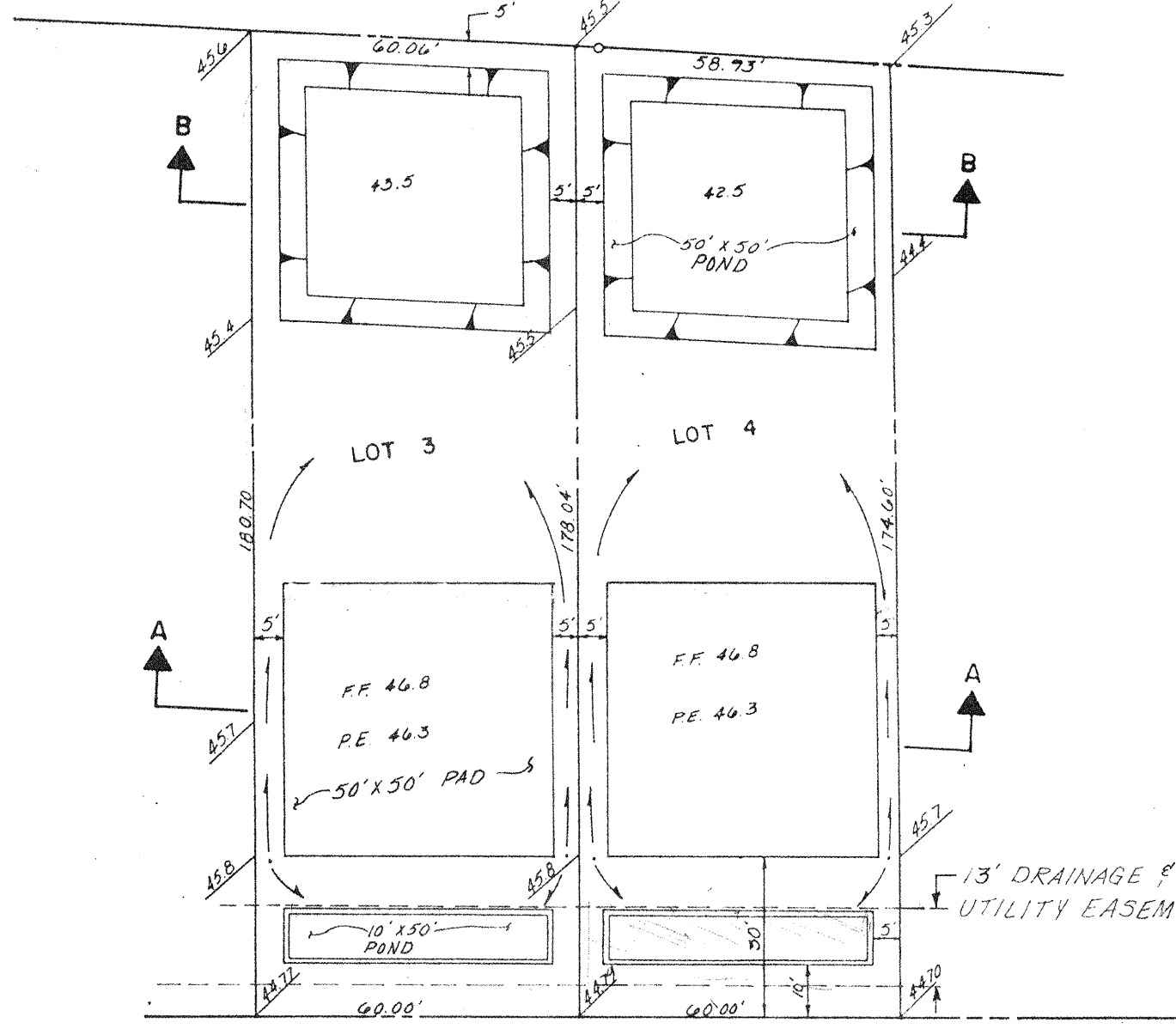
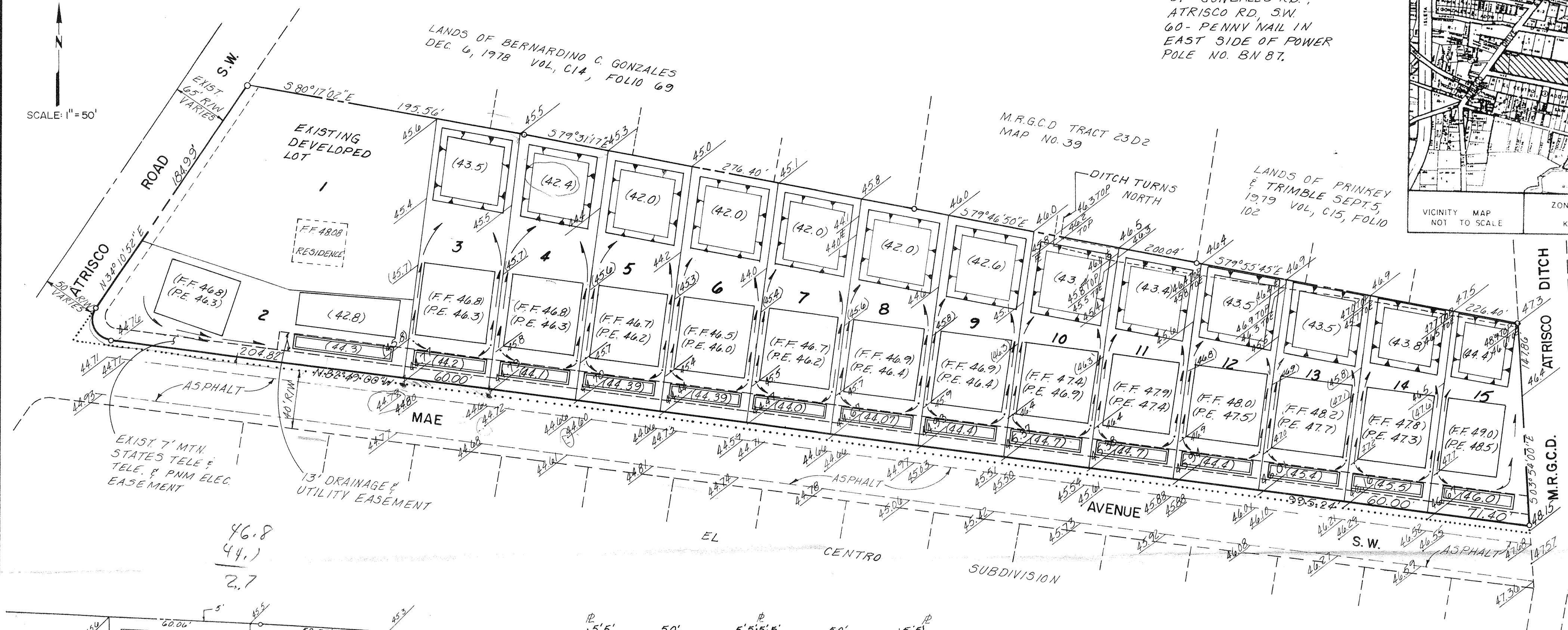
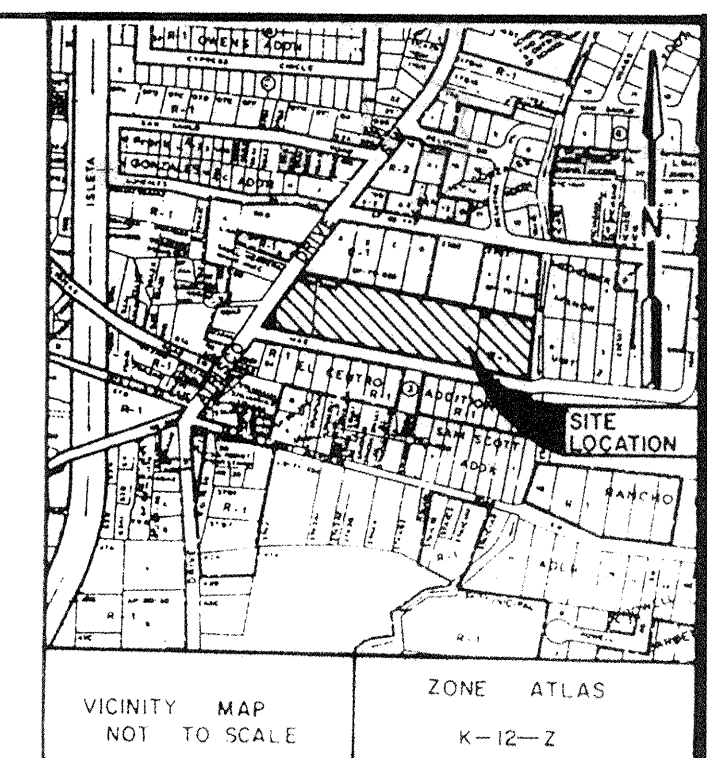
ENGINEERING DIVISION

