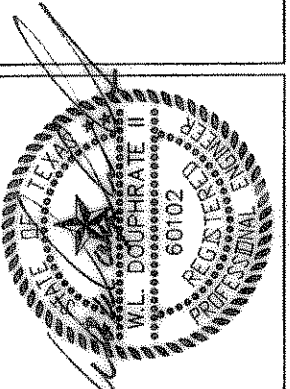


DRAINAGE TABLE					
AREA	ACRES	C	I <sub>100</sub>	Q <sub>100</sub>	T.C.
A	0.23	.50	9.8	1.13	10.0
B	0.26	.50	9.8	1.27	10.0
C	0.24	.50	9.8	1.18	10.0
D	1.86	.50	9.8	9.11	10.0
E	0.24	.50	9.8	1.18	10.0
F	3.01	.50	9.8	14.75	10.0
G	1.04	.50	9.8	5.10	10.0
H	0.51	.50	9.8	2.50	10.0
I	0.25	.50	9.8	1.23	10.0
J	0.42	.50	9.8	2.06	10.0
K	0.26	.50	9.8	1.27	10.0
L	1.33	.50	9.8	6.52	10.0
M	2.10	.50	9.8	10.29	10.0
N	0.28	.50	9.8	1.37	10.0
O	0.29	.50	9.8	1.42	10.0
P	1.22	.50	9.8	5.98	10.0
Q	0.65	.50	9.8	3.19	10.0
R	0.56	.50	9.8	2.74	10.0
S	0.22	.50	9.8	1.08	10.0
T	0.53	.50	9.8	2.60	10.0
U	2.38	.50	9.8	11.66	10.0
V	2.93	.50	9.8	14.36	10.0
W	1.79	.50	9.8	8.77	10.0
X	1.99	.50	9.8	9.75	10.0
Y	1.22	.50	9.8	5.98	10.0
Z	2.01	.50	9.8	9.85	10.0
A1	0.71	.50	9.8	3.48	10.0
B1	1.55	.50	9.8	7.60	10.0
C1	1.35	.50	9.8	6.62	10.0
D1	0.33	.50	9.8	1.62	10.0
E1	1.11	.50	9.8	5.44	10.0
F1	2.03	.50	9.8	9.95	10.0
G1	0.25	.50	9.8	1.25	10.0
H1	1.97	.50	9.8	9.65	10.0
I1	0.33	.50	9.8	1.62	10.0
J1	0.67	.50	9.8	3.28	10.0
K1	1.48	.50	9.8	7.25	10.0
L1	3.03	.50	9.8	14.85	10.0
M1	0.96	.50	9.8	4.70	10.0
N1	1.42	.50	9.8	6.96	10.0
O1	1.01	.50	9.8	4.95	10.0
P1	0.89	.50	9.8	4.36	10.0
Q1	0.35	.50	9.8	1.72	10.0
R1	0.57	.50	9.8	2.79	10.0
S1	0.14	.50	9.8	0.69	10.0
T1	0.54	.50	9.8	2.65	10.0
U1	1.27	.50	9.8	6.22	10.0
V1	1.58	.50	9.8	7.74	10.0
W1	0.70	.50	9.8	3.43	10.0
X1	0.86	.50	9.8	4.21	10.0
Y1	1.90	.50	9.8	9.31	10.0
Z1	0.11	.50	9.8	0.54	10.0
A2	0.24	.50	9.8	1.18	10.0
B2	1.28	.50	9.8	6.27	10.0
C2	2.44	.50	9.8	11.96	10.0
D2	0.81	.50	9.8	3.97	10.0
E2	0.13	.50	9.8	0.64	10.0
F2	2.22	.50	9.8	10.88	10.0
G2	0.23	.50	9.8	1.13	10.0
H2	3.50	.50	9.8	17.15	10.0
I2	3.48	.50	9.8	17.05	10.0
J2	3.43	.50	9.8	16.81	10.0
K2	6.30	.50	9.8	30.87	10.0
L2	1.57	.50	9.8	7.69	10.0
M2	0.34	.50	9.8	1.67	10.0
N2	0.61	.50	9.8	2.99	10.0
O2	0.72	.50	9.8	3.53	10.0

