

# **EROSION CONTROL NOTES:**

The contractor shall be responsible for compliance with the following:

1. No sediment-bearing water shall be allowed to discharge from the site during construction.
2. During grading operations and until the project has been completed. All adjacent property, rights-of-way, and easements shall be protected from flooding by runoff from the site.
3. Should the contractor fail to prevent sediment-bearing water from entering public right-of-way, he shall promptly remove from the public right-of-way, any and all sediment originating from the site.
4. Control of sediment-laden waters will be accomplished by use of a compacted earth berm of adequate height. The berm shall be located along the downstream perimeter of the property.

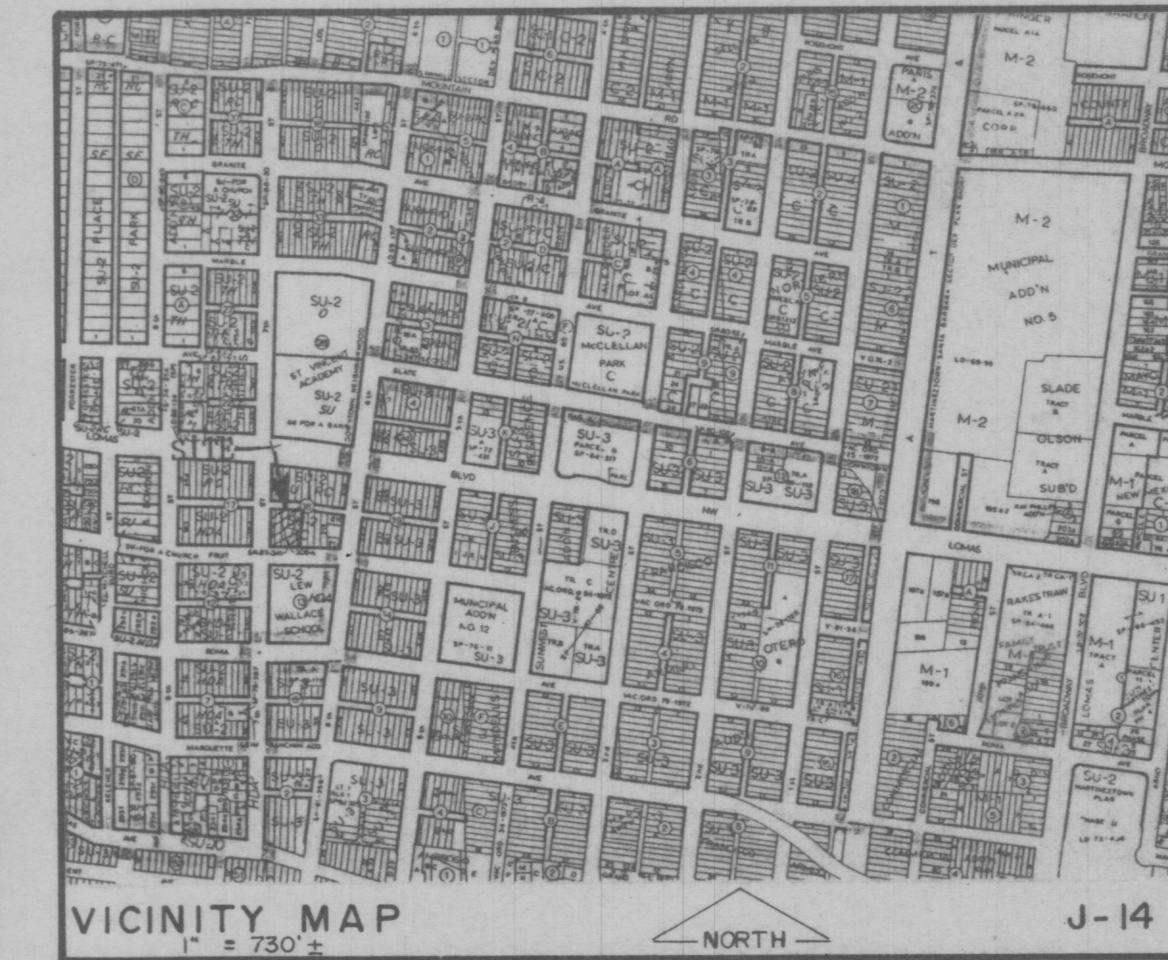
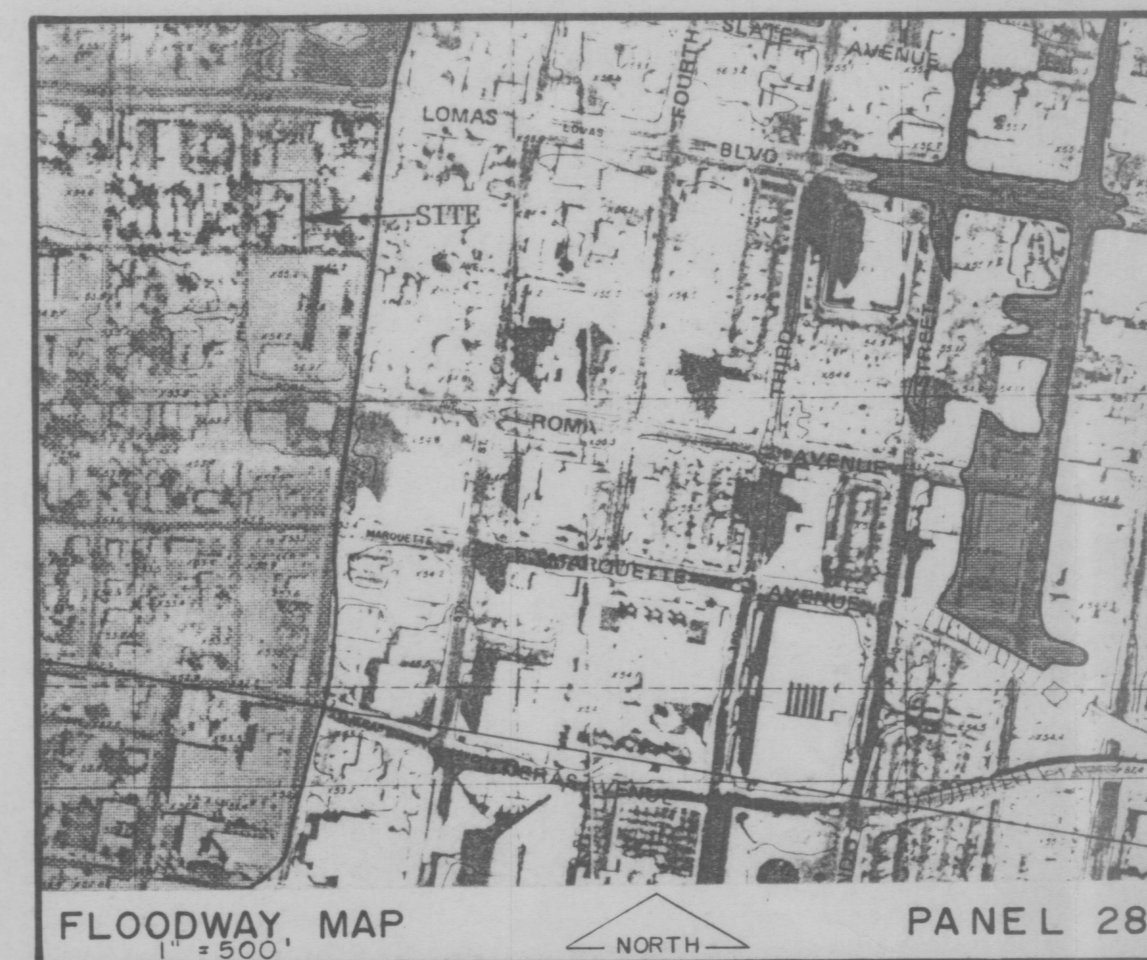
# **LEGAL DESCRIPTION:**

Lots 205, 206, 207 and 208, Block 18, Armijo Brothers Addition, Albuquerque, New Mexico.

# **BENCH MARK:**

Station 17 J-14 located at the intersection of Lomas Blvd and Eighth St., N.W. in the west median nose of Lomas Blvd. Station is a standard ACS aluminum cap stamped "17-J14, 1983", set flush with the top of concrete. Elevation = 4954.83 Feet.

