



Drainage Calculation Assumptions
 Tc of System = 43 minutes
 Cs = 0.45
 C100 = 0.64
 Is = 2.72 in/hr
 I100 = 4.60 in/hr



100 Year System Capacity Breakdown
 114.6 cfs offsite
 163.2 cfs onsite
 277.8 cfs total

66.1 cfs bypassed (carried away by sidestreets)
 114.6 - 66.1 = 48.5 cfs offsite carried by new SWS

48.5/277.8 cfs = 17% of total SWS flow

Alternate 100 Year System Capacity Breakdown
 114.6 cfs offsite
 163.2 cfs onsite
 277.8 cfs total

Potential runoff within 600' (137.7 acres) = 405 cfs

Total runoff carried to SWS system is 127.2 cfs less than potential.

CENTRAL - WOODLAWN TO ROCK DRAINAGE MAP
 WICHITA, KANSAS

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 DRAWN KWL
 REVIEW
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SHEET
 89
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 106

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