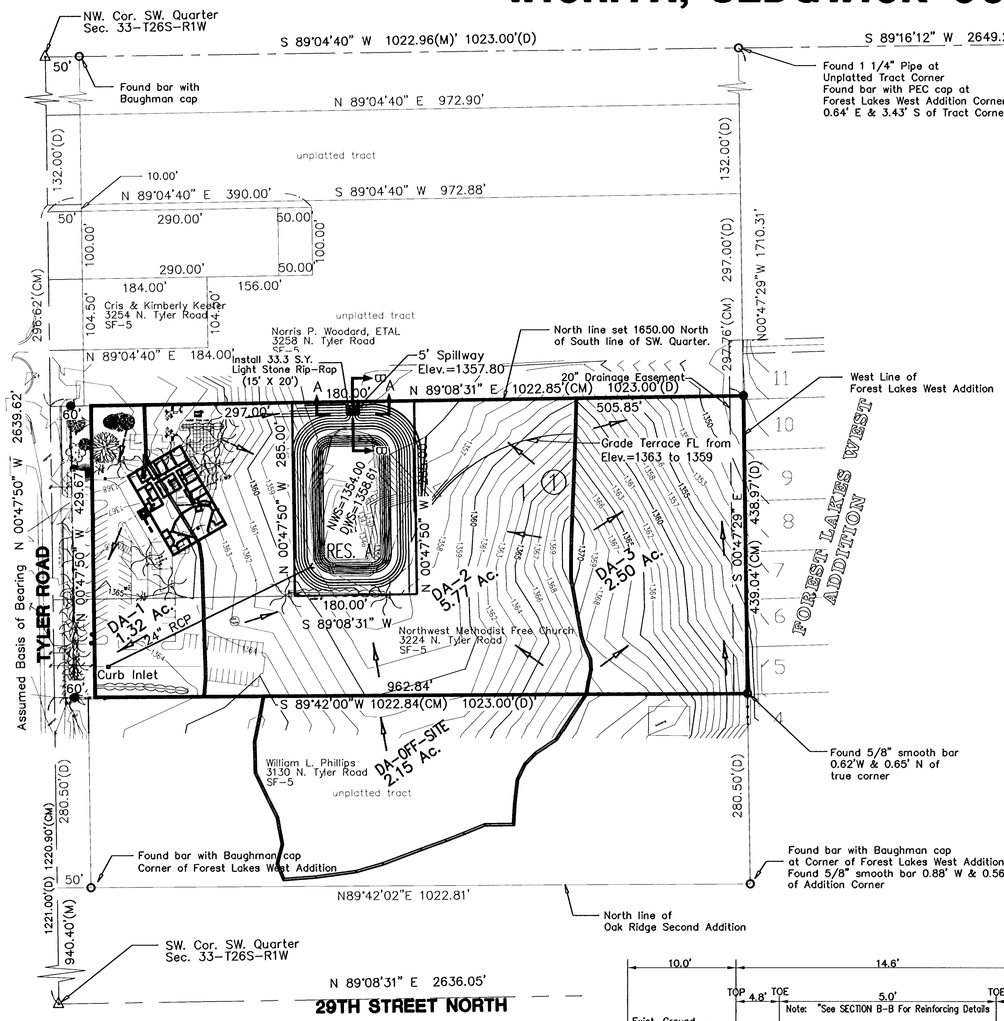
DRAINAGE PLAN FOR
NORTHWEST METHODIST ADDITION
WICHITA, SEDGWICK COUNTY, KANSAS



SCALE

200 0 200 400

				Undeveloped			Developed		
Area #	Area	t_c	I_{100}	Q_5	Q_{100}	CN	CN	Q_5	Q_{100}
1	1.32	4.62	7.40	2.02	5.58	72.0	91.1	3.12	6.46
2	5.77	4.62	7.40	8.80	24.35	72.0	73.4	13.60	28.20
3	2.50	4.62	7.40	3.81	10.55	72.0	72.0	*	*
Offsite	2.15	4.62	7.40	3.28	9.06	72.0	72.0	*	*

* Undeveloped

LEGEND

- ○ = 1/2" Iron Pipe (found)
- ⊠ = 1/2" Rebar (found)
- ● = PK Nail (found)
- \+ = "+" Cut (found)
- ⊿ = Section Corner
- (M) = Measured
- (P) = Platted
- R.O.W. = Right-of-Way

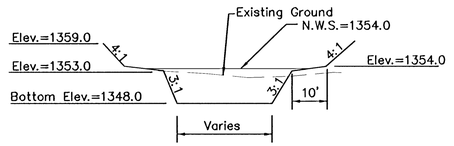
PROPOSED POND STAGE/STORAGE TABLE

Elevation	Acres	Storage Acre-Ft.	Total Storage Acre-Ft.	Q_5 ^	Q_{100}
1358.61	1.09	0.65	3.80		12.69
1358.00	1.05	0.19	3.14		1.92
1357.80	0.90	0.70	2.95	0.58	0.58
1357.00	0.85	0.06	2.25	0.51	0.51
1356.93	0.84	0.75	2.19	0.51	0.51
1356.00	0.78	0.75	1.44	0.40	0.40
1355.00	0.72	0.69	0.69	0.25	0.25
1354.00	0.66	0.00	0.00	0.00	0.00

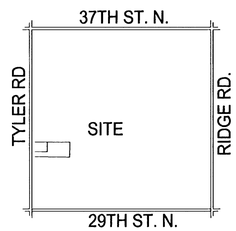
^ Drawdown through 4" pipe takes just under 74 hours. The existing flow does not account for 1.88 cfs of runoff north of the existing pond during 5-yr. event. Approx. 1.23 Acres drains directly to the north property instead of entering the existing pond.

