

The purpose of this revised drainage management plan is to update the plan to reflect the development of Journal Center since the plan was first approved in 1984. Since that time, Journal Center has been replatted, new streets constructed and new businesses have moved in. All new development has conformed to the 1984 plan and individual development plans have been approved by the City. The drainage concepts and basins remain substantially identical to the 1984 drainage management plan.

The criteria used for the minor re-analysis performed in this updated plan remained identical to that previously used and approved in the original 1984 plan.

The purpose of the plan is to outline drainage patterns, flow rates and facility capacities for the Journal Center Industrial/Commercial Park. The plan also serves to update recommendations made in an October 1980 report entitled *Journal Center Interim Drainage Report* based on current thinking outlined in the Drainage Ordinance and Development Process Manual (DPM).

It is proposed that runoff from sites be allowed to discharge to street rights-of-way or facilities in a free discharge manner. This runoff will be directed to three primary outfalls: the North Pino Arroyo Channel, the Los Angeles River and Los Angeles Blvd. The North Pino Arroyo is concrete lined with grass free board and discharges into the North Division Channel. The Jefferson Street storm drain discharges into the Domingo Baca Arroyo, north of Los Angeles Blvd. Runoff collected in Los Angeles Blvd. discharges into the North Division Channel. The accompanying plan identifies flow directions and the location of the primary outfalls.

- Runoff rates and facility capacities are contained in the tables below. Based on this information, three points should be highlighted:
1. Current runoff criteria yields flow rates less than those used in the 1980 report.
 2. Approximately 112 cfs will be directed to Los Angeles Blvd. during the 100-year storm. 226 cfs is collected in the storm drain system and conveyed to the Dominga Baca Arroyo. The 112 cfs represents a figure less than the undeveloped flow rate from the site prior to its development.

3. Section 8C of the Drainage Ordinance stipulates that the curb flow line depth shall not exceed 0.5 feet during the 10-year storm in arterial street sections. As the values indicate, this criteria is exceeded at several locations along Jefferson Street.

As provided in Section 6H of the Ordinance, a variance to the requirement outlined in No. 3 is requested for the following reasons:

1. Considerable expense has already been applied to the construction of drainage facilities in the area. The Pino Arroyo Channel and Jefferson Street storm sewer represent an investment of approximately 2 million dollars. Design was guided and approved based upon criteria in effect at the time assuming free discharge from all parcels.
2. The total length of street over which the criteria is exceeded is approximately 3000 feet. This represents a relatively short distance compared to the total length of Jefferson Street running through and south from the project.

BASED ON THE INFORMATION PRESENTED IN THIS PLAN, IT IS PROPOSED THAT A FREE DISCHARGE MANAGEMENT APPROACH BE APPROVED FOR ALL PARCELS WITHIN THE PARK, AND THAT A VARIANCE TO SECTION 8C BE GRANTED FOR THE 10-YEAR FLOW CRITERIA IN JEFFERSON STREET.

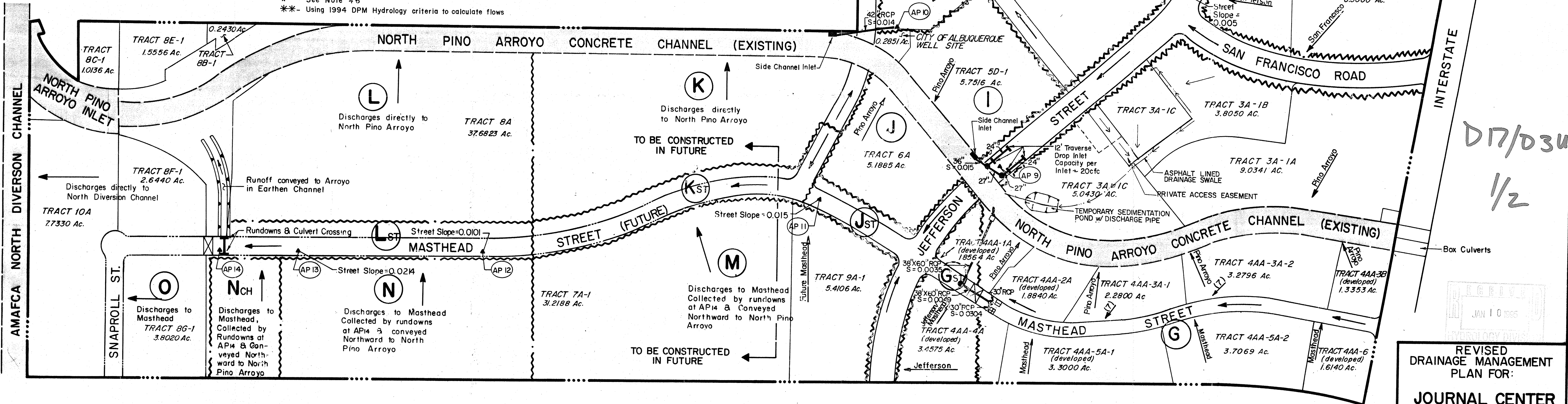
BASIN HYDROLOGY (Developed Conditions)

