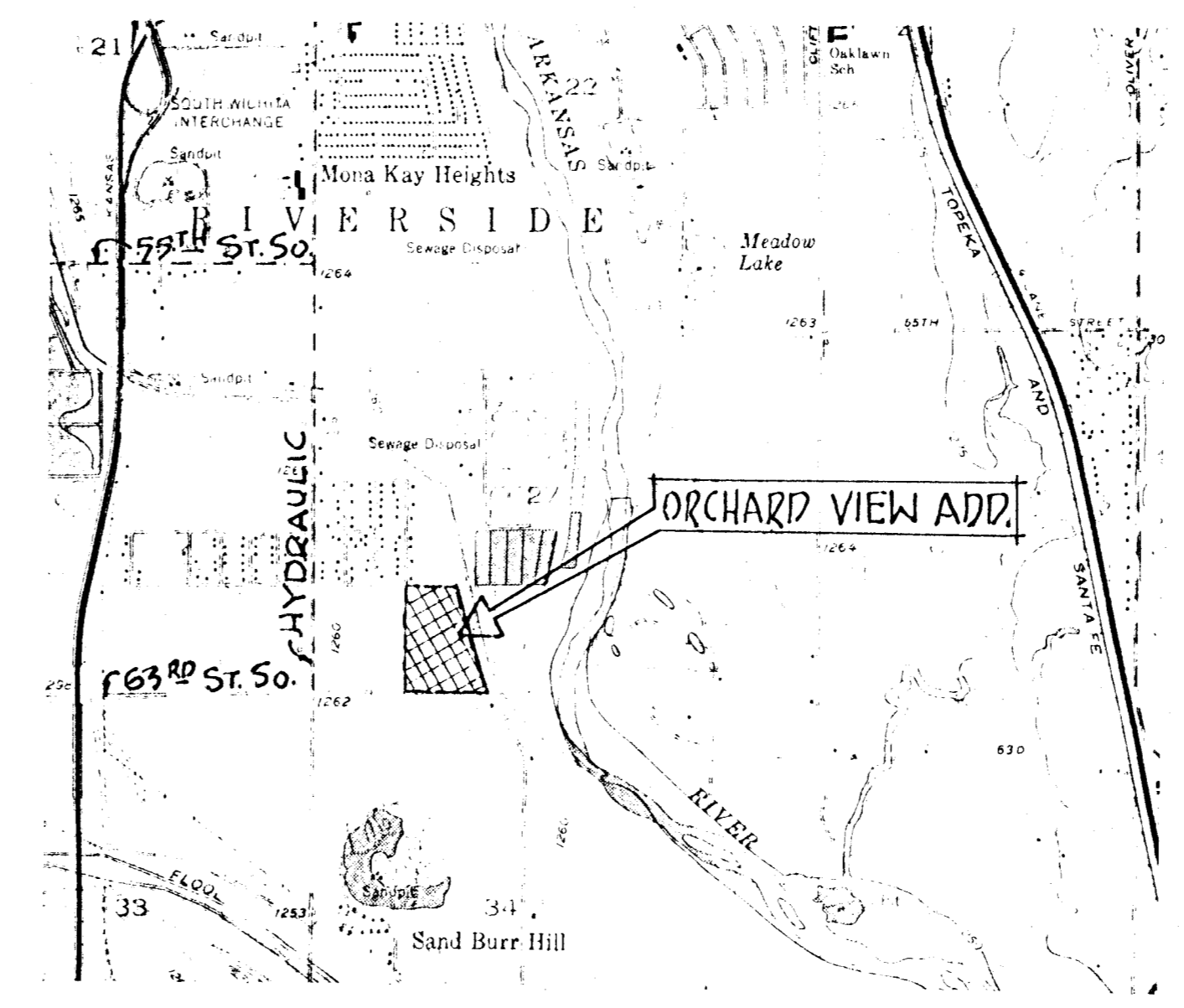
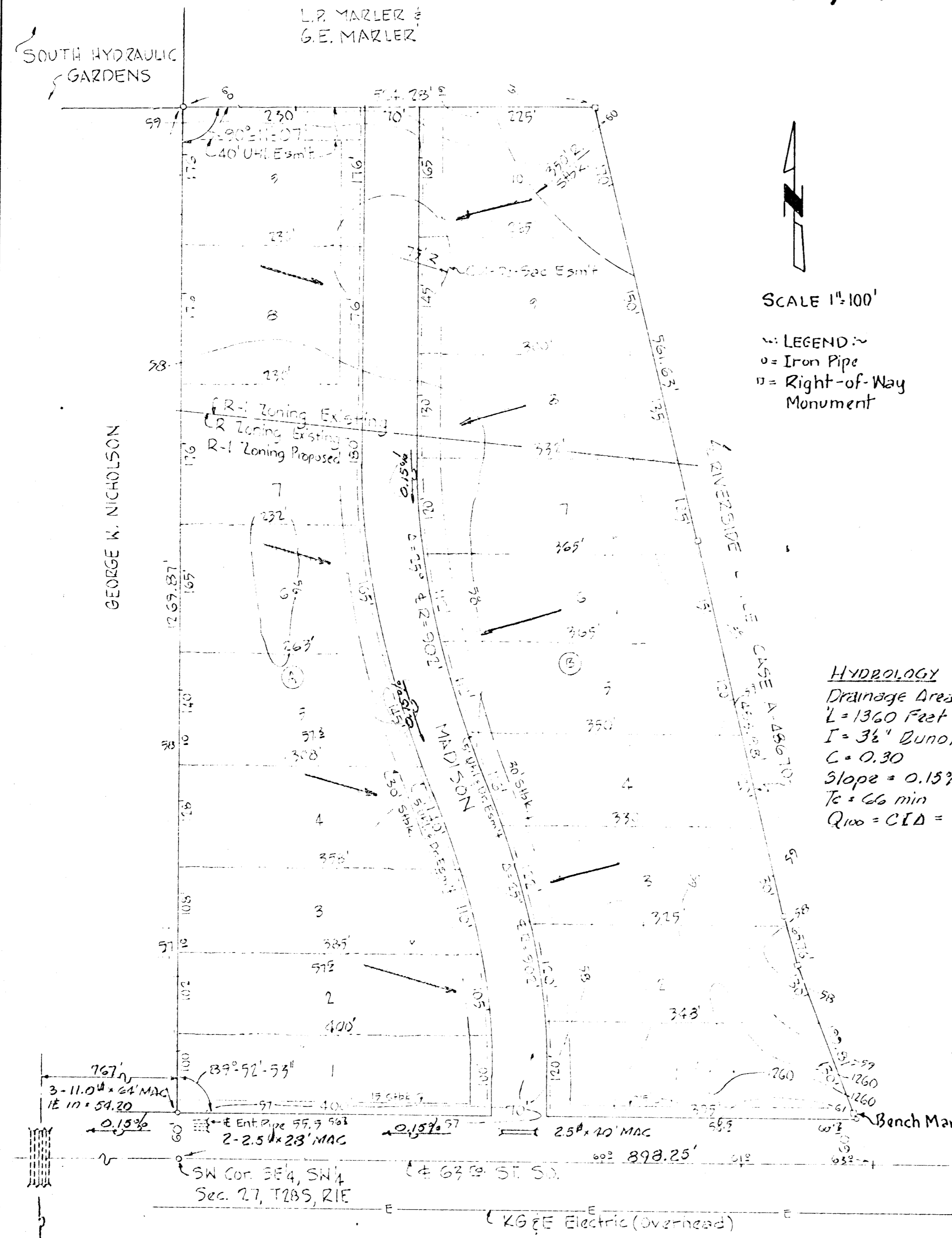