EXISTING POND STAGE/STORAGE TABLE

Elevation	Acres	Storage Acre-Ft.	Total Storage Acre-Ft.	Existing Q_5	Existing Q_{100}
1354.36	0.62	0.21	2.95		25.43
1354.00	0.52	0.50	2.74		0.00
1353.00	0.48	0.46	2.25		0.00
1352.00	0.44	0.32	1.79		0.00
1351.25	0.41	0.10	1.46	0.00	0.00
1351.00	0.40	0.38	1.37	0.00	0.00
1350.00	0.36	0.34	0.98	0.00	0.00
1349.00	0.33	0.27	0.64	0.00	0.00
1348.00	0.21	0.18	0.37	0.00	0.00
1347.00	0.15	0.13	0.19	0.00	0.00
1346.00	0.10	0.06	0.06	0.00	0.00
1345.00	0.02	0.00	0.00	0.00	0.00



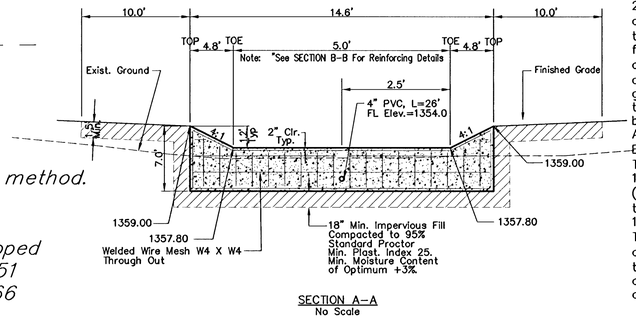
TYPICAL POND GRADING



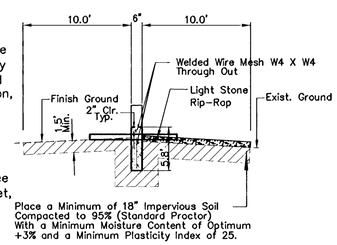
LOCATION MAP
No Scale

LEGAL DESCRIPTION

A tract of land in the Southwest Quarter of Section 33, T26S, R1W of the 6th P.M., Sedgwick County, Kansas, being more particularly described as: Going Northerly on the West line of Section 33, T26S, R1W, a distance of 1221.00 feet North from the Southwest corner of said section for a point of beginning, thence turning right deflecting 90°29' 21" and going Easterly a distance of 1023.00 feet, thence turning left deflecting 90°29'21" and going Northerly a distance of 438.97 feet, thence turning left deflecting 90°04' and going Westerly on a line 1650 feet North of and parallel with the South line of the Section, a distance of 666.00 feet, thence turning left deflecting 89°56' and going Southerly a distance of 288.38 feet, thence turning right deflecting 90°29'21" and going Westerly a distance of 357.00 feet to the West line of the Section, thence turning right ***(left)*** and going South 144.10 feet to the point of beginning enclosing 7.84 acres more or less.
AND:
Beginning at a point on the West line of Section Thirty-three (33), Township Twenty-six (26) South, Range One (1) West, a distance of 1365.00 feet North of the Southwest Corner of said Section Thirty-three (33), thence going Northerly on the same line a distance of 284.90 feet, thence turning right deflecting 89°56' and going Easterly on a line 1650.10 feet North of and parallel with the South line of said Section Thirty-three (33), a distance of 357.00 feet, thence turning right deflecting 90°04' and going Southerly a distance of 288.38 feet, thence turning right deflecting 29°29'20" and thence going Westerly a distance of 357.00 feet to the point of beginning, enclosing an area of 2.35 acres, more or less.



SECTION A-A
No Scale



SECTION B-B
No Scale

NOTES:

1. Determination of Q's was made using the rational method.

2. c's used were as follows:

	Undeveloped	Developed
5yr frequency	0.33	0.51
100 yr frequency	0.57	0.66

No.	Date	By	Approved	Revision

NORTHWEST METHODIST ADDITION
STORM SEWER IMPROVEMENTS
DRAINAGE PLAN
CITY OF WICHITA, KANSAS
JIM ARMOUR P.E.- CITY ENGINEER
1725 PPS (607881)

POE & ASSOCIATES, INC.
5940 E. Central, Suite 200 ■ Wichita, KS 67208-4242
Phone 316 685-4114 ■ FAX 316 685-4444

FINAL

Designed By: T. Austin
Drawn By: S. Schmidt
Poe Job No.: 874\Storm-drainage.dwg
Date: 01/10/2007