LARK ADDITION — By JDS — Date — Page — Of — BAUGHMAN COMPANY, P.A.

PREDEVELOPED FLOWS: $I_2 = 3.83$ $I_{100} = 7.37$

N.W Corner: D.A = 54.1 acres
C = 0.38
Q_2 = 78.7 cfs
Q_{100} = 151.5 cfs

SW. Corner: D.A = 54.6 acres
C = 0.38
Q_2 = 79.5 cfs
Q_{100} = 153.0 cfs

N.E Corner: D.A = 24.8 acres
C = 0.38
Q_2 = 36.1 cfs
Q_{100} = 69.4 cfs

SE Corner: D.A = 20.0
C = 0.38
Q_2 = 29.1 cfs
Q_{100} = 56.0 cfs

Notes:

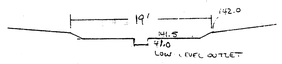
Pre-developed Q_{100} for N.W. Corner draining through RR tracks is 151.5 cfs and post-developed Q = 160.0 cfs. Due to the size of the drainage basin becoming smaller through street drainage to the East, the pre- and post-developed flows are approximately the same.

Drainage to the North shall be controlled by the amount of flow that can pass in the drainage ditch in the 30' Drainage Easement to the North of the property.

Drainage along Lark Lane shall be in an enclosed system installed with the Street petition to service Lark Ln. and Lark 2nd Addition along with the Exception in the North east corner of the preliminary plat.

LARK ADDITION — DETENTION POND — By JDS — Date 7-14-94 — Page — Of — BAUGHMAN COMPANY, P.A.

Elev	Area (sq. ft)		
130	40374	18179	= 58553
131	43690	+ 20987	= 64677
132	47142	+ 23997	= 71139
133	50733	+ 27148	= 77931
134	54472	+ 30606	= 85078
135	58386	+ 34272	= 92660
136	101055		
137	109712		
138	118471		
139	127332		
140	145359	> 160,000 sq. ft.	
141	163789		
142	183749		



Spillway @ 141.5

Q_{IN} = 140 cfs

Q_{OUT} = 60 cfs

RR Box - 6'x2'
Rock Bottom - SDES n = 0.023
Slope = 0.5%

$7.4 \text{ ac-ft} = \frac{322,344 \text{ cu. ft.}}{160,000 \text{ sq. ft.}} = 2.0$ ft. rise

STATIC POOL @ 140.0
WEIR ELEV. = 141.5
MAX. STORAGE = 7.4 ac ft.

WEIR: 15' BOTTOM
4:1 SIDESLOPES
BOTTOM SLOPE @ F 1.5%

TR-55 STORAGE VOLUME FOR DETENTION BASINS — VERSION TEST

Project: LARK ADDITION — User: JDS — Date: 09-14-94
County: SEDGWICK — State: KS — Checked: ____ — Date: ____
Subtitle: DETENTION POND DESIGN

Drainage Area: 55 Acres — Rainfall Frequency: 100 years
Rainfall-Type II
24-Hour Rainfall: 7.37 inches — Runoff Curve Number: 82
Peak Inflow: 140 cfs
Peak Outflow: 60 cfs
Runoff Volume: 5.3 inches
Detention Basin Storage Volume: 1.62 inches or 7.4 acre feet

Trapezoidal Channel Analysis & Design
Open Channel - Uniform flow

Worksheet Name:

Comment: WEIR FOR LARK DETENTION POND

Solve For Channel Slope

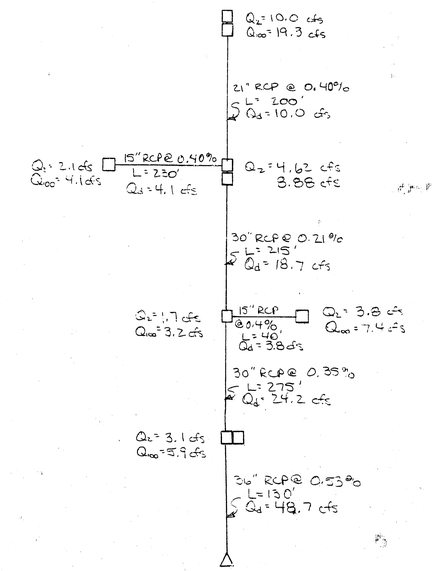
Given Input Data:

Bottom Width.....	15.00 ft
Left Side Slope..	4.00:1 (H:V)
Right Side Slope.	4.00:1 (H:V)
Manning's n.....	0.015
Depth.....	0.50 ft
Discharge.....	60.00 cfs

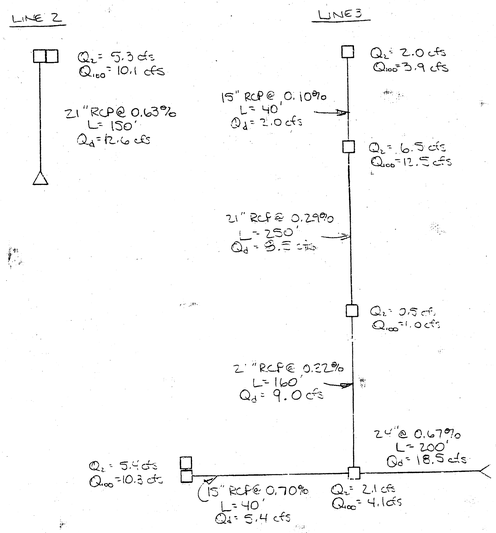
Computed Results:

Channel Slope....	0.0150 ft/ft
Velocity.....	7.06 fps
Flow Area.....	8.50 sf
Flow Top Width...	19.00 ft
Wetted Perimeter.	19.12 ft
Critical Depth...	0.74 ft
Critical Slope...	0.0039 ft/ft
Froude Number....	1.96 (flow is Supercritical)

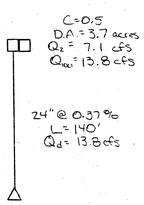
LARK ADDITION — LINE 1 — By JDS — Date 8-29-94 — Page 1 — Of 2 — BAUGHMAN COMPANY, P.A.



LARK ADDITION — LINES 2 & 3 — By JDS — Date 8-29-94 — Page 2 — Of 2 — BAUGHMAN COMPANY, P.A.

