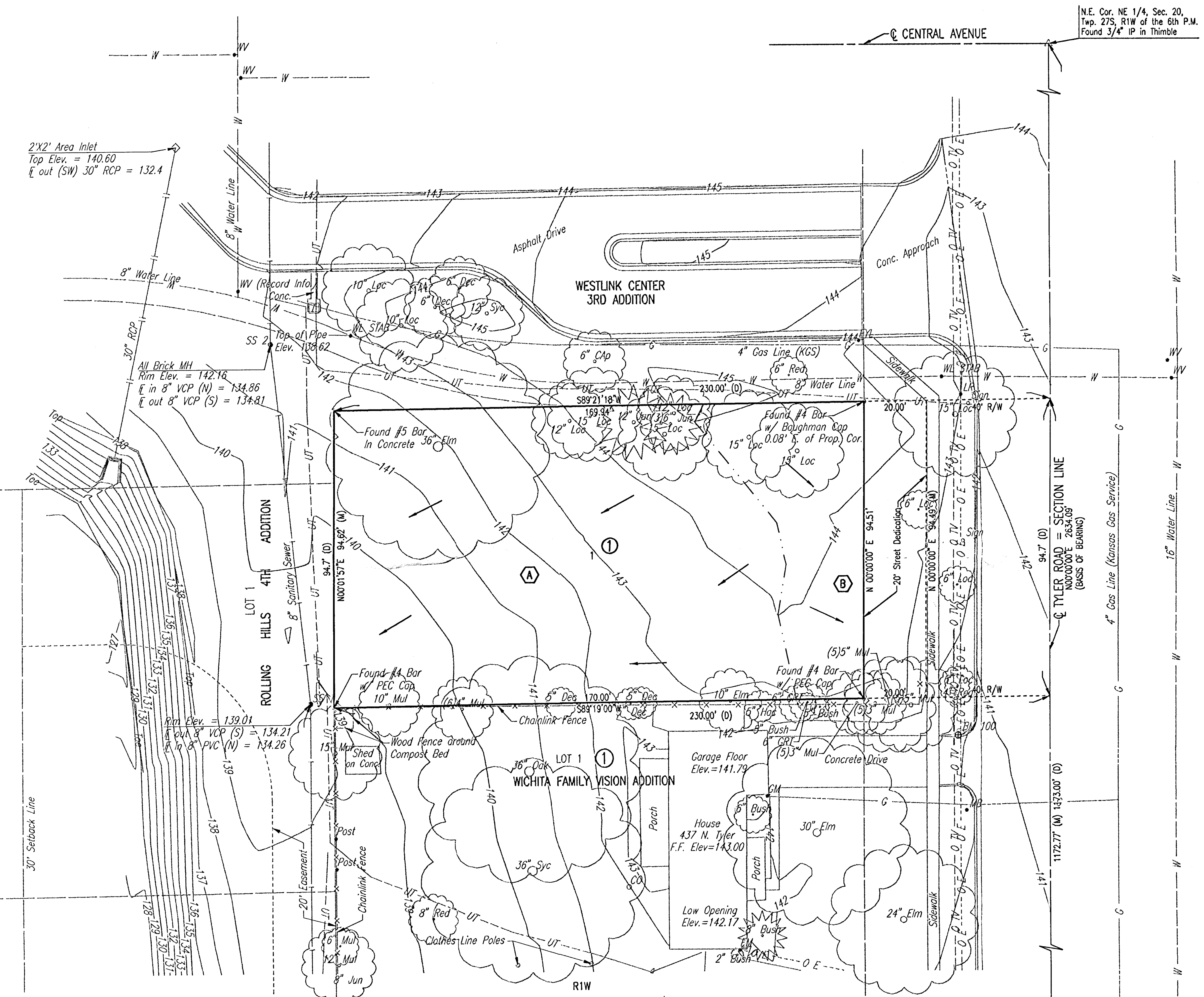
WICHITA FAMILY VISION 2ND ADDITION

TO WICHITA, SEDGWICK COUNTY, KANSAS



SCALE: 1" = 20'

● = 1/2" REBAR W/PEC CAP UNLESS OTHERWISE NOTED

BENCHMARKS;
PROJECT BENCHMARK:
#100 – CHISELED SQUARE CUT ON TOP OF CURB AT 437 N. TYLER ROAD.
ELEV. 141.555 CITY DATUM
ELEV. 1328.955 N.G.V.D.

