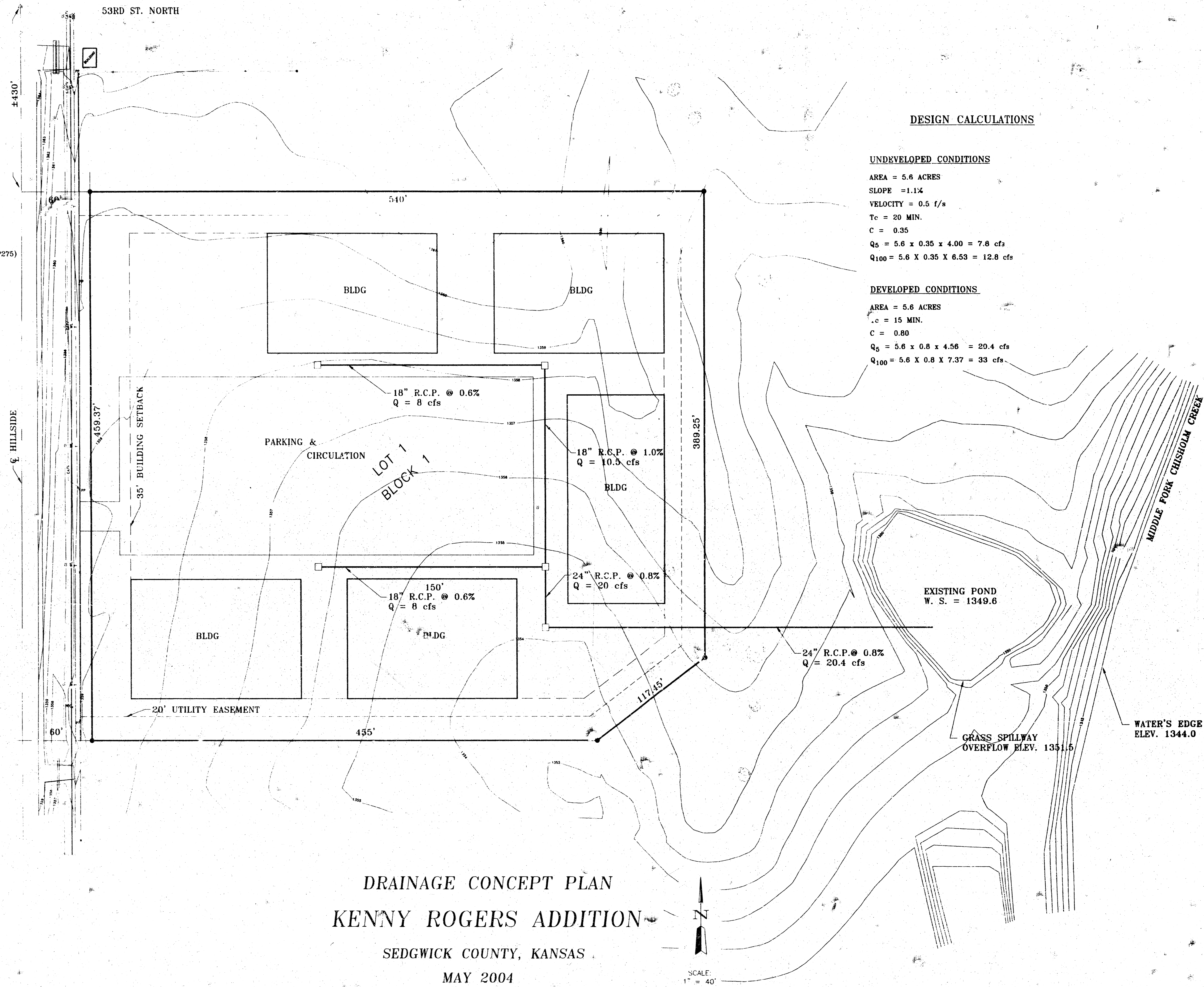


- NOTES:
1. LOCATION & SIZE OF BUILDINGS ARE APPROXIMATE AND SUBJECT TO CONDITIONS OF THE ASSOCIATED CUP FOR KENNY RODGERS COMMERCIAL COMMUNITY UNIT PLAN (CUP2004-14 DP275)
 2. INLET LOCATIONS & PIPE SIZES ARE APPROXIMATE AND SUBJECT TO ACTUAL DEVELOPMENT.
 3. EXISTING POND TO BE USED FOR STORM WATER DETENTION.
 4. STORM WATER SEWER PIPE TO BE SIZED TO HANDLE THE INITIAL DESIGN STORM OF 5 YEARS.



DESIGN CALCULATIONS

UNDEVELOPED CONDITIONS

AREA = 5.6 ACRES
 SLOPE = 1.1%
 VELOCITY = 0.5 f/s
 Tc = 20 MIN.
 C = 0.35
 Q₅ = 5.6 x 0.35 x 4.00 = 7.8 cfs
 Q₁₀₀ = 5.6 X 0.35 X 6.53 = 12.8 cfs

DEVELOPED CONDITIONS

AREA = 5.6 ACRES
 Tc = 15 MIN.
 C = 0.80
 Q₅ = 5.6 x 0.8 x 4.56 = 20.4 cfs
 Q₁₀₀ = 5.6 X 0.8 X 7.37 = 33 cfs

DRAINAGE CONCEPT PLAN
KENNY ROGERS ADDITION
 SEDGWICK COUNTY, KANSAS
 MAY 2004

