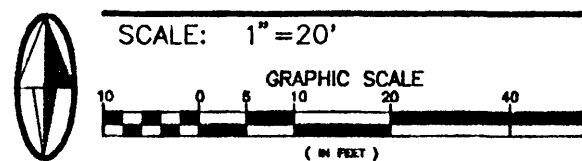


## DRAINAGE AND GRADING PLAN



### LEGAL DESCRIPTION

LOT C-2 LAND OF MEL SANCHEZ AND LATH & PLASTER SUPPLY CO., INC. AS SHOWN ON THE PLAT FILED AT THE OFFICE OF THE COUNTY CLERK, BERNALILLO COUNTY, NEW MEXICO ON JUNE 12, 1998 BK. 98C PAGE 163.

### BENCH MARK

A.C.S. STA. "NM47-8", A NMSHD BRASS CAP LOCATED IN THE MEDIAN OF SECOND STREET NW NORTH OF MONTANO ROAD AT SECOND STREET. ELEVATION = 4974.639

### LEGEND

- 73.0 EXISTING SPOT ELEVATION
- 73.0 NEW SPOT ELEVATION

### TBM:

FIRE HYDRANT PAD NORTH EAST CORNER OF LOT C-4-A NORTH EAST CORNER OF FIRE HYDRANT PAD ELEVATION 4974.51

### REQUIREMENTS FOR LOT DEVELOPMENT PLANS

- ALL LOTS SHALL DETAIN 100% OF THE 100yr-24hr VOLUME.
- ALL LOTS SHALL HAVE A PUMP SYSTEM TO EVACUATE THE SITE IN A MINIMUM OF 6-hours AND A MAXIMUM OF 24-hours.
- IT IS RECOMMENDED THAT ALL STRUCTURES HAVE A MINIMUM FINISHED FLOOR OF 4974.5
- ALL LOTS MUST INCLUDE AND CONTROL STORM WATERS THAT ENTER THE LOT FROM THE ACCESS ROAD.
- THE ASPHALT CURB IS TO BE REMOVED AT THE TIME OF SITE DEVELOPMENT.

## DRAINAGE/GRADING PLAN

The following items concerning Lot C-2 Lands of Mel Sanchez and Lath & Plaster Supply Co., Inc. Bernalillo County, Albuquerque, New Mexico are contained heron:

- Vicinity Map
- FEMA Flood Map
- Drainage Calculations

## EXISTING CONDITIONS

As shown by the vicinity map, the site contains .58 acres and is located South of Montano Road NW and East of Second Street NW along a private road. The site is essentially flat and does not have a natural outfall for the run-off. According to the Flood Insurance Rate Map Panel 0119D, dated September 20, 1996, the site is not located within a 100-year flood zone.