Telephone (505) 766-7467

SCALE: 1" = 50'

LANDS OF BERNARDINO C. GONZALES
DEC. 6, 1978 VOL. C14, FOLIO 69

BENCH MARK: 11-K12 ELEV 4946.738
NW. OF INTERSECTION
OF GONZALES RD. &
ATRISCO RD., SW.
60- PENNY NAIL IN
EAST SIDE OF POWER
POLE NO. BN 87.



LEGEND

- 44.77 EXIST. GRADE
- (44.77) PROPOSED GRADE
- F.F. FINISHED FLOOR
- P.E. PAD ELEVATION
- FE FLOW LINE
- [Symbol] PONDING AREA (BACK OF LOT)
- [Symbol] PONDING AREA (FRONT OF LOT)

DATE	REVISION	APPROVED BY:
7-22-86	Revise Dwg. to reflect 5' add'l R/W dedicated to the City. Esmt., Pond & Bldg. locations change.	[Signature]

John P. Anderson
6-23-86

TYPICAL LOT GRADING PLAN DETAIL
N.T.S.

SECTION A-A
N.T.S.

SECTION B-B
N.T.S.

PREPARED BY:

**GARDNER
MASON &
ASSOCIATES**

2127 Menaul Blvd. NE
Albuquerque, N.M. 87107
(505) 881-3846

REPLAT
OF
TRACTS 23 B1, 23 B2, 80C, & 22
M.R.G.C.D. PROPERTY MAP NO. 39
(NOW COMPRISING LOTS 1 THRU 15)
LANDS OF IRENE BLEA
ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO
GRADING AND DRAINAGE PLAN

SCALE: 1" = 50'

