



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

March 22, 1995

Robert Ryals, P.E.
Ryals Engineering
5301 Central NE
Albuquerque, NM 87108

RE: GRADING & DRAINAGE PLAN FOR FIRE MARSHAL'S ADD'N (H-17/D30)
RECEIVED MARCH 17, 1995 FOR BUILDING PERMIT
ENGINEER'S STAMP DATED 3-8-95

Dear Mr. Ryals:

Based on the information included in the submittal referenced above, City Hydrology accepts this Grading & Drainage Plan for Building Permit.

Include a copy of the approved Grading & Drainage Plan, dated 3-8-95, in the set of construction documents that will be submitted to Code Administration for the Building Permit.

Engineer's Certification of grading & drainage must be approved before any Certificate of Occupancy will be released.

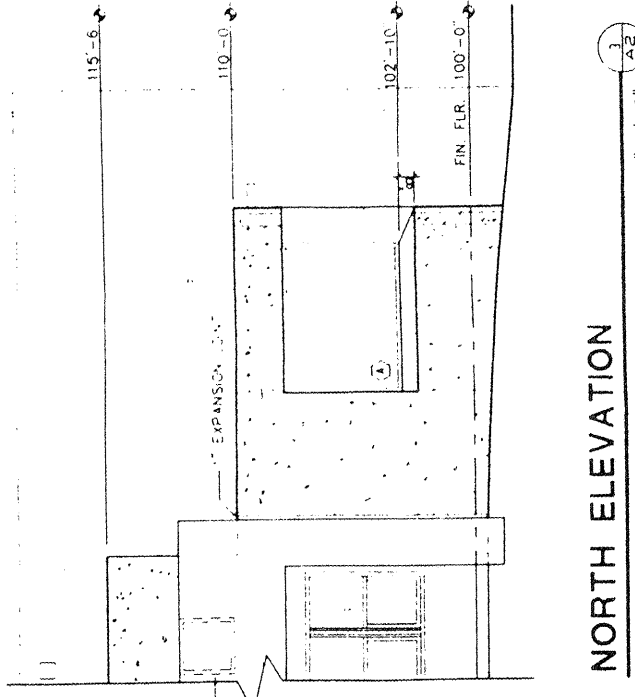
If you have any questions about this project, You may contact me at 768-2727.

Sincerely,

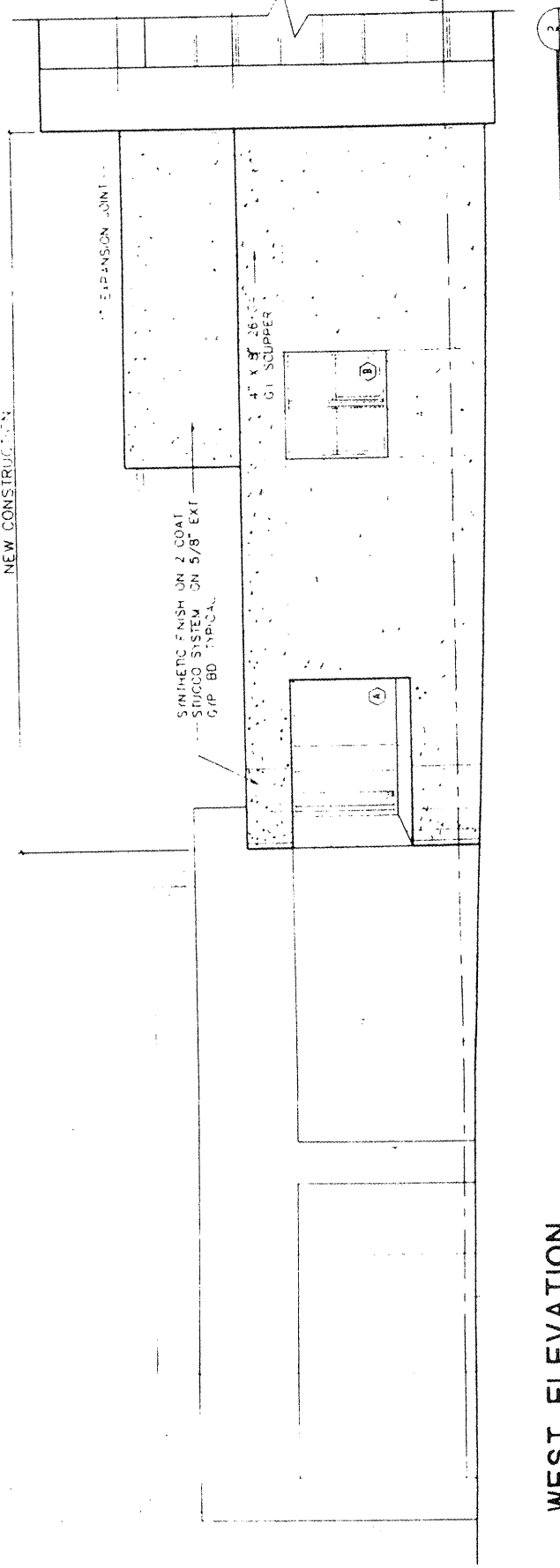
John P. Curtin, P.E.
Civil Engineer/Hydrology