DRAINAGE PLAN

ORCHARD VIEW ADDITION

SEDGWICK COUNTY, KANSAS

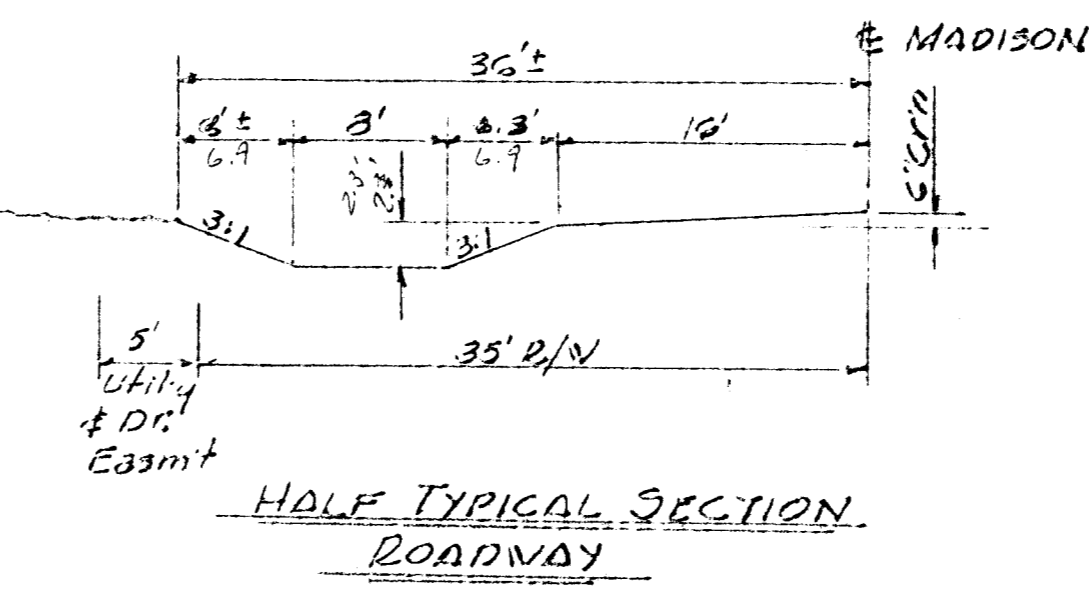


VICINITY MAP

SCALE 1"=100'

LEGEND:
 ○ = Iron Pipe
 ▭ = Right-of-Way Monument

HYDROLOGY
 Drainage Area = 21 Acres
 L = 1360 Feet
 I = 3 1/2" Runoff (100 yr)
 C = 0.30
 Slope = 0.15%
 Tc = 66 min
 Q₁₀₀ = CIA = 22 cfs.



HALF TYPICAL SECTION
ROADWAY

DITCH DESIGN
 Q₁₀₀ = 22.0 cfs
 N = 0.040
 SS = 3:1
 S = 0.0015'/ft
 B = 8.0 ft

Sanitary Sewer
 Probable Flow Eleu.
 N.L. Plat = 1253.8 ±
 S.L. Plat = 1257.6 ±

By Manning's Formula:
 Depth = 1.32'
 Velocity = 1.40 fps.

Using 0.2% to N.L.
 Plat and 0.3%
 within plat.

Min. cover of 30" required on sewer.

DELAMATER, FREUND & ASSOCIATES, P.A.

APPROVED _____ DATE _____
 249-Q-B-202