

DRAINAGE AREA DATA						
AREA NO.	AREA (ac.)	C	TC (min.)	I100 (in/hr)	Q100 (cfs)	COMMENTS
1	1.1	0.5	10	9.8	5.4	TO INLET NO. 1
2	1.3	0.5	10	9.8	6.4	TO INLET NO. 2
3	0.7	0.5	10	9.8	3.4	TO INLET NO. 3
4	1.0	0.5	10	9.8	4.9	TO INLET NO. 4
5	1.4	0.5	10	9.8	6.9	TO INLET NO. 5
6	0.9	0.5	10	9.8	4.4	TO INLET NO. 6
7	0.9	0.5	10	9.8	4.4	TO INLET NO. 7
8	0.5	0.5	10	9.8	2.5	TO INLET NO. 8
9	1.9	0.5	10	9.8	9.3	TO INLET NO. 9
10	1.2	0.5	10	9.8	5.9	TO INLET NO. 10
11	0.7	0.5	10	9.8	3.4	TO INLET NO. 11
12	0.9	0.5	10	9.8	4.4	TO INLET NO. 12
13	2.0	0.5	10	9.8	9.8	TO FUTURE INLET NO. 13
14	2.0	0.5	10	9.8	9.8	TO INLET NO. 14
15	1.4	0.5	10	9.8	6.9	TO INLET NO. 15
16	0.9	0.5	10	9.8	4.4	TO INLET NO. 16
17	0.9	0.5	10	9.8	4.4	TO INLET NO. 17
18	0.7	0.5	10	9.8	3.4	TO INLET NO. 18
19	1.3	0.5	10	9.8	6.4	TO INLET NO. 19
20	2.0	0.5	10	9.8	9.8	TO INLET NO. 20
21	1.8	0.5	10	9.8	8.8	TO INLET NO. 21
22	2.4	0.5	10	9.8	11.8	TO INLET NO. 22
23	1.0	0.5	10	9.8	4.9	TO INLET NO. 23
24	1.3	0.5	10	9.8	6.4	TO INLET NO. 24
25	2.2	0.5	10	9.8	10.8	TO INLET NO. 25
26	1.3	0.5	10	9.8	6.4	TO INLET NO. 26
27	1.6	0.5	10	9.8	7.8	TO INLET NO. 27
28	1.3	0.5	10	9.8	6.4	TO INLET NO. 28
29	1.6	0.5	10	9.8	7.8	TO INLET NO. 29
30	1.8	0.5	10	9.8	8.8	TO INLET NO. 30
31	1.0	0.5	10	9.8	4.9	TO INLET NO. 31
32	1.5	0.5	10	9.8	7.4	TO INLET NO. 32
33	1.5	0.5	10	9.8	7.4	TO INLET NO. 33
34	1.0	0.5	10	9.8	4.9	TO INLET NO. 34
35	0.9	0.5	10	9.8	4.4	TO INLET NO. 35
36	2.0	0.5	10	9.8	9.8	TO INLET NO. 36
37	1.1	0.5	10	9.8	5.4	TO INLET NO. 37
38	1.6	0.5	10	9.8	7.8	TO INLET NO. 38A & 38B
39	2.3	0.5	10	9.8	11.3	TO INLET NO. 39
40	2.5	0.5	10	9.8	12.3	TO INLET NO. 40
41	0.5	0.5	10	9.8	2.5	TO INLET NO. 41
42	1.5	0.5	10	9.8	7.4	TO INLET NO. 42
43	0.5	0.5	10	9.8	2.5	TO INLET NO. 43
44	1.4	0.5	10	9.8	6.9	TO INLET NO. 44
45	1.2	0.5	10	9.8	5.9	TO INLET NO. 45
46	1.4	0.5	10	9.8	6.9	TO INLET NO. 46
47	1.4	0.5	10	9.8	6.9	TO FUTURE INLET NO. F-1
48	1.6	0.5	10	9.8	7.8	TO FUTURE INLET NO. F-2
49	1.3	0.5	10	9.8	6.4	TO RIP-RAP (BUFFALO CREEK)
50	1.7	0.5	10	9.8	8.3	TO EXIST. INLET NO. EX-16
OS-1	1.4	0.35	10	9.8	4.8	TO ST. HWY. NO. 205 BYPASS
