



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

February 16, 1982

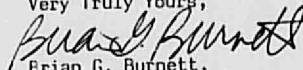
Mr. Ray Harrison
Ray Harrison & Associates
1517 A Girard Blvd. N.E.
Albuquerque, New Mexico 87106

Re: FOUR PLEX APARTMENT BUILDING
FOR J. ROY ESQUIBEL DRAINAGE REPORT

Dear Ray,

The referenced drainage report is approved. Please see that the plans dated 01/04/82 are placed in the construction sets. Mr. Fred Aguirre will sign off for the Hydrology section when this is done.

Very Truly Yours,


Brian G. Burnett,
Civil Engineer/Hydrology

BGB/bes

cc: Mr. J. Roy Esquibel

MUNICIPAL DEVELOPMENT DEPARTMENT

Richard S. Heller, P.E., City Engineer

ENGINEERING DIVISION

Telephone (505) 766-7467



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DRAINAGE REPORT INFORMATION SHEET

PROJECT TITLE Four Plex Apartment Building for J Roy Esquibel
ZONE ATLAS PAGE NO. K 11-5a CITY ADDRESS 6094 Avalon St NW
LEGAL ADDRESS Lot 16 PATLILLY SUBDIVISION
ENGINEERING FIRM RAY HARRISON & ASSOCIATES CONTACT RAY HARRISON
ADDRESS 1517 A Girard NE 87106 PHONE 265 4276
OWNER J. Roy Esquibel CONTACT Roy Esquibel
ADDRESS 6985 Isleta Blvd. SW PHONE 877 9448
ARCHITECT/SURVEYOR Ray Harrison & Assoc. CONTACT Ray Harrison
ADDRESS Same PHONE _____
DATE SUBMITTED 1/21/82
BY Ray Harrison

MUNICIPAL DEVELOPMENT DEPARTMENT

Richard S. Heller, P.E., City Engineer

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Telephone (505) 766-7467



RAY L. HARRISON & ASSOCIATES

CONSULTING ENGINEERS

DRAINAGE REPORT

6094 Avalon St. NW
Lot 16 Patlilly Subdivision
Four Plex Apartment building
J. Roy Esquibel

1517-A GIRARD BLVD. NE
ALBUQUERQUE, NEW MEXICO 87106
(505) 265-4276

The project consists of the construction of a four plex apartment building in the Northwest neights.

The drainage report for the subdivision is on file but shows lot 16 as undeveloped. The City Engineer Hydrologist stated that valley ponding would be required.

Check List

2. Planning History: No planning action in progress.
tract is zoned properly.

3. Professional Certification:
Architect, Bill Buckley
Drainage Report, Ray L. Harrison
Survey, Ray Harrison
Grading Plan, Ray Harrison

4. Flood Hazard: Tract is not included in the Master Drainage Study. FHA Flood Hazard Map attached.

5. Watershed soils: N/A

6. Soils: Madurez Wink Sandy Loam with slight limitation for dwellings.

7. Watershed areas, Offsite: The building to the East is on a tract that slopes to the street with no flow onto Lot 16, the tract to the west is flat with a slight slope to the south and lot 16 will be built up above it, the tract to the south slopes to the south.

8. Storm Flow Offsite: None

9. Flow depth and velocity: N/A

10. Other Conditions: From an inspection there are no other conditions that would affect drainage.

11. Proposed Treatment: N/A

12. Row Easement: N/A

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13. Flow Volume and Velocity, Onsite:

Undeveloped Flow
 $9,350/43560 \times 6 \times .4 = .52 \text{ CFS}$
Developed flow
Imperviable $7110/43560 \times 6 \times .9 = .88 \text{ CFS}$
Landscaped $2240/43560 \times 6 \times .5 = .15 \text{ CFS}$
Total developed = 1.03 CFS

14. Flow Depth and Velocity Onsite: Tract does not have any drainage channels with significant flow.

15. Proposed Treatment:

A. Definition: 90% of developed flow will be ponded.

B. Location and Configuration: The pond location is shown on the attached drawing "Drainage Plan", Volume Calculations are shown at Section 2
Volume furnished 1180 Cu. Ft.
Volume Required
Building 3,000 sq. ft. Paving 4110 Sq. ft.
 $7110 \times .18 \times .9 = 1150 \text{ Cu ft.}$

Positive Discharge

Q_5 (Undeveloped) $9350/43560 \times 1.62 \times .5 = .17 \text{ CFS}$
a 4" short tube will allow .36 CFS to enter the tube
 $Q = Ca(2gh)^{1/2}$ $C = .82$ (K & B) Avg. H = .4 a = .087 sq. ft.
a 4" pipe with a 2% slope will only carry .25 CFS
Table 6-2 (K & B)
a 4" pipe will be installed to meet city standards.

Pond Emergency spillway calculations:

$Q_{100} = 1.03 \text{ CFS}$ (see Item 13)

A broad crested weir is equivalent to the overflow.

