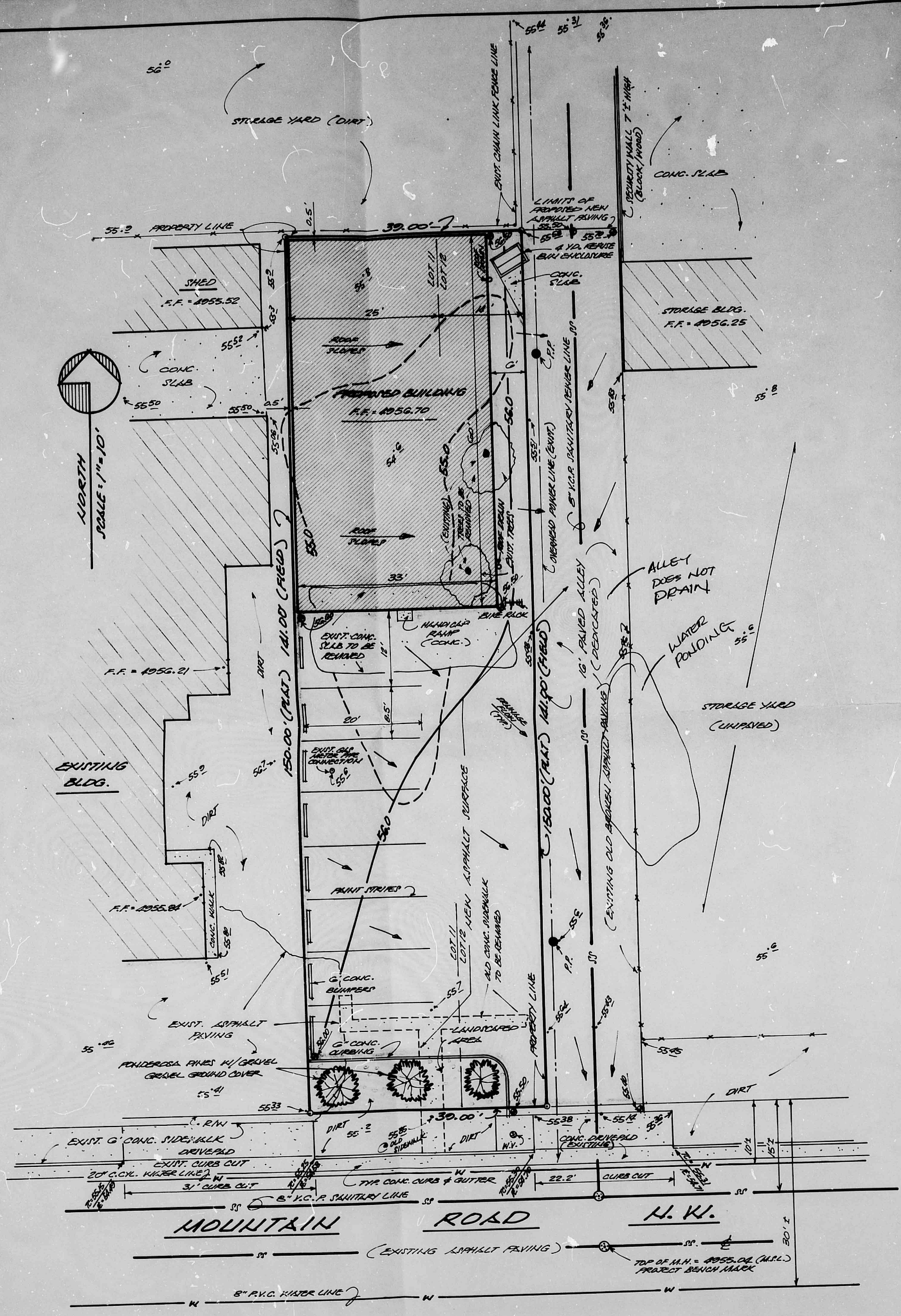
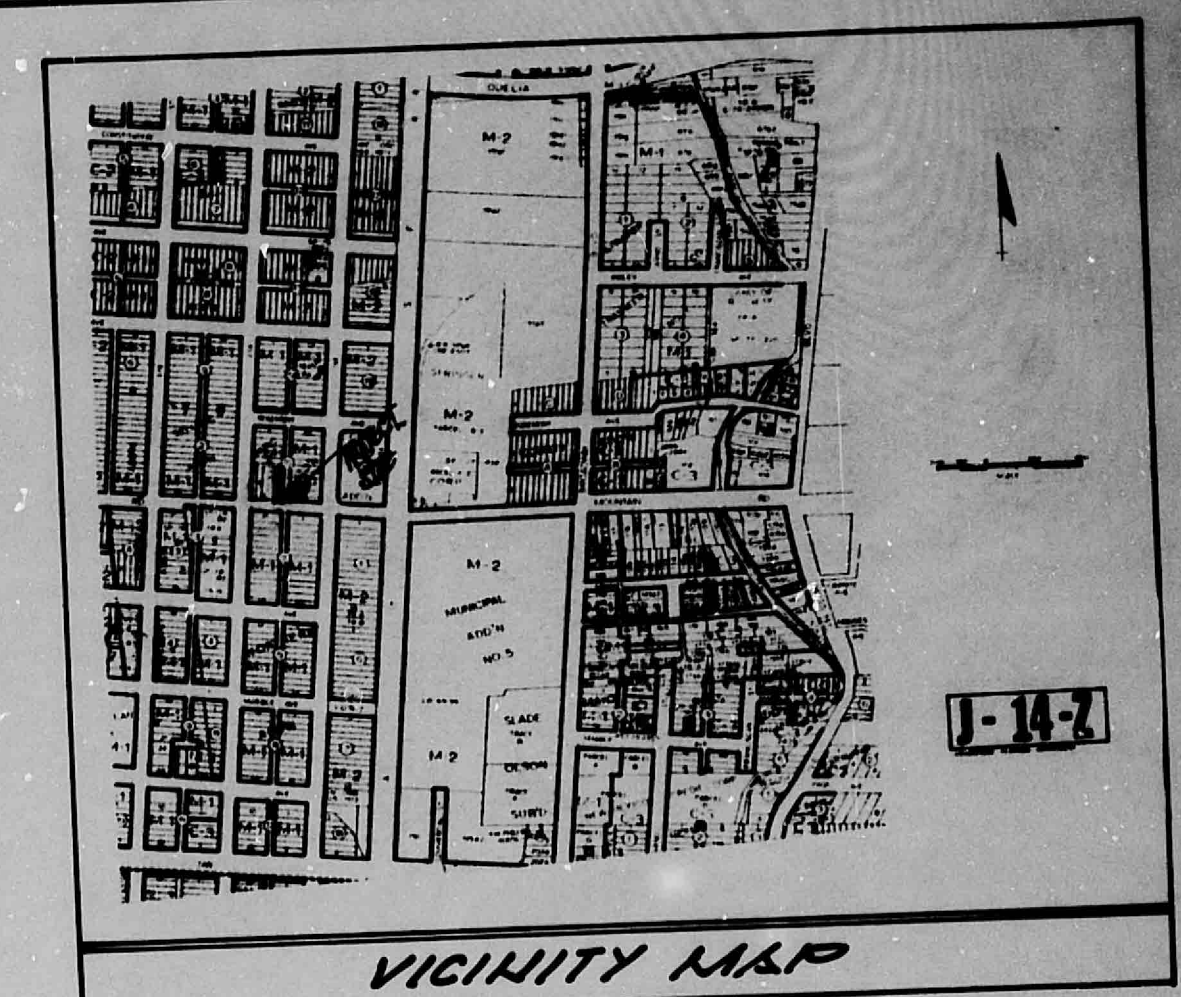