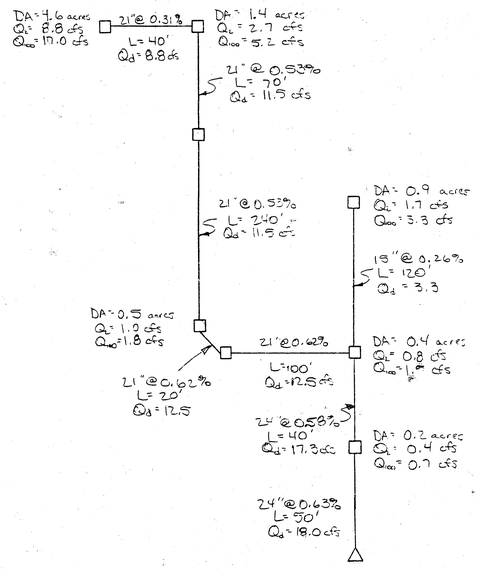


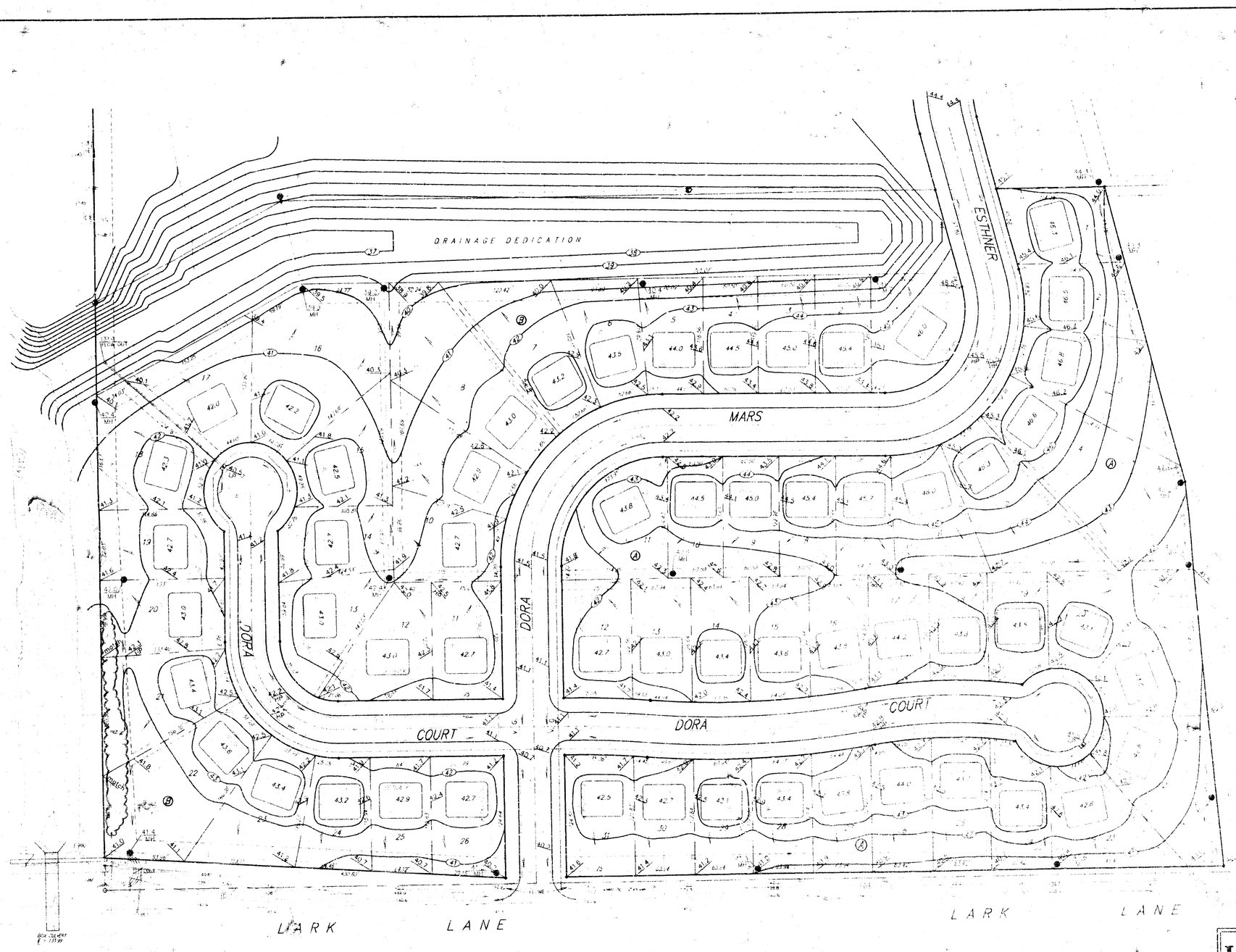
LARK 2ND ADDITION — LINE 1 — By JDS — Date 8-29-94 — Page 1 — Of — BAUGHMAN COMPANY, P.A.



LARK 2ND ADDITION — LINE 2 — By JDS — Date 8-29-94 — Page 2 — Of — BAUGHMAN COMPANY, P.A.