OS-2	0.6	0.8	10	9.8	4.7	TO RAINFOLOWER DRIVE
EX-1	0.5	0.5	10	9.8	2.5	TO EXIST. INLET NO. EX-1
EX-2	2.0	0.5	10	9.8	9.8	TO EXIST. INLET NO. EX-2
EX-3	2.1	0.5	10	9.8	10.3	TO EXIST. INLET NO. EX-3
EX-4	1.0	0.5	10	9.8	4.9	TO EXIST. INLET NO. EX-4
EX-5	1.4	0.5	10	9.8	6.9	TO EXIST. INLET NO. EX-5
EX-6	2.0	0.5	10	9.8	9.8	TO EXIST. INLET NO. EX-6
EX-7	1.6	0.5	10	9.8	7.8	TO EXIST. INLET NO. EX-7
EX-8	2.1	0.5	10	9.8	10.3	TO EXIST. INLET NO. EX-8
EX-9	1.4	0.5	10	9.8	6.9	TO EXIST. INLET NO. EX-9
EX-10	3.4	0.5	10	9.8	16.7	TO EXIST. INLET NO. EX-10A & EX-10B
EX-11	1.8	0.5	10	9.8	8.8	TO EXIST. INLET NO. EX-11
EX-12	0.6	0.5	10	9.8	2.9	TO EXIST. INLET NO. EX-12
EX-13	1.0	0.5	10	9.8	4.9	TO EXIST. INLET NO. EX-13
EX-14	1.2	0.5	10	9.8	5.9	TO EXIST. INLET NO. EX-14
EX-15	1.0	0.5	10	9.8	4.9	TO EXIST. CULVERT
EX-16	2.2	0.5	10	9.8	10.8	TO EXIST. INLET NO. EX-16
EX-17	1.9	0.5	10	9.8	9.3	TO BUFFALO CREEK

* = EXISTING DRAINAGE AREAS HAVE BEEN MODIFIED.

CITY OF ROCKWALL, TEXAS
HICKORY RIDGE PHASE FOUR
JOB # 99-066

CITY OF ROCKWALL, TEXAS															INLET DESIGN CALCULATIONS		
HICKORY RIDGE PHASE FOUR															BY JAMES SWAIM		
JOB # 99-066															DATE 12-20-02		
NO.	LOCATION	DESIGN STORM FREQ. (YRS.)	TIME OF CONC. (MIN.)	INTENSITY I (IN./HR.)	RUNOFF COEFF. "C"	AREA		BY-PASS FROM UPSTREAM INLET (C.F.S.)	TOTAL GUTTER OR INVERT FLOW (C.F.S.)	STREET OR ALLEY CAPACITY (C.F.S.)	GUTTER OR INVERT SLOPE (%)	CROWN OR INVERT SIZE	SELECTED INLET		INTERCEPTED FLOW BY INLET (C.F.S.)	BY-PASS TO DOWNSTREAM INLET (C.F.S.)	
						AC.	"Q" (C.F.S.)						LENGTH "L" (FEET)	TYPE			
1	STA 14+30 AMBER RIDGE DRIVE	100	10	9.80	0.50	1.1	5.4	0.00	5.4	4.9	0.70	6" CROWN	1-10'	STD.	7.0	5.4	0.0
2	STA 2+02 ALLEY "O"	100	10	9.80	0.50	1.3	6.4	0.00	6.4	6.7	0.80	5" INVERT	1-10'	STD.	6.6	6.4	0.0
3	STA 0+51 DOUBLE OAK DRIVE	100	10	9.80	0.50	0.7	3.4	0.00	3.4	5.6	0.90	6" CROWN	1-10'	STD.	6.7	3.4	0.0
4	STA 0+51 DOUBLE OAK DRIVE	100	10	9.80	0.50	1.0	4.9	0.00	4.9	5.6	0.90	6" CROWN	1-10'	STD.	6.7	4.9	0.0
5	STA 1+28 ALLEY "P"	100	10	9.80	0.50	1.4	6.9	0.00	6.9	7.1	0.90	5" INVERT	1-10'	STD.	6.5	6.5	0.4