SCALE 1" = 10'



# **DRAINAGE CALCULATIONS**

## **EXISTING CONDITIONS:**

The site is located on the NE corner of Seventh Street and Fruit Avenue, N.W. The site is bounded on the south by Fruit Avenue, on the west by Seventh Street, on the north by an existing paved alley and on the east by a paved parking lot. The site has three existing buildings, asphalt parking and landscaping. All runoff enters Fruit Avenue, Seventh Street or the paved alley and is conveyed by gutter flow to the existing inlet at the NNE curb return at the intersection of Seventh Street and Fruit Avenue. There is no off-site flow.

## **PROPOSED CONDITIONS:**

An additional building is proposed to be constructed on the site. Runoff will be directed to Seventh Street through the parking lot and driveway. Otherwise, drainage will remain the same as it presently is. Only a slight decrease in runoff results due to the new building replacing pavement.

## **REFERENCE:**

1. Hydrology File No. J-14 / D88, by Lou Gross in 1990.

## **FLOODWAY MAP:**

The floodway map inset shows the site plotted on the FEMA Floodway Map. The site does not lie within or adjacent to any 100-year flood zone.

## **RAINFALL, 100-YEAR, 6-HOUR:**

(Refer to D.P.M. Plate 22.2 D-1).  $R_6 = 2.2$  inches.

## **TIME OF CONCENTRATION:**

(Use ten (10) minutes, minimum time of concentration).

## **RAINFALL INTENSITY:**

(Refer to D.P.M. Plate 22.2 D-2).

$$I = R_6 \times 6.84 \times T_c^{-0.51} = 2.2 \times 6.84 \times 10^{-0.51} = 4.65 \text{ inches per hour.}$$

## **SITE IMPERVIOUSNESS BY DRAINAGE BASINS:**

| Surface     | "C"  | "CN" | DR   | EXISTING AREA (SF) | BASIN A | BASIN B | BASIN C | TOTAL DEV AREA (SF) |
|-------------|------|------|------|--------------------|---------|---------|---------|---------------------|
| Building    | 0.90 | 98   | 2.00 | 4657               | 2550    | 1950    | 1457    | 5957                |
| Asph/Conc   | 0.95 | 98   | 2.00 | 6776               | 150     | 3830    | 1496    | 5476                |
| Gravel/Dirt | 0.40 | 82   | 0.85 | -                  | -       | -       | -       | -                   |
| Landscap.   | 0.25 | 61   | 0.20 | 2767               | 1830    | 420     | 517     | 2767                |
| Totals      |      |      |      | 14200              | 4530    | 6200    | 3470    | 14200               |

## **WEIGHTED "C" FACTORS AND WEIGHTED DIRECT RUNOFF VALUES:**

|              | EXIST AREA | BASIN A | BASIN B | BASIN C | TOTAL DEV AREA |
|--------------|------------|---------|---------|---------|----------------|
| Weighted "C" | 0.80       | 0.64    | 0.89    | 0.82    | 0.79           |
| Weighted DR  | 1.65       | 1.27    | 1.88    | 1.71    | 1.65           |