DRAINAGE COMMENTS:

THE FOLLOWING TERMS CONCERNING THE PROPOSED PROJECT SITE ARE CONTAINED HEREON:

1. GRADING-DRAINAGE PLAN
2. VICINITY MAP
3. LOCAL JURISDICTION OF THE PROJECT SITE
4. FLOOD RATES AND VOLUMES OF RUN-OFF
5. EXISTING AND ANTICIPATED ALLEY PLAN

THE PROPOSED BUILDING - BUILDINGS ARE TO BE LOCATED ON THE NORTH SIDE OF MOUNTAIN ROAD, N.W. APPROXIMATELY 200' EAST OF SECOND STREET N.W. THE PROJECT SITE IS TO BE USED FOR THE PURPOSE OF A FLOOD PLAIN; HOWEVER, A SOUTHERLY PORTION OF THE ADJACENT ALLEY DOES LIE WITHIN A FLOOD, THEREFORE, FLOOD PROTECTIVE MEASURES HAVE BEEN INCORPORATED FOR THIS PLAN; THE SITE DOES NOT LIE ADJACENT TO AN EXISTING OR ANTICIPATED WATER COURSE; AND, THE SITE DOES NOT HAVE ANY DRAINAGE PATTERNS ON THE PROPERTY.

THE FLOODS OF THE DEVELOPED SITE WILL BE ACCOMMODATED BY THE NEWLY PAVED ALLEY AND DRAINAGE MOUNTAIN ROAD, N.W., (AS SHOWN ON THE PLAN HEREON).

BASED ON A SITE INVESTIGATION AND FIELD SURVEY, IT HAS BEEN DETERMINED THAT THE EXISTING AND PROPOSED IMPROVEMENTS ON THE SUBJECT SITE DO NOT EXCEED OR CONTRIBUTE TO EXCESSIVE FLOODS, AND WILL HAVE NO ADVERSE IMPACT ON DOWNSTREAM PROPERTIES.