$Q = CLH^{2/3}$ $H = .3'$ $L = 10'$ $C = 2.5$ Table 5-3 (K & B)

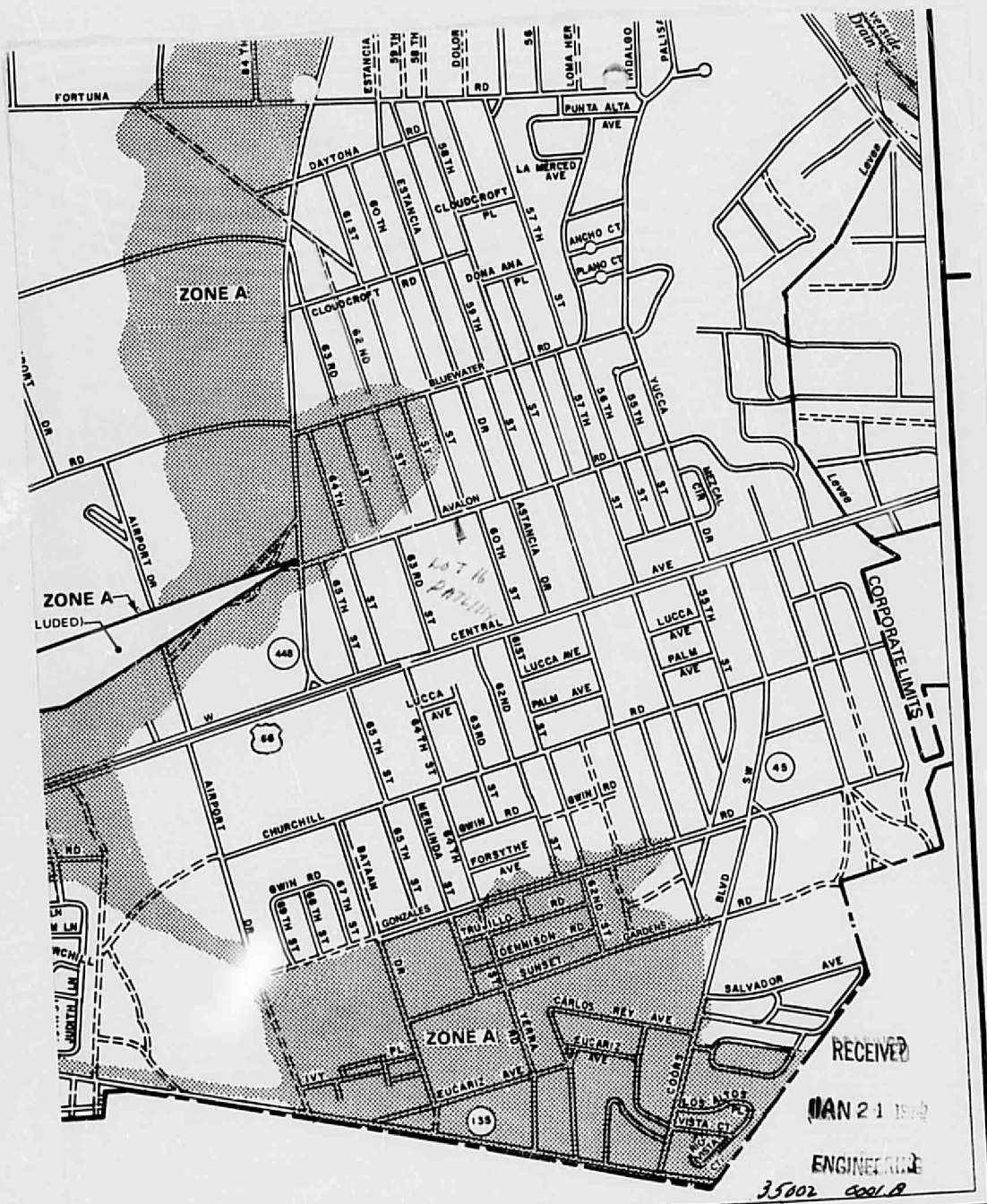
$Q = 11.2 \text{ CFS}$

Overflow has sufficient capacity

C. Quantification Q_{100} undeveloped = .52 CFS
developed = .25 CFS

16. Row Easements: N?A?

Ray L. Harrison



Sheet 4 of 9

FLOOD HAZARD BOUNDARY MAP

AVALON RD. NW.

8.5'
T/C 89.98
FL 89.31
INV. 89.35

EXIST. CURB

INSTALL 1-4" PIPE
PER CITY DWG
K15 PVC SCHED 40

INV. 89.6

EXIST.
S/W 4'

LOT 16 PARTIALLY
SUBDIVISION

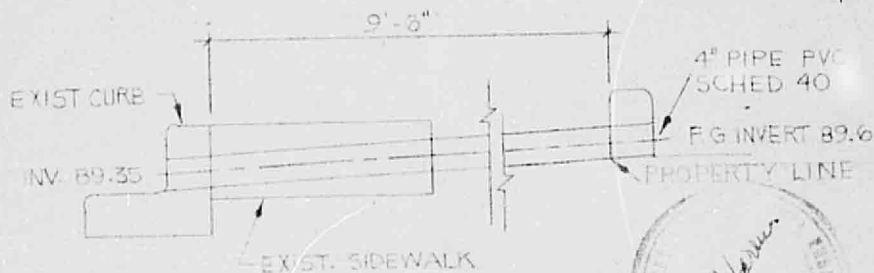
N

SCALE: 1" = 30'-0"