C = 0.5 FOR ALL NODES

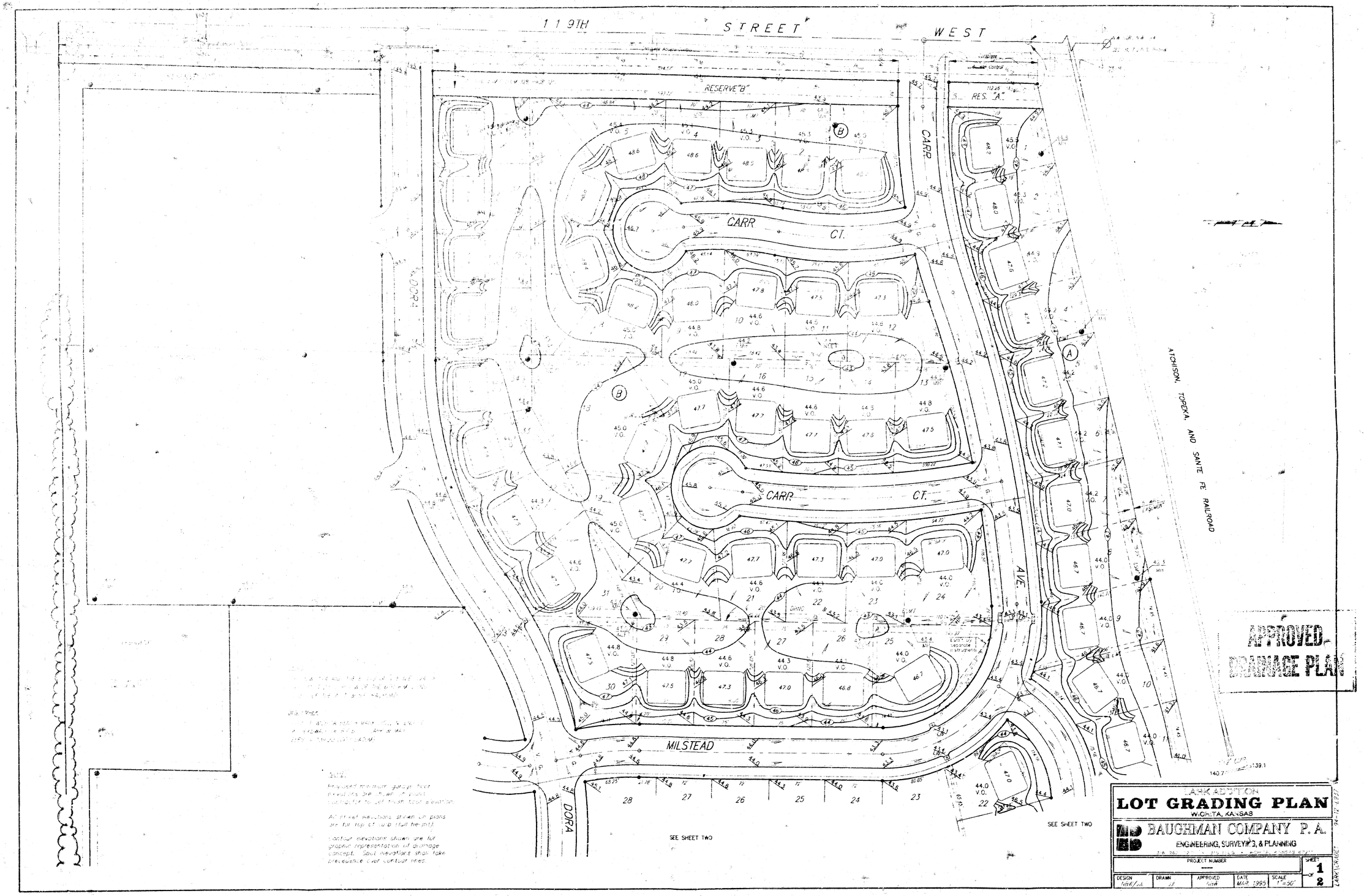


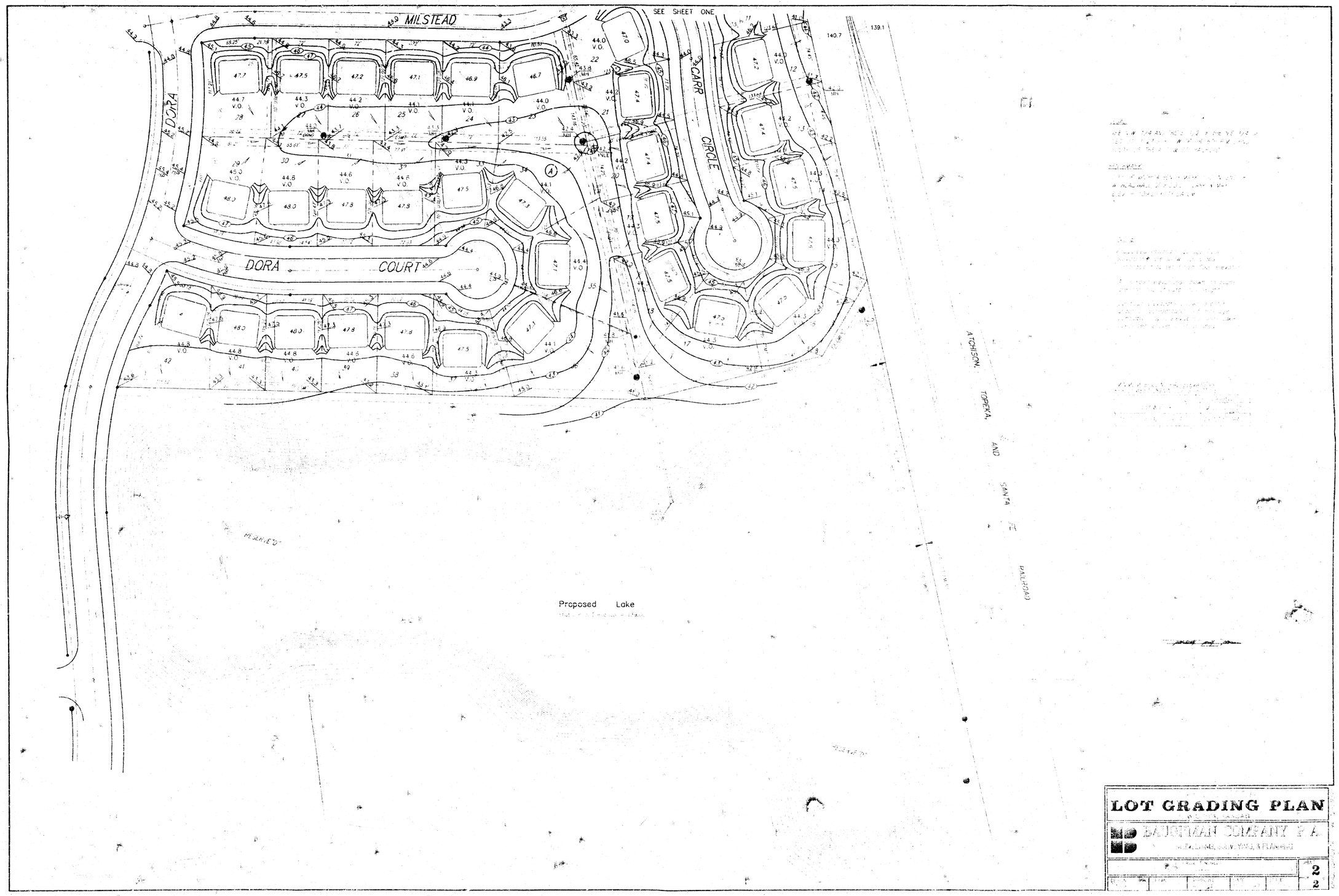


APPROVED
DRAINAGE PLAN

LOT GRADING PLAN

BAUCHMAN CONSULTANTS LTD.
ENGINEERING, SURVEYING & PLANNING


119TH STREET WEST
RESERVE "B"
RES. "A"
CARR CT.
CARR CT.
CARR AVE.
MILSTEAD
DORA
ATCHISON, TOPEKA, AND SANTE FE RAILROAD
SEE SHEET TWO
SEE SHEET TWO
APPROVED
DRAINAGE PLAN
LARK ADDITION
LOT GRADING PLAN
WICHITA, KANSAS
BAUGHMAN COMPANY P.A.
ENGINEERING, SURVEYING, & PLANNING
PROJECT NUMBER
DESIGN
DRAWN
APPROVED
DATE MAR 1995
SCALE 1"=30'
SHEET 1 OF 2