c: Andrew Garcia
Drew Mendez, Nims, Calvani & Assoc., 525 San Pedro NE 87108

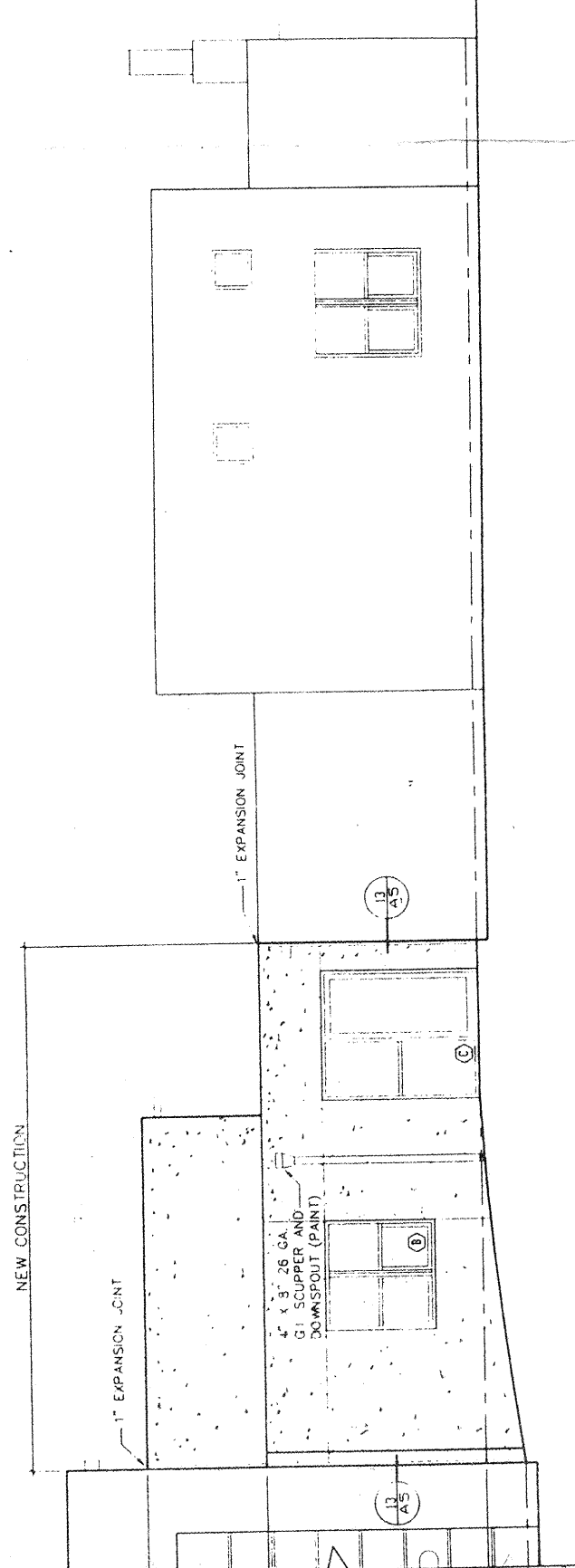
EXTERIOR
ELEVATIONS



NORTH ELEVATION



WEST ELEVATION



EAST ELEVATION

SITE/BUILDING REQUIREMENTS

BUILDING CRITERIA
PROJECT: ADDITION TO FIRE MARSHAL'S OFFICE
ADDRESS: 2510 QUINCY N.E.
LEGAL: LOTS 1-B-7, BLOCK 1, VIDAS ADDITION
OCCUPANCY TYPE: B-2
CONSTRUCTION TYPE: I N