STREET & STORM SEWER HYDRAULICS

N.A. - Not Applicable
* - See Note #6
**- Using 1994 DPM Hydrology criteria to calculate flows








NOTES

1. Basin Hydrology based on DPM Criteria, Chapter 22 (DPM Edition, 1984).
 - a. Tc- Plate 22.2 13-1 (10 minute minimum)
 - b. Intensity - Plate 22.2 D-2
 - c. 'C' for 85% Impervious = 0.80
- Plate 22.2 C-1
 - d. 100 year rainfall= 2.2 in. - Plate 22.2 D-1
2. Street capacities determined using DPM Criteria, Chapter 22, Plates 22.3 D-1 thru 22.3 D-4 (DPM Edition, 1984).
3. Storm sewer sized to operate under pressure flow - Plate 22.3 B-5.
4. Q10 = 0.657(Q100) - Plate 22.2 D-1 (DPM Edition, 1984).
5. Jefferson Street classified as min. arterial- 10 year street capacities based on 0.5' at curb flowline.
6. Double 'B' and 'C' inlets assumed to collect an average of 10cfs during 100-year flow.
7. The south half (max.) of these lots may drain to Masthead Street as necessary.
8. The drainage basin for this 37 cfs (100-year storm) discharge is located east of and within the right-of-way of I-25. Calculations for this discharge can be found under City Drainage file D-17/03Q. Handling of this 37 cfs discharge will occur as follows:
 - a. Interim (undeveloped Basin A and B-1) Plan - As shown, flow is discharged to the surface and will drain by overland flow to Headline Road.
 - b. Ultimate Plan - With the development of Basins A and B-1, the flow will be carried by surface facilities or underground storm drains to the Domingo Baca Arroyo or to Headline Road. This extension of drainage facilities may be performed in phases, i.e., each development will construct only its required portion of the facility, in accordance with the Drainage Ordinance and approved site-specific drainage plans.



9. The 37 cfs (100-year) offsite flow is labeled OF-1. The 10-year storm value is 24 cfs.
10. The high point in Headline Blvd. is located at the Lang Ave. intersection. This condition will cause a flow split. Approximately 37 cfs is assumed to flow north on Headline Blvd.

LEGEND

- PROPERTY LINE
 BASIN DIVIDE
 WATER BLOCK
 DOUBLE 'B' INLET
 DOUBLE 'C' INLET
 DOUBLE 'D' INLET
 TRIPLE 'C' INLET
 STORM SEWER & MANHOLE
 MAJOR FLOW DIRECTION & DISCHARGE LOCATION
 ANALYSIS POINT
- DEVELOPED TRACTS ARE NOTED AS SUCH
- ORIGINAL PLAN JULY 1984
 REVISION NO. 4 NOVEMBER 1990

