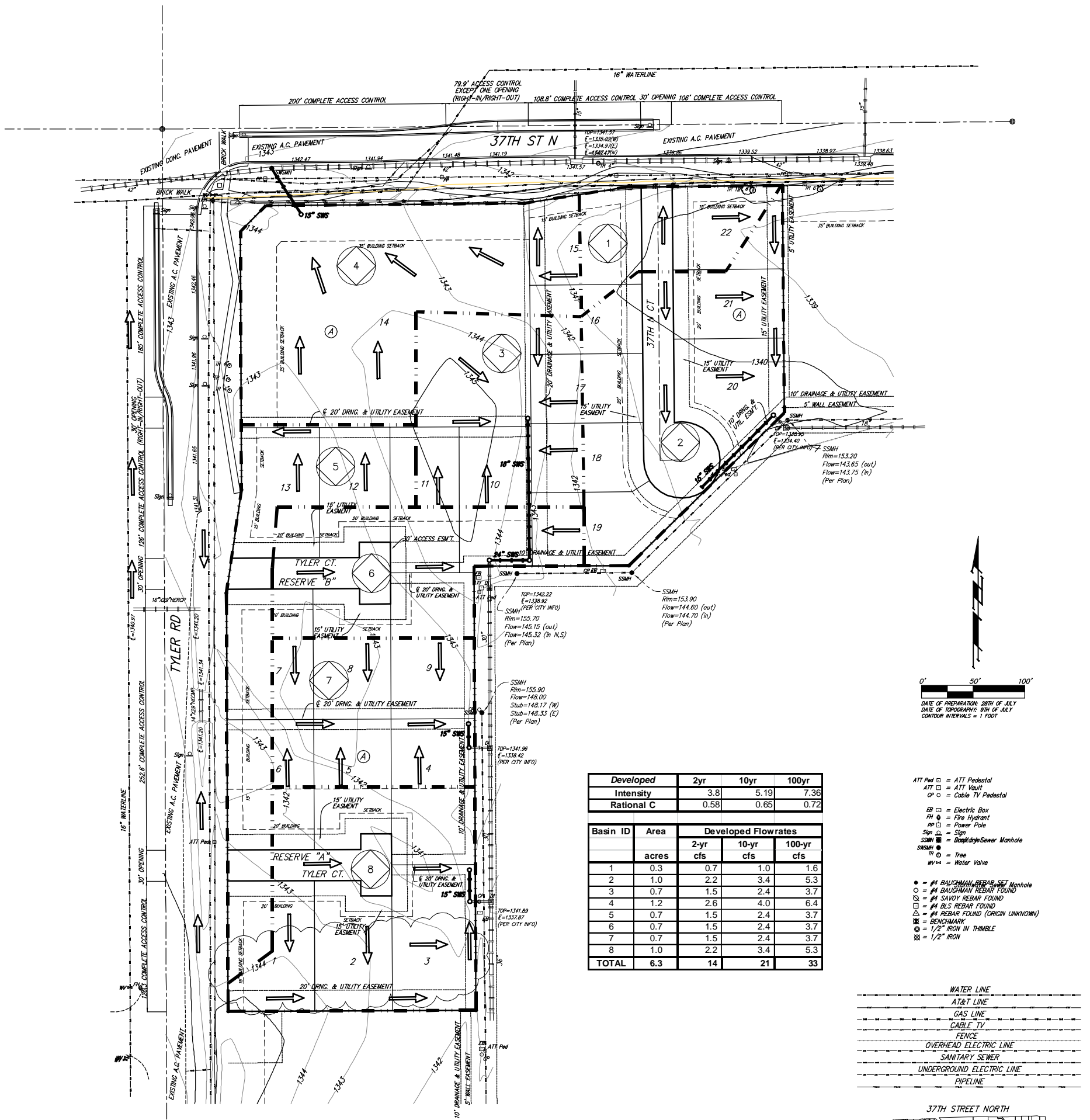


DRAINAGE PLAN

TYLER'S LANDING 5TH ADDITION

WICHITA, SEDGWICK COUNTY, KANSAS



Developed	2yr	10yr	100yr
Intensity	3.8	5.19	7.36
Rational C	0.58	0.65	0.72

Basin ID	Area acres	Developed Flowrates		
		2-yr cfs	10-yr cfs	100-yr cfs
1	0.3	0.7	1.0	1.6
2	1.0	2.2	3.4	5.3
3	0.7	1.5	2.4	3.7
4	1.2	2.6	4.0	6.4
5	0.7	1.5	2.4	3.7
6	0.7	1.5	2.4	3.7
7	0.7	1.5	2.4	3.7
8	1.0	2.2	3.4	5.3
TOTAL	6.3	14	21	33

Table 4-13 Volumetric Runoff Coefficients by Land Use and Hydrologic Soil Group

Land Use	Hydrologic Soil Group				Land Use	Hydrologic Soil Group			
	A	B	C	D		A	B	C	D
Undisturbed	0.02	0.03	0.04	0.05	Undisturbed	55	71	80	84
Turf or Disturbed Soils	0.15	0.20	0.22	0.25	Turf or Disturbed Soils	71	80	84	88
Impervious Cover	0.95	0.95	0.95	0.95	Impervious Cover	98	98	98	98

Basin #	Weighted Volumetric Runoff Coef. (R _w) (eq. 4-24*)								WQ _v ft ³		
	Undist.	Dist.	Red. Imp.	New Imp.	Total Area ft ²	U	D	Redev. I		I	R _w
Total TL Add	0	4,573,800	0	1,960,200	6,534,000	0.000	0.140	0.000	0.285	0.4250	277,695

*Total TL is the entire 150 acres of Tyler's Landing Addition(s) which drain through the currently developed drainage and pond systems.

Basin	Pond Volume Below Static Pool				Depth Feet	Volume Acre-Ft.