6	STA 1+88 PINERIDGE DRIVE	100	10	9.80	0.50	0.9	4.4	0.00	4.4	4.2	0.50	6" CROWN	1-10'	STD.	7.3	4.4	0.0
7	STA 2+32 PINERIDGE DRIVE	100	10	9.80	0.50	0.9	4.4	0.00	4.4	4.2	0.50	6" CROWN	1-10'	STD.	7.3	4.4	0.0
8	STA 8+00 AMBER RIDGE DRIVE	100	10	9.80	0.50	2.5	2.5	0.00	2.5	SAG	SAG	6" CROWN	1-10'	STD.	21.0	2.5	SAG
9	STA 8+00 AMBER RIDGE DRIVE	100	10	9.80	0.50	1.9	9.3	0.70	10.0	SAG	SAG	6" CROWN	1-10'	STD.	21.0	10.0	SAG
10	STA 1+58 ALLEY "Q"	100	10	9.80	0.50	1.2	5.9	0.00	5.9	5.9	0.62	5" INVERT	1-10'	STD.	6.8	5.9	0.0
11	STA 6+28 AMBER RIDGE DRIVE	100	10	9.80	0.50	0.7	3.4	0.00	3.4	4.2	0.50	6" CROWN	1-5'	STD.	3.1	3.1	0.3
12	STA 4+70 AMBER RIDGE DRIVE	100	10	9.80	0.50	0.9	4.4	0.00	4.4	4.2	0.50	6" CROWN	1-10'	STD.	7.3	4.4	0.0
13	STA 10+50 STATE HIGHWAY No. 205 BYPASS	100	10	9.80	0.50	2.0	9.8	2.10	11.9	22.0	1.00	1/4" PER FT	1-20'	REC.	13.8	11.9	0.0
14	STA 9+26 ALLEY "W"	100	10	9.80	0.50	2.0	9.8	0.00	9.8	9.7	1.70	5" INVERT	1-15'	STD.	10.0	9.8	0.3
15	STA 14+46 COOLWOOD LANE	100	10	9.80	0.50	1.4	6.9	0.00	6.9	10.4	1.70	6" CROWN	1-10'	STD.	6.6	6.6	0.0
16	STA 10+06 COOLWOOD LANE	100	10	9.80	0.50	0.9	4.4	0.00	4.4	4.9	0.70	6" CROWN	1-10'	STD.	7.0	4.4	0.0
17	STA 7+08 COOLWOOD LANE	100	10	9.80	0.50	0.9	4.4	0.00	4.4	4.9	0.70	6" CROWN	1-10'	STD.	7.0	4.4	0.0
18	STA 5+50 COOLWOOD LANE	100	10	9.80	0.50	0.70	3.4	0.90	4.3	4.9	0.70	6" CROWN	1-10'	STD.	7.0	4.3	0.0
19	STA 2+53 RAINFOLOWER DRIVE	100	10	9.80	0.50	1.3	6.4	0.00	6.4	11.7	4.00	6" CROWN	1-15'	STD.	9.3	6.4	0.0
20	STA 0+92 BERKSHIRE DRIVE	100	10	9.80	0.50	2.0	9.8	2.40	12.2	SAG	SAG	6" CROWN	1-10'	STD.	21.0	12.2	SAG
21	STA 0+92 BERKSHIRE DRIVE	100	10	9.80	0.50	1.8	8.8	2.20	11.0	SAG	SAG	6" CROWN	1-10'	STD.	21.0	11.0	SAG
22	STA 8+51 ALLEY "V"	100	10	9.80	0.50	2.4	11.8	0.00	11.8	11.6	2.42	5" INVERT	1-15'	STD.	9.4	9.4	2.4
23	STA 22+33 MISTY RIDGE LANE	100	10	9.80	0.50	1.0	4.9	0.00	4.9	6.7	1.32	6" CROWN	1-10'	STD.	6.4	4.9	0.0
24	STA 18+88 MISTY RIDGE LANE	100	10	9.80	0.50	1.3	6.4	0.00	6.4	6.4	1.20	6" CROWN	1-10'	STD.	6.5	6.4	0.0
25	STA 106+00 STATE HIGHWAY NO. 205 BYPASS	100	10	9.80	0.50	2.2	10.8	0.00	10.8	32.0	2.00	1/4" PER FT	1-15'	REC.	9.0	9.0	1.8