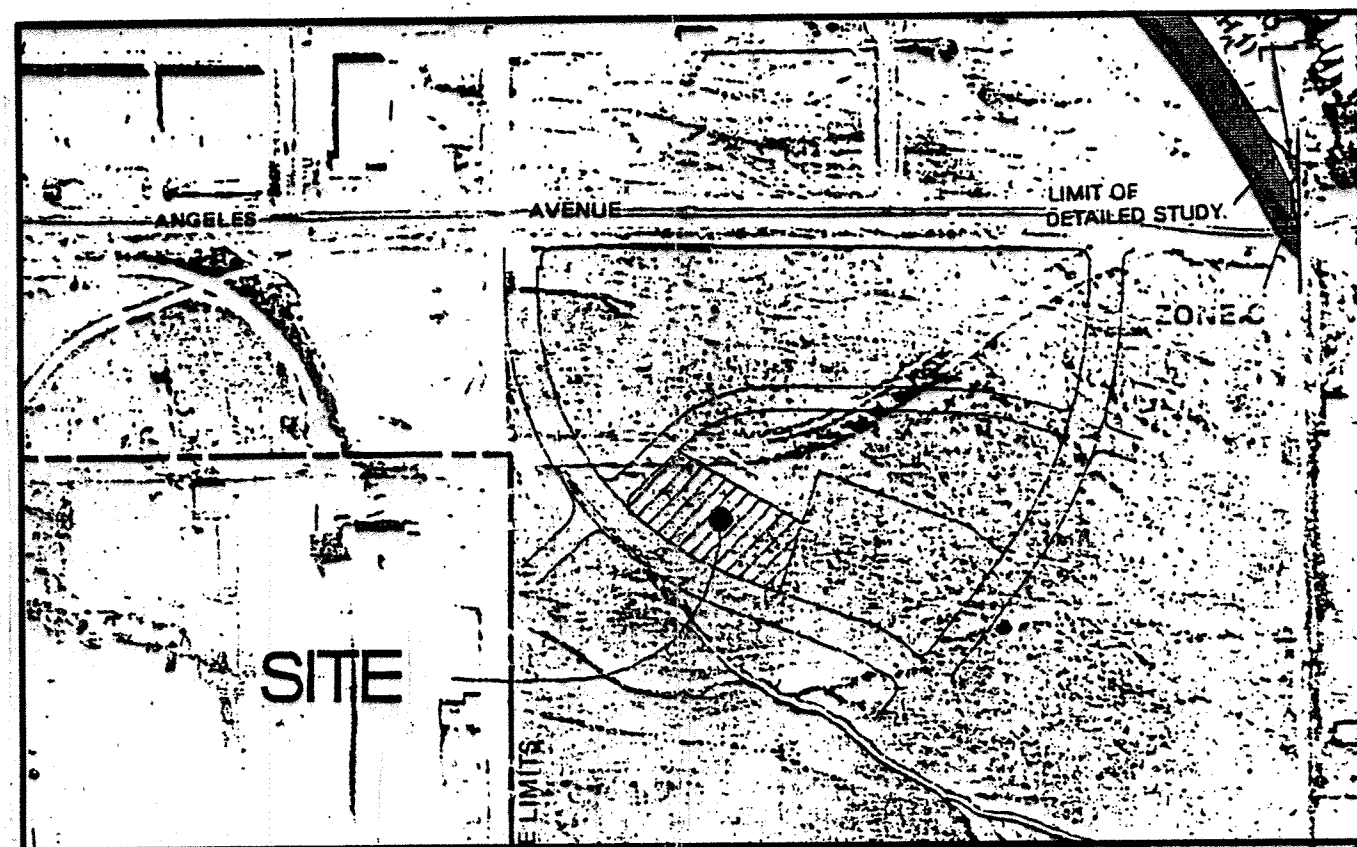
ORIGINAL PLAN	JULY 1984
REVISION NO. 4	NOVEMBER 1990
REVISION NO. 5	DECEMBER 1992

REVISED
DRAINAGE MANAGEMENT
PLAN FOR:

JOURNAL CENTER

DECEMBER 1992

12/17/92
10/21/94
JAMES R. THOMPSON
NEW REVIEW
9354
3-6-90
10-10-90
1-90
JOB No. 90110
BOHANNAN TUSTON



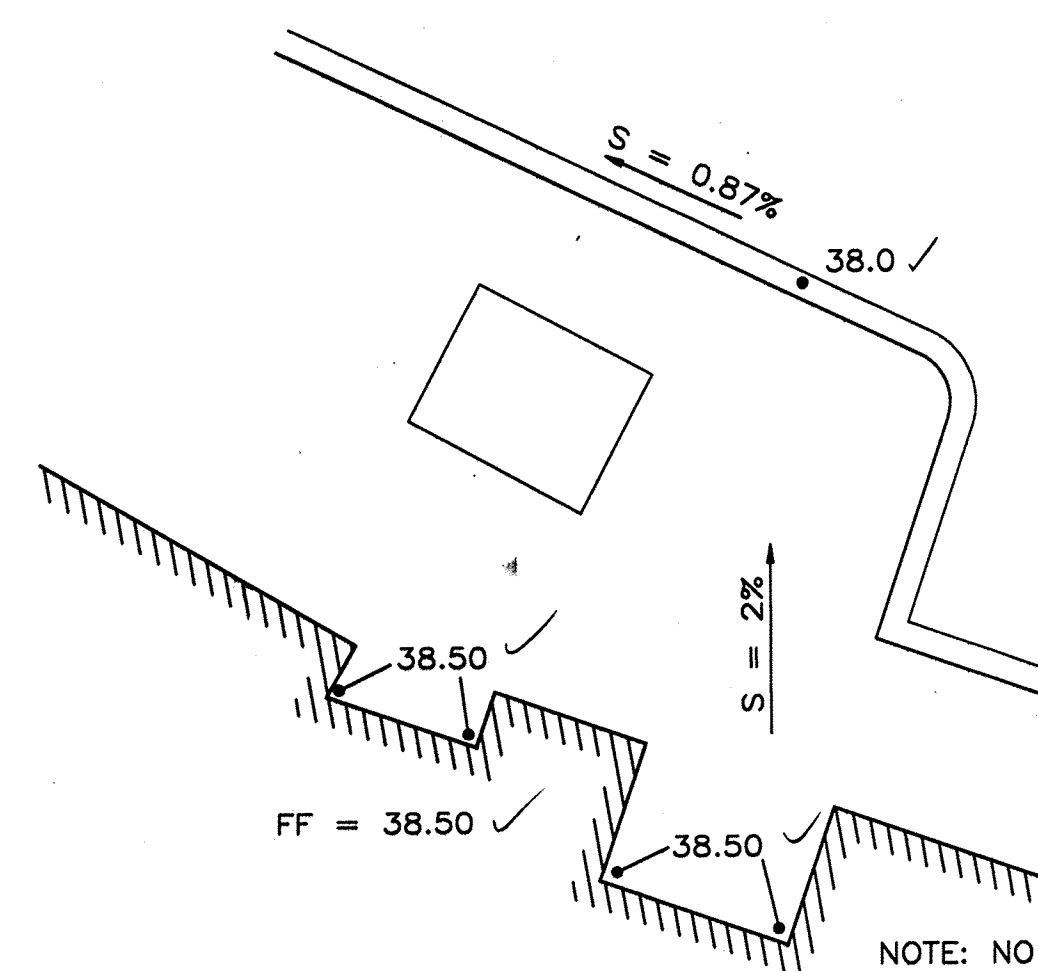
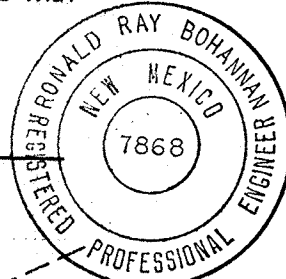
FEMA MAP 350002-0009C

EROSION CONTROL PLAN

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO IMPLEMENT THE EROSION CONTROL PLAN DURING THE CONSTRUCTION PHASE. REPAIR OF DAMAGED FACILITIES AND CLEAN-UP OF SEDIMENT ACCUMULATIONS ON ADJACENT PROPERTY AND IN PUBLIC FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR. FAILURE TO DO SO PROMPTLY MAY RESULT IN A "STOP-WORK ORDER" BEING ISSUED AND MAINTAINED UNTIL REPAIR AND CLEAN-UP IS COMPLETED TO THE CITY ENGINEER'S SATISFACTION. ALL EXPOSED EARTH SURFACES MUST BE PROTECTED FROM WIND AND WATER EROSION PRIOR TO FINAL CITY ACCEPTANCE OF ANY PROJECT. THE CONTINUED MAINTENANCE OF THESE PROTECTIVE MEASURES IS THE RESPONSIBILITY OF THE OWNER OR HIS ASSIGNS.