	Sq. Ft.	Acres	Sq. Ft.	Acres		
West Pond	123000	2.8	100600	2.3	8	20.5
Middle Pond	146600	3.4	97000	2.2	8	22.4
East Pond	26000	0.6	7000	0.2	8	3.0
Totals:		6.8		4.7		45.9

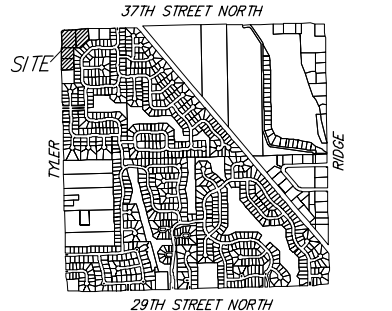
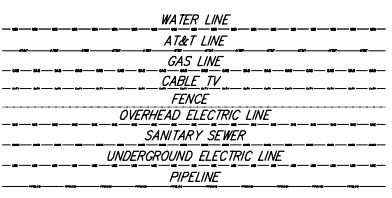
Pond Volume > WQ _v		
Pond	WQ _v	Check
45.9	6.4	Yes

Pond Volumes were estimated using a depth of 8' of water surface with 3:1 side slopes below the static water surface. The existing pond volumes far exceed the water quality volume needed for the entire Tyler's Landing site - which includes the existing/ds

NOTES: There is no FEMA SFHA located on this property as of this date per FEMA FIRM Panel 170 of 700, for Wichita, Sedgwick County, Kansas; effective February 2, 2007.

The Internal Storm Water Sewer will tie directly into the previously designed and constructed storm sewer for Tyler's Landing Addition. This system was designed for this site to utilize as was the downstream detention facilities.

Basins shown were modeled as closely as possible to the Tyler's Landing Commercial Addition Drainage Plan which previously plotted this property.



DRAINAGE PLAN
TYLER'S LANDING
5TH ADDITION
12 SEPT 2014

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