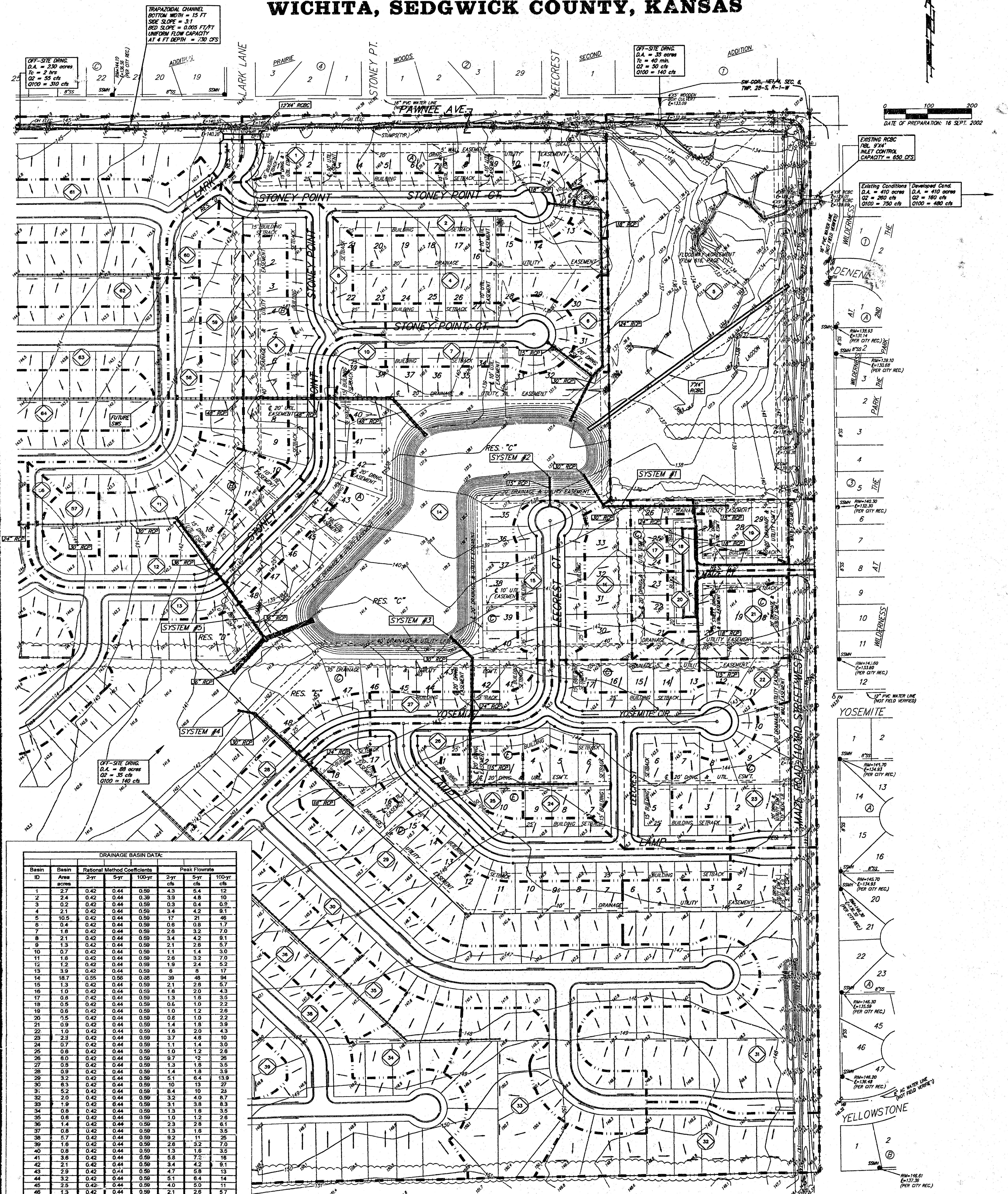


DRAINAGE PLAN SOUTHERN RIDGE ADDITION WICHITA, SEDGWICK COUNTY, KANSAS



TRAPEZOIDAL CHANNEL
BOTTOM WIDTH = 15 FT
SIDE SLOPE = 1:1
BED SLOPE = 0.005 FT/FT
UNIFORM FLOW CAPACITY
AT 4 FT DEPTH = 730 CFS