26	STA 4+57 ALLEY "T"	100	10	9.80	0.50	1.3	6.4	0.00	6.4	11.8	2.50	5" INVERT	1-10'	STD.	5.7	5.7	0.7
27	STA 5+11 DUSTY RIDGE DRIVE	100	10	9.80	0.50	1.6	7.8	0.00	7.8	7.4	1.60	6" CROWN	1-10'	STD.	6.3	6.3	1.5
28	STA 1+11 PEACHTREE DRIVE	100	10	9.80	0.50	1.3	6.4	0.00	6.4	6.4	1.18	6" CROWN	1-10'	STD.	6.5	6.4	0.0
29	STA 8+38 FALLBROOK DRIVE	100	10	9.80	0.50	1.6	7.8	0.00	7.8	8.9	2.30	6" CROWN	1-15'	STD.	9.9	7.8	0.0
30	STA 6+64 ALLEY "S"	100	10	9.80	0.50	1.8	8.8	0.00	8.8	8.7	1.36	5" INVERT	1-15'	STD.	10.5	8.8	0.0
31	STA 0+90 PIONEER DRIVE	100	10	9.80	0.50	1.0	4.9	0.00	4.9	SAG	SAG	6" CROWN	1-10'	STD.	21.0	4.9	SAG
32	STA 0+90 PIONEER DRIVE	100	10	9.80	0.50	1.5	7.4	0.00	7.4	SAG	SAG	6" CROWN	1-10'	STD.	21.0	7.4	SAG
33	STA 6+82 ALLEY "R"	100	10	9.80	0.50	1.5	7.4	0.00	7.4	9.4	1.60	5" INVERT	1-15'	STD.	10.1	7.4	0.0
34	STA 21+29 DEER RIDGE DRIVE	100	10	9.80	0.50	1.0	4.9	0.00	4.9	5.2	0.80	6" CROWN	1-10'	STD.	6.8	4.9	0.0
35	STA 21+13 DEER RIDGE DRIVE	100	10	9.80	0.50	0.9	4.4	0.00	4.4	5.2	0.80	6" CROWN	1-10'	STD.	6.8	4.4	0.0
36	STA 114+50 STATE HIGHWAY No. 205 BYPASS	100	10	9.80	0.50	2.0	9.8	0.00	9.8	20.0	0.80	1/4" PER FT	1-15'	REC.	9.9	9.8	0.0
37	STA 4+83 ALLEY "Z-1"	100	10	9.80	0.50	1.1	5.4	0.00	5.4	5.3	0.50	5" INVERT	1-10'	STD.	7.1	5.4	0.0
38-A	STA 4+93 FIELDSTONE DRIVE	100	10	9.80	0.50	0.8	3.9	0.00	3.9	4.2	0.50	6" CROWN	1-10'	STD.	7.3	3.9	0.0
38-B	STA 4+93 FIELDSTONE DRIVE	100	10	9.80	0.50	0.8	3.9	0.00	3.9	4.2	0.50	6" CROWN	1-10'	STD.	7.3	3.9	0.0
39	STA 2+31 ALLEY "Z"	100	10	9.80	0.50	2.3	11.3	0.00	11.3	SAG	SAG	5" INVERT	1-10'	STD.	21.0	11.3	SAG
40	STA 1+50 POST OAK DRIVE	100	10	9.80	0.50	2.5	12.3	0.00	12.3	SAG	SAG	6" CROWN	1-10'	STD.	21.0	12.3	SAG
41	STA 1+50 POST OAK DRIVE	100	10	9.80	0.50	2.5	12.3	0.00	12.3	SAG	SAG	6" CROWN	1-10'	STD.	21.0	12.3	SAG
42	STA 8+41 LIMESTONE HILL LANE	100	10	9.80	0.50	1.5	7.4	0.00	7.4	11.6	3.00	6" CROWN	1-15'	STD.	9.9	7.4	0.0
43	STA 4+16 LIMESTONE HILL LANE	100	10	9.80	0.50	0.5	2.5	4.70	7.2	7.2	0.90	6" CROWN	1-10'	STD.	7.2	7.2	0.0
44	STA 4+16 LIMESTONE HILL LANE	100	10	9.80	0.50	1.4	6.9	0.00	6.9	7.2	0.90	6" CROWN	1-10'				