## **PEAK DISCHARGE, 100-YEAR & 10-YEAR:**

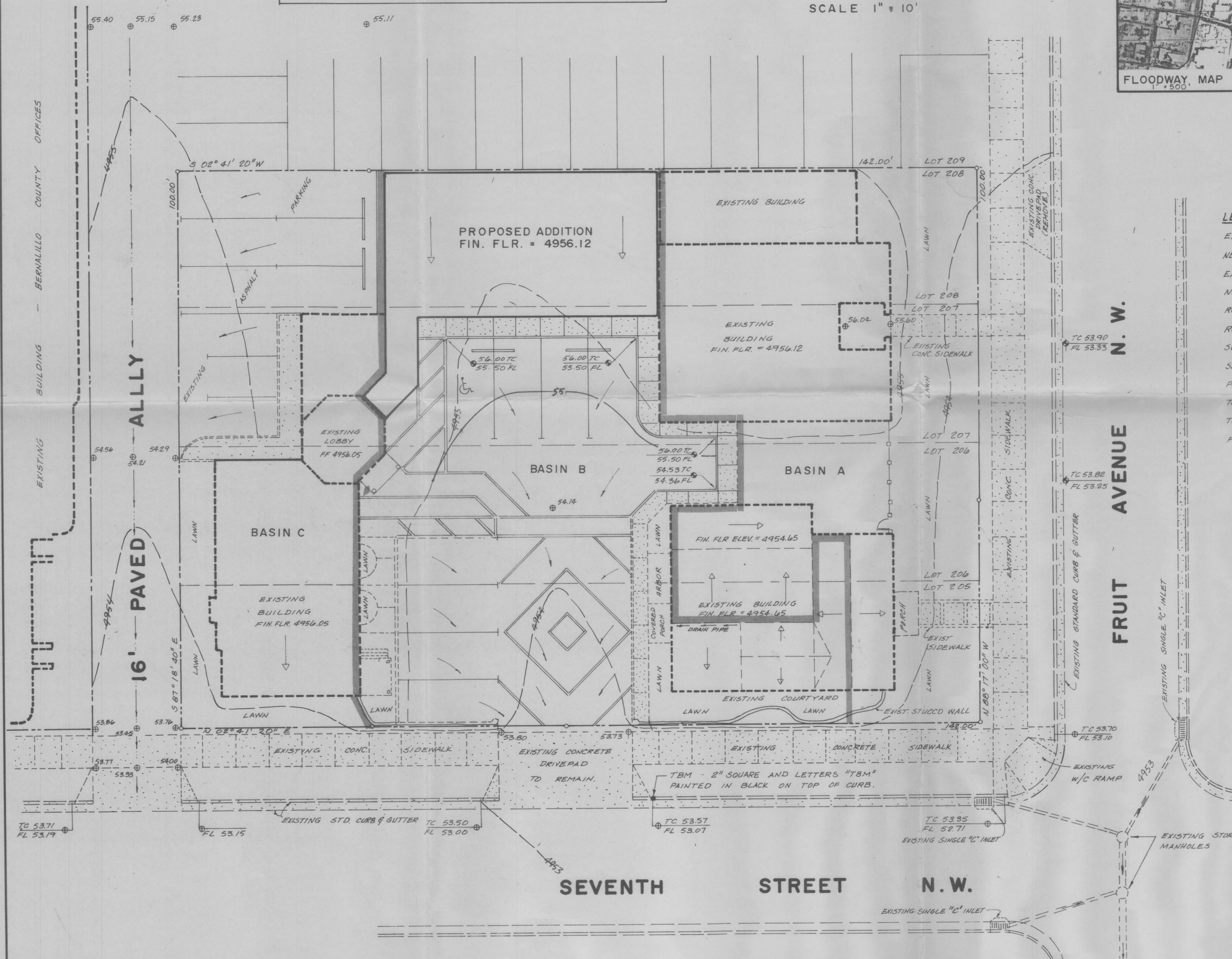
Use Rational Equation,  $Q_{100} = CIA$ ;  $Q_{10} = 0.657 Q_{100}$

|           | EXISTING | BASIN A | BASIN B | BASIN C | TOTAL SITE |
|-----------|----------|---------|---------|---------|------------|
| $Q_{100}$ | 1.21     | 0.31    | 0.59    | 0.30    | 1.20       |
| $Q_{10}$  | 0.80     | 0.20    | 0.39    | 0.20    | 0.79       |

## **VOLUME, 100-YEAR AND 10-YEAR, 6-HOUR:**

$$V_{100} = (\text{Direct Runoff} \times \text{Area in sq.ft.}) / 12; V_{10} = 0.657 V_{100}$$

|           | EXISTING | BASIN A | BASIN B | BASIN C | TOTAL SITE |
|-----------|----------|---------|---------|---------|------------|
| $V_{100}$ | 1952     | 479     | 971     | 494     | 1944       |
| $V_{10}$  | 1282     | 315     | 638     | 325     | 1277       |