DRAINAGE TABLE					
AREA	ACRES	C	I <sub>100</sub>	Q <sub>100</sub>	T.C.
P2	1.18	.50	9.8	5.78	10.0
Q2	1.09	.50	9.8	5.34	10.0
R2	0.13	.50	9.8	0.63	10.0
S2	0.38	.50	9.8	1.96	10.0
T2	0.64	.50	9.8	3.14	10.0
U2	0.51	.50	9.8	2.50	10.0
V2	2.31	.50	9.8	11.32	10.0
W2	0.89	.50	9.8	4.36	10.0
X2	1.84	.50	9.8	9.02	10.0
Y2	0.11	.50	9.8	0.54	10.0
Z2	1.73	.50	9.8	8.48	10.0
A3	0.41	.50	9.8	2.01	10.0
B3	1.32	.50	9.8	6.47	10.0
C3	1.10	.50	9.8	5.39	10.0
O1	65.5	.80	8.30	434.92	20.0
O2	3.26	.50	9.8	15.97	10.0
O3	2.03	.50	9.8	9.95	10.0
O4	1.51	.50	9.8	7.40	10.0
O5	13.73	.50	9.8	67.28	10.0
O6	5.76	.50	9.8	28.22	10.0
O7	8.90	.50	9.8	43.61	10.0
O8	8.96	.50	9.8	43.90	10.0
O9	3.89	.50	9.8	19.06	10.0
O10	19.37	.50	9.8	94.91	10.0