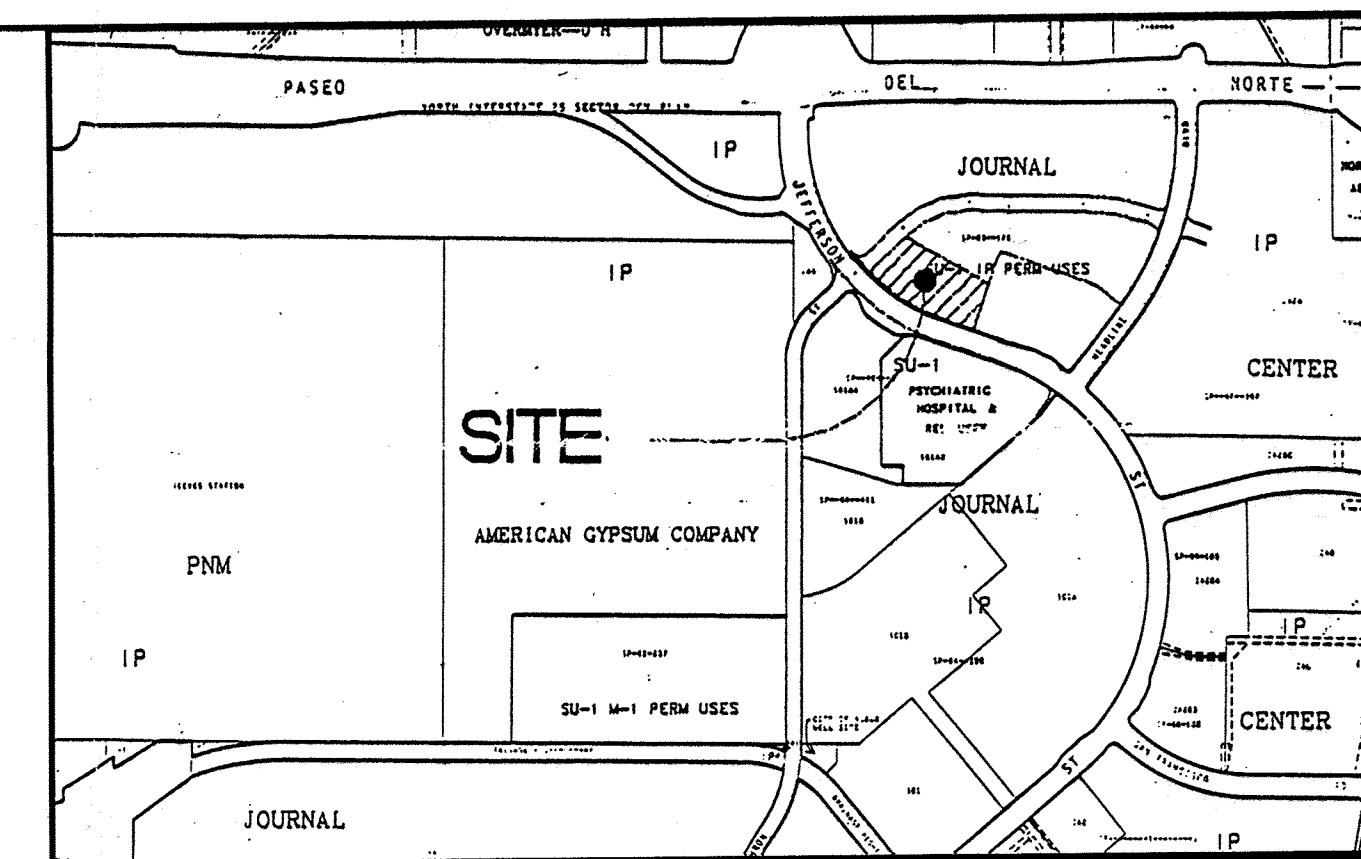
I certify that the grades shown on the plans have been built in substantial accordance with approved grading and drainage plan dated 4-10-95. Survey information was supplied by J.R. HALE in accordance with normal surveying practices.