OFF-SITE DRNG
D.A. = 35 acres
Tc = 2 hrs
Q100 = 310 cfs

EXISTING RCBC
10L 9" 4"
INLET CONTROL
CAPACITY = 630 CFS

Existing Conditions D.A. = 410 acres
Q1 = 280 cfs Q2 = 160 cfs
Q100 = 750 cfs

Developed Cond. D.A. = 410 acres
Q1 = 280 cfs Q2 = 160 cfs
Q100 = 480 cfs

Basin ID	Basin Area acres	Rational Method Coefficients			Peak Flowrate		
		2-yr	5-yr	100-yr	2-yr	5-yr	100-yr
1	2.7	0.42	0.44	0.59	4.3	6.4	12
2	2.4	0.42	0.44	0.59	3.9	4.8	10
3	0.2	0.42	0.44	0.59	0.3	0.4	0.9
4	2.1	0.42	0.44	0.59	3.4	4.2	9.1
5	10.5	0.42	0.44	0.59	17	21	46
6	0.4	0.42	0.44	0.59	0.6	0.8	1.7
7	1.8	0.42	0.44	0.59	2.6	3.2	7.0
8	2.1	0.42	0.44	0.59	3.4	4.2	9.1
9	1.3	0.42	0.44	0.59	2.1	2.8	5.7
10	0.7	0.42	0.44	0.59	1.1	1.4	3.0
11	1.8	0.42	0.44	0.59	2.6	3.2	7.0
12	1.2	0.42	0.44	0.59	1.9	2.4	5.2
13	1.9	0.42	0.44	0.59	2.8	3.5	7.7
14	18.7	0.55	0.56	0.58	39	48	94
15	1.3	0.42	0.44	0.59	2.1	2.8	5.7
16	1.0	0.42	0.44	0.59	1.6	2.0	4.3
17	0.3	0.42	0.44	0.59	0.3	0.4	0.9
18	0.5	0.42	0.44	0.59	0.6	0.8	1.7
19	0.6	0.42	0.44	0.59	1.0	1.2	2.6
20	0.5	0.42	0.44	0.59	0.8	1.0	2.2
21	0.9	0.42	0.44	0.59	1.4	1.8	3.9
22	1.0	0.42	0.44	0.59	1.8	2.0	4.3
23	2.3	0.42	0.44	0.59	3.7	4.8	10
24	0.7	0.42	0.44	0.59	1.1	1.4	3.0
25	0.8	0.42	0.44	0.59	1.0	1.2	2.8
26	8.0	0.42	0.44	0.59	13	16	35
27	0.8	0.42	0.44	0.59	1.3	1.8	3.5
28	0.9	0.42	0.44	0.59	1.4	1.8	3.9
29	3.2	0.42	0.44	0.59	5.1	6.4	13.9
30	6.3	0.42	0.44	0.59	10	13	27
31	5.2	0.42	0.44	0.59	8.4	10	23
32	2.0	0.42	0.44	0.59	3.2	4.0	8.7
33	1.9	0.42	0.44	0.59	3.1	3.8	8.3
34	0.8	0.42	0.44	0.59	1.3	1.8	3.5
35	0.8	0.42	0.44	0.59	1.0	1.2	2.6
36	1.4	0.42	0.44	0.59	2.3	2.8	6.1
37	0.8	0.42	0.44	0.59	1.3	1.8	3.5
38	1.7	0.42	0.44	0.59	2.7	3.4	7.5
39	1.6	0.42	0.44	0.59	2.6	3.2	7.0
40	0.8	0.42	0.44	0.59	1.3	1.8	3.5
41	3.8	0.42	0.44	0.59	5.8	7.2	16
42	2.1	0.42	0.44	0.59	3.4	4.2	9.1
43	2.9	0.42	0.44	0.59	4.7	5.8	13
44	3.2	0.42	0.44	0.59	5.1	6.4	14
45	2.5	0.42	0.44	0.59	4.0	5.0	11
46	1.3	0.42	0.44	0.59	2.1	2.8	5.7
47	4.9	0.42	0.44	0.59	7.9	9.8	21
48	0.9	0.42	0.44	0.59	1.4	1.8	3.9
49	2.5	0.42	0.44	0.59	4.0	5.0	11
50	1.3	0.42	0.44	0.59	2.1	2.8	5.7
51	0.4	0.42	0.44	0.59	0.6	0.8	1.7
52	2.1	0.42	0.44	0.59	3.4	4.2	9.1
53	2.1	0.42	0.44	0.59	3.4	4.2	9.1
54	2.3	0.42	0.44	0.59	3.7	4.8	10
55	3.5	0.42	0.44	0.59	5.8	7.0	15
56	0.3	0.42	0.44	0.59	0.5	0.8	1.3
57	0.4	0.42	0.44	0.59	0.6	0.8	1.7
58	1.3	0.42	0.44	0.59	2.1	2.8	5.7
59	1.2	0.42	0.44	0.59	1.9	2.4	5.2
60	0.4	0.42	0.44	0.59	0.6	0.8	1.7
61	1.7	0.42	0.44	0.59	2.7	3.4	7.4
62	1.7	0.42	0.44	0.59	2.7	3.4	7.4
63	3.6	0.42	0.44	0.59	5.1	6.4	14
64	1.3	0.42	0.44	0.59	2.1	2.8	5.7
65	1.2	0.42	0.44	0.59	1.9	2.4	5.2
66	0.9	0.42	0.44	0.59	1.4	1.8	3.9
67	1.2	0.42	0.44	0.59	1.9	2.4	5.2

LOT	BLOCK	ELEVATION CITY DATUM
31-48	A	1.30.0
34-48	C	1.30.0

BENCHMARK:
City of Wichita Benchmark Disc
SW Corner of the intersection
Pawnee & Bluff Rd.
44' South of centerline
48.0' West of centerline
12' East of fence
65' SW of Disc corner from
Elev = 135.12 City Datum
1322.52 NGVD29

NOTE:
A master grading plan for drainage has been developed for this subdivision and is on file with the City of Wichita, Kansas. All drainage easements, right-of-way, or reserves shall remain at established grades or as modified with the approval of the City Engineer of the City of Wichita, Kansas. No obstructions which impede the flow of this drainage system be allowed.