C.O.W. BENCHMARK:
WESTLINK AND CENTRAL. TOP OF NORTH HANDRAIL, AT EAST END OF RCBC.
ELEV. 147.41 CITY DATUM
ELEV. 1334.81 N.G.V.D.

DRAINAGE PLAN

UNDER EXISTING CONDITIONS, THE SITE CONSISTS OF A 0.37 ACRE LOT CONTAINING GRASS AND A FEW TREES. AT THE TIME OF REDEVELOPMENT, RUNOFF SHALL BE LIMITED TO EXISTING CONDITIONS. CALCULATIONS FOR EXISTING CONDITIONS ARE SHOWN BELOW.

EXISTING CONDITIONS HYDROLOGY: RATIONAL METHOD, Q=CIA

SOIL TYPE: Ba (BLANKET SILT LOAM)
HYDROLOGIC SOIL GROUP C

*INTENSITY: THE TIME OF CONCENTRATION WAS CALCULATED TO BE LESS THAN THE MINIMUM TIME OF CONCENTRATION. ASSUME MINIMUM TIME OF CONCENTRATION.
THEREFORE, AT Tc=15 MINUTES:
i_2=3.80 in/hr, i_5=4.62 in/hr, i_{100} =7.40 in/hr

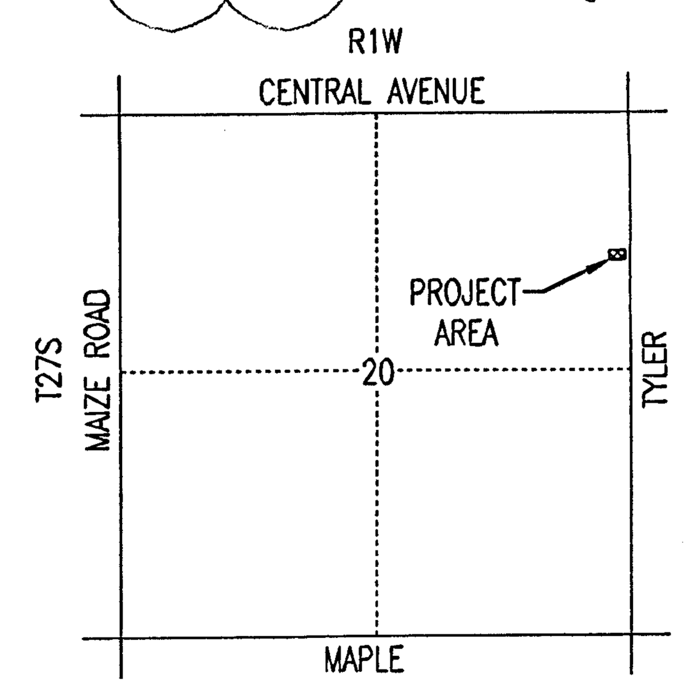
-RUNOFF COEFFICIENTS
URBAN LAWN AREAS, SOIL GROUP C
C_2=0.26, C_5=0.29, C_{100}=0.53

BASIN A
-RUNOFF DRAINS WEST TO AN EXISTING CHANNEL BEHIND THE LOT
-AREA=0.30 AC
-RUNOFF
$Q_2=C_2 i_2 A=0.26(3.80\ IN/HR)(0.30\ AC)=0.3$ CFS
$Q_5=C_5 i_5 A=0.29(4.62)(0.30)=0.4$ CFS
$Q_{100}=C_{100} i_{100} A=0.53(7.40)(0.30)=1.2$ CFS

BASIN B
-RUNOFF DRAINS EAST TO TYLER ROAD
-AREA=0.07 AC
-RUNOFF
-$Q_2=0.26(3.80)(0.07)=0.1$ CFS
$Q_5=0.29(4.62)(0.07)=0.1$ CFS
$Q_{100}=0.53(7.40)(0.07)=0.3$ CFS

DRAINAGE LEGEND

(A)	BASIN IDENTIFIER
— · · —	BASIN BOUNDARY
——►	STORM WATER FLOW



VICINITY MAP

DSNR: OPER: JJS SCALE: 1=20.00 06-30-2003 09:39:23 am
Q:\2003\03187\LDD 03187\dwg\Drainage