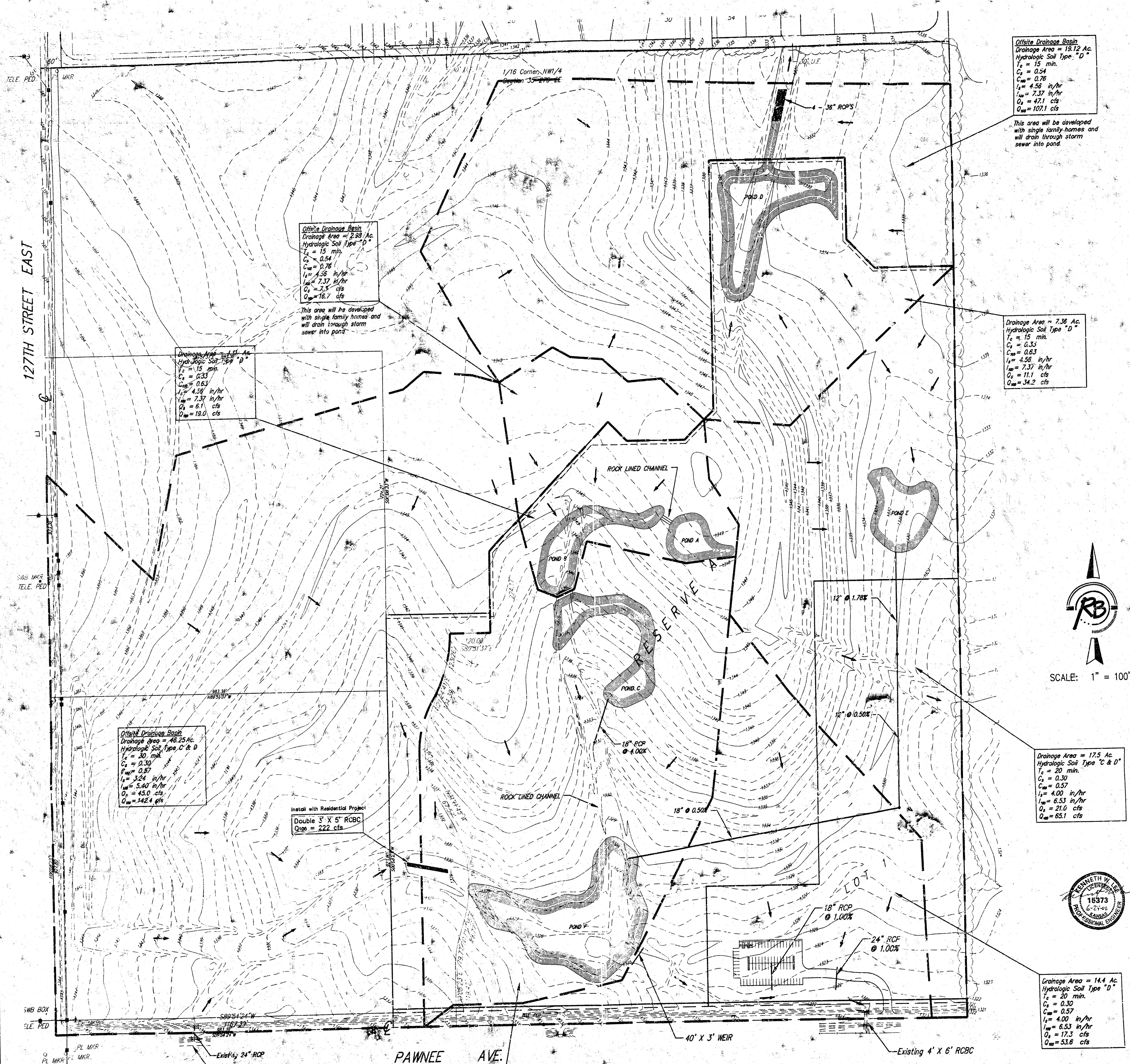




Offsite Drainage Basin
 Drainage Area = 19.12 Ac.
 Hydrologic Soil Type "D"
 $T_c = 15$ min.
 $C_s = 0.54$
 $C_{wa} = 0.76$
 $I_p = 4.56$ in/hr
 $I_{100} = 7.37$ in/hr
 $Q_s = 47.1$ cfs
 $Q_{100} = 107.1$ cfs

This area will be developed with single family homes and will drain through storm sewer into pond.