Ronald R. Bohannon
#7868



DETAIL "B"
SCALE: 1"=5'

NOTE: NO STEP SLOPE BLDG AWAY @ 2% GRADE



VICINITY MAP D-17

LEGAL DESCRIPTION
TRACT 1A-3 OF
JOURNAL NORTH

LEGEND

---	FUTURE SANITARY SEWER	○	EXISTING SAS MANHOLE
---	EXISTING SANITARY SEWER	⊗	FUTURE WATER VALVE
---	FUTURE WATERLINE	⊗	EXISTING WATER VALVE
---	EXISTING WATERLINE	⊗	FUTURE FIRE HYDRANT
---	FUTURE STORM DRAIN	⊗	EXISTING FIRE HYDRANT
---	EXISTING STORM DRAIN	■	FUTURE DROP INLET
---	FUTURE GAS LINE	□	EXISTING DROP INLET
---	EXISTING GAS LINE	▶	NEW WATER VALVE
---	STORM DRAIN PIPE	●	NEW FIRE HYDRANT
---	NEW SANITARY SEWER		
---	NEW WATERLINE		
---	NEW FIRE LINE		
---	NEW GAS LINE		
---	BASIN BOUNDARY		
42.00	FLOWLINE ELEVATION		
35.30	SPOT ELEVATION		
43.08	TOP OF CURB ELEVATION		
42.58	FLOWLINE ELEVATION		
→	DIRECTION OF FLOW		
39	NEW CONTOUR		
5145	EXISTING CONTOUR		

SEE ATTACHED PLAN AND
PROFILE SHEET FOR
STORM SEWER CONNECTION.

NOTE:
FOR GRADING & DRAINAGE PLAN OF TRACT 1A-5,
SEE ISAACSON & ARFMAN, PA
HEADLINE POINTE OFFICE BUILDING
CONCEPTUAL GRADING & DRAINAGE PLAN,
SHEET 2 OF 2

Q100 YR WATER SURFACE
ELEVATION=0.20'

FF = 38.50

38.17

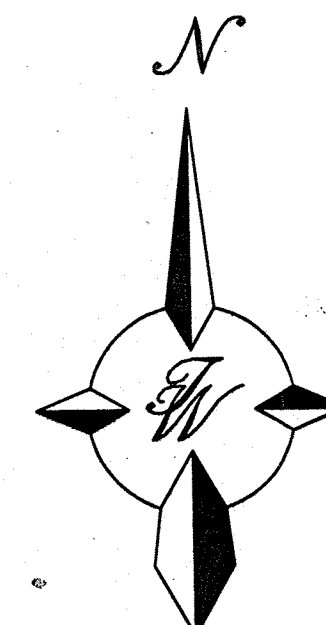
38.17

TO 38.0

FL 37.58

NOTE: 4" STEP OUT FROM BUILDING

DETAIL "A"
SCALE: 1"=5'



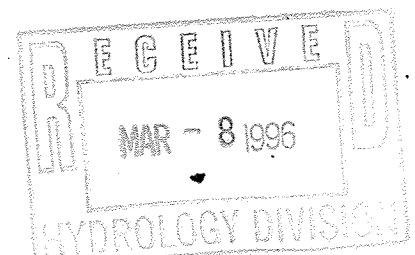
GRAPHIC SCALE

30 0 15 30

SCALE: 1"=30'

I certify that the grades shown on the plans have been built in substantial accordance with approved grading and drainage plan dated 4-10-95. Survey information was supplied by J.R. HALE in accordance with normal surveying practices.

Ronald R. Bohannon, P.E.
#7868



4-5-95	2 Spot Elevations & Drop Inlets	JCS	RRB
2-2-95	GRADES AT ENTRANCE	BY	CHK
REVISION DATE	DESCRIPTION		
ENGINEER'S SEAL	FIRST STATE BANK JOURNAL CENTER	DRAWN BY	SPINELLO
		DATE	10-28-94
	GRADING & DRAINAGE PLAN		9436GR.DWG
	TIERRA WEST DEVELOPMENT MANAGEMENT SERVICES	SHEET #	CI.2
	4600 MONTGOMERY BLVD. N.E., SUITE 3 ALBUQUERQUE, NEW MEXICO 87109 (505)883-7592	JOB #	940036

30\940036\9436GR.DWG\JCS\2-2-95