PRELIMINARY PLAT

E.M. STEVENS 4TH ADDITION

WICHITA, SEDGWICK COUNTY, KANSAS

N.W. COR. E1/2, NW1/4 SEC. 28, TWP. 27-S, R-2-E

N89°48'30"E 495'

U.S. HWY 54 (KELLOGG ST.)

(COND. CASE # A-54089)

COMPLETE ACCESS CONTROL

PROPOSED ONE OPENING

KPL GAS SERVICE LINE

N89°47'07"E 440'

KELLOGG DRIVE

KELLOGG DR.

WATER METER VAULT

GAS METER

FOUND 1/2" IRON REPLACED WITH 1/2" BAUGHMAN CAPPED PIN

FOUND 3/4" IRON REPLACED WITH 1/2" BAUGHMAN CAPPED PIN

S89°47'07"W

NE CORNER OF LOT 1, PAUL BURNETT ADDITION

STD. 2'X4' DROP INLET

35' BUILDING SETBACK

NORTH 78' FEET OF PROPOSED LOTS UNDER CONTRACT BY THE CITY OF WICHITA

113' BUILDING SETBACK

Area = 8.5 acres
C = 0.34
Q_2 = 13.2 cfs
Q_{100} = 21.3 cfs

DRAINAGE TO BE DIRECTED NORTH TO KELLOGG DR.

Area = 2.37 acres
C = 0.9
Q_5 = 9.7 cfs
Q_{100} = 15.7 cfs

UNPLATTED OWNER: EDWARD M. STEVEN & MICHAEL E. STEVEN

TO BE VACATED AND RELOCATED UNDERGROUND GAS SERVICE LINE (APPROXIMATE LOCATION, NOT VISIBLE)

6' CHAIN LINK & BARBED WIRE FENCE

GRAVEL DRIVE

ASPHALT DRIVE

55' X 520' INGRESS & EGRESS EASEMENT FOR BENEFIT OF ADJACENT PARCEL TO THE WEST PRESENTLY OWNED BY EDWARD M. STEVEN AND MICHAEL E. STEVEN PER FILM 472, PAGE 178

EXISTING CMP TO BE REMOVED

The development of the north 255' is restricted until the right-of-way and geometrics for a frontage road system is determined as outlined in the General Provisions 10, 11, 12, and 13 of the Pizza Hut Second Addition Community Unit Plan

SCALE 1" = 50'
0 50 100

FOUND CORNERS ARE OF UNIDENTIFIED ORIGIN UNLESS IDENTIFIED ON SKETCH
(D) = DESCRIBED
(M) = MEASURED
BEARING BASE = ASSUMED

FOUND 1/2" IRON REPLACED WITH 1/2" BAUGHMAN CAPPED PIN

N89°47'07"E 440' (D) & (M)

10' UTIL EASEMENT

10' K.G. & F. EASEMENT MISC. BOOK 301, PAGE 371 400'±

UNPLATTED OWNER: ERMA L. DURREGAN

Area = 9.2 acres
C = 0.28
Q_5 = 11.7 cfs
Q_{100} = 19.0 cfs

10' UTILITY EASEMENT

ASPHALT PARKING

558.10' (D) & (M)

558.28' (D) & (M)

150'

POOL

BUILDING # 10001

GRAVEL DRIVE

GRAVEL

122.99'

112.94'

60.97'

81.05'

61.42'

33.2'

1088.3'

440' (D) & (M)

495'

1/2" BAUGHMAN CAPPED PIN SET

160'

10' UTILITY EASEMENT

35' BUILDING SETBACK

NORTHERLY RIGHT OF WAY LINE OF

KANSAS TURNPIKE AUTHORITY

(COND. CASE # A-55770)

BEECH

VICINITY MAP

OWNER:

Edward M. and Michael E. Stevens
7333 E. Kellogg
Wichita, Kansas 67207
(316) 652-2277

LEGAL DESCRIPTION:

Commencing at the NW Corner of the E1/2 of the NW1/4 of Section 28, Twp-27-S, R-2-E of the 6th PM, Sedgwick County, Kansas; thence south along the west line of the E1/2 of said NW1/4, 81.9 feet to the south right-of-way line of U.S. Highway 54 as condemned in Case # A-54089 to the point of beginning; thence east along said highway right-of-way line, 440 feet; thence south parallel with the west line of the E1/2 of said NW1/4, 520 feet; thence west parallel with said highway right-of-way line, 440 feet; thence north along the west line of the E1/2 of said NW1/4, 520 feet to the point of beginning.

