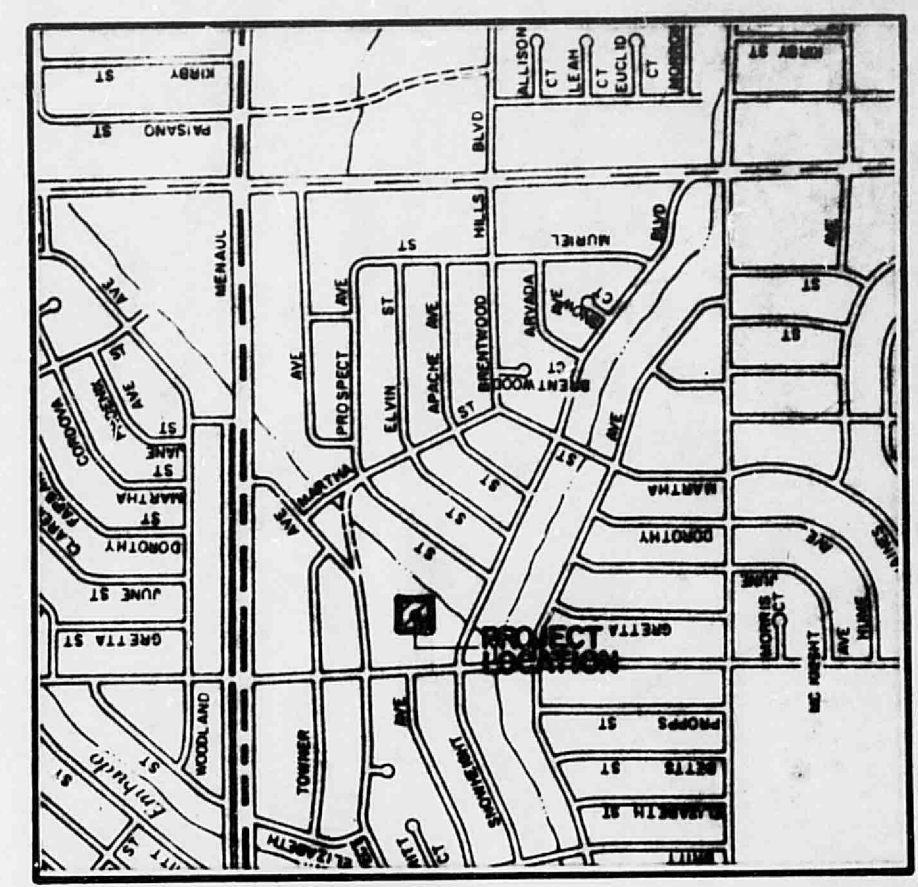


NOTE:
COURTYARD AREA DRAINS TO EXISTING DROP INLET.



The following items concerning the Collet Park Library Addition Drainage Plan are contained hereon:

1. Vicinity Map
2. Flood Hazard Map
3. Grading Plan
4. Calculations

The proposed improvements, as shown by the Vicinity Map, are located at the Collet Park Elementary School. At present, the site is developed. Adjacent sites are also developed.

The site does not lie within a flood hazard zone, as shown by the Flood Hazard Map. The Flood Hazard Map was taken from the "City of Albuquerque, New Mexico, Bernalillo County Flood Hazard Boundary Map" prepared by the U. S. Department of H. U. D. Federal Insurance Program. Offsite flows do not enter the site as determined from the Albuquerque Master Drainage Study Plate H21 and field inspection. As shown by the Grading Plan, the Piedra Lisa Arroyo is located to the southeast of the proposed library addition. At this point, the Piedra Lisa Arroyo is a fully improved concrete drainage channel.

The Grading Plan shows (1) existing grades indicated by spot elevations, (2) existing storm drainage facilities, (3) proposed finish floor elevations, (4) continuity between proposed and existing elevations, and (5) limit and character of proposed improvements. No grading of the site will be required with the exception of that which will be necessary to construct the proposed building itself. The finished floor of the proposed addition has been determined to be compatible with the existing building to which it will adjoin, and to avoid flooding. As can be seen from the Grading Plan, if the courtyard should flood, spilling will occur at Elevation 5531.55 (MSL/D).

The calculations which appear below analyze the proposed development in accordance with the City of Albuquerque Development Process Manual Volume II. Due to the small size of the site and the proposed improvements, the Rational method has been selected for use. Also, because there is an adequate downstream facility, the site will continue to free discharge to that facility. This free discharge will utilize the existing storm drain as shown by the Grading Plan.

OTHER MISCELLANEOUS INFORMATION

1. Discharge: $Q = C_1 A$

$C_{dev} = 0.95$ (impervious)
 $C_{undev} = 0.40$ (pervious)

$i = P_6(6.84) T_C^{-0.51} = 5.18 \text{ in/hr}$
where $P_6 = 2.45"$ (DPM Plate 22.2D-1)
 $T_C = 10 \text{ min}$

$A = 34' \times 36' = 1224 \text{ sf} = 0.03 \text{ Ac}$

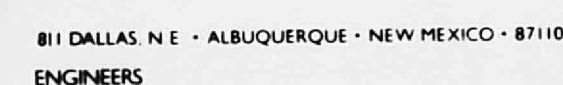
2. Volume: $V = C P_6 A \left(\frac{1}{12} \right)$

$C_{dev} = 0.95$
 $C_{undev} = 0.40$

$P_6 = 2.45"$ (DPM Plate 22.2D-1)
 $A = 1224 \text{ sf}$

$$\begin{aligned} Q_{100}, \text{undev} &= 0.40(5.18)(0.03) = 0.06 \text{ cfs} \\ V_{100}, \text{undev} &= 0.40\left(\frac{2.45}{12}\right)(1224) = 100 \text{ cf} \\ Q_{100}, \text{dev} &= 0.95(5.18)(0.03) = 0.15 \text{ cfs} \\ V_{100}, \text{dev} &= 0.95\left(\frac{2.45}{12}\right)(1224) = 237 \text{ cf} \\ \Delta Q_{100} &= 0.15 - 0.06 = 0.09 \text{ cfs} \\ \Delta V_{100} &= 237 - 100 = 137 \text{ cf} \end{aligned}$$

1. PROJECT BENCHMARK: ACS brass cap 8-H21A located at the southwest curb return at the intersection of Menaul Boulevard N.E. and Morris Avenue N.E.
Elevation: 5531.08 feet (MSLD)
2. TEMPORARY BENCHMARK: Finished floor of existing library as shown on Grading Plan.
Elevation: 5532.05 feet (MSLD)
3. SOILS (from SCS Soil Survey, Plate 32)
ETC Embudo-Tijeras Complex B Soil
4. ADDRESS: 2100 Morris Avenue N.E.

[illegible]

DESIGNED BY: JGM
DRAWN BY: OGC
APPROVED: TTM

JOB NO.
2-0701

DATE
7/82

COLLET PARK LIBRARY ADDITION DRAINAGE PLAN
ALBUQUERQUE PUBLIC SCHOOLS

FILE NO.

SHEET 1 OF 1