BUILDING AREA

EXISTING FIRE STATION 8,100 S.F.

EXISTING FIRE MARSHAL OFFICE 2,400 S.F.

TOTAL 10,500 S.F.

NEW ADDITION 1,525 S.F.

NEW TOTAL 12,025 S.F.

NEW ADDITION 14% OF TOTAL BUILDING AREA.

PARKING REQUIREMENTS

EXISTING BUILDING (REMODEL)
FIRE MARSHAL OFFICE - 1,996 SF / 200
FIRE STATION BUILDING - 23 SPACES
NEW BUILDING (ADDITION) - 1,329 SF / 200
TOTAL PARKING REQUIRED 40 SPACES

PARKING PROVIDED
EXISTING SPACES - 33 SPACES
ADDITIONAL SPACES PROVIDED - 7 SPACES
TOTAL PARKING PROVIDED 40 SPACES

PARKING SPACE BREAKDOWN

28 REGULAR
10 SMALL CAR
1 HANDICAP (CAR)
1 HANDICAP (VAN)

Bench Mark?

DRAINAGE CALCULATIONS

The Drainage Calculations which appear herein were prepared for the event for the proposed addition, on site drainage only. For drainage calculations, the area of the site was divided into three (3) sub-areas and the runoff from each sub-area was calculated separately. The runoff from each sub-area was then combined to determine the total runoff from the site. The calculations were performed using the Rational Method for Watersheds up to 40 acres in size.

PRECIPITATION ZONE: ZONE 2

EXISTING COMBILION
Total Area = 54,102 sf (1.24 ac.)
Roof & Paved Area (A₁) = 32,740 sf (.75 ac.)
Landscaped Area (A₂) = 21,362 sf (.49 ac.)
On Site Weighted Excess Precipitation (100-yr-1)
Weighted E = $\frac{A_1 C_1 + A_2 C_2}{A_1 + A_2}$
= $\frac{32,740(1.40) + 21,362(1.22)}{32,740 + 21,362}$
= 1.24

On Site Volume of Runoff:
V = (1.61)(1.24) = 1.61 ac-ft (7247 cfs)

On Site Peak Discharge Rate:
Q_p = Q₁A₁ + Q₂A₂
= (2.28)(.75) + (4.70)(.49)
= 4.7 cfs

Developed Condition
Total Area = 54,102 sf (1.24 ac.)
Roof & Paved Area (A₁) = 36,650 sf (.84 ac.)
Landscaped Area (A₂) = 17,452 sf (.40 ac.)
On Site Weighted Excess Precipitation (100-yr-1)
Weighted E = $\frac{A_1 C_1 + A_2 C_2}{A_1 + A_2}$
= $\frac{36,650(1.40) + 17,452(1.22)}{36,650 + 17,452}$
= 1.24

