

PRELIMINARY DRAINAGE STUDY
CRESTVIEW COUNTRY CLUB ESTATES
SOUTHCREST ADDITION

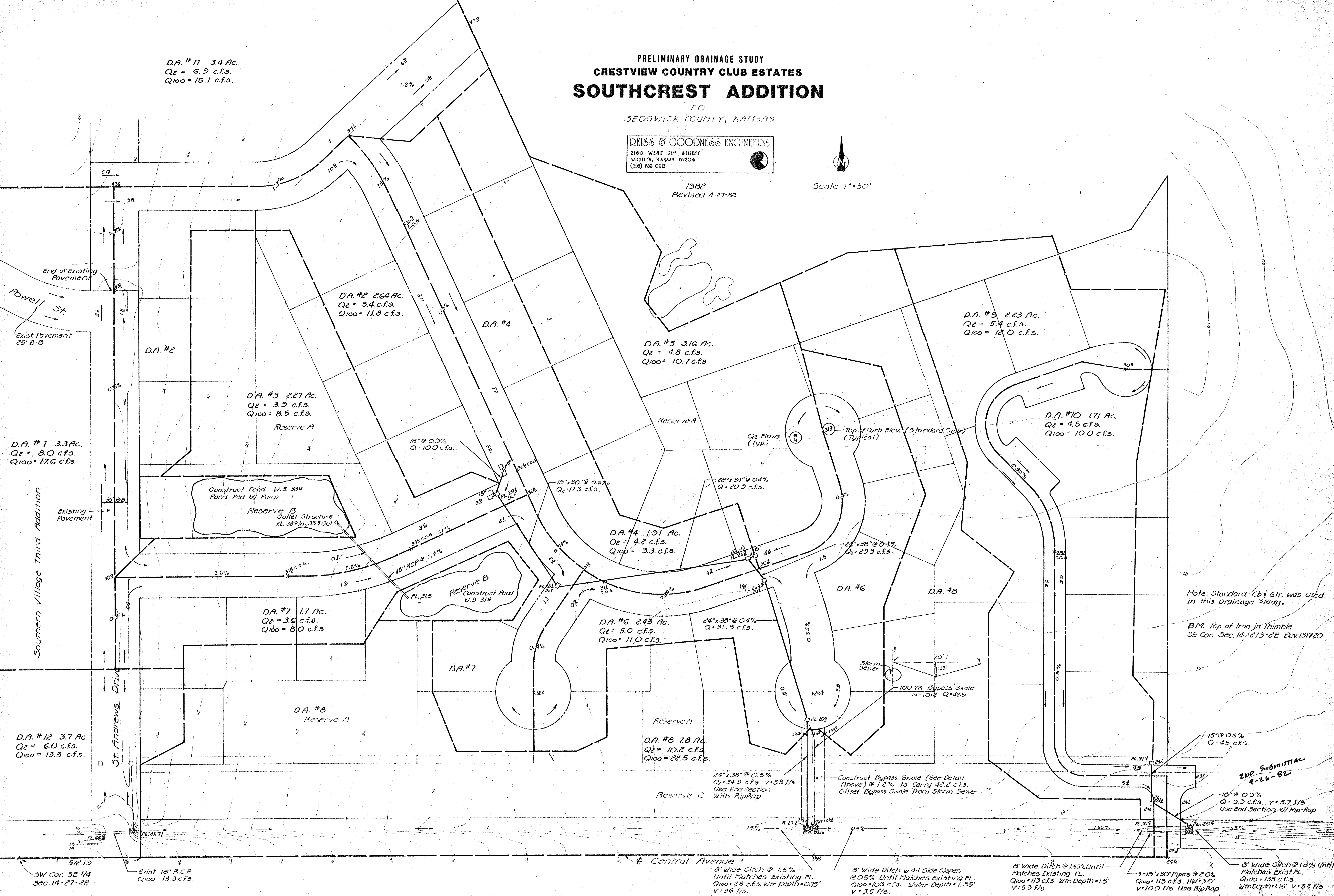
TO
 SEDGWICK COUNTY, KANSAS

REISS & GOODNESS ENGINEERS
 2100 WEST 21ST STREET
 WICHITA, KANSAS 67204
 (316) 832-0213

1982
 Revised 4-27-82

Scale 1" = 50'

D.A. #11 3.4 Ac.
 $Q_2 = 6.9$ c.f.s.
 $Q_{100} = 15.1$ c.f.s.



Note: Standard Cb & Gtr. was used in this Drainage Study.
 B.M. Top of Iron in Thimble
 SE Cor. Sec. 14-27-2E Elev. 1317.20

2ND SUBMITTAL
 4-26-82

D.A. #1 3.3 Ac.
 $Q_2 = 8.0$ c.f.s.
 $Q_{100} = 17.6$ c.f.s.

D.A. #2 2.64 Ac.
 $Q_2 = 5.4$ c.f.s.
 $Q_{100} = 11.8$ c.f.s.

D.A. #3 2.27 Ac.
 $Q_2 = 3.9$ c.f.s.
 $Q_{100} = 8.5$ c.f.s.

D.A. #4 1.91 Ac.
 $Q_2 = 4.2$ c.f.s.
 $Q_{100} = 9.3$ c.f.s.

D.A. #5 3.16 Ac.
 $Q_2 = 4.8$ c.f.s.
 $Q_{100} = 10.7$ c.f.s.

D.A. #9 2.23 Ac.
 $Q_2 = 5.4$ c.f.s.
 $Q_{100} = 12.0$ c.f.s.

D.A. #10 1.71 Ac.
 $Q_2 = 4.5$ c.f.s.
 $Q_{100} = 10.0$ c.f.s.

D.A. #7 1.7 Ac.
 $Q_2 = 3.6$ c.f.s.
 $Q_{100} = 8.0$ c.f.s.

D.A. #6 2.43 Ac.
 $Q_2 = 5.0$ c.f.s.
 $Q_{100} = 11.0$ c.f.s.

D.A. #8 7.8 Ac.
 $Q_2 = 10.2$ c.f.s.
 $Q_{100} = 22.5$ c.f.s.

D.A. #12 3.7 Ac.
 $Q_2 = 6.0$ c.f.s.
 $Q_{100} = 13.3$ c.f.s.

D.A. #8 Reserve A

Reserve C

SW Cor. SE 1/4
 Sec. 14-27-2E

Exist. 18" R.C.P.
 $Q_{100} = 13.3$ c.f.s.

8' Wide Ditch @ 1.5%
 Until Matches Existing FL.
 $Q_{100} = 28$ c.f.s. Wtr. Depth = 0.75'
 $V = 3.6$ f/s.

8' Wide Ditch w 4:1 Side Slopes
 @ 0.5% Until Matches Existing FL.
 $Q_{100} = 105$ c.f.s. Wtr. Depth = 1.55'
 $V = 3.5$ f/s.

8' Wide Ditch @ 1.55% Until
 Matches Existing FL.
 $Q_{100} = 113$ c.f.s. Wtr. Depth = 1.5'
 $V = 5.3$ f/s.

3-15" x 30" Pipes @ 2.0%
 $Q_{100} = 113$ c.f.s. HW = 3.0'
 $V = 10.0$ f/s Use RipRap

8' Wide Ditch @ 1.3% Until
 Matches Existing FL.
 $Q_{100} = 135$ c.f.s.
 Wtr. Depth = 1.75' $V = 5.2$ f/s