BENCHMARK:
"X" CHISELED IN ℄ OF ALLEY EAST OF MORNINGSTAR DRIVE WITHIN 3RD LOT NORTH OF MIDNIGHT PASS.
ELEV. 513.26

BENCHMARK:
PK NAIL IN ℄ OF CARUTH LANE & ALLEY INTER-SECTION 150'± EAST OF MORNINGSTAR DRIVE.
ELEV. 491.68

N

0 50 100 200
SCALE FEET

LEGEND

- F / 0.60 — AREA DESIGNATION / AREA IN ACRES
- FLOW ARROWS
- PROPOSED INLETS
- PROPOSED STORM SEWER SYSTEM
- DRAINAGE AREA BOUNDARY
- EXISTING INLETS
- EXISTING STORM SEWER SYSTEM

ASBUILT

Winkelmann & Associates, Inc. hereby states that this construction plan is based on information in "As Built" Modifications and that all information shown on these documents have been made as per information provided by the contractor. Winkelmann & Associates, Inc. does not certify as to the commercial quality of construction as no field observations were performed.

7-18-97
WINKELMANN & ASSOCIATES, INC. DATE

No.	DATE	REVISION	APPROV.

Winkelmann & Associates, Inc.
CONSULTING CIVIL ENGINEERS ■ SURVEYORS
12800 HILLCREST ROAD, SUITE 200
DALLAS, TEXAS 75230
(972) 490-7090
(972) 490-7099 FAX

STATE OF TEXAS — F.E. MIDDLETON, JR. — 83 — REGISTERED PROFESSIONAL ENGINEER

CARUTH LAKE PHASE FOUR
S.S. McCURRY SURVEY, ABSTRACT NO. 146
M.B. JONES SURVEY, ABSTRACT NO. 122
CITY OF ROCKWALL
ROCKWALL COUNTY, TEXAS