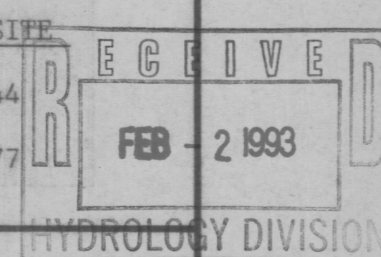


## **LEGEND:**

- EXISTING CONTOUR --- 4955 ---
- NEW CONTOUR --- 55 ---
- EXISTING SPOT ELEV. ⊕
- NEW SPOT ELEV. ⊕
- ROOF SLOPE ↗
- ROOF DRAIN ↘
- SWALE ———
- SHEET FLOW ———
- PROPERTY LINE - - - - -
- TOP OF ASPHALT TA
- TOP OF CURB TC
- FLOW LINE FL



**GRADING & DRAINAGE PLAN**  
**PLACITA de ABOGADO**  
**RON A. BELL**  
 SEVENTH ST. & FRUIT AVE. N.W.  
 ALBUQUERQUE, NEW MEXICO





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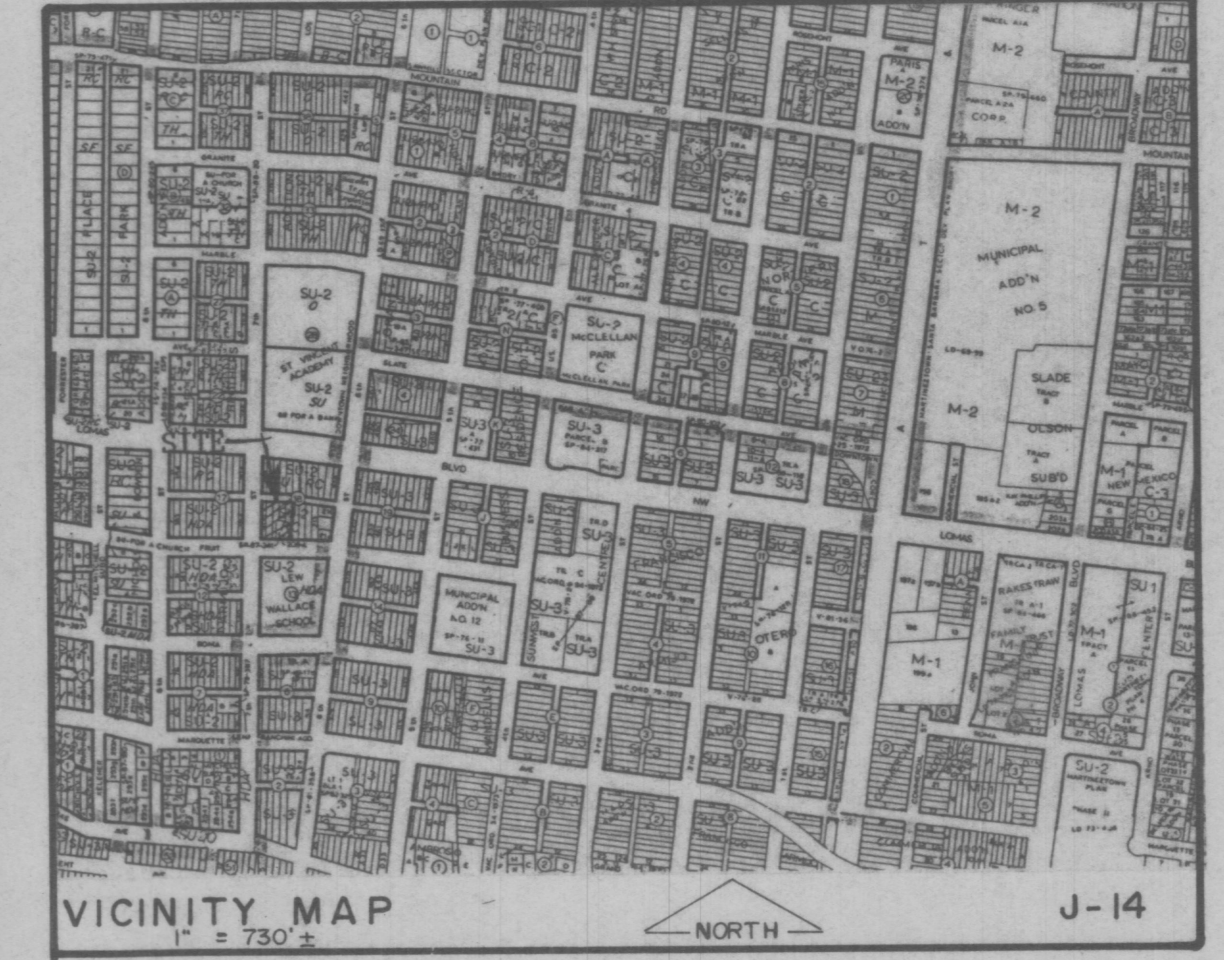