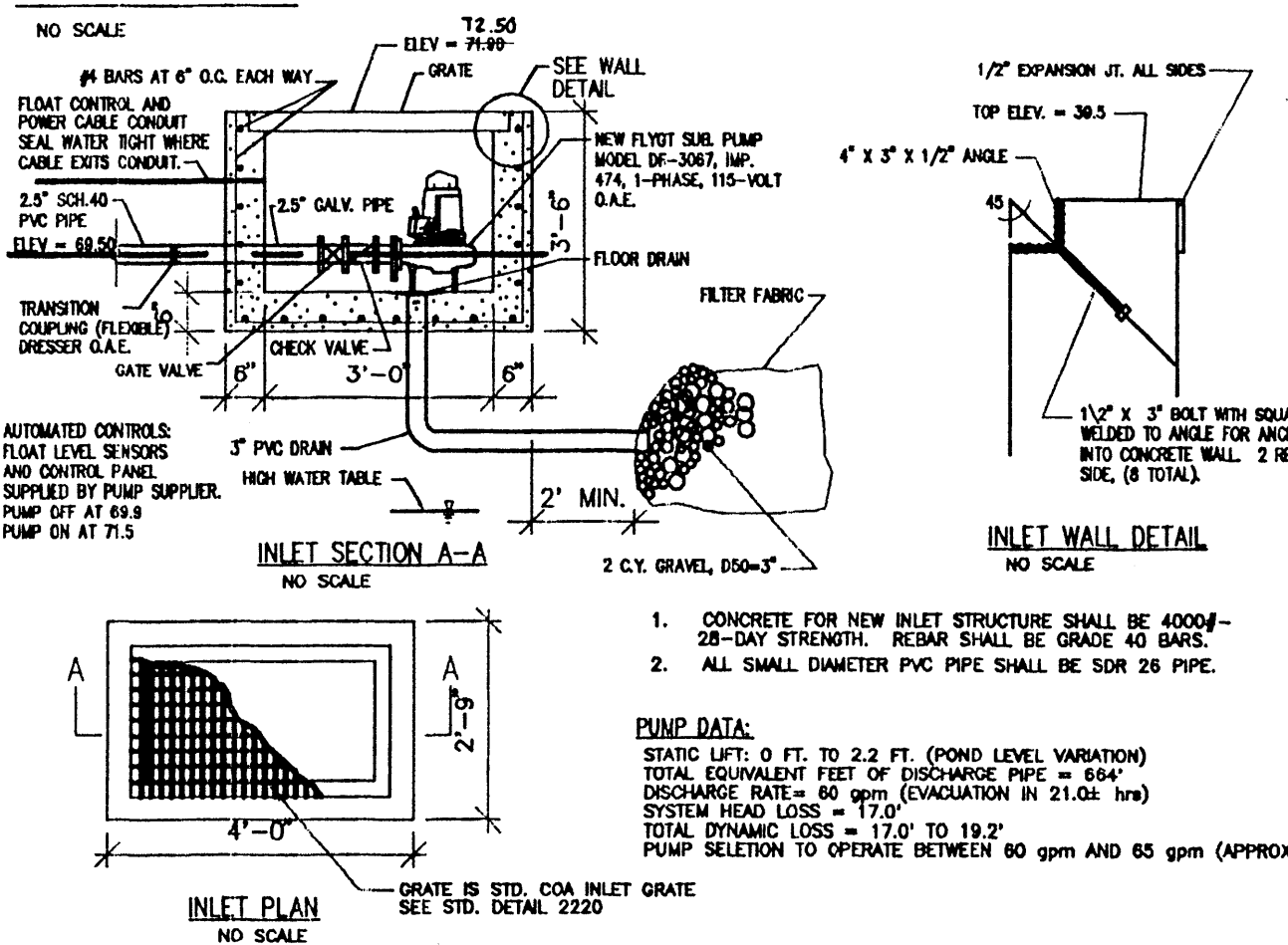
## PROPOSED CONDITIONS

As shown by the Drainage/Grading Plan, the project will consist of two 3042 sq ft OFFICE/WAREHOUSE buildings with associated paved parking and landscape areas. A Master Drainage Plan was prepared for the Subdivision by Kemper-Vaughn in April 1998. The Master Drainage Plan requires that each lot provide a pond for the 100-year, 24 hour rainfall event and to pump the water from the pond to Second Street via existing drain lines during the 6-hour period. The site will be graded to drain to the South into a pond containing an inlet. A pump located within the inlet will be connected to an existing drain line which conveys the run-off to Second St. NW. The calculations, which appear below, analyze the existing and proposed conditions for the 100-year, 24 hour rainfall event. The analysis is in accordance with the City of Albuquerque Development Process Manual, Volume II.

## DOWNSTEAM CAPACITY

Per the approved Master Drainage Plan, an inlet with a pump will be connected to the existing 2" schedule 40 PVC pipe.

## PUMP INLET



## GENERAL NOTES

- PRIOR TO ANY CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE LOCATION OF ALL POTENTIAL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AS SOON AS POSSIBLE TO RESOLVE THE CONFLICT WITH A MINIMUM AMOUNT OF DELAY.
- ALL WORK ON THIS PLAN SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.
- IF ANY UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES ARE SHOWN ON THESE DRAWINGS, THEY ARE SHOWN IN AN APPROXIMATE LOCATION ONLY, AND LINES MAY EXIST WHERE NONE ARE SHOWN, THE LOCATION IS BASED UPON INFORMATION PROVIDED BY THE UTILITY OWNER OR FROM EXISTING PLANS, AND THIS INFORMATION MAY BE INCOMPLETE, OR OBSOLETE AT THE TIME OF CONSTRUCTION. THE ENGINEER HAS NOT UNDERTAKEN ANY FIELD VERIFICATION OF THESE LOCATIONS, LINE SIZES OR MATERIAL TYPE, MAKES NO REPRESENTATION THEREOF, AND ASSUMES NO RESPONSIBILITY OR LIABILITY THEREFOR. THE CONTRACTOR SHALL INFORM ITSELF OF THE LOCATION OF ANY UTILITY LINE, PIPELINE OR UNDERGROUND INSTALLATION IN OR NEAR THE AREA IN ADVANCE OF AND DURING ANY EXCAVATION WORK. THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES CAUSED BY ITS FAILURE TO LOCATE, IDENTIFY AND PRESERVE ANY AND ALL EXISTING UTILITIES, PIPELINES AND UNDERGROUND FACILITIES. IN PLANNING AND CONDUCTING EXCAVATIONS, THE CONTRACTOR SHALL COMPLY WITH ALL STATE STATUTES, MUNICIPAL AND LOCAL ORDINANCES, RULES AND REGULATIONS, IF ANY, PERTAINING TO THE LOCATION OF THESE LINES AND FACILITIES.
- THE CONTRACTOR SHALL INSURE THAT NO SOIL ERODES FROM THE SITE INTO PUBLIC RIGHTS-OF-WAY OR ONTO PRIVATE PROPERTY. THIS CAN BE ACHIEVED BY CONSTRUCTING TEMPORARY BERMS AND BY WETTING THE SOIL TO KEEP IT FROM BLOWING.
- THE CONTRACTOR SHALL OBTAIN ANY AND ALL PERMITS REQUIRED BY THE CITY OF ALB. FOR THE COMPLETION OF THE WORK PRIOR TO BEGINNING CONSTRUCTION.