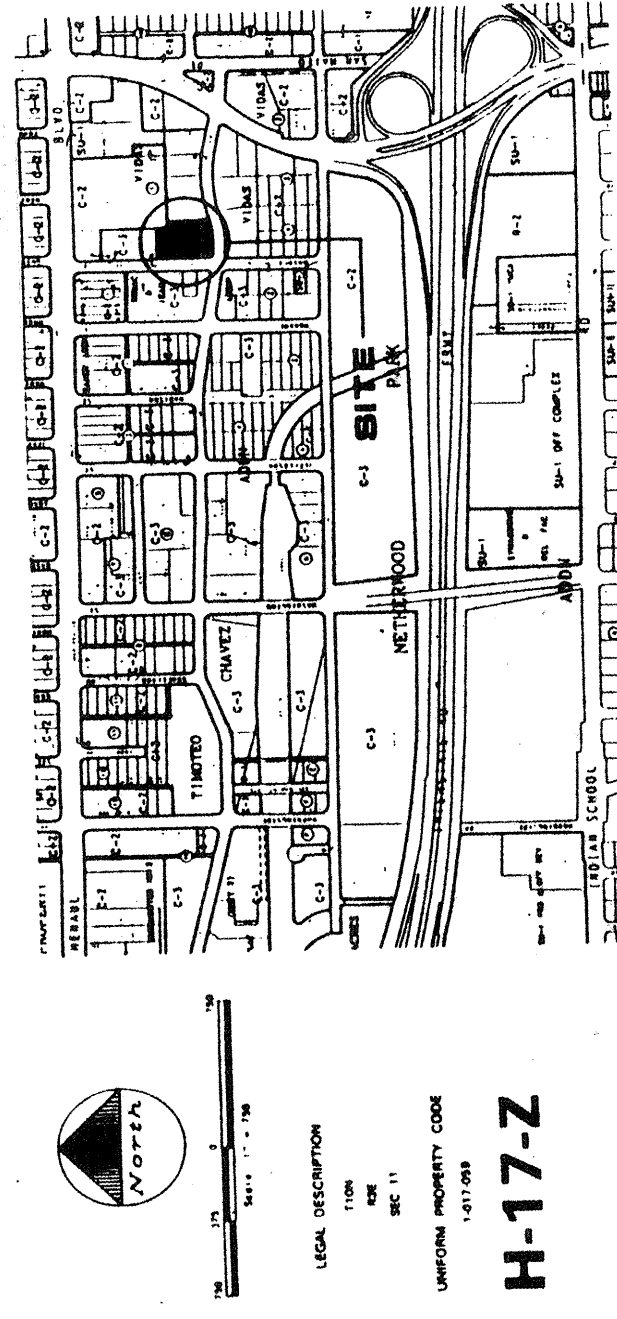
On Site Volume of Runoff:
V = (1.69)(1.24) = 1.74 ac-ft (7590 cfs)

On Site Peak Discharge Rate:
Q_p = (2.28)(.84) + (4.70)(.40)
= 4.46 cfs

CONCLUSION
A₁ = 7590 - 7247 = +343 cfs
A₂ = 4.46 - 4.7 = -.24 cfs

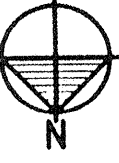
Conclusion
The proposed improvements will result in slightly more discharge from the site.

VICINITY MAP



H-17-Z

SITE / GRADING PLAN



SCALE: 1"=20'-0"

KEY NOTES

1. EXISTING ASPHALT PARKING AREA TO REMAIN.
2. EXISTING ASPHALT PARKING AREA TO BE REMOVED SHOWN DASHED.
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17. EXISTING ASPHALT PARKING AREA TO BE REMOVED SHOWN DASHED.

LANDSCAPING

TOTAL SITE AREA
BUILDING AREA
LANDSCAPE/PAVING AREA
LANDSCAPE AREA REQUIRED (15%)
LANDSCAPE AREA PROVIDED:

LANDSCAPING TO BE IRRIGATED AND MAINTAINED BY OWNER.

LANDSCAPING PLANT LIST

TREES

EXISTING ASH (1)

NEW MARSHAL ASH (2 1/2" CAL.)
FRAXINUS PENN MARSHAL (3)

EXISTING PINE (11)

EXISTING PURPLE PLUM (10)

EXISTING (7)

SHRUBS

EXISTING CARPET JUNCIFER (32)

EXISTING MISCELLANEOUS FLOWERING PLANTS

DEMOLITION / FLOOR PLAN



SCALE: 1/8"=1'-0"

KEY NOTES

1. REMOVE PORTION OF EXISTING WALL, DOOR AND FRAME. PATCH, REPAIR, TEXTURE AND PAINT REMAINING WALLS TO MATCH EXISTING.
2. EXISTING WALL TO BE REMOVED SHOWN DASHED.
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LEGEND