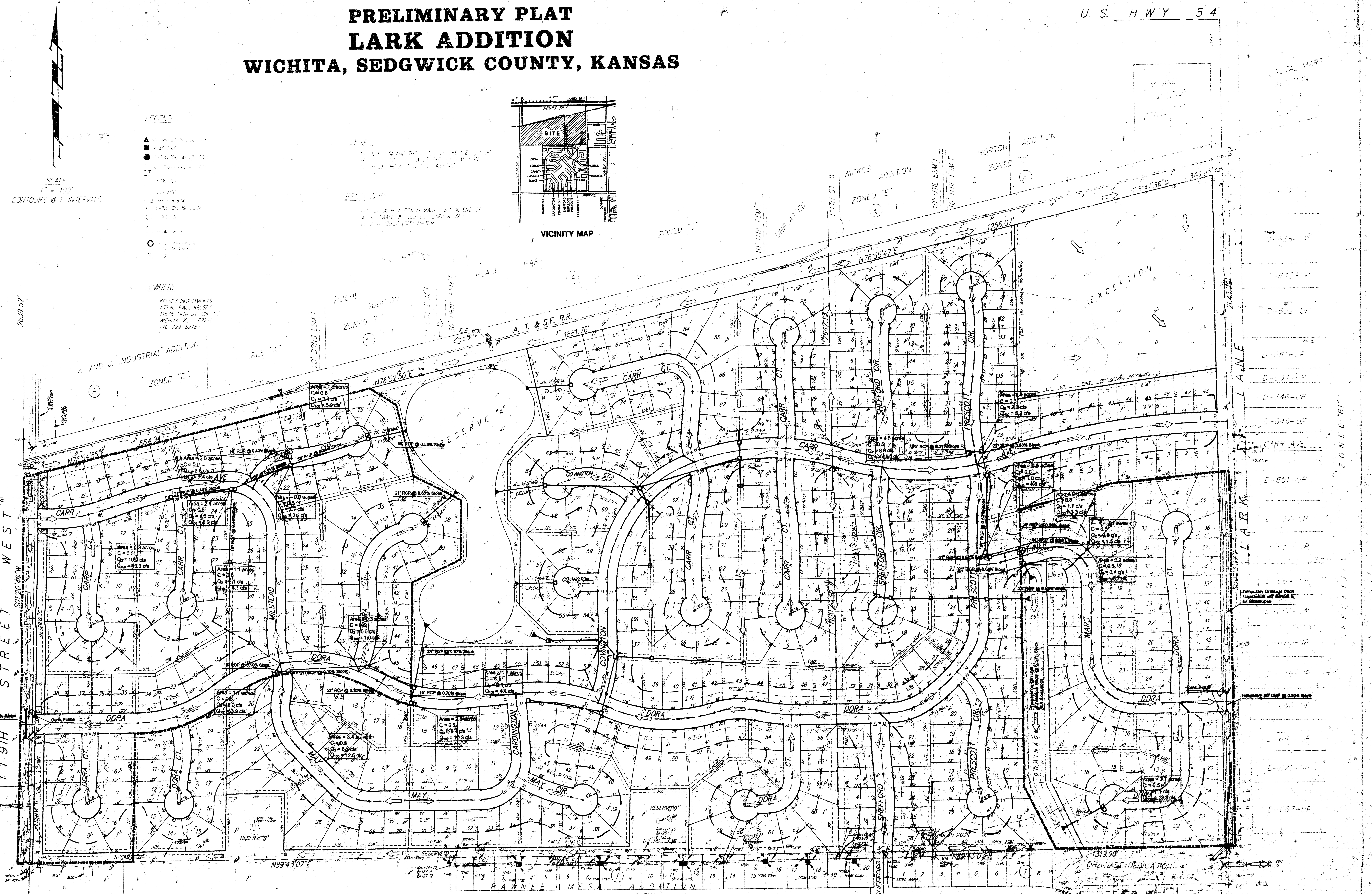
LOT GRADING PLAN

BAUGHMAN COMPANY P.A.

