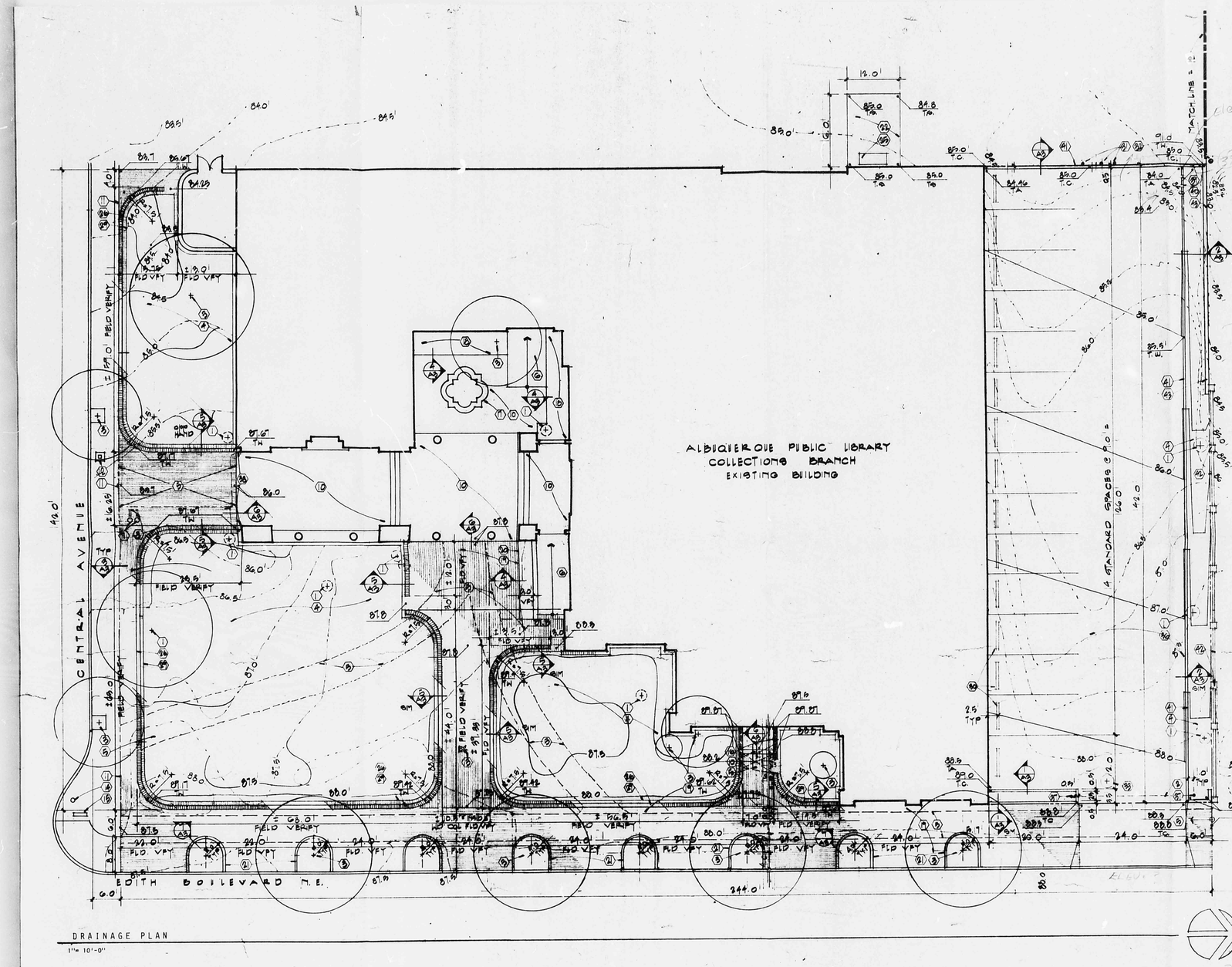
HYDROLOGY K14/D19 1 PLAN

K14/D19

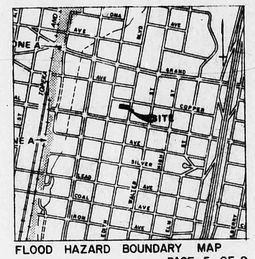
1 Plan

CITY OF ALBUQUERQUE



DRAINAGE PLAN
1"= 10'-0"

KEY MAP K-14-Z



FLOOD HAZARD BOUNDARY MAP
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TEMPORARY BENCH MARK :

LIBRARY FINISHED FLOOR ELEV. = 100.00
M.S.L.E. = 4989.17
BENCH MARK 6-K-14R (BROADWAY & CENTRAL)
M.S.L.E. = 4968.89

ALBUQUERQUE LIBRARY DRAINAGE PLAN

The proposed development involves a new parking lot covering approximately 0.16 acres located immediately north of the existing Albuquerque Library. The site is located in soil type Cu and Hydrologic soil group A. Hydrologic conditions are as follows:

Exist,
tc = 10 min, C = 0.16 (Plate 22.2 C-1).
i = 2.2 (2.3) = 5.06 in/hr.
Q = 0.16 (5.06) (.16) = 0.13 cfs.
Vol. = (175/12) 7100 = 443.8 c.f.

Develope,
Impervious Area = 6500 ft.^{2}

Determine Revised C.N.
6500 (98) = 637,000
600 (80) = 48,000
685,000
C.N. = 685,000/7100 - 96.5 Use 97

Determine Coeff.
6500 (.95) = 6175
600 (.4) = 240
6415
C = 6415/7100 = 0.9
Q = 0.9 (5.06) (.16) = 0.73 cfs
V = (1.9/12) 7100 = 1124

Max Ponding Vol. Req. = 1124-444 = 680 C.F.
Vol. Avail. in Planting Area = 300 C.F.
Depth Req. in Parking Lot = 380/875 = 0.43

Upstream flows are diverted away from the site by existing grades on Arno and do not affect the hydrology of the site.

Discharge from the site will be transported by proposed alley grades and discharge to Copper Ave.

Development of the site will not increase the threat of flooding to downstream areas.

3P2CF x .73 x 1/5
2P2CF = (.43)(.43)(X)

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DATE 1984 DRAWN SAM CHECKED RGH

SPECIAL COLLECTIONS BRANCH - ALBUQUERQUE PUBLIC LIBRARY
423 CENTRAL AVE, N.E. 1984 LANDSCAPING WORK
ALBUQUERQUE, NEW MEXICO
CITY OF ALBUQUERQUE PROJECT Number 1844

8310

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