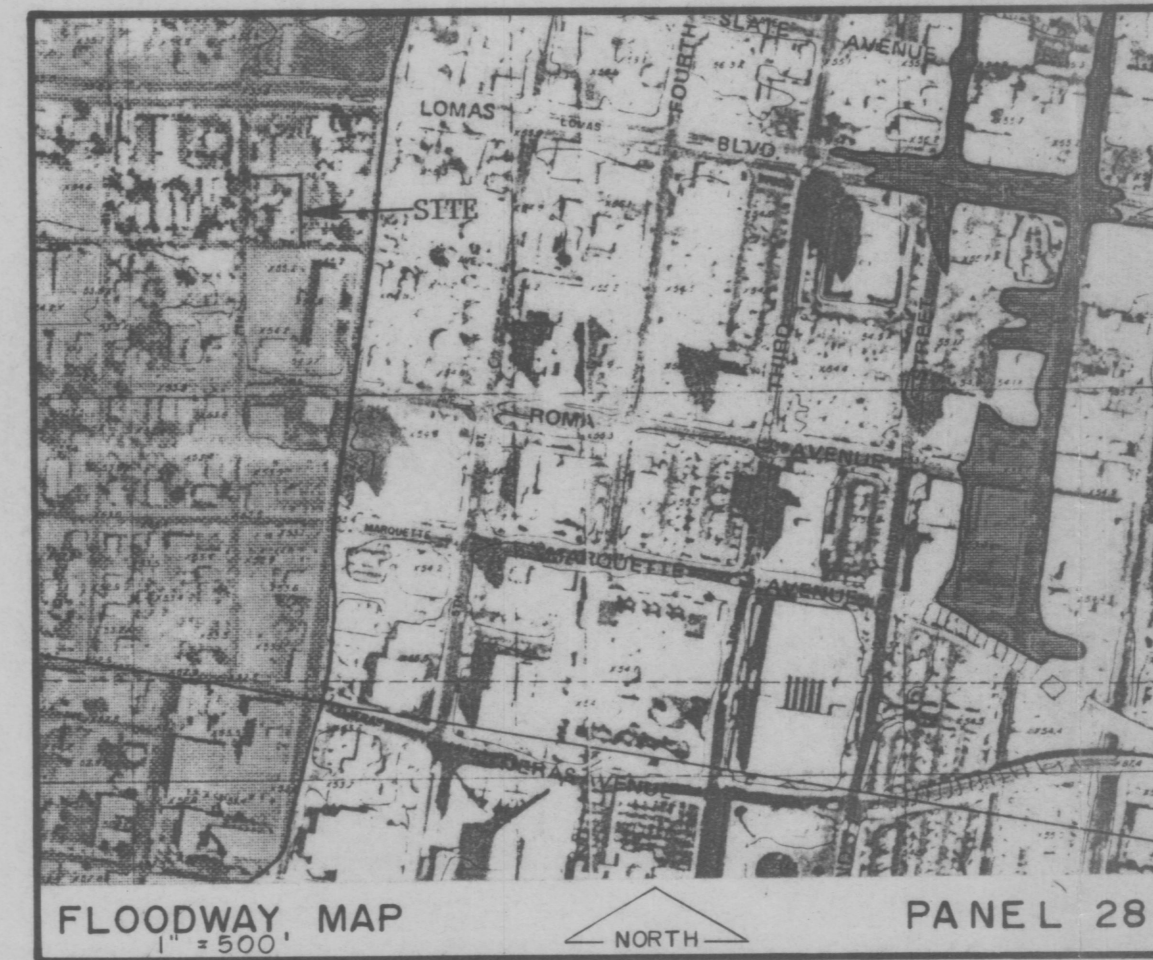
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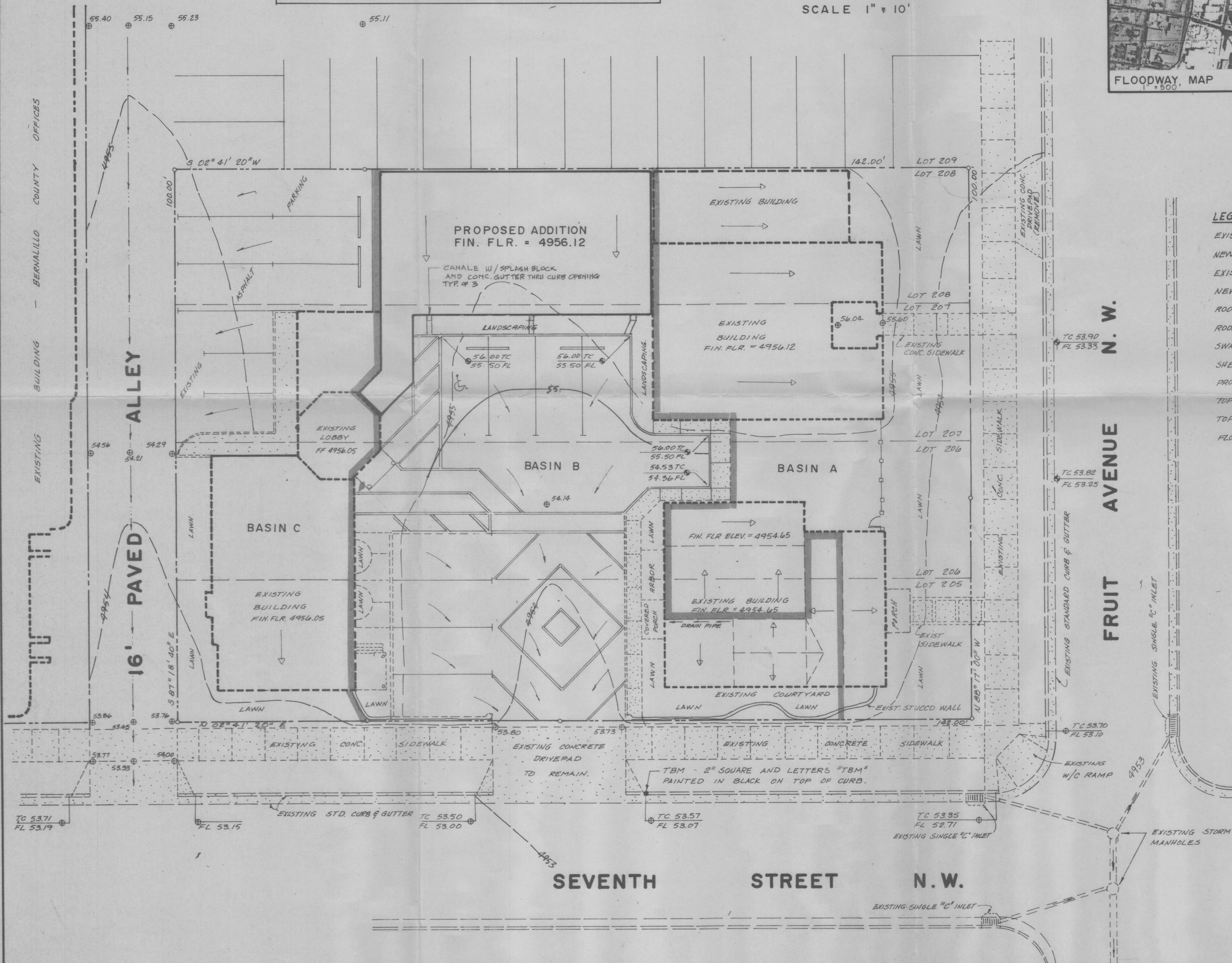
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| SWALE               | →            |
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SHEET NO.

C-2