HAP CRAWFORD PJ. AREA = 0.64 ac.

ZONE 2  
PRECIPITATION: 360 = 2.35 in.  
1440 = 2.75 in.  
10day = 3.95 in.

EXCESS PRECIPITATION:

PEAK DISCHARGE:

TREATMENT A	0.53 in.	1.56 cfs/ac.
TREATMENT B	0.78 in.	2.28 cfs/ac.
TREATMENT C	1.13 in.	3.14 cfs/ac.
TREATMENT D	2.12 in.	4.70 cfs/ac.

EXISTING CONDITIONS: AREA

PROPOSED CONDITIONS: AREA

TREATMENT A	0 ac.	0 ac.
TREATMENT B	0 ac.	0 ac.
TREATMENT C	0.58 ac.	0.079 ac.
TREATMENT D	0 ac.	0.501 ac.

## EXISTING EXCESS PRECIPITATION:

Weighted E = (0.53)(0.00) + (0.78)(0.00) + (1.13)(0.58) + (2.12)(0.00) / 0.64 = 1.02 in.  
V100-360 = (1.02)(0.64) / 12 = 0.054617 ac-ft = 2379 cf

## EXISTING PEAK DISCHARGE:

Q100 = (1.56)(0.00) + (2.28)(0.00) + (3.14)(0.58) + (4.70)(0.00) = 1.82

## PROPOSED EXCESS PRECIPITATION:

Weighted E = (0.53)(0.00) + (0.78)(0.00) + (1.13)(0.08) + (2.12)(0.50) / 0.64 = 1.80 in.  
V100-360 = (1.80)(0.64) / 12.0 = 0.095949 ac-ft = 4180 cf