Offsite Drainage Basin
 Drainage Area = 2.88 Ac.
 Hydrologic Soil Type "D"
 $T_c = 15$ min.
 $C_s = 0.54$
 $C_{wa} = 0.76$
 $I_p = 4.56$ in/hr
 $I_{100} = 7.37$ in/hr
 $Q_s = 3.5$ cfs
 $Q_{100} = 16.7$ cfs

This area will be developed with single family homes and will drain through storm sewer into pond.

Drainage Area = 4.11 Ac.
 Hydrologic Soil Type "D"
 $T_c = 15$ min.
 $C_s = 0.33$
 $C_{wa} = 0.63$
 $I_p = 4.56$ in/hr
 $I_{100} = 7.37$ in/hr
 $Q_s = 6.1$ cfs
 $Q_{100} = 19.0$ cfs

Drainage Area = 7.36 Ac.
 Hydrologic Soil Type "D"
 $T_c = 15$ min.
 $C_s = 0.33$
 $C_{wa} = 0.63$
 $I_p = 4.56$ in/hr
 $I_{100} = 7.37$ in/hr
 $Q_s = 11.1$ cfs
 $Q_{100} = 34.2$ cfs

Offsite Drainage Basin
 Drainage Area = 46.25 Ac.
 Hydrologic Soil Type "C & D"
 $T_c = 30$ min.
 $C_s = 0.30$
 $C_{wa} = 0.57$
 $I_p = 3.24$ in/hr
 $I_{100} = 5.40$ in/hr
 $Q_s = 45.0$ cfs
 $Q_{100} = 142.4$ cfs

Install with Residential Project
 Double 3' X 5' RBCB
 $Q_{100} = 222$ cfs

Drainage Area = 17.5 Ac.
 Hydrologic Soil Type "C & D"
 $T_c = 20$ min.
 $C_s = 0.30$
 $C_{wa} = 0.57$
 $I_p = 4.00$ in/hr
 $I_{100} = 6.53$ in/hr
 $Q_s = 21.0$ cfs
 $Q_{100} = 65.1$ cfs



Drainage Area = 14.4 Ac.
 Hydrologic Soil Type "D"
 $T_c = 20$ min.
 $C_s = 0.30$
 $C_{wa} = 0.57$
 $I_p = 4.00$ in/hr
 $I_{100} = 6.53$ in/hr
 $Q_s = 17.3$ cfs
 $Q_{100} = 53.6$ cfs

Offsite Drainage Basin
 Drainage Area = 28.70 Ac.
 Hydrologic Soil Type "C"
 $T_c = 30$ min.
 $C_s = 0.27$
 $C_{wa} = 0.51$
 $I_p = 3.24$ in/hr
 $I_{100} = 5.40$ in/hr
 $Q_s = 23.1$ cfs
 $Q_{100} = 79.0$ cfs

Drainage Area = 25.0 Ac.
 Hydrologic Soil Type "C & D"
 $T_c = 30$ min.
 $C_s = 0.30$
 $C_{wa} = 0.57$
 $I_p = 4.00$ in/hr
 $I_{100} = 6.53$ in/hr
 $Q_s = 30.0$ cfs
 $Q_{100} = 93.1$ cfs

Pond	Static Pool	Bottom	Surface Area	Q100 (IN)	Q100 (OUT)	Max. W.S.
A	1345.0	1335.0	0.46	N/A	N/A	N/A
B	1342.0	1335.0	0.74	43.2	35.8	1342.7
C	1338.0	1331.0	0.66	33.6	17.3	1338.8
D	1332.0	1322.0	1.42	159.7	98.7	1334.3
E	1331.0	1324.0	0.75	N/A	N/A	N/A
F	1328.0	1318.0	2.30	396.9	247.0	1330.0

Note: Inflow and Outflow Values are based on output from HEC-HMS. Ponds A and E are not designed for detention. Water will be pumped to Pond A as necessary to maintain water surface. All ponds shall be pumped to Pond A as necessary to maintain water surface. A 5' wide

Siena Hills Golf Course
 PAR 3 GOLF COURSE
DRAINAGE PLAN
 WICHITA, SEDGWICK COUNTY, KANSAS

Ruggles & Bohm, P.A.
 Professional Engineer
 15373
 State of Kansas