DRAINAGE CALCULATIONS

- I. REFERENCES:**
- A. City of Albuquerque Development Process Manual (DPM) Volume 2, Design Criteria, Chapter 22, Drainage, Flood Control and Erosion Control.
 - B. Soil Survey of Bernalillo County and Parts of Sandoval and Valencia Counties, New Mexico, United States Department of Agriculture, Soil Conservation Service.
- II. GENERAL INFORMATION:**
- A. Soil Type (Ref. B., Page 30) Soil type is Gk, Glendale loam. The hydrologic soil group is "B".
 - B. Imperviousness:
- | Type of Surface | Existing Area
Sq. Ft. Acres | Proposed Area
Sq. Ft. Acres |
|---------------------|--------------------------------|--------------------------------|
| Building roof | | 1980 |
| Concrete Surfaces | | N/A |
| Asphalt Surfaces | | 3255 |
| Landscaping | | 264 |
| Undeveloped surface | 5499 | |
| Site total | 5499 0.1262 | 5499 0.1262 |
| Percent Impervious | 0% | 95% |
- C. "C" Factor (See Ref. A., Plate 22.2 C-1)
 1. Undeveloped "C" Factor = 0.34
 2. Developed "C" Factor = 0.92
 - D. Rainfall, 100-year, 6-hour, R_6 : (See Ref. A., Plate 22.2 D-1) $R_6 = 2.2$ inches.
 - E. Time of Concentration, T_c : Use the minimum time of Concentration of 10 minutes for a site of this size.
 - F. Rainfall Intensity, I : (See Ref. A., Plate 22.2 D-2)

$$I = R_6 \times 6.84 \times T_c^{-0.51} = 2.2 \times 6.84 \times (10)^{-0.51} = 4.65$$
- III. PEAK DISCHARGE:**
- A. Existing Conditions (Use Rational Equation)

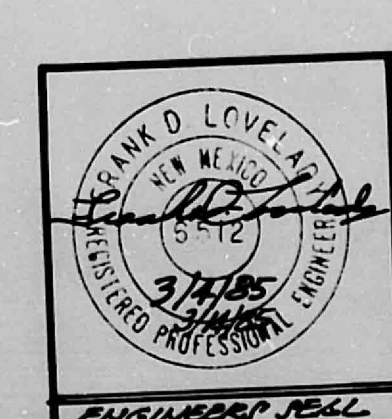
$$Q_{100} = 0.34 \times 4.65 \times 0.1262 = 0.20 \text{ cfs}$$

$$Q_{10} = 0.657 \times 0.20 = 0.13 \text{ (Ref. A., Plate 22.2 D-1)}$$
 - B. Developed conditions.

$$Q_{100} = 0.92 \times 4.65 \times 0.1262 = 0.53 \text{ cfs}$$

$$Q_{10} = 0.657 \times 0.53 = 0.35 \text{ cfs}$$

- LEGEND:**
- 70.0 55.30 = TOP OF CURB ELEVATION
 - 55.70 = CURB FLOOR LINE ELEVATION
 - 55.00 = EXISTING CONTOUR
 - 55.00 = PROPOSED CONTOUR
 - 55.30 = EXISTING SPOT ELEVATION
 - 55.50 = PROPOSED SPOT ELEVATION
 - 55.00 = PROPOSED LIMITS OF NEW PAVING



- CONSTRUCTION NOTES:**
1. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE AT 765-1234 FOR LOCATION OF EXISTING UTILITIES.
 2. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF ALL POTENTIAL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
 3. ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE, AND LOCAL LAWS, RULES, AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.
 4. ALL CONSTRUCTION WITHIN CITY RIGHT-OF-WAY SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE CITY OF ALBUQUERQUE STANDARDS AND PROCEDURES.

- GENERAL NOTES:**
1. TOPOGRAPHY SURVEY PERFORMED BY "TRANSIT-STADIA METHOD."
 2. NO SEARCH HAS BEEN MADE FOR EASEMENTS OF RECORD WITHIN THE SUBJECT PROPERTY OTHER THAN SHOWN ON THE MAP HEREON.
 3. UTILITY LINE INFORMATION OBTAINED FROM CITY OF ALBUQUERQUE ENGINEERING DEPARTMENT RECORDS AND FIELD SURVEY DATA.
- BENCH MARK:**
- STANDARD USCGS BRASS CAP STAMPED "L-224 9521" SET IN THE TOP OF TRAFFIC WARNING LIGHT AT MOUNTAIN ROAD N.W. AND RAILROAD TRACK. M.S.L. ELEVATION = 4958.360
- PROJECT TEMPORARY BENCH MARK (TBM) IS AS SHOWN ON THE GRADING PLAN HEREON.

LEGAL DESCRIPTION:

LOTS 11 & 12, BLOCK 15, PLAT ADDITION, ALBUQUERQUE, NEW MEXICO, (FILED: APRIL 20, 1911.)

DRAINAGE PLAN FOR
ALL OFFICE/SHOP FOR HIGHTONS-FLUIDO
(121 MOUNTAIN RD. N.W.)
ALBUQUERQUE, NEW MEXICO
JANUARY, 1985

514/D50