INLET CALCULATION CHART

INLET NO.	DRAIN AREA SERVED	DESIGN FREQ.	TIME "TC"	INTEN I	DEV. RUNOFF C	DRAIN AREA	DEV. Q	BYPASS FROM INLET	TOTAL Q	GUTTER CAP	GUTTER SLOPE	CROWN TYPE	LENGTH INLET	TYPE	BYPASS TO NEXT INLET
1	F	100	10	9.80	0.5	3.01	14.75	----	14.75	18.00	1.07	PARA.	15	CURB	----
2	G	100	10	9.80	0.5	1.04	5.10	----	5.10	18.00	1.07	PARA.	10	CURB	----
3	A,E,H,J	100	10	9.80	0.5	1.40	6.87	----	6.87	42.0	SAG	"	10	CURB	----
4	B,C	100	10	9.80	0.5	0.50	2.45	----	2.45	42.0	SAG	"	5	CURB	----
5	B3	100	10	9.80	0.5	1.32	6.47	----	6.47	20.0	1.03	"	10	"	----
6	N,O,R	100	10	9.80	0.5	1.13	5.53	----	5.53	20.0	1.05	"	10	"	----
7	P,Q	100	10	9.80	0.5	1.87	9.17	----	9.17	42.0	SAG	"	10	"	----
8	K,L,I	100	10	9.80	0.5	1.83	8.99	----	8.99	18.0	0.88	"	10	"	2.99
9	M	100	10	9.80	0.5	2.10	10.29	----	10.29	18.0	0.88	"	10	"	4.22
10	T	100	10	9.80	0.5	0.22	1.08	10.43	11.51	42.0	SAG	"	10	"	----
11	S,C1	100	10	9.80	0.5	1.57	7.69	----	7.69	42.0	SAG	"	10	"	----
12	Y	100	10	9.80	0.5	1.22	5.98	----	5.98	14.0	0.50	"	10	"	----
13	Z	100	10	9.80	0.5	2.01	9.85	----	9.85	14.0	0.50	"	10	"	3.85
14	F1,G1,I1	100	10	9.80	0.5	2.61	12.79	----	12.79	14.0	0.50	"	15	"	3.94
15	J1	100	10	9.80	0.5	0.67	3.28	----	3.28	14.0	0.50	"	5	"	0.28
16	D1,E1	100	10	9.80	0.5	1.44	6.62	4.22	10.84	24.0	1.63	PARA	15	"	----
17	N1,Z1,A1	100	10	9.80	0.5	1.77	8.68	----	8.68		SAG	INV	5	"	----
18	X1,Y1	100	10	9.80	0.5	2.76	13.52	----	13.52	42.0	SAG	PARA	8	"	----
19	V1,W1	100	10	9.80	0.5	2.28	11.17	----	11.17	42.0	SAG	"	8	"	----
20	S1,T1,M1,U1	100	10	9.80	0.5	2.91	14.26	----	14.26		SAG	INV	8	"	----
21	L1,O1,R1	100	10	9.80	0.5	4.36	21.36	----	21.36	42.0	SAG	PARA	15	"	----
22	K1,P1,Q1,E2,F2	100	10	9.80	0.5	5.07	24.85	----	24.85	42.0	SAG	"	15	"	----
23	U2,V2	100	10	9.80	0.5	3.92	13.82	----	13.82	42.0	SAG	"	8	"	----
24	Q2	100	10	9.80	0.5	1.09	5.34	----	5.34	20.0	1.20	"	10	"	----
25	M2,N2,O2,P2	100	10	9.80	0.5	2.85	13.97	----	13.97	42.0	SAG	"	2-5	"	----
26	C2,D2,G2	100	10	9.80	0.5	3.48	17.05	----	17.05	14.0	0.50	"	15	"	----
27	B2	100	10	9.80	0.5	1.28	6.27	----	6.27	14.0	0.50	"	10	"	3.55
28	Z2,A3,R2,S2	100	10	9.80	0.5	2.14	12.98	3.55	16.53	42.0	SAG	1/4"/FT	10	RECESSED	----
29	X2,Y2	100	10	9.80	0.5	1.95	9.56	----	9.56	42.0		DITCH	4'X4'	DROP INLET	----
30	C3	100	10	9.80	0.5	1.10	5.39	----	5.39	24	1.96	PARA	10	CURB	----
31	T2	100	10	9.80	0.5	.64	3.14	----	3.14	24	1.96	PARA	8	CURB	----
32	W2	100	10	9.80	0.5	.89	4.36	----	4.36	16	.62	PARA	8	CURB	----
33	H1	100	10	9.80	0.5	1.97	9.65	----	9.65	20	.98	PARA	10	CURB	3.65
34	B1	100	10	9.80	0.5	1.55	7.60	----	7.60	14	.54	PARA	10	CURB	1.60
35	A1	100	10	9.80	0.5	0.71	3.48	----	3.48	14	.54	INV	10'	CURB	----
36	O7	100	10	9.80	0.5	8.90	43.61	----	43.61			DITCH	4'X4'	DROP INLET	----



THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY W.L. DOUPHRATE II, TEXAS P.E. NO. 60102 ON 12/18/02

DOUPHRATE & ASSOCIATES, INC.  
 ENGINEERING PROJECT MANAGEMENT SURVEYING  
 2235 RIDGE RD., # 200 ROCKWALL, TEXAS 75087  
 PHONE: (972)771-9004 FAX: (972)771-9005

DRAINAGE CALCULATIONS  
 TIMBERCREEK ADDITION  
 CITY OF ROCKWALL  
 ROCKWALL, ROCKWALL COUNTY, TEXAS

- REVISED AREA P DUE TO FIELD CHANGES

REVISION  
 W.L.D.  
 CHECKED  
 DRAWN  
 8/11/99  
 DATE  
 9913DATA  
 PROJECT

REVISED TO CONFORM TO CONSTRUCTION RECORDS.  
 [Signature] DATE: 12/18/02