DRAINAGE PLAN
WEST BANK 1ST ADDITION

WICHITA, SEDGWICK COUNTY, KANSAS

MAPLE ST

SYCAMORE ST

ARKANSAS RIVER BLVD

McLEAN BLVD

LOT 1

LOT 2

D.A.=1.99 Ac.
Q_5=6.1 cfs
Q_{100}=11.7 cfs
18" R.C.P. @ 0.34%
=6.1 cfs

D.A.=0.03 Ac.
Q_{100}=0.2 cfs
through drive

D.A.=0.10 Ac.
Q_5=0.3 cfs
Q_{100}=0.6 cfs
8" Pipe @ 0.3%=0.3 cfs
through curb

D.A.=0.15 Ac.
Q_5=0.5 cfs
Q_{100}=0.9 cfs
8" Pipe @ 0.2%=0.5 cfs
through curb

D.A.=1.07 Ac.
Q_5=3.3 cfs
Q_{100}=6.3 cfs
15" R.C.P. @ 0.26%
=3.3 cfs

D.A.=1.31 Ac.
Q_5=4.0 cfs
Q_{100}=7.7 cfs
15" R.C.P. @ 0.38%
=4.0 cfs

D.A.=1.05 Ac.
Q_5=3.2 cfs
Q_{100}=6.2 cfs
15" R.C.P. @ 0.24%
=3.2 cfs

D.A.=0.55 Ac.
Q_5=1.7 cfs
Q_{100}=3.2 cfs
15" R.C.P. @ 0.24%
=3.2 cfs

D.A.=0.80 Ac.
Q_5=2.7 cfs
Q_{100}=4.7 cfs
15" R.C.P. @ 0.53%
=4.7 cfs

D.A.=0.52 Ac.
Q_5=1.6 cfs
Q_{100}=3.1 cfs
15" R.C.P. @ 0.23%
=3.1 cfs

D.A.=1.46 Ac.
Q_5=4.5 cfs
Q_{100}=8.6 cfs
18" R.C.P. @ 0.70%
=8.8 cfs

D.A.=4.85 Ac.
Q_5=5.7 cfs
Q_{100}=10.9 cfs
18" R.C.P. @ 1.10%
=10.9 cfs

Roof drains

Roof Drains

Roof Drains

Storm sewer to be constructed with Maple improvements

Storm sewer outfall pipe size to be determined with design of Maple/McLean improvements

Existing SWS to be removed with Maple/McLean improvements

Existing 15" S.W.S.

Existing 18" S.W.S.

Existing 18" S.W.S.

Existing 18" S.W.S.

Existing san. sewer

Existing 24" S.W.S.

Existing 24" S.W.S.

U. S. 54 HIGHWAY

A-60844

CONDEMNATION CASE

SCALE: 1"=40'

ELEVATION = CITY DATUM

BENCH MARK:
Brass rod in concrete post
@ S.W. Corner Maple & Sycamore
Elev. 1110.73 City Datum

PROJECT SITE

VICINITY MAP

Runoff calculations by Rational Formula: Q=CIA
Total site area = 11.9 Acres
T =15 minutes (assumed for all areas)
Impervious area=389,446 s.f. (75%)
Pervious area=129,482 s.f. (25%)
Soil group "B"
C_5=0.67 C_{100}=0.80
Q_5=3.06 cfs/acre Q_{100}=5.90 cfs/acre
I_5=4.56 in./hr. I_{100}=7.37 in./hr.

NOTE: This plan does not provide any on-site detention

GROSS SIZE OF PLAT
461,909.3 SQ FT ± OR 10.60 ACRES ±

LOT 1 (REVISED)
248,166.9 SQ FT ± OR 5.69 ACRES ±

LOT 2 (REVISED)
213,742.4 SQ FT ± OR 4.91 ACRES ±

RICHARD CHARLES ALDRICH
LICENSED
06-21
32-95
KANSAS
PROFESSIONAL ENGINEER

PROJECT NO. 94L00237P
DWG FILE (T.REX)237P\DRGP

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