2
2

DRAINAGE PLAN

PRELIMINARY PLAT
LARK ADDITION
WICHITA, SEDGWICK COUNTY, KANSAS



SCALE
1" = 100'
CONTOURS @ 1' INTERVALS
LEGEND
VICINITY MAP
SITE
OWNER:
U.S. HWY 54
A. T. & S.F. R.R.
A. AND J. INDUSTRIAL ADDITION
ZONED "E"
HORTON ADDITION
WICKES ADDITION
EXCEPTION
RESERVE "A"
RESERVE "B"
RESERVE "D"
CARR AVE.
CARR
CARR CT.
COVINGTON CT.
COVINGTON
MILSTEAD
CARDINGTON
SHEFFORD CIR.
SHEFFORD
PRESCOTT CIR.
PRESCOTT
MARC
DORA
DORA CT.
MAY
MAY CIR.
DRAINAGE
119TH STREET WEST
LARK LANE
PAWNEE MESA ADDITION
N76°52'50"E
N76°55'47"E
1881.76'
1256.07'
664.94'
2639.52'
2643.76'
1319.90'
N89°43'07"E
DRAINAGE DEDICATION

DRAINAGE PLAN

PRELIMINARY PLAT
LARK ADDITION
WICHITA, SEDGWICK COUNTY, KANSAS

SCALE
1" = 100'
CONTOURS @ 1' INTERVALS

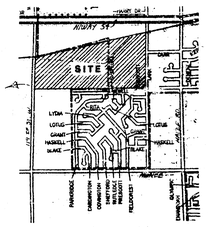
LEGEND

LEGAL:

THE N.W. 1/4 AND THE E. 1/2 OF THE N.E. 1/4 OF SEC. 11, T. 27 S., R. 1 W. OF THE 6TH P.M. LYING SOUTH OF THE A. T. & S.F. RAILROAD.

BENCHMARK:

CITY OF WICHITA BENCH MARK DISC IN END OF W. HEADWALL OF R.C.B.C. LARK & MAY
ELEV. = 1392.0 (CITY DATUM)



VICINITY MAP

OWNER:

KELSEY INVESTMENTS
ATTN: PAUL KELSEY
11535 14TH ST. CIR. N.
WICHITA, KS. 67212
PH. 729-6278

U.S. HWY 54

UNPLATTED ZONED "K1"

119TH STREET WEST

A AND J INDUSTRIAL ADDITION ZONED "E"

HUGHES ADDITION ZONED "E"

BLAIR PARK ZONED "C"

WICKES ADDITION ZONED "E"

HORTON ADDITION ZONED "E"

EXCEPTION

A. T. & S.F. RR.

RESERVE "A"

RESERVE "B"

RESERVE "C"

RESERVE "D"

CARR CT.

CARR CIR.

COVINGTON CT.

CARDINGTON CIR.

DORA

DORA CT.

MAY

MAY CIR.

MILSTEAD

SHEFFORD CIR.

PRESCOTT CIR.

MARS

Temporary Drainage Ditch Trapezoidal w/5' Bottom & 4:1 Sideslopes

Temporary 30" CMP @ 0.50% Slope

Temporary Drainage Ditch 20' Bottom Width @ 0.50% Slope, 6:1 Sideslopes

Conc. Flume

Conc. Facing

N76°55'47"E 1256.07'

N76°52'50"E 1831.76'

N76°54'55"E 664.95'

S01°20'45"W 1319.52'

N01°20'45"E 1319.90'

N89°43'07"E 1315.04'

N89°43'07"E 1319.90'

S89°43'07"W 1315.04'

S87°44'36"W 340.00'

2639.52'

BRAWNE MESA ADDITION