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PIPE DETAIL

SCALE: 1" = 1'-0"

Owner
J. Roy Esquivel
6985 Isleta Blvd. SW
Albuquerque, NM 87105

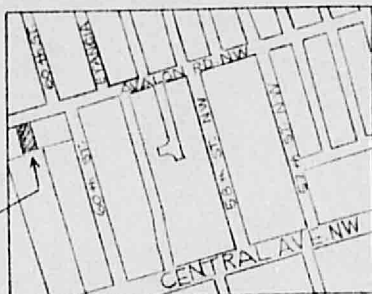
Engineer
Ray Harrison & Assoc.
1517 A Girard NE
Albuquerque, NM 87106

1/19/82

CITY OF ALBUQUERQUE

| APPROVALS | ENGINEER | DATE | TITLE: | MAP |
|---------------|----------|------|-------------------------|----------|
| A.C.E./DESIGN | | | DRAIN LINE THROUGH CURB | |
| INSPECTOR | | | 6094 AVALON RD. NW. | |
| A.C.E./FIELD | | | PROJECT NO. | NO. K-11 |

LOT 16 PAT LILLY



LOCATION MAP K-11



NOTICE TO CONTRACTORS

1. New Mexico Standard Specifications for Public Works Construction-1979 Edition will be referred to hereon as the "Standard Specification".
2. All work detailed on these plans to be performed under contract shall, except as otherwise stated or provided for hereon, be constructed in accordance with "Contract Documents for City-Wide Utilities and Cash Paving No. 30" Standard Specification.
3. Two working days prior to any excavation, contractor must contact Lin Service, 765-1234, for location of existing utilities.
4. Prior to construction, the contractor shall excavate and verify the horizontal and vertical locations of all obstructions. Should a conflict exist, the contractor shall notify the engineer or surveyor so that the conflict can be resolved with a minimum amount of delay.

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THE FOLLOWING NOTES ALSO APPLY WHEN CHECKED

- ☐ All utilities and utility service lines shall be installed prior to paving.
- ☒ Backfill compaction shall be according to specified street use. Residential
- ☐ Tack coat requirements shall be determined by the City Engineer.
- ☐ Sidewalks and wheelchair ramps within the curb returns shall be constructed wherever a new curb return is constructed.
- ☐ If curb is depressed for a driveway, the driveway shall be constructed prior to acceptance of curb and gutter.
- ☒ All storm drainage facilities shall be completed prior to final acceptance.
- ☐ The requestor or developer shall be responsible for repair or replacement of all curb and gutter or sidewalk damaged after approval by the City Engineer of work completed by the Contractor.

Handwritten signature: Ray J. Hansen

| | | | | |
|------------------------------|----------|------|---|---------------|
| APPROVED FOR RECORD DRAWINGS | | | APPROVED FOR CONSTRUCTION | |
| ASST. CITY ENGINEER, FIELD | | | DATE | CITY ENGINEER |
| | | | | DATE |
| CITY OF ALBUQUERQUE | | | | |
| APPROVALS | ENGINEER | DATE | TITLE: DRAIN LINE THROUGH CURB 6094 AVALON RD. N.W. | |
| A.C.E. DESIGN | | | | |
| WATER RESOURCES | | | PROJECT | MAP NO. K-11 |
| CITY ENGINEER | | | NO. | SHEET 1 OF 2 |

AVALON RD. N.W.

2.5' T/C 89.98
FL 89.31
INV 89.35

EXIST. CURB

INSTALL 1-4" PIPE
PER CITY DWG
K-15 PVC SCHED 40

INV. 89.6

EXIST.
S/W 4'

LOT 16 PATULLY
SUBDIVISION

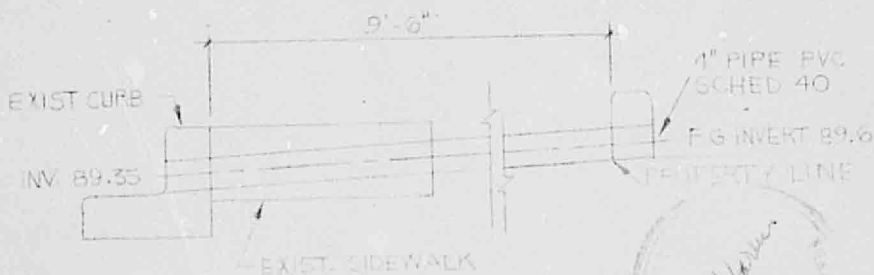
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SCALE: 1" = 1'-0"

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| A.C.E./DESIGN | | | DRAIN LINE THROUGH CURB |
| INSPECTOR | | | 6094 AVALON RD. N.W. |
| A.C.E./FIELD | | | PROJECT NO. |
| | | | MAP NO. K-11 |