LUMBERMEN'S INVESTMENT CORPORATION
5465 BELTLINE ROAD, SUITE 225
DALLAS, TEXAS 75240

INLET DESIGN CALCULATIONS

PROJECT NAME CARUTH LAKE, PH. 4 — BY K.G.
LINE NAME N/A — DATE 5/8/97

INLET No.	Location	Design Storm Frequency (yrs.)	AREA RUNOFF Q = C/A: Time of Conc. (min.)	Intensity I (in./hr.)	Runoff Coeff. "C"	Area (ac.)	"Q" (c.f.s.)	Carry-Over From Upstream Inlet (c.f.s.)	Total Gutter Flow (c.f.s.)	Gutter Capacity (c.f.s.)	Gutter Slope (ft./100ft.)	Crown Type	SELECTED INLET: Length "Li" (Feet)	SELECTED INLET: Type	Carry-Over To Downstream Inlet (c.f.s.)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
A	STA. 0+26.62 CARUTH LANE (LT.)	100	10	9.8	0.50	0.45	2.21	0	2.21	SAG	SAG	7" PARABOLIC	5'	C.I.	0
B	STA. 1+14.38 THISTLEDOWN COURT (LT.)	100	10	9.8	0.50	1.33	6.52	0	6.52	14.92	1.60	6" PARABOLIC	10'	C.I.	0
C	STA. 12+71.03 MIDNIGHT PASS (LT.)	100	10	9.8	0.50	1.94	9.51	0	9.51	11.79	1.00	6" PARABOLIC	15'	C.I.	0
D	STA. 12+65.61 MIDNIGHT PASS (RT.)	100	10	9.8	0.50	1.67	8.18	0	8.18	11.79	1.00	6" PARABOLIC	15'	C.I.	0
E	STA. 3+36.18 – AREA DRAIN	100	10	9.8	0.50	1.76	8.62	0	N/A	N/A	N/A	6" PARABOLIC	3'	TYPE "Y"	0
F	STA. 15+13.19 CARUTH LANE (LT.)	100	10	9.8	0.50	0.79	3.87	0	3.87	SAG	SAG	7" PARABOLIC	5'	C.I.	0
G	STA. 1+03.50 WINDRIDGE DRIVE (LT.)	100	10	9.8	0.50	0.89	4.36	0	4.36	9.14	0.60	6" PARABOLIC	10'	C.I.	0
H	STA. 15+13.19 CARUTH LANE (RT.)	100	10	9.8	0.50	2.46	12.05	7.61	19.66	SAG	SAG	7" PARABOLIC	10'	C.I.	0
I	STA. 1+53.67 THISTLEDOWN COURT (RT.)	100	10	9.8	0.50	0.21	1.03	0	1.03	14.92	1.60	6" PARABOLIC	5'	C.I.	0
J	STA. 2+37.00 STIMSON (RT.)	100	10	9.8	0.50	0.23	1.13	5.68	6.81	9.14	0.60	6" PARABOLIC	5'	C.I.	3.71
K	STA. 0+00 STIMSON (LT.)	100	10	9.8	0.50	1.20	5.88	21.20	27.08	18.22	2.40	6" PARABOLIC	15'	C.I.	16.58
L	STA. 0+00 STIMSON (LT.)	100	10	9.8	0.50	0.70	3.43	21.20	24.63	18.27	2.40	6" PARABOLIC	15'	C.I.	14.13
M	STA. 0+59.50 JOE WHITE (RT.)	100	10	9.8	0.50	1.68	8.23	0	8.23	9.14	0.80	6" PARABOLIC	10'	C.I.	0.73
N	STA. 3+55.32 MIDNIGHT PASS (LT.)	100	10	9.8	0.50	0.74	3.63	0	3.63	SAG	SAG	6" PARABOLIC	5'	C.I.	0
O	STA. 3+81.88 ALLEY "3" (LT.)	100	10	9.8	0.50	1.83	8.97	0	8.97	SAG	SAG	ALLEY	5'	C.I.	0
P	STA. 0+19.98 STIMSON (LT.)	100	10	9.8	0.50	0.01	0.05	14.13	14.18	15.82	1.80	6" PARABOLIC	15'	C.I.	3.18
Q	STA. 0+60.50 WATERVIEW WAY (LT.)	100	10	9.8	0.50	1.56	7.64	0	7.64	11.79	1.00	6" PARABOLIC	5'	C.I.	4.71
R	SAT. 0+60.50 WATERVIEW WAY (RT.)	100	10	9.8	0.50	1.27	6.22	0	6.22	11.79	1.00	6" PARABOLIC	10'	C.I.	0
S	STA. 6+95.45 CARUTH LANE (RT.)	100	10	9.8	0.50	0.78	3.82	0	3.82	SAG	SAG	7" PARABOLIC	5'	C.I.	0
T	STA. 6+95.45 CARUTH LANE (LT.)	100	10	9.8	0.50	0.29	1.42	0	1.42	SAG	SAG	7" PARABOLIC	5'	C.I.	0
U	STA. 3+55.32 MIDNIGHT PASS (RT.)	100	10	9.8	0.50	2.32	11.37	8.53	19.90	SAG	SAG	6" PARABOLIC	10'	C.I.	0
V	STA. 7+85.90 THISTLEDOWN COURT (LT.)	100	10	9.8	0.50	1.74	8.53	0	8.53	SAG	SAG	6" PARABOLIC	5'	C.I.	0
W	STA. 0+57.71 FANNIN ST. (LT.)	100	10	9.8	0.50	3.53	17.30	0	17.30	26.29	4.97	6" PARABOLIC	15'	C.I.	7.8
X	STA. 0+59.50 JOE WHITE (LT.)	100	10	9.8	0.50	2.63	12.89	0	12.89	9.14	0.60	6" PARABOLIC	15'	C.I.	0
Y	STA. 1+73.50 WINDRIDGE DRIVE (RT.)	100	10	9.8	0.50	0.78	3.82	6.89	10.71	9.14	0.60	6" PARABOLIC	5'	C.I.	7.61
Z	FUTURE – PH. 5	100	10	9.8	0.50	5.48	26.85	0	N/A	N/A	N/A	N/A	N/A	N/A	0
AA	FUTURE – PH. 5	100	10	9.8	0.50	7.81	38.27	0	N/A	N/A	N/A	N/A	N/A	N/A	0
BB	STA. 0+26.62 CARUTH LANE (RT.)	100	10	9.8	0.50	1.01	4.95	4.71	9.66	SAG	SAG	7" PARABOLIC	5'	C.I.	0
CC	STA. 0+19.98 STIMSON (RT.)	100	10	9.8	0.50	0.02	0.10	16.58	16.68	15.82	1.80	6" PARABOLIC	15'	C.I.	5.68
DD	EXIST. 10' CURB INLET	—	—	—	—	—	—	43.80	48.89	—	—	—	10'	C.I.	42.39

DRAINAGE AREA MAP
CARUTH LAKE PHASE FOUR

Scale : 1"=100' Date : 5-9-97
Designed By : K.G.
Drawn By : T.C./K.G.
Checked By : F.E.M.
File : 14633DMI.DWG
Project No. : 14633.01(20)

SHEET 2 OF 29