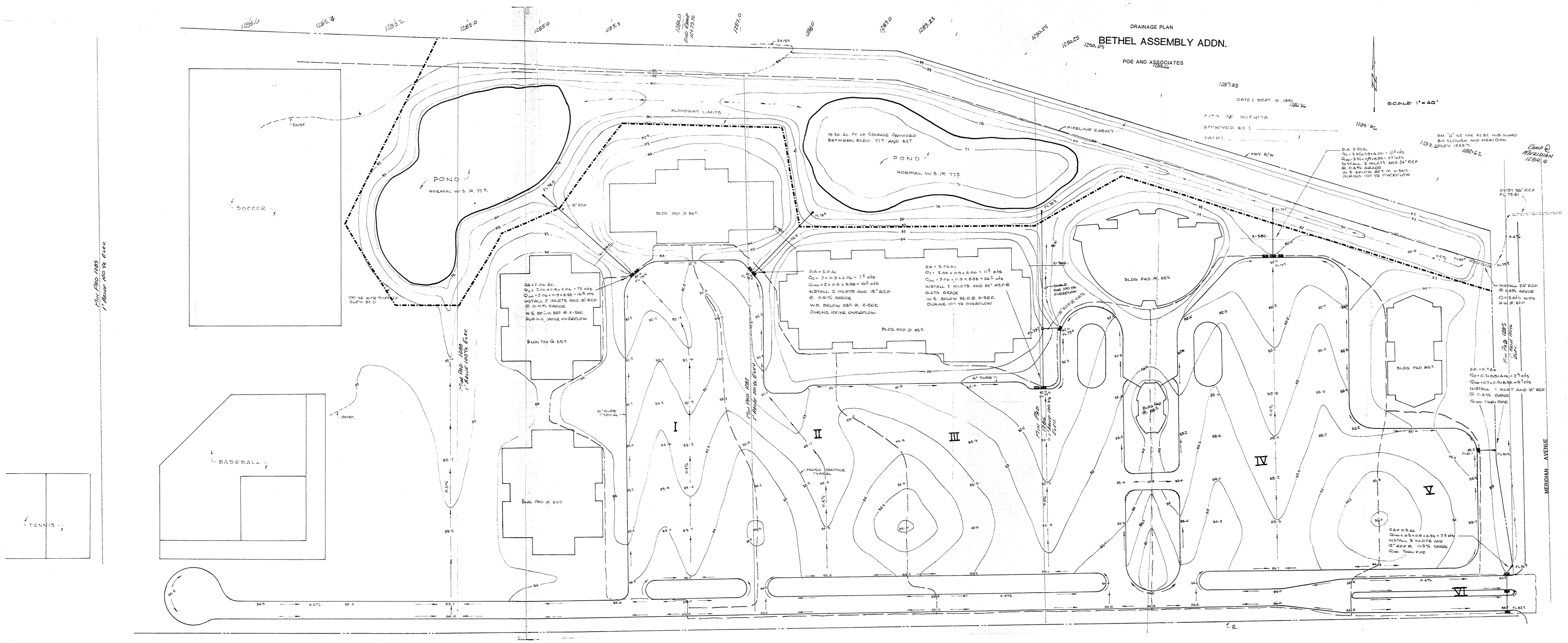
DRAINAGE PLAN
BETHEL ASSEMBLY ADDN.
POE AND ASSOCIATES
DATE: SEPT. 10, 1981
CITY OF WICHITA
APPROVED BY:
DATE:
SCALE 1"=40'
FLOODWAY LIMITS
PIPELINE EASM'T
HWY R/W
POND
NORMAL W.S. @ 77.5
15.36 AC. FT. OF STORAGE PROVIDED BETWEEN ELEV. 77.5' AND 82.5'
SOCCER
BASEBALL
TENNIS
BLDG PAD @ 86.5'
BLDG PAD @ 85.5'
BLDG PAD @ 86.0'
BLDG PAD @ 86.2'
BLDG PAD @ 86.5
BLDG PAD @ 86.0
DA = 2.06 AC.
Q25 = 2.0 x 0.9 x 4.06 = 7.3 cfs
Q100 = 2 x 0.9 x 6.38 = 16.5 cfs
INSTALL 2 INLETS AND 18" RCP @ 0.6% GRADE
W.S. BELOW 85.0' @ X-SEC DURING 100YR OVERFLOW
DA = 2.0 AC.
Q25 = 2 x 0.9 x 4.06 = 7.3 cfs
Q100 = 2 x 0.9 x 6.38 = 16.5 cfs
INSTALL 2 INLETS AND 18" RCP @ 0.6% GRADE
W.S. BELOW 85.5' @ X-SEC DURING 100YR OVERFLOW
DA = 3.06 AC.
Q25 = 3.06 x 0.9 x 4.06 = 11.3 cfs
Q100 = 3.06 x 0.9 x 6.38 = 24.7 cfs
INSTALL 2 INLETS AND 24" RCP @ 0.4% GRADE
W.S. BELOW 85.0 @ X-SEC. DURING 10 YR OVERFLOW
DA = 3.95 AC.
Q25 = 3.95 x 0.9 x 4.06 = 12.7 cfs
Q100 = 3.95 x 0.9 x 6.38 = 27.6 cfs
INSTALL 3 INLETS AND 24" RCP @ 0.4% GRADE
W.S. BELOW 82.5' @ X-SEC. DURING 100 YR OVERFLOW
BM "D" NE COR. REBE HUB GUARD BIG SLOUGH AND MERIDIAN ELEV. 1283.71
EXIST 36" RCP FL 79.61
INSTALL 24" RCP @ 0.4% GRADE Q25 = 8 cfs WITH W.W. @ 82.5
DA = 0.7 AC
Q25 = 0.7 x 0.9 x 4.06 = 2.5 cfs
Q100 = 0.7 x 0.9 x 6.38 = 5.7 cfs
INSTALL 1 INLET AND 18" RCP @ 0.4% GRADE
Q100 THRU PIPE
DA = 0.9 AC
Q25 = 0.9 x 0.9 x 4.06 = 3.3 cfs
Q100 = 0.9 x 0.9 x 6.38 = 5.7 cfs
INSTALL 1 INLET AND 18" RCP @ 0.4% GRADE
Q100 THRU PIPE
DA = 0.9 AC
Q25 = 0.9 x 0.9 x 4.06 = 3.3 cfs
Q100 = 0.9 x 0.9 x 6.38 = 5.7 cfs
INSTALL 3 INLETS AND 15" RCP @ 0.9% GRADE
Q100 THRU PIPE
FINISH CONTOUR TYPICAL
6" CURB TYPICAL
MIN. PAD 1289 1' ABOVE 100 YR. ELEV.
MIN. PAD 1287 1' ABOVE 100 YR. ELEV.
MIN. PAD 1285 1' ABOVE 100 YR. ELEV.
100 YR. WTR. SURFACE ELEV. 87.0
CAMP & MERIDIAN 1284.4
MERIDIAN AVENUE
I
II
III
IV
V
VI