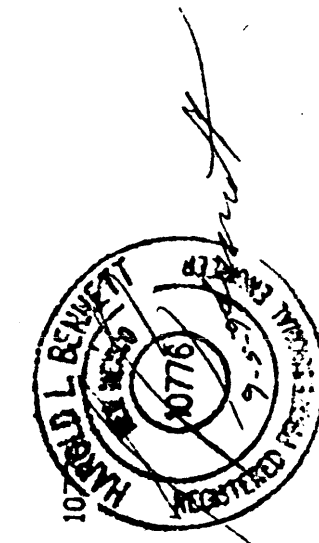
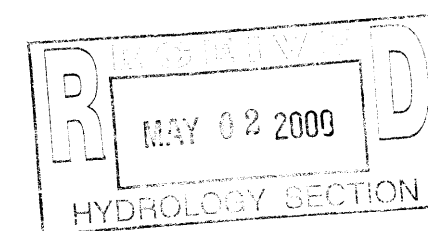
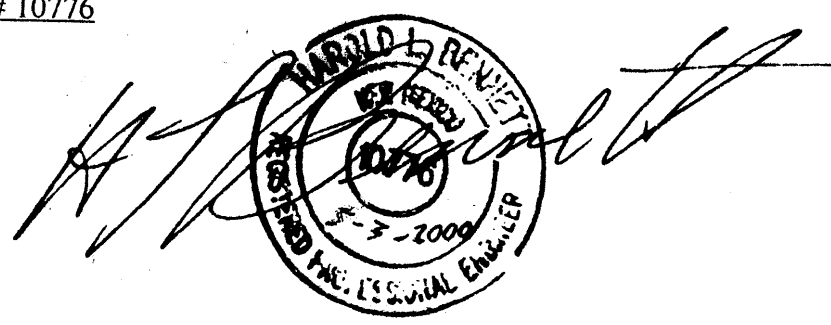
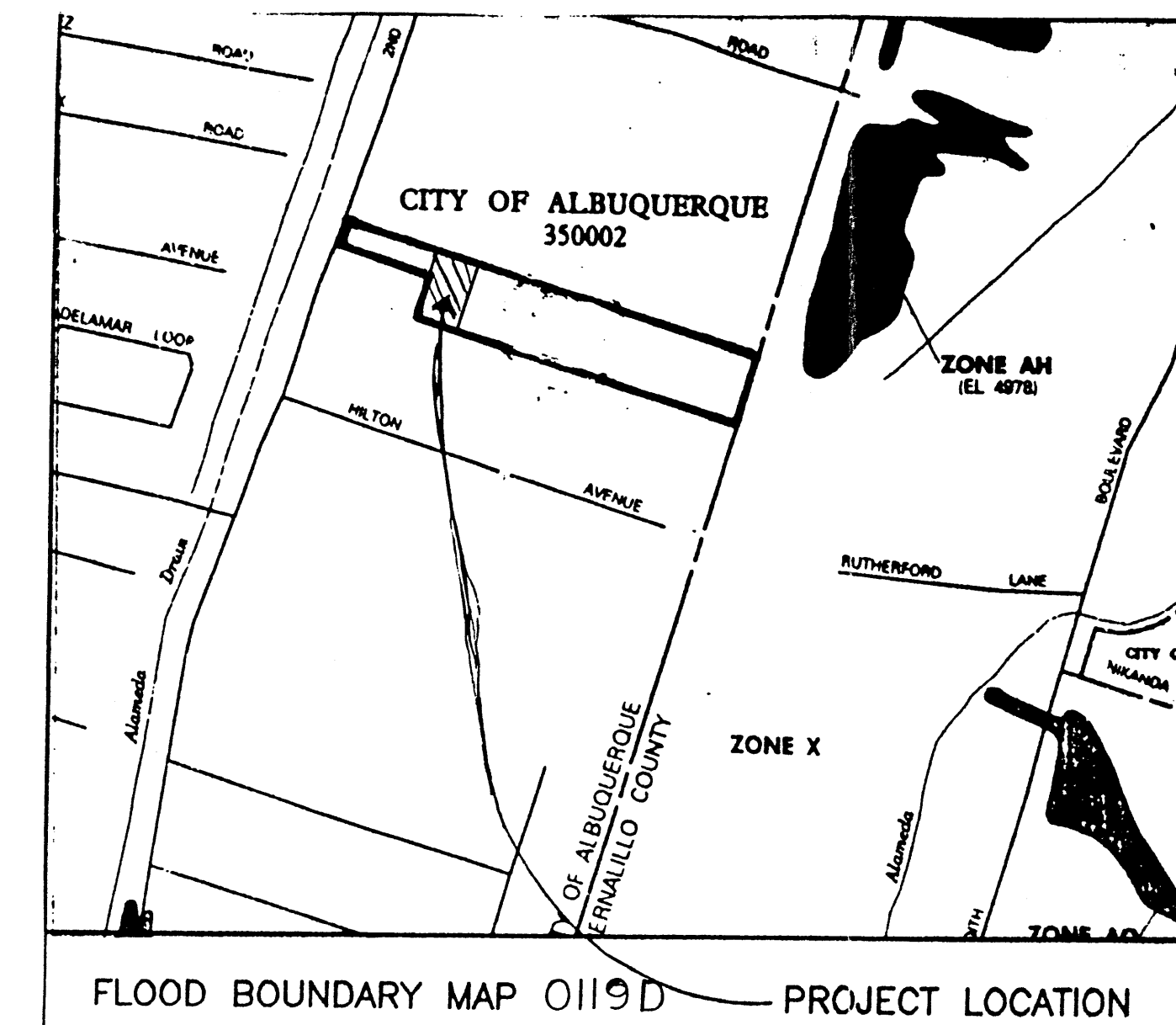
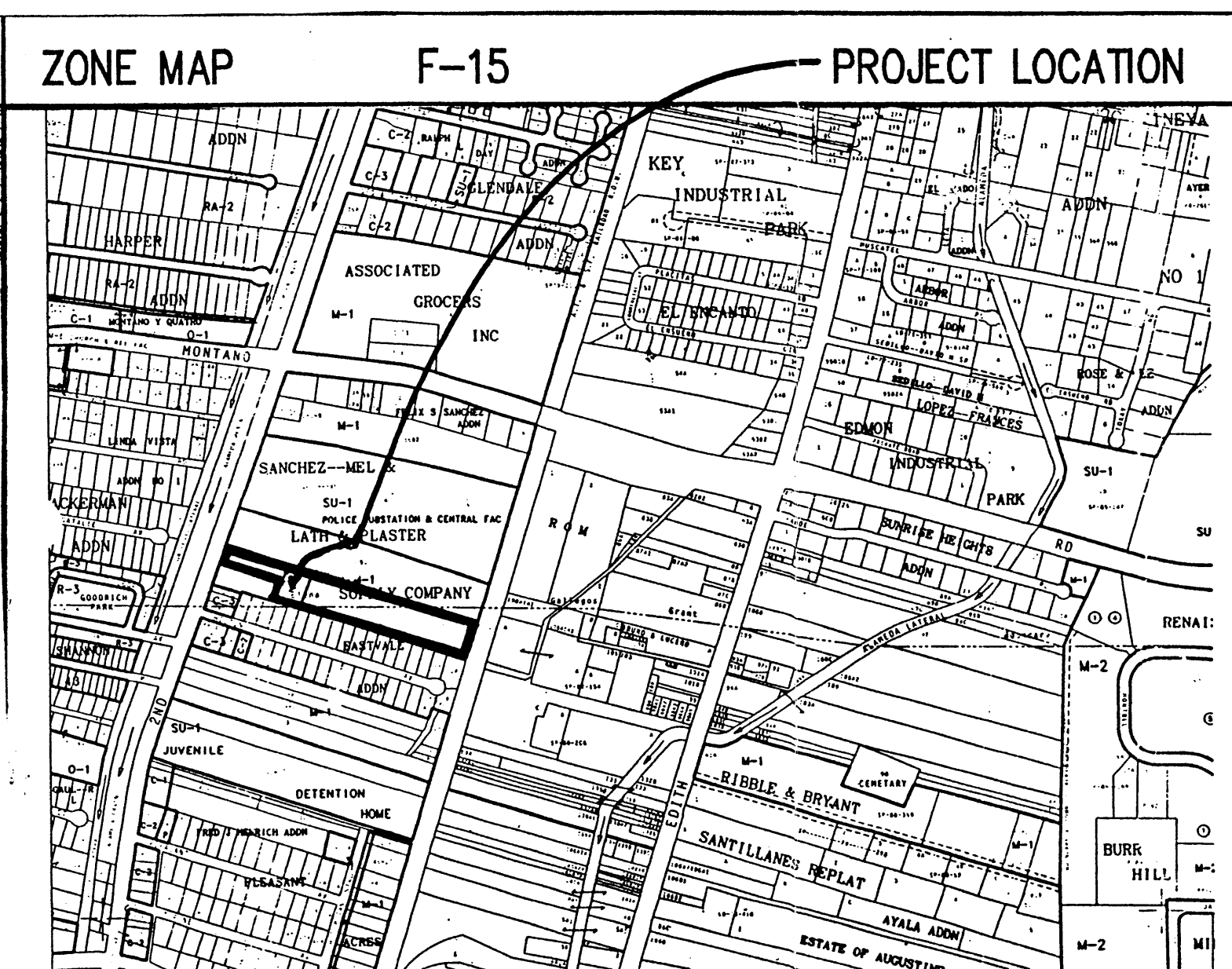
V100-1440 = (0.10)(0.50)(2.75 - 2.35) / 12 = 0.112649 ac-ft = 4907 cf

V100-10day = (0.10)(0.50)(3.95 - 2.35) / 12 = 0.162749 ac-ft = 7089 cf

## PROPOSED PEAK DISCHARGE:

Q100 = (1.56)(0.00) + (2.28)(0.00) + (3.14)(0.08) + (4.70)(0.50) = 2.60

VOLUME TO BE PONDED 100-YEAR, 24-HOUR = 4906 CF POND VOLUME PROVIDED 5006 CF



HAROLD L. BENNETT NMPE # 10776

5224 2ND STREET NW  
ALBUQUERQUE, NEW MEXICO

REVISION DATE

DATE  
9-17-99

SHEET NUMBER

C-1