NOTES:

1. DRAINAGE FROM THE WEST SHALL BE DIVERTED TO THE NORTH TO KELLOGG DRIVE RIGHT-OF-WAY.
2. DRAINAGE FROM THE SOUTH SHALL BE CONFINED TO THE 55' X 520' INGRESS & EGRESS EASEMENT AND SHALL NOT DRAIN ONTO SUBJECT PROPERTY.
3. PARKING LOT DETENTION SHALL BE IMPLEMENTED USING AREA INLETS. THE REQUIRED STORAGE VOLUME SHALL BE 0.38 ACRE FEET FOR EACH LOT ON THIS PLAT TO DETAIN THE 10 YEAR FREQUENCY.

DRAINAGE PLAN

May 15, 1995

BAUGHMAN COMPANY P. A.
SURVEYING & ENGINEERING
316/262-7271 • 315 ELLIS • WICHITA, KANSAS 67211

E.M. STEVENS 4th ADD.

By JDS | Date 4-18-95 | Page 1 | Of 3 — **BAUGHMAN COMPANY, P.A.**

TOTAL DRAINAGE AREA:
(FROM USGS MAP)

D.A. = 23.0 Acres   OFF-SITE AREA = 17.7 Acres

LAND USE OF OFF-SITE DRAINAGE:

60% COMMERCIAL
40% AGRICULTURAL

COMPOSITE "C" = $\frac{0.6(0.4) + 0.4(0.2)}{2}$ = 0.31

LAND USE OF ON-SITE DRAINAGE:

POST	PRE
100% COMMERCIAL	100% GRASS/OPEN SPACE
"C" = 0.90	"C" = 0.30

PEAK FLOW RATES:
(USING RATIONAL METHOD)

OFF-SITE DRAINAGE: $Q_5 = 17.7(0.31)(4.56) = 25.0$ cfs
$Q_{100} = 17.7(0.31)(7.37) = 40.4$ cfs

ON-SITE DRAINAGE (POST-DEV): $Q_5 = 2.37(0.9)(4.56) = 9.7$ cfs
$Q_{100} = 2.37(0.9)(7.37) = 15.7$ cfs

ON-SITE DRAINAGE (PRE-DEV): $Q_5 = 2.37(0.3)(4.56) = 3.2$ cfs
$Q_{100} = 2.37(0.3)(7.37) = 5.2$ cfs

"INCAHOOTS"

$Q_5 = 9.2\left[\frac{(0.9 \times 0.5) + (0.2 \times 0.5)}{2}\right](4.56) = 11.7$ cfs
$Q_{100} = 9.2\left[\frac{(0.9 \times 0.5) + (0.2 \times 0.5)}{2}\right](7.37) = 19.0$ cfs

E.M. STEVENS 4th ADDITION

By JDS | Date | Page 2 | Of 3 — **BAUGHMAN COMPANY, P.A.**

DETENTION STORAGE (10 Year)

A = 2.37 Ac.
CN = 98 (C = 0.90)
$Q_r = 2.37 * 1.5 = 3.55$ cfs
$T_c = 15.0$ min. ($i = 5.22$)
P = 5.52

$Q_i = 0.90 * 2.37 * 5.22 = 11.1$ cfs
$S = (1000/98) - 10 = 0.2041$
$Q = \frac{(5.52 - 0.2(0.2041))^2}{5.52 + 0.8(0.2041)}$
= 5.28 cfs (24 hour runoff)

VR = (Q/12) * A * 43,560
VR = $\frac{5.28}{12}$(2.37)(43,560) = 45,445 cu. ft.

$\frac{Q_r}{Q_i} = \frac{3.55}{11.1} = 0.3198$

FROM GRAPH, TYPE II STORM: $V_s/V_r = 0.368$

V_s Req'd = 0.368 * 45,445 = 16,724 cu. ft = 0.38 ac-ft.

