TO: CHRIS BRETENSTEIN 7TH FLOOR

WILLIAM L. JORDER, LS
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WESTSIDE FREE WILL BAPTIST CHURCH ADDITION
Drainage Report October 8, 1985

The church site will be developed according to the layout indicated on the plan. Soil types for this area is Wa (waldek) for the north portion and Na (Naron) for the south portion.

Both soil types are sandy loams with low plasticity indexes. The SCS soil group for waldek is C and for naron is B. The runoff curve number for the waldek portion (65%) is 80, and for the naron portion (35%) is 65. The cummulative Rn for the total site with the church development would be 75%.

The storm water runoff to be anticipated from this site for the 6" storm rainfall amount in a 6 hour period with a runoff curve number will be 3.28 inches.

The pond site existing on the lot will be considered as the recieving facility for the storm water runoff from the lot. The volume of the pond size will be large enough to provide the necessary capacity for the 100 year storm discharge.

The required volume from the storm is as follows:

Volume = 3.28 in./12(20.6 ac) = 5.63 Ac-Ft.
= 245,270 C.F.

The existing pond site has a capacity presently of 370,000 C.F. or 8.5 Ac-Ft. This considers the available capacity from elevation 76 water surface to 84. The existing pond has more capacity than is required by 50% or will withstand the runoff from the 8 inch storm in a 24 hour period.

Pipes crossing the private access road will discharge runoff across the road to the east into the pond. Average runoff factor for this area will be considered to be 0.35.

Qpipes = 0.35(6.08 inches)20.6 Ac. = 18.6 CFS
HW average = 2.2 feet

Required pipes = either 3- 15" pipes or 2-18" pipes.

The necessary pipes to be located across the road will be decided at the time of development of the final design as to where and how many.

RECEIVED
OCT 9 1985
DESIGN DIVISION

BENCH MARK:
Top of iron in thimble at the S.E. corner of the S.W.¼ of Sec. 12-28-1W
Elevation = 1284.83 M.S.L.

Vicinity Plat

Note: City of Wichita line is approximately 1000' East of the intersection of Meridian & MacArthur

PRELIMINARY PLAT

WEST SIDE FREE WILL BAPTIST CHURCH ADDITION

A TRACT IN THE S.W.1/4 OF SEC. 12, TWP. 28-S, R-1W

OWNER: WEST SIDE FREE WILL BAPTIST CHURCH

DRAINAGE PLAN

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SEPT 13, 1985